Umler®

Data Specification Manual

(Effective 6/13/2024)

Reference Version 24.2.0

Table of Contents

Introduction

The Umler Equipment Management Information System, the Equipment Register for North America, contains inspection dates required by AAR Interchange Rules for various rail car components, specific details on the internal and external dimensions, carrying capacities expressed in gallons/cubic feet capacity, equipment weight, as well as special equipment on all railcars and highway trailers and containers that are used in interchange equipment or commercial service. There are over 2 million equipment registrations in the Umler System.

The Umler System is managed by the Business Services Division at Railinc. All units registered in the Umler System are subject to an annual maintenance fee that is invoiced bi-annually. The Railinc Price List for this service as well as all Railinc services is available at https://public.railinc.com/support/railinc-price-list.

Responsibility for Reporting Required Information

1. Each Stenciled Mark Owner is required to report all equipment: freight cars, maintenance of way, locomotives, telemetry devices, chassis, trailers, containers, tank containers, rail compatible intermodal equipment and bogies for rail-compatible intermodal equipment. The dimensional, capacity and/or codified information reported must accurately reflect the requirements as outlined in the Umler Data Specification Manual for each applicable data element.

2. To protect an owner's Umler registration, updates to information require access through Railinc's Single Sign-On application at https://public.railinc.com. This precludes all unauthorized activity from being processed and updated to the file. Owners can contract to have an agent or agents report their data; however,

    a. your company administrator grants Umler Rights to the agent(s) or,

    b. the owner submits in writing, authorization to the Director, Umler Services, authorizing Railinc to provide access to the agent. Owners changing agents or assuming reporting responsibility should revoke Umler rights to the user or send a request on company letterhead to the Director, Umler Services, which will be provided within 24 hours to the owner or new agent.

3. It is the owner's responsibility to ensure that their mailing address, telephone and fax numbers and email address are kept up to date (see the FindUs.Rail industry contact database at https://public.railinc.com). In addition, owners must immediately advise the Director, Umler Services, when reporting responsibility has been assigned to a new agent with the agent's mailing address, telephone and fax numbers, and email address. All corrections must be emailed to csc@railinc.com.

The Uses of the Umler System

1. The Umler System is the industry's official source for accepting freight cars in interchange service in accordance with AAR Interchange Rules 90 and 93. Cars must be accurately registered in order to be included in the Car Hire Accounting Rate Master (CHARM®).

2. The Umler System is the official source for determination of the car's load limit and lightweight, Air Brake Test dates and cars eligible and/or certified for extended service of 50 years.

3. Numerous railroad operating officers utilize the file to determine car assignments, lengths, and weights to determine train makeup and line clearances. In addition, they can determine various special characteristics of cars to fulfill the shipper's car requirements.

4. Railroad traffic departments utilize the car's tare weight and capacity information in their automated billing systems.

5. Mechanical Departments schedule rail car maintenance based on inspection dates for various car components.

6. Railroad traffic departments bill Trailers and Containers based on outside length information.

7. Railinc verifies all interchange movements reported through the TRAIN II® system by validating the initial and number being reported. Also, the file is used to control the movement of overage equipment and cars not meeting FRA requirements and Mechanical Interchange rules that would restrict the interchange of a car.
8. The Umler System is the source of information for publishing the cars dimensional and capacity information in *The Official Railway Equipment Register*.

Purpose of the Umler Data Specification Manual:

This manual specifies data requirements for the proper reporting of locomotives, maintenance-of-way passenger cars, End of Train information Systems, rail cars and highway trailers and containers. Umler is the master file from which the CHARM® (Car Hire Accounting Rate Master) file and TRAIN II® (Tele Rail Automated Information Network Phase 2, the railroad industry's national car information system) are verified before equipment is entered into these files.

Data Requirements

This Specification Manual, divided into sections by equipment group, plus exhibits, outlining data input requirements, is the basis for Railinc's computer edit programs. Each equipment group and data element has corresponding permissible values, ranges, and business rules associated with the data. The Data Specification provides as much information as possible to assist users in entering these data elements.

Edits

1. Umler data will be edited. Add and change records must be valid to be submitted to the Umler system. If equipment data on file is not valid, a conflict is generated on the equipment. The submitting party will have thirty (30) days to correct the record. Records that are not corrected within thirty (30) days will have zero rates and the Rate Indicator 0, P or Q inserted into the records per Car Hire Rule 1 and Freight Tariff 6007-Series. Add and change records that do not meet the minimum edit criteria will be rejected without processing. The fields that will cause transactions to be rejected are listed as Mandatory fields in this specification manual.
2. Cars having a Rate Indicator Code 0, P or Q for 90 days having conflicts are assigned pool number 9999016 and Transportation Codes XZ. Once a zero Rate Indicator Code 0, P or Q has been inserted into a record, the appropriate indicator must be resubmitted in addition to the corrected data field.
3. Owners of unique equipment that cannot pass standard edit requirements must email csc@railinc.com the information in advance of the equipment being placed into service. This equipment will be included in the Exception Control file which allows the unique information to pass the edit parameters and the reported information is provided to the industry.

Some equipment data is mandatory in order to submit a valid equipment record. Optional fields can also be included but must contain valid data.

Notification of Errors: The notification of equipment conflicts is completed via tickler. Company administrators are responsible for updating recipient email information for tickler notifications.

Procedures for Identifying and Removing Equipment Having Canceled Reporting Marks:

1. Upon receipt of notice from the owner, agent or the Surface Transportation Board (STB) that a company having equipment registered in the Umler System has or will cease operations, the AAR will serve notice to the owner/agent that the reporting mark will be canceled thirty (30) days after the cessation of operations and that the Transportation Code M will be inserted into the records. The owner/agent must delete all equipment from the Umler System within ninety (90) days after the cancellation of the reporting mark. When, after the ninety (90) days the owner/agent fails to delete the equipment and, there is no evidence of movement reported to the TRAIN II® system, the equipment can be deleted.

2. Upon receipt of notice from the owner/agent that their equipment has been sold and will be restenciled with a new reporting mark, Railinc will insert the Transportation Code M in the records. The owner/agent of the canceled reporting mark will be advised of the insertion of the M code. The owner/agent of the canceled reporting mark will have ninety (90) days, after the insertion of the code M, to delete the cars from the Umler System. When, after ninety (90) days, the owner/agent of the canceled reporting mark(s) has not deleted the equipment or has not requested in writing an extension or extensions having a maximum of thirty (30) days, or there is no evidence of movements reported to the TRAIN II® system, the equipment can be deleted.

Submission of Data

Effective Date for Rates: For the purpose of receiving allowances, all data on newly acquired equipment and/or changes to equipment registered in the file which affects the valuation, age or Equipment Type Code (regardless of ownership), must be reported in the month prior to the first day of the month the charges are to become effective.

Update of the Umler Master File: Updates are processed immediately. Umler data transfers must be received by the 25th day of the month to ensure inclusion to the next month's CHARM® file.

Method: Data can be furnished via tele-communications as described in the *TRAIN II User Manual* available at Railinc.com, or by submitting your updates to the Railinc Customer Success Center at csc@railinc.com. Only users authorized by your company administrator may make changes to equipment records.

Umler Single Car Air Brake Test Applications can be submitted via the Umler System.

Owners Fleet Statistics, Error Reports, SCABT Manual, and Umler Contact are available on Railinc's website at: https://public.railinc.com.

Requesting Changes to Umler

To request changes to Umler, use the link below to access the UMLER CHANGE REQUEST form document. Provide details for all Umler system changes, including new elements, permissible values and business rules in the UMLER CHANGE REQUEST form. Save the form and email it to csc@railinc.com, attach the saved form to the email and send the email: https://public.railinc.com/sites/default/files/documents/Umler%20Change%20Request.dotx

Box Cars

General

Status Code *Mandatory* — **USCD**

Identifies the current operational state ●

Does not Carry Forward.

Permissible Values for USCD

A	ACTIVE	I	INACTIVE
P	PRE-REGISTERED		

NOTES:

- For Restencil and Clone process the initial Status of a car should be Pre-Registered.
- All Add-Back processes should initially set the Status to Pre-Registered
- A Pre-registered car will automatically have its Status changed to Active for the initial change when TRAIN detects three (3) movements on the car
- If the Status changes to Active due to movement and the car was created from a Restencil, the Prior Equipment ID (PRID) or source car will have its status changed to Inactive automatically by Umler

Equipment ID — **0001**

The equipment stenciled number

Validation Rule for 0001

-Equipment Number must not be larger than 6 digits (i.e., 999999)

NOTES:

- Equipment ID includes the mark and number stenciled on the equipment. Marks can be up to 4 characters and number up to 6 digits (i.e., ABCD999999).
- Up to 500 cars can be added or updated in a transaction.
- When adding an equipment record, ensure that Prior Equipment ID (PRID) is reported, unless the equipment is new.

Mechanical Designation *Mandatory* — **UMMD**

Equipment description without physical dimensions ●▲

Used in ETC Generation.

Permissible Values for UMMD

LC	Box-Special Design with side doors and roof hatches
LU	Box-Special Design for heavy duty support of retractable overhead doors
MWM	MoW - Box cars
MWX	MoW - Boarding/Camp car
RB	Box-Refrigerator (Bunkerless)
RBL	Box-Refrigerator (Bunkerless) with loading or stowing device
RC	Box-Refrigerator using cryogen
RP	Box-Refrigerator (Mechanical)
RPL	Box-Refrigerator (Mechanical) with loading or stowing device
XL	Box- Loader Equipped, with securements and/or with permanently attached moveable bulkheads
XLI	Box-Insulated Loader Equipped, with securements and/or permanently attached moveable bulkheads
XM	Box-General Service
XP	Box-Non-Insulated, Specially Equipped for Specific Commodities
XPI	Box-Insulated, Specially Equipped for Specific Commodities

Equipment Type Code — **UMET**

An alpha numeric code that describes the physical attributes of equipment

System Generated Field. This element is not eligible for Input.

NOTES:

- Please Refer to Appendix I for More information Regarding ETC Generation

Maint of Way Service Type — **B403**

Identifies equipment Maintenance Of Way function

Value does not carry forward for Equipment Group Change.

Permissible Values for B403

C2	Crane / Boom Support Car
F4	Flat-Wheel Sets
T4	Training Car
T8	Track Geometry Car

Validation Rule for B403

- Maint of Way Service Type can only be listed on records where the Equipment Group (0002) or Pseudo Equipment Group (B547) is listed as MISC

Built Date *Mandatory* — **BLDT**

The date the construction of the equipment is complete ●■

Data is Confidential. Used for Transportation Codes. Affects Rating. Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for BLDT

Minimum	Maximum
1/1/1900	12/31/9999

Validation Rule for BLDT

-Built Date must be within the last 99 years
-Built Date must not be in the future for equipment in Active Status
-Prior and target equipment's Built Date (BLDT) must match for restenciling
-Built Date cannot be updated within 30 days of the End of Service Date (B078)

NOTES:

- Data is public for railroad marked equipment.
- For connected unit cars report the oldest car in the set.

Rebuilt / ILS Date — **RBDT**

The date the re-construction of the equipment is complete

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for RBDT

Minimum	Maximum
1/1/1900	12/31/9999

Validation Rule for RBDT

-Rebuilt/Increased Life Service Date must be after the Built Date (BLDT)
-Rebuilt Date must not be more than 70 years after the Built Date (BLDT)
-Rebuilt Date is required for Extended Service Code (A096) 1, 2, or 3 for Increased Life Service
-Rebuilt Date is required for Extended Service Code (A096) R for Rebuilt, or V for 65 years of service
-If Rebuilt Date is reported then the Extended Service Code (A096) must be reported as R for Rebuilt, V, 1, 2, or 3 for Increased Life Service

NOTES:

- Railroad cars -- applicable only to cars meeting status as provided in both STB Accounting Rules, and the AAR Mechanical Interchange Rule 88, Office Manual.
- Private cars -- applicable to all cars meeting AAR Mechanical Interchange Rule 88, Section C, Office Manual and Sections A and B of the Field Manual.
- Private box cars -- For cars qualified under the provisions of Item 621, Note 1, Freight Tariff 6007-series for the purpose of determining cars' age for calculating the mileage rates.
- For connected unit cars report the oldest car in the set. Do not report Rebuilt Date unless car has been approved by the AAR.

Rebuilt Flag — **RBFL**

Identifies the equipment is nearing its end of life cycle

Data is Confidential. System Generated Field. This element is not eligible for Input.

Permissible Values for RBFL

N	No	Y	Yes

Owner *Mandatory* — **UMOW**

Primary reporting mark of the railroad or private company owning the car ●

Value does not carry forward for Single Clone / Multi-Clone / Single Restencil / Multi-Restencil.

NOTES:

- Report the primary reporting mark of the railroad or private company owning the car. When car's lease or lien is held by a bank, trust holder, capital lease company, etc. not having an assigned mark, report the primary reporting mark affiliated with the stenciled reporting mark.

Equipment Group *Mandatory*	0002
Identifies the various major car types	● ■

Used for Transportation Codes. Affects Rating.

Lessee	LESE
The reporting mark of the company leasing the equipment	

Value does not carry forward for Single Clone / Multi-Clone / Single Restencil / Multi-Restencil.

Validation Rule for LESE

-Umler Owner (UMOW) and Lessee are not allowed to be equal

-Lessee cannot be a child reporting mark

NOTES:

- In order to assign privately marked cars to a pool, a railroad reporting mark must be reported.

Maintenance Party	MNPT
The parent reporting mark of the company responsible for the maintenance and repairs of the equipment	

Does not Carry Forward.

Mark Owner Category	B201
The company that owns the stenciled mark on the car	

System Generated Field. This element is not eligible for Input. Value does not carry forward for Single Restencil / Multi-Restencil / Equipment Group Change / Add Back.

Permissible Values for B201

B	US Private
C	Canadian Private
F	Foreign Private
H	Canadian Class II
I	Canadian Class I
J	Mexican Class I
K	Canadian Class III
M	Mexican Private
N	US Private Steamship
O	Canadian Private Steamship
P	Mexican Private Steamship
Q	Foreign Private Steamship
R	US Class II Railroad
U	US Class I Railroad
V	US Class III Railroad
W	Mexican Class II Railroad
Y	Mexican Class III Railroad

NOTES:

- This value is stored in the Umler Database for informational purposes and is retrieved from the Roadmark Registry.

Prior Equipment ID	PRID
The previous reporting mark and number of the equipment	

Value does not carry forward for Single Clone / Multi-Clone.

Validation Rule for PRID

-Prior and target equipment's Built Date (BLDT) must match

-The Prior Equipment ID (0001) must belong to the same or comparable Equipment Group (0002) as the current car initial and number

NOTES:

- Prior ID enables equipment records to share the same historical lineage. Equipment Identification Number (EIN) is a generated id that enables these equipment records to share inspections and transaction history.

Last Update Date	B122
Date of the last Umler element change	

System Generated Field. This element is not eligible for Input.

Equipment Add Date	B082
Date the reporting mark and number was added to the Umler system	

System Generated Field. This element is not eligible for Input.

Status Change Reason	USCR
Identifies the reason for the current operational state	

System Generated Field. This element is not eligible for Input. Does not Carry Forward.

Permissible Values for USCR

I	Initial Load
M	Movement
O	Status Changed Manually
R	Restencil

NOTES:

- If movement is detected on equipment, status is changed to Active.
- If an equipment record is changed to Active, any prior equipment record is placed in Inactive status.

Status Change Date	USCT
Identifies the effective date of the current operational state	

System Generated Field. This element is not eligible for Input. Does not Carry Forward.

Extended Service *Mandatory*	A096
A code indicating the eligibility of an increase to the life cycle	●

Used for Transportation Codes. Value does not carry forward for Single Clone / Multi-Clone.

Permissible Values for A096

1	1st ILS Inspection, additional 5 years of Service
2	2nd ILS Inspection, additional 5 years of service (10 years total)
3	3rd ILS Inspection, additional 5 years of service (15 years total)
C	Built New between January 1, 1964 - June 30, 1974, Certified for 50 Years of Service, Built New Before July 1, 1974 & Received AAR Waiver
E	Built new from July 1,1974, Qualified for 50 Years Service
N	Built Before January 1, 1964, Qualified for 40 Years Service
R	Rule 88, Rebuilt cars
U	Built between January 1, 1964 - June 30, 1974, Qualified for 40 Years & eligible for certification for 50 Years Service
V	Car is certified (FRA Waiver & AAR) for 65 years of service from date built new from January 1, 1964

Validation Rule for A096

-If Rebuilt Date (RBDT) is reported, then the Extended Service Code (A096) must be reported as R for Rebuilt, V, 1, 2, or 3 for Increased Life Service

-Extended Service Code of C cannot be reported if the car was built before January 1, 1964 or on/after July 1, 1974

-Extended Service Code of E cannot be reported if the car was built before July 1, 1974

-Extended Service Code of N cannot be reported if the car was built on/after January 1, 1964

-Extended Service Code of U cannot be reported if the car was built before January 1, 1964 or on/after July 1, 1974

NOTES:

- Value is used to calculate End of Service Date (B078).
- Rebuilt Date (RBDT) is required for Extended Service Code (A096) R for Rebuilt, or V for 65 years service.
- Rebuilt Date (RBDT) is required for Extended Service Code (A096) 1, 2, 3, and

V for Increased Life Service.

End of Service Date	B078
Indicates the date of the end of equipment life	

Data is Confidential. System Generated Field. This element is not eligible for Input.

NOTES:

- Data becomes non-confidential two years prior to End of Service Date.

Do Not Load After	B590
Equipment should not be loaded after date shown in the element	

Data is Confidential.

Validation Rules for B590

-Do Not Load After (B590) cannot be updated thirty days prior to the date shown in the element.

-Do Not Load After (B590) cannot be updated within thirty days of the End of Service Date (B078).

-Do Not Load After (B590) date cannot be on or after the End of Service (B078) date.

NOTES:

- The element will be initially populated by End of Service (B078) minus 30 days.
- Data becomes non-confidential thirty days prior to the Do Not Load After (B590) date.

Equipment Identification	EINN
Unique equipment identifier regardless of stenciled mark	

System Generated Field. This element is not eligible for Input.

NOTES:

- Specify the Prior ID (PRID) on equipment records to ensure the historical lineage is preserved. Equipment with the same EIN share history and inspections.

Info Conflict Status	B355
Indicates that an Informational Conflict exists on the Equipment record	

System Generated Field. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Conflict Status	B050
Identifies the escalation level of equipment in active conflict	

System Generated Field. Affects Rating. This element is not eligible for Input . Value does not carry forward for Add Back.

Permissible Values for B050

1 Subject to Zero-Rating
2 Subject to Restricted in Interchange
3 Subject to Deletion

NOTES:

- Subject to Zero-Rating, goes into effect 30 days after Conflict Status occurs
- Subject to Restricted in Interchange, goes into effect 90 days after Conflict Status occurs
- Subject to Deletion, goes into effect 365 days after Conflict Status occurs

Date of Original Conflict	B063
The date the equipment was originally placed in the current conflict	

System Generated Field. This element is not eligible for Input.

Next Conflict Status	B135
Identifies the next escalation level of an equipment in active conflict	

System Generated Field. This element is not eligible for Input. Value does not carry forward for Add Back.

Permissible Values for B135

1 Subject to Zero-Rating
2 Subject to Restricted in Interchange
3 Subject to Deletion

NOTES:

- Subject to Zero-Rating, goes into effect 30 days after Conflict Status occurs
- Subject to Restricted in Interchange, goes into effect 90 days after Conflict Status occurs
- Subject to Deletion, goes into effect 365 days after Conflict Status occurs

Notice Indicator	B137
Identifies equipment in error in Umler Notice Management	

System Generated Field. This element is not eligible for Input.

Conflict Status Next Date	B062
The date the conflict status will be escalated	

System Generated Field. This element is not eligible for Input . Value does not carry forward for Add Back.

Rate Indicator	A070
Indicates the rate type applicable to the unit	

System Generated Field. Used for Transportation Codes. Affects Rating. This element is not eligible for Input. Does not Carry Forward.

Permissible Values for A070

0 Zero-Rated Due to Conflict Errors
2 Private Mileage Rate
4 Private Car Owner Designated Rate
6 Zero-Rated - Scrap (S_,SX), AAR Overage (XA), FRA Overage (YA), Umler Conflict - CHR 1/Tarriff 6007 (XZ). Zero-Rated Private Owner Election to Zero Rate [See Private Zero Rate (B150)].
B Railroad Class III Boxcar Sub19 Rate
M Railroad Market Rate
P Zero-Rated Railroad Class III Boxcar Sub19 Rate
Q Zero-Rated Railroad Market Rate Due to Conflict Errors

NOTES:

- If unit is zero-rated, correction of conflicts will reinstate the appropriate rate indicator code.
- Rate Indicator B will be automatically reported for boxcars covered under Ex Parte No. 346 Sub 19 (A227).
- For Rate Indicator B, car must be qualified with Ex Parte 346 sub 19 (A227), reporting code 23. Can only be reported by Railinc Administrator.
- Rate Indictor B is not applicable to boxcars that were owned by Class I or affiliated Class II carriers and subsequently purchased or leased after December 30, 1983, by a non-affiliated Class II or III carrier. These cars are not excluded under the provisions of Ex Parte No 346 Sub 19.

Private Zero Rate	B150
Indicates a private car is subject to contractual agreement, nullifying mileage rates	

Affects Rating.

Permissible Values for B150

Y Yes

NOTES:

- Reporting "Y" generates Rate Indicator (A070) value 6 and a zero rate.

TTX Hourly Rate	B212
Time Charge-The TTX hourly rate for the equipment	

Data is Confidential. This element is not eligible for Query.

Range of Values for B212

Minimum	Maximum
0	9

Validation Rule for B212

-TTX Hourly rate can only be set on TTX owned Equipment.

TTX Mileage Rate	B213
Mileage Charge-The TTX mileage rate for the equipment	

Data is Confidential. This element is not eligible for Query.

Range of Values for B213

Minimum	Maximum
0	1

Validation Rule for B213

-TTX Mileage rate can only be set on TTX owned Equipment.

Sub 19 (Ex Parte 346) — **A227**

Indicates the equipment is a Railroad Class III Sub 19 boxcar. ■

System Generated Field. Affects Rating. Value does not carry forward for Equipment Group Change.

Permissible Values for A227

23 Railroad Class III Sub 19 Boxcars Only

Validation Rule for A227

-Railroad Ex Parte Sub 19 Boxcar cannot be set if the Build Date (BLDT) or Rebuilt Date (RBDT) is greater than December 30, 1983

NOTES:

- Car must be populated with code 23 for Sub 19 (Ex Parte 346) (A227) to have Rate Indicator B (A070) generated.

First Movement Date — **USAT**

The first movement date under the stenciled mark of the equipment

This element is not eligible for Input. Does not Carry Forward.

Equipment Add Company — **B083**

The reporting mark of the company that added the equipment

System Generated Field. This element is not eligible for Input .

Registration Reason — **B174**

The code indicating the reason this equipment is added

Does not Carry Forward.

Permissible Values for B174

A	Add-Back	N	New
P	Pending Restencil	R	Restencil

Restencil Program Ind — **B177**

Identifies the equipment is under a restencil program

Permissible Values for B177

Y Yes

Delete Reason Code — **B064**

A code that designates the reason the equipment has been deleted

Value does not carry forward for Add Back.

Permissible Values for B064

A	Restenciled
D	Destroyed or wrecked
L	Lease terminated, removed from fleet
P	Retired unserviceable beyond economic repair
R	Rebuilt
S	Sold Serviceable
W	Over age retired for dismantling
Y	Error, reporting did not exist
Z	Other

Non-Compliant Wheelsets — **B544**

Equipment record is incomplete and has a missing wheelset component ID association. Refer to AAR Field Manual Rule 44 for industry requirements ✹

System Generated Field. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Validation Rule for B544

-A Wheelset Component ID is required for each applicable location on equipment built on or after January 1, 2016

-A Wheelset Component ID is required for each applicable location on equipment rebuilt on or after January 1, 2016 and Gross Rail Load (A266) is greater than 268,000 lbs

NOTES:

- A "Y" will be system generated if the equipment is active and the number of Wheelset CID's required is not equal to the Axle Count (A024) on the equipment
- Validation rule applies to equipment that has been in Active status for 60 days

Pseudo Equipment Group — **B547**

Equipment needs to be identified as a miscellaneous record while maintaining all elements linked to the original equipment group

System Generated Field.

Permissible Values for B547

MISC Miscellaneous

Weight

Gross Rail Load/Weight *Mandatory* — **A266**

The maximum permissible weight on rail of the equipment and the load, reported in pounds ● ■

Affects Rating.

Range of Values for A266

Minimum	Maximum
117000	2835000

Validation Rule for A266

-Gross Rail Load must be equal to the Load Limit (LDLT) plus the Tare Weight (A259)

NOTES:

Use Table 1 below to determine Gross Rail Load, if Qualification for Increased Gross Rail Load (B344) does not exist.

TABLE 1 -

Journal Size	Load per Axle	Gross Rail Load for 4-axle Equipment
B - 4 1/2" x 8"	25,750 lbs.	103,000 lbs.
C - 5" x 9"	35,500 lbs.	142,000 lbs.
D - 5 1/2" x 10"	44,250 lbs.	177,000 lbs.
E - 6" x 11"	55,000 lbs.	220,000 lbs.
F - 6 1/2" x 12"	65,750 lbs.	263,000 lbs.
G - 7" x 12"	78,750 lbs.	315,000 lbs.
K - 6 1/2" x 9"	71,500 lbs.	263,000 lbs.
M - 7" x 9"	78,750 lbs.	315,000 lbs.

Use Table 2 below to determine Gross Rail Load for 4-axle equipment if Qualification for Increased Gross Rail Load (B344) exists.

TABLE 2 -

Qualification for Increased Gross Rail Load (B344)	Journal Size	Gross Rail Load
1	K - 6 1/2" x 9"	286,000 lbs.
1	G – 7" x 12"	286,000 lbs.
1	M – 7" x 9"	286,000 lbs.
2	F - 6 1/2" x 12"	286,000 lbs.
2	K - 6 1/2" x 9"	286,000 lbs.
3	F - 6 1/2" x 12"	268,000 lbs.
3	K - 6 1/2" x 9"	268,000 lbs.

- For multi-unit equipment, report the total gross rail load for the entire set.
- Refer to Field Manual Rule 70 if additional information is required.

A Gross Rail Load less than the listed or calculated values may be entered; however:

- Star Code (A247) must be R or S, and
- Load Limit (LDLT) must also be reduced, ensuring Tare Weight (A259) plus Load Limit (LDLT) equals the reported Gross Rail Load.

For equipment having two or more different journal sizes, see following examples:

Example for Drawbar Connected:

- A 3-unit drawbar connected car has 12 axles.
- The end units (Locations A and B) each have 4 axles with E - 6" x 11" journals.
- The intermediate unit (Locations C) has 4 axles with F – 6 1/2" x 12" journals

Using TABLE 1, the Gross Rail Load would be:

8 ea. E-6" x 11" journal axles X 55,000 lbs. per axle = 440,000 lbs.
+ 4 ea. F-6 1/2" x 12" journal axles X 65,750 lbs. per axle = 263,000 lbs.
Gross Rail Load = 703,000 lbs.

Example for Articulated Connected:

- A 5-unit articulated intermodal car has 6 trucks (12 axles).
- The end trucks (Locations A and B) each have 2 axles with E - 6" x 11" journals.
- The intermediate trucks (Locations C, D, E, and F) each have 2 axles with G - 7" x 12" journals

Using TABLE 1, the Gross Rail Load would be:

4 ea. E-6" x 11" journal axles X 55,000 lbs. per axle = 220,000 lbs.
+ 8 ea. G-7" x 12" journal axles X 78,750 lbs. per axle = 630,000 lbs.
Gross Rail Load = 850,000 lbs.

Tare Weight *Mandatory* **A259**

The equipment weight on rail when empty, sometimes referred to as Light Weight, reported in pounds ● ■

Affects Rating.

Range of Values for A259

Minimum	Maximum
40000	1440000

Validation Rule for A259

-Tare Weight (A259) of BOXC with a blank Connected Unit Count (A020), must contain values between 40000 lbs. and 160000 lbs.
-Tare Weight (A259) of BOXC where Connected Unit Count (A020) is 2, must contain values between 80000 lbs. and 320000 lbs.
-Tare Weight (A259) of BOXC where Connected Unit Count (A020) is 3, must contain values between 120000 lbs. and 480000 lbs.
-Tare Weight (A259) of BOXC where Connected Unit Count (A020) is 4, must contain values between 160000 lbs. and 640000 lbs.
-Tare Weight (A259) of BOXC where Connected Unit Count (A020) is 5, must contain values between 200000 lbs. and 800000 lbs.
-Tare Weight (A259) of BOXC where Connected Unit Count (A020) is 6, must contain values between 240000 lbs. and 960000 lbs.
-Tare Weight (A259) of BOXC where Connected Unit Count (A020) is 7, must contain values between 280000 lbs. and 1120000 lbs.
-Tare Weight (A259) of BOXC where Connected Unit Count (A020) is 8, must contain values between 320000 lbs. and 1280000 lbs.
-Tare Weight (A259) of BOXC where Connected Unit Count (A020) is 9, must contain values between 360000 lbs. and 1440000 lbs.
- Tare Weight (A259) value must be reported to the nearest 100 pounds if Weighing Date (A288).

NOTES:

- Do not report an average Tare Weight for car series, except for Pre-Registered cars
- When cars are made active, the actual Tare Weight must be recorded

Load Limit *Mandatory* **LDLT**

The maximum permissible weight of the commodity that can be loaded into the equipment, reported in pounds ● ■

Affects Rating.

Range of Values for LDLT

Minimum	Maximum
40000	2475000

Validation Rule for LDLT

-Load Limit (LDLT) of BOXC with a blank Connected Unit Count (A020), must contain values between 40000 lbs. and 275000 lbs.
-Load Limit (LDLT) of BOXC where Connected Unit Count (A020) is 2, must contain values between 80000 lbs. and 550000 lbs.
-Load Limit (LDLT) of BOXC where Connected Unit Count (A020) is 3, must contain values between 120000 lbs. and 825000 lbs.
- Load Limit (LDLT) of BOXC where Connected Unit Count (A020) is 4, must contain values between 160000 lbs. and 1100000 lbs.
- Load Limit (LDLT) of BOXC where Connected Unit Count (A020) is 5, must contain values between 200000 lbs. and 1375000 lbs.
- Load Limit (LDLT) of BOXC where Connected Unit Count (A020) is 6, must contain values between 240000 lbs. and 1650000 lbs.
- Load Limit (LDLT) of BOXC where Connected Unit Count (A020) is 7, must contain values between 280000 lbs. and 1925000 lbs.
- Load Limit (LDLT) of BOXC where Connected Unit Count (A020) is 8, must contain values between 320000 lbs. and 2200000 lbs.
- Load Limit (LDLT) of BOXC where Connected Unit Count (A020) is 9, must contain values between 360000 lbs. and 2475000 lbs.

NOTES:

- For connected unit cars report the sum of the load limits for all units in the set.

Weighing Status *Mandatory* **A289**

Indicates the weight information is an estimate or an actual measurement ●

Value does not carry forward for Single Clone / Multi-Clone.

Permissible Values for A289

A Actual
E Estimated
V Verified correct Tare Weight
X Tare Weight subject to verification (System Generated)

Validation Rule for A289

-Equipment cannot be within a series of 10 with identical Tare Weights (A259), refer to Appendix P for further information on resolving tare weight conflicts
-When Status Code changes to Active or Inactive Weighing Status must be reported as Actual (A) or Verified (V) within 60 days of Status Code change

Weighing Date **A288**

The date the equipment was actually weighed

Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for A288

Minimum	Maximum
1/1/1900	12/31/9999

Validation Rule for A288

-If Weighing Date is reported the Tare Weight (A259) must be reported
-When Weighing Date is reported then Weighing Status (A289) must be A (Actual) or V (Verified)
-If Weighing Status (A289) is A (Actual) or V (Verified correct Tare Weight) then Weighing Date must be reported
-Weighing Date must be on or before the current date
-Weighing Date cannot be before Built / Rebuilt date

Cubic Feet Capacity **A067**

The maximum interior cubic feet capacity of the equipment

Range of Values for A067

Minimum	Maximum
1400	99999

Validation Rule for A067

-Cubic Feet Capacity (A067) of BOXC with a blank Connected Unit Count (A020), must contain values between 1400 cubic feet and 12500 cubic feet

-Cubic Feet Capacity (A067) of BOXC where Connected Unit Count (A020) is 2, must contain values between 2800 cubic feet and 25000 cubic feet
-Cubic Feet Capacity (A067) of BOXC where Connected Unit Count (A020) is 3, must contain values between 4200 cubic feet and 37500 cubic feet
-Cubic Feet Capacity (A067) of BOXC where Connected Unit Count (A020) is 4, must contain values between 5600 cubic feet and 50000 cubic feet

-Cubic Feet Capacity (A067) of BOXC where Connected Unit Count (A020) is 5, must contain values between 7000 cubic feet and 62500 cubic feet
-Cubic Feet Capacity (A067) of BOXC where Connected Unit Count (A020) is 6, must contain values between 8400 cubic feet and 75000 cubic feet
-Cubic Feet Capacity (A067) of BOXC where Connected Unit Count (A020) is 7, must contain values between 9800 cubic feet and 87500 cubic feet
-Cubic Feet Capacity (A067) of BOXC where Connected Unit Count (A020) is 8, must contain values between 11200 cubic feet and 100000 cubic feet

NOTES:

- For connected unit cars report the sum of all units cubic capacity.

Star Code — A247

Indicates a reduction of the Load Limit (LDLT) of the equipment per AAR Rule 70

Affects Rating.

Permissible Values for A247

R	Body Capacity less than Truck Capacity
S	Reduced Load Limit

NOTES:

- For connected unit cars report the sum of the load limits for all units in the set.

Qual for Inc GRL — B344

AAR qualification for increased Rail Load Code designating AAR approval for operating 4-axle equipment at a gross rail load greater than 263,000 lbs per AAR Rule 88

Permissible Values for B344

1	Rule 88 IGRL Code 1 (> 263,000 lbs. and <= 286,000 lbs. GRL per AAR Specification S-286)
2	Rule 88 IGRL Code 2 (> 263,000 lbs. and <= 286,000 lbs. GRL)
3	Rule 88 IGRL Code 3 (> 263,000 lbs. and <= 268,000 lbs. GRL)

Validation Rule for B344

-4-axle equipment having Qualification for Increased Gross Rail Load of 1 or 2 must have a Gross Rail Load (A266) that does not exceed 286,000 lbs.
-4-axle equipment having Qualification for Increased Gross Rail Load of 3 must have Gross Rail Load (A266) that does not exceed 268,000 lbs.
-4-axle equipment having Qualification for Increased Gross Rail Load of 1 must have a Journal Size (A147) of K, G, or M
-4-axle equipment having Qualification for Increased Gross Rail Load of 2 or 3 must have a Journal Size (A147) of F or K
-4-axle equipment having Qualification for Increased Gross Rail Load of 1, 2, or 3 must have a Wheel Diameter (A294) of 36 or 38
-Equipment having Qualification for Increased Gross Rail Load of 1 or 2, and a Gross Rail Load (A266) less than 286,000 lbs., must have Star Code (A247) of S
-Equipment having Qualification for Increased Gross Rail Load (B344) of 3, and a Gross Rail Load (A266) less than 268,000 lbs., must have Star Code of S
-4-axle equipment with Gross Rail Load (A266) greater than 263,000 lbs. and less than 315,000 lbs., and Star Code (A247) blank, must report Qualification for Increased Gross Rail Load

Dimension

Plate Code *Mandatory* — A046

Indicates the extreme height and width clearance of the equipment

Affects Rating.

Permissible Values for A046

B	Plate Code B	C	Plate Code C	E	Plate Code E
F	Plate Code F	G	Clearance Code G	N	Plate Code N

NOTES:

- For a description of Plate Codes, please see Appendix J at the back of this manual.
  - Report B: If clearance does not exceed Plate B
  - Report C: If clearance is greater than Plate B. but does not exceed Plate C
  - Report E: If clearance is greater than Plates B and C, but does not exceed Plate E.
  - Report F: If clearance is greater than Plates B, C and E, but does not exceed Plate F
  - Report G: If clearance exceeds Plates B, C, E, F, and N.
  - Report N: If clearance is greater than Plates B, C, E, and F, but does not exceed Plate N.
- There is no AAR Plate G. Clearance Code G is included in Umler to represent equipment that does not fit any existing AAR clearance plates.
- For ARTICULATED/MULTI-UNIT SET report the most restrictive clearance plate of UNIT in the set.

Outside Length *Mandatory* — OSLG

The outside length over pulling faces of couplers in normal position

Affects Rating. Displayed in feet and inches on the Web. Stored in inches.

Range of Values for OSLG

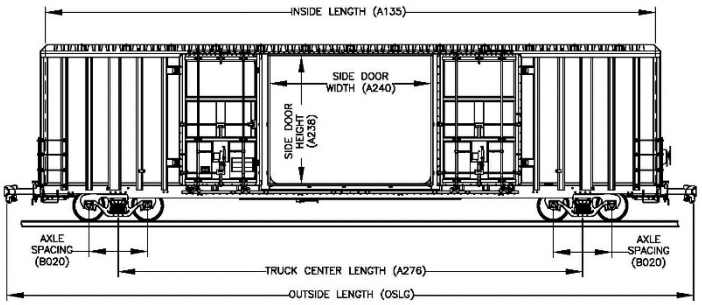
Minimum	Maximum
41 ft 6 inches	855 ft 0 inches

Validation Rule for OSLG

-Outside Length (OSLG) on freight cars must exceed the Inside Length (A135) by 2 feet or more
-Outside Length (OSLG) on freight cars (except refrigerators) must not exceed Inside Length (A135) by more than 16 feet
-Outside Length (OSLG) on refrigerator cars (Mechanical Designation RB, RBL, RP, RPL, or RC) must not exceed Inside Length (A135) by more than 26 feet
-Outside Length (OSLG) of BOXC with a blank Connected Unit Count (A020), must contain values between 41 feet 6 inches and 95 feet
-Outside Length (OSLG) of BOXC where Connected Unit Count (A020) is 2, must contain values between 83 feet and 190 feet
-Outside Length (OSLG) of BOXC where Connected Unit Count (A020) is 3, must contain values between 124 feet 6 inches and 285 feet
-Outside Length (OSLG) of BOXC where Connected Unit Count (A020) is 4, must contain values between 166 feet and 380 feet
-Outside Length (OSLG) of BOXC where Connected Unit Count (A020) is 5, must contain values between 207 feet 6 inches and 475 feet
-Outside Length (OSLG) of BOXC where Connected Unit Count (A020) is 6, must contain values between 249 feet and 570 feet
-Outside Length (OSLG) of BOXC where Connected Unit Count (A020) is 7, must contain values between 290 feet 6 inches and 665 feet
-Outside Length (OSLG) of BOXC where Connected Unit Count (A020) is 8, must contain values between 332 feet and 760 feet
-Outside Length (OSLG) of BOXC where Connected Unit Count (A020) is 9, must contain values between 373 feet 6 inches and 855 feet

NOTES:

- Numeric distance over pulling faces of couplers in normal positions. For ARTICULATED/MULTI-UNIT sets report the maximum coupled length of the set. Must be between 2 and 16 feet greater than inside length and between 2 and 26 feet for R_ _ _.
- For connected unit cars report the maximum coupled length of the set.
- Round fraction to the higher inch, e.g., 05 1/4" = 06"



Outside Extreme Width *Mandatory*	**A186**
The outside extreme width of the equipment	●■

Affects Rating. Displayed in feet and inches on the Web. Stored in inches.

Range of Values for A186

Minimum	Maximum
9 ft 2 inches	10 ft 10 inches

Validation Rule for A186

-Outside Extreme Width must not exceed 10 feet 8 inches for Plate Codes B, C, E, F, or N

NOTES:

- For connected unit cars report the dimension of the largest unit in the set.
- Round fraction to the higher inch, e.g., 05 1/4" = 06"

Outside Extreme Height *Mandatory*	**A185**
Height from top of rail to extreme projecting height	●■

Affects Rating. Displayed in feet and inches on the Web. Stored in inches.

Range of Values for A185

Minimum	Maximum
11 ft 10 inches	17 ft 4 inches

Validation Rule for A185

-Outside Extreme Height for Plate Code B must be less than or equal to 15 feet 1 inch

-Outside Extreme Height for Plate Code C must be less than or equal to 15 feet 6 inches

-Outside Extreme Height for Plate Code E must be less than or equal to 15 feet 9 inches

-Outside Extreme Height for Plate Code F must be less than or equal to 17 feet 0 inch

-Outside Extreme Height for Plate Code N must be less than or equal to 17 feet 1 inch

NOTES:

- For connected unit cars report the dimension of the largest unit in the set.
- Round fraction to the higher inch, e.g., 05 1/4" = 06"

Outside Height Extr Width *Mandatory*	**A187**
The highest point at which the extreme width of the equipment occurs	●

Displayed in feet and inches on the Web. Stored in inches.

Range of Values for A187

Minimum	Maximum
2 ft 0 inches	17 ft 4 inches

Validation Rule for A187

-Outside Extreme Width (A186) for Plate Code B must not exceed 10 feet 8 inches if Outside Height Extreme Width is 13 feet 10 inches or less

-Outside Extreme Width (A186) for Plate Code B must not exceed 10 feet 7 inches if Outside Height Extreme Width is 13 feet 11 inches

-Outside Extreme Width (A186) for Plate Code B must not exceed 10 feet 6 inches if Outside Height Extreme Width is 14 feet 0 inches

-Outside Extreme Width (A186) for Plate Code B must not exceed 10 feet 4 inches if Outside Height Extreme Width is 14 feet 1 inches

-Outside Extreme Width (A186) for Plate Code B must not exceed 10 feet 3 inches if Outside Height Extreme Width is 14 feet 2 inches

-Outside Extreme Width (A186) for Plate Code B must not exceed 10 feet 2 inches if Outside Height Extreme Width is 14 feet 3 inches

-Outside Extreme Width (A186) for Plate Code B must not exceed 10 feet 0 inches if Outside Height Extreme Width is 14 feet 4 inches

-Outside Extreme Width (A186) for Plate Code B must not exceed 9 feet 9 inches if Outside Height Extreme Width is 14 feet 5 inches

-Outside Extreme Width (A186) for Plate Code B must not exceed 9 feet 5 inches if Outside Height Extreme Width is 14 feet 6 inches

-Outside Extreme Width (A186) for Plate Code B must not exceed 9 feet 2 inches if Outside Height Extreme Width is 14 feet 7 inches

-Outside Extreme Width (A186) for Plate Code B must not exceed 8 feet 10 inches if Outside Height Extreme Width is 14 feet 8 inches

-Outside Extreme Width (A186) for Plate Code B must not exceed 8 feet 6 inches if Outside Height Extreme Width is 14 feet 9 inches

-Outside Extreme Width (A186) for Plate Code B must not exceed 8 feet 3 inches if Outside Height Extreme Width is 14 feet 10 inches

-Outside Extreme Width (A186) for Plate Code B must not exceed 7 feet 11 inches if Outside Height Extreme Width is 14 feet 11 inches

-Outside Extreme Width (A186) for Plate Code B must not exceed 7 feet 6 inches if Outside Height Extreme Width is 15 feet 0 inches

-Outside Extreme Width (A186) for Plate Code B must not exceed 7 feet 4 inches if Outside Height Extreme Width is 15 feet 1 inches

-Outside Extreme Width (A186) for Plate Code C must not exceed 10 feet 8 inches if Outside Height Extreme Width is 14 feet 3 inches or less

-Outside Extreme Width (A186) for Plate Code C must not exceed 10 feet 7 inches if Outside Height Extreme Width is 14 feet 4 inches

-Outside Extreme Width (A186) for Plate Code C must not exceed 10 feet 6 inches if Outside Height Extreme Width is 14 feet 5 inches

-Outside Extreme Width (A186) for Plate Code C must not exceed 10 feet 4 inches if Outside Height Extreme Width is 14 feet 6 inches

-Outside Extreme Width (A186) for Plate Code C must not exceed 10 feet 3 inches if Outside Height Extreme Width is 14 feet 7 inches

-Outside Extreme Width (A186) for Plate Code C must not exceed 10 feet 2 inches if Outside Height Extreme Width is 14 feet 8 inches

-Outside Extreme Width (A186) for Plate Code C must not exceed 10 feet 0 inches if Outside Height Extreme Width is 14 feet 9 inches

-Outside Extreme Width (A186) for Plate Code C must not exceed 9 feet 9 inches if Outside Height Extreme Width is 14 feet 10 inches

-Outside Extreme Width (A186) for Plate Code C must not exceed 9 feet 5 inches if Outside Height Extreme Width is 14 feet 11 inches

-Outside Extreme Width (A186) for Plate Code C must not exceed 9 feet 2 inches if Outside Height Extreme Width is 15 feet 0 inches

-Outside Extreme Width (A186) for Plate Code C must not exceed 8 feet 10 inches if Outside Height Extreme Width is 15 feet 1 inches

-Outside Extreme Width (A186) for Plate Code C must not exceed 8 feet 6 inches if Outside Height Extreme Width is 15 feet 2 inches

-Outside Extreme Width (A186) for Plate Code C must not exceed 8 feet 3 inches if Outside Height Extreme Width is 15 feet 3 inches

-Outside Extreme Width (A186) for Plate Code C must not exceed 7 feet 11 inches if Outside Height Extreme Width is 15 feet 4 inches

-Outside Extreme Width (A186) for Plate Code C must not exceed 7 feet 8 inches if Outside Height Extreme Width is 15 feet 5 inches

-Outside Extreme Width (A186) for Plate Code C must not exceed 7 feet 4 inches if Outside Height Extreme Width is 15 feet 6 inches

-Outside Extreme Width (A186) for Plate Code E must not exceed 10 feet 8 inches if Outside Height Extreme Width is 15 feet 2 inches

-Outside Extreme Width (A186) for Plate Code E must not exceed 10 feet 6 inches if Outside Height Extreme Width is 15 feet 3 inches or less

-Outside Extreme Width (A186) for Plate Code E must not exceed 10 feet 3 inches if Outside Height Extreme Width is 15 feet 4 inches

-Outside Extreme Width (A186) for Plate Code E must not exceed 9 feet 6 inches if Outside Height Extreme Width is 15 feet 5 inches

-Outside Extreme Width (A186) for Plate Code E must not exceed 8 feet 8 inches if Outside Height Extreme Width is 15 feet 6 inches

-Outside Extreme Width (A186) for Plate Code E must not exceed 7 feet 11 inches if Outside Height Extreme Width is 15 feet 7 inches

-Outside Extreme Width (A186) for Plate Code E must not exceed 7 feet 1 inches if Outside Height Extreme Width is 15 feet 8 inches

-Outside Extreme Width (A186) for Plate Code E must not exceed 6 feet 3 inches if Outside Height Extreme Width is 15 feet 9 inches
-Outside Extreme Width (A186) for Plate Code F must not exceed 10 feet 8 inches if Outside Height Extreme Width is 16 feet 3 inches or less
-Outside Extreme Width (A186) for Plate Code F must not exceed 10 feet 7 inches if Outside Height Extreme Width is between 16 feet 4 inches and 16 feet 6 inches
-Outside Extreme Width (A186) for Plate Code F must not exceed 10 feet 6 inches if Outside Height Extreme Width is 16 feet 7 inches
-Outside Extreme Width (A186) for Plate Code F must not exceed 10 feet 3 inches if Outside Height Extreme Width is 16 feet 8 inches
-Outside Extreme Width (A186) for Plate Code F must not exceed 10 feet 0 inches if Outside Height Extreme Width is 16 feet 9 inches
-Outside Extreme Width (A186) for Plate Code F must not exceed 9 feet 8 inches if Outside Height Extreme Width is 16 feet 10 inches
-Outside Extreme Width (A186) for Plate Code F must not exceed 9 feet 5 inches if Outside Height Extreme Width is 16 feet 11 inches
-Outside Extreme Width (A186) for Plate Code F must not exceed 9 feet 2 inches if Outside Height Extreme Width is 17 feet 0 inches
-Outside Extreme Width (A186) for Plate Code N must not exceed 10 feet 8 inches if Outside Height Extreme Width (A187) is 16 feet 9 inches or less
-Outside Extreme Width (A186) for Plate Code N must not exceed 10 feet 6 inches if Outside Height Extreme Width (A187) is 16 feet 10 inches
-Outside Extreme Width (A186) for Plate Code N must not exceed 10 feet 4 inches if Outside Height Extreme Width (A187) is 16 feet 11 inches
-Outside Extreme Width (A186) for Plate Code N must not exceed 10 feet 2 inches if Outside Height Extreme Width (A187) is 17 feet 0 inches
-Outside Extreme Width (A186) for Plate Code N must not exceed 9 feet 11 inches if Outside Height Extreme Width (A187) is 17 feet 1 inch

NOTES:

- For connected unit cars report the dimension of the largest unit in the set.
- Round fraction to the higher inch, e.g., 05 1/4" = 06"

Outside Upper Eaves Width	A194
The width between the outside uppermost corners of the equipment	✹

Displayed in feet and inches on the Web. Stored in inches.

Range of Values for A194

Minimum	Maximum
5 ft 0 inches	10 ft 8 inches

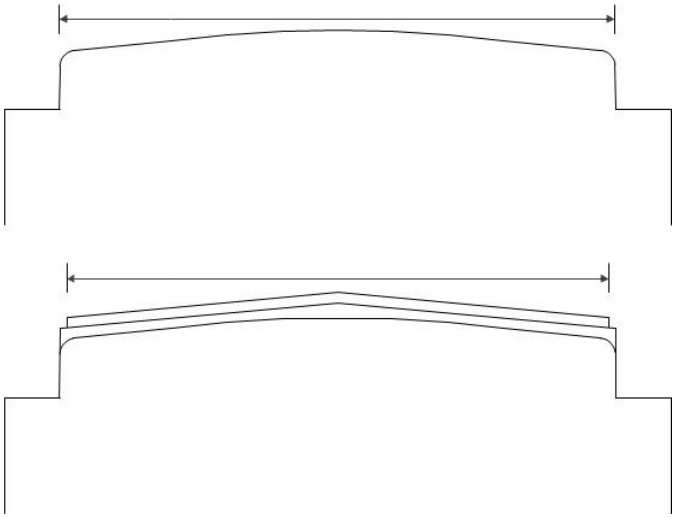
Validation Rule for A194

-Outside Upper Eaves Width (A194) is mandatory for boxcars built or rebuilt on or after June 1, 2015
-Outside Upper Eaves Width must be less than or equal to the Outside Extreme Width (A186)
-Outside Upper Eaves Width must be less than or equal to the Outside Lower Eaves Width (A190)
-Outside Upper Eaves Width for Plate Code B must not exceed 10 feet 8 inches if Outside Upper Eaves Height (A193) is 13 feet 10 inches or less
-Outside Upper Eaves Width for Plate Code B must not exceed 10 feet 7 inches if Outside Upper Eaves Height (A193) is 13 feet 11 inches
-Outside Upper Eaves Width for Plate Code B must not exceed 10 feet 6 inches if Outside Upper Eaves Height (A193) is 14 feet 0 inches
-Outside Upper Eaves Width for Plate Code B must not exceed 10 feet 4 inches if Outside Upper Eaves Height (A193) is 14 feet 1 inches
-Outside Upper Eaves Width for Plate Code B must not exceed 10 feet 3 inches if Outside Upper Eaves Height (A193) is 14 feet 2 inches
-Outside Upper Eaves Width for Plate Code B must not exceed 10 feet 2 inches if Outside Upper Eaves Height (A193) is 14 feet 3 inches
-Outside Upper Eaves Width for Plate Code B must not exceed 10 feet 0 inches if Outside Upper Eaves Height (A193) is 14 feet 4 inches
-Outside Upper Eaves Width for Plate Code B must not exceed 9 feet 9 inches if Outside Upper Eaves Height (A193) is 14 feet 5 inches
-Outside Upper Eaves Width for Plate Code B must not exceed 9 feet 5 inches if Outside Upper Eaves Height (A193) is 14 feet 6 inches
-Outside Upper Eaves Width for Plate Code B must not exceed 9 feet 2 inches if Outside Upper Eaves Height (A193) is 14 feet 7 inches
-Outside Upper Eaves Width for Plate Code B must not exceed 8 feet 10 inches if Outside Upper Eaves Height (A193) is 14 feet 8 inches
-Outside Upper Eaves Width for Plate Code B must not exceed 8 feet 6 inches if Outside Upper Eaves Height (A193) is 14 feet 9 inches
-Outside Upper Eaves Width for Plate Code B must not exceed 8 feet 3 inches if Outside Upper Eaves Height (A193) is 14 feet 10 inches
-Outside Upper Eaves Width for Plate Code B must not exceed 7 feet 11 inches if Outside Upper Eaves Height (A193) is 14 feet 11 inches
-Outside Upper Eaves Width for Plate Code B must not exceed 7 feet 8 inches if Outside Upper Eaves Height (A193) is 15 feet 0 inches
-Outside Upper Eaves Width for Plate Code B must not exceed 7 feet 4 inches if Outside Upper Eaves Height (A193) is 15 feet 1 inches
-Outside Upper Eaves Width for Plate Code C must not exceed 10 feet 8 inches if Outside Upper Eaves Height (A193) is 14 feet 3 inches or less
-Outside Upper Eaves Width for Plate Code C must not exceed 10 feet 7 inches if Outside Upper Eaves Height (A193) is 14 feet 4 inches
-Outside Upper Eaves Width for Plate Code C must not exceed 10 feet 6 inches if Outside Upper Eaves Height (A193) is 14 feet 5 inches
-Outside Upper Eaves Width for Plate Code C must not exceed 10 feet 4 inches if Outside Upper Eaves Height (A193) is 14 feet 6 inches
-Outside Upper Eaves Width for Plate Code C must not exceed 10 feet 3 inches if Outside Upper Eaves Height (A193) is 14 feet 7 inches
-Outside Upper Eaves Width for Plate Code C must not exceed 10 feet 2 inches if Outside Upper Eaves Height (A193) is 14 feet 8 inches
-Outside Upper Eaves Width for Plate Code C must not exceed 10 feet 0 inches if Outside Upper Eaves Height (A193) is 14 feet 9 inches
-Outside Upper Eaves Width for Plate Code C must not exceed 9 feet 9 inches if Outside Upper Eaves Height (A193) is 14 feet 10 inches
-Outside Upper Eaves Width for Plate Code C must not exceed 9 feet 5 inches if Outside Upper Eaves Height (A193) is 14 feet 11 inches
-Outside Upper Eaves Width for Plate Code C must not exceed 9 feet 2 inches if Outside Upper Eaves Height (A193) is 15 feet 0 inches
-Outside Upper Eaves Width for Plate Code C must not exceed 8 feet 10 inches if Outside Upper Eaves Height (A193) is 15 feet 1 inches
-Outside Upper Eaves Width for Plate Code C must not exceed 8 feet 6 inches if Outside Upper Eaves Height (A193) is 15 feet 2 inches
-Outside Upper Eaves Width for Plate Code C must not exceed 8 feet 3 inches if Outside Upper Eaves Height (A193) is 15 feet 3 inches
-Outside Upper Eaves Width for Plate Code C must not exceed 7 feet 11 inches if Outside Upper Eaves Height (A193) is 15 feet 4 inches
-Outside Upper Eaves Width for Plate Code C must not exceed 7 feet 8 inches if Outside Upper Eaves Height (A193) is 15 feet 5 inches
-Outside Upper Eaves Width for Plate Code C must not exceed 7 feet 4 inches if Outside Upper Eaves Height (A193) is 15 feet 6 inches
-Outside Upper Eaves Width for Plate Code E must not exceed 10 feet 8 inches if Outside Upper Eaves Height (A193) is 15 feet 2 inches
-Outside Upper Eaves Width for Plate Code E must not exceed 10 feet 6 inches if Outside Upper Eaves Height (A193) is 15 feet 3 inches
-Outside Upper Eaves Width for Plate Code E must not exceed 10 feet 3 inches if Outside Upper Eaves Height (A193) is 15 feet 4 inches
-Outside Upper Eaves Width for Plate Code E must not exceed 9 feet 6 inches if Outside Upper Eaves Height (A193) is 15 feet 5 inches
-Outside Upper Eaves Width for Plate Code E must not exceed 8 feet 8 inches if Outside Upper Eaves Height (A193) is 15 feet 6 inches
-Outside Upper Eaves Width for Plate Code E must not exceed 7 feet 11 inches if Outside Upper Eaves Height (A193) is 15 feet 7 inches
-Outside Upper Eaves Width for Plate Code E must not exceed 7 feet 1 inches if Outside Upper Eaves Height (A193) is 15 feet 8 inches
-Outside Upper Eaves Width for Plate Code E must not exceed 6 feet 3 inches if Outside Upper Eaves Height (A193) is 15 feet 9 inches
-Outside Upper Eaves Width for Plate Code F must not exceed 10 feet 8 inches if Outside Upper Eaves Height (A193) is 16 feet 3 inches
-Outside Upper Eaves Width for Plate Code F must not exceed 10 feet 7 inches if Outside Upper Eaves Height (A193) is between 16 feet 4 inches and 16 feet 6 inches

-Outside Upper Eaves Width for Plate Code F must not exceed 10 feet 6 inches if Outside Upper Eaves Height (A193) is 16 feet 7 inches
-Outside Upper Eaves Width for Plate Code F must not exceed 10 feet 3 inches if Outside Upper Eaves Height (A193) is 16 feet 8 inches
-Outside Upper Eaves Width for Plate Code F must not exceed 10 feet 0 inches if Outside Upper Eaves Height (A193) is 16 feet 9 inches
-Outside Upper Eaves Width for Plate Code F must not exceed 9 feet 8 inches if Outside Upper Eaves Height (A193) is 16 feet 10 inches
-Outside Upper Eaves Width for Plate Code F must not exceed 9 feet 5 inches if Outside Upper Eaves Height (A193) is 16 feet 11 inches
-Outside Upper Eaves Width for Plate Code F must not exceed 9 feet 2 inches if Outside Upper Eaves Height (A193) is 17 feet 0 inches
-Outside Upper Eaves Width for Plate Code N must not exceed 10 feet 8 inches if Outside Upper Eaves Height (A193) is 16 feet 9 inches or less
-Outside Upper Eaves Width for Plate Code N must not exceed 10 feet 6 inches if Outside Upper Eaves Height (A193) is 16 feet 10 inches
-Outside Upper Eaves Width for Plate Code N must not exceed 10 feet 4 inches if Outside Upper Eaves Height (A193) is 16 feet 11 inches
-Outside Upper Eaves Width for Plate Code N must not exceed 10 feet 2 inches if Outside Upper Eaves Height (A193) is 17 feet 0 inches
-Outside Upper Eaves Width for Plate Code N must not exceed 9 feet 11 inches if Outside Upper Eaves Height (A193) is 17 feet 1 inch

NOTES:

- For connected unit cars report the dimension of the largest unit in the set



Outside Upper Eaves Hght *Mandatory* **A193**

Height from the top of rail to the uppermost outside corner of the equipment ●

Displayed in feet and inches on the Web. Stored in inches.

Range of Values for A193

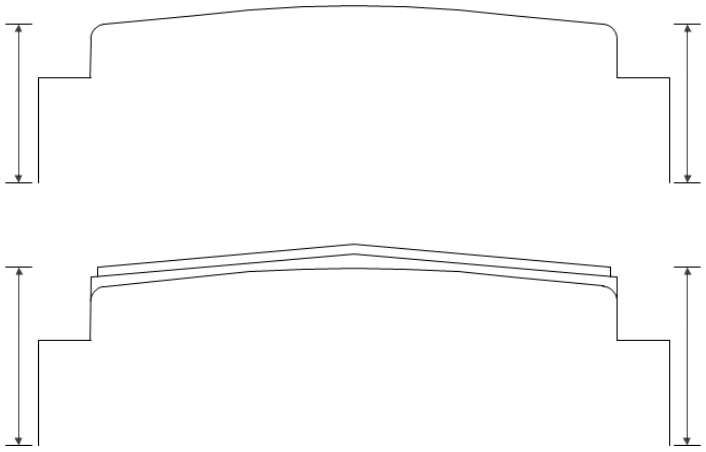
Minimum	Maximum
8 ft 0 inches	17 ft 4 inches

Validation Rule for A193

-Outside Upper Eaves Height must not exceed the Outside Extreme Height
-Outside Upper Eaves Height must be greater than or equal to the Outside Lower Eaves Height (A189)
-Outside Upper Eaves Height for Plate Code B must not exceed 15 feet 1 inch
-Outside Upper Eaves Height for Plate Code C must not exceed 15 feet 6 inches
-Outside Upper Eaves Height for Plate Code E must not exceed 15 feet 9 inches
-Outside Upper Eaves Height for Plate Code F must not exceed 17 feet 0 inches
-Outside Upper Eaves Height for Plate Code N must not exceed 17 feet 1 inch

NOTES:

- For connected unit cars report the dimension of the largest unit in the set.



Outside Lower Eaves Width **A190**

Width over lower eaves at sides of car (see diagram)

Displayed in feet and inches on the Web. Stored in inches.

Range of Values for A190

Minimum	Maximum
8 ft 6 inches	10 ft 8 inches

Validation Rule for A190

-Outside Lower Eaves Width must not exceed the Outside Extreme Width (A186)
-Outside Lower Eaves Width must be greater than or equal to Outside Upper Eaves Width (A194)
-Outside Lower Eaves Width for Plate Code B must not exceed 10 feet 8 inches if Outside Lower Eaves Height (A189) is 13 feet 10 inches or less
-Outside Lower Eaves Width for Plate Code B must not exceed 10 feet 7 inches if Outside Lower Eaves Height (A189) is 13 feet 11 inches
-Outside Lower Eaves Width for Plate Code B must not exceed 10 feet 6 inches if Outside Lower Eaves Height (A189) is 14 feet 0 inches
-Outside Lower Eaves Width for Plate Code B must not exceed 10 feet 3 inches if Outside Lower Eaves Height (A189) is 14 feet 2 inches
-Outside Lower Eaves Width for Plate Code B must not exceed 10 feet 2 inches if Outside Lower Eaves Height (A189) is 14 feet 3 inches
-Outside Lower Eaves Width for Plate Code B must not exceed 10 feet 0 inches if Outside Lower Eaves Height (A189) is 14 feet 4 inches
-Outside Lower Eaves Width for Plate Code B must not exceed 9 feet 9 inches if Outside Lower Eaves Height (A189) is 14 feet 5 inches
-Outside Lower Eaves Width for Plate Code B must not exceed 9 feet 5 inches if Outside Lower Eaves Height (A189) is 14 feet 6 inches
-Outside Lower Eaves Width for Plate Code B must not exceed 9 feet 2 inches if Outside Lower Eaves Height (A189) is 14 feet 7 inches
-Outside Lower Eaves Width for Plate Code B must not exceed 8 feet 10 inches if Outside Lower Eaves Height (A189) is 14 feet 8 inches
-Outside Lower Eaves Width for Plate Code C must not exceed 10 feet 8 inches if Outside Lower Eaves Height (A189) is 14 feet 3 inches or less
-Outside Lower Eaves Width for Plate Code C must not exceed 10 feet 7 inches if Outside Lower Eaves Height (A189) is 14 feet 4 inches
-Outside Lower Eaves Width for Plate Code C must not exceed 10 feet 6 inches if Outside Lower Eaves Height (A189) is 14 feet 5 inches
-Outside Lower Eaves Width for Plate Code C must not exceed 10 feet 4 inches if Outside Lower Eaves Height (A189) is 14 feet 6 inches
-Outside Lower Eaves Width for Plate Code C must not exceed 10 feet 3 inches if Outside Lower Eaves Height (A189) is 14 feet 7 inches
-Outside Lower Eaves Width for Plate Code C must not exceed 10 feet 2 inches if Outside Lower Eaves Height (A189) is 14 feet 8 inches
-Outside Lower Eaves Width for Plate Code C must not exceed 10 feet 0 inches if Outside Lower Eaves Height (A189) is 14 feet 9 inches

-Outside Lower Eaves Width for Plate Code C must not exceed 9 feet 9 inches if Outside Lower Eaves Height (A189) is 14 feet 10 inches
-Outside Lower Eaves Width for Plate Code C must not exceed 9 feet 5 inches if Outside Lower Eaves Height (A189) is 14 feet 11 inches
-Outside Lower Eaves Width for Plate Code C must not exceed 9 feet 2 inches if Outside Lower Eaves Height (A189) is 15 feet 0 inches
-Outside Lower Eaves Width for Plate Code C must not exceed 8 feet 10 inches if Outside Lower Eaves Height (A189) is 15 feet 1 inches
-Outside Lower Eaves Width for Plate Code C must not exceed 8 feet 6 inches if Outside Lower Eaves Height (A189) is 15 feet 2 inches
-Outside Lower Eaves Width for Plate Code E must not exceed 10 feet 8 inches if Outside Lower Eaves Height (A189) is 15 feet 2 inches or less
-Outside Lower Eaves Width for Plate Code E must not exceed 10 feet 6 inches if Outside Lower Eaves Height (A189) is 15 feet 3 inches
-Outside Lower Eaves Width for Plate Code E must not exceed 10 feet 3 inches if Outside Lower Eaves Height (A189) is 15 feet 4 inches
-Outside Lower Eaves Width for Plate Code E must not exceed 9 feet 6 inches if Outside Lower Eaves Height (A189) is 15 feet 5 inches
-Outside Lower Eaves Width for Plate Code E must not exceed 8 feet 8 inches if Outside Lower Eaves Height (A189) is 15 feet 6 inches
-Outside Lower Eaves Width for Plate Code F must not exceed 10 feet 8 inches if Outside Lower Eaves Height (A189) is 16 feet 3 inches or less
-Outside Lower Eaves Width for Plate Code F must not exceed 10 feet 7 inches if Outside Lower Eaves Height (A189) is between 16 feet 4 inches and 16 feet 6 inches
-Outside Lower Eaves Width for Plate Code F must not exceed 10 feet 6 inches if Outside Lower Eaves Height (A189) is 16 feet 7 inches
-Outside Lower Eaves Width for Plate Code F must not exceed 10 feet 3 inches if Outside Lower Eaves Height (A189) is 16 feet 8 inches
-Outside Lower Eaves Width for Plate Code F must not exceed 10 feet 0 inches if Outside Lower Eaves Height (A189) is 16 feet 9 inches
-Outside Lower Eaves Width for Plate Code F must not exceed 9 feet 8 inches if Outside Lower Eaves Height (A189) is 16 feet 10 inches
-Outside Lower Eaves Width for Plate Code F must not exceed 9 feet 5 inches if Outside Lower Eaves Height (A189) is 16 feet 11 inches
-Outside Lower Eaves Width for Plate Code F must not exceed 9 feet 2 inches if Outside Lower Eaves Height (A189) is 17 feet 0 inches
-Outside Lower Eaves Width for Plate Code N must not exceed 10 feet 8 inches if Outside Lower Eaves Height (A189) is 16 feet 9 inches or less
-Outside Lower Eaves Width for Plate Code N must not exceed 10 feet 6 inches if Outside Lower Eaves Height (A189) is 16 feet 10 inches
-Outside Lower Eaves Width for Plate Code N must not exceed 10 feet 4 inches if Outside Lower Eaves Height (A189) is 16 feet 11 inches
-Outside Lower Eaves Width for Plate Code N must not exceed 10 feet 2 inches if Outside Lower Eaves Height (A189) is 17 feet 0 inches
-Outside Lower Eaves Width for Plate Code N must not exceed 9 feet 11 inches if Outside Lower Eaves Height (A189) is 17 feet 1 inch

NOTES:
- Round fraction to the higher inch, e.g., 05 1/4" = 06"
- For connected unit cars report the dimension of the largest unit in the set.

Outside Lower Eaves Hght A189

Height from top of rail to lower eaves at side of car (see diagrams)

Displayed in feet and inches on the Web. Stored in inches.

Range of Values for A189

Minimum	Maximum
8 ft 0 inches	17 ft 4 inches

Validation Rule for A189

-Outside Lower Eaves Height must not exceed the Outside Extreme Height (A185)
-Outside Lower Eaves Height must not exceed Outside Upper Eaves Height (A193)
-Outside Lower Eaves Height for Plate Code B must not exceed 15 feet 1 inch
-Outside Lower Eaves Height for Plate Code C must not exceed 15 feet 6 inches
-Outside Lower Eaves Height for Plate Code E must not exceed 15 feet 9 inches
-Outside Lower Eaves Height for Plate Code F must not exceed 17 feet 0 inches
-If Outside Lower Eaves Width (A190) is reported then Outside Lower Eaves Height must be reported
-Outside Lower Eaves Height for Plate Code N must not exceed 17 feet 1 inch

NOTES:
- Round fraction to the higher inch, e.g., 05 ¼" = 06"
- For connected unit cars report the dimension of the largest unit in the set.

Inside Length *Mandatory* A135

The inside length of the equipment from end to end inside walls, linings, and permanent bulkheads ●▲

Used in ETC Generation. Displayed in feet and inches on the Web. Stored in inches.

Range of Values for A135

Minimum	Maximum
39 ft 0 inches	93 ft 0 inches

NOTES:
- Round fraction to the lower inch, e.g., 05 1/4" = 05"
- For connected unit cars report the shortest dimension of a unit in the set.
- Outside Length (OSLG) on freight cars must exceed the Inside Length (A135) by 2 feet or more.
- Outside Length (OSLG) on freight cars (except refrigerators) must not exceed Inside Length (A135) by more than 16 feet.
- Outside Length (OSLG) on refrigerator cars (Mechanical Designation RB, RBL, RP, RPL or RC) must not exceed Inside Length (A135) by more than 26 feet.

Inside Width *Mandatory* A138

The inside width of the equipment from side walls and linings ●▲

Used in ETC Generation. Displayed in feet and inches on the Web. Stored in inches.

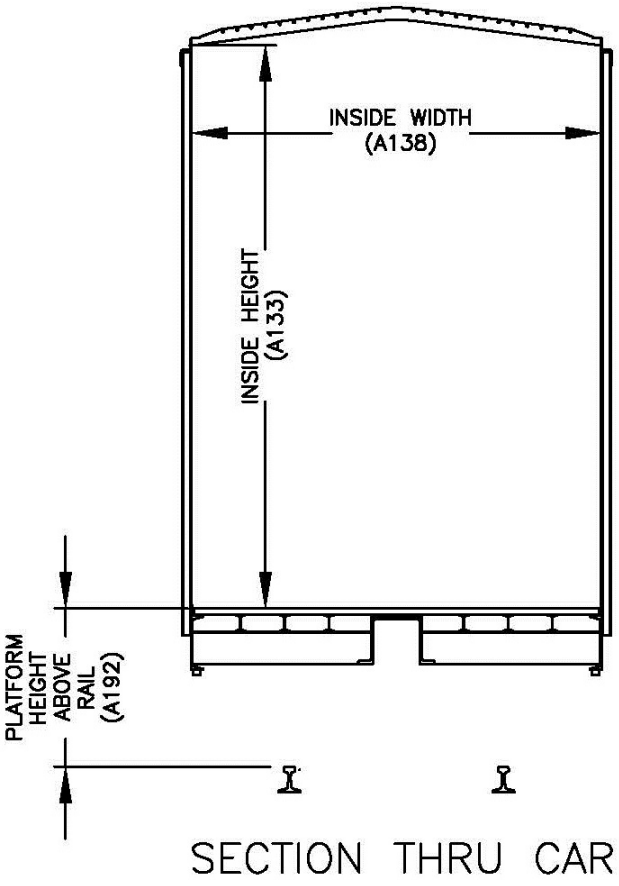
Range of Values for A138

Minimum	Maximum
8 ft 6 inches	9 ft 8 inches

Validation Rule for A138

-Inside Width/Inside Platform Width must not exceed Outside Extreme Width

NOTES:
- For connected unit cars report the shortest dimension of a unit in the set.



Inside Height A133

The inside height of the equipment from the floor to the top of the side, or to the lowest point of the interior ceiling ✹

Displayed in feet and inches on the Web. Stored in inches.

Range of Values for A133

Minimum	Maximum
8 ft 10 inches	13 ft 4 inches

Validation Rule for A133

-Refrigerator Cars require an Inside Height of greater than or equal to 6 feet

-Inside Height must not exceed Outside Extreme Height (A185)

-All Box Cars with a Built Date (BLDT) or Rebuilt Date (RBDT) on or after April 1, 2016 must report Inside Height

NOTES:

- For connected unit cars report the shortest dimension of a unit in the set.

Truck Center Length A276

The length between the centers of the two truck systems ■

Affects Rating. Displayed in feet and inches on the Web. Stored in inches.

Range of Values for A276

Minimum	Maximum
22 ft 6 inches	76 ft 11 inches

Validation Rule for A276

-Truck Center Length is required for cars with an Outside Length of greater than 62 feet 6 inches

NOTES:

- For connected unit cars report the dimension of the largest unit in the set.

Platform Hght Above Rail A192

Describes the platform height above the rail in inches ✹

Range of Values for A192

Minimum	Maximum
30	60

Validation Rule for A192

-High Cube, Plate F Box Cars must report Platform Height Above Rail, if built after July 27, 2010

-Platform Height Above Rail (A192) is required for Boxcars where the Plate Code (A046) exceeds C and the Built Date (BLDT) or Rebuilt Date (RBDT) is on or after July 1, 2016

Door

Side Door Type *Mandatory* B193

Indicates the description of the side door ●▲

Used in ETC Generation.

Permissible Values for B193

01	Single Sliding Doors
02	Single Plug Doors
04	Double Sliding Doors
06	Double Plug Doors
08	Combinations Sliding And Plug Doors
10	Split Refrigerator Door (Hinged)
11	More than One Opening on Same Side
13	Other
15	Permanently Closed or No Side Door
16	All Door Box Car(L_4_ Only)
17	Double, Double Plug Doors

Validation Rule for B193

-Box Cars with Mechanical Designation LU require a Box Side Door Type of 16 (All Door Box Car)

-Box Side Door Type of 16 (All Door Box Car) is only applicable to Box Cars with Mechanical Designation LU

-Box Cars that have a Side Door Type of 1, 2, 4, 6 or 8 must have a Side Door Orientation (B192) of S or C

Box Side Door Orientation B192

Indicates the position of the side door on a box car

Permissible Values for B192

C Centered S Staggered

Validation Rule for B192

-Box Side Door Orientation is not applicable to (Mechanical Designation LU) Box Cars

Side Door Width A240

The width of the side door opening ▲

Used in ETC Generation. Displayed in feet and inches on the Web. Stored in inches.

Range of Values for A240

Minimum	Maximum
6 ft 0 inches	27 ft 0 inches

Validation Rule for A240

-Side Door Width of Refrigerator Cars, Mechanical Designations (RB, RBL, RC, RP, RPL) must not exceed 21 feet 11 inches

-Side Door Width of Box Cars (Mechanical Designation LU) must be greater than or equal 24 feet 8 inches

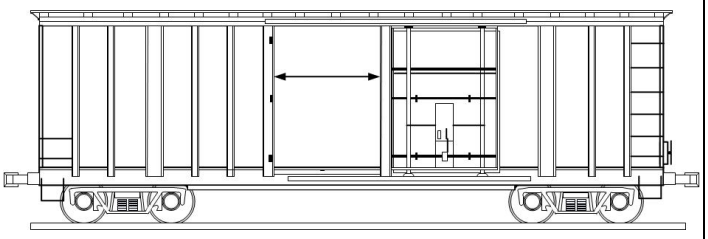
-Side Door Width requires that Side Door Height (A238) also be entered

-Side Door Height (A238) requires that Side Door Width also be entered

-Side Door Width must not be reported for Boxcars with Side Door Type (B193) of 15

-Side Door Width must be reported for Boxcars whose Side Door Type (B193) is not 15

NOTES:
- Round fraction to the lower inch, e.g., 05 1/4" = 05"
- If more than one opening on the side, report the width of the maximum continuous opening
- For connected unit cars report the dimension of the smallest side door width of a unit in the set.



Side Door Height — **A238**

The height of the side door opening

Displayed in feet and inches on the Web. Stored in inches.

Range of Values for A238

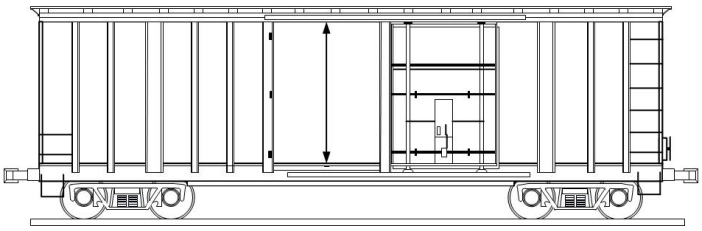
Minimum	Maximum
8 ft 0 inches	12 ft 11 inches

Validation Rule for A238

-Side Door Height must not be reported for Boxcars with Side Door Type (B193) of 15

-Side Door Height must be reported for Boxcars whose Side Door Type (B193) is not 15

NOTES:
- Round fraction to the lower inch, e.g., 05 1/4" = 05"
- For connected unit cars report the dimension of the smallest unit in the set.



End Door Width — **A082**

The width of the end door opening in inches

Displayed in feet and inches on the Web. Stored in inches.

Range of Values for A082

Minimum	Maximum
8 ft 0 inches	10 ft 2 inches

Validation Rule for A082

-End Door Width is not applicable to Refrigerator Cars, Mechanical Designations (RB, RBL, RP, RPL or RC)

NOTES:
- Round fraction to the lower inch, e.g., 05 1/4" = 05"
- For connected unit cars report the dimension of the smallest end door width of a unit in the set.

End Door Height — **A080**

The height of the end door opening in inches

Displayed in feet and inches on the Web. Stored in inches.

Range of Values for A080

Minimum	Maximum
8 ft 6 inches	10 ft 0 inches

Validation Rule for A080

-End Door Height is not applicable to Refrigerator Cars, Mechanical Designations (RB, RBL, RP, RPL or RC)

-End Door Height must not be reported if End Door Width is not reported

-End Door Height must be reported if End Door Width is reported

NOTES:
- Round fraction to the lower inch, e.g., 05 ¼" = 05"
- For connected unit cars report the dimension of the smallest end door height of a unit in the set.

Anti-Pilferage Locking — **B016**

Indicates that an anti-pilferage locking device is available

Permissible Values for B016

Y Yes

Door Assist Type — **B072** ✹

Indicates the type of door assist on the equipment

Permissible Values for B072

P Puller Bracket
H Hydraulic
N Not Equipped
U Unknown

Validation Rule for B072

-Door Assist is not applicable to Refrigerator Cars

-Door Assist Type must be populated if the equipment was built or rebuilt on or after Dec 1, 2015

-Equipment built on or after Dec 1, 2015 cannot have a Door Assist Type of Unknown

Specification

Truck Count — **B256**

The total number of trucks on the equipment

System Generated Field. This element is not eligible for Input.

Range of Values for B256

Minimum	Maximum
2	18

Axle Count *Mandatory* — **A024** ●■

The total number of axles on the equipment

Affects Rating.

Range of Values for A024

Minimum	Maximum
4	36

Validation Rule for A024

-Axle Count must be greater than or equal to 4

-Axle Count for an articulated car must be greater than or equal to ((Connected Unit Count (A020) x 2) + 2)

-Axle Count for a draw bar connected car must be greater than or equal to (Connected Unit Count (A020) x 4)

-Total Axle Count must match sum of truck axle counts

Wheel Bearing Type *Mandatory* — **B191** ●■

Indicates the wheel bearing code for the equipment

Affects Rating.

Permissible Values for B191

P Plain R Roller

Validation Rule for B191

-Cars with Plain Bearings will have a Transportation Code (TCOD) and Transportation Condition Code (TCCD) of either YA, S_, SX, or XJ

-Equipment cannot have Plain Bearings if Built Date (BLDT) is on or after January 1, 1993

Bearing Shielded From HBD — B021

Indicates the bearing is shielded from the hot box detector on the equipment

Permissible Values for B021

Y Yes

Brake Shoe Type *Mandatory* — B026

Indicates the type of brake shoe on the equipment ●

Permissible Values for B026

C Tread Conditioning
H High Friction Composite
L Low Friction Composite/Cast Iron

CC Side Bearing Type — A146

Indicates the travel range of the constant contact side bearings installed on the equipment

Permissible Values for A146

LC Long Travel Constant Contact
SC Short Travel Constant Contact

Validation Rule for A146

-Equipment having Qualification for Increased Gross Rail Load (B344) of 1 must have Constant Contact Side Bearing Type of LC

Empty/Load Device Eqpd — B075

Indicates a system that determines if the equipment is empty or loaded, and then varies the braking forces accordingly

Permissible Values for B075

Y Yes

Body Material *Mandatory* — A030

The material that composes the body of the equipment ●▲

Used in ETC Generation.

Permissible Values for A030

01 Aluminum
04 Combination
09 Fiberglass Reinforced Composite
18 Stainless Steel
19 Standard Steel
30 Wood

NOTES:

- Used in ETC Generation for Mechanical Designation (UMMD) RB, RBL, RP, RPL, RC.

Center of Gravity Empty — A045

When empty, indicates the height from Top of Rail to the Center of Gravity

Range of Values for A045

Minimum	Maximum
35	80

Validation Rule for A045

-All cars that exceed Plate Code (A046) C must report Center of Gravity Empty except for cars with Equipment Type Code (UMET) of J_ _ _

Remote Monitoring Device — B176

Indicates the equipment is equipped with a location monitoring device

Permissible Values for B176

Y Yes
N No

AEI High Temperature Tag — B006

Indicates the equipment is equipped with a high temperature AEI tag

Permissible Values for B006

Y High Temperature Tag

Permanent Heater — B147

Indicates the equipment is equipped with a permanent heater to maintain commodities at a consistent temperature

Permissible Values for B147

Y Yes

Validation Rule for B147

-Permanent Heaters are only applicable to Boxcars with Mechanical Designation (UMMD) of XLI or MWM

Connected Unit Count — A020

Indicates the number of units within an articulated or multi-unit equipment ■

Affects Rating.

Range of Values for A020

Minimum	Maximum
4	9

Validation Rule for A020

-Connected Unit Count must equal the number of Unit Segments
-Unit Segment Component elements must not be reported if the Connected Unit Count is not reported
-Unit Segment Component elements must be reported if Connected Unit Count is reported

Intermediate Conn Style — B115

Indicates the method by which two or more pieces of equipment are connected

Permissible Values for B115

A Articulated Connector
D Drawbar Connector

Validation Rule for B115

-Intermediate Connector Style is required for multi-unit equipment
-Intermediate Connector Style must not be reported for single unit equipment

Operating Brakes *Mandatory* — A182

The number of air brake control valves on the equipment (excludes hand brakes). One control valve consists of a service portion, emergency portion, and pipe bracket. Example: DB-60 control valve ●

Permissible Values for A182

1 2 3 4 5
6 7 8 9

Validation Rule for A182

-Operating Brakes must be reported for all equipment
-Operating Brakes (A182) must be 1 for non-articulated equipment with an Axle Count (A024) equal to 4

ECP Brake Type — B327

Indicates the type of electronic controlled pneumatic brake used on the equipment ✹

Permissible Values for B327

N Not Equipped
O Overlay - Both ECP & Air Brake
S Stand Alone - ECP Only

Validation Rule for B327

-Equipment must have a value entered for ECP Brake Type if built or rebuilt after June 28, 2012

ECP Brake Builder — B328

The manufacturer of the electronic controlled pneumatic brake used on the equipment

Permissible Values for B328

NYAB New York Air Brake
WABT WABTEC

Validation Rule for B328

-If ECP Brake Type (B327) is Stand Alone or Overlay then a value must be entered for ECP Brake Builder
-If ECP Brake Type (B327) is Not Equipped then ECP Brake Builder is not reportable

Slack Adjuster Group — B538

The slack adjuster group on the equipment per AAR Field Manual Rule #8 ✹

Value does not carry forward for Single Clone / Multi-Clone.

Permissible Values for B538

A	Group A	B	Group B	C	Group C	D	Group D
E	Group E	F	Group F	G	Group G	H	Group H
J	Group J	L	Group L	M	Group M	N	Group N
O	Group O	P	Group P	Q	Group Q	R	Group R
1	Internal	2	Unequipped				

Validation Rule for B538

- Slack Adjuster Group is mandatory for all equipment built or rebuilt on or after January 1, 2016
- If Slack Adjuster Group is reported as "1" then Brake Cylinder Mount Type (B540) must be reported as "T"
- If Slack Adjuster Group is "1" or "2", then Slack Adjuster CID (B359) must not be reported.

NOTES:

- Permissible value of "1 – Internal" identifies special truck mounted internal slack adjuster within brake cylinder.

Brake Cylinder Mount Type — B540

Identifies the location of the brake cylinder ✹

Permissible Values for B540

B	Body Mounted
T	Truck Mounted

Validation Rule for B540

- Brake Cylinder Mount Type is mandatory for all equipment built or rebuilt on or after January 1, 2016

Equipment Builder — A035

Identifies the original manufacturer of the equipment ✹

Permissible Values for A035

ACF	American Car & Foundry
ACFX	ACF Industries
ARI	ARI Industries
BERW	Berwick Forge
BETH	Bethlehem Car Works
BSP	Bethlehem Steel Corporation
CFF	Canadian Car & Foundry
CONC	Concarrill
DIFC	Difco
EDSP	ESTRATEGIAS DUL S. DE R.L.
ERSB	Ebenezer Railcar
EVAN	Evans Products
FCA	Freight Car America
FGRW	FRTGRW
FMC	FMC Corporation
GATX	General American Transportation Corp
GMB	Greenbrier
GSC	Greenville Steel Car
GTYE	Golden Tye
GUN4	Gunderson - Trenton Works
GUND	Gunderson Inc
GUNM	Gunderson - Mexico
HYUN	Hyundai
JAC	Johnstown America Corporation
JKFO	JK-CO LLC
KASG	Kasgro Railcar
MULT	Multiple
NACA	National Alabama Corporation
NACC	North American Car
NRE	National Railway Equipment
NSC	National Steel Car
PCF	Pacific Car & Foundry
PS	Pullman-Standard
PSP	Pullman-Standard, Division of Trinity Industries
SI	SOUTH IRON
SLRX	Saint Louis Refrigerator Car Company
THRL	Thrall
TREN	Trenton Works
TRIN	Trinity
UNKN	Unknown
V	OWNER RAILROAD

Validation Rule for A035

-Equipment Builder must be populated if the Built Date (BLDT) is July 1, 2010 or newer
-Equipment built or rebuilt on or after July 1, 2010 cannot have a Equipment Builder of Unknown
-Equipment with a Built Date (BLDT) on or after July 1, 2010 cannot have an Equipment Builder Code of OWNER RAILROAD.
-Equipment Builder can have a value of MULT only if the equipment has multiple units.

Builder Lot Code — B030

A unique identifier for a group of equipment built by one manufacturer under the same contract ✹

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Validation Rule for B030

-Equipment built or rebuilt on or after June 28, 2012 must have a value for Builder Lot Code

Built Country — B031

The country where the equipment was constructed

Data is Confidential.

Permissible Values for B031

CA	Canada	MX	Mexico
US	United States		

Rebuilt Country — B170

The country where the equipment was re-constructed

Permissible Values for B170

CA	Canada	MX	Mexico
US	United States		

FRA Reflectorization — B096

Indicates the equipment owner assumes responsibility for applying reflectorization tape

Permissible Values for B096

P	Reflectorization Plan
W	Reflectorization Waiver

Validation Rule for B096

-Reflectorization is mandatory for all equipment after November 28, 2015.

Refrig Emission Code — B345

California State Emission standards for refrigeration units

Value does not carry forward for Single Clone / Multi-Clone.

Permissible Values for B345

N	Not Qualified	Q	Qualified
U	Ultra-Qualified		

Air Hose Arrangement — B524

The type of trainline air hose arrangement ✹

Permissible Values for B524

A	S-424 Angle Cock Location
B	S-425 Angle Cock Location on Cars Equipped with AAR Type F Coupler

C S-426 Angle Cock Location on Cars with Floating Sills
D S-427 Angle Cock and Air Brake Hose Location on Cars with Excessive Overhang Preventing Compliance with AAR Standards
E S-428 Angle Cock Location on Cars Equipped with AAR Type F Coupler and Cushioned Underframe
F S-4003 (Former Standard)
G S-4003x (Former Standard Retrofitted to Meet All Dimensions Except Height)
H S-4003-05 (Current Standard Train Line Arrangement for Cars with F-Shank Couplers)
I S-4021 Angle Cock and Brake Hose Location on Cars with EOCC (E and F)
J S-4021 Coupler Mounted Bracket End Arrangement
K S-4028 Train Line Arrangement with Displaceable Union on Cars with EOCC and Couplers Not Exceeding 45 in. in Length
L S-4029 Train Line Arrangement with Displaceable Union on Cars with EOCC and Couplers Exceeding 45 in. in Length
M S-4030 Trolley Arrangement on Cars with EOCC and E-Shank Couplers

Validation Rule for B524

-Air Hose Arrangement must be reported for this equipment if it is Built or Rebuilt on or after April 22, 2014.

NOTES:

- If any of the following conditions apply, Air Hose Arrangement (B524) must be reported for cars Built or Rebuilt on or after April 22, 2014:
  - Draft Gear Type (B073) at any location is C or E.
  - Connected Unit Count (A020) is reported.
  - Outside Length (OSLG) is greater than or equal to 70 feet (840 inches).
  - The overhang is greater than 5 feet 6 inches (66 inches). Overhang is calculated as follows:
  - 0.5 * (Outside Length, in inches, minus Truck Center Length, in inches, minus 31 inches)
    - For all other equipment, reporting Air Hose Arrangement is optional.
    -

4-Pressure ABT Receiver Eqpd B539

Identifies if the equipment is equipped with a 4-pressure air brake test receiver

Value does not carry forward for Single Clone / Multi-Clone.

Permissible Values for B539

E Equipped
N Not Equipped

NOTES:

- An "E" will be system generated if a 4-Pressure ABT is reported on the equipment.

Feature

Floor Material A104

Describes the type of construction material used for the equipment floor

Permissible Values for A104

01 Aluminum
02 Aluminum (Ribbed)
05 Composite Nailable (considered same as wood
06 Composite Nailable, Reinforced (considered same as wood)
14 Other
15 Other, Reinforced
19 Standard Steel
23 Steel Nailable (includes alternate wood and steel floor
24 Steel Nailable, Reinforced (includes alternate wood and steel floor
25 Standard Steel, Reinforced
30 Wood
31 Wood (Ribbed)
32 Wood, Double
33 Wood, Double, Reinforced
34 Wood Floor with Steel Protective Plates (includes perforated steel)
35 Wood Floor, Reinforced, with Steel Protective Plates (includes perforated steel)
36 Wood Floor, Reinforced

Validation Rule for A104

-Only Refrigerated Boxcars or Boxcars with Mechanical Designation MWM can have Floor Material codes of 1, 2, or 31.

Flr Strength Classfn *Mandatory* A102

Describes the maximum weight the equipment floor can support ●

Permissible Values for A102

01K 01K - Does not meet minimum requirements
25K 25000 Pounds
50K 50000 Pounds
60K 60000 Pounds
70K 70000 Pounds
80K 80000 Pounds

Validation Rule for A102

- A Floor Strength Classification of 50K or greater must be reported for equipment with a Built Date (BLDT) on or after April 1, 2016
- Refrigerated and Insulated Box cars with Mechanical Designations (UMMD) of RB, RBL, RC, RP, RPL, XLI, XPI must report a Floor Strength Classification of 25K or greater for equipment with a Built Date (BLDT) on or after April 1, 2016

NOTES:

- See the Manual of Standards and Recommended Practices Design, Fabrication, and Construction of Freight Cars (MSRP), AAR Specification M-1001, Chapter 4 (Lift Truck Wheel Loads) for the floor strength requirements of boxcars.

Floor Drain Equipped B095

Indicates the equipment floor has a drain

Permissible Values for B095

Y Yes

Validation Rule for B095

-Floor Drain is only applicable to Refrigerator Cars with Mechanical Designation (UMMD) of RB, RBL, RC, RP, RPL

Wood Racks Covering Floor B233

Reinforcement of the equipment floor using wood racks

Permissible Values for B233

Y Yes

Validation Rule for B233

-Wood Racks Covering Floors are only applicable to Refrigerator Cars with Mechanical Designations (UMMD) of RB, RBL, RP, RPL, RC

Pallet Equipped B144

Indicates if equipment is equipped with pallets

Permissible Values for B144

Y Yes

Validation Rule for B144

-Pallets are not applicable to Mechanical Designation (UMMD) XM

Lining Material A158

Describes the type of construction material used in the lining of equipment

Permissible Values for A158

07 Composite Wood and Steel
08 Fiberglass
17 Sheet Metal
26 Synthetic
28 Unlined
29 Vinyl
30 Wood

Validation Rule for A158

-Refrigerator Cars with Mechanical Designation (UMMD) of RB, RBL, RC, RP, RPL cannot have Lining Material codes of 7 or 29

Bulkhead Type B034

Identifies the type of bulkhead attached to the equipment

Permissible Values for B034

F Fixed I Inflatable M Moveable

Validation Rule for B034

-Refrigerator Cars with Mechanical Designation (UMMD) of RB, RBL, RC, RP, RPL cannot have Lining Material codes of 7, or 29

Column Load Dividers B046

Indicates the equipment is column load divider equipped

Permissible Values for B046

Y Yes

Validation Rule for B046

-Column Load Dividers are only applicable to Box Cars with Mechanical Designation (UMMD) of XP, XPI, XF, XL, XLI, or MWM

Interior Rack B114

Indicates the equipment is interior rack equipped

Permissible Values for B114

Y Yes

Validation Rule for B114

-Interior racks are not applicable to Box Cars with Mechanical Designation (UMMD) of XM

Side Filler Equipped B194

Indicates the equipment is side filler equipped used to prevent shifting within the car during transit

Permissible Values for B194

Y Yes

Validation Rule for B194

-Side Filler is not applicable to Box Cars with Mechanical Designation (UMMD) of XM

Lading Strap Anchor Eqpd B121

Indicates the equipment has fixed devices or design features which provide connection points for straps or bands securing the lading

Permissible Values for B121

Y Yes

Adj Lading Strap Equipped B281

Indicates the equipment has adjustable straps or a strap system used for securing the lading

Permissible Values for B281

Y Yes

Validation Rule for B281

-If Adjustable Lading Strap Equipped is Yes, then Lading Strap Anchor Equipped (B121) must also be populated

Belt Rail Equipped B024

Indicates the equipment is belt rail equipped

Permissible Values for B024

Y Yes

Rub Rail B183

Indicates the equipment is rub rail anchoring equipped

Permissible Values for B183

Y Yes

Validation Rule for B183

-Rub Rails are only applicable to Box Cars with Mechanical Designation (UMMD) of XP, XPI, XL, XLI or MWM

Retention Bar Equipped B269

Indicates the equipment is retention bar equipped

Permissible Values for B269

Y Yes

Validation Rule for B269

-Retention Bars are only applicable to Box Cars with Mechanical Designation (UMMD) of XP, XPI, XL, XLI or MWM

Roof Type A226

Describes the type of roof or hatches on the equipment

Permissible Values for A226

7 Rectangular or square roof hatches

9 Rectangular or square hatches offset from center line of car

Validation Rule for A226

-Refrigerator Cars with Mechanical Designation (UMMD) of RB, RBL, RC, RP, RPL cannot have a Roof Type reported

-Rectangular or Square Roof Hatches are only applicable to Boxcars with Mechanical Designation (UMMD) LC

Vent Openings B222

Indicates the equipment has vent openings

Permissible Values for B222

Y Yes

Validation Rule for B222

-Vent Openings are only applicable to Boxcars (Mechanical Designation of XP, XPI, or MWM)

Refrigeration Fuel Type A207

Type of fuel used in the refrigeration unit

Permissible Values for A207

D Diesel

Validation Rule for A207

- Refrigeration Fuel Type is only applicable to Refrigerator cars with Mechanical Designation (UMMD) of RP and RPL

Refrigeration Level B172

Describes the level of refrigeration to be used within the equipment

Permissible Values for B172

F Zero Only (Frozen)

N Non-Frozen

W Wide Range (Frozen to Non-Frozen)

Validation Rule for B172

-Refrigeration Level is only applicable to Refrigerator Cars with Mechanical Designation (UMMD) of RP and RPL

Class A Explosives Eqpd B089

Indicates the equipment is equipped to handle class A explosives

Permissible Values for B089

Y Yes

Validation Rule for B089

-Class A Explosives handling is only applicable to Box Cars with Mechanical Designation (UMMD) of RB, RBL, XL, XM, XLI, XP, XPI

Cost

Original Cost A184

The original manufacturer selling price ✹

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for A184

Minimum	Maximum
0	9999999

Validation Rule for A184

-Original Cost must be equal to the Ledger Value if there are no Additions & Betterments.

-Original Cost must be equal to the Ledger Value if Additions & Betterments Indicator is not reported.
-Railroad marked freight cars except MISC, LOCO, TRLR, CONT, CHSS, STWH, EOTD, and PSGR are required to have an Original Cost
-Private marked freight cars except MISC, LOCO, TRLR, CONT, CHSS, STWH, EOTD, and PSGR are required to have an Original Cost if Built Date (BLDT) is on or after January 1, 2015

NOTES:

- For railroad-marked cars, report in US dollars the original ledger value of the original owner. For cars rebuilt, report the cost prescribed in MR Interchange Rule 88 and Circular Letter OT-24
- The original cost is used in the settlement of AAR Interchange Rule 107 Office Manual.
- The reporting of Original Cost information is mandatory for all Railroad marked equipment and for Privately-marked equipment built or rebuilt after January 1, 2015.
- For connected unit cars report the total original cost for all units in the set.
- Raise all cents to the next dollar, e.g. $5,501.02 = 0005502

Ledger Value — A150

The sum of original cost and additions & betterments

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for A150

Minimum	Maximum
0	9999999

Validation Rule for A150

-Original Cost must be equal to the Ledger Value if there are no Additions & Betterments.
-Ledger Value must equal the Original Cost (A184) plus the additions & betterments, if Total A&B (A003) has been reported. Otherwise Ledger Value should equal Original Cost (A184).

Total A&B — A003

System generated sum of all reported amounts in A&B Amount (A317), in US dollars

Data is Confidential. System Generated Field. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for A003

Minimum	Maximum
0	99999999

Ind for Pos/Neg Total A&B — A128

A code indicating the positive or negative adjustment to the original cost of the equipment

Data is Confidential. System Generated Field. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Permissible Values for A128

N Negative P Positive

A&B Pos/Neg Ind — A316

A code indicating the positive or negative adjustment to the individual addition and betterment

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Permissible Values for A316

N Negative P Positive

Validation Rule for A316

-When entering an individual Addition & Betterment, you must enter a value in all 4 fields.
-The A&B Indicator is required when Additions & Betterments are reported.
-The A&B Indicator must not be reported if Additions & Betterments are not reported.

A&B Amount — A317

The amount of the individual addition and betterment added to or subtracted from the original cost of the equipment

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for A317

Minimum	Maximum
1	999999

Validation Rule for A317

-When entering an individual addition & betterment; A&B Date Done (A319), A&B Type (A318), A&B Pos/Neg Ind (A316), and A&B Amount (A317) must be reported

NOTES:

- For railroad-marked cars, report the sum of all additions and betterments applied to the car. This value is for record keeping purposes only and will not be used to report Ledger Value.
- For private Cars report the additions and betterments as qualified under AAR interchange Rule 107 for determination of settlement value.
  - Additions are costs of all new components applied subsequent to the date the car was built or rebuilt and carried in the capital investment account.
  - Betterments are costs of all improvements of components of existing equipment through the substitution of superior parts for inferior parts subsequent to the date the car was built of rebuilt.
- For connected unit cars report the total Truck Location A for all units in the set

A&B Date Done — A319

The date of the individual addition and betterment

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for A319

Minimum	Maximum
1/1/1900	12/31/9999

Validation Rule for A319

-When entering an individual Addition & Betterment, you must enter a value in all 4 fields.
-Addition and Betterment Date Done cannot be earlier than Built Date (BLDT).
-Additions & Betterments Date Done cannot be later than today's date.

A&B Type — A318

The type of individual addition and betterment as defined by Rule 107

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Permissible Values for A318

GNRL	General - Capitalized Additions and Betterments
IHTR	In-transit heater applied to car. Includes renewal in damaged car. When installed coincidental with construction of car, the amount charged to Capital Account for such installation may be estimated.
INIT	Initial load of historical A&B amount as of Umler 4.6 implementation date
REFR	Mechanical refrigerating systems or thermostatically controlled temperature device (including power equipment). When installed coincidental with construction or Rule 88 rebuild, the amount charged to Capital Account for such installation may be estimated.

Validation Rule for A318

-For each equipment, only one Individual A&B Type can have a value of INIT.
-When entering an individual Addition & Betterment, you must enter a value in all 4 fields.

Car Management

Pool Number — P001

Unique number used to indicate the grouping of equipment for a particular

purpose ■

Used for Transportation Codes. Affects Rating. This element is not eligible for Input. Value does not carry forward for Equipment Group Change / Add Back.

Pool Control TCPC

Pool Control

System Generated Field. Used for Transportation Codes. This element is not eligible for Input, Output or Query.

NOTES:

- For further explanation reference Appendices C and E.

User Routing Instructions TCUR

The routing instruction reported by the user

Used for Transportation Codes.

Permissible Values for TCUR

2	Trailer Service Rule 2
G	Contaminated commodity service
M	Mark canceled
O	Owner requested return
U	Unassigned equipment

NOTES:

- For further explanation reference Appendix E.

Umler Transportation Code TCOD

The type of assigned service, empty routing or restriction of the equipment

System Generated Field. Used for Transportation Codes. This element is not eligible for Input.

NOTES:

- For further explanation reference Appendix E.

Transportation Cond Code TCCD

The AAR or FRA interchange restriction code

System Generated Field. Used for Transportation Codes. This element is not eligible for Input.

NOTES:

- For further explanation reference Appendix E.

Mechanical Restriction TCME

User reported or system generated type of mechanical restriction

Used for Transportation Codes.

Permissible Values for TCME

S	Scrap
X	AAR Interchange Restriction
Y	FRA Interchange Prohibited

NOTES:

- For further explanation reference Appendix D.1

Mech Restriction Reason TCMR

The explanation of the Mechanical Restriction (TCME)

Used for Transportation Codes.

Permissible Values for TCMR

A	Restricted Due to Age (Over 40-AAR, Over 50-FRA)
B	Restricted Due to Air Brakes
C	Restricted Due to Axles
D	Restricted Due to Couplers and Couplers Parts
F	Restricted Due to Couplers Yokes
G	Restricted Due to Draft Gears
J	Restricted Due to Journal Bearing and Journal Lubrication
N	Restricted Due to Trucks
P	Restricted Due to Truck Side Frames
T	Restricted Due to Trucks Bolsters
U	Restricted by AAR or Owner
W	Restricted Due to Wheels
X	Restricted Due to Scrap or Early Warning
Z	Restricted Due to Umler Conflict (Not Valid for User Input)

NOTES:

- For further explanation reference Appendix D.2.
- The assignment of the Transportation Codes S_, SX, XA, XZ and YA generate the Rate Indicator Code 6 to the CHARM file to zero (0) rate the car hire and mileage rate.

Sys Gen Routing Inst TCGR

The routing instruction generated by the system

System Generated Field. Used for Transportation Codes. This element is not eligible for Input.

NOTES:

- For further explanation reference Appendix E.5.

Loading Authority Fleet Status B597

Identifies when a car is listed on a fleet in the Loading Authority application

System Generated Field. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Permissible Values for B597

Y	Yes
S	Suspended

NOTES:

- • When equipment is on a fleet the Loading Authority (LA) application will update the flag to 'Y – Yes'. When equipment is removed from a fleet the LA application will remove the 'Y – Yes'.
- When equipment is on a LA fleet that is suspended the LA application will update the flag to 'S – Suspended'. When the equipment is on a LA fleet that is no longer suspended the LA application will update the flag to 'Y – Yes'.

Train Service

Restricted Speed Empty B180

Describes the maximum restricted speed the equipment can travel when empty

Range of Values for B180

Minimum	Maximum
5	95

Restricted Speed Loaded B181

Describes the maximum restricted speed the equipment can travel when loaded

Range of Values for B181

Minimum	Maximum
5	95

Shove Car to Rest B189

Identifies the car must be moved to rest by locomotive

Permissible Values for B189

Y	Yes

Shove Adj. Car to Rest B188

Identifies the adjacent car must be shoved to rest by locomotive

Permissible Values for B188

Y	Yes

Train Position Sensitive B211

Indicates there is a physical reason, limiting its position on a train

Permissible Values for B211

Y	Yes

End of Train Only B277

Indicates the equipment must be placed at the end of the train (including per AAR RP-2001)

Permissible Values for B277

Y Yes

Check Trailing Tonnage B044

Indicates the equipment has restrictions on trailing tonnage

Permissible Values for B044

Y Yes

Curve Negotiate Exception B178

Describes the requirement for negotiating a curve

Permissible Values for B178

A Restrictive Curve Negotiability, Section 2.1.4 of M-1001

B Does not meet all Chapter XI Curving Requirements

Cooper Rating Exception B273

Describes the cooper rating (weight distribution model of the equipment), for use in movement across bridges

Permissible Values for B273

A Excessive Cooper Rating

B Cooper Rating in Excess of E66

Clearance Exception B275

Describes equipment containing nonstandard dimension

Permissible Values for B275

A Excessive Outside Extreme Height (A185)

B Excessive Outside Extreme Width (A186)

D All other unique clearance issues

F Exceeds Plate Code (A046) F at plug door top retainer

Validation Rule for B275

-All Box Cars built or rebuilt on or after April 1, 2016 with a Plate Code (A046) of G must report a Clearance Exception

-Clearance Exception can only be reported when Plate Code (A046) is G

Loaded Net Braking Ratio B551

Indicates calculated minimum loaded net braking ratio per AAR Specifications in place on built or rebuilt date (in percent).

System Generated Field. This element is not eligible for input.

Permissible Values for B551

– 11.0

– 8.5

NOTES:

- Loaded Net Braking Ratio is determined as follows;:
  - If Built Date (BLDT) or Rebuilt Date (RBDT) is less than 1/1/1972, then Loaded Net Braking Ratio will be set to blank.
  - If Built Date (BLDT) or Rebuilt Date (RBDT) is greater than or equal to 1/1/2004, or if Equipment Type Code (UMET) begins with "Q" or "S", then Loaded Net Braking Ratio is 11.0%.
  - For all other equipment, Loaded Net Braking Ratio is 8.5%.

Owner-Provided Loaded Net Braking Ratio B552

Indicates an alternate minimum loaded net braking ratio provided by owner (in percent).

Range of Values for B552

Minimum	Maximum
8.5	14.0

NOTES:

- Owner may enter a documented alternative minimum loaded net braking ratio in this field that is greater than the system calculated Loaded Net Braking Ratio (B551).
- When reported, the Owner-Provided Loaded Net Braking Ratio will be used in PTC stopping distance calculations.
- A change in value for the following elements will cause the Owner-Provided Loaded Net Braking Ratio to reset to blank:
  - Rebuilt Date (RBDT)
  - Gross Rail Load/Weight (A266)
  - Equipment Type Code (UMET)
  - Empty/Load Device Eqpd (B075)

Empty Braking Ratio B553

Indicates calculated empty braking ratio per AAR Specifications in place on built or rebuilt date (in percent).

System Generated Field. This element is not eligible for input.

Range of Values for B553

Minimum	Maximum
15.0	38.0

NOTES:

- Empty Braking Ratio is determined as follows;:
  - If Built Date (BLDT) or Rebuilt Date (RBDT) is less than 1/1/1972, then Empty Braking Ratio will be set to blank.

Owner-Provided Empty Braking Ratio B554

Indicates an owner supplied alternate empty braking ratio (in percent).

Range of Values for B554

Minimum	Maximum
15.0	38.0

NOTES:

- Owner may enter a documented alternative minimum loaded net braking ratio in this field that is greater than the system calculated Loaded Net Braking Ratio (B551).
- When reported, the Owner-Provided Loaded Net Braking Ratio will be used in PTC stopping distance calculations.
- A change in value for the following elements will cause the Owner-Provided Loaded Net Braking Ratio to reset to blank:
  - Rebuilt Date (RBDT)
  - Gross Rail Load/Weight (A266)
  - Equipment Type Code (UMET)
  - Empty/Load Device Eqpd (B075)

Truck Components

Axle Spacing Distance *Mandatory* B020

The distance between axle centers on the same truck ●■

Affects Rating.

Permissible Values for B020

53 53 Inches
54 54 Inches
55 55 Inches
60 60 Inches
61 61 Inches
62 62 Inches
63 63 Inches
64 64 Inches
65 65 Inches
66 66 Inches
68 68 Inches
70 70 Inches
71 71 Inches
72 72 Inches
73 73 Inches
74 74 Inches
76 76 Inches
78 78 Inches
99 Axle Space Unknown

Validation Rule for B020

- Equipment with a Built Date (BLDT) on or after January 1, 1980 cannot report Axle Space Unknown

Truck Axle Count *Mandatory* **B252**

The number of axles per truck ●

Range of Values for B252

Minimum	Maximum
2	3

Validation Rule for B252

- Sum of Truck Axle Counts must equal Axle Count (A024)

Journal Size *Mandatory* **A147**

The size of the journal bearing ● ■

Affects Rating.

Permissible Values for A147

A	3-3/4 X 7	B	4-1/4 X 8	C	5 X 9
D	5-1/2 X 10	E	6X11	F	6-1/2 X 12
G	7 X 12	K	6-1/ 2X 9	M	7 X 9

Validation Rule for A147

- -4-axle equipment with Journal Size B and Star Code (A247) is not populated, must have Gross Rail Load (A266) of 103,000 lbs.
- -4-axle equipment with Journal Size C and Star Code (A247) is not populated, must have Gross Rail Load (A266) of 142,000 lbs.
- -4-axle equipment with Journal Size D and Star Code (A247) is not populated, must have Gross Rail Load (A266) of 177,000 lbs.
- -4-axle equipment with Journal Size E and Star Code (A247) is not populated, must have Gross Rail Load (A266) of 220,000 lbs.
- -4-axle equipment with Journal Size F or K, Star Code (A247) is not populated, and Qualification for Increased Gross Rail Load (B344) is not populated, must have Gross Rail Load (A266) of 263,000 lbs.
- -4-axle equipment with Journal Size F or K, Star Code (A247) is not populated, and Qualification for Increased Gross Rail Load (B344) of 1 or 2, must have Gross Rail Load (A266) of 286,000 lbs.
- -4-axle equipment with Journal Size G or M, Star Code (A247) is not populated, and Qualification for Increased Gross Rail Load (B344) is not populated, must have Gross Rail Load (A266) of 315,000 lbs.
- -4-axle equipment with Journal Size G, K, or M, Star Code (A247) is not populated, and Qualification for Increased Gross Rail Load (B344) of 1, must have Gross Rail Load (A266) of 286,000 lbs.

NOTES:

- A, B and C Journal Classes are prohibited in Interchange per Rule 90.B.4

Wheel Diameter *Mandatory* **A294**

The diameter of the wheels ● ■

Affects Rating.

Permissible Values for A294

33	33 Inches	36	36 Inches	38	38 Inches

Validation Rule for A294

- -UnStarred Cars with Gross Weight of 286,000 lbs. and Increased Gross Rail Load of 2 must have a Wheel Diameter of either 36 or 38 inches
- -Equipment with a Qualification for Increased Gross Rail Load (B344) of 1 and Journal Size (A147) of K must have a Wheel Diameter of 36
- -Cars with an Increased Gross Rail Load of 1 and Journal of G or M must have a Wheel Diameter of 38 inches
- -If Connected Unit Count (A020) is not reported, different Wheel Diameters cannot be reported

Stability Device Equipped **B199**

Indicates a stability device is present on the truck ■

Affects Rating.

Permissible Values for B199

Y Yes

Bolster Component ID **B351**

Bolster Component ID from Component Registry

Data is Confidential. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Sideframe Component ID **B352**

Side Frame Component ID from Component Registry

Data is Confidential. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Wheelset Component ID **B350**

Component ID from Component Registry

Data is Confidential. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Draft System Components

Coupler Code **A057**

Defines the equipment coupler type

Permissible Values for A057

BE60AHT	Type E (Rule 16) - BE60AHT
BE60BHT	Type E Obsolete (Rule 16) - BE60BHT
BE63AHT	Type E Obsolete (Rule 16) - BE63AHT
BE63HT	Type E (Rule 16) - BE63HT
BE67HT	Type E (Rule 16) - BE67HT
BE68HT	Type E/F (Rule 17) - BE68HT
E42BEX	Type E/F (Rule 17) - E42BEX
E50ARE	Type E/F (Rule 17) - E50ARE
E50BEX	Type E/F (Rule 17) - E50BEX
E60CC	Type E (Rule 16) - E60CC
E60CE	Type E (Rule 16) - E60CE
E60CEX	Type E (Rule 16) - E60CEX
E60CHT	Type E (Rule 16) - E60CHT
E60CHTE	Type E (Rule 16) - E60CHTE
E60CHTQ	Type E (Rule 16) - E60CHTQ
E60DC	Type E (Rule 16) - E60DC
E60DE	Type E (Rule 16) - E60DE
E60EE	Type E (Rule 16) - E60EE
E61	Type E Obsolete (Rule 16) - E61
E67AHT	Type E (Rule 16) - E67AHT
E67BC	Type E (Rule 16) - E67BC
E67BE	Type E (Rule 16) - E67BE
E67BHT	Type E (Rule 16) - E67BHT
E67BHTE	Type E (Rule 16) - E67BHTE
E67CC	Type E (Rule 16) - E67CC
E67CE	Type E (Rule 16) - E67CE
E68AHT	Type E/F Obsolete (Rule 17) - E68AHT
E68AHTE	Type E/F Obsolete (Rule 17) - E68AHTE
E68BC	Type E/F (Rule 17) - E68BC
E68BE	Type E/F (Rule 17) - E68BE
E68BHT	Type E/F (Rule 17) - E68BHT
E68BHTE	Type E/F (Rule 17) - E68BHTE
E68BHTQ	Type E/F (Rule 17) - E68BHTQ
E68CE	Type E/F (Rule 17) - E68CE
E68DE	Type E/F Obsolete (Rule 17) - E68DE
E69AE	Type E/F (Rule 17) - E69AE
E69AHTE	Type E/F (Rule 17) - E69AHTE
E69BE	Type E/F (Rule 17) - E69BE
E69CE	Type E/F (Rule 17) - E69CE
E69CEX	Type E/F (Rule 17) - E69CEX
E69HTE	Type E/F (Rule 17) - E69HTE
E69LCE	Type E/F (Rule 17) – E69LCE
EB7AHT	Type E (Rule 16) - EB7AHT
EF204CE	Type E/F (Rule 17) - EF204CE
EF306CE	Type E/F (Rule 17) – EF306CE
EF511AE	Type E/F (Rule 17) - EF511AE

EF511BE	Type E/F (Rule 17) - EF511BE
EF511CE	Type E/F (Rule 17) - EF511CE
EF511DE	Type E/F (Rule 17) - EF511DE
EF511LCE	Type E/F (Rule 17) – EF511LCE
EF511WE	Type E/F (Rule 17) - EF511WE
EF512CE	Type E/F (Rule 17) - EF512CE
EF512WE	Type E/F (Rule 17) - EF512WE
EF528WE	Type E/F (Rule 17) - EF528WE
EFROTARY	Type E/F Rotary - EFROTARY
EFSPEC	Type E/F Special - EFSPEC
EFUNK	Type E/F Unknown - EFUNK
EK323CE	Type E (Rule 16) - EK323CE (Long Travel)
EK324CE	Type E (Rule 16) – EK324CE (Long Travel)
ESPEC	Type E Special - ESPEC
EUNK	Type E Unknown - EUNK
F70BHT	Type F Obsolete (Rule 18) - F70BHT
F70BHTE	Type F Obsolete (Rule 18) - F70BHTE
F70CC	Type F (Rule 18) - F70CC
F70CE	Type F (Rule 18) - F70CE
F70CHT	Type F (Rule 18) - F70CHT
F70CHTE	Type F (Rule 18) - F70CHTE
F70DE	Type F (Rule 18) - F70DE
F70HT	Type F Obsolete (Rule 18) - F70HT
F71CHT	Type F (Rule 18) - F71CHT
F72HT	Type F (Rule 18) - F72HT
F73AC	Type F (Rule 18) - F73AC
F73AE	Type F (Rule 18) - F73AE
F73AHT	Type F (Rule 18) - F73AHT
F73AHTE	Type F (Rule 18) - F73AHTE
F73BE	Type F (Rule 18) - F73BE
F73HTE	Type F Obsolete (Rule 18) - F73HTE
F79BHT	Type F Obsolete (Rule 18) - F79BHT
F79BHTE	Type F Obsolete (Rule 18) - F79BHTE
F79CC	Type F (Rule 18) - F79CC
F79CE	Type F (Rule 18) - F79CE
F79CHT	Type F (Rule 18) - F79CHT
F79CHTE	Type F (Rule 18) - F79CHTE
F79DE	Type F (Rule 18) - F79DE
FR201E	Type F (Rule 18) Rotary - FR201E
FF205E	Type F (Rule 18) - FF205E
FF218AE	Type F (Rule 18) – FF218AE
FR205AE	Type F (Rule 18) Rotary - FR205AE
FR205BE	Type F (Rule 18) Rotary - FR205BE
FR205E	Type F (Rule 18) Rotary - FR205E
FR206E	Type F (Rule 18) Rotary - FR206E
FR206EA	Type F (Rule 18) Rotary - FR206EA
FR207AE	Type F (Rule 18) Rotary - FR207AE
FR207E	Type F (Rule 18) Rotary - FR207E
FR208AE	Type F (Rule 18) Rotary - FR208AE (without wear insert)
FR208E	Type F (Rule 18) Rotary - FR208E (with wear insert)
FR209E	Type F (Rule 18) Rotary - FR209E
FR301E	Type F (Rule 18) Rotary - FR301E
FR304E	Type F (Rule 18) Rotary - FR304E (with wear plate)
FR304WE	Type F (Rule 18) Rotary - FR304WE (without wear plate)
FROTARY	Type E/F Rotary - FROTARY
FSPEC	Type F Special - FSPEC
FUNK	Type F Unknown - FUNK
S700AE	Type E (Rule 16) - S700AE
SBE60CC	Type E (Rule 16) - SBE60CC
SBE60CE	Type E (Rule 16) - SBE60CE
SBE60DC	Type E (Rule 16) - SBE60DC
SBE60DE	Type E (Rule 16) - SBE60DE
SBE60DREX	Type E (Rule 16) - SBE60DREX
SBE60EE	Type E (Rule 16) - SBE60EE
SBE60EEX	Type E (Rule 16) - SBE60EEX
SBE67BC	Type E (Rule 16) - SBE67BC
SBE67BE	Type E (Rule 16) - SBE67BE
SBE67CC	Type E (Rule 16) - SBE67CC
SBE67CE	Type E (Rule 16) - SBE67CE
SBE67CREX	Type E (Rule 16) - SBE67CREX
SBE67DE	Type E (Rule 16) - SBE67DE
SBE68BC	Type E/F (Rule 17) - SBE68BC
SBE68BE	Type E/F (Rule 17) - SBE68BE
SBE68CE	Type E/F (Rule 17) - SBE68CE
SBE68CREX	Type E/F (Rule 17) - SBE68CREX
SBE68DE	Type E/F (Rule 17) - SBE68DE
SBE68WEX	Type E/F (Rule 17) - SBE68WEX
SBE69AE	Type E/F (Rule 17) - SBE69AE
SBE69BE	Type E/F (Rule 17) - SBE69BE
SBE69BREX	Type E/F (Rule 17) - SBE69BREX
SBE69CE	Type E/F (Rule 17) - SBE69CE
SE60CC	Type E (Rule 16) - SE60CC
SE60CE	Type E (Rule 16) - SE60CE
SE60CHT	Type E (Rule 16) - SE60CHT
SE60CHTE	Type E (Rule 16) - SE60CHTE
SE60DC	Type E (Rule 16) - SE60DC
SE60DE	Type E (Rule 16) - SE60DE
SE60DEX	Type E (Rule 16) - SE60DEX
SE60EE	Type E (Rule 16) - SE60EE
SE67BC	Type E (Rule 16) - SE67BC
SE67BE	Type E (Rule 16) - SE67BE
SE67BHT	Type E (Rule 16) - SE67BHT
SE67BHTE	Type E (Rule 16) - SE67BHTE
SE67CC	Type E (Rule 16) - SE67CC
SE67CE	Type E (Rule 16) - SE67CE
SE68BC	Type E/F (Rule 17) - SE68BC
SE68BE	Type E/F (Rule 17) - SE68BE
SE68BHT	Type E/F (Rule 17) - SE68BHT
SE68BHTE	Type E/F (Rule 17) - SE68BHTE
SE68CE	Type E/F (Rule 17) - SE68CE
SE69AE	Type E/F (Rule 17) - SE69AE
SE69BE	Type E/F (Rule 17) - SE69BE
SE69CE	Type E/F (Rule 17) - SE69CE
SF70CC	Type F (Rule 18) - SF70CC
SF70CE	Type F (Rule 18) - SF70CE
SF70CHT	Type F (Rule 18) - SF70CHT
SF70CHTE	Type F (Rule 18) - SF70CHTE
SF70DE	Type F (Rule 18) - SF70DE
SF79CC	Type F (Rule 18) - SF79CC
SF79CE	Type F (Rule 18) - SF79CE
SF79CHT	Type F (Rule 18) - SF79CHT
SF79CHTE	Type F (Rule 18) - SF79CHTE
SF79DE	Type F (Rule 18) - SF79DE

Validation Rule for A057

-If Rotary Coupler Style is reported, then Coupler Code must be a rotary coupler.

-If Coupler Code is a rotary coupler, then Coupler Style must be R (Rotary).

-Coupler Code of Type E Obsolete (Rule 16) can only be reported if the car was built or rebuilt before July 31, 2015

-Coupler Code of Type E/F Obsolete (Rule 17) can only be reported if the car was built or rebuilt before July 31, 2015

-Coupler Code of Type F Obsolete (Rule 18) can only be reported if the car was built or rebuilt before July 31, 2015

-Coupler Code of FROTARY or EFROTARY cannot be reported for cars Built or Rebuilt on or after August 12, 2014.

NOTES:

- Obsolete: All Type D couplers are obsolete and should report code DOBS; cars with this coupler code will be restricted in interchange as discussed below.
- Unknown: If the coupler code is unknown or if the code stamped on the coupler is illegible, the code BUNK FUNK, EFUNK, or LOCOUNK should be reported.
- Special: Codes ESPEC, FSPEC, and EFSPEC have been created to decline coupler bodies that have been manufactured specifically for the equipment owner and are not listed in the attached table.
- The codes FROTARY and EFROTARY cannot be reported for equipment Built

or Rebuilt since August 12, 2014.

Coupler Style *Mandatory*	B058
Describes the basic coupler design of the equipment	●■▲

Used in ETC Generation. Affects Rating.

Permissible Values for B058

B	Bottom Shelf	D	Double Shelf
P	Plain	R	Rotary

Validation Rule for B058

-If Draft System Type (B073) is H (Hydraulic) then Coupler Style (B058) cannot be reported as M (Solid Drawbar) or L (Rotary Drawbar)

-If Draft System Type (B073) is not Center Of Car or End Of Car, Inches of Travel (B061) cannot be reported

-If Draft System Type (B073) of Center Of Car or End Of Car is reported then Inches of Travel (B061) must also be reported

Inches of Travel	B061
The number of inches a draft system will travel	■▲

Used in ETC Generation. Affects Rating.

Range of Values for B061

Minimum	Maximum
1	30

Validation Rule for B061

-If Draft System Type (B073) is not Center Of Car or End Of Car, Inches of Travel (B061) cannot be reported

-If Draft System Type (B073) of Center Of Car or End Of Car is reported then Inches of Travel (B061) must also be reported

-Inches of Travel cannot be greater than 20 for equipment with a Built Date (BLDT) on or after January 1, 1974

Draft System Type *Mandatory*	B073
Describes the draft gear/underframe cushion type	●■▲

Used in ETC Generation. Affects Rating.

Permissible Values for B073

C	Cushioning at Center of Car (COC)
E	Cushioning at End of Car (EOC)
S	Standard Draft Gear
X	Devices with less than 6 inches buff travel approved under AAR Standard S-060
Y	Devices with 6 to 10 inches of buff travel approved under AAR Standard S-060

Validation Rule for B073

- If Draft System Type (B073) is Standard Draft Gear (S), Inches of Travel (B061) cannot be reported

- If Draft System Type (B073) is reported as C, E, X, or Y then Inches of Travel (B061) must also be reported

- If Draft System Type (B073) of X, or Y is reported then Draft Gear Group/Cushion Unit Pocket (B562) cannot be reported

- If Draft System Type (B073) X is reported, the Inches of Travel (B061) value must be greater than or equal to 1 and less than 6

- If Draft System Type (B073) Y is reported, the Inches of Travel (B061) value must be greater than or equal to 6 and less than or equal to 10

-If Draft System Type (B073) is E then Coupler Style (B058) cannot be reported as R

-If Draft System Type (B073) is S then Draft Gear Group/Cushion Unit Pocket (B562) may only be A, B, C, D, E, F, G, H, J, K, L, M, N, P, Q, R, S, or Z (AAR Rule 21)

-If Draft System Type (B073) is E then Draft Gear Group/Cushion Unit Pocket (B562) may only be EOC-1,EOC-1D, EOC-1B, EOC-2, EOC-2D, EOC-2B, EOC-3, EOC-3B,EOC-4, EOC-4B, EOC-5, EOC-5D, EOC-5B, EOC-6, EOC-6D, EOC-6B, EOC-7, EOC-7B, EOC-8, EOC-8B, EOC-8F, EOC-9, EOC-9B, EOC-9D, EOC-9E, EOC-10, EOC-10D, EOC-10B, EOC-10F, EOC-11, EOC-11D, EOC-11B,EOC-12, EOC-12D, EOC-12B, EOC-13, EOC-13B, EOC-14, EOC-14B, EOC-15, EOC-15D, EOC-15B, EOC-16, EOC-16D, EOC-16B, EOC-17, EOC-17D, EOC-17B, EOC-18, EOC-18D, EOC-18B, EOC-19, EOC-19B, EOC-20, EOC-20B, EOC-21, EOC-21B, EOC-22, EOC-22B, EOC-23, EOC-23B, EOC-24, EOC-24B, EOC-25E, EOC-26B, EOC-26F, or EOC-27D, or EOC-27E (AAR Rule 59)

Draft Gear Group/Cushion Unit Pocket	B562
Draft Gear Group/Cushion Unit Pocket value as listed in AAR Field Manual Interchange Rule 21 and 59	✹

Carry forward for Single Clone / Multi-Clone / Restencil / Add-Back / Equipment Group Change.

Permissible Values for B562EOC-1,EOC-1D, EOC-1B, EOC-2, EOC-2D, EOC-2B, EOC-3, EOC-3B,EOC-4, EOC-4B, EOC-5, EOC-5D, EOC-5B, EOC-6, EOC-6D, EOC-6B, EOC-7, EOC-7B, EOC-8, EOC-8B, EOC-8F, EOC-9, EOC-9B, EOC-9D, EOC-9E, EOC-10, EOC-10D, EOC-10B, EOC-10F, EOC-11, EOC-11D, EOC-11B,EOC-12, EOC-12D, EOC-12B, EOC-13, EOC-13B, EOC-14, EOC-14B, EOC-15, EOC-15D, EOC-15B, EOC-16, EOC-16D, EOC-16B, EOC-17, EOC-17D, EOC-17B, EOC-18, EOC-18D, EOC-18B, EOC-19, EOC-19B, EOC-20, EOC-20B, EOC-21, EOC-21B, EOC-22, EOC-22B, EOC-23, EOC-23B, EOC-24, EOC-24B, EOC-25E, EOC-26B, EOC-26F, EOC-27D, EOC-27E COC-1, COC-2, COC-3, COC-4, COC-5, COC-6, COC-7, COC-8 (*AAR Rule 59*).

A, B, C, D, E, F, G, H, J, K, L, M, N, P, Q, R, S, Z (*AAR Rule 21*).

Validation Rule(s) for B562

- Draft Gear Group/Cushion Unit Pocket (B562) is mandatory for equipment built on or after June 13, 2019, unless Draft System Type (B073) is reported as X or Y

-If Draft Gear Group/Cushion Unit Pocket (B562) is not equal to A, B, C, D, E, F, G, H, J, K, L, M, N, P, Q, R, S, or Z, then Cushion Unit Type (B563) must be populated

-When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-6, EOC-7, EOC-7B, EOC-8, EOC-8B, EOC-9, EOC-9B, EOC-9D, EOC-10, EOC-10B, EOC-10D, EOC-14, EOC-14B, EOC-18D, EOC-23, EOC-23B, EOC-24, EOC-25E, EOC-26B, or EOC-27D then the Cushion Unit Type (B563) must be 1

- When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-9E, EOC-26F, or EOC-27E, then the Cushion Unit Type (B563) must be 2

-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-11, EOC-12, EOC-13, EOC-13B, EOC-15, EOC-15B, EOC-15D, EOC-17, EOC-17B, EOC-17D, EOC-18, EOC-18B, EOC-19, EOC-19B, EOC-20, EOC-20B, EOC-21, EOC-21B, EOC-22, EOC-22B, EOC-24B, COC-3, COC-5, or COC-7 then the Cushion Unit Type (B563) must be 1 or 2

-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-8F or EOC-10F then the Cushion Unit Type (B563) must be 2 or 3

-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-5, EOC-5B, EOC-5D, EOC-6, EOC-6B, EOC-6D EOC-11B, EOC-11D, EOC-12B, EOC-12D, or COC-4 then the Cushion Unit Type (B563) must be 1, 2, or 3

-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-16, EOC-16B, EOC-16D, or COC-1 then the Cushion Unit Type (B563) must be 1, 2, or 4

-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-2B, EOC-2D, EOC-3, EOC-3B, EOC-4, EOC-4B, or COC-2 then the Cushion Unit Type (B563) must be 1, 2, 3, or 4

-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-1, EOC-1B, EOC-1D, or EOC-2 then the Cushion Unit Type (B563) must be 1, 2, 3, 4, or S

-When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-8 then the Cushion Unit Type (B563) must be 1, 2, 3, 4, or 5

-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-1D, EOC-2,EOC-2D, EOC-2B, EOC-3, EOC-3B, EOC-5, EOC-5D, EOC-5B, EOC-6D, EOC-7, EOC-7B, EOC-9, EOC-9B, EOC-9D, EOC-9E, EOC-10D, EOC-11, EOC-11B, EOC-11D, EOC-12D, EOC-14,EOC-14B, EOC-15, EOC-15D, EOC-15B, EOC-16D, EOC-17D, EOC-23, EOC-23B, EOC-27D, or EOC-27E then the Inches of Travel (B061) must be 10

-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-16, EOC-16B, EOC-19, EOC-19B, EOC-22, EOC-22B, or EOC-25E then the inches of travel must be 12

-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-20 or EOC-20B then the Inches of Travel (B061) must be 14

-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-1B, EOC-4, EOC-4B, EOC-6, EOC-6B, EOC-8, EOC-8B, EOC-8F, EOC-10, EOC-10B, EOC-10F, EOC-12, EOC-12B, EOC-13, EOC-13B, EOC-17, EOC-17B, EOC-18, EOC-18D, EOC-18B, EOC-21, EOC-21B, EOC-24, or EOC-24B then the Inches of Travel (B061) must be 15

-When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-2, COC-3, COC-4, COC-5, COC-6, or COC-8 then the Inches of Travel (B061) must be 20

-When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-1, and Cushion Unit Type (B563) is 1 or 2, then the Inches of Travel (B061) must be 20

-When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-1, and Cushion Unit Type (B563) is 4, then the Inches of Travel (B061) must be 18

-When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-7, and Cushion Unit Type (B563) is 2, then the Inches of Travel (B061) must be 20
-When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-7, and Cushion Unit Type (B563) is 1, then the Inches of Travel (B061) must be 30
-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-1 then the Inches of Travel (B061) must be 10, 12, or 15
-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-26, then the Inches of Travel (B061) must be 18

Note:
Reference AAR Field Manual Interchange Rule(s) 21 and 59.

Cushion Unit Type **B563**

Cushion Unit Type value as listed in AAR Field Manual Interchange Rule 21 and 59 ✹

Carry forward for Single Clone / Multi-Clone / Restencil / Add-Back / Equipment Group Change.

Permissible Values for B563

1 – Type 1
2 – Type 2
3 – Type 3
4 – Type 4
5 – Type 5
S – Type S

Validation Rule(s) for B563

- Cushion Unit Type (B563) is mandatory for equipment built on or after June 13, 2019.
-If Draft Gear Group/Cushion Unit Pocket (B562) is not equal to A, B, C, D, E, F, G, H, J, K, L, M, N, P, Q, R, S, or Z, then Cushion Unit Type (B563) must be populated.
-When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-6, EOC-7, EOC-7B, EOC-8, EOC-8B, EOC-9, EOC-9B, EOC-9D, EOC-10, EOC-10B, EOC-10D, EOC-14, EOC-14B, EOC-18D, EOC-23, EOC-23B, EOC-24, EOC-25E, or EOC-26B then the Cushion Unit Type (B563) must be 1.
-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-9E, EOC-26F, or EOC-27E, then the Cushion Unit Type (B563) must be 2
-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-11, EOC-12, EOC-13, EOC-13B, EOC-15, EOC-15B, EOC-15D, EOC-17, EOC-17B, EOC-17D, EOC-18, EOC-18B, EOC-19, EOC-19B, EOC-20, EOC-20B, EOC-21, EOC-21B, EOC-22, EOC-22B, EOC-24B, COC-3, COC-5, or COC-7 then the Cushion Unit Type (B563) must be 1 or 2.
-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-8F or EOC-10F then the Cushion Unit Type (B563) must be 2 or 3.
-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-5, EOC-5B, EOC-5D, EOC-6, EOC-6B, EOC-6D EOC-11B, EOC-11D, EOC-12B, EOC-12D, or COC-4 then the Cushion Unit Type (B563) must be 1, 2, or 3.
-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-16, EOC-16B, EOC-16D, or COC-1 then the Cushion Unit Type (B563) must be 1, 2, or 4.
-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-2B, EOC-2D, EOC-3, EOC-3B, EOC-4, EOC-4B, or COC-2 then the Cushion Unit Type (B563) must be 1, 2, 3, or 4.
-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-1, EOC-1B, EOC-1D, or EOC-2 then the Cushion Unit Type (B563) must be 1, 2, 3, 4, or S.
-When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-8 then the Cushion Unit Type (B563) must be 1, 2, 3, 4, or 5.
-When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-1, and Cushion Unit Type (B563) is 1 or 2, then the Inches of Travel (B061) must be 20.
-When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-1, and Cushion Unit Type (B563) is 4, then the Inches of Travel (B061) must be 18.
-When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-7, and Cushion Unit Type (B563) is 2, then the Inches of Travel (B061) must be 20.
-When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-7, and Cushion Unit Type (B563) is 1, then the Inches of Travel (B061) must be 30.

Note:
Reference AAR Field Manual Interchange Rule(s) 21 and 59.

Coupler Component ID **B353**

Coupler Component ID from Component Registry

Data is Confidential. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Cushioning Unit Component ID **B361**

Component ID from Component Registry

Data is Confidential. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Unit Segment Components

Unit Equipment Group **A307**

Describes the equipment type of the platform ■

Affects Rating.

Permissible Values for A307

BOXC	Box Car	FLAT	Flat Car
GOND	Gondola	HOPP	Hopper
IFLT	Intermodal Flat	TANK	Tank Car
VFLT	Vehicular Flat		

Validation Rule for A307

-Unit Equipment Group cannot be reported if the Connected Unit Count (A020) is not reported
-Unit Equipment Group must be reported if Connected Unit Count (A020) is reported

Unit Tare Weight **A299**

The unit segment weight on rail when empty, sometimes referred to as Light Weight, reported in pounds

Range of Values for A299

Minimum	Maximum
40000	160000

Validation Rule for A299

-Unit Tare Weight must not be reported if the Connected Unit Count (A020) is not reported
-Unit Tare Weight must be reported if Connected Unit Count (A020) is reported
-Unit Tare Weight for Boxcars must be less than or equal 160,000 lbs.
-Unit Tare Weight for Refrigerators must be less than or equal 140,000 lbs.
-Unit Tare Weight for IFLTs must be greater than 10,000 lbs.
-Unit Tare Weight for IFLTs must be less than 72,000 lbs.
-Unit Tare Weight for all flats other than VFlats with ETC Q___ must be greater than 23,000 lbs.
-Unit Tare Weight for all flats other than VFlats with ETC Q___ must be less than 500,000 lbs.
-Unit Segment Tare Weights must add up to the Total Tare Weight (A259)
-Unit Tare Weight (A299) value must be reported to the nearest 100 pounds

Unit Load Limit **A300**

The maximum permissible weight of the commodity that can be loaded into the unit segment, reported in pounds

Range of Values for A300

Minimum	Maximum
40000	275000

Validation Rule for A300

-Unit Load Limit must not be reported if the Connected Unit Count (A020) is not reported
-Unit Load Limit must be reported if Connected Unit Count (A020) is reported

-Unit Segment Load Limits must add up to the Load Limit (LDLT)

Unit Cubic Feet Capacity A065

The calculated interior dimensions of the unit segment in cubic feet

Range of Values for A065

Minimum	Maximum
1400	12500

Validation Rule for A065

-Unit Cubic Feet Capacity must not be reported if the Connected Unit Count (A020) is not reported

-Unit Cubic Feet Capacity requires Connected Unit Count (A020)

-Unit Cubic Feet Capacity for Boxcars must be greater than or equal 2000 cubic feet

-Unit Cubic Feet Capacity for Boxcars must be less than or equal 11000 cubic feet

-Unit Cubic Feet Capacity for Refrigerators must be greater than or equal 1400 cubic feet

-Unit Cubic Feet Capacity for Refrigerators must be less than or equal 6700 cubic feet

-Unit Cubic Feet Capacity must add up to the Cubic Feet Capacity (A067).

Unit Inside Length A301

The inside length of each unit segment

Displayed in feet and inches on the Web. Stored in inches.

Range of Values for A301

Minimum	Maximum
39 ft 0 inches	93 ft 11 inches

Validation Rule for A301

-Unit Inside Length can only be reported if Connected Unit Count (A020) is reported

-Unit Inside Length must be reported if Connected Unit Count (A020) is reported

Brake System Components

Emergency Brake Valve CID B354

Component ID from Component Registry

Data is Confidential. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Emergency Valve COTS Date B567

Brake valve emergency portion recondition date

System generated element. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

NOTES:

- Emergency Valve COTS Date is system-generated from a Emergency Brake Valve Inspection.

Emergency Valve OEM Warranty Date B568

Brake valve emergency portion Original Equipment Manufacturer warranty date

System generated element. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

NOTES:

- Emergency Valve OEM Date is system-generated from a Emergency Brake Valve Inspection.

Emergency Valve Part Number B569

Brake valve emergency portion part number

System generated element. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

NOTES:

- Emergency Valve Part Number is system-generated from a Emergency Brake Valve Inspection.

Service Brake Valve CID B357

Component ID from Component Registry

Data is Confidential. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Service Valve COTS Date B564

Brake valve service portion recondition date

System generated element. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

NOTES:

- Service Valve COTS Date is system-generated from a Service Brake Valve Inspection.

Service Valve OEM Warranty Date B565

Brake valve service portion Original Equipment Manufacturer warranty date

System generated element. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

NOTES:

- Service Valve OEM Date is system-generated from a Service Brake Valve Inspection.

Service Valve Part Number B566

Brake valve service portion part number

System generated element. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

NOTES:

- Service Valve Part Number is system-generated from a Service Brake Valve Inspection.

Slack Adjuster CID B359

Component ID from Component Registry

Data is Confidential. This element is not eligible for Input . Value does not carry forward for Single Clone / Multi-Clone.

Miscellaneous

Umler Effective Date EFDT

The date the rating activity (pre-registration, modification, etc.) is expected to occur

This element is not eligible for Query. Does not Carry Forward.

Validation Rule for EFDT

-Effective Date cannot be set to more than 13 months in the future.

NOTES:

- Effective Date will default to the 1st of the following month that equipment is registered

Inspection

ABT Due Date (Repair Track) DU13

The due date of the air brake test per AAR Field Manual Rule 3

System Generated Field. This element is not eligible for Input. Value does not carry forward for Add Back.

ABT 5-8 Year Due Date DU58

The 5-8 year due date for the air brake test (ABT) after the ABT Due Date (Repair Track)

System Generated Field. This element is not eligible for Input. Value does not carry forward for Add Back.

Car Grade CG01

The grading of the interior condition of the equipment

Value does not carry forward for Single Clone / Multi-Clone / Equipment Group Change.

Permissible Values for CG01

A	A-Grade A
B	B-Grade B
C	C-Grade C
K	K-Contaminated (system generated by waybill only)
L	L-Grade A/B with Exceptions
M	M-Restraining Device missing or defective (Shipper/Receiver)
R	R-Dirty Equipment (Shipper Only)
T	T-Car Certified Clean and Defect Free (Receiver Only)
U	U-Unfit for Lading
X	X-Grade A Contains Refuse
Y	Y-Grade B Contains Refuse
Z	Z-Grade C Contains Refuse

Car Grade Inspection Date — **CG02**

The date of the grading of the interior condition of the equipment

Value does not carry forward for Single Clone / Multi-Clone / Equipment Group Change.

Car Grade Inspection Time — **CG03**

The time of the grading of the interior condition of the equipment

Value does not carry forward for Single Clone / Multi-Clone / Equipment Group Change.

Car Grade Location SPLC — **CG04**

The SPLC of the grading location

Value does not carry forward for Single Clone / Multi-Clone / Equipment Group Change.

Car Grade Inspection SCAC — **CG05**

The shop SCAC grading location

Value does not carry forward for Single Clone / Multi-Clone / Equipment Group Change.

Inspection Date Done — **DTDN**

The date the inspection was completed; used for all inspection types reported on equipment

Insp Service Valve COTS Date — **B570**

Brake valve service portion recondition date

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

NOTES:

- Reports of 9999 will be allowed in case the date is illegible and the valve cannot be replaced immediately.
- Valid date format: MMYY

Insp Service Valve OEM Warranty Date — **B571**

Brake valve service portion Original Equipment Manufacturer warranty date

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

NOTES:

- Reports of 999999 will be allowed in case the date is illegible and the valve cannot be replaced immediately.
- Valid date format: MMYYYY

Insp Service Valve Part Number — **B572**

Brake valve service portion part number

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Insp Emergency Valve COTS Date — **B573**

Brake valve emergency portion recondition date

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Validation Rule for DTDN

- The inspection date must not be 60 days before the Build Date

Inspection Due Date — **INDD**

The due date of the next inspection; used for all inspection types reported on equipment

System Generated Field. This element is not eligible for Input. Value does not carry forward for Add Back.

Inspection Performer — **PERF**

The SCAC that completed the inspection; used for all inspection types reported on equipment

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Inspection Reporter — **REPT**

The SCAC that reported the inspection; used for all inspection types reported on equipment

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Location/SPLC — **SPLC**

The SPLC of the inspecting location; used for all inspection types reported on equipment

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Air Brake Test Device — **B523**

Indicates the type of test device used to perform the Air Brake Test ✹

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Permissible Values for B523

A	Automatic (Non 4-Pressure)
M	Manual
P	Automatic (4-Pressure)

Validation Rule for B523

-Air Brake Test Device (B523) must be reported for Air Brake Test inspection reported on or after December 10, 2020

NOTES:

- Reports of 9999 will be allowed in case the date is illegible and the valve cannot be replaced immediately.
- Valid date format: MMYY

Insp Emergency Valve OEM Warranty Date — **B574**

Brake valve emergency portion Original Equipment Manufacturer warranty date

System generated element. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

NOTES:

- Reports of 999999 will be allowed in case the date is illegible and the valve cannot be replaced immediately.
- Valid date format: MMYYYY

Insp Emergency Valve Part Number — **B575**

Brake valve emergency portion part number

System generated element. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Insp Service Valve Location *Mandatory* — **B576**

Brake valve service portion location ●

. Value does not carry forward for Single Clone / Multi-Clone.

Insp Emergency Valve Location *Mandatory*	**B577**
Brake valve emergency portion location reported on an emergency brake valve inspection	●

Value does not carry forward for Single Clone / Multi-Clone.

Gondola

General

Status Code *Mandatory* **USCD**

Identifies the current operational state ●

Does not Carry Forward.

Permissible Values for USCD

A	ACTIVE	I	INACTIVE
P	PRE-REGISTERED		

NOTES:

- For Restencil and Clone process the initial Status of a car should be Pre-Registered.
- All Add-Back processes should initially set the Status to Pre-Registered
- A Pre-registered car will automatically have its Status changed to Active for the initial change when TRAIN detects three (3) movements on the car
- If the Status changes to Active due to movement and the car was created from a Restencil, the Prior Equipment ID (PRID) or source car will have its status changed to Inactive automatically by Umler

Equipment ID **0001**

The equipment stenciled number

Validation Rule for 0001

-Equipment Number must not be larger than 6 digits (i.e., 999999)

NOTES:

- Equipment ID includes the mark and number stenciled on the equipment. Marks can be up to 4 characters and number up to 6 digits (i.e., ABCD999999).
- Up to 500 cars can be added or updated in a transaction.
- When adding an equipment record, ensure that Prior Equipment ID (PRID) is reported, unless the equipment is new.

Mechanical Designation *Mandatory* **UMMD**

Equipment description without physical dimensions ●▲

Used in ETC Generation. Used for Transportation Codes.

Permissible Values for UMMD

GB	Gondola-Flat Bottom
GBR	Gondola-Flat Bottom with Roof
GBS	Gondola-Flat Bottom, Specially Equipped
GBSR	Gondola-Flat Bottom with Roof, Specially Equipped
GS	Gondola-Drop Bottom
GSS	Gondola-Drop Bottom, Specially Equipped
GT	Gondola-High Sides and Ends-for Unloading in Dumping Machines Only
GTR	Gondola-High Sides and Ends, with Roof
GTS	Gondola-High Sides and Ends, Specially Equipped
GWS	Gondola-Well, Specially Equipped
GWSR	Gondola-Well with Roof, Specially Equipped
LG	Gondola-Special Design for demountable containers
MW	MoW - Miscellaneous
MWD	MoW - Side Dump Cars
MWGN	MoW - Gondola

Equipment Type Code **UMET**

An alpha numeric code that describes the physical attributes of equipment

System Generated Field. This element is not eligible for Input.

NOTES:

- Please Refer to Appendix I for More information Regarding ETC Generation

Maint of Way Service Type **B403**

Identifies equipment Maintenance Of Way function

Value does not carry forward for Equipment Group Change.

Permissible Values for B403

C2	Crane / Boom Support Car
F4	Flat-Wheel Sets
T4	Training Car
T8	Track Geometry Car

Validation Rule for B403

- Maint of Way Service Type can only be listed on records where the Equipment Group (0002) or Pseudo Equipment Group (B547) is listed as MISC

Built Date *Mandatory* **BLDT**

The date the construction of the equipment is complete ●■

Data is Confidential. Used for Transportation Codes. Affects Rating. Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for BLDT

Minimum	Maximum
1/1/1900	12/31/9999

Validation Rule for BLDT

-Built Date must be within the last 99 years
-Built Date must not be in the future for equipment in Active Status
-Prior and target equipment's Built Date (BLDT) must match for restenciling
-Built Date cannot be updated within 30 days of the End of Service Date (B078)

NOTES:

- Data is public for railroad marked equipment.
- For connected unit cars report the oldest car in the set.

Rebuilt / ILS Date **RBDT**

The date the re-construction of the equipment is complete

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for RBDT

Minimum	Maximum
1/1/1900	12/31/9999

Validation Rule for RBDT

-Rebuilt/Increased Life Service Date must be after the Built Date (BLDT)
-Rebuilt Date must not be more than 70 years after the Built Date (BLDT)
-Rebuilt Date is required for Extended Service Code (A096) 1, 2, or 3 for Increased Life Service
-Rebuilt Date is required for Extended Service Code (A096) R for Rebuilt, or V for 65 years of service
-If Rebuilt Date is reported then the Extended Service Code (A096) must be reported as R for Rebuilt, V, 1, 2, or 3 for Increased Life Service

NOTES:

- Railroad cars -- applicable only to cars meeting status as provided in both STB Accounting Rules, and the AAR Mechanical Interchange Rule 88, Office Manual.
- Private cars -- applicable to all cars meeting AAR Mechanical Interchange Rule 88, Section C, Office Manual and Sections A and B of the Field Manual.
- For connected unit cars report the oldest car in the set. Do not report Rebuilt Date unless car has been approved by the AAR.

Rebuilt Flag **RBFL**

Identifies the equipment is nearing its end of life cycle

Data is Confidential. System Generated Field. This element is not eligible for Input.

Permissible Values for RBFL

N	No	Y	Yes

Owner *Mandatory* **UMOW**

Primary reporting mark of the railroad or private company owning the car ●

Value does not carry forward for Single Clone / Multi-Clone / Single Restencil / Multi-Restencil.

NOTES:

- Report the primary reporting mark of the railroad or private company owning the car. When car's lease or lien is held by a bank, trust holder, capital lease company, etc. not having an assigned mark, report the primary reporting mark affiliated with the stenciled reporting mark.

Equipment Group *Mandatory*	0002
Identifies the various major car types	●■

Used for Transportation Codes. Affects Rating.

Lessee	LESE
The reporting mark of the company leasing the equipment	

Value does not carry forward for Single Clone / Multi-Clone / Single Restencil / Multi-Restencil.

Validation Rule for LESE

-Umler Owner (UMOW) and Lessee are not allowed to be equal

-Lessee cannot be a child reporting mark

NOTES:

- In order to assign privately marked cars to a pool, a railroad reporting mark must be reported.

Maintenance Party	MNPT
The parent reporting mark of the company responsible for the maintenance and repairs of the equipment	

Does not Carry Forward.

Mark Owner Category	B201
The company that owns the stenciled mark on the car	

System Generated Field. This element is not eligible for Input. Value does not carry forward for Single Restencil / Multi-Restencil / Equipment Group Change / Add Back.

Permissible Values for B201

B	US Private
C	Canadian Private
F	Foreign Private
H	Canadian Class II
I	Canadian Class I
J	Mexican Class I
K	Canadian Class III
M	Mexican Private
N	US Private Steamship
O	Canadian Private Steamship
P	Mexican Private Steamship
Q	Foreign Private Steamship
R	US Class II Railroad
U	US Class I Railroad
V	US Class III Railroad
W	Mexican Class II Railroad
Y	Mexican Class III Railroad

NOTES:

- This value is stored in the Umler Database for informational purposes and is retrieved from the Roadmark Registry.

Prior Equipment ID	PRID
The previous reporting mark and number of the equipment	

Value does not carry forward for Single Clone / Multi-Clone.

Validation Rule for PRID

-Prior and target equipment's Built Date (BLDT) must match

-The Prior Equipment ID (0001) must belong to the same or comparable Equipment Group (0002) as the current car initial and number

NOTES:

- Prior ID enables equipment records to share the same historical lineage. Equipment Identification Number (EIN) is a generated id that enables these equipment records to share inspections and transaction history.

Last Update Date	B122
Date of the last Umler element change	

System Generated Field. This element is not eligible for Input.

Equipment Add Date	B082
Date the reporting mark and number was added to the Umler system	

System Generated Field. This element is not eligible for Input.

Status Change Reason	USCR
Identifies the reason for the current operational state	

System Generated Field. This element is not eligible for Input. Does not Carry Forward.

Permissible Values for USCR

I	Initial Load
M	Movement
O	Status Changed Manually
R	Restencil

NOTES:

- If movement is detected on equipment, status is changed to Active.
- If an equipment record is changed to Active, any prior equipment record is placed in Inactive status.

Status Change Date	USCT
Identifies the effective date of the current operational state	

System Generated Field. This element is not eligible for Input. Does not Carry Forward.

Extended Service *Mandatory*	A096
A code indicating the eligibility of an increase to the life cycle	●

Used for Transportation Codes. Value does not carry forward for Single Clone / Multi-Clone.

Permissible Values for A096

1	1st ILS Inspection, additional 5 years of Service
2	2nd ILS Inspection, additional 5 years of service (10 years total)
3	3rd ILS Inspection, additional 5 years of service (15 years total)
C	Built New between January 1, 1964 - June 30, 1974, Certified for 50 Years of Service, Built New Before July 1, 1974 & Received AAR Waiver
E	Built new from July 1,1974, Qualified for 50 Years Service
N	Built Before January 1, 1964, Qualified for 40 Years Service
R	Rule 88, Rebuilt cars
U	Built between January 1, 1964 - June 30, 1974, Qualified for 40 Years & eligible for certification for 50 Years Service
V	Car is certified (FRA Waiver & AAR) for 65 years of service from date built new from January 1, 1964

Validation Rule for A096

-If Rebuilt Date (RBDT) is reported, then the Extended Service Code (A096) must be reported as R for Rebuilt, V, 1, 2, or 3 for Increased Life Service

-Extended Service Code of C cannot be reported if the car was built before January 1, 1964 or on/after July 1, 1974

-Extended Service Code of E cannot be reported if the car was built before July 1, 1974

-Extended Service Code of N cannot be reported if the car was built on/after January 1, 1964

-Extended Service Code of U cannot be reported if the car was built before January 1, 1964 or on/after July 1, 1974

NOTES:

- Value is used to calculate End of Service Date (B078).
- Rebuilt Date (RBDT) is required for Extended Service Code (A096) R for Rebuilt, or V for 65 years service.
- Rebuilt Date (RBDT) is required for Extended Service Code (A096) 1, 2, 3, and V for Increased Life Service.

End of Service Date B078

Indicates the date of the end of equipment life

Data is Confidential. System Generated Field. This element is not eligible for Input.

NOTES:

- Data becomes non-confidential two years prior to End of Service Date.

Do Not Load After B590

Equipment should not be loaded after date shown in the element

Data is Confidential.

Validation Rules for B590

-Do Not Load After (B590) cannot be updated thirty days prior to the date shown in the element.

-Do Not Load After (B590) cannot be updated within thirty days of the End of Service Date (B078).

-Do Not Load After (B590) date cannot be on or after the End of Service (B078) date.

NOTES:

- The element will be initially populated by End of Service (B078) minus 30 days.
- Data becomes non-confidential thirty days prior to the Do Not Load After (B590) date.

Equipment Identification EINN

Unique equipment identifier regardless of stenciled mark

System Generated Field. This element is not eligible for Input.

NOTES:

- Specify the Prior ID (PRID) on equipment records to ensure the historical lineage is preserved. Equipment with the same EIN share history and inspections.

Info Conflict Status B355

Indicates that an Informational Conflict exists on the Equipment record

System Generated Field. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Conflict Status B050

Identifies the escalation level of equipment in active conflict

System Generated Field. Affects Rating. This element is not eligible for Input. Value does not carry forward for Add Back.

Permissible Values for B050

1 Subject to Zero-Rating
2 Subject to Restricted in Interchange
3 Subject to Deletion

NOTES:

- Subject to Zero-Rating, goes into effect 30 days after Conflict Status occurs
- Subject to Restricted in Interchange, goes into effect 90 days after Conflict Status occurs
- Subject to Deletion, goes into effect 365 days after Conflict Status occurs

Date of Original Conflict B063

The date the equipment was originally placed in the current conflict

System Generated Field. This element is not eligible for Input.

Next Conflict Status B135

Identifies the next escalation level of an equipment in active conflict

System Generated Field. This element is not eligible for Input. Value does not carry forward for Add Back.

Permissible Values for B135

1 Subject to Zero-Rating
2 Subject to Restricted in Interchange
3 Subject to Deletion

NOTES:

- Subject to Zero-Rating, goes into effect 30 days after Conflict Status occurs
- Subject to Restricted in Interchange, goes into effect 90 days after Conflict Status occurs
- Subject to Deletion, goes into effect 365 days after Conflict Status occurs

Notice Indicator B137

Identifies equipment in error in Umler Notice Management

System Generated Field. This element is not eligible for Input.

Conflict Status Next Date B062

The date the conflict status will be escalated

System Generated Field. This element is not eligible for Input. Value does not carry forward for Add Back.

Rate Indicator A070

Indicates the rate type applicable to the unit

System Generated Field. Used for Transportation Codes. Affects Rating. This element is not eligible for Input. Does not Carry Forward.

Permissible Values for A070

0 Zero-Rated Due to Conflict Errors
2 Private Mileage Rate
4 Private Car Owner Designated Rate
6 Zero-Rated - Scrap (S_,SX), AAR Overage (XA), FRA Overage (YA), Umler Conflict - CHR 1/Tarriff 6007 (XZ). Zero-Rated Private Owner Election to Zero Rate [See Private Zero Rate (B150)].
M Railroad Market Rate
Q Zero-Rated Railroad Market Rate Due to Conflict Errors

NOTES:

- If unit is zero-rated, correction of conflicts will reinstate the appropriate rate indicator code.

Private Zero Rate B150

Indicates a private car is subject to contractual agreement, nullifying mileage rates

Affects Rating.

Permissible Values for B150

Y Yes

NOTES:

- Reporting "Y" generates Rate Indicator (A070) value 6 and a zero rate.

TTX Hourly Rate B212

Time Charge-The TTX hourly rate for the equipment

Data is Confidential. This element is not eligible for Query.

Range of Values for B212

Minimum	Maximum
0	9

Validation Rule for B212

-TTX Hourly rate can only be set on TTX owned Equipment.

TTX Mileage Rate B213

Mileage Charge-The TTX mileage rate for the equipment

Data is Confidential. This element is not eligible for Query.

Range of Values for B213

Minimum	Maximum
0	1

Validation Rule for B213

-TTX Mileage rate can only be set on TTX owned Equipment.

First Movement Date USAT

The first movement date under the stenciled mark of the equipment

This element is not eligible for Input. Does not Carry Forward.

Equipment Add Company B083

The reporting mark of the company that added the equipment

System Generated Field. This element is not eligible for Input.

Registration Reason B174

The code indicating the reason this equipment is added

Does not Carry Forward.

Permissible Values for B174

A	Add-Back	N	New
P	Pending Restencil	R	Restencil

Restencil Program Ind B177

Identifies the equipment is under a restencil program

Permissible Values for B177

Y Yes

Delete Reason Code B064

A code that designates the reason the equipment has been deleted

Value does not carry forward for Add Back.

Permissible Values for B064

A	Restenciled
D	Destroyed or wrecked
L	Lease terminated, removed from fleet
P	Retired unserviceable beyond economic repair
R	Rebuilt
S	Sold Serviceable
W	Over age retired for dismantling
Y	Error, reporting did not exist
Z	Other

Non-Compliant Wheelsets B544

Equipment record is incomplete and has a missing wheelset component ID association. Refer to AAR Field Manual Rule 44 for industry requirements ✹

System Generated Field. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Validation Rule for B544

-A Wheelset Component ID is required for each applicable location on equipment built on or after January 1, 2016

-A Wheelset Component ID is required for each applicable location on equipment rebuilt on or after January 1, 2016 and Gross Rail Load (A266) is greater than 268,000 lbs

NOTES:

- A "Y" will be system generated if the equipment is active and the number of Wheelset CID's required is not equal to the Axle Count (A024) on the equipment
- Validation rule applies to equipment that has been in Active status for 60 days

Pseudo Equipment Group B547

Equipment needs to be identified as a miscellaneous record while maintaining all elements linked to the original equipment group

System Generated Field.

Permissible Values for B547

MISC Miscellaneous

Weight

Gross Rail Load/Weight *Mandatory* A266

The maximum permissible weight on rail of the equipment and the load, reported in pounds ● ■

Affects Rating.

Range of Values for A266

Minimum	**Maximum**
160000	2835000

Validation Rule for A266

-Gross Rail Load must be equal to the Load Limit (LDLT) plus the Tare Weight (A259)

NOTES:

Use Table 1 below to determine Gross Rail Load, if Qualification for Increased Gross Rail Load (B344) does not exist.

TABLE 1 -

Journal Size	Load per Axle	Gross Rail Load for 4-axle Equipment
B - 4 1/2" x 8"	25,750 lbs.	103,000 lbs.
C - 5" x 9"	35,500 lbs.	142,000 lbs.
D - 5 1/2" x 10"	44,250 lbs.	177,000 lbs.
E - 6" x 11"	55,000 lbs.	220,000 lbs.
F - 6 1/2" x 12"	65,750 lbs.	263,000 lbs.
G - 7" x 12"	78,750 lbs.	315,000 lbs.
K - 6 1/2" x 9"	71,500 lbs.	263,000 lbs.
M - 7" x 9"	78,750 lbs.	315,000 lbs.

Use Table 2 below to determine Gross Rail Load for 4-axle equipment if Qualification for Increased Gross Rail Load (B344) exists.

TABLE 2 -

Qualification for Increased Gross Rail Load (B344)	Journal Size	Gross Rail Load
1	K - 6 1/2" x 9"	286,000 lbs.
1	G – 7" x 12"	286,000 lbs.
1	M – 7" x 9"	286,000 lbs.
2	F - 6 1/2" x 12"	286,000 lbs.
2	K - 6 1/2" x 9"	286,000 lbs.
3	F - 6 1/2" x 12"	268,000 lbs.
3	K - 6 1/2" x 9"	268,000 lbs.

- For multi-unit equipment, report the total gross rail load for the entire set.
- Refer to Field Manual Rule 70 if additional information is required.

A Gross Rail Load less than the listed or calculated values may be entered; however:

- Star Code (A247) must be R or S, and
- Load Limit (LDLT) must also be reduced, ensuring Tare Weight (A259) plus Load Limit (LDLT) equals the reported Gross Rail Load.

For equipment having two or more different journal sizes, see following examples:

Example for Drawbar Connected:

- A 3-unit drawbar connected car has 12 axles.
- The end units (Locations A and B) each have 4 axles with E - 6" x 11" journals.
- The intermediate unit (Locations C) has 4 axles with F – 6 1/2" x 12" journals

Using TABLE 1, the Gross Rail Load would be:

8 ea. E-6" x 11" journal axles X 55,000 lbs. per axle = 440,000 lbs.
+ 4 ea. F-6 1/2" x 12" journal axles X 65,750 lbs. per axle = 263,000 lbs.
Gross Rail Load = 703,000 lbs.

Example for Articulated Connected:

- A 5-unit articulated intermodal car has 6 trucks (12 axles).
- The end trucks (Locations A and B) each have 2 axles with E - 6" x 11" journals.
- The intermediate trucks (Locations C, D, E, and F) each have 2 axles with G - 7" x 12" journals

Using TABLE 1, the Gross Rail Load would be:

4 ea. E-6" x 11" journal axles X 55,000 lbs. per axle = 220,000 lbs.
+ 8 ea. G-7" x 12" journal axles X 78,750 lbs. per axle = 630,000 lbs.
Gross Rail Load = 850,000 lbs.

Tare Weight *Mandatory* **A259**

The equipment weight on rail when empty, sometimes referred to as Light Weight, reported in pounds ●■

Affects Rating.

Range of Values for A259

Minimum	Maximum
30000	1350000

Validation Rule for A259

- Tare Weight (A259) of GOND with a blank Connected Unit Count (A020), must contain values between 30,000 lbs. and 150,000 lbs.
-Tare Weight (A259) of GOND where Connected Unit Count (A020) is 2, must contain values between 60,000 lbs. and 300,000 lbs.
-Tare Weight (A259) of GOND where Connected Unit Count (A020) is 3, must contain values between 90,000 lbs. and 450,000 lbs.
-Tare Weight (A259) of GOND where Connected Unit Count (A020) is 4, must contain values between 120,000 lbs. and 600,000 lbs.
-Tare Weight (A259) of GOND where Connected Unit Count (A020) is 5, must contain values between 150,000 lbs. and 750,000 lbs.
-Tare Weight (A259) of GOND where Connected Unit Count (A020) is 6, must contain values between 180,000 lbs. and 900,000 lbs.
-Tare Weight (A259) of GOND where Connected Unit Count (A020) is 7, must contain values between 210,000 lbs. and 1,050,000 lbs.
- Tare Weight (A259) of GOND where Connected Unit Count (A020) is 8, must contain values between 240,000 lbs. and 1,200,000 lbs.
-Tare Weight (A259) of GOND where Connected Unit Count (A020) is 9, must contain values between 270,000 lbs. and 1,350,000 lbs.
- Tare Weight (A259) value must be reported to the nearest 100 pounds if Weighing Date (A288).

NOTES:

- Do not report an average Tare Weight for car series, except for Pre-Registered cars
- When cars are made active, the actual Tare Weight must be recorded

Load Limit *Mandatory* **LDLT**

The maximum permissible weight of the commodity that can be loaded into the equipment, reported in pounds ●■▲

Used in ETC Generation. Affects Rating.

Range of Values for LDLT

Minimum	Maximum
70000	2565000

Validation Rule for LDLT

-Load Limit (LDLT) of GOND with a blank Connected Unit Count (A020), must contain values between 70,000 lbs. and 285,000 lbs.
-Load Limit (LDLT) of GOND where Connected Unit Count (A020) is 2, must contain values between 140,000 lbs. and 570,000 lbs.
-Load Limit (LDLT) of GOND where Connected Unit Count (A020) is 3, must contain values between 210,000 lbs. and 855,000 lbs.
-Load Limit (LDLT) of GOND where Connected Unit Count (A020) is 4, must contain values between 280,000 lbs. and 1,140,000 lbs.
-Load Limit (LDLT) of GOND where Connected Unit Count (A020) is 5, must contain values between 350,000 lbs. and 1,425,000 lbs.
-Load Limit (LDLT) of GOND where Connected Unit Count (A020) is 6, must contain values between 420,000 lbs. and 1,710,000 lbs.
-Load Limit (LDLT) of GOND where Connected Unit Count (A020) is 7, must contain values between 490,000 lbs. and 1,995,000 lbs.
-Load Limit (LDLT) of GOND where Connected Unit Count (A020) is 8, must contain values between 560,000 lbs. and 2,280,000 lbs.
-Load Limit (LDLT) of GOND where Connected Unit Count (A020) is 9, must contain values between 630,000 lbs. and 2,565,000 lbs.

NOTES:

- For connected unit cars report the sum of the load limits for all units in the set.

Weighing Status *Mandatory* **A289**

Indicates the weight information is an estimate or an actual measurement ●

Value does not carry forward for Single Clone / Multi-Clone.

Permissible Values for A289

A	Actual
E	Estimated
V	Verified correct Tare Weight
X	Tare Weight subject to verification (System Generated)

Validation Rule for A289

-Equipment cannot be within a series of 10 with identical Tare Weights (A259), refer to Appendix P for further information on resolving tare weight conflicts
-When Status Code changes to Active or Inactive Weighing Status must be reported as Actual (A) or Verified (V) within 60 days of Status Code change

Weighing Date **A288**

The date the equipment was actually weighed

Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for A288

Minimum	Maximum
1/1/1900	12/31/9999

Validation Rule for A288

-If Weighing Date is reported the Tare Weight (A259) must be reported
-When Weighing Date is reported then Weighing Status (A289) must be A (Actual) or V (Verified)
-If Weighing Status (A289) is A (Actual) or V (Verified correct Tare Weight) then Weighing Date must be reported
-Weighing Date must be on or before the current date
-Weighing Date cannot be before Built / Rebuilt date

Cubic Feet Capacity *Mandatory* **A067**

The maximum interior cubic feet capacity of the equipment ●▲

Used in ETC Generation.

Range of Values for A067

Minimum	Maximum
400	79200

NOTES:

- For connected unit cars report the sum of all units cubic capacity.
- Plate Codes A, B, C, E, F, G are applicable to Gondolas

Star Code **A247**

Indicates a reduction of the Load Limit (LDLT) of the equipment per AAR Rule 70 ■

Affects Rating.

Permissible Values for A247

R	Body Capacity less than Truck Capacity
S	Reduced Load Limit

Validation Rule for A247

-4-axle Cars with Star Codes of S or R must not exceed Gross Weight of 263,000 lbs. when Journal Size is A, B, C, D, or E
-Journal Sizes having Star Code of S must have a Gross Weight that is less than the calculated Gross Weight with rounding applied
-UnStarred 4 Axle Cars reporting Increased Gross Rail Load (IGRL) of 2 or 3 must have a Gross Weight greater than or equal to 264,000 lbs.
-Starred 4 axle cars with IGRL of 1 must have a Wheel Size of 36 inches when Gross Weight is less than 286,000 lbs.
-Starred 4 Axle Cars with Increased Gross Rail Load (IGRL) reported must have a Journal Size of K, G, or M

Qual for Inc GRL **B344**

AAR qualification for increased Rail Load Code designating AAR approval for operating 4-axle equipment at a gross rail load greater than 263,000 lbs per

AAR Rule 88

Permissible Values for B344

1 Rule 88 IGRL Code 1 (> 263,000 lbs. and <= 286,000 lbs. GRL per AAR Specification S-286)
2 Rule 88 IGRL Code 2 (> 263,000 lbs. and <= 286,000 lbs. GRL)
3 Rule 88 IGRL Code 3 (> 263,000 lbs. and <= 268,000 lbs. GRL)

Validation Rule for B344

-Equipment having Qualification for Increased Gross Rail Load of 3, and a Gross Rail Load (A266) less than 268,000 lbs, must have Star Code (A247) of S.
-Equipment having Qualification for Increased Gross Rail Load of 1 or 2, and a Gross Rail Load (A266) less than 286,000 lbs, must have Star Code (A247) of S.
-4-axle equipment with Gross Rail Load (A266) greater than 263,000 lbs. and less than 315,000 lbs., and Star Code (A247) blank, must report Qualification for Increased Gross Rail Load.
-4-axle equipment having Qualification for Increased Gross Rail Load of 1, 2, or 3 must have a Wheel Diameter (A294) of 36 or 38
-4-axle equipment having Qualification for Increased Gross Rail Load of 2 or 3 must have a Journal Size (A147) of F or K
-4-axle equipment having Qualification for Increased Gross Rail Load of 1 must have a Journal Size (A147) of K, G, or M
-4-axle equipment having Qualification for Increased Gross Rail Load of 3 must have Gross Rail Load (A266) that does not exceed 268,000 lbs
-4-axle equipment having Qualification for Increased Gross Rail Load of 1 or 2 must have Gross Rail Load (A266) that does not exceed 286,000 lbs

Dimension

Plate Code *Mandatory* A046

Indicates the extreme height and width clearance of the equipment ●■

Affects Rating.

Permissible Values for A046

B Plate Code B
C Plate Code C
E Plate Code E
F Plate Code F
G Clearance Code G
N Plate Code N

NOTES:

- For a description of Plate Codes, please see Appendix J at the back of this manual.
  - Report B: If clearance does not exceed Plate B
  - Report C: If clearance is greater than Plate B. but does not exceed Plate C
  - Report E: If clearance is greater than Plates B and C, but does not exceed Plate E.
  - Report F: If clearance is greater than Plates B, C and E, but does not exceed Plate F
  - Report G: If clearance exceeds Plates B, C, E, F, and N.
  - Report N: If clearance is greater than Plates B, C, E, and F, but does not exceed Plate N.
- There is no AAR Plate G. Clearance Code G is included in Umler to represent equipment that does not fit any existing AAR clearance plates.
- For ARTICULATED/MULTI-UNIT SET report the most restrictive clearance plate of UNIT in the set.

Outside Length *Mandatory* OSLG

The outside length over pulling faces of couplers in normal position ●■

Affects Rating. Displayed in feet and inches on the Web. Stored in inches.

Range of Values for OSLG

Minimum	Maximum
28 ft 0 inches	792 ft 0 inches

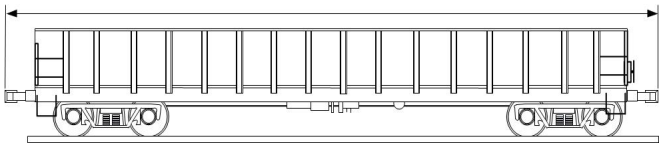
Validation Rule for OSLG

-Outside Length on a GT ore jenny (Mechanical Designation - GT, Flat Bottom, Inside Length less than 36 feet) cannot be less than 24 feet
-Outside Length (OSLG) on freight cars must exceed the Inside Length (A135) by 2 feet or more
-Outside Length (OSLG) on freight cars (except refrigerator cars with Mechanical Designation RB, RBL, RP, RPL, or RC) must not exceed Inside Length (A135) by more than 16 feet
-Outside Length (OSLG) of GOND with a blank Connected Unit Count (A020), must contain values between 24 feet and 88 feet
-Outside Length (OSLG) of GOND where Connected Unit Count (A020) is 2, must contain values between 48 feet and 176 feet
-Outside Length (OSLG) of GOND where Connected Unit Count (A020) is 3, must contain values between 72 feet and 264 feet
-Outside Length (OSLG) of GOND where Connected Unit Count (A020) is 4, must contain values between 96 feet and 352 feet
-Outside Length (OSLG) of GOND where Connected Unit Count (A020) is 5, must contain values between 120 feet and 440 feet
-Outside Length (OSLG) of GOND where Connected Unit Count (A020) is 6, must contain values between 144 feet and 528 feet
-Outside Length (OSLG) of GOND where Connected Unit Count (A020) is 7, must contain values between 168 feet and 616 feet
-Outside Length (OSLG) of GOND where Connected Unit Count (A020) is 8, must contain values between 192 feet and 704 feet
-Outside Length (OSLG) of GOND where Connected Unit Count (A020) is 9, must contain values between 216 feet and 792 feet

NOTES:

For connected unit cars report the maximum coupled length of the set.

- Round fraction to the higher inch, e.g., 05 1/4" = 06"



Outside Extreme Width *Mandatory* A186

The outside extreme width of the equipment ●■

Affects Rating. Displayed in feet and inches on the Web. Stored in inches.

Range of Values for A186

Minimum	Maximum
8 ft 5 inches	11 ft 6 inches

Validation Rule for A186

-Outside Extreme Width must not exceed 10 feet 8 inches for Plate Codes B, C, E, F, or N

NOTES:

- For connected unit cars report the dimension of the largest unit in the set.
- Round fraction to the higher inch, e.g., 05 1/4" = 06"
- If equipment operates with removable cover Roof Type (A226) code 2, report dimension with cover installed.

Outside Extreme Height *Mandatory* A185

Height from top of rail to extreme projecting height ●■

Affects Rating. Displayed in feet and inches on the Web. Stored in inches.

Range of Values for A185

Minimum	Maximum
4 ft 0 inches	18 ft 0 inches

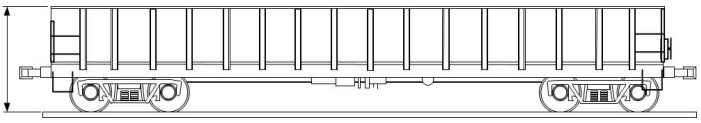
Validation Rule for A185

-Outside Extreme Height for Plate Codes B must be less than or equal to 15 feet 1 inch
-Outside Extreme Height for Plate Codes C or I must be less than or equal to 15 feet 6 inches
-Outside Extreme Height for Plate Code E must be less than or equal to 15 feet 9 inches

-Outside Extreme Height for Plate Code F must be less than or equal to 17 feet 0 inch
-Outside Extreme Height for Plate Code N must be less than or equal to 17 feet 1 inch

NOTES:

- For connected unit cars report the dimension of the largest unit in the set.
- Round fraction to the higher inch, e.g., 05 1/4" = 06"



Outside Height Extr Width *Mandatory*	**A187**
The highest point at which the extreme width of the equipment occurs	●

Displayed in feet and inches on the Web. Stored in inches.

Range of Values for A187

Minimum	Maximum
1 ft 0 inches	18 ft 0 inches

Validation Rule for A187

-Outside Extreme Width (A186) for Plate Code B must not exceed 10 feet 8 inches if Outside Height Extreme Width is 13 feet 10 inches or less
-Outside Extreme Width (A186) for Plate Code B must not exceed 10 feet 7 inches if Outside Height Extreme Width is 13 feet 11 inches
-Outside Extreme Width (A186) for Plate Code B must not exceed 10 feet 6 inches if Outside Height Extreme Width is 14 feet 0 inches
-Outside Extreme Width (A186) for Plate Code B must not exceed 10 feet 4 inches if Outside Height Extreme Width is 14 feet 1 inches
-Outside Extreme Width (A186) for Plate Code B must not exceed 10 feet 3 inches if Outside Height Extreme Width is 14 feet 2 inches
-Outside Extreme Width (A186) for Plate Code B must not exceed 10 feet 2 inches if Outside Height Extreme Width is 14 feet 3 inches
-Outside Extreme Width (A186) for Plate Code B must not exceed 10 feet 0 inches if Outside Height Extreme Width is 14 feet 4 inches
-Outside Extreme Width (A186) for Plate Code B must not exceed 9 feet 9 inches if Outside Height Extreme Width is 14 feet 5 inches
-Outside Extreme Width (A186) for Plate Code B must not exceed 9 feet 5 inches if Outside Height Extreme Width is 14 feet 6 inches
-Outside Extreme Width (A186) for Plate Code B must not exceed 9 feet 2 inches if Outside Height Extreme Width is 14 feet 7 inches
-Outside Extreme Width (A186) for Plate Code B must not exceed 8 feet 10 inches if Outside Height Extreme Width is 14 feet 8 inches
-Outside Extreme Width (A186) for Plate Code B must not exceed 8 feet 6 inches if Outside Height Extreme Width is 14 feet 9 inches
-Outside Extreme Width (A186) for Plate Code B must not exceed 8 feet 3 inches if Outside Height Extreme Width is 14 feet 10 inches
-Outside Extreme Width (A186) for Plate Code B must not exceed 7 feet 11 inches if Outside Height Extreme Width is 14 feet 11 inches
-Outside Extreme Width (A186) for Plate Code B must not exceed 7 feet 6 inches if Outside Height Extreme Width is 15 feet 0 inches
-Outside Extreme Width (A186) for Plate Code B must not exceed 7 feet 4 inches if Outside Height Extreme Width is 15 feet 1 inches
-Outside Extreme Width (A186) for Plate Code C must not exceed 10 feet 8 inches if Outside Height Extreme Width is 14 feet 3 inches or less
-Outside Extreme Width (A186) for Plate Code C must not exceed 10 feet 7 inches if Outside Height Extreme Width is 14 feet 4 inches
-Outside Extreme Width (A186) for Plate Code C must not exceed 10 feet 6 inches if Outside Height Extreme Width is 14 feet 5 inches
-Outside Extreme Width (A186) for Plate Code C must not exceed 10 feet 4 inches if Outside Height Extreme Width is 14 feet 6 inches
-Outside Extreme Width (A186) for Plate Code C must not exceed 10 feet 3 inches if Outside Height Extreme Width is 14 feet 7 inches
-Outside Extreme Width (A186) for Plate Code C must not exceed 10 feet 2 inches if Outside Height Extreme Width is 14 feet 8 inches
-Outside Extreme Width (A186) for Plate Code C must not exceed 10 feet 0 inches if Outside Height Extreme Width is 14 feet 9 inches
-Outside Extreme Width (A186) for Plate Code C must not exceed 9 feet 9 inches if Outside Height Extreme Width is 14 feet 10 inches
-Outside Extreme Width (A186) for Plate Code C must not exceed 9 feet 5 inches if Outside Height Extreme Width is 14 feet 11 inches
-Outside Extreme Width (A186) for Plate Code C must not exceed 9 feet 2 inches if Outside Height Extreme Width is 15 feet 0 inches
-Outside Extreme Width (A186) for Plate Code C must not exceed 8 feet 10 inches if Outside Height Extreme Width is 15 feet 1 inches
-Outside Extreme Width (A186) for Plate Code C must not exceed 8 feet 6 inches if Outside Height Extreme Width is 15 feet 2 inches
-Outside Extreme Width (A186) for Plate Code C must not exceed 8 feet 3 inches if Outside Height Extreme Width is 15 feet 3 inches
-Outside Extreme Width (A186) for Plate Code C must not exceed 7 feet 11 inches if Outside Height Extreme Width is 15 feet 4 inches
-Outside Extreme Width (A186) for Plate Code C must not exceed 7 feet 8 inches if Outside Height Extreme Width is 15 feet 5 inches
-Outside Extreme Width (A186) for Plate Code C must not exceed 7 feet 4 inches if Outside Height Extreme Width is 15 feet 6 inches
-Outside Extreme Width (A186) for Plate Code E must not exceed 10 feet 8 inches if Outside Height Extreme Width is 15 feet 2 inches or less
-Outside Extreme Width (A186) for Plate Code E must not exceed 10 feet 6 inches if Outside Height Extreme Width is 15 feet 3 inches
-Outside Extreme Width (A186) for Plate Code E must not exceed 10 feet 3 inches if Outside Height Extreme Width is 15 feet 4 inches
-Outside Extreme Width (A186) for Plate Code E must not exceed 9 feet 6 inches if Outside Height Extreme Width is 15 feet 5 inches
-Outside Extreme Width (A186) for Plate Code E must not exceed 8 feet 8 inches if Outside Height Extreme Width is 15 feet 6 inches

-Outside Extreme Width (A186) for Plate Code E must not exceed 7 feet 11 inches if Outside Height Extreme Width is 15 feet 7 inches
-Outside Extreme Width (A186) for Plate Code E must not exceed 7 feet 1 inches if Outside Height Extreme Width is 15 feet 8 inches
-Outside Extreme Width (A186) for Plate Code E must not exceed 6 feet 3 inches if Outside Height Extreme Width is 15 feet 9 inches
-Outside Extreme Width (A186) for Plate Code F must not exceed 10 feet 8 inches if Outside Height Extreme Width is 16 feet 3 inches or less
-Outside Extreme Width (A186) for Plate Code F must not exceed 10 feet 7 inches if Outside Height Extreme Width is between 16 feet 4 inches and 16 feet 6 inches
-Outside Extreme Width (A186) for Plate Code F must not exceed 10 feet 6 inches if Outside Height Extreme Width is 16 feet 7 inches
-Outside Extreme Width (A186) for Plate Code F must not exceed 10 feet 3 inches if Outside Height Extreme Width is 16 feet 8 inches
-Outside Extreme Width (A186) for Plate Code F must not exceed 10 feet 0 inches if Outside Height Extreme Width is 16 feet 9 inches
-Outside Extreme Width (A186) for Plate Code F must not exceed 9 feet 8 inches if Outside Height Extreme Width is 16 feet 10 inches
-Outside Extreme Width (A186) for Plate Code F must not exceed 9 feet 5 inches if Outside Height Extreme Width is 16 feet 11 inches
-Outside Extreme Width (A186) for Plate Code F must not exceed 9 feet 2 inches if Outside Height Extreme Width is 17 feet 0 inches
-Outside Extreme Width (A186) for Plate Code B must not exceed 8 feet 3 inches if Outside Height Extreme Width is 14 feet 10 inches
-Outside Extreme Width (A186) for Plate Code C must not exceed 8 feet 3 inches if Outside Height Extreme Width is 15 feet 3 inches
-Outside Extreme Width (A186) for Plate Code N must not exceed 10 feet 8 inches if Outside Height Extreme Width (A187) is 16 feet 9 inches or less
-Outside Extreme Width (A186) for Plate Code N must not exceed 10 feet 6 inches if Outside Height Extreme Width (A187) is 16 feet 10 inches
-Outside Extreme Width (A186) for Plate Code N must not exceed 10 feet 4 inches if Outside Height Extreme Width (A187) is 16 feet 11 inches
-Outside Extreme Width (A186) for Plate Code N must not exceed 10 feet 2 inches if Outside Height Extreme Width (A187) is 17 feet 0 inches
-Outside Extreme Width (A186) for Plate Code N must not exceed 9 feet 11 inches if Outside Height Extreme Width (A187) is 17 feet 1 inch

NOTES:

- For connected unit cars report the dimension of the largest unit in the set.
- Round fraction to the higher inch, e.g., 05 1/4" = 06"

Outside Upper Eaves Width	A194
The width between the outside uppermost corners of the equipment	

Displayed in feet and inches on the Web. Stored in inches.

Range of Values for A194

Minimum	Maximum
4 ft 0 inches	10 ft 10 inches

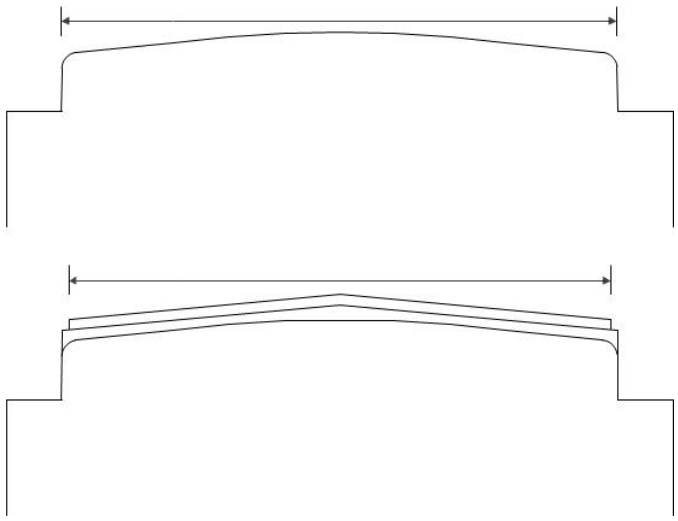
Validation Rule for A194

-Outside Upper Eaves Width (A194) is mandatory for Gondolas built or rebuilt on or after June 18, 2020
-Outside Upper Eaves Width must be less than or equal to the Outside Extreme Width (A186)
-Outside Upper Eaves Width must be less than or equal to the Outside Lower Eaves Width (A190)
-Outside Upper Eaves Width for Plate Code B must not exceed 10 feet 8 inches if Outside Upper Eaves Height (A193) is 13 feet 10 inches or less
-Outside Upper Eaves Width for Plate Code B must not exceed 10 feet 8 inches if Outside Upper Eaves Height (A193) is 13 feet 10 inches or less
-Outside Upper Eaves Width for Plate Code B must not exceed 10 feet 7 inches if Outside Upper Eaves Height (A193) is 13 feet 11 inches
-Outside Upper Eaves Width for Plate Code B must not exceed 10 feet 6 inches if Outside Upper Eaves Height (A193) is 14 feet 0 inches
-Outside Upper Eaves Width for Plate Code B must not exceed 10 feet 4 inches if Outside Upper Eaves Height (A193) is 14 feet 1 inches
-Outside Upper Eaves Width for Plate Code B must not exceed 10 feet 3 inches if Outside Upper Eaves Height (A193) is 14 feet 2 inches
-Outside Upper Eaves Width for Plate Code B must not exceed 10 feet 2 inches if Outside Upper Eaves Height (A193) is 14 feet 3 inches
-Outside Upper Eaves Width for Plate Code B must not exceed 10 feet 0 inches if Outside Upper Eaves Height (A193) is 14 feet 4 inches
-Outside Upper Eaves Width for Plate Code B must not exceed 9 feet 9 inches if Outside Upper Eaves Height (A193) is 14 feet 5 inches
-Outside Upper Eaves Width for Plate Code B must not exceed 9 feet 5 inches if Outside Upper Eaves Height (A193) is 14 feet 6 inches
-Outside Upper Eaves Width for Plate Code B must not exceed 9 feet 2 inches if Outside Upper Eaves Height (A193) is 14 feet 7 inches
-Outside Upper Eaves Width for Plate Code B must not exceed 8 feet 10 inches if Outside Upper Eaves Height (A193) is 14 feet 8 inches
-Outside Upper Eaves Width for Plate Code B must not exceed 8 feet 6 inches if Outside Upper Eaves Height (A193) is 14 feet 9 inches
-Outside Upper Eaves Width for Plate Code B must not exceed 8 feet 3 inches if Outside Upper Eaves Height (A193) is 14 feet 10 inches
-Outside Upper Eaves Width for Plate Code B must not exceed 7 feet 11 inches if Outside Upper Eaves Height (A193) is 14 feet 11 inches
-Outside Upper Eaves Width for Plate Code B must not exceed 7 feet 8 inches if Outside Upper Eaves Height (A193) is 15 feet 0 inches
-Outside Upper Eaves Width for Plate Code B must not exceed 7 feet 4 inches if Outside Upper Eaves Height (A193) is 15 feet 1 inches
-Outside Upper Eaves Width for Plate Code C must not exceed 10 feet 8 inches if Outside Upper Eaves Height (A193) is 14 feet 3 inches or less
-Outside Upper Eaves Width for Plate Code C must not exceed 10 feet 7 inches if Outside Upper Eaves Height (A193) is 14 feet 4 inches
-Outside Upper Eaves Width for Plate Code C must not exceed 10 feet 6 inches if Outside Upper Eaves Height (A193) is 14 feet 5 inches
-Outside Upper Eaves Width for Plate Code C must not exceed 10 feet 4 inches if Outside Upper Eaves Height (A193) is 14 feet 6 inches
-Outside Upper Eaves Width for Plate Code C must not exceed 10 feet 3 inches if Outside Upper Eaves Height (A193) is 14 feet 7 inches
-Outside Upper Eaves Width for Plate Code C must not exceed 10 feet 2 inches if Outside Upper Eaves Height (A193) is 14 feet 8 inches
-Outside Upper Eaves Width for Plate Code C must not exceed 10 feet 0 inches if Outside Upper Eaves Height (A193) is 14 feet 9 inches
-Outside Upper Eaves Width for Plate Code C must not exceed 9 feet 9 inches if Outside Upper Eaves Height (A193) is 14 feet 10 inches
-Outside Upper Eaves Width for Plate Code C must not exceed 9 feet 5 inches if Outside Upper Eaves Height (A193) is 14 feet 11 inches
-Outside Upper Eaves Width for Plate Code C must not exceed 9 feet 2 inches if Outside Upper Eaves Height (A193) is 15 feet 0 inches
-Outside Upper Eaves Width for Plate Code C must not exceed 8 feet 10 inches if Outside Upper Eaves Height (A193) is 15 feet 1 inches
-Outside Upper Eaves Width for Plate Code C must not exceed 8 feet 6 inches if Outside Upper Eaves Height (A193) is 15 feet 2 inches

-Outside Upper Eaves Width for Plate Code C must not exceed 8 feet 3 inches if Outside Upper Eaves Height (A193) is 15 feet 3 inches
-Outside Upper Eaves Width for Plate Code C must not exceed 7 feet 11 inches if Outside Upper Eaves Height (A193) is 15 feet 4 inches
-Outside Upper Eaves Width for Plate Code C must not exceed 7 feet 8 inches if Outside Upper Eaves Height (A193) is 15 feet 5 inches
-Outside Upper Eaves Width for Plate Code C must not exceed 7 feet 4 inches if Outside Upper Eaves Height (A193) is 15 feet 6 inches
-Outside Upper Eaves Width for Plate Code E must not exceed 10 feet 8 inches if Outside Upper Eaves Height (A193) is 15 feet 2 inches
-Outside Upper Eaves Width for Plate Code E must not exceed 10 feet 6 inches if Outside Upper Eaves Height (A193) is 15 feet 3 inches
-Outside Upper Eaves Width for Plate Code E must not exceed 10 feet 3 inches if Outside Upper Eaves Height (A193) is 15 feet 4 inches
-Outside Upper Eaves Width for Plate Code E must not exceed 9 feet 6 inches if Outside Upper Eaves Height (A193) is 15 feet 5 inches
-Outside Upper Eaves Width for Plate Code E must not exceed 8 feet 8 inches if Outside Upper Eaves Height (A193) is 15 feet 6 inches
-Outside Upper Eaves Width for Plate Code E must not exceed 7 feet 11 inches if Outside Upper Eaves Height (A193) is 15 feet 7 inches
-Outside Upper Eaves Width for Plate Code E must not exceed 7 feet 1 inches if Outside Upper Eaves Height (A193) is 15 feet 8 inches
-Outside Upper Eaves Width for Plate Code E must not exceed 6 feet 3 inches if Outside Upper Eaves Height (A193) is 15 feet 9 inches
-Outside Upper Eaves Width for Plate Code F must not exceed 10 feet 8 inches if Outside Upper Eaves Height (A193) is 16 feet 3 inches
-Outside Upper Eaves Width for Plate Code F must not exceed 10 feet 7 inches if Outside Upper Eaves Height (A193) is between 16 feet 4 inches and 16 feet 6 inches
-Outside Upper Eaves Width for Plate Code F must not exceed 10 feet 6 inches if Outside Upper Eaves Height (A193) is 16 feet 7 inches
-Outside Upper Eaves Width for Plate Code F must not exceed 10 feet 3 inches if Outside Upper Eaves Height (A193) is 16 feet 8 inches
-Outside Upper Eaves Width for Plate Code F must not exceed 10 feet 0 inches if Outside Upper Eaves Height (A193) is 16 feet 9 inches
-Outside Upper Eaves Width for Plate Code F must not exceed 9 feet 8 inches if Outside Upper Eaves Height (A193) is 16 feet 10 inches
-Outside Upper Eaves Width for Plate Code F must not exceed 9 feet 5 inches if Outside Upper Eaves Height (A193) is 16 feet 11 inches
-Outside Upper Eaves Width for Plate Code F must not exceed 9 feet 2 inches if Outside Upper Eaves Height (A193) is 17 feet 0 inches
-Outside Upper Eaves Width for Plate Code N must not exceed 10 feet 8 inches if Outside Upper Eaves Height (A193) is 16 feet 9 inches or less
-Outside Upper Eaves Width for Plate Code N must not exceed 10 feet 6 inches if Outside Upper Eaves Height (A193) is 16 feet 10 inches
-Outside Upper Eaves Width for Plate Code N must not exceed 10 feet 4 inches if Outside Upper Eaves Height (A193) is 16 feet 11 inches
-Outside Upper Eaves Width for Plate Code N must not exceed 10 feet 2 inches if Outside Upper Eaves Height (A193) is 17 feet 0 inches
-Outside Upper Eaves Width for Plate Code N must not exceed 9 feet 11 inches if Outside Upper Eaves Height (A193) is 17 feet 1 inch

NOTES:

- For connected unit cars report the dimension of the largest unit in the set
- Round fraction to the higher inch, eg., 05 1/4" = 06"



Outside Upper Eaves Hght	A193
Height from the top of rail to the uppermost outside corner of the equipment	

Displayed in feet and inches on the Web. Stored in inches.

Range of Values for A193

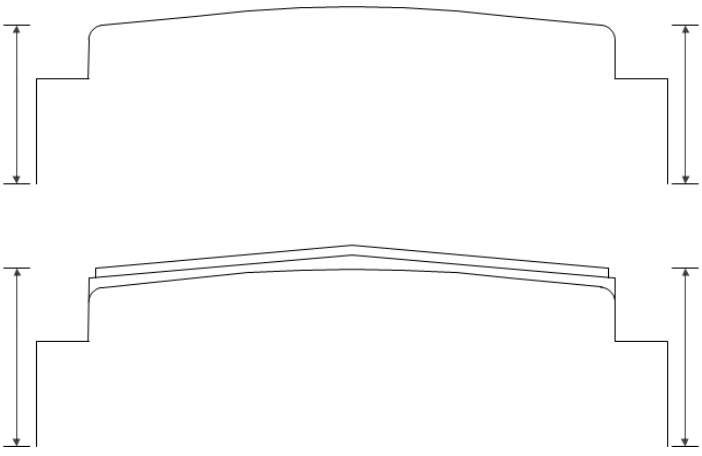
Minimum	Maximum
2 ft 0 inches	17 ft 11 inches

Validation Rule for A193

-Outside Upper Eaves Height must not exceed the Outside Extreme Height (A185)
-Outside Upper Eaves Height must be greater than or equal to the Outside Lower Eaves Height (A189)
- Outside Upper Eaves Height for Plate Code B must not exceed 15 feet 1 inch
- Outside Upper Eaves Height for Plate Code C must not exceed 15 feet 6 inches
-Outside Upper Eaves Height for Plate Code E must not exceed 15 feet 9 inches
-Outside Upper Eaves Height for Plate Code F must not exceed 17 feet 0 inches
-Outside Upper Eaves Height for Plate Code N must not exceed 17 feet 1 inch

NOTES:

- For connected unit cars report the dimension of the largest unit in the set.
- If equipment operates with removable cover Roof Type (A226) code 2, report dimension with cover installed.



Outside Lower Eaves Width	A190

Width over lower eaves at sides of car (see diagram)

Displayed in feet and inches on the Web. Stored in inches.

Range of Values for A190

Minimum	Maximum
7 ft 0 inches	10 ft 10 inches

Validation Rule for A190

-Outside Lower Eaves Width must not exceed the Outside Extreme Width (A186)

-Outside Lower Eaves Width must be greater than or equal to Outside Upper Eaves Width (A194)

-Outside Lower Eaves Width must be reported if Outside Lower Eaves Height (A189) is reported

-Outside Lower Eaves Width must not exceed the Outside Extreme Width (A186)

-Outside Lower Eaves Width must be greater than or equal to Outside Upper Eaves Width (A194)

-Outside Lower Eaves Width must be reported if Outside Lower Eaves Height (A189) is reported

-Outside Lower Eaves Width for Plate Code B must not exceed 10 feet 8 inches if Outside Lower Eaves Height (A189) is 13 feet 10 inches or less

-Outside Lower Eaves Width for Plate Code B must not exceed 10 feet 7 inches if Outside Lower Eaves Height (A189) is 13 feet 11 inches

-Outside Lower Eaves Width for Plate Code B must not exceed 10 feet 6 inches if Outside Lower Eaves Height (A189) is 14 feet 0 inches

-Outside Lower Eaves Width for Plate Code B must not exceed 10 feet 3 inches if Outside Lower Eaves Height (A189) is 14 feet 2 inches

-Outside Lower Eaves Width for Plate Code B must not exceed 10 feet 2 inches if Outside Lower Eaves Height (A189) is 14 feet 3 inches

-Outside Lower Eaves Width for Plate Code B must not exceed 10 feet 0 inches if Outside Lower Eaves Height (A189) is 14 feet 4 inches

-Outside Lower Eaves Width for Plate Code B must not exceed 9 feet 9 inches if Outside Lower Eaves Height (A189) is 14 feet 5 inches

-Outside Lower Eaves Width for Plate Code B must not exceed 9 feet 5 inches if Outside Lower Eaves Height (A189) is 14 feet 6 inches

-Outside Lower Eaves Width for Plate Code B must not exceed 9 feet 2 inches if Outside Lower Eaves Height (A189) is 14 feet 7 inches

-Outside Lower Eaves Width for Plate Code B must not exceed 8 feet 10 inches if Outside Lower Eaves Height (A189) is 14 feet 8 inches

-Outside Lower Eaves Width for Plate Code B must not exceed 8 feet 3 inches if Outside Lower Eaves Height (A189) is 14 feet 10 inches

-Outside Lower Eaves Width for Plate Code B must not exceed 7 feet 11 inches if Outside Lower Eaves Height (A189) is 14 feet 11 inches

-Outside Lower Eaves Width for Plate Code B must not exceed 7 feet 8 inches if Outside Lower Eaves Height (A189) is 15 feet 0 inches

-Outside Lower Eaves Width for Plate Code B must not exceed 7 feet 4 inches if Outside Lower Eaves Height (A189) is 15 feet 1 inches

-Outside Lower Eaves Width for Plate Code C must not exceed 10 feet 8 inches if Outside Lower Eaves Height (A189) is 14 feet 3 inches or less

-Outside Lower Eaves Width for Plate Code C must not exceed 10 feet 7 inches if Outside Lower Eaves Height (A189) is 14 feet 4 inches

-Outside Lower Eaves Width for Plate Code C must not exceed 10 feet 6 inches if Outside Lower Eaves Height (A189) is 14 feet 5 inches

-Outside Lower Eaves Width for Plate Code C must not exceed 10 feet 4 inches if Outside Lower Eaves Height (A189) is 14 feet 6 inches

-Outside Lower Eaves Width for Plate Code C must not exceed 10 feet 3 inches if Outside Lower Eaves Height (A189) is 14 feet 7 inches

-Outside Lower Eaves Width for Plate Code C must not exceed 10 feet 2 inches if Outside Lower Eaves Height (A189) is 14 feet 8 inches

-Outside Lower Eaves Width for Plate Code C must not exceed 10 feet 0 inches if Outside Lower Eaves Height (A189) is 14 feet 9 inches

-Outside Lower Eaves Width for Plate Code C must not exceed 9 feet 9 inches if Outside Lower Eaves Height (A189) is 14 feet 10 inches

-Outside Lower Eaves Width for Plate Code C must not exceed 9 feet 5 inches if Outside Lower Eaves Height (A189) is 14 feet 11 inches

-Outside Lower Eaves Width for Plate Code C must not exceed 9 feet 2 inches if Outside Lower Eaves Height (A189) is 15 feet 0 inches

-Outside Lower Eaves Width for Plate Code C must not exceed 8 feet 10 inches if Outside Lower Eaves Height (A189) is 15 feet 1 inches

-Outside Lower Eaves Width for Plate Code C must not exceed 8 feet 6 inches if Outside Lower Eaves Height (A189) is 15 feet 2 inches

-Outside Lower Eaves Width for Plate Code C must not exceed 8 feet 3 inches if Outside Lower Eaves Height (A189) is 15 feet 3 inches

-Outside Lower Eaves Width for Plate Code C must not exceed 7 feet 11 inches if Outside Lower Eaves Height (A189) is 15 feet 4 inches

-Outside Lower Eaves Width for Plate Code C must not exceed 7 feet 8 inches if Outside Lower Eaves Height (A189) is 15 feet 5 inches

-Outside Lower Eaves Width for Plate Code C must not exceed 7 feet 4 inches if Outside Lower Eaves Height (A189) is 15 feet 6 inches

-Outside Lower Eaves Width for Plate Code E must not exceed 10 feet 8 inches if Outside Lower Eaves Height (A189) is 15 feet 2 inches or less

-Outside Lower Eaves Width for Plate Code E must not exceed 10 feet 6 inches if Outside Lower Eaves Height (A189) is 15 feet 3 inches

-Outside Lower Eaves Width for Plate Code E must not exceed 10 feet 3 inches if Outside Lower Eaves Height (A189) is 15 feet 4 inches

-Outside Lower Eaves Width for Plate Code E must not exceed 9 feet 6 inches if Outside Lower Eaves Height (A189) is 15 feet 5 inches

-Outside Lower Eaves Width for Plate Code E must not exceed 8 feet 8 inches if Outside Lower Eaves Height (A189) is 15 feet 6 inches

-Outside Lower Eaves Width for Plate Code E must not exceed 7 feet 11 inches if Outside Lower Eaves Height (A189) is 15 feet 7 inches

-Outside Lower Eaves Width for Plate Code E must not exceed 7 feet 1 inches if Outside Lower Eaves Height (A189) is 15 feet 8 inches

-Outside Lower Eaves Width for Plate Code F must not exceed 10 feet 8 inches if Outside Lower Eaves Height (A189) is 16 feet 3 inches or less

-Outside Lower Eaves Width for Plate Code F must not exceed 10 feet 7 inches if Outside Lower Eaves Height (A189) is between 16 feet 4 inches and 16 feet 6 inches

-Outside Lower Eaves Width for Plate Code F must not exceed 10 feet 6 inches if Outside Lower Eaves Height (A189) is 16 feet 7 inches

-Outside Lower Eaves Width for Plate Code F must not exceed 10 feet 3 inches if Outside Lower Eaves Height (A189) is 16 feet 8 inches

-Outside Lower Eaves Width for Plate Code F must not exceed 10 feet 0 inches if Outside Lower Eaves Height (A189) is 16 feet 9 inches

-Outside Lower Eaves Width for Plate Code F must not exceed 9 feet 8 inches if Outside Lower Eaves Height (A189) is 16 feet 10 inches

-Outside Lower Eaves Width for Plate Code F must not exceed 9 feet 5 inches if Outside Lower Eaves Height (A189) is 16 feet 11 inches

-Outside Lower Eaves Width for Plate Code F must not exceed 9 feet 2 inches if Outside Lower Eaves Height (A189) is 17 feet 0 inches

-Outside Lower Eaves Width for Plate Code N must not exceed 10 feet 8 inches if Outside Lower Eaves Height (A189) is 16 feet 9 inches or less

-Outside Lower Eaves Width for Plate Code N must not exceed 10 feet 6 inches if Outside Lower Eaves Height (A189) is 16 feet 10 inches

-Outside Lower Eaves Width for Plate Code N must not exceed 10 feet 4 inches if Outside Lower Eaves Height (A189) is 16 feet 11 inches

-Outside Lower Eaves Width for Plate Code N must not exceed 10 feet 2 inches if Outside Lower Eaves Height (A189) is 17 feet 0 inches

-Outside Lower Eaves Width for Plate Code N must not exceed 9 feet 11 inches if Outside Lower Eaves Height (A189) is 17 feet 1 inch

NOTES:

- Round fraction to the higher inch, e.g., 05 1/4" = 06"
- For connected unit cars report the dimension of the largest unit in the set.

Outside Lower Eaves Hght **A189**

Height from top of rail to lower eaves at side of car (see diagrams)

Displayed in feet and inches on the Web. Stored in inches.

Range of Values for A189

Minimum	Maximum
8 ft 0 inches	17 ft 0 inches

Validation Rule for A189

-Outside Lower Eaves Height must not exceed the Outside Extreme Height (A185)

-Outside Lower Eaves Height for Plate Codes A, B or H must not exceed 15 feet 1 inch

-Outside Lower Eaves Height for Plate Codes C or I must not exceed 15 feet 6 inches

-Outside Lower Eaves Height for Plate Code E must not exceed 15 feet 9 inches

-Outside Lower Eaves Height for Plate Code F must not exceed 17 feet 0 inches

-Outside Lower Eaves Height for Plate Code N must not exceed 17 feet 1 inch

NOTES:

- Round fraction to the higher inch, e.g., 05 1/4" = 06"
- For connected unit cars report the dimension of the largest unit in the set.

Inside Length *Mandatory* **A135**

The inside length of the equipment from end to end inside walls, linings, and permanent bulkheads ●▲

Used in ETC Generation. Displayed in feet and inches on the Web. Stored in inches.

Range of Values for A135

Minimum	Maximum
21 ft 0 inches	77 ft 0 inches

Validation Rule for A135

-Inside Length on an Ore Jenny (Mechanical Description GT) must be less than or equal to 35 feet 11 inches

-Inside Length/Inside Platform Length must be less than or equal to Outside Length (OSLG)

NOTES:

- Round fraction to the lower inch, e.g., 05 1/4" = 05"
- For connected unit cars report the shortest dimension of a unit in the set.

Inside Width *Mandatory* **A138**

The inside width of the equipment from side walls and linings ●▲

Used in ETC Generation. Displayed in feet and inches on the Web. Stored in inches.

Range of Values for A138

Minimum	Maximum
6 ft 0 inches	10 ft 10 inches

Validation Rule for A138

-Inside Width/Inside Platform Width must not exceed Outside Extreme Width

NOTES:

- For connected unit cars report the shortest dimension of a unit in the set.

Inside Height *Mandatory* **A133**

The inside height of the equipment from the floor to the top of the side, or to the lowest point of the interior ceiling ●▲

Used in ETC Generation. Displayed in feet and inches on the Web. Stored in inches.

Range of Values for A133

Minimum	Maximum
1 ft 0 inches	15 ft 6 inches

Validation Rule for A133-Inside Height must not exceed Outside Extreme Height (A185)

NOTES:

- For connected unit cars report the shortest dimension of a unit in the set.
- Round fraction to the lower inch, e.g., 05 1/4" = 05

Truck Center Length **A276**

The length between the centers of the two truck systems ■

Affects Rating. Displayed in feet and inches on the Web. Stored in inches.

Range of Values for A276

Minimum	Maximum
17 ft 0 inches	67 ft 0 inches

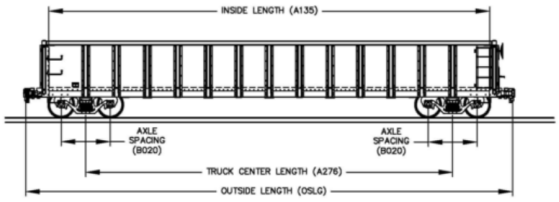
Validation Rule for A276

-Truck Center Length is required if the equipment has a Built Date (BLDT) or Rebuilt Date (RBDT) that is on or after June 18, 2020

-Truck Center Length is required for cars with an Outside Length (OSLG) of greater than 62 feet 6 inches

NOTES:

- For connected unit cars report the dimension of the largest unit in the set.
- Round fraction to the higher inch, e.g., 05 1/4" = 06"



Bulkhead Top Width **B038**

Describes the width of the bulkhead

Value does not carry forward for Equipment Group Change. Displayed in feet and inches on the Web. Stored in inches.

Range of Values for B038

Minimum	Maximum
8 ft 0 inches	11 ft 7 inches

Bulkhd Height Abov Pltfrm **B035**

Describes the height of the bulkhead

Value does not carry forward for Equipment Group Change. Displayed in feet and inches on the Web. Stored in inches.

Range of Values for B035

Minimum	Maximum
8 ft 0 inches	11 ft 8 inches

Door

End Door Width **A082**

The width of the end door opening in inches

Displayed in feet and inches on the Web. Stored in inches.

Range of Values for A082

Minimum	Maximum
1 ft 0 inches	10 ft 6 inches

Validation Rule for A082

-End Door Width must be reported for Drop-End Gondolas (Mechanical Designation of GB; Gondola End Door must be Drop End)

NOTES:

- Round fraction to the lower inch, e.g., 05 1/4" = 05"
- For connected unit cars report the dimension of the smallest end door width of a unit in the set.

End Door Height **A080**

The height of the end door opening in inches

Displayed in feet and inches on the Web. Stored in inches.

Range of Values for A080

Minimum	Maximum
1 ft 0 inches	10 ft 11 inches

Validation Rule for A080

-End Door Height must be reported when Gondola With Drop Ends (B103) is Y

-End Door Height must not be reported if End Door Width (A082) is not reported

-End Door Height must be reported if End Door Width (A082) is reported

NOTES:

- Round fraction to the lower inch, e.g., 05 1/4" = 05"
- For connected unit cars report the dimension of the smallest end door height of a unit in the set.

Gondola With Drop Ends **B103**

Indicates the equipment has drop end doors ▲

Used in ETC Generation.

Permissible Values for B103

Y Yes

Specification

Truck Count B256

The total number of trucks on the equipment

System Generated Field. This element is not eligible for Input.

Range of Values for B256

Minimum	Maximum
2	6

Axle Count *Mandatory* A024 ●■

The total number of axles on the equipment

Affects Rating.

Range of Values for A024

Minimum	Maximum
4	36

Validation Rule for A024

-Axle Count must be greater than or equal to 4

-Axle Count for an articulated car must be greater than or equal to ((Connected Unit Count (A020) x 2) + 2)

-Axle Count for a draw bar connected car must be greater than or equal to (Connected Unit Count (A020) x 4)

-Total Axle Count must match sum of truck axle counts

Wheel Bearing Type *Mandatory* B191 ●■

Indicates the wheel bearing code for the equipment

Affects Rating.

Permissible Values for B191

P Plain R Roller

Validation Rule for B191

-Cars with Plain Bearings will have a Transportation Code (TCOD) and Transportation Condition Code (TCCD) of either YA, S_, SX, or XJ

-Equipment cannot have Plain Bearings if Built Date (BLDT) is on or after January 1, 1993

Bearing Shielded From HBD B021

Indicates the bearing is shielded from the hot box detector

Permissible Values for B021

Y Yes

Brake Shoe Type *Mandatory* B026 ●

Indicates the type of brake shoe on the equipment

Permissible Values for B026

C Tread Conditioning

H High Friction Composite

L Low Friction Composite/Cast Iron

CC Side Bearing Type A146

Indicates the travel range of the constant contact side bearings installed on the equipment

Permissible Values for A146

LC Long Travel Constant Contact

SC Short Travel Constant Contact

Validation Rule for A146

-Equipment having Qualification for Increased Gross Rail Load (B344) of 1 must have Constant Contact Side Bearing Type of LC

Empty/Load Device Eqpd B075

Indicates a system that determines if the equipment is empty or loaded, and then varies the braking forces accordingly

Permissible Values for B075

Y Yes

Body Material A030

The material that composes the body of the equipment

Permissible Values for A030

00 High Strength Steel (Over 100ksi Yield Strength)

01 Aluminum

04 Combination

18 Stainless Steel

19 Standard Steel

30 Wood

Center Of Gravity Empty A045

When empty, indicates the height from Top of Rail to the Center of Gravity ■

Affects Rating.

Range of Values for A045

Minimum	Maximum
31	70

Validation Rule for A045

-All cars that exceed Plate Code (A046) C must report Center of Gravity Empty except for cars with Equipment Type Code (UMET) of J_ _ _

-All Gondolas with an Equipment Type Code (UMET) of E_ _ _ or G_ _ _ must report Center of Gravity Empty

-Center of Gravity Empty must be reported with the Mechanical Designation (UMMD) of LG, MWD, or MW

Remote Monitoring Device B176

Indicates the equipment is equipped with a location monitoring device

Permissible Values for B176

Y Yes

N No

AEI High Temperature Tag B006

Indicates the equipment is equipped with a high temperature AEI tag

Permissible Values for B006

Y High Temperature Tag

Floor Cradle/Trough Eqpd A103

Indicates the equipment has a floor cradle or trough

Permissible Values for A103

Y Yes

Validation Rule for A103

-Steel Coil Aluminum Loading must not be reported, if the Floor Cradle/Trough Orientation and Floor Cradle/Trough Equipped are not reported

-Floor Cradle/Trough Orientation (B093) must be reported, if the Floor Cradle/Trough Equipped (A103) is reported

Floor Cradle/Trough Orien B093

Indicates the direction of the floor cradle or trough in relationship to the equipment body ▲

Used in ETC Generation.

Permissible Values for B093

L Longitudinal T Transverse

Validation Rule for B093

-Floor Cradle/Trough Orientation (B093) must be reported, if the Floor Cradle/Trough Equipped (A103) is reported

-Floor Cradle/Trough Orientation used for Mechanical Designation (UMMD) of GBS or GBSR

Coil Steel/Alum. Loading B132

Indicates the equipment is designed to carry coils of steel or aluminum ▲

Used in ETC Generation.

Permissible Values for B132
Y Yes

Light Density — B124

Indicates the equipment is designed to carry low density commodities such as wood chips and similar products ▲

Used in ETC Generation.

Permissible Values for B124
Y Yes

Validation Rule for B124
-Gondolas with Light Density applies only to Mechanical Designations (UMMD) of GTS, GTR, GBR, GBS, GBSR, GSS, GWS, GWSR, MWD, LG, or MW

Connected Unit Count — A020

Indicates the number of units within an articulated or multi-unit equipment ■

Affects Rating.

Range of Values for A020

Minimum	Maximum
2	9

Validation Rule for A020
-Connected Unit Count must equal the number of Unit Segments
-Unit Segment Component elements must not be reported if the Connected Unit Count is not reported
-Unit Segment Component elements must be reported if Connected Unit Count is reported

Intermediate Conn Style — B115

Indicates the method by which two or more pieces of equipment are connected

Permissible Values for B115
A Articulated Connector
D Drawbar Connector

Validation Rule for B115
-Intermediate Connector Style is required for multi-unit equipment
-Intermediate Connector Style must not be reported for single unit equipment

Operating Brakes *Mandatory* — A182

The number of air brake control valves on the equipment (excludes hand brakes). One control valve consists of a service portion, emergency portion, and pipe bracket. Example: DB-60 control valve ●

Permissible Values for A182
1 2 3 4 5
6 7 8 9

Validation Rule for A182
-Operating Brakes must be reported for all equipment
-Operating Brakes (A182) must be 1 for non-articulated equipment with an Axle Count (A024) equal to 4

ECP Brake Type — B327

Indicates the type of electronic controlled pneumatic brake used on the equipment ✹

Permissible Values for B327
N Not Equipped
O Overlay - Both ECP & Air Brake
S Stand Alone - ECP Only

Validation Rule for B327
-Equipment must have a value entered for ECP Brake Type if built or rebuilt after June 28, 2012

ECP Brake Builder — B328

The manufacturer of the electronic controlled pneumatic brake used on the equipment

Permissible Values for B328
NYAB New York Air Brake
WABT WABTEC

Validation Rule for B328
-If ECP Brake Type (B327) is Stand Alone or Overlay then a value must be entered for ECP Brake Builder
-If ECP Brake Type (B327) is Not Equipped then ECP Brake Builder is not reportable

Slack Adjuster Group — B538

The slack adjuster group on the equipment per AAR Field Manual Rule #8 ✹

Value does not carry forward for Single Clone / Multi-Clone.

Permissible Values for B538

A	Group A	B	Group B	C	Group C	D	Group D
E	Group E	F	Group F	G	Group G	H	Group H
J	Group J	L	Group L	M	Group M	N	Group N
O	Group O	P	Group P	Q	Group Q	R	Group R
1	Internal	2	Unequipped				

Validation Rule for B538
- Slack Adjuster Group is mandatory for all equipment built or rebuilt on or after January 1, 2016
- If Slack Adjuster Group is reported as "1" then Brake Cylinder Mount Type (B540) must be reported as "T"
- If Slack Adjuster Group is "1" or "2", then Slack Adjuster CID (B359) must not be reported.

NOTES:
- Permissible value of "1 – Internal" identifies special truck mounted internal slack adjuster within brake cylinder.

Brake Cylinder Mount Type — B540

Identifies the location of the brake cylinder ✹

Permissible Values for B540
B Body Mounted
T Truck Mounted

Validation Rule for B540
- Brake Cylinder Mount Type is mandatory for all equipment built or rebuilt on or after January 1, 2016

Equipment Builder — A035

Identifies the original manufacturer of the equipment ✹

Permissible Values for A035

ACFX	ACF Industries
ALST	Alstom
ARI	ARI Industries
BERW	Berwick Forge
BETH	Bethlehem Car Works
BSP	Bethlehem Steel Corporation
CFF	Canadian Car & Foundry
CNCF	Carros De Ferrocarril, SA
CONC	Concarrill
CURR	Curry Rail Service
DARB	Darby
DIFC	Difco
EDSP	ESTRATEGIAS DUL S. DE R.L.
ERSB	Ebenezer Railcar
EVAN	Evans Products
FCA	Freight Car America
FMC	FMC Corporation
FREU	Freuhauf Corporation
GMB	Greenbrier
GSC	Greenville Steel Car
GUN4	Gunderson - Trenton Works
GUND	Gunderson Inc
HST	Hawker Siddeley
HYUN	Hyundai
JAC	Johnstown America Corporation
JKFO	JK-CO LLC
KASG	Kasgro Railcar

KRCX	Kimball Railcar Services
MRNE	Marine Industries
MULT	Multiple
NACA	National Alabama Corporation
NSC	National Steel Car
NYC	New York Central Railroad
ORTN	Ortner
PCF	Pacific Car & Foundry
PORW	Thrall-Winder
PS	Pullman-Standard
PSP	Pullman-Standard, Division of Trinity Industries
THRL	Thrall
TRAN	Tranzrail
TREN	Trenton Works
TRIN	Trinity
UNKN	Unknown
V	OWNER RAILROAD
VERM	Vertex

Validation Rule for A035

-Equipment Builder must be populated if the Built Date (BLDT) is July 1, 2010 or newer

-Equipment built or rebuilt on or after July 1, 2010 cannot have a Equipment Builder of Unknown

-Equipment with a Built Date (BLDT) on or after July 1, 2010 cannot have an Equipment Builder Code of OWNER RAILROAD.

-Equipment Builder can have a value of MULT only if the equipment has multiple units.

Builder Lot Code — B030

A unique identifier for a group of equipment built by one manufacturer under the same builder specification ✹

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Validation Rule for B030

-Equipment built or rebuilt on or after June 28, 2012 must have a value for Builder Lot Code

Built Country — B031

The country where the equipment was constructed

Data is Confidential.

Permissible Values for B031

CA	Canada	MX	Mexico
US	United States		

Rebuilt Country — B170

The country where the equipment was re-constructed

Permissible Values for B170

CA	Canada	MX	Mexico
US	United States		

FRA Reflectorization — B096

Indicates the equipment owner assumes responsibility for applying reflectorization tape

Permissible Values for B096

P	Reflectorization Plan
W	Reflectorization Waiver

Validation Rule for B096

-Reflectorization is mandatory for all equipment after November 28, 2015.

Bottom Outlet Count — B142

The number of bottom unloading devices on the equipment

Range of Values for B142

Minimum	Maximum
0	9

Air Hose Arrangement — B524

The type of trainline air hose arrangement ✹

Permissible Values for B524

A	S-424 Angle Cock Location
B	S-425 Angle Cock Location on Cars Equipped with AAR Type F Coupler
C	S-426 Angle Cock Location on Cars with Floating Sills
D	S-427 Angle Cock and Air Brake Hose Location on Cars with Excessive Overhang Preventing Compliance with AAR Standards
E	S-428 Angle Cock Location on Cars Equipped with AAR Type F Coupler and Cushioned Underframe
F	S-4003 (Former Standard)
G	S-4003x (Former Standard Retrofitted to Meet All Dimensions Except Height)
H	S-4003-05 (Current Standard Train Line Arrangement for Cars with F-Shank Couplers)
I	S-4021 Angle Cock and Brake Hose Location on Cars with EOCC (E and F)
J	S-4021 Coupler Mounted Bracket End Arrangement
K	S-4028 Train Line Arrangement with Displaceable Union on Cars with EOCC and Couplers Not Exceeding 45 in. in Length
L	S-4029 Train Line Arrangement with Displaceable Union on Cars with EOCC and Couplers Exceeding 45 in. in Length
M	S-4030 Trolley Arrangement on Cars with EOCC and E-Shank Couplers

Validation Rule for B524

-Air Hose Arrangement must be reported for this equipment if it is Built or Rebuilt on or after April 22, 2014.

NOTES:

- If any of the following conditions apply, Air Hose Arrangement (B524) must be reported for cars Built or Rebuilt on or after April 22, 2014:
  - Draft Gear Type (B073) at any location is C or E.
  - Connected Unit Count (A020) is reported.
  - Outside Length (OSLG) is greater than or equal to 70 feet (840 inches).
  - The overhang is greater than 5 feet 6 inches (66 inches). Overhang is calculated as follows:
  - 0.5 * (Outside Length, in inches, minus Truck Center Length, in inches, minus 31 inches)
    - For all other equipment, reporting Air Hose Arrangement is optional.

4-Pressure ABT Receiver Eqpd — B539

Identifies if the equipment is equipped with a 4-pressure air brake test receiver

Value does not carry forward for Single Clone / Multi-Clone.

Permissible Values for B539

E	Equipped
N	Not Equipped

NOTES:

- An "E" will be system generated if a 4-Pressure ABT is reported on the equipment.

Feature

Floor Material — A104

Describes the type of construction material used for the equipment floor ▲

Used in ETC Generation.

Permissible Values for A104

00	High Strength Steel (Over 100ksi Yield Strength)
01	Aluminum
05	Composite Nailable (considered same as wood
14	Other
15	Other, Reinforced
19	Standard Steel
23	Steel Nailable (includes alternate wood and steel floor
24	Steel Nailable, Reinforced (includes alternate wood and steel floor
25	Standard Steel, Reinforced
30	Wood
33	Wood, Double, Reinforced
34	Wood Floor with Steel Protective Plates (includes perforated steel)

35 Wood Floor, Reinforced, with Steel Protective Plates (includes perforated steel)
36 Wood Floor, Reinforced

Validation Rule for A104
- Equipment Built or Rebuilt on or after January 1, 2000 cannot have a value of Other, or Other, Reinforced

Gondola Floor Design — B094
Describes the equipment floor design ▲

Used in ETC Generation.

Permissible Values for B094
D Depressed Bottom
F Flat Bottom

NOTES:
- Gondola Floor Design must be reported if Mechanical Designation (UMMD) is GT

Wood Racks Covering Floor — B233
Reinforcement of the equipment floor using wood racks

Permissible Values for B233
Y Yes

Lining Material — A158
Describes the type of construction material used in the lining of equipment

Permissible Values for A158
17 Sheet Metal
26 Synthetic
28 Unlined
30 Wood

Bulkhead Type — B034
Identifies the type of bulkhead attached to the equipment

Value does not carry forward for Equipment Group Change.

Permissible Values for B034
F Fixed

Validation Rule for B034
-Gondola Bulkhead Types are only applicable for Mechanical Designation (UMMD) of GTS, GTR, GBR, GBS, GBSR, GSS, GWS, GWSR, LG, MWD, or MW

Removable Cover Equipped — B060
Indicates the equipment is equipped with a removable cover

Permissible Values for B060
Y Yes

Validation Rule for B060
-Removable Cover Equipped is not applicable to Gondolas with Mechanical Designation (UMMD) of GB or GS

Lading Strap Anchor Eqpd — B121
Indicates the equipment has fixed devices or design features which provide connection points for straps or bands securing the lading

Permissible Values for B121
Y Yes

Validation Rule for B121
-Lading Strap Anchor Locations are not applicable to Gondolas with the Mechanical Designation (UMMD) of GT

Tie Down Assembly Non-FA — B271
Identifies equipment having a tie down assembly, for a non flat car

Permissible Values for B271
Y Yes

Validation Rule for B271
-Tie Down Assembly Non-FA Equipped is not applicable to Gondolas with Mechanical Designations (UMMD) of GB, GS, or GT

Cross Bar Equipped — B268
Identifies the equipment has a cross bar for securing the load

Permissible Values for B268
Y Yes

Validation Rule for B268
-Cross Bar Equipped (B268) only applies to Mechanical Designation (UMMD) of GBS or GBSR

Cross Bar Count — B592
The number of coil load divider bars (cross bars) that is standard to a specially equipped gondola

Range of Values for B592

Minimum	Maximum
1	9

Validation Rule for B592
-Cross Bar Count (B592) must be reported, if Cross Bar Equipped (B268) is Y-Yes
-Cross Bar Count only applies to Mechanical Designation (UMMD) of GBS or GBSR

Roof Type — A226
Describes the type of roof or hatches on the equipment

Permissible Values for A226
1 Trough hatch in roof
2 Removable roof
5 Other types of roof openings

Validation Rule for A226
-Trough Hatch Roofs are only applicable to Gondolas and Hoppers with Mechanical Designation (UMMD) of GBR, GBSR, GWSR, HKR, HMSR, HTR, or LO
-Removable Roofs are only applicable to Gondolas with Mechanical Designation (UMMD) of GBR, GBSR, GWSR, or GTR
-Round Roof Hatches at centerline of cars are only applicable to Boxcars, Gondolas, or Covered Hoppers with Mechanical Designation (UMMD) of XP, GTR, or LO
-Other types of Roofs are only applicable to Hoppers, or Specialized Gondolas with Roofs with Mechanical Designation (UMMD) of LO, HTR, or GTR
-Mechanical Designations (UMMD) of GBR, GBSR, GWSR, GTR, HKR, HMSR, HTR, or LO require that Roof Type be set

Clean Out Door Equipped — B600
Indicates the equipment is equipped with a clean out door

Permissible Values for B600
Y Yes

Cost

Original Cost — A184
The original manufacturer selling price ✹

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for A184

Minimum	Maximum
0	9999999

Validation Rule for A184
-Original Cost must be equal to the Ledger Value if there are no Additions & Betterments.
-Original Cost must be equal to the Ledger Value if Additions & Betterments Indicator is not reported.
-Railroad marked freight cars except MISC, LOCO, TRLR, CONT, CHSS, STWH, EOTD, and PSGR are required to have an Original Cost

-Private marked freight cars except MISC, LOCO, TRLR, CONT, CHSS, STWH, EOTD, and PSGR are required to have an Original Cost if Built Date (BLDT) is on or after January 1, 2015

NOTES:

- Original Cost is never altered. It is the cost of the equipment to the original owner.
- For railroad-marked cars, report in US dollars the original ledger value of the original owner For cars rebuilt, report the cost prescribed in MR Interchange Rule 88 and Circular Letter OT-24
- The original cost is used in the settlement of AAR Interchange Rule 107 Office Manual.
- For connected unit cars report the total original cost for all units in the set.
- Numeric, applicable to all railroad-marked cars Also, applicable to privately marked covered hopper (LO) cars.
- Raise all cents to the next dollar, e.g. $5,501.02 = 0005502

Ledger Value — A150

The sum of original cost and additions & betterments

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for A150

Minimum	Maximum
0	9999999

Validation Rule for A150

-Original Cost must be equal to the Ledger Value if there are no Additions & Betterments.

-Ledger Value must equal the Original Cost (A184) plus the additions & betterments, if Total A&B (A003) has been reported. Otherwise Ledger Value should equal Original Cost (A184).

Total A&B — A003

System generated sum of all reported amounts in A&B Amount (A317), in US dollars

Data is Confidential. System Generated Field. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for A003

Minimum	Maximum
0	99999999

NOTES:

For railroad-marked cars, report the sum of all additions and betterments applied to the car. This value is for record keeping purposes only and will not be used to report Ledger Value.

- For private Cars report the additions and betterments as qualified under AAR interchange Rule 107 for determination of settlement value.
  - Additions are costs of all new components applied subsequent to the date the car was built or rebuilt and carried in the capital investment account.
  - Betterments are costs of all improvements of components of existing equipment through the substitution of superior parts for inferior parts subsequent to the date the car was built of rebuilt.
- For connected unit cars report the total Truck Location A for all units in the set

Ind for Pos/Neg Total A&B — A128

A code indicating the positive or negative adjustment to the original cost of the equipment

Data is Confidential. System Generated Field. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Permissible Values for A128

N Negative P Positive

A&B Pos/Neg Ind — A316

A code indicating the positive or negative adjustment to the individual addition and betterment

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Permissible Values for A316

N Negative P Positive

Validation Rule for A316

-When entering an individual Addition & Betterment, you must enter a value in all 4 fields.

-The A&B Indicator is required when Additions & Betterments are reported.

-The A&B Indicator must not be reported if Additions & Betterments are not reported.

A&B Amount — A317

The amount of the individual addition and betterment added to or subtracted from the original cost of the equipment

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for A317

Minimum	Maximum
1	999999

Validation Rule for A317

-When entering an individual addition & betterment; A&B Date Done (A319), A&B Type (A318), A&B Pos/Neg Ind (A316), and A&B Amount (A317) must be reported

A&B Date Done — A319

The date of the individual addition and betterment

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for A319

Minimum	Maximum
1/1/1900	12/31/9999

Validation Rule for A319

-When entering an individual Addition & Betterment, you must enter a value in all 4 fields.

-Addition and Betterment Date Done cannot be earlier than Built Date (BLDT).

-Additions & Betterments Date Done cannot be later than today's date.

A&B Type — A318

The type of individual addition and betterment as defined by Rule 107

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Permissible Values for A318

GNRL General - Capitalized Additions and Betterments

INIT Initial load of historical A&B amount as of Umler 4.6 implementation date

Validation Rule for A318

-For each equipment, only one Individual A&B Type can have a value of INIT.

-When entering an individual Addition & Betterment, you must enter a value in all 4 fields.

Car Management

Pool Number — P001

Unique number used to indicate the grouping of equipment for a particular purpose ■

Used for Transportation Codes. Affects Rating. This element is not eligible for Input. Value does not carry forward for Equipment Group Change / Add Back.

Pool Control — TCPC

Pool Control ■

System Generated Field. Used for Transportation Codes. Affects Rating. This element is not eligible for Input, Output or Query.

NOTES:

- For further explanation reference Appendices C and E.

User Routing Instructions TCUR

The routing instruction reported by the user

Used for Transportation Codes.

Permissible Values for TCUR

2	Trailer Service Rule 2
G	Contaminated commodity service
M	Mark canceled
O	Owner requested return
U	Unassigned equipment

NOTES:

- For further explanation reference Appendix E.

Umler Transportation Code TCOD

The type of assigned service, empty routing or restriction of the equipment

System Generated Field. Used for Transportation Codes. This element is not eligible for Input.

NOTES:

- For further explanation reference Appendix E.

Transportation Cond Code TCCD

The AAR or FRA interchange restriction code

System Generated Field. Used for Transportation Codes. This element is not eligible for Input.

NOTES:

- For further explanation reference Appendix E.

Mechanical Restriction TCME

User reported or system generated type of mechanical restriction

Used for Transportation Codes.

Permissible Values for TCME

S	Scrap
X	AAR Interchange Restriction
Y	FRA Interchange Prohibited

NOTES:

- For further explanation reference Appendix D.1

Mech Restriction Reason TCMR

The explanation of the Mechanical Restriction (TCME)

Used for Transportation Codes.

Permissible Values for TCMR

A	Restricted Due to Age (Over 40-AAR, Over 50-FRA)
B	Restricted Due to Air Brakes
C	Restricted Due to Axles
D	Restricted Due to Couplers and Couplers Parts
F	Restricted Due to Couplers Yokes
G	Restricted Due to Draft Gears
J	Restricted Due to Journal Bearing and Journal Lubrication
N	Restricted Due to Trucks
P	Restricted Due to Truck Side Frames
T	Restricted Due to Trucks Bolsters
U	Restricted by AAR or Owner
W	Restricted Due to Wheels
X	Restricted Due to Scrap or Early Warning
Z	Restricted Due to Umler Conflict (Not Valid for User Input)

NOTES:

- For further explanation reference Appendix D.2.
- The assignment of the Transportation Codes S_, SX, XA, XZ and YA generate the Rate Indicator Code 6 to the CHARM file to zero (0) rate the car hire and mileage rate.

Sys Gen Routing Inst TCGR

The routing instruction generated by the system

System Generated Field. Used for Transportation Codes. This element is not eligible for Input.

NOTES:

- For further explanation reference Appendix E.5.

Loading Authority Fleet Status B597

Identifies when a car is listed on a fleet in the Loading Authority application

System Generated Field. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Permissible Values for B597

Y	Yes
S	Suspended

NOTES:

- • When equipment is on a fleet the Loading Authority (LA) application will update the flag to 'Y – Yes'. When equipment is removed from a fleet the LA application will remove the 'Y – Yes'.
- When equipment is on a LA fleet that is suspended the LA application will update the flag to 'S – Suspended'. When the equipment is on a LA fleet that is no longer suspended the LA application will update the flag to 'Y – Yes'.

Train Service

Restricted Speed Empty B180

Describes the maximum restricted speed the equipment can travel when empty

Range of Values for B180

Minimum	Maximum
5	95

Restricted Speed Loaded B181

Describes the maximum restricted speed the equipment can travel when loaded

Range of Values for B181

Minimum	Maximum
5	95

Shove Car to Rest B189

Identifies the car must be moved to rest by locomotive

Permissible Values for B189

Y	Yes

Shove Adj. Car to Rest B188

Identifies the adjacent car must be shoved to rest by locomotive

Permissible Values for B188

Y	Yes

Train Position Sensitive B211

Indicates there is a physical reason, limiting its position on a train

Permissible Values for B211

Y	Yes

End of Train Only B277

Indicates the equipment must be placed at the end of the train (including per AAR RP-2001)

Permissible Values for B277

Y	Yes

Check Trailing Tonnage B044

Indicates the equipment has restrictions on trailing tonnage

Permissible Values for B044

Y	Yes

Curve Negotiate Exception — B178

Describes the requirement for negotiating a curve

Permissible Values for B178

A	Restrictive Curve Negotiability, Section 2.1.4 of M-1001
B	Does not meet all Chapter XI Curving Requirements

Cooper Rating Exception — B273

Describes the cooper rating (weight distribution model of the equipment), for use in movement across bridges

Permissible Values for B273

A	Excessive Cooper Rating
B	Cooper Rating in Excess of E66

Clearance Exception — B275

Describes equipment containing nonstandard dimension

Permissible Values for B275

A	Excessive Outside Extreme Height (A185)
B	Excessive Outside Extreme Width (A186)
D	All other unique clearance issues

Loaded Net Braking Ratio — B551

Indicates calculated minimum loaded net braking ratio per AAR Specifications in place on built or rebuilt date (in percent).
System Generated Field. This element is not eligible for input.

Permissible Values for B551

– 11.0
– 8.5

NOTES:

- Owner may enter a documented alternative minimum loaded net braking ratio in this field that is greater than the system calculated Loaded Net Braking Ratio (B551).
- When reported, the Owner-Provided Loaded Net Braking Ratio will be used in PTC stopping distance calculations.
- A change in value for the following elements will cause the Owner-Provided Loaded Net Braking Ratio to reset to blank:
  - Rebuilt Date (RBDT)
  - Gross Rail Load/Weight (A266)
  - Equipment Type Code (UMET)
  - Empty/Load Device Eqpd (B075)

Empty Braking Ratio — B553

Indicates calculated empty braking ratio per AAR Specifications in place on built or rebuilt date (in percent).
System Generated Field. This element is not eligible for input.

Range of Values for B553

Minimum	Maximum
15.0	38.0

NOTES:

- Empty Braking Ratio is determined as follows;:
  - If Built Date (BLDT) or Rebuilt Date (RBDT) is less than 1/1/1972, then Empty Braking Ratio will be set to blank.

Owner-Provided Empty Braking Ratio — B554

Indicates an owner supplied alternate empty braking ratio (in percent).

Range of Values for B554

Minimum	Maximum
15.0	38.0

NOTES:

- Owner may enter a documented alternative minimum loaded net braking ratio in this field that is greater than the system calculated Loaded Net Braking Ratio (B551).
- When reported, the Owner-Provided Loaded Net Braking Ratio will be used in PTC stopping distance calculations.
- A change in value for the following elements will cause the Owner-Provided Loaded Net Braking Ratio to reset to blank:
  - Rebuilt Date (RBDT)
  - Gross Rail Load/Weight (A266)
  - Equipment Type Code (UMET)
  - Empty/Load Device Eqpd (B075)

Truck Components

Axle Spacing Distance *Mandatory* — B020

The distance between axle centers on the same truck ● ■

Affects Rating.

Permissible Values for B020

53	53 Inches
54	54 Inches
55	55 Inches
60	60 Inches
61	61 Inches
62	62 Inches
63	63 Inches
64	64 Inches
65	65 Inches
66	66 Inches
68	68 Inches
70	70 Inches
71	71 Inches
72	72 Inches
73	73 Inches
74	74 Inches
76	76 Inches
78	78 Inches
99	Axle Space Unknown

Truck Axle Count *Mandatory* — B252

The number of axles per truck ●

Range of Values for B252

Minimum	Maximum
2	4

Validation Rule for B252

- Sum of Truck Axle Counts must equal Axle Count (A024)

Journal Size *Mandatory* — A147

The size of the journal bearing ● ■

Affects Rating.

Permissible Values for A147

A	3-3/4 X 7	B	4-1/4 X 8	C	5 X 9
D	5-1/2 X 10	E	6X11	F	6-1/2 X 12
G	7 X 12	K	6-1/ 2X 9	M	7 X 9

Validation Rule for A147

-4-axle equipment with Journal Size B and Star Code (A247) is not populated, must have Gross Rail Load (A266) of 103,000 lbs.
-4-axle equipment with Journal Size C and Star Code (A247) is not populated, must have Gross Rail Load (A266) of 142,000 lbs.
-4-axle equipment with Journal Size D and Star Code (A247) is not populated, must have Gross Rail Load (A266) of 177,000 lbs.
-4-axle equipment with Journal Size E and Star Code (A247) is not populated, must have Gross Rail Load (A266) of 220,000 lbs.
-4-axle equipment with Journal Size F or K, Star Code (A247) is not populated, and Qualification for Increased Gross Rail Load (B344) is not populated, must have Gross Rail Load (A266) of 263,000 lbs.
-4-axle equipment with Journal Size F or K, Star Code (A247) is not populated, and Qualification for Increased Gross Rail Load (B344) of 1 or 2, must have Gross Rail Load (A266) of 286,000 lbs.

-4-axle equipment with Journal Size G or M, Star Code (A247) is not populated, and Qualification for Increased Gross Rail Load (B344) is not populated, must have Gross Rail Load (A266) of 315,000 lbs.
-4-axle equipment with Journal Size G, K, or M, Star Code (A247) is not populated, and Qualification for Increased Gross Rail Load (B344) of 1, must have Gross Rail Load (A266) of 286,000 lbs.

NOTES:

- A, B and C Journal Classes are prohibited in Interchange per Rule 90.B.4

Wheel Diameter *Mandatory* **A294**

The diameter of the wheels ●■

Affects Rating.

Permissible Values for A294

33	33 Inches	36	36 Inches
38	38 Inches		

Validation Rule for A294

-Equipment with Qualification for Increased Gross Rail Load (B344) of 1, and Journal Size (A147) of G or M, must have Wheel Diameter of 38
-Equipment with Qualification for Increased Gross Rail Load (B344) of 1, and Journal Size (A147) of K, must have Wheel Diameter of 36
-If Connected Unit Count (A020) is not reported, different Wheel Diameters cannot be reported

Stability Device Equipped **B199**

Indicates a stability device is present on the truck ■

Affects Rating.

Permissible Values for B199

Y	Yes

Bolster Component ID **B351**

Bolster Component ID from Component Registry

Data is Confidential. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Sideframe Component ID **B352**

Side Frame Component ID from Component Registry

Data is Confidential. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Wheelset Component ID **B350**

Component ID from Component Registry

Data is Confidential. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Draft System Components

Coupler Code **A057**

Defines the equipment coupler type

Permissible Values for A057

BE60AHT	Type E (Rule 16) - BE60AHT
BE60BHT	Type E Obsolete (Rule 16) - BE60BHT
BE63AHT	Type E Obsolete (Rule 16) - BE63AHT
BE63HT	Type E (Rule 16) - BE63HT
BE67HT	Type E (Rule 16) - BE67HT
E42BEX	Type E/F (Rule 17) - E42BEX
E50ARE	Type E/F (Rule 17) - E50ARE
E50BEX	Type E/F (Rule 17) - E50BEX
E60CC	Type E (Rule 16) - E60CC
E60CE	Type E (Rule 16) - E60CE
E60CEX	Type E (Rule 16) - E60CEX
E60CHT	Type E (Rule 16) - E60CHT
E60CHTE	Type E (Rule 16) - E60CHTE
E60CHTQ	Type E (Rule 16) - E60CHTQ
E60DC	Type E (Rule 16) - E60DC
E60DE	Type E (Rule 16) - E60DE
E60EE	Type E (Rule 16) - E60EE
E61	Type E Obsolete (Rule 16) - E61
E67AHT	Type E (Rule 16) - E67AHT
E67BC	Type E (Rule 16) - E67BC
E67BE	Type E (Rule 16) - E67BE
E67BHT	Type E (Rule 16) - E67BHT
E67BHTE	Type E (Rule 16) - E67BHTE
E67CC	Type E (Rule 16) - E67CC
E67CE	Type E (Rule 16) - E67CE
E68AHT	Type E/F Obsolete (Rule 17) - E68AHT
E68AHTE	Type E/F Obsolete (Rule 17) - E68AHTE
E68BC	Type E/F (Rule 17) - E68BC
E68BE	Type E/F (Rule 17) - E68BE
E68BHT	Type E/F (Rule 17) - E68BHT
E68BHTE	Type E/F (Rule 17) - E68BHTE
E68BHTQ	Type E/F (Rule 17) - E68BHTQ
E68CE	Type E/F (Rule 17) - E68CE
E68DE	Type E/F Obsolete (Rule 17) - E68DE
E69AE	Type E/F (Rule 17) - E69AE
E69AHTE	Type E/F (Rule 17) - E69AHTE
E69BE	Type E/F (Rule 17) - E69BE
E69CE	Type E/F (Rule 17) - E69CE
E69CEX	Type E/F (Rule 17) - E69CEX
E69HTE	Type E/F (Rule 17) - E69HTE
E69LCE	Type E/F (Rule 17) - E69LCE
EB7AHT	Type E (Rule 16) - EB7AHT
EF204CE	Type E/F (Rule 17) - EF204CE
EF306CE	Type E/F (Rule 17) - EF306CE
EF511AE	Type E/F (Rule 17) - EF511AE
EF511BE	Type E/F (Rule 17) - EF511BE
EF511CE	Type E/F (Rule 17) - EF511CE
EF511DE	Type E/F (Rule 17) - EF511DE
EF511LCE	Type E/F (Rule 17) - EF511LCE
EF511WE	Type E/F (Rule 17) - EF511WE
EF512CE	Type E/F (Rule 17) - EF512CE
EF512WE	Type E/F (Rule 17) - EF512WE
EF528WE	Type E/F (Rule 17) - EF528WE
EFROTARY	Type E/F Rotary - EFROTARY
EFSPEC	Type E/F Special - EFSPEC
EFUNK	Type E/F Unknown - EFUNK
EK323CE	Type E (Rule 16) - EK323CE (Long Travel)
EK324CE	Type E (Rule 16) - EK324CE (Long Travel)
ESPEC	Type E Special - ESPEC
EUNK	Type E Unknown - EUNK
F70BHT	Type F Obsolete (Rule 18) - F70BHT
F70BHTE	Type F Obsolete (Rule 18) - F70BHTE
F70CC	Type F (Rule 18) - F70CC
F70CE	Type F (Rule 18) - F70CE
F70CHT	Type F (Rule 18) - F70CHT
F70CHTE	Type F (Rule 18) - F70CHTE
F70DE	Type F (Rule 18) - F70DE
F70HT	Type F Obsolete (Rule 18) - F70HT
F71CHT	Type F (Rule 18) - F71CHT
F72HT	Type F (Rule 18) - F72HT
F73AC	Type F (Rule 18) - F73AC
F73AE	Type F (Rule 18) - F73AE
F73AHT	Type F (Rule 18) - F73AHT
F73AHTE	Type F (Rule 18) - F73AHTE
F73BE	Type F (Rule 18) - F73BE
F73HTE	Type F Obsolete (Rule 18) - F73HTE
F79BHT	Type F Obsolete (Rule 18) - F79BHT
F79BHTE	Type F Obsolete (Rule 18) - F79BHTE
F79CC	Type F (Rule 18) - F79CC
F79CE	Type F (Rule 18) - F79CE
F79CHT	Type F (Rule 18) - F79CHT
F79CHTE	Type F (Rule 18) - F79CHTE
F79DE	Type F (Rule 18) - F79DE

FF205E	Type F (Rule 18) - FF205E
FF218AE	Type F (Rule 18) - FF218AE
FR201E	Type F (Rule 18) Rotary - FR201E
FR205AE	Type F (Rule 18) Rotary - FR205AE
FR205BE	Type F (Rule 18) Rotary - FR205BE
FR205E	Type F (Rule 18) Rotary - FR205E
FR206E	Type F (Rule 18) Rotary - FR206E
FR206EA	Type F (Rule 18) Rotary - FR206EA
FR207AE	Type F (Rule 18) Rotary - FR207AE
FR207E	Type F (Rule 18) Rotary - FR207E
FR208AE	Type F (Rule 18) Rotary - FR208AE (without wear insert)
FR208E	Type F (Rule 18) Rotary - FR208E (with wear insert)
FR209E	Type F (Rule 18) Rotary - FR209E
FR301E	Type F (Rule 18) Rotary - FR301E
FR304E	Type F (Rule 18) Rotary - FR304E (with wear plate)
FR304WE	Type F (Rule 18) Rotary - FR304WE (without wear plate)
FROTARY	Type E/F Rotary - FROTARY
FSPEC	Type F Special - FSPEC
FUNK	Type F Unknown - FUNK
S700AE	Type E (Rule 16) - S700AE
SBE60CC	Type E (Rule 16) - SBE60CC
SBE60CE	Type E (Rule 16) - SBE60CE
SBE60DC	Type E (Rule 16) - SBE60DC
SBE60DE	Type E (Rule 16) - SBE60DE
SBE60DREX	Type E (Rule 16) - SBE60DREX
SBE60EE	Type E (Rule 16) - SBE60EE
SBE60EEX	Type E (Rule 16) - SBE60EEX
SBE67BC	Type E (Rule 16) - SBE67BC
SBE67BE	Type E (Rule 16) - SBE67BE
SBE67CC	Type E (Rule 16) - SBE67CC
SBE67CE	Type E (Rule 16) - SBE67CE
SBE67CREX	Type E (Rule 16) - SBE67CREX
SBE67DE	Type E (Rule 16) - SBE67DE
SBE68BC	Type E/F (Rule 17) - SBE68BC
SBE68BE	Type E/F (Rule 17) - SBE68BE
SBE68CE	Type E/F (Rule 17) - SBE68CE
SBE68CREX	Type E/F (Rule 17) - SBE68CREX
SBE68DE	Type E/F (Rule 17) - SBE68DE
SBE68WEX	Type E/F (Rule 17) - SBE68WEX
SBE69AE	Type E/F (Rule 17) - SBE69AE
SBE69BE	Type E/F (Rule 17) - SBE69BE
SBE69BREX	Type E/F (Rule 17) - SBE69BREX
SBE69CE	Type E/F (Rule 17) - SBE69CE
SE60CC	Type E (Rule 16) - SE60CC
SE60CE	Type E (Rule 16) - SE60CE
SE60CHT	Type E (Rule 16) - SE60CHT
SE60CHTE	Type E (Rule 16) - SE60CHTE
SE60DC	Type E (Rule 16) - SE60DC
SE60DE	Type E (Rule 16) - SE60DE
SE60DEX	Type E (Rule 16) - SE60DEX
SE60EE	Type E (Rule 16) - SE60EE
SE67BC	Type E (Rule 16) - SE67BC
SE67BE	Type E (Rule 16) - SE67BE
SE67BHT	Type E (Rule 16) - SE67BHT
SE67BHTE	Type E (Rule 16) - SE67BHTE
SE67CC	Type E (Rule 16) - SE67CC
SE67CE	Type E (Rule 16) - SE67CE
SE68BC	Type E/F (Rule 17) - SE68BC
SE68BE	Type E/F (Rule 17) - SE68BE
SE68BHT	Type E/F (Rule 17) - SE68BHT
SE68BHTE	Type E/F (Rule 17) - SE68BHTE
SE68CE	Type E/F (Rule 17) - SE68CE
SE69AE	Type E/F (Rule 17) - SE69AE
SE69BE	Type E/F (Rule 17) - SE69BE
SE69CE	Type E/F (Rule 17) - SE69CE
SF70CC	Type F (Rule 18) - SF70CC
SF70CE	Type F (Rule 18) - SF70CE
SF70CHT	Type F (Rule 18) - SF70CHT
SF70CHTE	Type F (Rule 18) - SF70CHTE
SF70DE	Type F (Rule 18) - SF70DE
SF79CC	Type F (Rule 18) - SF79CC
SF79CE	Type F (Rule 18) - SF79CE
SF79CHT	Type F (Rule 18) - SF79CHT
SF79CHTE	Type F (Rule 18) - SF79CHTE
SF79DE	Type F (Rule 18) - SF79DE

Validation Rule for A057

-If Rotary Coupler Style is reported, then Coupler Code must be a rotary coupler.

-If Coupler Code is a rotary coupler, then Coupler Style must be R (Rotary).

-Coupler Code of Type E Obsolete (Rule 16) can only be reported if the car was built or rebuilt before July 31, 2015

-Coupler Code of Type E/F Obsolete (Rule 17) can only be reported if the car was built or rebuilt before July 31, 2015

-Coupler Code of Type F Obsolete (Rule 18) can only be reported if the car was built or rebuilt before July 31, 2015

-Coupler Code of FROTARY or EFROTARY cannot be reported for cars Built or Rebuilt on or after August 12, 2014.

NOTES:

- Obsolete: All Type D couplers are obsolete and should report code DOBS; cars with this coupler code will be restricted in interchange as discussed below.
- Unknown: If the coupler code is unknown or if the code stamped on the coupler is illegible, the code BUNK FUNK, EFUNK, or LOCOUNK should be reported.
- Special: Codes ESPEC, FSPEC, and EFSPEC have been created to decline coupler bodies that have been manufactured specifically for the equipment owner and are not listed in the attached table.
- The codes FROTARY and EFROTARY cannot be reported for equipment Built or Rebuilt since August 12, 2014.

Coupler Style *Mandatory* **B058**

Describes the basic coupler design of the equipment ●■▲

Used in ETC Generation. Affects Rating.

Permissible Values for B058

B	Bottom Shelf	D	Double Shelf
P	Plain	R	Rotary

Validation Rule for B058

-If Draft System Type (B073) is not Center Of Car or End Of Car, Inches of Travel (B061) cannot be reported

-If Draft System Type (B073) of Center Of Car or End Of Car is reported then Inches of Travel (B061) must also be reported

-If Draft System Type (B073) is E then Coupler Style (B058) cannot be reported as L or R

Inches of Travel **B061**

The number of inches a draft system will travel ■▲

Used in ETC Generation. Affects Rating.

Range of Values for B061

Minimum	Maximum
1	30

Validation Rule for B061

-If Draft System Type (B073) is not Center Of Car or End Of Car, Inches of Travel (B061) cannot be reported

-If Draft System Type (B073) of Center Of Car or End Of Car is reported then Inches of Travel (B061) must also be reported

-Inches of Travel cannot be greater than 20 for equipment with a Built Date (BLDT) on or after January 1, 1974

Draft System Type *Mandatory* **B073**

Describes the draft gear/underframe cushion type ●■▲

Used in ETC Generation. Affects Rating.

Permissible Values for B073

C	Cushioning at Center of Car (COC)
E	Cushioning at End of Car (EOC)

S Standard Draft Gear
X Devices with less than 6 inches buff travel approved under AAR Standard S-060
Y Devices with 6 to 10 inches of buff travel approved under AAR Standard S-060

Validation Rule for B073

- If Draft System Type (B073) is Standard Draft Gear (S), Inches of Travel (B061) cannot be reported
- If Draft System Type (B073) is reported as C, E, X, or Y then Inches of Travel (B061) must also be reported
- If Draft System Type (B073) of X, or Y is reported then Draft Gear Group/Cushion Unit Pocket (B562) cannot be reported
- If Draft System Type (B073) X is reported, the Inches of Travel (B061) value must be greater than or equal to 1 and less than 6
- If Draft System Type (B073) Y is reported, the Inches of Travel (B061) value must be greater than or equal to 6 and less than or equal to 10
- If Draft System Type (B073) is S then Draft Gear Group/Cushion Unit Pocket (B562) may only be A, B, C, D, E, F, G, H, J, K, L, M, N, P, Q, R, S, or Z (AAR Rule 21)
-If Draft System Type (B073) is E then Draft Gear Group/Cushion Unit Pocket (B562) may only be EOC-1,EOC-1D, EOC-1B, EOC-2, EOC-2D, EOC-2B, EOC-3, EOC-3B,EOC-4, EOC-4B, EOC-5, EOC-5D, EOC-5B, EOC-6, EOC-6D, EOC-6B, EOC-7, EOC-7B, EOC-8, EOC-8B, EOC-8F, EOC-9, EOC-9B, EOC-9D, EOC-9E, EOC-10, EOC-10D, EOC-10B, EOC-10F, EOC-11, EOC-11D, EOC-11B,EOC-12, EOC-12D, EOC-12B, EOC-13, EOC-13B, EOC-14, EOC-14B, EOC-15, EOC-15D, EOC-15B, EOC-16, EOC-16D, EOC-16B, EOC-17, EOC-17D, EOC-17B, EOC-18, EOC-18D, EOC-18B, EOC-19, EOC-19B, EOC-20, EOC-20B, EOC-21, EOC-21B, EOC-22, EOC-22B, EOC-23, EOC-23B, EOC-24, EOC-24B, EOC-25E, EOC-26B, EOC-26F, or EOC-27D, or EOC-27E (AAR Rule 59)

Draft Gear Group/Cushion Unit Pocket	B562
Draft Gear Group/Cushion Unit Pocket value as listed in AAR Field Manual Interchange Rule 21 and 59 ✹	

Carry forward for Single Clone / Multi-Clone / Restencil / Add-Back / Equipment Group Change.

Permissible Values for B562EOC-1,EOC-1D, EOC-1B, EOC-2, EOC-2D, EOC-2B, EOC-3, EOC-3B,EOC-4, EOC-4B, EOC-5, EOC-5D, EOC-5B, EOC-6, EOC-6D, EOC-6B, EOC-7, EOC-7B, EOC-8, EOC-8B, EOC-8F, EOC-9, EOC-9B, EOC-9D, EOC-9E, EOC-10, EOC-10D, EOC-10B, EOC-10F, EOC-11, EOC-11D, EOC-11B,EOC-12, EOC-12D, EOC-12B, EOC-13, EOC-13B, EOC-14, EOC-14B, EOC-15, EOC-15D, EOC-15B, EOC-16, EOC-16D, EOC-16B, EOC-17, EOC-17D, EOC-17B, EOC-18, EOC-18D, EOC-18B, EOC-19, EOC-19B, EOC-20, EOC-20B, EOC-21, EOC-21B, EOC-22, EOC-22B, EOC-23, EOC-23B, EOC-24, EOC-24B, EOC-25E, EOC-26B, EOC-26F, EOC-27D, EOC-27E, COC-1, COC-2, COC-3, COC-4, COC-5, COC-6, COC-7, COC-8 (*AAR Rule 59*).

A, B, C, D, E, F, G, H, J, K, L, M, N, P, Q, R, Z (*AAR Rule 21*).

Validation Rule(s) for B562

-Draft Gear Group/Cushion Unit Pocket (B562) is mandatory for equipment built on or after June 13, 2019, unless Draft System Type (B073) is reported as X or Y
-If Draft Gear Group/Cushion Unit Pocket (B562) is not equal to A, B, C, D, E, F, G, H, J, K, L, M, N, P, Q, R, or Z, then Cushion Unit Type (B563) must be populated
-When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-6, EOC-7, EOC-7B, EOC-8, EOC-8B, EOC-9, EOC-9B, EOC-9D, EOC-10, EOC-10B, EOC-10D, EOC-14, EOC-14B, EOC-18D, EOC-23, EOC-23B, EOC-24, EOC-25E, EOC-26B, or EOC-27D then the Cushion Unit Type (B563) must be 1
- When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-9E, EOC-26F, or EOC-27E, then the Cushion Unit Type (B563) must be 2
-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-11, EOC-12, EOC-13, EOC-13B, EOC-15, EOC-15B, EOC-15D, EOC-17, EOC-17B, EOC-17D, EOC-18, EOC-18B, EOC-19, EOC-19B, EOC-20, EOC-20B, EOC-21, EOC-21B, EOC-22, EOC-22B, EOC-24B, COC-3, COC-5, or COC-7 then the Cushion Unit Type (B563) must be 1 or 2
-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-8F or EOC-10F then the Cushion Unit Type (B563) must be 2 or 3
-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-5, EOC-5B, EOC-5D, EOC-6, EOC-6B, EOC-6D EOC-11B, EOC-11D, EOC-12B, EOC-12D, or COC-4 then the Cushion Unit Type (B563) must be 1, 2, or 3
-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-16, EOC-16B, EOC-16D, or COC-1 then the Cushion Unit Type (B563) must be 1, 2, or 4
-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-2B, EOC-2D, EOC-3, EOC-3B, EOC-4, EOC-4B, or COC-2 then the Cushion Unit Type (B563) must be 1, 2, 3, or 4
-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-1, EOC-1B, EOC-1D, or EOC-2 then the Cushion Unit Type (B563) must be 1, 2, 3, 4, or S
-When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-8 then the Cushion Unit Type (B563) must be 1, 2, 3, 4, or 5
-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-1D, EOC-2,EOC-2D, EOC-2B, EOC-3, EOC-3B, EOC-5, EOC-5D, EOC-5B, EOC-6D, EOC-7, EOC-7B, EOC-9, EOC-9B, EOC-9D, EOC-9E, EOC-10D, EOC-11, EOC-11B, EOC-11D, EOC-12D, EOC-14,EOC-14B, EOC-15, EOC-15D, EOC-15B, EOC-16D, EOC-17D, EOC-23, EOC-23B, EOC-27D, or EOC-27E then the Inches of Travel (B061) must be 10
-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-16, EOC-16B, EOC-19, EOC-19B, EOC-22, EOC-22B, or EOC-25E then the inches of travel must be 12
-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-20 or EOC-20B then the Inches of Travel (B061) must be 14
-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-1B, EOC-4, EOC-4B, EOC-6, EOC-6B, EOC-8, EOC-8B, EOC-8F, EOC-10, EOC-10B, EOC-10F, EOC-12, EOC-12B, EOC-13, EOC-13B, EOC-17, EOC-17B, EOC-18, EOC-18D, EOC-18B, EOC-21, EOC-21B, EOC-24, or EOC-24B then the Inches of Travel (B061) must be 15
-When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-2, COC-3, COC-4, COC-5, COC-6, or COC-8 then the Inches of Travel (B061) must be 20
-When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-1, and Cushion Unit Type (B563) is 1 or 2, then the Inches of Travel (B061) must be 20
-When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-1, and Cushion Unit Type (B563) is 4, then the Inches of Travel (B061) must be 18
-When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-7, and Cushion Unit Type (B563) is 2, then the Inches of Travel (B061) must be 20
-When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-7, and Cushion Unit Type (B563) is 1, then the Inches of Travel (B061) must be 30
-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-1 then the Inches of Travel (B061) must be 10, 12, or 15
-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-26, then the Inches of Travel (B061) must be 18

Note:

Reference AAR Field Manual Interchange Rule(s) 21 and 59.

Cushion Unit Type	B563
Cushion Unit Type value as listed in AAR Field Manual Interchange Rule 21 and 59 ✹	

Carry forward for Single Clone / Multi-Clone / Restencil / Add-Back / Equipment Group Change.

Permissible Values for B563

1 – Type 1
2 – Type 2
3 – Type 3
4 – Type 4
5 – Type 5
S – Type S

Validation Rule(s) for B563

- Cushion Unit Type (B563) is mandatory for equipment built on or after June 13, 2019.
-If Draft Gear Group/Cushion Unit Pocket (B562) is not equal to A, B, C, D, E, F, G, H, J, K, L, M, N, P, Q, R, or Z, then Cushion Unit Type (B563) must be populated.
-When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-6, EOC-7, EOC-7B, EOC-8, EOC-8B, EOC-9, EOC-9B, EOC-9D, EOC-10, EOC-10B, EOC-10D, EOC-14, EOC-14B, EOC-18D, EOC-23, EOC-23B, EOC-24, EOC-25E, or EOC-26B then the Cushion Unit Type (B563) must be 1.
-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-9E, EOC-26F, or EOC-27E, then the Cushion Unit Type (B563) must be 2
-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-11, EOC-12, EOC-13, EOC-13B, EOC-15, EOC-15B, EOC-15D, EOC-17, EOC-17B, EOC-17D, EOC-18, EOC-18B, EOC-19, EOC-19B, EOC-20, EOC-20B, EOC-21, EOC-21B, EOC-22, EOC-22B, EOC-24B, COC-3, COC-5, or COC-7 then the Cushion Unit Type (B563) must be 1 or 2.

-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-8F or EOC-10F then the Cushion Unit Type (B563) must be 2 or 3.
-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-5, EOC-5B, EOC-5D, EOC-6, EOC-6B, EOC-6D EOC-11B, EOC-11D, EOC-12B, EOC-12D, or COC-4 then the Cushion Unit Type (B563) must be 1, 2, or 3.
-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-16, EOC-16B, EOC-16D, or COC-1 then the Cushion Unit Type (B563) must be 1, 2, or 4.
-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-2B, EOC-2D, EOC-3, EOC-3B, EOC-4, EOC-4B, or COC-2 then the Cushion Unit Type (B563) must be 1, 2, 3, or 4.
-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-1, EOC-1B, EOC-1D, or EOC-2 then the Cushion Unit Type (B563) must be 1, 2, 3, 4, or S.
-When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-8 then the Cushion Unit Type (B563) must be 1, 2, 3, 4, or 5.
-When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-1, and Cushion Unit Type (B563) is 1 or 2, then the Inches of Travel (B061) must be 20.
-When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-1, and Cushion Unit Type (B563) is 4, then the Inches of Travel (B061) must be 18.
-When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-7, and Cushion Unit Type (B563) is 2, then the Inches of Travel (B061) must be 20.
-When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-7, and Cushion Unit Type (B563) is 1, then the Inches of Travel (B061) must be 30.

Note:
Reference AAR Field Manual Interchange Rule(s) 21 and 59.

Coupler Component ID — B353

Coupler Component ID from Component Registry

Data is Confidential. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Cushioning Unit Component ID — B361

Component ID from Component Registry

Data is Confidential. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Unit Segment Components

Unit Equipment Group — A307

Describes the equipment type of the platform ■

Affects Rating.

Permissible Values for A307

BOXC	Box Car	FLAT	Flat Car
GOND	Gondola	HOPP	Hopper
IFLT	Intermodal Flat	TANK	Tank Car
VFLT	Vehicular Flat		

Validation Rule for A307
-Unit Equipment Group cannot be reported if the Connected Unit Count (A020) is not reported
-Unit Equipment Group must be reported if Connected Unit Count (A020) is reported

Unit Tare Weight — A299

The unit segment weight on rail when empty, sometimes referred to as Light Weight, reported in pounds

Range of Values for A299

Minimum	Maximum
30000	150000

Validation Rule for A299
-Unit Tare Weight must not be reported if the Connected Unit Count (A020) is not reported
-Unit Tare Weight must be reported if Connected Unit Count (A020) is reported
-Unit Tare Weight for Gondolas must be greater than or equal 30,000 lbs.
-Unit Tare Weight for Gondolas must be less than or equal 150,000 lbs.
-Unit Segment Tare Weights must add up to the Total Tare Weight (A259)
-Unit Tare Weight (A299) value must be reported to the nearest 100 pounds

Unit Load Limit — A300

The maximum permissible weight of the commodity that can be loaded into the unit segment, reported in pounds

Range of Values for A300

Minimum	Maximum
70000	300000

Validation Rule for A300
-Unit Load Limit can not be reported if the Connected Unit Count (A020) is not reported
-Unit Load Limit must be reported if Connected Unit Count (A020) is reported
-Unit Segment Load Limits must add up to the Load Limit (LDLT)

Unit Cubic Feet Capacity — A065

The calculated interior dimensions of the unit segment in cubic feet

Range of Values for A065

Minimum	Maximum
400	8800

Validation Rule for A065
-Unit Cubic Feet Capacity must not be reported if the Connected Unit Count (A020) is not reported
-Unit Cubic Feet Capacity requires Connected Unit Count (A020)
-Unit Cubic Feet Capacity for Gondolas or Hoppers must be greater than or equal 400 cubic feet
-Unit Cubic Feet Capacity for Gondolas must be less than or equal 8800 cubic feet
-Unit Cubic Feet Capacity must add up to the Cubic Feet Capacity (A067).

Brake System Components

Emergency Brake Valve CID — B354

Component ID from Component Registry

Data is Confidential. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Emergency Valve COTS Date — B567

Brake valve emergency portion recondition date

System generated element. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

NOTES:
- Emergency Valve COTS Date is system-generated from a Emergency Brake Valve Inspection.

Emergency Valve OEM Warranty Date — B568

Brake valve emergency portion Original Equipment Manufacturer warranty date

System generated element. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

NOTES:
- Emergency Valve OEM Date is system-generated from a Emergency Brake Valve Inspection.

Emergency Valve Part Number — B569

Brake valve emergency portion part number

System generated element. This element is not eligible for Input. Value does not

carry forward for Single Clone / Multi-Clone.

NOTES:

- Emergency Valve Part Number is system-generated from a Emergency Brake Valve Inspection.

Service Brake Valve CID	B357
Component ID from Component Registry	

Data is Confidential. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Service Valve COTS Date	B564
Brake valve service portion recondition date	

System generated element. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

NOTES:

- Service Valve COTS Date is system-generated from a Service Brake Valve Inspection.

Service Valve OEM Warranty Date	B565
Brake valve service portion Original Equipment Manufacturer warranty date	

System generated element. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

NOTES:

- Service Valve OEM Date is system-generated from a Service Brake Valve Inspection.

Service Valve Part Number	B566
Brake valve service portion part number	

System generated element. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

NOTES:

Service Valve Part Number is system-generated from a Service Brake Valve Inspection.

Slack Adjuster CID	B359
Component ID from Component Registry	

Data is Confidential. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Miscellaneous

Commercial Owner CIF	B049
The Customer Identification File (CIF) number for a commercial owner at a specific location	

Commercial Lessee CIF	B048
The Customer Identification File (CIF) number for a commercial lessee at a specific location	

Umler Effective Date	EFDT
The date the rating activity (pre-registration, modification, etc.) is expected to occur	

This element is not eligible for Query. Does not Carry Forward.

Validation Rule for EFDT

-Effective Date cannot be set to more than 13 months in the future.

NOTES:

- Effective Date will default to the 1st of the following month that equipment is registered

Inspection

ABT Due Date (Repair Track)	DU13
The due date of the air brake test per AAR Field Manual Rule 3	

System Generated Field. This element is not eligible for Input. Value does not carry forward for Add Back.

ABT 5-8 Year Due Date	DU58
The 5-8 year due date for the air brake test (ABT) after the ABT Due Date (Repair Track)	

System Generated Field. This element is not eligible for Input. Value does not carry forward for Add Back.

Car Grade	CG01
The grading of the interior condition of the equipment	

Value does not carry forward for Single Clone / Multi-Clone / Equipment Group Change.

Permissible Values for CG01

A	A-Grade A
B	B-Grade B
C	C-Grade C
D	D-Holes in Floor or Sides, Gates may be missing
K	K-Contaminated (system generated by waybill only)
U	U-Unfit for Lading
X	X-Grade A Contains Refuse
Y	Y-Grade B Contains Refuse
Z	Z-Grade C Contains Refuse

Car Grade Inspection Date	CG02
The date of the grading of the interior condition of the equipment	

Value does not carry forward for Single Clone / Multi-Clone / Equipment Group Change.

Car Grade Inspection Time	CG03
The time of the grading of the interior condition of the equipment	

Value does not carry forward for Single Clone / Multi-Clone / Equipment Group Change.

Car Grade Location SPLC	CG04
The SPLC of the grading location	

Value does not carry forward for Single Clone / Multi-Clone / Equipment Group Change.

Car Grade Inspection SCAC	CG05
The shop SCAC grading location	

Value does not carry forward for Single Clone / Multi-Clone / Equipment Group Change.

Inspection Date Done	DTDN
The date the inspection was completed; used for all inspection types reported on equipment	

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Validation Rule for DTDN

-The inspection date must not be 60 days before the Build Date

Inspection Due Date	INDD
The due date of the next inspection; used for all inspection types reported on equipment	

System Generated Field. This element is not eligible for Input. Value does not carry forward for Add Back.

Inspection Performer **PERF**

The SCAC that completed the inspection; used for all inspection types reported on equipment

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Inspection Reporter **REPT**

The SCAC that reported the inspection; used for all inspection types reported on equipment

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Location/SPLC **SPLC**

The SPLC of the inspecting location; used for all inspection types reported on equipment

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Air Brake Test Device **B523**

Indicates the type of test device used to perform the Air Brake Test ✹

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Permissible Values for B523

A Automatic (Non 4-Pressure)
M Manual
P Automatic (4-Pressure)

Validation Rule for B523

-Air Brake Test Device (B523) must be reported for Air Brake Test inspection reported on or after December 10, 2020

Insp Service Valve COTS Date **B570**

Brake valve service portion recondition date

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

NOTES:

- Reports of 9999 will be allowed in case the date is illegible and the valve cannot be replaced immediately.
- Valid date format: MMYY

Insp Service Valve OEM Warranty Date **B571**

Brake valve service portion Original Equipment Manufacturer warranty date

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

NOTES:

- Reports of 999999 will be allowed in case the date is illegible and the valve cannot be replaced immediately.
- Valid date format: MMYYYY

Insp Service Valve Part Number **B572**

Brake valve service portion part number

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Insp Emergency Valve COTS Date **B573**

Brake valve emergency portion recondition date

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

NOTES:

- Reports of 9999 will be allowed in case the date is illegible and the valve cannot be replaced immediately.
- Valid date format: MMYY

Insp Emergency Valve OEM Warranty Date **B574**

Brake valve emergency portion Original Equipment Manufacturer warranty date

System generated element. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

NOTES:

- Reports of 999999 will be allowed in case the date is illegible and the valve cannot be replaced immediately.
- Valid date format: MMYYYY

Insp Emergency Valve Part Number **B575**

Brake valve emergency portion part number

System generated element. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Insp Service Valve Location *Mandatory* **B576**

Brake valve service portion location ●

. Value does not carry forward for Single Clone / Multi-Clone.

Insp Emergency Valve Location *Mandatory* **B577**

Brake valve emergency portion location reported on an emergency brake valve inspection ●

Value does not carry forward for Single Clone / Multi-Clone.

Hopper

General

Status Code *Mandatory* — **USCD**

Identifies the current operational state ●

Does not Carry Forward.

Permissible Values for USCD

A	ACTIVE	I	INACTIVE
P	PRE-REGISTERED		

NOTES:

- For Restencil and Clone process the initial Status of a car should be Pre-Registered.
- All Add-Back processes should initially set the Status to Pre-Registered
- A Pre-registered car will automatically have its Status changed to Active for the initial change when TRAIN detects three (3) movements on the car
- If the Status changes to Active due to movement and the car was created from a Restencil, the Prior Equipment ID (PRID) or source car will have its status changed to Inactive automatically by Umler

Equipment ID — **0001**

The equipment stenciled number

Validation Rule for 0001

-Equipment Number must not be larger than 6 digits (i.e., 999999)

NOTES:

- Equipment ID includes the mark and number stenciled on the equipment. Marks can be up to 4 characters and number up to 6 digits (i.e., ABCD999999).
- Up to 500 cars can be added or updated in a transaction.
- When adding an equipment record, ensure that Prior Equipment ID (PRID) is reported, unless the equipment is new.

Mechanical Designation *Mandatory* — **UMMD**

Equipment description without physical dimensions ●▲

Used in ETC Generation. Used for Transportation Codes.

Permissible Values for UMMD

HK	Hopper-Doors Hinged Lengthwise, Dumping Inside/Outside of Rails
HKR	Hopper-With Roof, Doors Hinged Lengthwise, Dumping Inside/Outside of Rails
HKS	Hopper-Specially Equipped with Roof, Doors Hinged Lengthwise, Dumping Inside/Outside of Rails
HM	Hopper-2 Compartments, Doors Hinged Crosswise, Dumping Between Rails
HMA	Hopper-2 Compartments, Doors Hinged Lengthwise, Dumping Between Rails
HMS	Hopper-Specially Equipped, 2 Compartments, Doors Hinged Crosswise, Dumping Between Rails
HMSR	Hopper-Specially Equipped with Roof, 2 Compartments, Doors Hinged Crosswise, Dumping Between Rails
HT	Hopper-3 or more Compartments, Doors Hinged Crosswise, Dumping Between Rails
HTA	Hopper-3 or more Compartments, Doors Hinged Lengthwise, Dumping Between Rails
HTR	Hopper-With Roof, 3 or more Compartments, Doors Hinged Crosswise, Dumping Between Rails
HTS	Hopper-Specially Equipped, 3 or more Compartments, Doors Hinged Crosswise, Dumping Between Rails
LM	Hopper-Specially Equipped for demountable containers
LO	Hopper-Covered
MWB	MoW - Ballast Car
MWH	MoW - Hopper

Equipment Type Code — **UMET**

An alpha numeric code that describes the physical attributes of equipment

System Generated Field. This element is not eligible for Input.

NOTES:

- Please Refer to Appendix I for More information Regarding ETC Generation

Maint of Way Service Type — **B403**

Identifies equipment Maintenance Of Way function

Value does not carry forward for Equipment Group Change.

Permissible Values for B403

C2	Crane / Boom Support Car
F4	Flat-Wheel Sets
T4	Training Car
T8	Track Geometry Car

Validation Rule for B403

- Maint of Way Service Type can only be listed on records where the Equipment Group (0002) or Pseudo Equipment Group (B547) is listed as MISC

Built Date *Mandatory* — **BLDT**

The date the construction of the equipment is complete ● ■

Data is Confidential. Used for Transportation Codes. Affects Rating. Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for BLDT

Minimum	Maximum
1/1/1900	12/31/9999

Validation Rule for BLDT

-Built Date must be within the last 99 years
-Built Date must not be in the future for equipment in Active Status
-Prior and target equipment's Built Date (BLDT) must match for restenciling
-Built Date cannot be updated within 30 days of the End of Service Date (B078)

NOTES:

- Data is public for railroad marked equipment.
- For connected unit cars report the oldest car in the set.

Rebuilt / ILS Date — **RBDT**

The date the re-construction of the equipment is complete

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for RBDT

Minimum	Maximum
1/1/1900	12/31/9999

Validation Rule for RBDT

-Rebuilt/Increased Life Service Date must be after the Built Date (BLDT)
-Rebuilt Date must not be more than 70 years after the Built Date (BLDT)
-Rebuilt Date is required for Extended Service Code (A096) 1, 2, or 3 for Increased Life Service
-Rebuilt Date is required for Extended Service Code (A096) R for Rebuilt, or V for 65 years of service
-If Rebuilt Date is reported then the Extended Service Code (A096) must be reported as R for Rebuilt, V, 1, 2, or 3 for Increased Life Service

NOTES:

- Railroad cars -- applicable only to cars meeting status as provided in both STB Accounting Rules, and the AAR Mechanical Interchange Rule 88, Office Manual.
- Private cars -- applicable to all cars meeting AAR Mechanical Interchange Rule 88, Section C, Office Manual and Sections A and B of the Field Manual.
- Private covered hopper cars -- qualifying under the provisions of Item 621, Note 1, Freight Tariff 6007-series for the purpose of determining cars' age for calculating the mileage rates.
- For connected unit cars report the oldest car in the set. Do not report Rebuilt Date unless car has been approved by the AAR.

Rebuilt Flag — **RBFL**

Identifies the equipment is nearing its end of life cycle

Data is Confidential. System Generated Field. This element is not eligible for Input.

Permissible Values for RBFL

N	No	Y	Yes

Owner *Mandatory* — **UMOW**

Primary reporting mark of the railroad or private company owning the car ●

Value does not carry forward for Single Clone / Multi-Clone / Single Restencil / Multi-Restencil.

NOTES:

- Report the primary reporting mark of the railroad or private company owning the car. When car's lease or lien is held by a bank, trust holder, capital lease company, etc. not having an assigned mark, report the primary reporting mark affiliated with the stenciled reporting mark.

Lessee LESE

The reporting mark of the company leasing the equipment

Value does not carry forward for Single Clone / Multi-Clone / Single Restencil / Multi-Restencil.

Validation Rule for LESE

-Umler Owner (UMOW) and Lessee are not allowed to be equal

-Lessee cannot be a child reporting mark.

NOTES:

- In order to assign privately marked cars to a pool, a railroad reporting mark must be reported.

Equipment Group *Mandatory* 0002

Identifies the various major car types ● ■

Used for Transportation Codes. Affects Rating.

Maintenance Party MNPT

The parent reporting mark of the company responsible for the maintenance and repairs of the equipment

Does not Carry Forward.

Mark Owner Category B201

The company that owns the stenciled mark on the car

System Generated Field. This element is not eligible for Input. Value does not carry forward for Single Restencil / Multi-Restencil / Equipment Group Change / Add Back.

Permissible Values for B201

B	US Private
C	Canadian Private
F	Foreign Private
H	Canadian Class II
I	Canadian Class I
J	Mexican Class I
K	Canadian Class III
M	Mexican Private
N	US Private Steamship
O	Canadian Private Steamship
P	Mexican Private Steamship
Q	Foreign Private Steamship
R	US Class II Railroad
U	US Class I Railroad
V	US Class III Railroad
W	Mexican Class II Railroad
Y	Mexican Class III Railroad

NOTES:

- This value is stored in the Umler Database for informational purposes and is retrieved from the Roadmark Registry.

Prior Equipment ID PRID

The previous reporting mark and number of the equipment

Value does not carry forward for Single Clone / Multi-Clone.

Validation Rule for PRID

-Prior and target equipment's Built Date (BLDT) must match

-The Prior Equipment ID (0001) must belong to the same or comparable Equipment Group (0002) as the current car initial and number

NOTES:

- Prior ID enables equipment records to share the same historical lineage. Equipment Identification Number (EIN) is a generated id that enables these equipment records to share inspections and transaction history.

Last Update Date B122

Date of the last Umler element change

System Generated Field. This element is not eligible for Input.

Equipment Add Date B082

Date the reporting mark and number was added to the Umler system

System Generated Field. This element is not eligible for Input.

Status Change Reason USCR

Identifies the reason for the current operational state

System Generated Field. This element is not eligible for Input. Does not Carry Forward.

Permissible Values for USCR

I	Initial Load
M	Movement
O	Status Changed Manually
R	Restencil

NOTES:

- If movement is detected on equipment, status is changed to Active.
- If an equipment record is changed to Active, any prior equipment record is placed in Inactive status.

Status Change Date USCT

Identifies the effective date of the current operational state

System Generated Field. This element is not eligible for Input. Does not Carry Forward.

Extended Service *Mandatory* A096

A code indicating the eligibility of an increase to the life cycle ●

Used for Transportation Codes. Value does not carry forward for Single Clone / Multi-Clone.

Permissible Values for A096

1	1st ILS Inspection, additional 5 years of Service
2	2nd ILS Inspection, additional 5 years of service (10 years total)
3	3rd ILS Inspection, additional 5 years of service (15 years total)
C	Built New between January 1, 1964 - June 30, 1974, Certified for 50 Years of Service, Built New Before July 1, 1974 & Received AAR Waiver
E	Built new from July 1,1974, Qualified for 50 Years Service
N	Built Before January 1, 1964, Qualified for 40 Years Service
R	Rule 88, Rebuilt cars
U	Built between January 1, 1964 - June 30, 1974, Qualified for 40 Years & eligible for certification for 50 Years Service
V	Car is certified (FRA Waiver & AAR) for 65 years of service from date built new from January 1, 1964

Validation Rule for A096

-If Rebuilt Date (RBDT) is reported, then the Extended Service Code (A096) must be reported as R for Rebuilt, V, 1, 2, or 3 for Increased Life Service

-Extended Service Code of C cannot be reported if the car was built before January 1, 1964 or on/after July 1, 1974

-Extended Service Code of E cannot be reported if the car was built before July 1, 1974

-Extended Service Code of N cannot be reported if the car was built on/after January 1, 1964

-Extended Service Code of U cannot be reported if the car was built before January 1, 1964 or on/after July 1, 1974

NOTES:

- Value is used to calculate End of Service Date (B078).
- Rebuilt Date (RBDT) is required for Extended Service Code (A096) R for Rebuilt, or V for 65 years service.
- Rebuilt Date (RBDT) is required for Extended Service Code (A096) 1, 2, 3, and V for Increased Life Service.

End of Service Date B078

Indicates the date of the end of equipment life

Data is Confidential. System Generated Field. This element is not eligible for Input.

NOTES:

- Data becomes non-confidential two years prior to End of Service Date.

Do Not Load After B590

Equipment should not be loaded after date shown in the element

Data is Confidential.

Validation Rules for B590

-Do Not Load After (B590) cannot be updated thirty days prior to the date shown in the element.

-Do Not Load After (B590) cannot be updated within thirty days of the End of Service Date (B078).

-Do Not Load After (B590) date cannot be on or after the End of Service (B078) date.

NOTES:

- The element will be initially populated by End of Service (B078) minus 30 days.
- Data becomes non-confidential thirty days prior to the Do Not Load After (B590) date.

Equipment Identification	EINN
Unique equipment identifier regardless of stenciled mark	

System Generated Field. This element is not eligible for Input.

NOTES:

- Specify the Prior ID (PRID) on equipment records to ensure the historical lineage is preserved. Equipment with the same EIN share history and inspections.

Info Conflict Status	B355
Indicates that an Informational Conflict exists on the Equipment record	

System Generated Field. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Conflict Status	B050
Identifies the escalation level of equipment in active conflict	■

System Generated Field. Affects Rating. This element is not eligible for Input. Value does not carry forward for Add Back.

Permissible Values for B050

1 Subject to Zero-Rating
2 Subject to Restricted in Interchange
3 Subject to Deletion

NOTES:

- Subject to Zero-Rating, goes into effect 30 days after Conflict Status occurs
- Subject to Restricted in Interchange, goes into effect 90 days after Conflict Status occurs
- Subject to Deletion, goes into effect 365 days after Conflict Status occurs

Date of Original Conflict	B063
The date the equipment was originally placed in the current conflict	

System Generated Field. This element is not eligible for Input.

Next Conflict Status	B135
Identifies the next escalation level of an equipment in active conflict	

System Generated Field. This element is not eligible for Input. Value does not carry forward for Add Back.

Permissible Values for B135

1 Subject to Zero-Rating
2 Subject to Restricted in Interchange
3 Subject to Deletion

NOTES:

- Subject to Zero-Rating, goes into effect 30 days after Conflict Status occurs
- Subject to Restricted in Interchange, goes into effect 90 days after Conflict Status occurs
- Subject to Deletion, goes into effect 365 days after Conflict Status occurs

Notice Indicator	B137
Identifies equipment in error in Umler Notice Management	

System Generated Field. This element is not eligible for Input.

Conflict Status Next Date	B062
The date the conflict status will be escalated	

System Generated Field. This element is not eligible for Input. Value does not carry forward for Add Back.

Rate Indicator	A070
Indicates the rate type applicable to the unit	■

System Generated Field. Used for Transportation Codes. Affects Rating. This element is not eligible for Input. Does not Carry Forward.

Permissible Values for A070

0 Zero-Rated Due to Conflict Errors
2 Private Mileage Rate
6 Zero-Rated - Scrap (S_,SX), AAR Overage (XA), FRA Overage (YA), Umler Conflict - CHR 1/Tarriff 6007 (XZ). Zero-Rated Private Owner Election to Zero Rate [See Private Zero Rate (B150)].
M Railroad Market Rate
Q Zero-Rated Railroad Market Rate Due to Conflict Errors

NOTES:

- If unit is zero-rated, correction of conflicts will reinstate the appropriate rate indicator code.

Private Zero Rate	B150
Indicates a private car is subject to contractual agreement, nullifying mileage rates ■	

Affects Rating.

Permissible Values for B150

Y Yes

NOTES:

- Reporting "Y" generates Rate Indicator (A070) value 6 and a zero rate.

First Movement Date	USAT
The first movement date under the stenciled mark of the equipment	

This element is not eligible for Input. Does not Carry Forward.

Equipment Add Company	B083
The reporting mark of the company that added the equipment	

System Generated Field. This element is not eligible for Input.

Registration Reason	B174
The code indicating the reason this equipment is added	

Does not Carry Forward.

Permissible Values for B174

A Add-Back
N New
P Pending Restencil
R Restencil

Restencil Program Ind	B177
Identifies the equipment is under a restencil program	

Permissible Values for B177

Y Yes

Delete Reason Code	B064
A code that designates the reason the equipment has been deleted	

Value does not carry forward for Add Back.

Permissible Values for B064

A Restenciled
D Destroyed or wrecked
L Lease terminated, removed from fleet
P Retired unserviceable beyond economic repair
R Rebuilt
S Sold Serviceable
W Over age retired for dismantling
Y Error, reporting did not exist
Z Other

Non-Compliant Wheelsets	B544
Equipment record is incomplete and has a missing wheelset component ID association. Refer to AAR Field Manual Rule 44 for industry requirements ✹	

System Generated Field. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Validation Rule for B544

-A Wheelset Component ID is required for each applicable location on equipment built on or after January 1, 2016

-A Wheelset Component ID is required for each applicable location on equipment rebuilt on or after January 1, 2016 and Gross Rail Load (A266) is greater than 268,000 lbs

NOTES:

- A "Y" will be system generated if the equipment is active and the number of Wheelset CID's required is not equal to the Axle Count (A024) on the equipment
- Validation rule applies to equipment that has been in Active status for 60 days

Pseudo Equipment Group **B547**

Equipment needs to be identified as a miscellaneous record while maintaining all elements linked to the original equipment group

System Generated Field.

Permissible Values for B547

MISC Miscellaneous

Weight

Gross Rail Load/Weight *Mandatory* **A266**

The maximum permissible weight on rail of the equipment and the load, reported in pounds

Affects Rating.

Range of Values for A266

Minimum	Maximum
43000	2835000

Validation Rule for A266

-Gross Rail Load must be equal to the Load Limit (LDLT) plus the Tare Weight (A259)

NOTES:

Use Table 1 below to determine Gross Rail Load, if Qualification for Increased Gross Rail Load (B344) does not exist.

TABLE 1 -

Journal Size	Load per Axle	Gross Rail Load for 4-axle Equipment
B - 4 1/2" x 8"	25,750 lbs.	103,000 lbs.
C - 5" x 9"	35,500 lbs.	142,000 lbs.
D - 5 1/2" x 10"	44,250 lbs.	177,000 lbs.
E - 6" x 11"	55,000 lbs.	220,000 lbs.
F - 6 1/2" x 12"	65,750 lbs.	263,000 lbs.
G - 7" x 12"	78,750 lbs.	315,000 lbs.
K - 6 1/2" x 9"	71,500 lbs.	263,000 lbs.
M - 7" x 9"	78,750 lbs.	315,000 lbs.

Use Table 2 below to determine Gross Rail Load for 4-axle equipment if Qualification for Increased Gross Rail Load (B344) exists.

TABLE 2 -

Qualification for Increased Gross Rail Load (B344)	Journal Size	Gross Rail Load
1	K - 6 1/2" x 9"	286,000 lbs.
1	G – 7" x 12"	286,000 lbs.
1	M – 7" x 9"	286,000 lbs.
2	F - 6 1/2" x 12"	286,000 lbs.
2	K - 6 1/2" x 9"	286,000 lbs.
3	F - 6 1/2" x 12"	268,000 lbs.
3	K - 6 1/2" x 9"	268,000 lbs.

- For multi-unit equipment, report the total gross rail load for the entire set.
- Refer to Field Manual Rule 70 if additional information is required.

A Gross Rail Load less than the listed or calculated values may be entered; however:

- Star Code (A247) must be R or S, and
- Load Limit (LDLT) must also be reduced, ensuring Tare Weight (A259) plus Load Limit (LDLT) equals the reported Gross Rail Load.

For equipment having two or more different journal sizes, see following examples:

Example for Drawbar Connected:

- A 3-unit drawbar connected car has 12 axles.
- The end units (Locations A and B) each have 4 axles with E - 6" x 11" journals.
- The intermediate unit (Locations C) has 4 axles with F – 6 1/2" x 12" journals

Using TABLE 1, the Gross Rail Load would be:

8 ea. E-6" x 11" journal axles X 55,000 lbs. per axle = 440,000 lbs.
+ 4 ea. F-6 1/2" x 12" journal axles X 65,750 lbs. per axle = 263,000 lbs.
Gross Rail Load = 703,000 lbs.

Example for Articulated Connected:

- A 5-unit articulated intermodal car has 6 trucks (12 axles).
- The end trucks (Locations A and B) each have 2 axles with E - 6" x 11" journals.
- The intermediate trucks (Locations C, D, E, and F) each have 2 axles with G - 7" x 12" journals

Using TABLE 1, the Gross Rail Load would be:

4 ea. E-6" x 11" journal axles X 55,000 lbs. per axle = 220,000 lbs.
+ 8 ea. G-7" x 12" journal axles X 78,750 lbs. per axle = 630,000 lbs.
Gross Rail Load = 850,000 lbs.

Tare Weight *Mandatory* **A259**

The equipment weight on rail when empty, sometimes referred to as Light Weight, reported in pounds

Affects Rating.

Range of Values for A259

Minimum	Maximum
23000	1080000

Validation Rule for A259

-Tare Weight for all non-articulated HOPP must be less than 120000 lbs.
-Tare Weight (A259) of HOPP with a blank Connected Unit Count (A020), must contain values between 23,000 lbs. and 120,000 lbs.
-Tare Weight (A259) of HOPP where Connected Unit Count (A020) is 2, must contain values between 46,000 lbs. and 240,000 lbs.
-Tare Weight (A259) of HOPP where Connected Unit Count (A020) is 3, must contain values between 69,000 lbs. and 360,000 lbs.
-Tare Weight (A259) of HOPP where Connected Unit Count (A020) is 4, must contain values between 92,000 lbs. and 480,000 lbs.
-Tare Weight (A259) of HOPP where Connected Unit Count (A020) is 5, must contain values between 115,000 lbs. and 600,000 lbs.
-Tare Weight (A259) of HOPP where Connected Unit Count (A020) is 6, must contain values between 138,000 lbs. and 720,000 lbs.
-Tare Weight (A259) of HOPP where Connected Unit Count (A020) is 7, must contain values between 161,000 lbs. and 840,000 lbs.
-Tare Weight (A259) of HOPP where Connected Unit Count (A020) is 8, must contain values between 184,000 lbs. and 960,000 lbs.
-Tare Weight (A259) of HOPP where Connected Unit Count (A020) is 9, must contain values between 207,000 lbs. and 1,080,000 lbs.
- Tare Weight (A259) value must be reported to the nearest 100 pounds if Weighing Date (A288).

NOTES:

- Do not report an average Tare Weight for car series, except for Pre-Registered cars
- When cars are made active, the actual Tare Weight must be recorded

Load Limit *Mandatory* **LDLT**

The maximum permissible weight of the commodity that can be loaded into the equipment, reported in pounds

Used in ETC Generation. Affects Rating.

Range of Values for LDLT

Minimum	Maximum
100000	2385000

Validation Rule for LDLT

-Load Limit (LDLT) of HOPP with a blank Connected Unit Count (A020), must contain values between 100,000 lbs. and 265,000 lbs

-Load Limit (LDLT) of HOPP where Connected Unit Count (A020) is 2, must contain values between 200,000 lbs. and 530,000 lbs.

-Load Limit (LDLT) of HOPP where Connected Unit Count (A020) is 3, must contain values between 300,000 lbs. and 795,000 lbs.

-Load Limit (LDLT) of HOPP where Connected Unit Count (A020) is 4, must contain values between 400,000 lbs. and 1,060,000 lbs.

-Load Limit (LDLT) of HOPP where Connected Unit Count (A020) is 5, must contain values between 500,000 lbs. and 1,325,000 lbs.

-Load Limit (LDLT) of HOPP where Connected Unit Count (A020) is 6, must contain values between 600,000 lbs. and 1,590,000 lbs.

-Load Limit (LDLT) of HOPP where Connected Unit Count (A020) is 7, must contain values between 700,000 lbs. and 1,855,000 lbs.

-Load Limit (LDLT) of HOPP where Connected Unit Count (A020) is 8, must contain values between 800,000 lbs. and 2,120,000 lbs.

-Load Limit (LDLT) of HOPP where Connected Unit Count (A020) is 9, must contain values between 900,000 lbs. and 2,385,000 lbs.

NOTES:

- For connected unit cars report the sum of the load limits for all units in the set.

Weighing Status *Mandatory* — A289

Indicates the weight information is an estimate or an actual measurement ●

Value does not carry forward for Single Clone / Multi-Clone.

Permissible Values for A289

A	Actual
E	Estimated
V	Verified correct Tare Weight
X	Tare Weight subject to verification (System Generated)

Validation Rule for A289

-Equipment cannot be within a series of 10 with identical Tare Weights (A259), refer to Appendix P for further information on resolving tare weight conflicts

-When Status Code changes to Active or Inactive Weighing Status must be reported as Actual (A) or Verified (V) within 60 days of Status Code change

Weighing Date — A288

The date the equipment was actually weighed

Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for A288

Minimum	Maximum
1/1/1900	12/31/9999

Validation Rule for A288

-If Weighing Date is reported the Tare Weight (A259) must be reported

-When Weighing Date is reported then Weighing Status (A289) must be A (Actual) or V (Verified)

-If Weighing Status (A289) is A (Actual) or V (Verified correct Tare Weight) then Weighing Date must be reported

-Weighing Date must be on or before the current date

-Weighing Date cannot be before Built / Rebuilt date

Cubic Feet Capacity *Mandatory* — A067

The maximum interior cubic feet capacity of the equipment ●▲

Used in ETC Generation.

Range of Values for A067

Minimum	Maximum
400	76500

Validation Rule for A067

-Cubic Feet Capacity for all non-articulated HOPP must be less than 8500 cubic feet

-Cubic Feet Capacity (A067) of HOPP with a blank Connected Unit Count (A020), must contain values between 400 cubic feet and 8,500 cubic feet

-Cubic Feet Capacity (A067) of HOPP where Connected Unit Count (A020) is 2, must contain values between 800 cubic feet and 17,000 cubic feet

-Cubic Feet Capacity (A067) of HOPP where Connected Unit Count (A020) is 3, must contain values between 1,200 cubic feet and 25,500 cubic feet

-Cubic Feet Capacity (A067) of HOPP where Connected Unit Count (A020) is 4, must contain values between 1,600 cubic feet and 34,000 cubic feet

-Cubic Feet Capacity (A067) of HOPP where Connected Unit Count (A020) is 5, must contain values between 2,000 cubic feet and 42,500 cubic feet

-Cubic Feet Capacity (A067) of HOPP where Connected Unit Count (A020) is 6, must contain values between 2,400 cubic feet and 51,000 cubic feet

-Cubic Feet Capacity (A067) of HOPP where Connected Unit Count (A020) is 7, must contain values between 2,800 cubic feet and 59,500 cubic feet

-Cubic Feet Capacity (A067) of HOPP where Connected Unit Count (A020) is 8, must contain values between 3,200 cubic feet and 68,000 cubic feet

-Cubic Feet Capacity (A067) of HOPP where Connected Unit Count (A020) is 9, must contain values between 3,600 cubic feet and 76,500 cubic feet

NOTES:

- For connected unit cars report the sum of all units cubic capacity.
- Plate Codes B, C, E, F, G are applicable to Hoppers

Star Code — A247

Indicates a reduction of the Load Limit (LDLT) of the equipment per AAR Rule 70 ■

Affects Rating.

Permissible Values for A247

R	Body Capacity less than Truck Capacity
S	Reduced Load Limit

Validation Rule for A247

-4-axle Cars with Star Codes of S or R must not exceed Gross Weight of 263,000 lbs. when Journal Size is A, B, C, D, or E

-Journal Sizes having Star Code of S must have a Gross Weight that is less than the calculated Gross Weight with rounding applied

-UnStarred 4 Axle Cars reporting Increased Gross Rail Load (IGRL) of 2 or 3 must have a Gross Weight greater than or equal to 264,000 lbs.

-Starred 4 axle cars with IGRL of 1 must have a Wheel Size of 36 inches when Gross Weight is less than 286,000 lbs.

-Starred 4 Axle Cars with Increased Gross Rail Load (IGRL) reported must have a Journal Size of K, G, or M

Qual for Inc GRL — B344

AAR qualification for increased Rail Load Code designating AAR approval for operating 4-axle equipment at a gross rail load greater than 263,000 lbs per AAR Rule 88

Permissible Values for B344

1	Rule 88 IGRL Code 1 (> 263,000 lbs. and <= 286,000 lbs. GRL per AAR Specification S-286)
2	Rule 88 IGRL Code 2 (> 263,000 lbs. and <= 286,000 lbs. GRL)
3	Rule 88 IGRL Code 3 (> 263,000 lbs. and <= 268,000 lbs. GRL)

Validation Rule for B344

-Equipment having Qualification for Increased Gross Rail Load of 3, and a Gross Rail Load (A266) less than 268,000 lbs, must have Star Code (A247) of S.

-Equipment having Qualification for Increased Gross Rail Load of 1 or 2, and a Gross Rail Load (A266) less than 286,000 lbs, must have Star Code (A247) of S.

-4-axle equipment with Gross Rail Load (A266) greater than 263,000 lbs. and less than 315,000 lbs., and Star Code (A247) blank, must report Qualification for Increased Gross Rail Load.

-4-axle equipment having Qualification for Increased Gross Rail Load of 1, 2, or 3 must have a Wheel Diameter (A294) of 36 or 38

-4-axle equipment having Qualification for Increased Gross Rail Load of 2 or 3 must have a Journal Size (A147) of F or K

-4-axle equipment having Qualification for Increased Gross Rail Load of 1 must have a Journal Size (A147) of K, G, or M

-4-axle equipment having Qualification for Increased Gross Rail Load of 3 must have Gross Rail Load (A266) that does not exceed 268,000 lbs

-4-axle equipment having Qualification for Increased Gross Rail Load of 1 or 2 must have Gross Rail Load (A266) that does not exceed 286,000 lbs

Dimension

Plate Code *Mandatory* — A046

Indicates the extreme height and width clearance of the equipment ●■

Affects Rating.

Permissible Values for A046

B	Plate Code B
C	Plate Code C
E	Plate Code E
F	Plate Code F
G	Clearance Code G
N	Plate Code N

NOTES:

- For a description of Plate Codes, please see Appendix J at the back of this manual.

- Report B: If clearance does not exceed Plate B
- Report C: If clearance is greater than Plate B. but does not exceed Plate C
- Report E: If clearance is greater than Plates B and C, but does not exceed Plate E.
- Report F: If clearance is greater than Plates B, C and E, but does not exceed Plate F
- Report G: If clearance exceeds Plates B, C, E, F, and N.
- Report N: If clearance is greater than Plates B, C, E, and F, but does not exceed Plate N.

- There is no AAR Plate G. Clearance Code G is included in Umler to represent equipment that does not fit any existing AAR clearance plates.
- For ARTICULATED/MULTI-UNIT SET report the most restrictive clearance plate of UNIT in the set.

Outside Length *Mandatory* **OSLG**

The outside length over pulling faces of couplers in normal position ● ■

Affects Rating. Displayed in feet and inches on the Web. Stored in inches.

Range of Values for OSLG

Minimum	Maximum
20 ft 0 inches	720 ft 0 inches

Validation Rule for OSLG

-Outside Length (OSLG) on freight cars (except refrigerators) must not exceed Inside Length (A135) by more than 16 feet

-Outside Length (OSLG) of HOPP with a blank Connected Unit Count (A020), must contain values between 20 feet and 80 feet

-Outside Length (OSLG) of HOPP where Connected Unit Count (A020), is 2, must contain values between 40 feet and 160 feet

-Outside Length (OSLG) of HOPP where Connected Unit Count (A020), is 3, must contain values between 60 feet and 240 feet

-Outside Length (OSLG) of HOPP where Connected Unit Count (A020), is 4, must contain values between 80 feet and 320 feet

-Outside Length (OSLG) of HOPP where Connected Unit Count (A020), is 5, must contain values between 100 feet and 400 feet

-Outside Length (OSLG) of HOPP where Connected Unit Count (A020), is 6, must contain values between 120 feet and 480 feet

-Outside Length (OSLG) of HOPP where Connected Unit Count (A020), is 7, must contain values between 140 feet and 560 feet

-Outside Length (OSLG) of HOPP where Connected Unit Count (A020), is 8, must contain values between 160 feet and 640 feet

-Outside Length (OSLG) of HOPP where Connected Unit Count (A020), is 9, must contain values between 180 feet and 720 feet

NOTES:

- For connected unit cars report the maximum coupled length of the set.
- Round fraction to the higher inch, e.g., 05 1/4" = 06"

Outside Extreme Width *Mandatory* **A186**

The outside extreme width of the equipment ● ■

Affects Rating. Displayed in feet and inches on the Web. Stored in inches.

Range of Values for A186

Minimum	Maximum
7 ft 0 inches	12 ft 0 inches

Validation Rule for A186

-Outside Extreme Width must not exceed 10 feet 8 inches for Plate Codes B, C, E, F, or N

NOTES:

- For connected unit cars report the dimension of the largest unit in the set.
- Round fraction to the higher inch, e.g., 05 1/4" = 06"

Outside Extreme Height *Mandatory* **A185**

Height from top of rail to extreme projecting height ● ■

Affects Rating. Displayed in feet and inches on the Web. Stored in inches.

Range of Values for A185

Minimum	Maximum
10 ft 0 inches	17 ft 0 inches

Validation Rule for A185

-Outside Extreme Height for Plate Codes B must be less than or equal to 15 feet 1 inch

-Outside Extreme Height for Plate Codes C or I must be less than or equal to 15 feet 6 inches

-Outside Extreme Height for Plate Code E must be less than or equal to 15 feet 9 inches

-Outside Extreme Height for Plate Code F must be less than or equal to 17 feet 0 inch

-Outside Extreme Height for Plate Code N must be less than or equal to 17 feet 1 inch

NOTES:

- For connected unit cars report the dimension of the largest unit in the set.
- Round fraction to the higher inch, e.g., 05 1/4" = 06"

Outside Height Extr Width *Mandatory* **A187**

The highest point at which the extreme width of the equipment occurs ●

Displayed in feet and inches on the Web. Stored in inches.

Range of Values for A187

Minimum	Maximum
1 ft 0 inches	18 ft 0 inches

Validation Rule for A187

-Outside Extreme Width (A186) for Plate Code B must not exceed 10 feet 8 inches if Outside Height Extreme Width is 13 feet 10 inches or less

-Outside Extreme Width (A186) for Plate Code B must not exceed 10 feet 7 inches if Outside Height Extreme Width is 13 feet 11 inches

-Outside Extreme Width (A186) for Plate Code B must not exceed 10 feet 6 inches if Outside Height Extreme Width is 14 feet 0 inches

-Outside Extreme Width (A186) for Plate Code B must not exceed 10 feet 4 inches if Outside Height Extreme Width is 14 feet 1 inches

-Outside Extreme Width (A186) for Plate Code B must not exceed 10 feet 3 inches if Outside Height Extreme Width is 14 feet 2 inches

-Outside Extreme Width (A186) for Plate Code B must not exceed 10 feet 2 inches if Outside Height Extreme Width is 14 feet 3 inches

-Outside Extreme Width (A186) for Plate Code B must not exceed 10 feet 0 inches if Outside Height Extreme Width is 14 feet 4 inches

-Outside Extreme Width (A186) for Plate Code B must not exceed 9 feet 9 inches if Outside Height Extreme Width is 14 feet 5 inches

-Outside Extreme Width (A186) for Plate Code B must not exceed 9 feet 5 inches if Outside Height Extreme Width is 14 feet 6 inches

-Outside Extreme Width (A186) for Plate Code B must not exceed 9 feet 2 inches if Outside Height Extreme Width is 14 feet 7 inches

-Outside Extreme Width (A186) for Plate Code B must not exceed 8 feet 10 inches if Outside Height Extreme Width is 14 feet 8 inches

-Outside Extreme Width (A186) for Plate Code B must not exceed 8 feet 6 inches if Outside Height Extreme Width is 14 feet 9 inches

-Outside Extreme Width (A186) for Plate Code B must not exceed 8 feet 3 inches if Outside Height Extreme Width is 14 feet 10 inches

-Outside Extreme Width (A186) for Plate Code B must not exceed 7 feet 11 inches if Outside Height Extreme Width is 14 feet 11 inches

-Outside Extreme Width (A186) for Plate Code B must not exceed 7 feet 6 inches if Outside Height Extreme Width is 15 feet 0 inches

-Outside Extreme Width (A186) for Plate Code B must not exceed 7 feet 4 inches if Outside Height Extreme Width is 15 feet 1 inches

-Outside Extreme Width (A186) for Plate Code C must not exceed 10 feet 8 inches if Outside Height Extreme Width is 14 feet 3 inches or less

-Outside Extreme Width (A186) for Plate Code C must not exceed 10 feet 7 inches if Outside Height Extreme Width is 14 feet 4 inches

-Outside Extreme Width (A186) for Plate Code C must not exceed 10 feet 6 inches if Outside Height Extreme Width is 14 feet 5 inches

-Outside Extreme Width (A186) for Plate Code C must not exceed 10 feet 4 inches if Outside Height Extreme Width is 14 feet 6 inches

-Outside Extreme Width (A186) for Plate Code C must not exceed 10 feet 3 inches if Outside Height Extreme Width is 14 feet 7 inches

-Outside Extreme Width (A186) for Plate Code C must not exceed 10 feet 2 inches if Outside Height Extreme Width is 14 feet 8 inches

-Outside Extreme Width (A186) for Plate Code C must not exceed 10 feet 0 inches if Outside Height Extreme Width is 14 feet 9 inches

-Outside Extreme Width (A186) for Plate Code C must not exceed 9 feet 9 inches if Outside Height Extreme Width is 14 feet 10 inches

-Outside Extreme Width (A186) for Plate Code C must not exceed 9 feet 5 inches if Outside Height Extreme Width is 14 feet 11 inches

-Outside Extreme Width (A186) for Plate Code C must not exceed 9 feet 2 inches if Outside Height Extreme Width is 15 feet 0 inches

-Outside Extreme Width (A186) for Plate Code C must not exceed 8 feet 10 inches if Outside Height Extreme Width is 15 feet 1 inches
-Outside Extreme Width (A186) for Plate Code C must not exceed 8 feet 6 inches if Outside Height Extreme Width is 15 feet 2 inches
-Outside Extreme Width (A186) for Plate Code C must not exceed 8 feet 3 inches if Outside Height Extreme Width is 15 feet 3 inches
-Outside Extreme Width (A186) for Plate Code C must not exceed 7 feet 11 inches if Outside Height Extreme Width is 15 feet 4 inches
-Outside Extreme Width (A186) for Plate Code C must not exceed 7 feet 8 inches if Outside Height Extreme Width is 15 feet 5 inches
Outside Extreme Width (A186) for Plate Code C must not exceed 7 feet 4 inches if Outside Height Extreme Width is 15 feet 6 inches
-Outside Extreme Width (A186) for Plate Code E must not exceed 10 feet 8 inches if Outside Height Extreme Width is 15 feet 2 inches or less
-Outside Extreme Width (A186) for Plate Code E must not exceed 10 feet 6 inches if Outside Height Extreme Width is 15 feet 3 inches
-Outside Extreme Width (A186) for Plate Code E must not exceed 10 feet 3 inches if Outside Height Extreme Width is 15 feet 4 inches
-Outside Extreme Width (A186) for Plate Code E must not exceed 9 feet 6 inches if Outside Height Extreme Width is 15 feet 5 inches
-Outside Extreme Width (A186) for Plate Code E must not exceed 8 feet 8 inches if Outside Height Extreme Width is 15 feet 6 inches
-Outside Extreme Width (A186) for Plate Code E must not exceed 7 feet 11 inches if Outside Height Extreme Width is 15 feet 7 inches
-Outside Extreme Width (A186) for Plate Code E must not exceed 7 feet 1 inches if Outside Height Extreme Width is 15 feet 8 inches
-Outside Extreme Width (A186) for Plate Code E must not exceed 6 feet 3 inches if Outside Height Extreme Width is 15 feet 9 inches
-Outside Extreme Width (A186) for Plate Code F must not exceed 10 feet 8 inches if Outside Height Extreme Width is 16 feet 3 inches or less
-Outside Extreme Width (A186) for Plate Code F must not exceed 10 feet 7 inches if Outside Height Extreme Width is between 16 feet 4 inches and 16 feet 6 inches
-Outside Extreme Width (A186) for Plate Code F must not exceed 10 feet 6 inches if Outside Height Extreme Width is 16 feet 7 inches
-Outside Extreme Width (A186) for Plate Code F must not exceed 10 feet 3 inches if Outside Height Extreme Width is 16 feet 8 inches
-Outside Extreme Width (A186) for Plate Code F must not exceed 10 feet 0 inches if Outside Height Extreme Width is 16 feet 9 inches
-Outside Extreme Width (A186) for Plate Code F must not exceed 9 feet 8 inches if Outside Height Extreme Width is 16 feet 10 inches
-Outside Extreme Width (A186) for Plate Code F must not exceed 9 feet 5 inches if Outside Height Extreme Width is 16 feet 11 inches
-Outside Extreme Width (A186) for Plate Code F must not exceed 9 feet 2 inches if Outside Height Extreme Width is 17 feet 0 inches
-Outside Extreme Width (A186) for Plate Code B must not exceed 8 feet 3 inches if Outside Height Extreme Width is 14 feet 10 inches
-Outside Extreme Width (A186) for Plate Code C must not exceed 8 feet 3 inches if Outside Height Extreme Width is 15 feet 3 inches
-Outside Extreme Width (A186) for Plate Code N must not exceed 10 feet 8 inches if Outside Height Extreme Width (A187) is 16 feet 9 inches or less
-Outside Extreme Width (A186) for Plate Code N must not exceed 10 feet 6 inches if Outside Height Extreme Width (A187) is 16 feet 10 inches
-Outside Extreme Width (A186) for Plate Code N must not exceed 10 feet 4 inches if Outside Height Extreme Width (A187) is 16 feet 11 inches
-Outside Extreme Width (A186) for Plate Code N must not exceed 10 feet 2 inches if Outside Height Extreme Width (A187) is 17 feet 0 inches
-Outside Extreme Width (A186) for Plate Code N must not exceed 9 feet 11 inches if Outside Height Extreme Width (A187) is 17 feet 1 inch

NOTES:

- For connected unit cars report the dimension of the largest unit in the set.
- Round fraction to the higher inch, e.g., 05 1/4" = 06"

Outside Upper Eaves Width	**A194**
The width between the outside uppermost corners of the equipment	

Displayed in feet and inches on the Web. Stored in inches.

Range of Values for A194

Minimum	Maximum
4 ft 0 inches	11 ft 2 inches

Validation Rule for A194

-Outside Upper Eaves Width (A194) is mandatory for Hoppers built or rebuilt on or after June 18, 2020
-Outside Upper Eaves Width must be less than or equal to the Outside Extreme Width (A186)
-Outside Upper Eaves Width must be less than or equal to the Outside Lower Eaves Width (A190)
-Outside Upper Eaves Width for Plate Code B must not exceed 10 feet 8 inches if Outside Upper Eaves Height (A193) is 13 feet 10 inches or less
-Outside Upper Eaves Width for Plate Code B must not exceed 10 feet 8 inches if Outside Upper Eaves Height (A193) is 13 feet 10 inches or less
-Outside Upper Eaves Width for Plate Code B must not exceed 10 feet 7 inches if Outside Upper Eaves Height (A193) is 13 feet 11 inches
-Outside Upper Eaves Width for Plate Code B must not exceed 10 feet 6 inches if Outside Upper Eaves Height (A193) is 14 feet 0 inches
-Outside Upper Eaves Width for Plate Code B must not exceed 10 feet 4 inches if Outside Upper Eaves Height (A193) is 14 feet 1 inches
-Outside Upper Eaves Width for Plate Code B must not exceed 10 feet 3 inches if Outside Upper Eaves Height (A193) is 14 feet 2 inches
-Outside Upper Eaves Width for Plate Code B must not exceed 10 feet 2 inches if Outside Upper Eaves Height (A193) is 14 feet 3 inches
-Outside Upper Eaves Width for Plate Code B must not exceed 10 feet 0 inches if Outside Upper Eaves Height (A193) is 14 feet 4 inches
-Outside Upper Eaves Width for Plate Code B must not exceed 9 feet 9 inches if Outside Upper Eaves Height (A193) is 14 feet 5 inches
-Outside Upper Eaves Width for Plate Code B must not exceed 9 feet 5 inches if Outside Upper Eaves Height (A193) is 14 feet 6 inches
-Outside Upper Eaves Width for Plate Code B must not exceed 9 feet 2 inches if Outside Upper Eaves Height (A193) is 14 feet 7 inches
-Outside Upper Eaves Width for Plate Code B must not exceed 8 feet 10 inches if Outside Upper Eaves Height (A193) is 14 feet 8 inches
-Outside Upper Eaves Width for Plate Code B must not exceed 8 feet 6 inches if Outside Upper Eaves Height (A193) is 14 feet 9 inches
-Outside Upper Eaves Width for Plate Code B must not exceed 8 feet 3 inches if Outside Upper Eaves Height (A193) is 14 feet 10 inches
-Outside Upper Eaves Width for Plate Code B must not exceed 7 feet 11 inches if Outside Upper Eaves Height (A193) is 14 feet 11 inches
-Outside Upper Eaves Width for Plate Code B must not exceed 7 feet 8 inches if Outside Upper Eaves Height (A193) is 15 feet 0 inches
-Outside Upper Eaves Width for Plate Code B must not exceed 7 feet 4 inches if Outside Upper Eaves Height (A193) is 15 feet 1 inches
-Outside Upper Eaves Width for Plate Code C must not exceed 10 feet 8 inches if Outside Upper Eaves Height (A193) is 14 feet 3 inches or less
-Outside Upper Eaves Width for Plate Code C must not exceed 10 feet 7 inches if Outside Upper Eaves Height (A193) is 14 feet 4 inches
-Outside Upper Eaves Width for Plate Code C must not exceed 10 feet 6 inches if Outside Upper Eaves Height (A193) is 14 feet 5 inches
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-Outside Upper Eaves Width for Plate Code C must not exceed 10 feet 0 inches if Outside Upper Eaves Height (A193) is 14 feet 9 inches
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-Outside Upper Eaves Width for Plate Code C must not exceed 9 feet 2 inches if Outside Upper Eaves Height (A193) is 15 feet 0 inches
-Outside Upper Eaves Width for Plate Code C must not exceed 8 feet 10 inches if Outside Upper Eaves Height (A193) is 15 feet 1 inches
-Outside Upper Eaves Width for Plate Code C must not exceed 8 feet 6 inches if Outside Upper Eaves Height (A193) is 15 feet 2 inches
-Outside Upper Eaves Width for Plate Code C must not exceed 8 feet 3 inches if Outside Upper Eaves Height (A193) is 15 feet 3 inches
-Outside Upper Eaves Width for Plate Code C must not exceed 7 feet 11 inches if Outside Upper Eaves Height (A193) is 15 feet 4 inches
-Outside Upper Eaves Width for Plate Code C must not exceed 7 feet 8 inches if Outside Upper Eaves Height (A193) is 15 feet 5 inches
-Outside Upper Eaves Width for Plate Code C must not exceed 7 feet 4 inches if Outside Upper Eaves Height (A193) is 15 feet 6 inches
-Outside Upper Eaves Width for Plate Code E must not exceed 10 feet 8 inches if Outside Upper Eaves Height (A193) is 15 feet 2 inches
-Outside Upper Eaves Width for Plate Code E must not exceed 10 feet 6 inches if Outside Upper Eaves Height (A193) is 15 feet 3 inches
-Outside Upper Eaves Width for Plate Code E must not exceed 10 feet 3 inches if Outside Upper Eaves Height (A193) is 15 feet 4 inches

-Outside Upper Eaves Width for Plate Code E must not exceed 9 feet 6 inches if Outside Upper Eaves Height (A193) is 15 feet 5 inches
-Outside Upper Eaves Width for Plate Code E must not exceed 8 feet 8 inches if Outside Upper Eaves Height (A193) is 15 feet 6 inches
-Outside Upper Eaves Width for Plate Code E must not exceed 7 feet 11 inches if Outside Upper Eaves Height (A193) is 15 feet 7 inches
-Outside Upper Eaves Width for Plate Code E must not exceed 7 feet 1 inches if Outside Upper Eaves Height (A193) is 15 feet 8 inches
-Outside Upper Eaves Width for Plate Code E must not exceed 6 feet 3 inches if Outside Upper Eaves Height (A193) is 15 feet 9 inches
-Outside Upper Eaves Width for Plate Code F must not exceed 10 feet 8 inches if Outside Upper Eaves Height (A193) is 16 feet 3 inches
-Outside Upper Eaves Width for Plate Code F must not exceed 10 feet 7 inches if Outside Upper Eaves Height (A193) is between 16 feet 4 inches and 16 feet 6 inches
-Outside Upper Eaves Width for Plate Code F must not exceed 10 feet 6 inches if Outside Upper Eaves Height (A193) is 16 feet 7 inches
-Outside Upper Eaves Width for Plate Code F must not exceed 10 feet 3 inches if Outside Upper Eaves Height (A193) is 16 feet 8 inches
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-Outside Upper Eaves Width for Plate Code F must not exceed 9 feet 8 inches if Outside Upper Eaves Height (A193) is 16 feet 10 inches
-Outside Upper Eaves Width for Plate Code F must not exceed 9 feet 5 inches if Outside Upper Eaves Height (A193) is 16 feet 11 inches
-Outside Upper Eaves Width for Plate Code F must not exceed 9 feet 2 inches if Outside Upper Eaves Height (A193) is 17 feet 0 inches
-Outside Upper Eaves Width (A194) is mandatory for Hoppers built or rebuilt on or after June 18, 2020
-Outside Upper Eaves Width must be less than or equal to the Outside Extreme Width (A186)
-Outside Upper Eaves Width must be less than or equal to the Outside Lower Eaves Width (A190)
-Outside Upper Eaves Width for Plate Code B must not exceed 10 feet 8 inches if Outside Upper Eaves Height (A193) is 13 feet 10 inches or less
-Outside Upper Eaves Width for Plate Code B must not exceed 10 feet 8 inches if Outside Upper Eaves Height (A193) is 13 feet 10 inches or less
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-Outside Upper Eaves Width for Plate Code B must not exceed 8 feet 3 inches if Outside Upper Eaves Height (A193) is 14 feet 10 inches
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-Outside Upper Eaves Width for Plate Code B must not exceed 7 feet 8 inches if Outside Upper Eaves Height (A193) is 15 feet 0 inches
-Outside Upper Eaves Width for Plate Code B must not exceed 7 feet 4 inches if Outside Upper Eaves Height (A193) is 15 feet 1 inches
-Outside Upper Eaves Width for Plate Code C must not exceed 10 feet 8 inches if Outside Upper Eaves Height (A193) is 14 feet 3 inches or less
-Outside Upper Eaves Width for Plate Code C must not exceed 10 feet 7 inches if Outside Upper Eaves Height (A193) is 14 feet 4 inches
-Outside Upper Eaves Width for Plate Code C must not exceed 10 feet 6 inches if Outside Upper Eaves Height (A193) is 14 feet 5 inches
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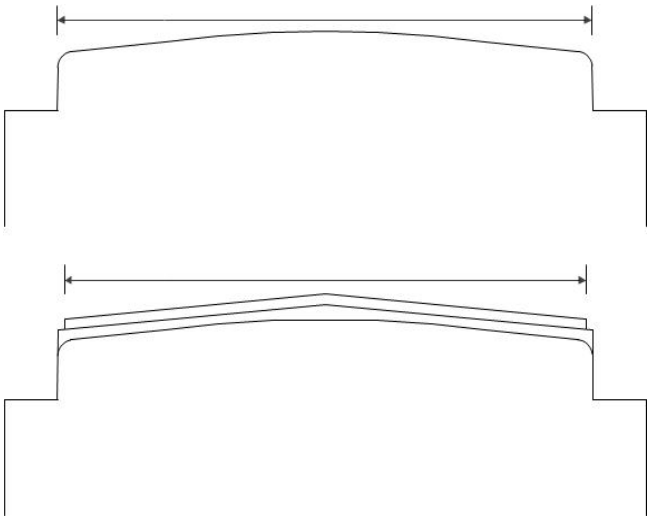
-Outside Upper Eaves Width for Plate Code C must not exceed 9 feet 9 inches if Outside Upper Eaves Height (A193) is 14 feet 10 inches
-Outside Upper Eaves Width for Plate Code C must not exceed 9 feet 5 inches if Outside Upper Eaves Height (A193) is 14 feet 11 inches
-Outside Upper Eaves Width for Plate Code C must not exceed 9 feet 2 inches if Outside Upper Eaves Height (A193) is 15 feet 0 inches
-Outside Upper Eaves Width for Plate Code C must not exceed 8 feet 10 inches if Outside Upper Eaves Height (A193) is 15 feet 1 inches
-Outside Upper Eaves Width for Plate Code C must not exceed 8 feet 6 inches if Outside Upper Eaves Height (A193) is 15 feet 2 inches
-Outside Upper Eaves Width for Plate Code C must not exceed 8 feet 3 inches if Outside Upper Eaves Height (A193) is 15 feet 3 inches
-Outside Upper Eaves Width for Plate Code C must not exceed 7 feet 11 inches if Outside Upper Eaves Height (A193) is 15 feet 4 inches
-Outside Upper Eaves Width for Plate Code C must not exceed 7 feet 8 inches if Outside Upper Eaves Height (A193) is 15 feet 5 inches
-Outside Upper Eaves Width for Plate Code C must not exceed 7 feet 4 inches if Outside Upper Eaves Height (A193) is 15 feet 6 inches
-Outside Upper Eaves Width for Plate Code E must not exceed 10 feet 8 inches if Outside Upper Eaves Height (A193) is 15 feet 2 inches
-Outside Upper Eaves Width for Plate Code E must not exceed 10 feet 6 inches if Outside Upper Eaves Height (A193) is 15 feet 3 inches
-Outside Upper Eaves Width for Plate Code E must not exceed 10 feet 3 inches if Outside Upper Eaves Height (A193) is 15 feet 4 inches
-Outside Upper Eaves Width for Plate Code E must not exceed 9 feet 6 inches if Outside Upper Eaves Height (A193) is 15 feet 5 inches
-Outside Upper Eaves Width for Plate Code E must not exceed 8 feet 8 inches if Outside Upper Eaves Height (A193) is 15 feet 6 inches
-Outside Upper Eaves Width for Plate Code E must not exceed 7 feet 11 inches if Outside Upper Eaves Height (A193) is 15 feet 7 inches
-Outside Upper Eaves Width for Plate Code E must not exceed 7 feet 1 inches if Outside Upper Eaves Height (A193) is 15 feet 8 inches
-Outside Upper Eaves Width for Plate Code E must not exceed 6 feet 3 inches if Outside Upper Eaves Height (A193) is 15 feet 9 inches
-Outside Upper Eaves Width for Plate Code F must not exceed 10 feet 8 inches if Outside Upper Eaves Height (A193) is 16 feet 3 inches
-Outside Upper Eaves Width for Plate Code F must not exceed 10 feet 7 inches if Outside Upper Eaves Height (A193) is between 16 feet 4 inches and 16 feet 6 inches
-Outside Upper Eaves Width for Plate Code F must not exceed 10 feet 6 inches if Outside Upper Eaves Height (A193) is 16 feet 7 inches
-Outside Upper Eaves Width for Plate Code F must not exceed 10 feet 3 inches if Outside Upper Eaves Height (A193) is 16 feet 8 inches
-Outside Upper Eaves Width for Plate Code F must not exceed 10 feet 0 inches if Outside Upper Eaves Height (A193) is 16 feet 9 inches
-Outside Upper Eaves Width for Plate Code F must not exceed 9 feet 8 inches if Outside Upper Eaves Height (A193) is 16 feet 10 inches
-Outside Upper Eaves Width for Plate Code F must not exceed 9 feet 5 inches if Outside Upper Eaves Height (A193) is 16 feet 11 inches
-Outside Upper Eaves Width for Plate Code F must not exceed 9 feet 2 inches if Outside Upper Eaves Height (A193) is 17 feet 0 inches
-Outside Upper Eaves Width for Plate Code N must not exceed 10 feet 8 inches if Outside Upper Eaves Height (A193) is 16 feet 9 inches or less
-Outside Upper Eaves Width for Plate Code N must not exceed 10 feet 6 inches if Outside Upper Eaves Height (A193) is 16 feet 10 inches
-Outside Upper Eaves Width for Plate Code N must not exceed 10 feet 4 inches if Outside Upper Eaves Height (A193) is 16 feet 11 inches
-Outside Upper Eaves Width for Plate Code N must not exceed 10 feet 2 inches if Outside Upper Eaves Height (A193) is 17 feet 0 inches
-Outside Upper Eaves Width for Plate Code N must not exceed 9 feet 11 inches if Outside Upper Eaves Height (A193) is 17 feet 1 inch

NOTES:

- For connected unit cars report the dimension of the largest unit in the set
- Round fraction to the higher inch, eg., 05 1/4" = 06"



Outside Upper Eaves Hght	A193
Height from the top of rail to the uppermost outside corner of the equipment	

Displayed in feet and inches on the Web. Stored in inches.

Range of Values for A193

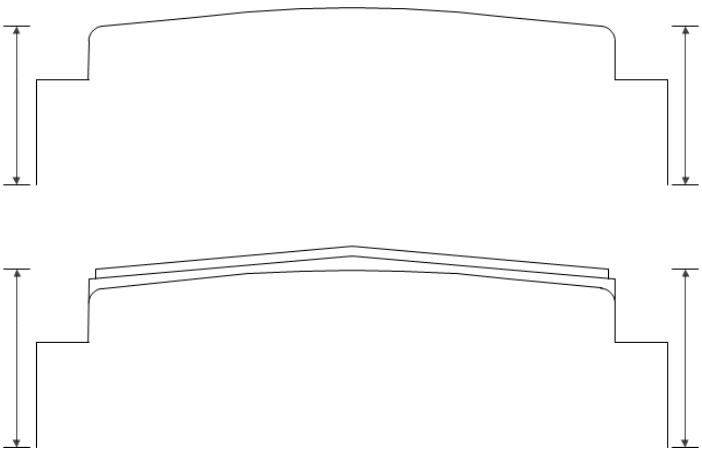
Minimum	Maximum
7 ft 0 inches	17 ft 0 inches

Validation Rule for A193

-Outside Upper Eaves Height must not exceed the Outside Extreme Height (A185)
-Outside Upper Eaves Height must be greater than or equal to the Outside Lower Eaves Height (A189)
-Outside Upper Eaves Height for Plate Codes B must not exceed 15 feet 1 inch
-Outside Upper Eaves Height for Plate Codes C must not exceed 15 feet 6 inches
-Outside Upper Eaves Height for Plate Code E must not exceed 15 feet 9 inches
-Outside Upper Eaves Height for Plate Code F must not exceed 17 feet 0 inches
-Outside Upper Eaves Height for Plate Code N must not exceed 17 feet 1 inch

NOTES:

- For connected unit cars report the dimension of the largest unit in the set.
- If equipment operates with removable cover Roof Type (A226) code 2, report dimension with cover installed.



Outside Lower Eaves Width	A190
Width over lower eaves at sides of car (see diagram)	

Displayed in feet and inches on the Web. Stored in inches.

Range of Values for A190

Minimum	Maximum
7 ft 0 inches	10 ft 10 inches

Validation Rule for A190

-Outside Lower Eaves Width can only be reported for Hoppers with roofs or covers (Mechanical Designation of LO, HTR, HKR, HMSR, LM, MWB, or MW)
-Outside Lower Eaves Width must not exceed the Outside Extreme Width (A186)
-Outside Lower Eaves Width must be greater than or equal to Outside Upper Eaves Width (A194)
-Outside Lower Eaves Width must be reported if Outside Lower Eaves Height (A189) is reported
-Outside Lower Eaves Width for Plate Code B must not exceed 10 feet 8 inches if Outside Lower Eaves Height (A189) is 13 feet 10 inches or less
-Outside Lower Eaves Width for Plate Code B must not exceed 10 feet 7 inches if Outside Lower Eaves Height (A189) is 13 feet 11 inches
-Outside Lower Eaves Width for Plate Code B must not exceed 10 feet 6 inches if Outside Lower Eaves Height (A189) is 14 feet 0 inches
-Outside Lower Eaves Width for Plate Code B must not exceed 10 feet 3 inches if Outside Lower Eaves Height (A189) is 14 feet 2 inches
-Outside Lower Eaves Width for Plate Code B must not exceed 10 feet 2 inches if Outside Lower Eaves Height (A189) is 14 feet 3 inches
-Outside Lower Eaves Width for Plate Code B must not exceed 10 feet 0 inches if Outside Lower Eaves Height (A189) is 14 feet 4 inches
-Outside Lower Eaves Width for Plate Code B must not exceed 9 feet 9 inches if Outside Lower Eaves Height (A189) is 14 feet 5 inches
-Outside Lower Eaves Width for Plate Code B must not exceed 9 feet 5 inches if Outside Lower Eaves Height (A189) is 14 feet 6 inches
-Outside Lower Eaves Width for Plate Code B must not exceed 9 feet 2 inches if Outside Lower Eaves Height (A189) is 14 feet 7 inches
-Outside Lower Eaves Width for Plate Code B must not exceed 8 feet 10 inches if Outside Lower Eaves Height (A189) is 14 feet 8 inches
-Outside Lower Eaves Width for Plate Code B must not exceed 8 feet 3 inches if Outside Lower Eaves Height (A189) is 14 feet 10 inches
-Outside Lower Eaves Width for Plate Code B must not exceed 7 feet 11 inches if Outside Lower Eaves Height (A189) is 14 feet 11 inches
-Outside Lower Eaves Width for Plate Code B must not exceed 7 feet 8 inches if Outside Lower Eaves Height (A189) is 15 feet 0 inches
-Outside Lower Eaves Width for Plate Code B must not exceed 7 feet 4 inches if Outside Lower Eaves Height (A189) is 15 feet 1 inches
-Outside Lower Eaves Width for Plate Code C must not exceed 10 feet 8 inches if Outside Lower Eaves Height (A189) is 14 feet 3 inches or less
-Outside Lower Eaves Width for Plate Code C must not exceed 10 feet 7 inches if Outside Lower Eaves Height (A189) is 14 feet 4 inches
-Outside Lower Eaves Width for Plate Code C must not exceed 10 feet 6 inches if Outside Lower Eaves Height (A189) is 14 feet 5 inches
-Outside Lower Eaves Width for Plate Code C must not exceed 10 feet 4 inches if Outside Lower Eaves Height (A189) is 14 feet 6 inches
-Outside Lower Eaves Width for Plate Code C must not exceed 10 feet 3 inches if Outside Lower Eaves Height (A189) is 14 feet 7 inches
-Outside Lower Eaves Width for Plate Code C must not exceed 10 feet 2 inches if Outside Lower Eaves Height (A189) is 14 feet 8 inches
-Outside Lower Eaves Width for Plate Code C must not exceed 10 feet 0 inches if Outside Lower Eaves Height (A189) is 14 feet 9 inches
-Outside Lower Eaves Width for Plate Code C must not exceed 9 feet 9 inches if Outside Lower Eaves Height (A189) is 14 feet 10 inches
-Outside Lower Eaves Width for Plate Code C must not exceed 9 feet 5 inches if Outside Lower Eaves Height (A189) is 14 feet 11 inches
-Outside Lower Eaves Width for Plate Code C must not exceed 9 feet 2 inches if Outside Lower Eaves Height (A189) is 15 feet 0 inches
-Outside Lower Eaves Width for Plate Code C must not exceed 8 feet 10 inches if Outside Lower Eaves Height (A189) is 15 feet 1 inches
-Outside Lower Eaves Width for Plate Code C must not exceed 8 feet 6 inches if Outside Lower Eaves Height (A189) is 15 feet 2 inches
-Outside Lower Eaves Width for Plate Code C must not exceed 8 feet 3 inches if Outside Lower Eaves Height (A189) is 15 feet 3 inches
-Outside Lower Eaves Width for Plate Code C must not exceed 7 feet 11 inches if Outside Lower Eaves Height (A189) is 15 feet 4 inches
-Outside Lower Eaves Width for Plate Code C must not exceed 7 feet 8 inches if Outside Lower Eaves Height (A189) is 15 feet 5 inches
-Outside Lower Eaves Width for Plate Code C must not exceed 7 feet 4 inches if Outside Lower Eaves Height (A189) is 15 feet 6 inches
-Outside Lower Eaves Width for Plate Code E must not exceed 10 feet 8 inches if Outside Lower Eaves Height (A189) is 15 feet 2 inches or less
-Outside Lower Eaves Width for Plate Code E must not exceed 10 feet 6 inches if Outside Lower Eaves Height (A189) is 15 feet 3 inches
-Outside Lower Eaves Width for Plate Code E must not exceed 10 feet 3 inches if Outside Lower Eaves Height (A189) is 15 feet 4 inches

-Outside Lower Eaves Width for Plate Code E must not exceed 9 feet 6 inches if Outside Lower Eaves Height (A189) is 15 feet 5 inches
-Outside Lower Eaves Width for Plate Code E must not exceed 8 feet 8 inches if Outside Lower Eaves Height (A189) is 15 feet 6 inches
-Outside Lower Eaves Width for Plate Code E must not exceed 7 feet 11 inches if Outside Lower Eaves Height (A189) is 15 feet 7 inches
-Outside Lower Eaves Width for Plate Code E must not exceed 7 feet 1 inches if Outside Lower Eaves Height (A189) is 15 feet 8 inches
-Outside Lower Eaves Width for Plate Code F must not exceed 10 feet 8 inches if Outside Lower Eaves Height (A189) is 16 feet 3 inches or less
-Outside Lower Eaves Width for Plate Code N must not exceed 10 feet 8 inches if Outside Lower Eaves Height (A189) is 16 feet 9 inches or less
-Outside Lower Eaves Width for Plate Code N must not exceed 10 feet 6 inches if Outside Lower Eaves Height (A189) is 16 feet 10 inches
-Outside Lower Eaves Width for Plate Code N must not exceed 10 feet 4 inches if Outside Lower Eaves Height (A189) is 16 feet 11 inches
-Outside Lower Eaves Width for Plate Code N must not exceed 10 feet 2 inches if Outside Lower Eaves Height (A189) is 17 feet 0 inches
-Outside Lower Eaves Width for Plate Code N must not exceed 9 feet 11 inches if Outside Lower Eaves Height (A189) is 17 feet 1 inch

NOTES:
- Round fraction to the higher inch, e.g., 05 1/4" = 06"
- For connected unit cars report the dimension of the largest unit in the set.

Outside Lower Eaves Hght — A189

Height from top of rail to lower eaves at side of car (see diagrams)

Displayed in feet and inches on the Web. Stored in inches.

Range of Values for A189

Minimum	Maximum
8 ft 0 inches	16 ft 0 inches

Validation Rule for A189
-Outside Lower Eaves Height may only be reported for Hoppers with roofs or covers (Mechanical Designations of LO, HTR, HKR, HMSR LM, MWB, or MW)
-Outside Lower Eaves Height must not exceed the Outside Extreme Height (A185)
-Outside Lower Eaves Height for Plate Codes A, B or H must not exceed 15 feet 1 inch
-Outside Lower Eaves Height for Plate Codes C or I must not exceed 15 feet 6 inches
-Outside Lower Eaves Height for Plate Code E must not exceed 15 feet 9 inches
-Outside Lower Eaves Height for Plate Code F must not exceed 17 feet 0 inches
-Outside Lower Eaves Height for Plate Code N must not exceed 17 feet 1 inch

NOTES:
- Round fraction to the higher inch, e.g., 05 1/4" = 06"
- For connected unit cars report the dimension of the largest unit in the set.

Truck Center Length — A276

The length between the centers of the two truck systems

Affects Rating. Displayed in feet and inches on the Web. Stored in inches.

Range of Values for A276

Minimum	Maximum
15 ft 0 inches	64 ft 0 inches

Validation Rule for A276
-Truck Center Length is required if the equipment has a Built Date (BLDT) or Rebuilt Date (RBDT) that is on or after June 18, 2020
-Truck Center Length is required for cars with an Outside Length (OSLG) of greater than 62 feet 6 inches

NOTES:
- For connected unit cars report the dimension of the largest unit in the set.
- Round fraction to the higher inch, e.g., 05 1/4" = 06"

Specification

Truck Count — B256

The total number of trucks on the equipment

System Generated Field. This element is not eligible for Input.

Range of Values for B256

Minimum	Maximum
2	4

Axle Count *Mandatory* — A024

The total number of axles on the equipment

Affects Rating.

Range of Values for A024

Minimum	Maximum
4	36

Validation Rule for A024
-Axle Count must be greater than or equal to 4
-Axle Count for an articulated car must be greater than or equal to ((Connected Unit Count (A020) x 2) + 2)
-Axle Count for a draw bar connected car must be greater than or equal to (Connected Unit Count (A020) x 4)
-Total Axle Count must match sum of truck axle counts

Wheel Bearing Type *Mandatory* — B191

Indicates the wheel bearing code for the equipment

Affects Rating.

Permissible Values for B191
P Plain
R Roller

Validation Rule for B191
-Cars with Plain Bearings will have a Transportation Code (TCOD) and Transportation Condition Code (TCCD) of either YA, S_, SX, or XJ
-Equipment cannot have Plain Bearings if Built Date (BLDT) is on or after January 1, 1993

Bearing Shielded From HBD — B021

Indicates the bearing is shielded from the hot box detector

Permissible Values for B021
Y Yes

Brake Shoe Type *Mandatory* — B026

Indicates the type of brake shoe on the equipment

Permissible Values for B026
C Tread Conditioning
H High Friction Composite
L Low Friction Composite/Cast Iron

CC Side Bearing Type — A146

Indicates the travel range of the constant contact side bearings installed on the equipment

Permissible Values for A146
LC Long Travel Constant Contact
SC Short Travel Constant Contact

Validation Rule for A146
-Equipment having Qualification for Increased Gross Rail Load (B344) of 1 must have Constant Contact Side Bearing Type of LC

Empty/Load Device Eqpd — B075

Indicates a system that determines if the equipment is empty or loaded, and then varies the braking forces accordingly

Permissible Values for B075
Y Yes

Body Material — A030

The material that composes the body of the equipment

Permissible Values for A030
01 Aluminum
04 Combination
18 Stainless Steel
19 Standard Steel

Center Of Gravity Empty — A045

When empty, indicates the height from Top of Rail to the Center of Gravity

Range of Values for A045

Minimum	Maximum
22	98

Validation Rule for A045
-All cars that exceed Plate Code (A046) C built on or after January 1, 2012 must report Center of Gravity (Empty Car)

Remote Monitoring Device — B176

Indicates the equipment is equipped with a location monitoring device

Permissible Values for B176

Y	Yes
N	No

AEI High Temperature Tag — B006

Indicates the equipment is equipped with a high temperature AEI tag

Permissible Values for B006

Y	High Temperature Tag

Compartment Count — A052

The number of individual compartments the equipment contains

Range of Values for A052

Minimum	Maximum
1	9

Degree of Slope Sheets — A071

The angle in degrees of the slope sheets, from horizontal

Range of Values for A071

Minimum	Maximum
10	90

Validation Rule for A071

-Degree of Slope Sheets is required for Hoppers other than Mechanical Designation (UMMD) of LO, MWB, or MW if the car was Built Date (BLDT) or Rebuilt Date (RBDT) after July 1, 1997

Unloading System Type — B220

Describes the unloading system of the equipment ▲

Used in ETC Generation.

Permissible Values for B220

FLGR	Fluidized/Gravity
FLPN	Fluidized/Pneumatic
GRAV	Gravity
GRPN	Gravity/Pneumatic
OTHR	Other
PNEU	Pneumatic
PSDF	Pressure Differential

Validation Rule for B220

-Unloading System Type must be reported for Covered Hoppers (UMMD = LO).

Auto Unload Device Equip — B224

Identifies whether non-covered Hoppers have an automatic unloading device

Permissible Values for B224

Y	Yes

Validation Rule for B224

-Automatic Unloading Device Equipped cannot be reported for Covered Hoppers.

Vibrator Bracket Equipped — B223

Identifies the equipment has vibrator brackets

Permissible Values for B223

Y	Yes

Validation Rule for B223

-Vibrator Bracket can only be reported for Covered Hoppers with Mechanical Designation (UMMD) of LO, MWB, or MW

Light Density — B124

Indicates the equipment is designed to carry low density commodities such as wood chips and similar products ▲

Used in ETC Generation.

Permissible Values for B124

Y	Yes

Validation Rule for B124

-Light Density can only be reported for Hoppers with Mechanical Designation (UMMD) of HKS, HMS, HTR, HTS, HKR, HMSR, HMA, MWB, or MW

Connected Unit Count — A020

Indicates the number of units within an articulated or multi-unit equipment ■

Affects Rating.

Range of Values for A020

Minimum	Maximum
2	9

Validation Rule for A020

-Connected Unit Count must equal the number of Unit Segments
-Unit Segment Component elements must not be reported if the Connected Unit Count is not reported
-Unit Segment Component elements must be reported if Connected Unit Count is reported

Intermediate Conn Style — B115

Indicates the method by which two or more pieces of equipment are connected

Permissible Values for B115

A	Articulated Connector
D	Drawbar Connector

Validation Rule for B115

-Intermediate Connector Style is required for multi-unit equipment
-Intermediate Connector Style must not be reported for single unit equipment

Operating Brakes *Mandatory* — A182

The number of air brake control valves on the equipment (excludes hand brakes). One control valve consists of a service portion, emergency portion, and pipe bracket. Example: DB-60 control valve ●

Permissible Values for A182

1	2	3	4	5
6	7	8	9	

Validation Rule for A182

-Operating Brakes must be reported for all equipment
-Operating Brakes (A182) must be 1 for non-articulated equipment with an Axle Count (A024) equal to 4

ECP Brake Type — B327

Indicates the type of electronic controlled pneumatic brake used on the equipment ✹

Permissible Values for B327

N	Not Equipped
O	Overlay - Both ECP & Air Brake
S	Stand Alone - ECP Only

Validation Rule for B327

-Equipment must have a value entered for ECP Brake Type if built or rebuilt after June 28, 2012

ECP Brake Builder — B328

The manufacturer of the electronic controlled pneumatic brake used on the equipment

Permissible Values for B328

HPA	HPA Monon Corporation
NYAB	New York Air Brake
WABT	WABTEC

Validation Rule for B328

-If ECP Brake Type (B327) is Stand Alone or Overlay then a value must be entered for ECP Brake Builder
-If ECP Brake Type (B327) is Not Equipped then ECP Brake Builder is not reportable

Slack Adjuster Group — B538

The slack adjuster group on the equipment per AAR Field Manual Rule #8 ✹

Value does not carry forward for Single Clone / Multi-Clone.

Permissible Values for B538

A	Group A	B	Group B	C	Group C	D	Group D
E	Group E	F	Group F	G	Group G	H	Group H
J	Group J	L	Group L	M	Group M	N	Group N
O	Group O	P	Group P	Q	Group Q	R	Group R
1	Internal	2	Unequipped				

Validation Rule for B538

- Slack Adjuster Group is mandatory for all equipment built or rebuilt on or after January 1, 2016
- If Slack Adjuster Group is reported as "1" then Brake Cylinder Mount Type (B540) must be reported as "T"
- If Slack Adjuster Group is "1" or "2", then Slack Adjuster CID (B359) must not be reported.

NOTES:

- Permissible value of "1 – Internal" identifies special truck mounted internal slack adjuster within brake cylinder.

Brake Cylinder Mount Type	B540
Identifies the location of the brake cylinder	✹

Permissible Values for B540

B	Body Mounted
T	Truck Mounted

Validation Rule for B540

- Brake Cylinder Mount Type is mandatory for all equipment built or rebuilt on or after January 1, 2016

Equipment Builder	A035
Identifies the original manufacturer of the equipment	✹

Permissible Values for A035

AB	AMF BEAIRD
ACF	American Car & Foundry
ACFX	ACF Industries
ARI	ARI Industries
BERW	Berwick Forge
BETH	Bethlehem Car Works
BSP	Bethlehem Steel Corporation
CE	CHESAPEAKE & OHIO
CNCF	Carros De Ferrocarril, SA
CURR	Curry Rail Service
EASX	East Rail Car Division
EDSP	ESTRATEGIAS DUL S. DE R.L.
ERSB	Ebenezer Railcar
EVAN	Evans Products
FCA	Freight Car America
FMC	FMC Corporation
FREU	Freuhauf Corporation
GATX	General American Transportation Corp
GLOB	Global Lot
GMB	Greenbrier
GSC	Greenville Steel Car
GULF	Gulf Railcar
GUND	Gunderson Inc
GUNM	Gunderson - Mexico
HST	Hawker Siddeley
IA	INGALLS
IR	Ingersoll Rand
JAC	Johnstown America Corporation
JKFO	JK-CO LLC
KASG	Kasgro Railcar
LAVE	Lavelin
MAGR	Magor Car Manufacturing
MF	MECHTRON
MH	MURFREESBORO (BUTLER)
MRNE	Marine Industries
NACA	National Alabama Corporation
NACC	North American Car
NG	NORFOLK & WESTERN
NSC	National Steel Car
ORTN	Ortner
PCF	Pacific Car & Foundry
PCM	Pullman Car & Manufacturing
PE	PORTEC
PORT	Porter Locomotive Company
PORW	Thrall-Winder
PRO	Procor Limited
PS	Pullman-Standard
PSP	Pullman-Standard, Division of Trinity Industries
RCC	Raceland Car Corporation
RICH	Richmond Locomotive Works
RTCX	Richmond Tank Car
SC	SOUTHEASTERN
THR	Thrall Car Service Parts
THRL	Thrall
TRAN	Tranzrail
TREN	Trenton Works
TRIN	Trinity
TRIX	Trinity Mexico
UNAM	United America
UNKN	Unknown
UTLX	Union Tank Car
V	OWNER RAILROAD
VERM	Vertex

Validation Rule for A035

- Equipment Builder must be populated if the Built Date (BLDT) is July 1, 2010 or newer
- Equipment built or rebuilt on or after July 1, 2010 cannot have a Equipment Builder of Unknown
- Equipment with a Built Date (BLDT) on or after July 1, 2010 cannot have an Equipment Builder Code of OWNER RAILROAD.
- Equipment Builder can have a value of MULT only if the equipment has multiple units.

Builder Lot Code	B030
A unique identifier for a group of equipment built by one manufacturer under the same builder specification	✹

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Validation Rule for B030

- Equipment built or rebuilt on or after June 28, 2012 must have a value for Builder Lot Code

Built Country	B031
The country where the equipment was constructed	

Data is Confidential.

Permissible Values for B031

CA	Canada	MX	Mexico
US	United States		

Rebuilt Country	B170
The country where the equipment was re-constructed	

Permissible Values for B170

CA	Canada	MX	Mexico
US	United States		

FRA Reflectorization	B096
Indicates the equipment owner assumes responsibility for applying reflectorization tape	

Permissible Values for B096

P	Reflectorization Plan
W	Reflectorization Waiver

Validation Rule for B096

- Reflectorization is mandatory for all equipment after November 28, 2015.

Bottom Outlet Count	B142
The number of bottom unloading devices on the equipment	

Range of Values for B142

Minimum	Maximum
1	9

Air Hose Arrangement	B524
The type of trainline air hose arrangement	✹

Permissible Values for B524

A	S-424 Angle Cock Location
B	S-425 Angle Cock Location on Cars Equipped with AAR Type F Coupler
C	S-426 Angle Cock Location on Cars with Floating Sills
D	S-427 Angle Cock and Air Brake Hose Location on Cars with Excessive Overhang Preventing Compliance with AAR Standards
E	S-428 Angle Cock Location on Cars Equipped with AAR Type F Coupler and Cushioned Underframe
F	S-4003 (Former Standard)
G	S-4003x (Former Standard Retrofitted to Meet All Dimensions Except Height)
H	S-4003-05 (Current Standard Train Line Arrangement for Cars with F-Shank Couplers)
I	S-4021 Angle Cock and Brake Hose Location on Cars with EOCC (E and F)

J S-4021 Coupler Mounted Bracket End Arrangement
K S-4028 Train Line Arrangement with Displaceable Union on Cars with EOCC and Couplers Not Exceeding 45 in. in Length
L S-4029 Train Line Arrangement with Displaceable Union on Cars with EOCC and Couplers Exceeding 45 in. in Length
M S-4030 Trolley Arrangement on Cars with EOCC and E-Shank Couplers

Validation Rule for B524

-Air Hose Arrangement must be reported for this equipment if it is Built or Rebuilt on or after April 22, 2014.

NOTES:

- If any of the following conditions apply, Air Hose Arrangement (B524) must be reported for cars Built or Rebuilt on or after April 22, 2014:
  - Draft Gear Type (B073) at any location is C or E.
  - Connected Unit Count (A020) is reported.
  - Outside Length (OSLG) is greater than or equal to 70 feet (840 inches).
  - The overhang is greater than 5 feet 6 inches (66 inches). Overhang is calculated as follows:
  - 0.5 * (Outside Length, in inches, minus Truck Center Length, in inches, minus 31 inches)
    - For all other equipment, reporting Air Hose Arrangement is optional.

4-Pressure ABT Receiver Eqpd B539

Identifies if the equipment is equipped with a 4-pressure air brake test receiver

Value does not carry forward for Single Clone / Multi-Clone.

Permissible Values for B539

E Equipped
N Not Equipped

NOTES:

- An "E" will be system generated if a 4-Pressure ABT is reported on the equipment.

Feature

Lining Material A158

Describes the type of construction material used in the lining of equipment

Permissible Values for A158

03 Cement
07 Composite Wood and Steel
08 Fiberglass
12 Metal Clad
13 Metal Spray
16 Rubber
17 Sheet Metal
26 Synthetic
28 Unlined
29 Vinyl
30 Wood

Roof Type A226

Describes the type of roof or hatches on the equipment

Permissible Values for A226

1 Trough hatch in roof
2 Removable roof
3 Self-storing roof
4 Round hatches on center line of car
5 Other types of roof openings
6 Combination (through & round or square) hatches
7 Rectangular or square roof hatches
8 Round hatches offset from center line of car
9 Rectangular or square hatches offset from center line of car

Validation Rule for A226

-Trough Hatch Roofs are only applicable to Gondolas and Hoppers with Mechanical Designation of GBR, GBSR, GWSR, HKR, HMSR, HTR, or LO
-Self-Storing Roofs are only applicable to Boxcars and Hoppers with Mechanical Designation of HKR, HMSR, HTR, LC, LO, or XP
-Round hatches on center line of car are only applicable for Covered Hoppers with Mechanical Designation (UMMD) of LO
-Rectangular or Square Roof Hatches are only applicable to Boxcars with Mechanical Designation (UMMD) LC
-Other types of Roofs are only applicable to Hoppers, or Specialized Gondolas with Roofs with Mechanical Designation of LO, HTR, or GTR
-Mechanical Designations GBR, GBSR, GWSR, GTR, HKR, HMSR, HTR, or LO require that Roof Type be set

Cost

Original Cost A184

The original manufacturer selling price ✹

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for A184

Minimum	Maximum
0	9999999

Validation Rule for A184

-Original Cost must be equal to the Ledger Value if there are no Additions & Betterments.
-Original Cost must be equal to the Ledger Value if Additions & Betterments Indicator is not reported.
-Railroad marked freight cars except MISC, LOCO, TRLR, CONT, CHSS, STWH, EOTD, and PSGR are required to have an Original Cost
-Private marked freight cars except MISC, LOCO, TRLR, CONT, CHSS, STWH, EOTD, and PSGR are required to have an Original Cost if Built Date (BLDT) is on or after January 1, 2015

NOTES:

- Original Cost is never altered. It is the cost of the equipment to the original owner.
- For privately marked hopper (LO) cars, report in US dollars the original cost.
- For railroad-marked cars, report in US dollars the original ledger value of the original owner For cars rebuilt, report the cost prescribed in MR Interchange Rule 88 and Circular Letter OT-24
- The original cost is used in the settlement of AAR Interchange Rule 107 Office Manual.
- For connected unit cars report the total original cost for all units in the set.
- Numeric, applicable to all railroad-marked cars Also, applicable to privately marked covered hopper (LO) cars.
- Raise all cents to the next dollar, e.g. $5,501.02 = 0005502

Ledger Value A150

The sum of original cost and additions & betterments

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for A150

Minimum	Maximum
0	9999999

Validation Rule for A150

-Original Cost must be equal to the Ledger Value if there are no Additions & Betterments.
-Ledger Value must equal the Original Cost (A184) plus the additions & betterments, if Total A&B (A003) has been reported. Otherwise Ledger Value should equal Original Cost (A184).

Total A&B A003

System generated sum of all reported amounts in A&B Amount (A317), in US dollars

Data is Confidential. System Generated Field. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for A003

Minimum	Maximum
0	99999999

NOTES:

- For railroad-marked cars, report the sum of all additions and betterments applied to the car. This value is for record keeping purposes only and will not be used to report Ledger Value.
- For private Cars report the additions and betterments as qualified under AAR interchange Rule 107 for determination of settlement value.
- For privately marked covered hopper (LO) cars, report (if not in original cost) the cost of original into-service freight, capitalized linings, capitalized additions and betterments as authorized by Freight Tariff 6007-series. This field is used to determine Adjusted Value for mileage rate calculations.
  - Additions are costs of all new components applied subsequent to the date the car was built or rebuilt and carried in the capital investment account.
  - Betterments are costs of all improvements of components of existing equipment through the substitution of superior parts for inferior parts

subsequent to the date the car was built of rebuilt.

- For connected unit cars report the total Truck Location A for all units in the set

Ind for Pos/Neg Total A&B — **A128**

A code indicating the positive or negative adjustment to the original cost of the equipment

Data is Confidential. System Generated Field. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Permissible Values for A128

N	Negative	P	Positive

A&B Pos/Neg Ind — **A316**

A code indicating the positive or negative adjustment to the individual addition and betterment

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Permissible Values for A316

N	Negative	P	Positive

Validation Rule for A316

-When entering an individual Addition & Betterment, you must enter a value in all 4 fields.

-The A&B Indicator is required when Additions & Betterments are reported.

-The A&B Indicator must not be reported if Additions & Betterments are not reported.

A&B Amount — **A317**

The amount of the individual addition and betterment added to or subtracted from the original cost of the equipment

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for A317

Minimum	Maximum
1	999999

Validation Rule for A317

-When entering an individual addition & betterment; A&B Date Done (A319), A&B Type (A318), A&B Pos/Neg Ind (A316), and A&B Amount (A317) must be reported

A&B Date Done — **A319**

The date of the individual addition and betterment

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for A319

Minimum	Maximum
1/1/1900	12/31/9999

Validation Rule for A319

-When entering an individual Addition & Betterment, you must enter a value in all 4 fields.

-Addition and Betterment Date Done cannot be earlier than Built Date (BLDT).

-Additions & Betterments Date Done cannot be later than today's date.

A&B Type — **A318**

The type of individual addition and betterment as defined by Rule 107

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Permissible Values for A318

GNRL	General - Capitalized Additions and Betterments
INIT	Initial load of historical A&B amount as of Umler 4.6 implementation date
LOLI	Protective coating inside LO covered hopper, includes renewal of lining in damaged cars
SPAR	Any type Sparger system applied. Includes renewal of lining in damaged cars.

Validation Rule for A318

-For each equipment, only one Individual A&B Type can have a value of INIT.

-When entering an individual Addition & Betterment, you must enter a value in all 4 fields.

Car Management

Pool Number — **P001**

Unique number used to indicate the grouping of equipment for a particular purpose ■

Used for Transportation Codes. Affects Rating. This element is not eligible for Input. Value does not carry forward for Equipment Group Change / Add Back.

Pool Control — **TCPC**

Pool Control

System Generated Field. Used for Transportation Codes. This element is not eligible for Input, Output or Query.

NOTES:

- For further explanation reference Appendices C and E.

User Routing Instructions — **TCUR**

The routing instruction reported by the user

Used for Transportation Codes.

Permissible Values for TCUR

2	Trailer Service Rule 2
G	Contaminated commodity service
M	Mark canceled
O	Owner requested return
U	Unassigned equipment

NOTES:

- For further explanation reference Appendix E.

Umler Transportation Code — **TCOD**

The type of assigned service, empty routing or restriction of the equipment

System Generated Field. Used for Transportation Codes. This element is not eligible for Input.

NOTES:

- For further explanation reference Appendix E.

Transportation Cond Code — **TCCD**

The AAR or FRA interchange restriction code

System Generated Field. Used for Transportation Codes. This element is not eligible for Input.

NOTES:

- For further explanation reference Appendix E.

Mechanical Restriction — **TCME**

User reported or system generated type of mechanical restriction

Used for Transportation Codes.

Permissible Values for TCME

S	Scrap
X	AAR Interchange Restriction
Y	FRA Interchange Prohibited

NOTES:

- For further explanation reference Appendix D.1

Mech Restriction Reason — **TCMR**

The explanation of the Mechanical Restriction (TCME)

Used for Transportation Codes.

Permissible Values for TCMR

A	Restricted Due to Age (Over 40-AAR, Over 50-FRA)
B	Restricted Due to Air Brakes
C	Restricted Due to Axles
D	Restricted Due to Couplers and Couplers Parts
F	Restricted Due to Couplers Yokes
G	Restricted Due to Draft Gears
J	Restricted Due to Journal Bearing and Journal Lubrication
N	Restricted Due to Trucks
P	Restricted Due to Truck Side Frames
T	Restricted Due to Trucks Bolsters
U	Restricted by AAR or Owner
W	Restricted Due to Wheels
X	Restricted Due to Scrap or Early Warning
Z	Restricted Due to Umler Conflict (Not Valid for User Input)

NOTES:

- For further explanation reference Appendix D.2.
- The assignment of the Transportation Codes S_, SX, XA, XZ and YA generate the Rate Indicator Code 6 to the CHARM file to zero (0) rate the car hire and mileage rate.

Sys Gen Routing Inst TCGR

The routing instruction generated by the system

System Generated Field. Used for Transportation Codes. This element is not eligible for Input.

NOTES:

- For further explanation reference Appendix E.5.

Loading Authority Fleet Status B597

Identifies when a car is listed on a fleet in the Loading Authority application

System Generated Field. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Permissible Values for B597

Y Yes

S Suspended

NOTES:

- • When equipment is on a fleet the Loading Authority (LA) application will update the flag to 'Y – Yes'. When equipment is removed from a fleet the LA application will remove the 'Y – Yes'.
- When equipment is on a LA fleet that is suspended the LA application will update the flag to 'S – Suspended'. When the equipment is on a LA fleet that is no longer suspended the LA application will update the flag to 'Y – Yes'.

Train Service

Restricted Speed Empty B180

Describes the maximum restricted speed the equipment can travel when empty

Range of Values for B180

Minimum	Maximum
5	95

Restricted Speed Loaded B181

Describes the maximum restricted speed the equipment can travel when loaded

Range of Values for B181

Minimum	Maximum
5	95

Shove Car to Rest B189

Identifies the car must be moved to rest by locomotive

Permissible Values for B189

Y Yes

Shove Adj. Car to Rest B188

Identifies the adjacent car must be shoved to rest by locomotive

Permissible Values for B188

Y Yes

Train Position Sensitive B211

Indicates there is a physical reason, limiting its position on a train

Permissible Values for B211

Y Yes

End of Train Only B277

Indicates the equipment must be placed at the end of the train (including per AAR RP-2001)**Permissible Values for B277**

Y Yes

Check Trailing Tonnage B044

Indicates the equipment has restrictions on trailing tonnage

Permissible Values for B044

Y Yes

Curve Negotiate Exception B178

Describes the requirement for negotiating a curve

Permissible Values for B178

A Restrictive Curve Negotiability, Section 2.1.4 of M-1001

B Does not meet all Chapter XI Curving Requirements

Cooper Rating Exception B273

Describes the cooper rating (weight distribution model of the equipment), for use in movement across bridges

Permissible Values for B273

A Excessive Cooper Rating

B Cooper Rating in Excess of E66

Clearance Exception B275

Describes equipment containing nonstandard dimension

Permissible Values for B275

A Excessive Outside Extreme Height (A185)

B Excessive Outside Extreme Width (A186)

D All other unique clearance issues

E Hopper with excessive Outside Width (A186) only when pickup shoes are extended

Validation Rule for B275

- Clearance Exception of E can only be reported if Auto Unload Device Equip (B224) is reported.

NOTES:

- For hoppers reporting a Clearance Exception (B275) of E, report the Plate Code (A046) that the equipment meets with the pickup shoes in the retracted position.

Loaded Net Braking Ratio B551

Indicates calculated minimum loaded net braking ratio per AAR Specifications in place on built or rebuilt date (in percent).
System Generated Field. This element is not eligible for input.

Permissible Values for B551

– 11.0

– 8.5

NOTES:

- Loaded Net Braking Ratio is determined as follows;:
  - If Built Date (BLDT) or Rebuilt Date (RBDT) is less than 1/1/1972, then Loaded Net Braking Ratio will be set to blank.
  - If Built Date (BLDT) or Rebuilt Date (RBDT) is greater than or equal to 1/1/2004, or if Equipment Type Code (UMET) begins with "Q" or "S", then Loaded Net Braking Ratio is 11.0%.
  - For all other equipment, Loaded Net Braking Ratio is 8.5%.

Owner-Provided Loaded Net Braking Ratio B552

Indicates an alternate minimum loaded net braking ratio provided by owner (in percent).

Range of Values for B552

Minimum	Maximum
8.5	14.0

NOTES:

- Owner may enter a documented alternative minimum loaded net braking ratio in this field that is greater than the system calculated Loaded Net Braking Ratio (B551).
- When reported, the Owner-Provided Loaded Net Braking Ratio will be used in PTC stopping distance calculations.
- A change in value for the following elements will cause the Owner-Provided Loaded Net Braking Ratio to reset to blank:
  - Rebuilt Date (RBDT)
  - Gross Rail Load/Weight (A266)
  - Equipment Type Code (UMET)
  - Empty/Load Device Eqpd (B075)

Empty Braking Ratio **B553**

Indicates calculated empty braking ratio per AAR Specifications in place on built or rebuilt date (in percent).
System Generated Field. This element is not eligible for input.

Range of Values for B553

Minimum	Maximum
15.0	38.0

NOTES:

- Empty Braking Ratio is determined as follows;:
  - If Built Date (BLDT) or Rebuilt Date (RBDT) is less than 1/1/1972, then Empty Braking Ratio will be set to blank.

Owner-Provided Empty Braking Ratio **B554**

Indicates an owner supplied alternate empty braking ratio (in percent).

Range of Values for B554

Minimum	Maximum
15.0	38.0

NOTES:

- Owner may enter a documented alternative minimum loaded net braking ratio in this field that is greater than the system calculated Loaded Net Braking Ratio (B551).
- When reported, the Owner-Provided Loaded Net Braking Ratio will be used in PTC stopping distance calculations.
- A change in value for the following elements will cause the Owner-Provided Loaded Net Braking Ratio to reset to blank:
  - Rebuilt Date (RBDT)
  - Gross Rail Load/Weight (A266)
  - Equipment Type Code (UMET)
  - Empty/Load Device Eqpd (B075)

Truck Components

Axle Spacing Distance *Mandatory* **B020**

The distance between axle centers on the same truck

Affects Rating.

Permissible Values for B020

53	53 Inches
54	54 Inches
55	55 Inches
60	60 Inches
61	61 Inches
62	62 Inches
63	63 Inches
64	64 Inches
65	65 Inches
66	66 Inches
68	68 Inches
70	70 Inches
71	71 Inches
72	72 Inches
73	73 Inches
74	74 Inches
76	76 Inches
78	78 Inches
99	Axle Space Unknown

Truck Axle Count *Mandatory* **B252**

The number of axles per truck

Range of Values for B252

Minimum	Maximum
2	4

Validation Rule for B252

- Sum of Truck Axle Count must equal Axle Count (A024)

Journal Size *Mandatory* **A147**

The size of the journal bearing

Affects Rating.

Permissible Values for A147

A	3-3/4 X 7	B	4-1/4 X 8	C	5 X 9
D	5-1/2 X 10	E	6X11	F	6-1/2 X 12
G	7 X 12	K	6-1/ 2X 9	M	7 X 9

Validation Rule for A147

- -4-axle equipment with Journal Size B and Star Code (A247) is not populated, must have Gross Rail Load (A266) of 103,000 lbs.
- -4-axle equipment with Journal Size C and Star Code (A247) is not populated, must have Gross Rail Load (A266) of 142,000 lbs.
- -4-axle equipment with Journal Size D and Star Code (A247) is not populated, must have Gross Rail Load (A266) of 177,000 lbs.
- -4-axle equipment with Journal Size E and Star Code (A247) is not populated, must have Gross Rail Load (A266) of 220,000 lbs.
- -4-axle equipment with Journal Size F or K, Star Code (A247) is not populated, and Qualification for Increased Gross Rail Load (B344) is not populated, must have Gross Rail Load (A266) of 263,000 lbs.
- -4-axle equipment with Journal Size F or K, Star Code (A247) is not populated, and Qualification for Increased Gross Rail Load (B344) of 1 or 2, must have Gross Rail Load (A266) of 286,000 lbs.
- -4-axle equipment with Journal Size G or M, Star Code (A247) is not populated, and Qualification for Increased Gross Rail Load (B344) is not populated, must have Gross Rail Load (A266) of 315,000 lbs.
- -4-axle equipment with Journal Size G, K, or M, Star Code (A247) is not populated, and Qualification for Increased Gross Rail Load (B344) of 1, must have Gross Rail Load (A266) of 286,000 lbs.

NOTES:

- A, B and C Journal Classes are prohibited in Interchange per Rule 90.B.4

Wheel Diameter *Mandatory* **A294**

The diameter of the wheels

Affects Rating.

Permissible Values for A294

33	33 Inches	36	36 Inches
38	38 Inches		

Validation Rule for A294

- -Equipment with Qualification for Increased Gross Rail Load (B344) of 1, and Journal Size (A147) of G or M, must have Wheel Diameter of 38
- -Equipment with Qualification for Increased Gross Rail Load (B344) of 1, and Journal Size (A147) of K, must have Wheel Diameter of 36
- -If Connected Unit Count (A020) is not reported, different Wheel Diameters cannot be reported

Stability Device Equipped **B199**

Indicates a stability device is present on the truck

Affects Rating.

Permissible Values for B199

Y	Yes

Bolster Component ID **B351**

Bolster Component ID from Component Registry

Data is Confidential. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Sideframe Component ID **B352**

Side Frame Component ID from Component Registry

Data is Confidential. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Wheelset Component ID **B350**

Component ID from Component Registry

Data is Confidential. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Draft System Components

Coupler Code **A057**

Defines the equipment coupler type

Permissible Values for A057

BE60AHT	Type E (Rule 16) - BE60AHT
BE60BHT	Type E Obsolete (Rule 16) - BE60BHT
BE63AHT	Type E Obsolete (Rule 16) - BE63AHT
BE63HT	Type E (Rule 16) - BE63HT
BE67HT	Type E (Rule 16) - BE67HT
E42BEX	Type E/F (Rule 17) - E42BEX

E50ARE	Type E/F (Rule 17) - E50ARE
E50BEX	Type E/F (Rule 17) - E50BEX
E60CC	Type E (Rule 16) - E60CC
E60CE	Type E (Rule 16) - E60CE
E60CHT	Type E (Rule 16) - E60CHT
E60CHTE	Type E (Rule 16) - E60CHTE
E60DC	Type E (Rule 16) - E60DC
E60DE	Type E (Rule 16) - E60DE
E60EE	Type E (Rule 16) - E60EE
E61	Type E Obsolete (Rule 16) - E61
E67AHT	Type E (Rule 16) - E67AHT
E67BC	Type E (Rule 16) - E67BC
E67BE	Type E (Rule 16) - E67BE
E67BHT	Type E (Rule 16) - E67BHT
E67BHTE	Type E (Rule 16) - E67BHTE
E67CC	Type E (Rule 16) - E67CC
E67CE	Type E (Rule 16) - E67CE
E68AHT	Type E/F Obsolete (Rule 17) - E68AHT
E68AHTE	Type E/F Obsolete (Rule 17) - E68AHTE
E68BC	Type E/F (Rule 17) - E68BC
E68BE	Type E/F (Rule 17) - E68BE
E68BHT	Type E/F (Rule 17) - E68BHT
E68BHTE	Type E/F (Rule 17) - E68BHTE
E68CE	Type E/F (Rule 17) - E68CE
E69AE	Type E/F (Rule 17) - E69AE
E69AHTE	Type E/F (Rule 17) - E69AHTE
E69BE	Type E/F (Rule 17) - E69BE
E69CE	Type E/F (Rule 17) - E69CE
E69CEX	Type E/F (Rule 17) - E69CEX
E69HTE	Type E/F (Rule 17) - E69HTE
E69LCE	Type E/F (Rule 17) - E69LCE
EB7AHT	Type E (Rule 16) - EB7AHT
EF204CE	Type E/F (Rule 17) - EF204CE
EF306CE	Type E/F (Rule 17) - EF306CE
EF511AE	Type E/F (Rule 17) - EF511AE
EF511BE	Type E/F (Rule 17) - EF511BE
EF511CE	Type E/F (Rule 17) - EF511CE
EF511DE	Type E/F (Rule 17) - EF511DE
EF511WE	Type E/F (Rule 17) - EF511WE
EF511LCE	Type E/F (Rule 17) - EF511LCE
EF512CE	Type E/F (Rule 17) - EF512CE
EF512WE	Type E/F (Rule 17) - EF512WE
EF528WE	Type E/F (Rule 17) - EF528WE
EFROTARY	Type E/F Rotary - EFROTARY
EFSPEC	Type E/F Special - EFSPEC
EFUNK	Type E/F Unknown - EFUNK
ESPEC	Type E Special - ESPEC
EUNK	Type E Unknown - EUNK
F70BHT	Type F Obsolete (Rule 18) - F70BHT
F70BHTE	Type F Obsolete (Rule 18) - F70BHTE
F70CC	Type F (Rule 18) - F70CC
F70CE	Type F (Rule 18) - F70CE
F70CHT	Type F (Rule 18) - F70CHT
F70CHTE	Type F (Rule 18) - F70CHTE
F70DE	Type F (Rule 18) - F70DE
F70HT	Type F Obsolete (Rule 18) - F70HT
F71CHT	Type F (Rule 18) - F71CHT
F72HT	Type F (Rule 18) - F72HT
F73AC	Type F (Rule 18) - F73AC
F73AE	Type F (Rule 18) - F73AE
F73AHT	Type F (Rule 18) - F73AHT
F73AHTE	Type F (Rule 18) - F73AHTE
F73BE	Type F (Rule 18) - F73BE
F73HTE	Type F Obsolete (Rule 18) - F73HTE
F79BHT	Type F Obsolete (Rule 18) - F79BHT
F79BHTE	Type F Obsolete (Rule 18) - F79BHTE
F79CC	Type F (Rule 18) - F79CC
F79CE	Type F (Rule 18) - F79CE
F79CHT	Type F (Rule 18) - F79CHT
F79CHTE	Type F (Rule 18) - F79CHTE
F79DE	Type F (Rule 18) - F79DE
FF205E	Type F (Rule 18) - FF205E
FF218AE	Type F (Rule 18) - FF218AE
FR201E	Type F (Rule 18) Rotary - FR201E
FR205AE	Type F (Rule 18) Rotary - FR205AE
FR205BE	Type F (Rule 18) Rotary - FR205BE
FR205E	Type F (Rule 18) Rotary - FR205E
FR206E	Type F (Rule 18) Rotary - FR206E
FR207AE	Type F (Rule 18) Rotary - FR207AE
FR207E	Type F (Rule 18) Rotary - FR207E
FR208AE	Type F (Rule 18) Rotary - FR208AE (without wear insert)
FR208E	Type F (Rule 18) Rotary - FR208E (with wear insert)
FR209E	Type F (Rule 18) Rotary - FR209E
FR301E	Type F (Rule 18) Rotary - FR301E
FR304E	Type F (Rule 18) Rotary - FR304E (with wear plate)
FR304WE	Type F (Rule 18) Rotary - FR304WE (without wear plate)
FROTARY	Type E/F Rotary - FROTARY
FSPEC	Type F Special - FSPEC
FUNK	Type F Unknown - FUNK
S700AE	Type E (Rule 16) - S700AE
SBE60CC	Type E (Rule 16) - SBE60CC
SBE60CE	Type E (Rule 16) - SBE60CE
SBE60DC	Type E (Rule 16) - SBE60DC
SBE60DE	Type E (Rule 16) - SBE60DE
SBE60DREX	Type E (Rule 16) - SBE60DREX
SBE60EE	Type E (Rule 16) - SBE60EE
SBE67BC	Type E (Rule 16) - SBE67BC
SBE67BE	Type E (Rule 16) - SBE67BE
SBE67CC	Type E (Rule 16) - SBE67CC
SBE67CE	Type E (Rule 16) - SBE67CE
SBE67CREX	Type E (Rule 16) - SBE67CREX
SBE67DE	Type E (Rule 16) - SBE67DE
SBE68BC	Type E/F (Rule 17) - SBE68BC
SBE68BE	Type E/F (Rule 17) - SBE68BE
SBE68CE	Type E/F (Rule 17) - SBE68CE
SBE68CREX	Type E/F (Rule 17) - SBE68CREX
SBE68DE	Type E/F (Rule 17) - SBE68DE
SBE68WEX	Type E/F (Rule 17) - SBE68WEX
SBE69AE	Type E/F (Rule 17) - SBE69AE
SBE69BE	Type E/F (Rule 17) - SBE69BE
SBE69BREX	Type E/F (Rule 17) - SBE69BREX
SBE69CE	Type E/F (Rule 17) - SBE69CE
SE60CC	Type E (Rule 16) - SE60CC
SE60CE	Type E (Rule 16) - SE60CE
SE60CHT	Type E (Rule 16) - SE60CHT
SE60CHTE	Type E (Rule 16) - SE60CHTE
SE60DC	Type E (Rule 16) - SE60DC
SE60DE	Type E (Rule 16) - SE60DE
SE60EE	Type E (Rule 16) - SE60EE
SE67BC	Type E (Rule 16) - SE67BC
SE67BE	Type E (Rule 16) - SE67BE
SE67BHT	Type E (Rule 16) - SE67BHT
SE67BHTE	Type E (Rule 16) - SE67BHTE
SE67CC	Type E (Rule 16) - SE67CC
SE67CE	Type E (Rule 16) - SE67CE
SE68BC	Type E/F (Rule 17) - SE68BC
SE68BE	Type E/F (Rule 17) - SE68BE
SE68BHT	Type E/F (Rule 17) - SE68BHT
SE68BHTE	Type E/F (Rule 17) - SE68BHTE
SE68CE	Type E/F (Rule 17) - SE68CE
SE69AE	Type E/F (Rule 17) - SE69AE
SE69BE	Type E/F (Rule 17) - SE69BE
SE69CE	Type E/F (Rule 17) - SE69CE
SF70CC	Type F (Rule 18) - SF70CC
SF70CE	Type F (Rule 18) - SF70CE
SF70CHT	Type F (Rule 18) - SF70CHT
SF70CHTE	Type F (Rule 18) - SF70CHTE
SF70DE	Type F (Rule 18) - SF70DE
SF79CC	Type F (Rule 18) - SF79CC
SF79CE	Type F (Rule 18) - SF79CE
SF79CHT	Type F (Rule 18) - SF79CHT
SF79CHTE	Type F (Rule 18) - SF79CHTE
SF79DE	Type F (Rule 18) - SF79DE

Validation Rule for A057

-If Rotary Coupler Style is reported, then Coupler Code must be a rotary coupler.
-If Coupler Code is a rotary coupler, then Coupler Style must be R (Rotary).
-Coupler Code of Type E Obsolete (Rule 16) can only be reported if the car was built or rebuilt before July 31, 2015
-Coupler Code of Type E/F Obsolete (Rule 17) can only be reported if the car was built or rebuilt before July 31, 2015
-Coupler Code of Type F Obsolete (Rule 18) can only be reported if the car was built or rebuilt before July 31, 2015
-Coupler Code of FROTARY or EFROTARY cannot be reported for cars Built or Rebuilt on or after August 12, 2014.

NOTES:

- Obsolete: All Type D couplers are obsolete and should report code DOBS; cars with this coupler code will be restricted in interchange as discussed below.
- Unknown: If the coupler code is unknown or if the code stamped on the coupler is illegible, the code BUNK FUNK, EFUNK, or LOCOUNK should be reported.
- Special: Codes ESPEC, FSPEC, and EFSPEC have been created to decline

coupler bodies that have been manufactured specifically for the equipment owner and are not listed in the attached table.

- The codes FROTARY and EFROTARY cannot be reported for equipment Built or Rebuilt since August 12, 2014.

Coupler Style *Mandatory* **B058**

Describes the basic coupler design of the equipment ●■▲

Used in ETC Generation. Affects Rating.

Permissible Values for B058

B	Bottom Shelf	D	Double Shelf
P	Plain	R	Rotary

Validation Rule for B058

-If Draft System Type (B073) is H (Hydraulic) then Coupler Style cannot be reported as M (Solid Drawbar) or L (Rotary Drawbar)

-If Draft System Type (B073) is not Center Of Car or End Of Car, Inches of Travel (B061) cannot be reported

-If Draft System Type (B073) of Center Of Car or End Of Car is reported then Inches of Travel (B061) must also be reported

Inches of Travel **B061**

The number of inches a draft system will travel ■

Affects Rating.

Range of Values for B061

Minimum	Maximum
1	36

Validation Rule for B061

-If Draft System Type (B073) is not Center Of Car or End Of Car, Inches of Travel (B061) cannot be reported

-If Draft System Type (B073) of Center Of Car or End Of Car is reported then Inches of Travel (B061) must also be reported

Draft System Type *Mandatory* **B073**

Describes the draft gear/underframe cushion type ●■

Affects Rating.

Permissible Values for B073

C	Cushioning Center of Car
E	Cushioning End of Car
S	Standard
X	Devices with less than 6 inches buff travel approved under AAR Standard S-060
Y	Devices with 6 to 10 inches of buff travel approved under AAR Standard S-060

Validation Rule for B073

- If Draft System Type (B073) is Standard Draft Gear (S), Inches of Travel (B061) cannot be reported
- If Draft System Type (B073) is reported as C, E, X, or Y then Inches of Travel (B061) must also be reported
- If Draft System Type (B073) of X, or Y is reported then Draft Gear Group/Cushion Unit Pocket (B562) cannot be reported
- If Draft System Type (B073) X is reported, the Inches of Travel (B061) value must be greater than or equal to 1 and less than 6
- If Draft System Type (B073) Y is reported, the Inches of Travel (B061) value must be greater than or equal to 6 and less than or equal to 10

-If Draft System Type (B073) is S then Draft Gear Group/Cushion Unit Pocket (B562) may only be A, B, C, D, E, F, G, H, J, K, L, M, N, P, Q, R, S, or Z (AAR Rule 21)

-If Draft System Type (B073) is E then Draft Gear Group/Cushion Unit Pocket (B562) may only be EOC-1,EOC-1D, EOC-1B, EOC-2, EOC-2D, EOC-2B, EOC-3, EOC-3B,EOC-4, EOC-4B, EOC-5, EOC-5D, EOC-5B, EOC-6, EOC-6D, EOC-6B, EOC-7, EOC-7B, EOC-8, EOC-8B, EOC-8F, EOC-9, EOC-9B, EOC-9D, EOC-9E, EOC-10, EOC-10D, EOC-10B, EOC-10F, EOC-11, EOC-11D, EOC-11B,EOC-12, EOC-12D, EOC-12B, EOC-13, EOC-13B, EOC-14, EOC-14B, EOC-15, EOC-15D, EOC-15B, EOC-16, EOC-16D, EOC-16B, EOC-17, EOC-17D, EOC-17B, EOC-18, EOC-18D, EOC-18B, EOC-19, EOC-19B, EOC-20, EOC-20B, EOC-21, EOC-21B, EOC-22, EOC-22B, EOC-23, EOC-23B, EOC-24, EOC-24B, EOC-25E, EOC-26B, EOC-26F, or EOC-27D, or EOC-27E (AAR Rule 59)

Draft Gear Group/Cushion Unit Pocket **B562**

Draft Gear Group/Cushion Unit Pocket value as listed in AAR Field Manual Interchange Rule 21 and 59 ✹

Carry forward for Single Clone / Multi-Clone / Restencil / Add-Back / Equipment Group Change.

Permissible Values for B562EOC-1,EOC-1D, EOC-1B, EOC-2, EOC-2D, EOC-2B, EOC-3, EOC-3B,EOC-4, EOC-4B, EOC-5, EOC-5D, EOC-5B, EOC-6, EOC-6D, EOC-6B, EOC-7, EOC-7B, EOC-8, EOC-8B, EOC-8F, EOC-9, EOC-9B, EOC-9D, EOC-9E, EOC-10, EOC-10D, EOC-10B, EOC-10F, EOC-11, EOC-11D, EOC-11B,EOC-12, EOC-12D, EOC-12B, EOC-13, EOC-13B, EOC-14, EOC-14B, EOC-15, EOC-15D, EOC-15B, EOC-16, EOC-16D, EOC-16B, EOC-17, EOC-17D, EOC-17B, EOC-18, EOC-18D, EOC-18B, EOC-19, EOC-19B, EOC-20, EOC-20B, EOC-21, EOC-21B, EOC-22, EOC-22B, EOC-23, EOC-23B, EOC-24, EOC-24B, EOC-25E, EOC-26B, EOC-26F, EOC-27D, EOC-27E, COC-1, COC-2, COC-3, COC-4, COC-5, COC-6, COC-7, COC-8 (*AAR Rule 59*).

A, B, C, D, E, F, G, H, J, K, L, M, N, P, Q, R, S, Z (*AAR Rule 21*).

Validation Rule(s) for B562

- Draft Gear Group/Cushion Unit Pocket (B562) is mandatory for equipment built on or after June 13, 2019, unless Draft System Type (B073) is reported as X or Y

-If Draft Gear Group/Cushion Unit Pocket (B562) is not equal to A, B, C, D, E, F, G, H, J, K, L, M, N, P, Q, R, S, or Z, then Cushion Unit Type (B563) must be populated

-When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-6, EOC-7, EOC-7B, EOC-8, EOC-8B, EOC-9, EOC-9B, EOC-9D, EOC-10, EOC-10B, EOC-10D, EOC-14, EOC-14B, EOC-18D, EOC-23, EOC-23B, EOC-24, EOC-25E, EOC-26B, or EOC-27D then the Cushion Unit Type (B563) must be 1

-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-9E, EOC-26F, or EOC-27E, then the Cushion Unit Type (B563) must be 2

-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-11, EOC-12, EOC-13, EOC-13B, EOC-15, EOC-15B, EOC-15D, EOC-17, EOC-17B, EOC-17D, EOC-18, EOC-18B, EOC-19, EOC-19B, EOC-20, EOC-20B, EOC-21, EOC-21B, EOC-22, EOC-22B, EOC-24B, COC-3, COC-5, or COC-7 then the Cushion Unit Type (B563) must be 1 or 2

-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-8F or EOC-10F then the Cushion Unit Type (B563) must be 2 or 3

-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-5, EOC-5B, EOC-5D, EOC-6, EOC-6B, EOC-6D EOC-11B, EOC-11D, EOC-12B, EOC-12D, or COC-4 then the Cushion Unit Type (B563) must be 1, 2, or 3

-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-16, EOC-16B, EOC-16D, or COC-1 then the Cushion Unit Type (B563) must be 1, 2, or 4

-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-2B, EOC-2D, EOC-3, EOC-3B, EOC-4, EOC-4B, or COC-2 then the Cushion Unit Type (B563) must be 1, 2, 3, or 4

-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-1, EOC-1B, EOC-1D, or EOC-2 then the Cushion Unit Type (B563) must be 1, 2, 3, 4, or S

-When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-8 then the Cushion Unit Type (B563) must be 1, 2, 3, 4, or 5

-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-1D, EOC-2,EOC-2D, EOC-2B, EOC-3, EOC-3B, EOC-5, EOC-5D, EOC-5B, EOC-6D, EOC-7, EOC-7B, EOC-9, EOC-9B, EOC-9D, EOC-9E, EOC-10D, EOC-11, EOC-11B, EOC-11D, EOC-12D, EOC-14,EOC-14B, EOC-15, EOC-15D, EOC-15B, EOC-16D, EOC-17D, EOC-23, EOC-23B, EOC-27D, or EOC-27E then the Inches of Travel (B061) must be 10

-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-16, EOC-16B, EOC-19, EOC-19B, EOC-22, EOC-22B, or EOC-25E then the inches of travel must be 12

-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-20 or EOC-20B then the Inches of Travel (B061) must be 14

-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-1B, EOC-4, EOC-4B, EOC-6, EOC-6B, EOC-8, EOC-8B, EOC-8F, EOC-10, EOC-10B, EOC-10F, EOC-12, EOC-12B, EOC-13, EOC-13B, EOC-17, EOC-17B, EOC-18, EOC-18D, EOC-18B, EOC-21, EOC-21B, EOC-24, or EOC-24B then the Inches of Travel (B061) must be 15

-When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-2, COC-3, COC-4, COC-5, COC-6, or COC-8 then the Inches of Travel (B061) must be 20

-When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-1, and Cushion Unit Type (B563) is 1 or 2, then the Inches of Travel (B061) must be 20

-When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-1, and Cushion Unit Type (B563) is 4, then the Inches of Travel (B061) must be 18

-When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-7, and Cushion Unit Type (B563) is 2, then the Inches of Travel (B061) must be 20

-When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-7, and Cushion Unit Type (B563) is 1, then the Inches of Travel (B061) must be 30

-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-1 then the Inches of Travel (B061) must be 10, 12, or 15
-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-26, then the Inches of Travel (B061) must be 18

Note:
Reference AAR Field Manual Interchange Rule(s) 21 and 59.

Cushion Unit Type B563

Cushion Unit Type value as listed in AAR Field Manual Interchange Rule 21 and 59 ✹

Carry forward for Single Clone / Multi-Clone / Restencil / Add-Back / Equipment Group Change.

Permissible Values for B563
1 – Type 1
2 – Type 2
3 – Type 3
4 – Type 4
5 – Type 5
S – Type S

Validation Rule(s) for B563
- Cushion Unit Type (B563) is mandatory for equipment built on or after June 13, 2019.
-If Draft Gear Group/Cushion Unit Pocket (B562) is not equal to A, B, C, D, E, F, G, H, J, K, L, M, N, P, Q, R, S, or Z, then Cushion Unit Type (B563) must be populated.
-When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-6, EOC-7, EOC-7B, EOC-8, EOC-8B, EOC-9, EOC-9B, EOC-9D, EOC-10, EOC-10B, EOC-10D, EOC-14, EOC-14B, EOC-18D, EOC-23, EOC-23B, EOC-24, EOC-25E, or EOC-26B then the Cushion Unit Type (B563) must be 1.
-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-26F then the Cushion Unit Type (B563) must be 2.
-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-11, EOC-12, EOC-13, EOC-13B, EOC-15, EOC-15B, EOC-15D, EOC-17, EOC-17B, EOC-17D, EOC-18, EOC-18B, EOC-19, EOC-19B, EOC-20, EOC-20B, EOC-21, EOC-21B, EOC-22, EOC-22B, EOC-24B, COC-3, COC-5, or COC-7 then the Cushion Unit Type (B563) must be 1 or 2.
-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-8F or EOC-10F then the Cushion Unit Type (B563) must be 2 or 3.
-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-5, EOC-5B, EOC-5D, EOC-6, EOC-6B, EOC-6D EOC-11B, EOC-11D, EOC-12B, EOC-12D, or COC-4 then the Cushion Unit Type (B563) must be 1, 2, or 3.
-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-16, EOC-16B, EOC-16D, or COC-1 then the Cushion Unit Type (B563) must be 1, 2, or 4.
-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-2B, EOC-2D, EOC-3, EOC-3B, EOC-4, EOC-4B, or COC-2 then the Cushion Unit Type (B563) must be 1, 2, 3, or 4.
-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-1, EOC-1B, EOC-1D, or EOC-2 then the Cushion Unit Type (B563) must be 1, 2, 3, 4, or S.
-When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-8 then the Cushion Unit Type (B563) must be 1, 2, 3, 4, or 5.
-When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-1, and Cushion Unit Type (B563) is 1 or 2, then the Inches of Travel (B061) must be 20.
-When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-1, and Cushion Unit Type (B563) is 4, then the Inches of Travel (B061) must be 18.
-When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-7, and Cushion Unit Type (B563) is 2, then the Inches of Travel (B061) must be 20.
-When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-7, and Cushion Unit Type (B563) is 1, then the Inches of Travel (B061) must be 30.

Note:
Reference AAR Field Manual Interchange Rule(s) 21 and 59.

Coupler Component ID B353

Coupler Component ID from Component Registry

Data is Confidential. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Cushioning Unit Component ID B361

Component ID from Component Registry

Data is Confidential. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Unit Segment Components

Unit Equipment Group A307

Describes the equipment type of the platform ■

Affects Rating.

Permissible Values for A307

BOXC	Box Car	FLAT	Flat Car
GOND	Gondola	HOPP	Hopper
IFLT	Intermodal Flat	TANK	Tank Car
VFLT	Vehicular Flat		

Validation Rule for A307
-Unit Equipment Group cannot be reported if the Connected Unit Count (A020) is not reported
-Unit Equipment Group must be reported if Connected Unit Count (A020) is reported

Unit Tare Weight A299

The unit segment weight on rail when empty, sometimes referred to as Light Weight, reported in pounds

Range of Values for A299

Minimum	Maximum
23000	120000

Validation Rule for A299
-Unit Tare Weight must not be reported if the Connected Unit Count (A020) is not reported
-Unit Tare Weight must be reported if Connected Unit Count (A020) is reported
-Unit Tare Weight for Hoppers must be greater than or equal 23,000 lbs.
-Unit Tare Weight for Hoppers must be less than 120,000 lbs.
-Unit Segment Tare Weights must add up to the Total Tare Weight (A259)
-Unit Tare Weight (A299) value must be reported to the nearest 100 pounds

Unit Load Limit A300

The maximum permissible weight of the commodity that can be loaded into the unit segment, reported in pounds

Range of Values for A300

Minimum	Maximum
70000	300000

Validation Rule for A300
-Unit Load Limit can not be reported if the Connected Unit Count (A020) is not reported
-Unit Load Limit must be reported if Connected Unit Count (A020) is reported
-Unit Segment Load Limits must add up to the Load Limit (LDLT)

Unit Cubic Feet Capacity A065

The calculated interior dimensions of the unit segment in cubic feet

Range of Values for A065

Minimum	Maximum
400	8500

Validation Rule for A065
-Unit Cubic Feet Capacity must not be reported if the Connected Unit Count (A020) is not reported
-Unit Cubic Feet Capacity requires Connected Unit Count (A020)
-Unit Cubic Feet Capacity for Gondolas or Hoppers must be greater than or equal 400 cubic feet
-Unit Cubic Feet Capacity for Hoppers must be less than or equal 8500 cubic feet
-Unit Cubic Feet Capacity must add up to the Cubic Feet Capacity (A067).

Brake System Components

Emergency Brake Valve CID B354

Component ID from Component Registry

Data is Confidential. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Emergency Valve COTS Date B567

Brake valve emergency portion recondition date

System generated element. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

NOTES:

- Emergency Valve COTS Date is system-generated from a Emergency Brake Valve Inspection.

Emergency Valve OEM Warranty Date B568

Brake valve emergency portion Original Equipment Manufacturer warranty date

System generated element. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

NOTES:

- Emergency Valve OEM Date is system-generated from a Emergency Brake Valve Inspection.

Emergency Valve Part Number B569

Brake valve emergency portion part number

System generated element. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

NOTES:

- Emergency Valve Part Number is system-generated from a Emergency Brake Valve Inspection.

Service Brake Valve CID B357

Component ID from Component Registry

Data is Confidential. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Service Valve COTS Date B564

Brake valve service portion recondition date

System generated element. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

NOTES:

- Service Valve COTS Date is system-generated from a Service Brake Valve Inspection.

Service Valve OEM Warranty Date B565

Brake valve service portion Original Equipment Manufacturer warranty date

System generated element. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

NOTES:

- Service Valve OEM Date is system-generated from a Service Brake Valve Inspection.

Service Valve Part Number B566

Brake valve service portion part number

System generated element. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

NOTES:

Service Valve Part Number is system-generated from a Service Brake Valve Inspection.

Slack Adjuster CID B359

Component ID from Component Registry

Data is Confidential. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Miscellaneous

Commercial Owner CIF B049

The Customer Identification File (CIF) number for a commercial owner at a specific location

Commercial Lessee CIF B048

The Customer Identification File (CIF) number for a commercial lessee at a specific location

Umler Effective Date EFDT

The date the rating activity (pre-registration, modification, etc.) is expected to occur

This element is not eligible for Query. Does not Carry Forward.

Validation Rule for EFDT

-Effective Date cannot be set to more than 13 months in the future.

NOTES:

- Effective Date will default to the 1st of the following month that equipment is registered

Inspection

ABT Due Date (Repair Track) DU13

The due date of the air brake test per AAR Field Manual Rule 3

System Generated Field. This element is not eligible for Input. Value does not carry forward for Add Back.

ABT 5-8 Year Due Date DU58

The 5-8 year due date for the air brake test (ABT) after the ABT Due Date (Repair Track)

System Generated Field. This element is not eligible for Input. Value does not carry forward for Add Back.

Car Grade CG01

The grading of the interior condition of the equipment

Value does not carry forward for Single Clone / Multi-Clone / Equipment Group Change.

Permissible Values for CG01

N N-Ruminant Proteins (system generated by waybill only)

Car Grade Inspection Date CG02

The date of the grading of the interior condition of the equipment

Value does not carry forward for Single Clone / Multi-Clone / Equipment Group Change.

Car Grade Inspection Time CG03

The time of the grading of the interior condition of the equipment

Value does not carry forward for Single Clone / Multi-Clone / Equipment Group Change.

Car Grade Location SPLC CG04

The SPLC of the grading location

Value does not carry forward for Single Clone / Multi-Clone / Equipment Group Change.

Car Grade Inspection SCAC CG05

The shop SCAC grading location

Value does not carry forward for Single Clone / Multi-Clone / Equipment Group Change.

Inspection Date Done DTDN

The date the inspection was completed; used for all inspection types reported on equipment

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Validation Rule for DTDN

-The inspection date must not be 60 days before the Build Date

Inspection Due Date **INDD**

The due date of the next inspection; used for all inspection types reported on equipment

System Generated Field. This element is not eligible for Input. Value does not carry forward for Add Back.

Inspection Performer **PERF**

The SCAC that completed the inspection; used for all inspection types reported on equipment

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Inspection Reporter **REPT**

The SCAC that reported the inspection; used for all inspection types reported on equipment

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Location/SPLC **SPLC**

The SPLC of the inspecting location; used for all inspection types reported on equipment

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Air Brake Test Device **B523**

Indicates the type of test device used to perform the Air Brake Test ✹

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Permissible Values for B523

A Automatic (Non 4-Pressure)
M Manual
P Automatic (4-Pressure)

Validation Rule for B523

-Air Brake Test Device (B523) must be reported for Air Brake Test inspection reported on or after December 10, 2020

Insp Service Valve COTS Date **B570**

Brake valve service portion recondition date

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

NOTES:

- Reports of 9999 will be allowed in case the date is illegible and the valve cannot be replaced immediately.
- Valid date format: MMYY

Insp Service Valve OEM Warranty Date **B571**

Brake valve service portion Original Equipment Manufacturer warranty date

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

NOTES:

- Reports of 999999 will be allowed in case the date is illegible and the valve cannot be replaced immediately.
- Valid date format: MMYYYY

Insp Service Valve Part Number **B572**

Brake valve service portion part number

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Insp Emergency Valve COTS Date **B573**

Brake valve emergency portion recondition date

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

NOTES:

- Reports of 9999 will be allowed in case the date is illegible and the valve cannot be replaced immediately.
- Valid date format: MMYY

Insp Emergency Valve OEM Warranty Date **B574**

Brake valve emergency portion Original Equipment Manufacturer warranty date

System generated element. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

NOTES:

- Reports of 999999 will be allowed in case the date is illegible and the valve cannot be replaced immediately.
- Valid date format: MMYYYY

Insp Emergency Valve Part Number **B575**

Brake valve emergency portion part number

System generated element. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Insp Service Valve Location *Mandatory* **B576**

Brake valve service portion location ●

Value does not carry forward for Single Clone / Multi-Clone.

Insp Emergency Valve Location *Mandatory* **B577**

Brake valve emergency portion location reported on an emergency brake valve inspection ●

Value does not carry forward for Single Clone / Multi-Clone.

Miscellaneous Cars

General

Status Code *Mandatory* — **USCD**

Identifies the current operational state ●

Does not Carry Forward.

Permissible Values for USCD

A	ACTIVE	I	INACTIVE
P	PRE-REGISTERED		

NOTES:

- For Restencil and Clone process the initial Status of a car should be Pre-Registered.
- All Add-Back processes should initially set the Status to Pre-Registered
- A Pre-registered car will automatically have its Status changed to Active for the initial change when TRAIN detects three (3) movements on the car
- If the Status changes to Active due to movement and the car was created from a Restencil, the Prior Equipment ID (PRID) or source car will have its status changed to Inactive automatically by Umler

Equipment ID — **0001**

The equipment stenciled number

Validation Rule for 0001

-Equipment Number must not be larger than 6 digits (i.e., 999999)

NOTES:

- Equipment ID includes the mark and number stenciled on the equipment. Marks can be up to 4 characters and number up to 6 digits (i.e., ABCD999999).
- Up to 500 cars can be added or updated in a transaction.
- When adding an equipment record, ensure that Prior Equipment ID (PRID) is reported, unless the equipment is new.

Mechanical Designation *Mandatory* — **UMMD**

Equipment description without physical dimensions ●▲

Used in ETC Generation. Used for Transportation Codes.

Permissible Values for UMMD

MFND	Fuel Tender Diesel (Non-tank)
MFTD	Fuel Tender Diesel (Tank)
MFNG	Natural Gas Fuel Tender (Non-tank)
MFTG	Natural Gas Fuel Tender (Tank)
MS	MoW - Scale Test Car
MT	MoW - Training Unit
MW	MoW - Miscellaneous
MWB	MoW - Ballast Car
MWD	MoW - Side Dump Cars
MWDC	Retired Mechanical Designation
MWE	MoW - Ballast Spreader
MWF	MoW - Flats
MWG	MoW - Section Gang or Track Inspection Car
MWK	MoW - Snow Removal Equipment
MWM	MoW - Box cars
MWP	MoW - Pile Driver
MWRC	MoW - Remote Control Equipment
MWS	MoW - Hoist Crane
MWSP	MoW - Shoving Platform
MWW	MoW - Wrecking Derrick
MWX	MoW - Boarding/Camp car
NE	MoW - Caboose

Validation Rule for UMMD

-Outside Length cannot be greater than 190 feet for equipment without the Mechanical Designation MWG in the MISC Group

Equipment Type Code — **UMET**

An alpha numeric code that describes the physical attributes of equipment

System Generated Field. This element is not eligible for Input.

NOTES:

- Please Refer to Appendix I for More information Regarding ETC Generation

Maint of Way Service Type — **B403**

Identifies equipment Maintenance Of Way function

Permissible Values for B403

A1	Box Car
B1	Ballast Car
C1	Crane
C2	Crane / Boom Support Car
D1	Body Side Dump Car
F1	Flat Car
F2	Road Way Equipment Carrier
F3	Ramp Unit
F4	Flat-Wheel Sets
G1	Gondola
L1	Flat-Load Up
P1	Plow
R1	Welded Rail Flat Car
S1	Shoving Platform
S2	Scale Test Car
T1	Cross Tie Car
T2	Track Panel Car
T3	Switch Panel Car
T4	Training Car
T5	TANK Training Car
T6	Diesel Fuel Tender
T7	Water Fuel Tender
T8	Track Geometry Car
R2	Welded Rail Gondola Car

Built Date *Mandatory* — **BLDT**

The date the construction of the equipment is complete ●■

Data is Confidential. Used for Transportation Codes. Affects Rating. Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for BLDT

Minimum	Maximum
1/1/1900	12/31/9999

Validation Rule for BLDT

-Built Date must be within the last 99 years

-Built Date must not be in the future for equipment in Active Status

-Prior and target equipment's Built Date (BLDT) must match for restenciling

-Built Date cannot be updated within 30 days of the End of Service Date (B078)

NOTES:

- Data is public for railroad marked equipment.
- For connected unit cars report the oldest car in the set.

Rebuilt / ILS Date — **RBDT**

The date the re-construction of the equipment is complete

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for RBDT

Minimum	Maximum
1/1/1900	12/31/9999

Validation Rule for RBDT

-Rebuilt/Increased Life Service Date must be after the Built Date (BLDT)

-Rebuilt Date must not be more than 70 years after the Built Date (BLDT)

-Rebuilt Date is required for Extended Service Code (A096) 1, 2, or 3 for Increased Life Service

-Rebuilt Date is required for Extended Service Code (A096) R for Rebuilt, or V for 65 years of service

-If Rebuilt Date is reported then the Extended Service Code (A096) must be reported as R for Rebuilt, V, 1, 2, or 3 for Increased Life Service

NOTES:

- Railroad cars -- applicable only to cars meeting status as provided in both STB Accounting Rules, and the AAR Mechanical Interchange Rule 88, Office Manual.
- Private cars -- applicable to all cars meeting AAR Mechanical Interchange Rule 88, Section C, Office Manual and Sections A and B of the Field Manual.
- For connected unit cars report the oldest car in the set. Do not report Rebuilt Date unless car has been approved by the AAR.

Rebuilt Flag	RBFL
Identifies the equipment is nearing its end of life cycle	

Data is Confidential. System Generated Field. This element is not eligible for Input.

Permissible Values for RBFL

N No Y Yes

Owner *Mandatory*	UMOW
Primary reporting mark of the railroad or private company owning the car ●	

Value does not carry forward for Single Clone / Multi-Clone / Single Restencil / Multi-Restencil.

NOTES:

- Report the primary reporting mark of the railroad or private company owning the car. When car's lease or lien is held by a bank, trust holder, capital lease company, etc. not having an assigned mark, report the primary reporting mark affiliated with the stenciled reporting mark.

Equipment Group *Mandatory*	0002
Identifies the various major car types ● ■	

Used for Transportation Codes. Affects Rating.

Lessee	LESE
The reporting mark of the company leasing the equipment	

Value does not carry forward for Single Clone / Multi-Clone / Single Restencil / Multi-Restencil.

Validation Rule for LESE

-Umler Owner (UMOW) and Lessee are not allowed to be equal

-Lessee cannot be a child reporting mark

Maintenance Party	MNPT
The parent reporting mark of the company responsible for the maintenance and repairs of the equipment	

Does not Carry Forward.

Mark Owner Category	B201
The company that owns the stenciled mark on the car	

System Generated Field. This element is not eligible for Input. Value does not carry forward for Single Restencil / Multi-Restencil / Equipment Group Change / Add Back.

Permissible Values for B201

B US Private
C Canadian Private
F Foreign Private
H Canadian Class II
I Canadian Class I
J Mexican Class I
K Canadian Class III
M Mexican Private
N US Private Steamship
O Canadian Private Steamship
P Mexican Private Steamship
Q Foreign Private Steamship
R US Class II Railroad
U US Class I Railroad
V US Class III Railroad
W Mexican Class II Railroad
Y Mexican Class III Railroad

NOTES:

- This value is stored in the Umler Database for informational purposes and is retrieved from the Roadmark Registry.

Prior Equipment ID	PRID
The previous reporting mark and number of the equipment	

Value does not carry forward for Single Clone / Multi-Clone.

Validation Rule for PRID

-Prior and target equipment's Built Date (BLDT) must match

-The Prior Equipment ID (0001) must belong to the same or comparable Equipment Group (0002) as the current car initial and number

NOTES:

- Prior ID enables equipment records to share the same historical lineage. Equipment Identification Number (EIN) is a generated id that enables these equipment records to share inspections and transaction history.

Last Update Date	B122
Date of the last Umler element change	

System Generated Field. This element is not eligible for Input.

Equipment Add Date	B082
Date the reporting mark and number was added to the Umler system	

System Generated Field. This element is not eligible for Input.

Status Change Reason	USCR
Identifies the reason for the current operational state	

System Generated Field. This element is not eligible for Input. Does not Carry Forward.

Permissible Values for USCR

I Initial Load
M Movement
O Status Changed Manually
R Restencil

NOTES:

- If movement is detected on equipment, status is changed to Active.
- If an equipment record is changed to Active, any prior equipment record is placed in Inactive status.

Status Change Date	USCT
Identifies the effective date of the current operational state	

System Generated Field. This element is not eligible for Input. Does not Carry Forward.

Extended Service *Mandatory*	A096
A code indicating the eligibility of an increase to the life cycle ●	

Used for Transportation Codes. Value does not carry forward for Single Clone / Multi-Clone.

Permissible Values for A096

1 1st ILS Inspection, additional 5 years of Service
2 2nd ILS Inspection, additional 5 years of service (10 years total)
3 3rd ILS Inspection, additional 5 years of service (15 years total)
C Built New between January 1, 1964 - June 30, 1974, Certified for 50 Years of Service, Built New Before July 1, 1974 & Received AAR Waiver
E Built new from July 1,1974, Qualified for 50 Years Service
N Built Before January 1, 1964, Qualified for 40 Years Service
R Rule 88, Rebuilt cars
U Built between January 1, 1964 - June 30, 1974, Qualified for 40 Years & eligible for certification for 50 Years Service

V Car is certified (FRA Waiver & AAR) for 65 years of service from date built new from January 1, 1964

Validation Rule for A096

-If Rebuilt Date (RBDT) is reported, then the Extended Service Code (A096) must be reported as R for Rebuilt, V, 1, 2, or 3 for Increased Life Service

-Extended Service Code of C cannot be reported if the car was built before January 1, 1964 or on/after July 1, 1974

-Extended Service Code of E cannot be reported if the car was built before July 1, 1974

-Extended Service Code of N cannot be reported if the car was built on/after January 1, 1964

-Extended Service Code of U cannot be reported if the car was built before January 1, 1964 or on/after July 1, 1974

NOTES:

- Value is used to calculate End of Service Date (B078).
- Rebuilt Date (RBDT) is required for Extended Service Code (A096) R for Rebuilt, or V for 65 years service.
- Rebuilt Date (RBDT) is required for Extended Service Code (A096) 1, 2, 3, and V for Increased Life Service.

End of Service Date — B078

Indicates the date of the end of equipment life

Data is Confidential. System Generated Field. This element is not eligible for Input.

NOTES:

Data becomes non-confidential two years prior to End of Service Date.

Equipment Identification — EINN

Unique equipment identifier regardless of stenciled mark

System Generated Field. This element is not eligible for Input.

NOTES:

- Specify the Prior ID (PRID) on equipment records to ensure the historical lineage is preserved. Equipment with the same EIN share history and inspections.

Info Conflict Status — B355

Indicates that an Informational Conflict exists on the Equipment record

System Generated Field. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Conflict Status — B050

Identifies the escalation level of equipment in active conflict

System Generated Field. This element is not eligible for Input. Value does not carry forward for Add Back.

Permissible Values for B050

1 Subject to Zero-Rating
2 Subject to Restricted in Interchange
3 Subject to Deletion

NOTES:

- Subject to Zero-Rating, goes into effect 30 days after Conflict Status occurs
- Subject to Restricted in Interchange, goes into effect 90 days after Conflict Status occurs
- Subject to Deletion, goes into effect 365 days after Conflict Status occurs

Date of Original Conflict — B063

The date the equipment was originally placed in the current conflict

System Generated Field. This element is not eligible for Input.

Next Conflict Status — B135

Identifies the next escalation level of an equipment in active conflict

System Generated Field. This element is not eligible for Input. Value does not carry forward for Add Back.

Permissible Values for B135

1 Subject to Zero-Rating
2 Subject to Restricted in Interchange
3 Subject to Deletion

NOTES:

- Subject to Zero-Rating, goes into effect 30 days after Conflict Status occurs
- Subject to Restricted in Interchange, goes into effect 90 days after Conflict Status occurs
- Subject to Deletion, goes into effect 365 days after Conflict Status occurs

Notice Indicator — B137

Identifies equipment in error in Umler Notice Management

System Generated Field. This element is not eligible for Input.

Conflict Status Next Date — B062

The date the conflict status will be escalated

System Generated Field. This element is not eligible for Input. Value does not carry forward for Add Back.

Rate Indicator — A070

Indicates the rate type applicable to the unit

System Generated Field. Used for Transportation Codes. Affects Rating. This element is not eligible for Input. Does not Carry Forward.

Permissible Values for A070

0 Zero-Rated Due to Conflict Errors
6 Zero-Rated - Scrap (S_,SX), AAR Overage (XA), FRA Overage (YA), Umler Conflict - CHR 1/Tarriff 6007 (XZ). Zero-Rated Private Owner Election to Zero Rate [See Private Zero Rate (B150)].

NOTES:

- If unit is zero-rated, correction of conflicts will reinstate the appropriate rate indicator code.

First Movement Date — USAT

The first movement date under the stenciled mark of the equipment

This element is not eligible for Input. Does not Carry Forward.

Equipment Add Company — B083

The reporting mark of the company that added the equipment

System Generated Field. This element is not eligible for Input.

Registration Reason — B174

The code indicating the reason this equipment is added

Does not Carry Forward.

Permissible Values for B174

A Add-Back
N New
P Pending Restencil
R Restencil

Restencil Program Ind — B177

Identifies the equipment is under a restencil program

Permissible Values for B177

Y Yes

Delete Reason Code — B064

A code that designates the reason the equipment has been deleted

Value does not carry forward for Add Back.

Permissible Values for B064

A Restenciled
D Destroyed or wrecked
L Lease terminated, removed from fleet
P Retired unserviceable beyond economic repair
R Rebuilt
S Sold Serviceable
W Over age retired for dismantling
Y Error, reporting did not exist

Z Other

Non-Compliant Wheelsets B544

Equipment record is incomplete and has a missing wheelset component ID association. Refer to AAR Field Manual Rule 44 for industry requirements ✹

System Generated Field. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Validation Rule for B544

-A Wheelset Component ID is required for each applicable location on equipment built on or after January 1, 2016

-A Wheelset Component ID is required for each applicable location on equipment rebuilt on or after January 1, 2016 and Gross Rail Load (A266) is greater than 268,000 lbs

NOTES:

- A "Y" will be system generated if the equipment is active and the number of Wheelset CID's required is not equal to the Axle Count (A024) on the equipment
- Validation rule applies to equipment that has been in Active status for 60 days

Weight

Gross Rail Load/Weight A266

The maximum permissible weight on rail of the equipment and the load, reported in pounds

Range of Values for A266

Minimum	Maximum
9000	1000000

Validation Rule for A266

-UnStarred 4 Axle Cars with a Journal Size of G must have a Gross Weight equal to 315,000 lbs.

-Gross Rail Load must be equal to the Load Limit (LDLT) plus the Tare Weight (A259)

NOTES:

Use Table 1 below to determine Gross Rail Load, if Qualification for Increased Gross Rail Load (B344) does not exist.

TABLE 1 -

Journal Size	Load per Axle	Gross Rail Load for 4-axle Equipment
B - 4 1/2" x 8"	25,750 lbs.	103,000 lbs.
C - 5" x 9"	35,500 lbs.	142,000 lbs.
D - 5 1/2" x 10"	44,250 lbs.	177,000 lbs.
E - 6" x 11"	55,000 lbs.	220,000 lbs.
F - 6 1/2" x 12"	65,750 lbs.	263,000 lbs.
G - 7" x 12"	78,750 lbs.	315,000 lbs.
K - 6 1/2" x 9"	71,500 lbs.	263,000 lbs.
M - 7" x 9"	78,750 lbs.	315,000 lbs.

Use Table 2 below to determine Gross Rail Load for 4-axle equipment if Qualification for Increased Gross Rail Load (B344) exists.

TABLE 2 -

Qualification for Increased Gross Rail Load (B344)	Journal Size	Gross Rail Load
1	K - 6 1/2" x 9"	286,000 lbs.
1	G - 7" x 12"	286,000 lbs.
1	M - 7" x 9"	286,000 lbs.
2	F - 6 1/2" x 12"	286,000 lbs.
2	K - 6 1/2" x 9"	286,000 lbs.
3	F - 6 1/2" x 12"	268,000 lbs.
3	K - 6 1/2" x 9"	268,000 lbs.

- For multi-unit equipment, report the total gross rail load for the entire set.
- Refer to Field Manual Rule 70 if additional information is required.

A Gross Rail Load less than the listed or calculated values may be entered; however:

- Star Code (A247) must be R or S, and
- Load Limit (LDLT) must also be reduced, ensuring Tare Weight (A259) plus Load Limit (LDLT) equals the reported Gross Rail Load.

For equipment having two or more different journal sizes, see following examples:

Example for Drawbar Connected:

- A 3-unit drawbar connected car has 12 axles.
- The end units (Locations A and B) each have 4 axles with E - 6" x 11" journals.
- The intermediate unit (Locations C) has 4 axles with F – 6 1/2" x 12" journals

Using TABLE 1, the Gross Rail Load would be:

8 ea. E-6" x 11" journal axles X 55,000 lbs. per axle = 440,000 lbs.
+ 4 ea. F-6 1/2" x 12" journal axles X 65,750 lbs. per axle = 263,000 lbs.
Gross Rail Load = 703,000 lbs.

Example for Articulated Connected:

- A 5-unit articulated intermodal car has 6 trucks (12 axles).
- The end trucks (Locations A and B) each have 2 axles with E - 6" x 11" journals.
- The intermediate trucks (Locations C, D, E, and F) each have 2 axles with G - 7" x 12" journals

Using TABLE 1, the Gross Rail Load would be:

4 ea. E-6" x 11" journal axles X 55,000 lbs. per axle = 220,000 lbs.
+ 8 ea. G-7" x 12" journal axles X 78,750 lbs. per axle = 630,000 lbs.
Gross Rail Load = 850,000 lbs.

Tare Weight A259

The equipment weight on rail when empty, sometimes referred to as Light Weight, reported in pounds

Range of Values for A259

Minimum	Maximum
16000	500000

Validation Rule for A259

- Tare Weight (A259) value must be reported to the nearest 100 pounds if Weighing Date (A288).

NOTES:

- Do not report an average Tare Wt. for car series, except for Pre-Registered cars
- When cars are made active, the actual Tare Wt. must be recorded

Load Limit *Mandatory* LDLT

The maximum permissible weight of the commodity that can be loaded into the equipment, reported in pounds ●

Range of Values for LDLT

Minimum	Maximum
8000	999900

NOTES:

- For connected unit cars report the sum of the load limits for all units in the set.

Weighing Status *Mandatory* A289

Indicates the weight information is an estimate or an actual measurement ●

Value does not carry forward for Single Clone / Multi-Clone.

Permissible Values for A289

A	Actual
E	Estimated
V	Verified correct Tare Weight
X	Tare Weight subject to verification (System Generated)

Validation Rule for A289

-Equipment cannot be within a series of 10 with identical Tare Weights (A259), refer to Appendix P for further information on resolving tare weight conflicts

Weighing Date — A288

The date the equipment was actually weighed

Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for A288

Minimum	Maximum
1/1/1900	12/31/9999

Validation Rule for A288

-If Weighing Date is reported the Tare Weight (A259) must be reported

-When Weighing Date is reported then Weighing Status (A289) must be A (Actual) or V (Verified)

-If Weighing Status (A289) is A (Actual) or V (Verified correct Tare Weight) then Weighing Date must be reported

-Weighing Date must be on or before the current date

-Weighing Date cannot be before Built / Rebuilt date

Cubic Feet Capacity — A067

The maximum interior cubic feet capacity of the equipment

NOTES:

- For connected unit cars report the sum of all units cubic capacity.

Star Code — A247

Indicates a reduction of the Load Limit (LDLT) of the equipment per AAR Rule 70 ■

Affects Rating.

Permissible Values for A247

R	Body Capacity less than Truck Capacity
S	Reduced Load Limit

Validation Rule for A247

-4-axle Cars with Star Codes of S or R must not exceed Gross Weight of 263,000 lbs. when Journal Size is A, B, C, D, or E

-Journal Sizes having Star Code of S must have a Gross Weight that is less than the calculated Gross Weight with rounding applied

-UnStarred 4 Axle Cars reporting Increased Gross Rail Load (IGRL) of 2 or 3 must have a Gross Weight greater than or equal to 264,000 lbs.

-Starred 4 axle cars with IGRL of 1 must have a Wheel Size of 36 inches when Gross Weight is less than 286,000 lbs.

-Starred 4 Axle Cars with Increased Gross Rail Load (IGRL) reported must have a Journal Size of K, G, or M

Qual for Inc GRL — B344

AAR qualification for increased Rail Load Code designating AAR approval for operating 4-axle equipment at a gross rail load greater than 263,000 lbs per AAR Rule 88

Permissible Values for B344

1	Rule 88 IGRL Code 1 (> 263,000 lbs. and <= 286,000 lbs. GRL per AAR Specification S-286)
2	Rule 88 IGRL Code 2 (> 263,000 lbs. and <= 286,000 lbs. GRL)
3	Rule 88 IGRL Code 3 (> 263,000 lbs. and <= 268,000 lbs. GRL)

Validation Rule for B344

-4-axle Cars reporting Increased Gross Rail Load (IGRL) of 3, or reporting IGRL of 1 or 2 and having an S Star Code must have a Gross Weight that does not exceed 286,000 lbs.

-4-axle Cars with Increased Gross Rail Load (IGRL) of 2 or 3 must have a Journal Size of F or K

-4-axle Rule 88 Cars require a Wheel Size of 36 or 38 inches for Gross Weight greater than 263,000 and less than or equal to 286,000 lbs.

-4-axle Cars with Increased Gross Rail Load (IGRL) of 1 or 2 having no Star Code and a Journal Size of other than F or K, must have a Gross Weight greater than or equal to 263,000 lbs. and less than or equal to 286,000 lbs.

-4-axle equipment with Increased Gross Rail Load (IGRL) of 1 and having no Star Code (A247) must have a Journal Size (A147) of G, K, or M

-4-axle equipment having Qualification for Increased Gross Rail Load of 2 or 3 must have a Journal Size (A147) of F or K

-Unstarred 4 Axle Cars with Increased Gross Rail Load of 2 or IGRL of 1 and Journal Size K must have a Wheel Size of 36 inches

-Unstarred 4 Axle Cars with GRL of 315,000 and no IGRL reported and Unstarred cars with Journal Size of G or M must have a Wheel Size of 38 inches

-Unstarred 4 axle cars must report Qualifications for Increased GRL if the GRL is between 263,000 and 315,000

Dimension

Plate Code *Mandatory* — A046

Indicates the extreme height and width clearance of the equipment ●

Permissible Values for A046

B	Plate Code B
C	Plate Code C
E	Plate Code E
F	Plate Code F
G	Clearance Code G
H	Plate Code H
J	Plate Code J
K	Plate Code K
L	Plate Code L
M	Plate Code M
N	Plate Code N

NOTES:

- For a description of Plate Codes, please see Appendix J at the back of this manual.
  - Report B: If clearance does not exceed Plate B
  - Report C: If clearance is greater than Plate B. but does not exceed Plate C
  - Report E: If clearance is greater than Plates B and C, but does not exceed Plate E.
  - Report F: If clearance is greater than Plates B, C and E, but does not exceed Plate F
  - Report G: If clearance exceeds Plates B, C, E, F. and N.
  - Report N: If clearance is greater than Plates B, C, E, and F, but does not exceed Plate N.
- There is no AAR Plate G. Clearance Code G is included in Umler to represent equipment that does not fit any existing AAR clearance plates.
- For ARTICULATED/MULTI-UNIT SET report the most restrictive clearance plate of UNIT in the set.

Outside Length *Mandatory* — OSLG

The outside length over pulling faces of couplers in normal position ● ■

Affects Rating. Displayed in feet and inches on the Web. Stored in inches.

Range of Values for OSLG

Minimum	Maximum
13 ft 0 inches	225 ft 0 inches

NOTES:

- For connected unit cars report the maximum coupled length of the set.
- Round fraction to the higher inch, e.g., 05 1/4" = 06"

Outside Extreme Width *Mandatory* — A186

The outside extreme width of the equipment ●

Displayed in feet and inches on the Web. Stored in inches.

Range of Values for A186

Minimum	Maximum
7 ft 0 inches	11 ft 10 inches

Validation Rule for A186

-Outside Extreme Width must not exceed 10 feet 8 inches for Plate Codes B, C, E, F, or N
-Outside Extreme Width (A186) for Plate Code A must not be less than 10 feet 8 inches.
-Outside Extreme Width (A186) for Plate Code A must not exceed 10 feet 10 inches.

NOTES:
- For connected unit cars report the dimension of the largest unit in the set.
- Round fraction to the higher inch, e.g., 05 1/4" = 06"

Outside Extreme Height **A185**

Height from top of rail to extreme projecting height

Displayed in feet and inches on the Web. Stored in inches.

Range of Values for A185

Minimum	Maximum
2 ft 0 inches	21 ft 0 inches

Validation Rule for A185

-Outside Extreme Height for Plate Codes A, B, or H must be less than or equal to 15 feet 1 inch
-Outside Extreme Height for Plate Codes C or I must be less than or equal to 15 feet 6 inches
-Outside Extreme Height for Plate Code E must be less than or equal to 15 feet 9 inches
-Outside Extreme Height for Plate Code F must be less than or equal to 17 feet 0 inch
-Outside Extreme Height for Plate Code N must be less than or equal to 17 feet 1 inch

NOTES:
- For connected unit cars report the dimension of the largest unit in the set.
- Round fraction to the higher inch, e.g., 05 1/4" = 06"

Outside Height Extr Width **A187**

The highest point at which the extreme width of the equipment occurs

Displayed in feet and inches on the Web. Stored in inches.

Range of Values for A187

Minimum	Maximum
1 ft 0 inches	18 ft 0 inches

Validation Rule for A187

-Outside Extreme Width (A186) for Plate Codes B must not exceed 10 feet 8 inches if Outside Height Extreme Width is 13 feet 10 inches or less
-Outside Extreme Width (A186) for Plate Codes B must not exceed 10 feet 7 inches if Outside Height Extreme Width is 13 feet 11 inches
-Outside Extreme Width (A186) for Plate Codes B must not exceed 10 feet 6 inches if Outside Height Extreme Width is 14 feet 0 inches
-Outside Extreme Width (A186) for Plate Codes B must not exceed 10 feet 4 inches if Outside Height Extreme Width is 14 feet 1 inches
-Outside Extreme Width (A186) for Plate Codes B must not exceed 10 feet 3 inches if Outside Height Extreme Width is 14 feet 2 inches
-Outside Extreme Width (A186) for Plate Codes B must not exceed 10 feet 2 inches if Outside Height Extreme Width is 14 feet 3 inches
-Outside Extreme Width (A186) for Plate Codes B must not exceed 10 feet 0 inches if Outside Height Extreme Width is 14 feet 4 inches
-Outside Extreme Width (A186) for Plate Codes B must not exceed 9 feet 9 inches if Outside Height Extreme Width is 14 feet 5 inches
-Outside Extreme Width (A186) for Plate Codes B must not exceed 9 feet 5 inches if Outside Height Extreme Width is 14 feet 6 inches
-Outside Extreme Width (A186) for Plate Codes B must not exceed 9 feet 2 inches if Outside Height Extreme Width is 14 feet 7 inches
-Outside Extreme Width (A186) for Plate Codes B must not exceed 8 feet 10 inches if Outside Height Extreme Width is 14 feet 8 inches
-Outside Extreme Width (A186) for Plate Codes B must not exceed 8 feet 6 inches if Outside Height Extreme Width is 14 feet 9 inches
-Outside Extreme Width (A186) for Plate Codes B must not exceed 8 feet 3 inches if Outside Height Extreme Width is 14 feet 10 inches
-Outside Extreme Width (A186) for Plate Codes B must not exceed 7 feet 11 inches if Outside Height Extreme Width is 14 feet 11 inches
-Outside Extreme Width (A186) for Plate Codes B must not exceed 7 feet 6 inches if Outside Height Extreme Width is 15 feet 0 inches
-Outside Extreme Width (A186) for Plate Codes B must not exceed 7 feet 4 inches if Outside Height Extreme Width is 15 feet 1 inches
-Outside Extreme Width (A186) for Plate Codes C must not exceed 10 feet 8 inches if Outside Height Extreme Width is 14 feet 3 inches or less
-Outside Extreme Width (A186) for Plate Codes C must not exceed 10 feet 7 inches if Outside Height Extreme Width is 14 feet 4 inches
-Outside Extreme Width (A186) for Plate Codes C must not exceed 10 feet 6 inches if Outside Height Extreme Width is 14 feet 5 inches
-Outside Extreme Width (A186) for Plate Codes C must not exceed 10 feet 4 inches if Outside Height Extreme Width is 14 feet 6 inches
-Outside Extreme Width (A186) for Plate Codes C must not exceed 10 feet 3 inches if Outside Height Extreme Width is 14 feet 7 inches
-Outside Extreme Width (A186) for Plate Codes C must not exceed 10 feet 2 inches if Outside Height Extreme Width is 14 feet 8 inches
-Outside Extreme Width (A186) for Plate Codes C must not exceed 10 feet 0 inches if Outside Height Extreme Width is 14 feet 9 inches
-Outside Extreme Width (A186) for Plate Codes C must not exceed 9 feet 9 inches if Outside Height Extreme Width is 14 feet 10 inches
-Outside Extreme Width (A186) for Plate Codes C must not exceed 9 feet 5 inches if Outside Height Extreme Width is 14 feet 11 inches
-Outside Extreme Width (A186) for Plate Codes C must not exceed 9 feet 2 inches if Outside Height Extreme Width is 15 feet 0 inches
-Outside Extreme Width (A186) for Plate Codes C must not exceed 8 feet 10 inches if Outside Height Extreme Width is 15 feet 1 inches
-Outside Extreme Width (A186) for Plate Codes C must not exceed 8 feet 6 inches if Outside Height Extreme Width is 15 feet 2 inches
-Outside Extreme Width (A186) for Plate Codes C must not exceed 8 feet 3 inches if Outside Height Extreme Width is 15 feet 3 inches
-Outside Extreme Width (A186) for Plate Codes C must not exceed 7 feet 11 inches if Outside Height Extreme Width is 15 feet 4 inches
-Outside Extreme Width (A186) for Plate Codes C must not exceed 7 feet 8 inches if Outside Height Extreme Width is 15 feet 5 inches
-Outside Extreme Width (A186) for Plate Codes C must not exceed 7 feet 4 inches if Outside Height Extreme Width is 15 feet 6 inches
-Outside Extreme Width (A186) for Plate Code E must not exceed 10 feet 8 inches if Outside Height Extreme Width is 15 feet 2 inches or less
-Outside Extreme Width (A186) for Plate Code E must not exceed 10 feet 6 inches if Outside Height Extreme Width is 15 feet 3 inches
-Outside Extreme Width (A186) for Plate Code E must not exceed 10 feet 3 inches if Outside Height Extreme Width is 15 feet 4 inches
-Outside Extreme Width (A186) for Plate Code E must not exceed 9 feet 6 inches if Outside Height Extreme Width is 15 feet 5 inches
-Outside Extreme Width (A186) for Plate Code E must not exceed 8 feet 8 inches if Outside Height Extreme Width is 15 feet 6 inches
-Outside Extreme Width (A186) for Plate Code E must not exceed 7 feet 11 inches if Outside Height Extreme Width is 15 feet 7 inches
-Outside Extreme Width (A186) for Plate Code E must not exceed 7 feet 1 inches if Outside Height Extreme Width is 15 feet 8 inches
-Outside Extreme Width (A186) for Plate Code E must not exceed 6 feet 3 inches if Outside Height Extreme Width is 15 feet 9 inches
-Outside Extreme Width (A186) for Plate Code F must not exceed 10 feet 8 inches if Outside Height Extreme Width is 16 feet 3 inches or less
-Outside Extreme Width (A186) for Plate Code F must not exceed 10 feet 7 inches if Outside Height Extreme Width is between 16 feet and 4 inches and 16 feet 6 inches
-Outside Extreme Width (A186) for Plate Code F must not exceed 10 feet 6 inches if Outside Height Extreme Width is 16 feet 7 inches
-Outside Extreme Width (A186) for Plate Code F must not exceed 10 feet 3 inches if Outside Height Extreme Width is 16 feet 8 inches
-Outside Extreme Width (A186) for Plate Code F must not exceed 10 feet 0 inches if Outside Height Extreme Width is 16 feet 9 inches
-Outside Extreme Width (A186) for Plate Code F must not exceed 9 feet 8 inches if Outside Height Extreme Width is 16 feet 10 inches
-Outside Extreme Width (A186) for Plate Code F must not exceed 9 feet 5 inches if Outside Height Extreme Width is 16 feet 11inches

-Outside Extreme Width (A186) for Plate Code F must not exceed 9 feet 2 inches if Outside Height Extreme Width is 17 feet 0 inches
-Outside Extreme Width (A186) for Plate Code J must not exceed 10 feet 8 inches if Outside Height Extreme Width is 16 feet 4 inches or less
-Outside Extreme Width (A186) for Plate Code K must not exceed 10 feet 8 inches if Outside Height Extreme Width is 18 feet 5 inches or less
-Outside Extreme Width (A186) for Plate Code N must not exceed 10 feet 8 inches if Outside Height Extreme Width (A187) is 16 feet 9 inches or less
-Outside Extreme Width (A186) for Plate Code N must not exceed 10 feet 6 inches if Outside Height Extreme Width (A187) is 16 feet 10 inches
-Outside Extreme Width (A186) for Plate Code N must not exceed 10 feet 4 inches if Outside Height Extreme Width (A187) is 16 feet 11 inches
-Outside Extreme Width (A186) for Plate Code N must not exceed 10 feet 2 inches if Outside Height Extreme Width (A187) is 17 feet 0 inches
-Outside Extreme Width (A186) for Plate Code N must not exceed 9 feet 11 inches if Outside Height Extreme Width (A187) is 17 feet 1 inch

NOTES:

- For connected unit cars report the dimension of the largest unit in the set.
- Round fraction to the higher inch, e.g., 05 1/4" = 06"

Outside Upper Eaves Width — A194

The width between the outside uppermost corners of the equipment

Displayed in feet and inches on the Web. Stored in inches.

Range of Values for A194

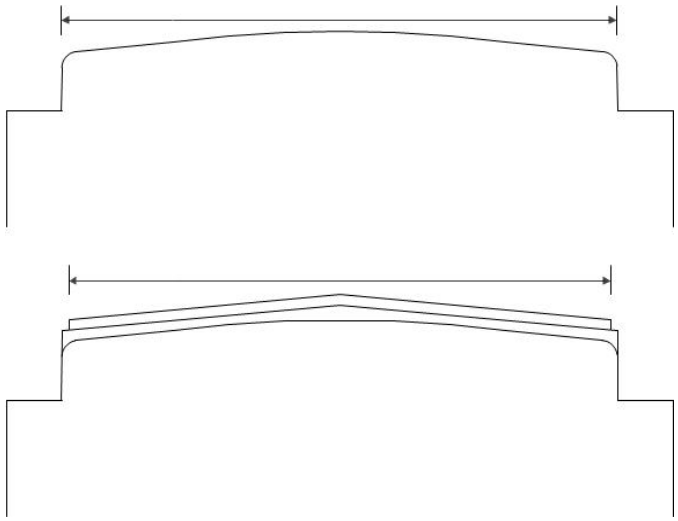
Minimum	Maximum
4 ft 0 inches	10 ft 10 inches

Validation Rule for A194

-Outside Upper Eaves Width must be less than or equal to the Outside Extreme Width (A186)
-Outside Upper Eaves Width must be less than or equal to the Outside Lower Eaves Width (A190)
-Outside Upper Eaves Width for Plate Code A must not exceed 10 feet 10 inches
-Outside Upper Eaves Width for Plate Code B, C, E, F, H, or I must not exceed 10 feet 8 inches
-Outside Upper Eaves Width for Plate Code N must not exceed 10 feet 8 inches if Outside Upper Eaves Height (A193) is 16 feet 9 inches or less
-Outside Upper Eaves Width for Plate Code N must not exceed 10 feet 6 inches if Outside Upper Eaves Height (A193) is 16 feet 10 inches
-Outside Upper Eaves Width for Plate Code N must not exceed 10 feet 4 inches if Outside Upper Eaves Height (A193) is 16 feet 11 inches
-Outside Upper Eaves Width for Plate Code N must not exceed 10 feet 2 inches if Outside Upper Eaves Height (A193) is 17 feet 0 inches
-Outside Upper Eaves Width for Plate Code N must not exceed 9 feet 11 inches if Outside Upper Eaves Height (A193) is 17 feet 1 inch

NOTES:

- For connected unit cars report the dimension of the largest unit in the set



Outside Upper Eaves Hght — A193

Height from the top of rail to the uppermost outside corner of the equipment

Displayed in feet and inches on the Web. Stored in inches.

Range of Values for A193

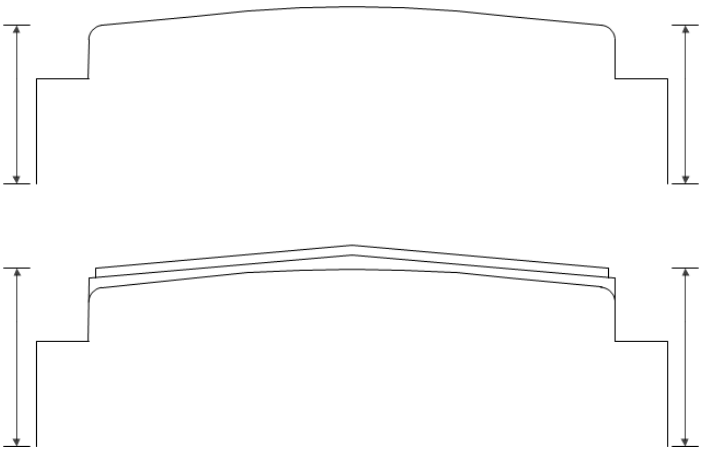
Minimum	Maximum
2 ft 0 inches	17 ft 11 inches

Validation Rule for A193

-Outside Upper Eaves Height must not exceed the Outside Extreme Height
-Outside Upper Eaves Height must be greater than or equal to the Outside Lower Eaves Height (A189)
-Outside Upper Eaves Height for Plate Codes A, B, or H must not exceed 15 feet 1 inch
-Outside Upper Eaves Height for Plate Codes C or I must not exceed 15 feet 6 inches
-Outside Upper Eaves Height for Plate Code E must not exceed 15 feet 9 inches
-Outside Upper Eaves Height for Plate Code F must not exceed 17 feet 0 inches
-Outside Upper Eaves Height for Plate Code N must not exceed 17 feet 1 inch

NOTES:

- For connected unit cars report the dimension of the largest unit in the set.



Outside Lower Eaves Width — A190

Width over lower eaves at sides of car (see diagram)

Displayed in feet and inches on the Web. Stored in inches.

Range of Values for A190

Minimum	Maximum
7 ft 0 inches	10 ft 10 inches

Validation Rule for A190

-Outside Lower Eaves Width must not exceed the Outside Extreme Width (A186)

-Outside Lower Eaves Width for Plate Code A must not exceed 10 feet 10 inches

-Outside Lower Eaves Width for Plate Codes B, C, E, F, H, or I must not exceed 10 feet 8 inches

-Outside Lower Eaves Width for Plate Code N must not exceed 10 feet 8 inches if Outside Lower Eaves Height (A189) is 16 feet 9 inches or less

-Outside Lower Eaves Width for Plate Code N must not exceed 10 feet 6 inches if Outside Lower Eaves Height (A189) is 16 feet 10 inches

-Outside Lower Eaves Width for Plate Code N must not exceed 10 feet 4 inches if Outside Lower Eaves Height (A189) is 16 feet 11 inches

-Outside Lower Eaves Width for Plate Code N must not exceed 10 feet 2 inches if Outside Lower Eaves Height (A189) is 17 feet 0 inches

-Outside Lower Eaves Width for Plate Code N must not exceed 9 feet 11 inches if Outside Lower Eaves Height (A189) is 17 feet 1 inch

NOTES:

- Round fraction to the higher inch, e.g., 05 1/4" = 06"
- For connected unit cars report the dimension of the largest unit in the set.

Outside Lower Eaves Hght — A189

Height from top of rail to lower eaves at side of car (see diagrams)

Displayed in feet and inches on the Web. Stored in inches.

Range of Values for A189

Minimum	Maximum
8 ft 0 inches	17 ft 11 inches

Validation Rule for A189

-Outside Lower Eaves Height must not exceed the Outside Extreme Height (A185)

-Outside Lower Eaves Height for Plate Codes A, B or H must not exceed 15 feet 1 inch

-Outside Lower Eaves Height for Plate Codes C or I must not exceed 15 feet 6 inches

-Outside Lower Eaves Height for Plate Code E must not exceed 15 feet 9 inches

-Outside Lower Eaves Height for Plate Code F must not exceed 17 feet 0 inches

-Outside Lower Eaves Height for Plate Code N must not exceed 17 feet 1 inch

NOTES:

- Round fraction to the higher inch, e.g., 05 1/4" = 06"
- For connected unit cars report the dimension of the largest unit in the set.

Inside Length — A135

The inside length of the equipment from end to end inside walls, linings, and permanent bulkheads

Displayed in feet and inches on the Web. Stored in inches.

Range of Values for A135

Minimum	Maximum
19 ft 0 inches	99 ft 3 inches

Validation Rule for A135

-Inside Length/Inside Platform Length must be less than or equal to Outside Length (OSLG)

NOTES:

- Round fraction to the lower inch, e.g., 05 1/4" = 05"
- For connected unit cars report the shortest dimension of a unit in the set.

Inside Width — A138

The inside width of the equipment from side walls and linings

Displayed in feet and inches on the Web. Stored in inches.

Range of Values for A138

Minimum	Maximum
4 ft 0 inches	12 ft 6 inches

Validation Rule for A138

-Inside Width/Inside Platform Width must not exceed Outside Extreme Width

NOTES:

- For connected unit cars report the shortest dimension of a unit in the set.

Inside Height — A133

The inside height of the equipment from the floor to the top of the side, or to the lowest point of the interior ceiling

Displayed in feet and inches on the Web. Stored in inches.

Range of Values for A133

Minimum	Maximum
1 ft 0 inches	15 ft 10 inches

Validation Rule for A133

-Inside Height must not exceed Outside Extreme Height (A185)

NOTES:

- For connected unit cars report the shortest dimension of a unit in the set.

Truck Center Length — A276 ■

The length between the centers of the two truck systems

Affects Rating. Displayed in feet and inches on the Web. Stored in inches.

Range of Values for A276

Minimum	Maximum
15 ft 0 inches	76 ft 11 inches

Validation Rule for A276

-Truck Center Length is required for cars with an Outside Length of greater than 62 feet 6 inches

-Truck Center Length must be a minimum of 15 feet for cars with an Outside Length greater than 62 feet 6 inches

NOTES:

- For connected unit cars report the dimension of the largest unit in the set.

Platform Hght Above Rail — A192 ▲

Describes the platform height above the rail in inches

Used in ETC Generation. Displayed in feet and inches on the Web. Stored in inches.

Range of Values for A192

Minimum	Maximum
2 ft 0 inches	8 ft 10 inches

Validation Rule for A192

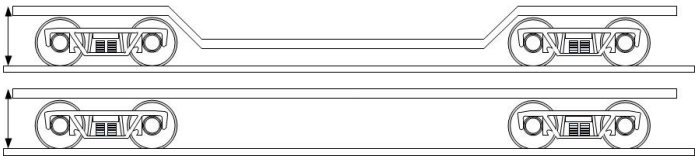
-Platform Height cannot be greater than Outside Height

NOTES:

- EXCEPTIONS: For bi-level and tri-level flat cars, measurement is from top of rail to top of floor of lower deck. Feet in Pos. 45-46, inches in Pos. 47-48. Round fraction to the higher inch, e.g., 05 1/4" = 06". This field must agree relationally for V_ _ _ Equipment Type Codes and P_ _ _.

P_ _ _	MINIMUM—1ft 1in MAXIMUM—4ft 9in
Q_ _ _	MINIMUM—10in MAXIMUM—4ft
S_ _ _	MINIMUM—10in MAXIMUM—4ft
All F_ _ _ except F_3_ and F_6_	MINIMUM—2ft MAXIMUM—5ft 11in
All F_3_, F_6_ and F_9_	MINIMUM—2ft MAXIMUM—8ft 11in
Q8_ _	MINIMUM—2ft 6in MAXIMUM—5ft
P1_ _, P2_ _, P5_ _, P6_ _	MINIMUM—2ft MAXIMUM—3ft 3in
P3_ _, P4_ _, P7_ _, P8_ _	MINIMUM—3ft 4in MAXIMUM—5ft 11in
P9_ _	MINIMUM—3ft 2in MAXIMUM—3ft 2in
Q_1_	MINIMUM—2ft MAXIMUM—2ft 8in

- See diagram below for place of measurement on depressed cars (Equipment Type Code F_3_, F_9) and well cars (Equipment Type Code F_6_).



Bulkhead Top Width B038

Describes the width of the bulkhead

Value does not carry forward for Equipment Group Change.

Range of Values for B038

Minimum	Maximum
25	139

Bulkhd Height Abov Pltfrm B035

Describes the height of the bulkhead

Value does not carry forward for Equipment Group Change.

Range of Values for B035

Minimum	Maximum
36	195

Specification

Truck Count B256

The total number of trucks on the equipment

System Generated Field. This element is not eligible for Input.

Range of Values for B256

Minimum	Maximum
1	30

Axle Count *Mandatory* A024

The total number of axles on the equipment ●

Range of Values for A024

Minimum	Maximum
2	999

Validation Rule for A024

-Axle Count for an articulated car must be greater than or equal to ((Connected Unit Count (A020) x 2) + 2)

-Axle Count for a draw bar connected car must be greater than or equal to (Connected Unit Count (A020) x 4)

-Total Axle Count must match sum of truck axle counts

Wheel Bearing Type *Mandatory* B191

Indicates the wheel bearing code for the equipment ● ■

Affects Rating.

Permissible Values for B191

P Plain R Roller

Validation Rule for B191

-Cars with Plain Bearings will have a Transportation Code (TCOD) and Transportation Condition Code (TCCD) of either YA, S_, SX, or XJ

-Equipment cannot have Plain Bearings if Built Date (BLDT) is on or after January 1, 1993

Bearing Shielded From HBD B021

Indicates the bearing is shielded from the hot box detector on the equipment

Permissible Values for B021

Y Yes

Brake Shoe Type *Mandatory* B026

Indicates the type of brake shoe on the equipment ●

Permissible Values for B026

C Tread Conditioning

H High Friction Composite

L Low Friction Composite/Cast Iron

CC Side Bearing Type A146

Indicates the travel range of the constant contact side bearings installed on the equipment

Permissible Values for A146

LC Long Travel Constant Contact

SC Short Travel Constant Contact

Validation Rule for A146

-Equipment having Qualification for Increased Gross Rail Load (B344) of 1 must have Constant Contact Side Bearing Type of LC

Empty/Load Device Eqpd B075

Indicates a system that determines if the equipment is empty or loaded, and then varies the braking forces accordingly

Permissible Values for B075

Y Yes

Body Material A030

The material that composes the body of the equipment

Permissible Values for A030

01 Aluminum

04 Combination

09 Fiberglass Reinforced Composite

18 Stainless Steel

19 Standard Steel

30 Wood

Center of Gravity Empty A045

When empty, indicates the height from Top of Rail to the Center of Gravity

Range of Values for A045

Minimum	Maximum
22	80

Validation Rule for A045

-All cars that exceed Plate Code (A046) C built on or after January 1, 2012 must report Center of Gravity (Empty Car)

Remote Monitoring Device B176

Indicates the equipment is equipped with a location monitoring device

Permissible Values for B176

Y Yes

N No

Auto Unload Device Equip B224

Identifies whether non-covered Hoppers have an automatic unloading device

Permissible Values for B224

Y Yes

Connected Unit Count A020

Indicates the number of units within an articulated or multi-unit equipment ■

Affects Rating.

Range of Values for A020

Minimum	Maximum
2	45

Validation Rule for A020

-Connected Unit Count must equal the number of Unit Segments

-Unit Segment Component elements must not be reported if the Connected Unit Count is not reported

-Unit Segment Component elements must be reported if Connected Unit Count is reported

Intermediate Conn Style B115

Indicates the method by which two or more pieces of equipment are connected

Permissible Values for B115

A Articulated Connector
D Drawbar Connector

Validation Rule for B115

-Intermediate Connector Style is required for multi-unit equipment
-Intermediate Connector Style must not be reported for single unit equipment

Operating Brakes *Mandatory* **A182**

The number of air brake control valves on the equipment (excludes hand brakes). One control valve consists of a service portion, emergency portion, and pipe bracket. Example: DB-60 control valve ●

Permissible Values for A182

1	2	3	4	5
6	7	8	9	

Validation Rule for A182

-Operating Brakes must be reported for all equipment
-Operating Brakes (A182) must be 1 for non-articulated equipment with an Axle Count (A024) equal to 4

ECP Brake Type **B327**

Indicates the type of electronic controlled pneumatic brake used on the equipment ✹

Permissible Values for B327

N Not Equipped
O Overlay - Both ECP & Air Brake
S Stand Alone - ECP Only

Validation Rule for B327

-Equipment must have a value entered for ECP Brake Type if built or rebuilt after June 28, 2012

ECP Brake Builder **B328**

The manufacturer of the electronic controlled pneumatic brake used on the equipment

Permissible Values for B328

NYAB New York Air Brake
WABT WABTEC

Validation Rule for B328

-If ECP Brake Type (B327) is Stand Alone or Overlay then a value must be entered for ECP Brake Builder
-If ECP Brake Type (B327) is Not Equipped then ECP Brake Builder is not reportable

Slack Adjuster Group **B538**

The slack adjuster group on the equipment per AAR Field Manual Rule #8 ✹

Value does not carry forward for Single Clone / Multi-Clone.

Permissible Values for B538

A	Group A	B	Group B	C	Group C	D	Group D
E	Group E	F	Group F	G	Group G	H	Group H
J	Group J	L	Group L	M	Group M	N	Group N
O	Group O	P	Group P	Q	Group Q	R	Group R
1	Internal	2	Unequipped				

Validation Rule for B538

- Slack Adjuster Group is mandatory for all equipment built or rebuilt on or after January 1, 2016
- If Slack Adjuster Group is reported as "1" then Brake Cylinder Mount Type (B540) must be reported as "T"
- If Slack Adjuster Group is "1" or "2", then Slack Adjuster CID (B359) must not be reported.

NOTES:

- Permissible value of "1 – Internal" identifies special truck mounted internal slack adjuster within brake cylinder.

Brake Cylinder Mount Type **B540**

Identifies the location of the brake cylinder ✹

Permissible Values for B540

B Body Mounted
T Truck Mounted

Validation Rule for B540

- Brake Cylinder Mount Type is mandatory for all equipment built or rebuilt on or after January 1, 2016

Equipment Builder **A035**

Identifies the original manufacturer of the equipment ✹

Permissible Values for A035

9	NORFOLK SOUTHERN RWY
AB	AMF BEAIRD
ACF	American Car & Foundry
ACFX	ACF Industries
ARI	ARI Industries
BETH	Bethlehem Car Works
CURR	Curry Rail Service
EDSP	ESTRATEGIAS DUL S. DE R.L.
ERSB	Ebenezer Railcar
EVAN	Evans Products
FCA	Freight Car America
GATX	General American Transportation Corp
GENS	General Steel
GMB	Greenbrier
GSC	Greenville Steel Car
GUND	Gunderson Inc
GUNM	Gunderson – Mexico
HARS	Harsco
HST	Hawker Siddeley
HYUN	Hyundai
ICC	International Car Company
JKFO	JK-CO LLC
KASG	Kasgro Railcar
LAVE	Lavelin
MRNE	Marine Industries
NACA	National Alabama Corporation
NACC	North American Car
NRE	National Railway Equipment
NSC	National Steel Car
PCF	Pacific Car & Foundry
PLAS	Plasser America
PSP	Pullman-Standard, Division of Trinity Industries
RELC	Relco
SI	SOUTH IRON
TETX	Texana Tank
THRL	Thrall
TRIN	Trinity
TRIX	Trinity Mexico
TT	TEXANA TANK
UNKN	Unknown
UTLX	Union Tank Car
V	OWNER RAILROAD

Validation Rule for A035

-Equipment Builder must be populated if the Built Date (BLDT) is July 1, 2010 or newer
-Equipment built or rebuilt on or after July 1, 2010 cannot have a Equipment Builder of Unknown
-Equipment with a Built Date (BLDT) on or after July 1, 2010 cannot have an Equipment Builder Code of OWNER RAILROAD.
-Equipment Builder can have a value of MULT only if the equipment has multiple units.

NOTES:

- If 'M999' is utilized, please email csc@railinc.com to introduce a new value to Equipment Builder (A035) for the Miscellaneous Equipment Group.

Builder Lot Code **B030**

A unique identifier for a group of equipment built by one manufacturer under

the same contract

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

FRA Reflectorization B096

Indicates the equipment owner assumes responsibility for applying reflectorization tape

Permissible Values for B096

P Reflectorization Plan
W Reflectorization Waiver

Validation Rule for B096

-Reflectorization is mandatory for all equipment after November 28, 2015.

Air Hose Arrangement B524

The type of trainline air hose arrangement ✹

Permissible Values for B524

A S-424 Angle Cock Location
B S-425 Angle Cock Location on Cars Equipped with AAR Type F Coupler
C S-426 Angle Cock Location on Cars with Floating Sills
D S-427 Angle Cock and Air Brake Hose Location on Cars with Excessive Overhang Preventing Compliance with AAR Standards
E S-428 Angle Cock Location on Cars Equipped with AAR Type F Coupler and Cushioned Underframe
F S-4003 (Former Standard)
G S-4003x (Former Standard Retrofitted to Meet All Dimensions Except Height)
H S-4003-05 (Current Standard Train Line Arrangement for Cars with F-Shank Couplers)
I S-4021 Angle Cock and Brake Hose Location on Cars with EOCC (E and F)
J S-4021 Coupler Mounted Bracket End Arrangement
K S-4028 Train Line Arrangement with Displaceable Union on Cars with EOCC and Couplers Not Exceeding 45 in. in Length
L S-4029 Train Line Arrangement with Displaceable Union on Cars with EOCC and Couplers Exceeding 45 in. in Length
M S-4030 Trolley Arrangement on Cars with EOCC and E-Shank Couplers

Validation Rule for B524

-Air Hose Arrangement must be reported for this equipment if it is Built or Rebuilt on or after April 22, 2014.

NOTES:

- If any of the following conditions apply, Air Hose Arrangement (B524) must be reported for cars Built or Rebuilt on or after April 22, 2014:
  - Draft Gear Type (B073) at any location is C or E.
  - Connected Unit Count (A020) is reported.
  - Outside Length (OSLG) is greater than or equal to 70 feet (840 inches).
  - The overhang is greater than 5 feet 6 inches (66 inches). Overhang is calculated as follows:
  - 0.5 * (Outside Length, in inches, minus Truck Center Length, in inches, minus 31 inches)
    - For all other equipment, reporting Air Hose Arrangement is optional.

4-Pressure ABT Receiver Eqpd B539

Identifies if the equipment is equipped with a 4-pressure air brake test receiver

Value does not carry forward for Single Clone / Multi-Clone.

Permissible Values for B539

E Equipped
N Not Equipped

NOTES:

- An "E" will be system generated if a 4-Pressure ABT is reported on the equipment.

Feature

Floor Material A104

Describes the type of construction material used for the equipment floor

Permissible Values for A104

01 Aluminum
02 Aluminum (Ribbed)
05 Composite Nailable (considered same as wood
06 Composite Nailable, Reinforced (considered same as wood)
14 Other
15 Other, Reinforced
19 Standard Steel
21 Steel Floor, (straight deck) without risers (F-8-)
22 Steel Floor, permanently mounted steel risers (F-8-)
23 Steel Nailable (includes alternate wood and steel floor
24 Steel Nailable, Reinforced (includes alternate wood and steel floor
25 Standard Steel, Reinforced
27 Unknown (Flats only)
30 Wood
32 Wood, Double
33 Wood, Double, Reinforced
34 Wood Floor with Steel Protective Plates (includes perforated steel)
35 Wood Floor, Reinforced, with Steel Protective Plates (includes perforated steel)
36 Wood Floor, Reinforced

NOTES:

- If Mechanical Designation (UMMD) is FBC and Floor material is 22 (Steel w/Risers), Steel Riser Equipped (B200) in not reportable.

Bulkhead Type B034

Identifies the type of bulkhead attached to the equipment

Value does not carry forward for Equipment Group Change.

Permissible Values for B034

F Fixed L Fixed with Flipper

Cost

Original Cost A184

The original manufacturer selling price ✹

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for A184

Minimum	Maximum
0	9999999

Validation Rule for A184

-Original Cost must be equal to the Ledger Value if there are no Additions & Betterments.
-Original Cost must be equal to the Ledger Value if Additions & Betterments Indicator is not reported.
-Railroad marked freight cars except MISC, LOCO, TRLR, CONT, CHSS, STWH, EOTD, and PSGR are required to have an Original Cost
-Private marked freight cars except MISC, LOCO, TRLR, CONT, CHSS, STWH, EOTD, and PSGR are required to have an Original Cost if Built Date (BLDT) is on or after January 1, 2015

NOTES:

- Original Cost is never altered. It is the cost of the equipment to the original owner.
- For railroad-marked cars, report in US dollars the original ledger value of the original owner For cars rebuilt, report the cost prescribed in MR Interchange Rule 88 and Circular Letter OT-24
- The original cost is used in the settlement of AAR Interchange Rule 107 Office Manual.
- For connected unit cars report the total original cost for all units in the set.
- Numeric, applicable to all railroad-marked cars Also, applicable to privately marked covered hopper (LO) cars.
- Raise all cents to the next dollar, e.g. $5,501.02 = 0005502

Ledger Value A150

The sum of original cost and additions & betterments

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for A150

Minimum	Maximum
0	9999999

Validation Rule for A150

-Original Cost must be equal to the Ledger Value if there are no Additions & Betterments.

-Ledger Value must equal the Original Cost (A184) plus the additions & betterments, if Total A&B (A003) has been reported. Otherwise Ledger Value should equal Original Cost (A184).

Total A&B — A003

System generated sum of all reported amounts in A&B Amount (A317), in US dollars

Data is Confidential. System Generated Field. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for A003

Minimum	Maximum
0	99999999

NOTES:

- For railroad-marked cars, report the sum of all additions and betterments applied to the car. This value is for record keeping purposes only and will not be used to report Ledger Value.
- For private Cars report the additions and betterments as qualified under AAR interchange Rule 107 for determination of settlement value.
  - Additions are costs of all new components applied subsequent to the date the car was built or rebuilt and carried in the capital investment account.
  - Betterments are costs of all improvements of components of existing equipment through the substitution of superior parts for inferior parts subsequent to the date the car was built of rebuilt.
- For connected unit cars report the total Truck Location A for all units in the set

Ind for Pos/Neg Total A&B — A128

A code indicating the positive or negative adjustment to the original cost of the equipment

Data is Confidential. System Generated Field. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Permissible Values for A128

N Negative P Positive

A&B Pos/Neg Ind — A316

A code indicating the positive or negative adjustment to the individual addition and betterment

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Permissible Values for A316

N Negative P Positive

Validation Rule for A316

-When entering an individual Addition & Betterment, you must enter a value in all 4 fields.

-The A&B Indicator is required when Additions & Betterments are reported.

-The A&B Indicator must not be reported if Additions & Betterments are not reported.

A&B Amount — A317

The amount of the individual addition and betterment added to or subtracted from the original cost of the equipment

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for A317

Minimum	Maximum
1	999999

Validation Rule for A317

-When entering an individual addition & betterment; A&B Date Done (A319), A&B Type (A318), A&B Pos/Neg Ind (A316), and A&B Amount (A317) must be reported

A&B Date Done — A319

The date of the individual addition and betterment

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for A319

Minimum	Maximum
1/1/1900	12/31/9999

Validation Rule for A319

-When entering an individual Addition & Betterment, you must enter a value in all 4 fields.

-Addition and Betterment Date Done cannot be earlier than Built Date (BLDT).

-Additions & Betterments Date Done cannot be later than today's date.

A&B Type — A318

The type of individual addition and betterment as defined by Rule 107

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Permissible Values for A318

GNRL General - Capitalized Additions and Betterments

INIT Initial load of historical A&B amount as of Umler 4.6 implementation date

Validation Rule for A318

-For each equipment, only one Individual A&B Type can have a value of INIT.

-When entering an individual Addition & Betterment, you must enter a value in all 4 fields.

Car Management

Pool Number — P001

Unique number used to indicate the grouping of equipment for a particular purpose

Used for Transportation Codes. This element is not eligible for Input. Value does not carry forward for Equipment Group Change / Add Back.

User Routing Instructions — TCUR

The routing instruction reported by the user

Used for Transportation Codes.

Permissible Values for TCUR

2 Trailer Service Rule 2

G Contaminated commodity service

M Mark canceled

O Owner requested return

U Unassigned equipment

NOTES:

- For further explanation reference Appendix E.

Umler Transportation Code — TCOD

The type of assigned service, empty routing or restriction of the equipment

System Generated Field. Used for Transportation Codes. This element is not eligible for Input.

NOTES:

- For further explanation reference Appendix E.

Transportation Cond Code — TCCD

The AAR or FRA interchange restriction code

System Generated Field. Used for Transportation Codes. This element is not eligible for Input.

NOTES:

- For further explanation reference Appendix E.

Mechanical Restriction TCME

User reported or system generated type of mechanical restriction

Used for Transportation Codes.

Permissible Values for TCME

S Scrap
X AAR Interchange Restriction
Y FRA Interchange Prohibited

NOTES:

- For further explanation reference Appendix D.1

Mech Restriction Reason TCMR

The explanation of the Mechanical Restriction (TCME)

Used for Transportation Codes.

Permissible Values for TCMR

A Restricted Due to Age (Over 40-AAR, Over 50-FRA)
B Restricted Due to Air Brakes
C Restricted Due to Axles
D Restricted Due to Couplers and Couplers Parts
F Restricted Due to Couplers Yokes
G Restricted Due to Draft Gears
J Restricted Due to Journal Bearing and Journal Lubrication
N Restricted Due to Trucks
P Restricted Due to Truck Side Frames
T Restricted Due to Trucks Bolsters
U Restricted by AAR or Owner
W Restricted Due to Wheels
X Restricted Due to Scrap or Early Warning
Z Restricted Due to Umler Conflict (Not Valid for User Input)

NOTES:

- For further explanation reference Appendix D.2.
- The assignment of the Transportation Codes S_, SX, XA, XZ and YA generate the Rate Indicator Code 6 to the CHARM file to zero (0) rate the car hire and mileage rate.

Sys Gen Routing Inst TCGR

The routing instruction generated by the system

This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone / Single Restencil / Multi-Restencil / Add Back.

NOTES:

- For further explanation reference Appendix E.5.

Loading Authority Fleet Status B597

Identifies when a car is listed on a fleet in the Loading Authority application

System Generated Field. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Permissible Values for B597

Y Yes
S Suspended

NOTES:

- • When equipment is on a fleet the Loading Authority (LA) application will update the flag to 'Y – Yes'. When equipment is removed from a fleet the LA application will remove the 'Y – Yes'.
- When equipment is on a LA fleet that is suspended the LA application will update the flag to 'S – Suspended'. When the equipment is on a LA fleet that is no longer suspended the LA application will update the flag to 'Y – Yes'.

Train Service

Restricted Speed Empty B180

Describes the maximum restricted speed the equipment can travel when empty

Range of Values for B180

Minimum	Maximum
5	95

Restricted Speed Loaded B181

Describes the maximum restricted speed the equipment can travel when loaded

Range of Values for B181

Minimum	Maximum
5	95

Shove Car to Rest B189

Identifies the car must be moved to rest by locomotive

Permissible Values for B189

Y Yes

Train Position Sensitive B211

Indicates there is a physical reason, limiting its position on a train

Permissible Values for B211

Y Yes

End of Train Only B277

Indicates the equipment must be placed at the end of the train (including per AAR RP-2001)

Permissible Values for B277

Y Yes

Check Trailing Tonnage B044

Indicates the equipment has restrictions on trailing tonnage

Permissible Values for B044

Y Yes

Curve Negotiate Exception B178

Describes the requirement for negotiating a curve

Permissible Values for B178

A Restrictive Curve Negotiability, Section 2.1.4 of M-1001
B Does not meet all Chapter XI Curving Requirements

Coupler Restriction B278

Special Train Service Code WI

Permissible Values for B278

Y Yes

Cooper Rating Exception B273

Describes the cooper rating (weight distribution model of the equipment), for use in movement across bridges

Permissible Values for B273

A Excessive Cooper Rating
B Cooper Rating in Excess of E66

Clearance Exception B275

Describes equipment containing nonstandard dimension

Permissible Values for B275

A Excessive Outside Extreme Height (A185)
B Excessive Outside Extreme Width (A186)
C Lower Guides for Loading High Cube Containers
D All other unique clearance issues
E Hopper with Excessive Outside Width when pickup shoes are extended

Loaded Net Braking Ratio B551

Indicates calculated minimum loaded net braking ratio per AAR Specifications in place on built or rebuilt date (in percent).
System Generated Field. This element is not eligible for input.

Permissible Values for B551

– 11.0
– 8.5

NOTES:

- Loaded Net Braking Ratio is determined as follows;:
  - If Built Date (BLDT) or Rebuilt Date (RBDT) is less than 1/1/1972, then Loaded Net Braking Ratio will be set to blank.
  - If Built Date (BLDT) or Rebuilt Date (RBDT) is greater than or equal to 1/1/2004, or if Equipment Type Code (UMET) begins with "Q" or "S", then Loaded Net Braking Ratio is 11.0%.
  - For all other equipment, Loaded Net Braking Ratio is 8.5%.

Owner-Provided Loaded Net Braking Ratio **B552**

Indicates an alternate minimum loaded net braking ratio provided by owner (in percent).

Range of Values for B552

Minimum	Maximum
8.5	14.0

NOTES:

- Owner may enter a documented alternative minimum loaded net braking ratio in this field that is greater than the system calculated Loaded Net Braking Ratio (B551).
- When reported, the Owner-Provided Loaded Net Braking Ratio will be used in PTC stopping distance calculations.
- A change in value for the following elements will cause the Owner-Provided Loaded Net Braking Ratio to reset to blank:
  - Rebuilt Date (RBDT)
  - Gross Rail Load/Weight (A266)
  - Equipment Type Code (UMET)
  - Empty/Load Device Eqpd (B075)

Empty Braking Ratio **B553**

Indicates calculated empty braking ratio per AAR Specifications in place on built or rebuilt date (in percent).
System Generated Field. This element is not eligible for input.

Range of Values for B553

Minimum	Maximum
15.0	38.0

NOTES:

- Empty Braking Ratio is determined as follows;:
  - If Built Date (BLDT) or Rebuilt Date (RBDT) is less than 1/1/1972, then Empty Braking Ratio will be set to blank.

Owner-Provided Empty Braking Ratio **B554**

Indicates an owner supplied alternate empty braking ratio (in percent).

Range of Values for B554

Minimum	Maximum
15.0	38.0

NOTES:

- Owner may enter a documented alternative minimum loaded net braking ratio in this field that is greater than the system calculated Loaded Net Braking Ratio (B551).
- When reported, the Owner-Provided Loaded Net Braking Ratio will be used in PTC stopping distance calculations.
- A change in value for the following elements will cause the Owner-Provided Loaded Net Braking Ratio to reset to blank:
  - Rebuilt Date (RBDT)
  - Gross Rail Load/Weight (A266)
  - Equipment Type Code (UMET)
  - Empty/Load Device Eqpd (B075)

Truck Components

Axle Spacing Distance *Mandatory* **B020**

The distance between axle centers on the same truck ●■

Affects Rating.

Permissible Values for B020

53	53 Inches
54	54 Inches
55	55 Inches
60	60 Inches
61	61 Inches
62	62 Inches
63	63 Inches
64	64 Inches
65	65 Inches
66	66 Inches
68	68 Inches
70	70 Inches
71	71 Inches
72	72 Inches
73	73 Inches
74	74 Inches
76	76 Inches
78	78 Inches
99	Axle Space Unknown

Truck Axle Count **B252**

The number of axles per truck

Range of Values for B252

Minimum	Maximum
1	4

Validation Rule for B252

- Sum of Truck Axle Count must equal Axle Count (A024)

Journal Size *Mandatory* **A147**

The size of the journal bearing ●■

Affects Rating.

Permissible Values for A147

A	3-3/4 X 7	B	4-1/4 X 8	C	5 X 9
D	5-1/2 X 10	E	6X11	F	6-1/2 X 12
G	7 X 12	H	7 X 14	K	6-1/ 2X 9
M	7 X 9				

Validation Rule for A147

-4-axle equipment with Journal Size B and Star Code (A247) is not populated, must have Gross Rail Load (A266) of 103,000 lbs.
-Journal Size B (4 1/4 x 8) requires a Gross Weight of 154,000 lbs. for 6-axle cars unless the car is Star Coded
-4-axle equipment with Journal Size C and Star Code (A247) is not populated, must have Gross Rail Load (A266) of 142,000 lbs.
-Journal Size C (5 x 9) requires a Gross Weight of 213,000 lbs. for 6-axle cars unless the car is Star Coded
-4-axle equipment with Journal Size D and Star Code (A247) is not populated, must have Gross Rail Load (A266) of 177,000 lbs.
-Journal Size D (5 1/2 x 10) requires a Gross Weight of 265,000 lbs. for 6-axle cars unless the car is Star Coded
-4-axle equipment with Journal Size E and Star Code (A247) is not populated, must have Gross Rail Load (A266) of 220,000 lbs.
-Journal Size E (6 x 11) requires a Gross Weight of 179,000 lbs. for 4-axles ETC P---, Q---, V--- cars only (cars with 28 inch wheels) unless the car is Star Coded
-Journal Size E (6 x 11) requires a Gross Weight of 330,000 lbs. for 6-axles
-4-axle equipment with Journal Size F or K, Star Code (A247) is not populated, and Qualification for Increased Gross Rail Load (B344) is not populated, must have Gross Rail Load (A266) of 263,000 lbs.
-4-axle equipment with Journal Size F or K, Star Code (A247) is not populated, and Qualification for Increased Gross Rail Load (B344) of 1 or 2, must have Gross Rail Load (A266) of 286,000 lbs.
-Journal Size F requires a Gross Weight of 394,500 lbs. or 429,000 lbs. for 6-axle cars unless the car is Star Coded.

-4-axle equipment with Journal Size G or M, Star Code (A247) is not populated, and Qualification for Increased Gross Rail Load (B344) is not populated, must have Gross Rail Load (A266) of 315,000 lbs.
-4-axle equipment with Journal Size G, K, or M, Star Code (A247) is not populated, and Qualification for Increased Gross Rail Load (B344) of 1, must have Gross Rail Load (A266) of 286,000 lbs.
-Journal Size G (7 x 12) requires a Gross Weight of 472,000 lbs. for 6-axle cars unless the car is Star Coded
-Journal Size H (7 x 14) requires a Gross Weight of 315,000 lbs. for 4-axle cars unless the car is Star Coded
-Journal Size H (7 x 14) requires a Gross Weight of 472,000 lbs. for 6-axle cars unless the car is Star Coded
-Journal Size I (6 x 11 and 6 1/2 x 12) or J (6 x 11 and 7 x 12) are only applicable to articulated or draw-bar cars
-Journal Size Code M (7 x 9) requires a Gross Weight of 472,000 lbs. for 6-axles
-Unstarred 4 Axle Cars with GRL of 315,000 and no IGRL reported and Unstarred cars with Journal Size of G or M must have a Wheel Size of 38 inches
-Gross Weight must be 394,000 lbs. for 6 -axle cars with Journal Size K

NOTES:

- A, B and C Journal Classes are prohibited in Interchange per Rule 90.B.4

Wheel Diameter *Mandatory*	**A294**
The diameter of the wheels	●

Permissible Values for A294

28	28 Inches	30	30 Inches	33	33 Inches
36	36 Inches	38	38 Inches		

Validation Rule for A294

-UnStarred Cars with Gross Weight of 286,000 lbs. and Increased Gross Rail Load of 2 must have a Wheel Diameter of 36 inches
-UnStarred Cars with Gross Weight of 286,000 lbs. and Increased Gross Rail Load of 2 must have a Wheel Diameter of either 36 or 38 inches
-Cars with an Increased Gross Rail Load of 1 and Journal of G or M must have a Wheel Diameter of 38 inches
-If Connected Unit Count (A020) is not reported, different Wheel Diameters cannot be reported

Stability Device Equipped	**B199**
Indicates a stability device is present on the truck	■

Affects Rating.

Permissible Values for B199

Y	Yes

Bolster Component ID	**B351**
Bolster Component ID from Component Registry	

Data is Confidential. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Sideframe Component ID	**B352**
Side Frame Component ID from Component Registry	

Data is Confidential. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Wheelset Component ID	**B350**
Component ID from Component Registry	

Data is Confidential. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Draft System Components

Coupler Code	**A057**
Defines the equipment coupler type	

Permissible Values for A057

BE60AHT	Type E (Rule 16) - BE60AHT
BE60BHT	Type E Obsolete (Rule 16) - BE60BHT
BE63AHT	Type E Obsolete (Rule 16) - BE63AHT
BE63HT	Type E (Rule 16) - BE63HT
BE67HT	Type E (Rule 16) - BE67HT
BE68HT	Type E/F (Rule 17) - BE68HT
E42BEX	Type E/F (Rule 17) - E42BEX
E50ARE	Type E/F (Rule 17) - E50ARE
E50BEX	Type E/F (Rule 17) - E50BEX
E60CC	Type E (Rule 16) - E60CC
E60CE	Type E (Rule 16) - E60CE
E60CHT	Type E (Rule 16) - E60CHT
E60CHTE	Type E (Rule 16) - E60CHTE
E60DC	Type E (Rule 16) - E60DC
E60DE	Type E (Rule 16) - E60DE
E60EE	Type E (Rule 16) - E60EE
E61	Type E Obsolete (Rule 16) - E61
E67AHT	Type E (Rule 16) - E67AHT
E67BC	Type E (Rule 16) - E67BC
E67BE	Type E (Rule 16) - E67BE
E67BHT	Type E (Rule 16) - E67BHT
E67BHTE	Type E (Rule 16) - E67BHTE
E67CC	Type E (Rule 16) - E67CC
E67CE	Type E (Rule 16) - E67CE
E68AHT	Type E/F Obsolete (Rule 17) - E68AHT
E68AHTE	Type E/F Obsolete (Rule 17) - E68AHTE
E68BC	Type E/F (Rule 17) - E68BC
E68BE	Type E/F (Rule 17) - E68BE
E68BHT	Type E/F (Rule 17) - E68BHT
E68BHTE	Type E/F (Rule 17) - E68BHTE
E68CE	Type E/F (Rule 17) - E68CE
E69AE	Type E/F (Rule 17) - E69AE
E69AHTE	Type E/F (Rule 17) - E69AHTE
E69BE	Type E/F (Rule 17) - E69BE
E69CE	Type E/F (Rule 17) - E69CE
E69CEX	Type E/F (Rule 17) - E69CEX
E69HTE	Type E/F (Rule 17) - E69HTE
E69LCE	Type E/F (Rule 17) - E69LCE
EB7AHT	Type E (Rule 16) - EB7AHT
EF204CE	Type E/F (Rule 17) - EF204CE
EF306CE	Type E/F (Rule 17) - EF306CE
EF511AE	Type E/F (Rule 17) - EF511AE
EF511BE	Type E/F (Rule 17) - EF511BE
EF511CE	Type E/F (Rule 17) - EF511CE
EF511DE	Type E/F (Rule 17) - EF511DE
EF511LCE	Type E/F (Rule 17) - EF511LCE
EF511WE	Type E/F (Rule 17) - EF511WE
EF512CE	Type E/F (Rule 17) - EF512CE
EF512WE	Type E/F (Rule 17) - EF512WE
EF528WE	Type E/F (Rule 17) - EF528WE
EFROTARY	Type E/F Rotary - EFROTARY
EFSPEC	Type E/F Special - EFSPEC
EFUNK	Type E/F Unknown - EFUNK
ESPEC	Type E Special - ESPEC
EUNK	Type E Unknown - EUNK
F70BHT	Type F Obsolete (Rule 18) - F70BHT
F70BHTE	Type F Obsolete (Rule 18) - F70BHTE
F70CC	Type F (Rule 18) - F70CC
F70CE	Type F (Rule 18) - F70CE
F70CHT	Type F (Rule 18) - F70CHT
F70CHTE	Type F (Rule 18) - F70CHTE
F70DE	Type F (Rule 18) - F70DE
F70HT	Type F Obsolete (Rule 18) - F70HT
F71CHT	Type F (Rule 18) - F71CHT
F72HT	Type F (Rule 18) - F72HT
F73AC	Type F (Rule 18) - F73AC
F73AE	Type F (Rule 18) - F73AE

F73AHT	Type F (Rule 18) - F73AHT
F73AHTE	Type F (Rule 18) - F73AHTE
F73BE	Type F (Rule 18) - F73BE
F73HTE	Type F Obsolete (Rule 18) - F73HTE
F79BHT	Type F Obsolete (Rule 18) - F79BHT
F79BHTE	Type F Obsolete (Rule 18) - F79BHTE
F79CC	Type F (Rule 18) - F79CC
F79CE	Type F (Rule 18) - F79CE
F79CHT	Type F (Rule 18) - F79CHT
F79CHTE	Type F (Rule 18) - F79CHTE
F79DE	Type F (Rule 18) - F79DE
FF205E	Type F (Rule 18) - FF205E
FF218AE	Type F (Rule 18) - FF218AE
FR201E	Type F (Rule 18) Rotary - FR201E
FR205AE	Type F (Rule 18) Rotary - FR205AE
FR205BE	Type F (Rule 18) Rotary - FR205BE
FR205E	Type F (Rule 18) Rotary - FR205E
FR206E	Type F (Rule 18) Rotary - FR206E
FR207AE	Type F (Rule 18) Rotary - FR207AE
FR207E	Type F (Rule 18) Rotary - FR207E
FR208AE	Type F (Rule 18) Rotary - FR208AE (without wear insert)
FR208E	Type F (Rule 18) Rotary - FR208E (with wear insert)
FR209E	Type F (Rule 18) Rotary - FR209E
FR301E	Type F (Rule 18) Rotary - FR301E
FR304E	Type F (Rule 18) Rotary - FR304E (with wear plate)
FR304WE	Type F (Rule 18) Rotary - FR304WE (without wear plate)
FROTARY	Type E/F Rotary - FROTARY
FSPEC	Type F Special - FSPEC
FUNK	Type F Unknown - FUNK
S700AE	Type E (Rule 16) - S700AE
SBE60CC	Type E (Rule 16) - SBE60CC
SBE60CE	Type E (Rule 16) - SBE60CE
SBE60DC	Type E (Rule 16) - SBE60DC
SBE60DE	Type E (Rule 16) - SBE60DE
SBE60DREX	Type E (Rule 16) - SBE60DREX
SBE60EE	Type E (Rule 16) - SBE60EE
SBE67BC	Type E (Rule 16) - SBE67BC
SBE67BE	Type E (Rule 16) - SBE67BE
SBE67CC	Type E (Rule 16) - SBE67CC
SBE67CE	Type E (Rule 16) - SBE67CE
SBE67CREX	Type E (Rule 16) - SBE67CREX
SBE67DE	Type E (Rule 16) - SBE67DE
SBE68BC	Type E/F (Rule 17) - SBE68BC
SBE68BE	Type E/F (Rule 17) - SBE68BE
SBE68CE	Type E/F (Rule 17) - SBE68CE
SBE68CREX	Type E/F (Rule 17) - SBE68CREX
SBE68DE	Type E/F (Rule 17) - SBE68DE
SBE68WEX	Type E/F (Rule 17) - SBE68WEX
SBE69AE	Type E/F (Rule 17) - SBE69AE
SBE69BE	Type E/F (Rule 17) - SBE69BE
SBE69BREX	Type E/F (Rule 17) - SBE69BREX
SBE69CE	Type E/F (Rule 17) - SBE69CE
SE60CC	Type E (Rule 16) - SE60CC
SE60CE	Type E (Rule 16) - SE60CE
SE60CHT	Type E (Rule 16) - SE60CHT
SE60CHTE	Type E (Rule 16) - SE60CHTE
SE60DC	Type E (Rule 16) - SE60DC
SE60DE	Type E (Rule 16) - SE60DE
SE60EE	Type E (Rule 16) - SE60EE
SE67BC	Type E (Rule 16) - SE67BC
SE67BE	Type E (Rule 16) - SE67BE
SE67BHT	Type E (Rule 16) - SE67BHT
SE67BHTE	Type E (Rule 16) - SE67BHTE
SE67CC	Type E (Rule 16) - SE67CC
SE67CE	Type E (Rule 16) - SE67CE
SE68BC	Type E/F (Rule 17) - SE68BC
SE68BE	Type E/F (Rule 17) - SE68BE
SE68BHT	Type E/F (Rule 17) - SE68BHT
SE68BHTE	Type E/F (Rule 17) - SE68BHTE
SE68CE	Type E/F (Rule 17) - SE68CE
SE69AE	Type E/F (Rule 17) - SE69AE
SE69BE	Type E/F (Rule 17) - SE69BE
SE69CE	Type E/F (Rule 17) - SE69CE
SF70CC	Type F (Rule 18) - SF70CC
SF70CE	Type F (Rule 18) - SF70CE
SF70CHT	Type F (Rule 18) - SF70CHT
SF70CHTE	Type F (Rule 18) - SF70CHTE
SF70DE	Type F (Rule 18) - SF70DE
SF79CC	Type F (Rule 18) - SF79CC
SF79CE	Type F (Rule 18) - SF79CE
SF79CHT	Type F (Rule 18) - SF79CHT
SF79CHTE	Type F (Rule 18) - SF79CHTE
SF79DE	Type F (Rule 18) - SF79DE

Validation Rule for A057

-If Rotary Coupler Style is reported, then Coupler Code must be a rotary coupler.

-If Coupler Code is a rotary coupler, then Coupler Style must be R (Rotary).

-Coupler Code of Type E Obsolete (Rule 16) can only be reported if the car was built or rebuilt before July 31, 2015

-Coupler Code of Type E/F Obsolete (Rule 17) can only be reported if the car was built or rebuilt before July 31, 2015

-Coupler Code of Type F Obsolete (Rule 18) can only be reported if the car was built or rebuilt before July 31, 2015

-Coupler Code of FROTARY or EFROTARY cannot be reported for cars Built or Rebuilt on or after August 12, 2014.

NOTES:

- Obsolete: All Type D couplers are obsolete and should report code DOBS; cars with this coupler code will be restricted in interchange as discussed below.
- Unknown: If the coupler code is unknown or if the code stamped on the coupler is illegible, the code BUNK FUNK, EFUNK, or LOCOUNK should be reported.
- Special: Codes ESPEC, FSPEC, and EFSPEC have been created to decline coupler bodies that have been manufactured specifically for the equipment owner and are not listed in the attached table.
- The codes FROTARY and EFROTARY cannot be reported for equipment Built or Rebuilt since August 12, 2014.

Coupler Style *Mandatory* **B058**

Describes the basic coupler design of the equipment ●■

Affects Rating.

Permissible Values for B058

B	Bottom Shelf	D	Double Shelf
P	Plain	R	Rotary

Validation Rule for B058

-If Draft System Type (B073) is H (Hydraulic) then Coupler Style cannot be reported as M (Solid Drawbar) or L (Rotary Drawbar)

-If Draft System Type (B073) is not Center Of Car or End Of Car, Inches of Travel (B061) cannot be reported

-If Draft System Type (B073) of Center Of Car or End Of Car is reported then Inches of Travel (B061) must also be reported

Inches of Travel **B061**

The number of inches a draft system will travel ■

Affects Rating.

Range of Values for B061

Minimum	Maximum
1	36

Validation Rule for B061

-If Draft System Type (B073) is not Center Of Car or End Of Car, Inches of Travel (B061) cannot be reported

- If Draft System Type (B073) of Center Of Car or End Of Car is reported then Inches of Travel (B061) must also be reported

Draft System Type *Mandatory* **B073**

Describes the draft gear/underframe cushion type ●■

Affects Rating.

Permissible Values for B073

C Cushioning Center of Car
E Cushioning End of Car
S Standard
X Devices with less than 6 inches buff travel approved under AAR Standard S-060
Y Devices with 6 to 10 inches of buff travel approved under AAR Standard S-060

Validation Rule for B073

- If Draft System Type (B073) is Standard Draft Gear (S), Inches of Travel (B061) cannot be reported
- If Draft System Type (B073) is reported as C, E, X, or Y then Inches of Travel (B061) must also be reported
- If Draft System Type (B073) of X, or Y is reported then Draft Gear Group/Cushion Unit Pocket (B562) cannot be reported
- If Draft System Type (B073) X is reported, the Inches of Travel (B061) value must be greater than or equal to 1 and less than 6
- If Draft System Type (B073) Y is reported, the Inches of Travel (B061) value must be greater than or equal to 6 and less than or equal to 10
- If Draft System Type (B073) is S then Draft Gear Group/Cushion Unit Pocket (B562) may only be A, B, C, D, E, F, G, H, J, K, L, M, N, P, Q, R, S, or Z (AAR Rule 21)
- If Draft System Type (B073) is E then Draft Gear Group/Cushion Unit Pocket (B562) may only be EOC-1,EOC-1D, EOC-1B, EOC-2, EOC-2D, EOC-2B, EOC-3, EOC-3B,EOC-4, EOC-4B, EOC-5, EOC-5D, EOC-5B, EOC-6, EOC-6D, EOC-6B, EOC-7, EOC-7B, EOC-8, EOC-8B, EOC-8F, EOC-9, EOC-9B, EOC-9D, EOC-9E, EOC-10, EOC-10D, EOC-10B, EOC-10F, EOC-11, EOC-11D, EOC-11B,EOC-12, EOC-12D, EOC-12B, EOC-13, EOC-13B, EOC-14, EOC-14B, EOC-15, EOC-15D, EOC-15B, EOC-16, EOC-16D, EOC-16B, EOC-17, EOC-17D, EOC-17B, EOC-18, EOC-18D, EOC-18B, EOC-19, EOC-19B, EOC-20, EOC-20B, EOC-21, EOC-21B, EOC-22, EOC-22B, EOC-23, EOC-23B, EOC-24, EOC-24B, EOC-25E, EOC-26B, EOC-26F, or EOC-27D, or EOC-27E (AAR Rule 59)

Draft Gear Group/Cushion Unit Pocket **B562**

Draft Gear Group/Cushion Unit Pocket value as listed in AAR Field Manual Interchange Rule 21 and 59 ✹

Carry forward for Single Clone / Multi-Clone / Restencil / Add-Back / Equipment Group Change.

Permissible Values for B562EOC-1,EOC-1D, EOC-1B, EOC-2, EOC-2D, EOC-2B, EOC-3, EOC-3B,EOC-4, EOC-4B, EOC-5, EOC-5D, EOC-5B, EOC-6, EOC-6D, EOC-6B, EOC-7, EOC-7B, EOC-8, EOC-8B, EOC-8F, EOC-9, EOC-9B, EOC-9D, EOC-9E, EOC-10, EOC-10D, EOC-10B, EOC-10F, EOC-11, EOC-11D, EOC-11B,EOC-12, EOC-12D, EOC-12B, EOC-13, EOC-13B, EOC-14, EOC-14B, EOC-15, EOC-15D, EOC-15B, EOC-16, EOC-16D, EOC-16B, EOC-17, EOC-17D, EOC-17B, EOC-18, EOC-18D, EOC-18B, EOC-19, EOC-19B, EOC-20, EOC-20B, EOC-21, EOC-21B, EOC-22, EOC-22B, EOC-23, EOC-23B, EOC-24, EOC-24B, EOC-25E, EOC-26B, EOC-26F, EOC-27D, EOC-27E, COC-1, COC-2, COC-3, COC-4, COC-5, COC-6, COC-7, COC-8 (*AAR Rule 59*).

A, B, C, D, E, F, G, H, J, K, L, M, N, P, Q, R, S, Z (*AAR Rule 21*).

Validation Rule(s) for B562

- Draft Gear Group/Cushion Unit Pocket (B562) is mandatory for equipment built on or after June 13, 2019, unless Draft System Type (B073) is reported as X or Y-If Draft Gear Group/Cushion Unit Pocket (B562) is not equal to A, B, C, D, E, F, G, H, J, K, L, M, N, P, Q, R, S, or Z, then Cushion Unit Type (B563) must be populated
- When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-6, EOC-7, EOC-7B, EOC-8, EOC-8B, EOC-9, EOC-9B, EOC-9D, EOC-10, EOC-10B, EOC-10D, EOC-14, EOC-14B, EOC-18D, EOC-23, EOC-23B, EOC-24, EOC-25E, EOC-26B, or EOC-27D then the Cushion Unit Type (B563) must be 1
- When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-9E, EOC-26F, or EOC-27E, then the Cushion Unit Type (B563) must be 2
- When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-11, EOC-12, EOC-13, EOC-13B, EOC-15, EOC-15B, EOC-15D, EOC-17, EOC-17B, EOC-17D, EOC-18, EOC-18B, EOC-19, EOC-19B, EOC-20, EOC-20B, EOC-21, EOC-21B, EOC-22, EOC-22B, EOC-24B, COC-3, COC-5, or COC-7 then the Cushion Unit Type (B563) must be 1 or 2
- When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-8F or EOC-10F then the Cushion Unit Type (B563) must be 2 or 3
- When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-5, EOC-5B, EOC-5D, EOC-6, EOC-6B, EOC-6D EOC-11B, EOC-11D, EOC-12B, EOC-12D, or COC-4 then the Cushion Unit Type (B563) must be 1, 2, or 3
- When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-16, EOC-16B, EOC-16D, or COC-1 then the Cushion Unit Type (B563) must be 1, 2, or 4
- When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-2B, EOC-2D, EOC-3, EOC-3B, EOC-4, EOC-4B, or COC-2 then the Cushion Unit Type (B563) must be 1, 2, 3, or 4
- When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-1, EOC-1B, EOC-1D, or EOC-2 then the Cushion Unit Type (B563) must be 1, 2, 3, 4, or S
- When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-8 then the Cushion Unit Type (B563) must be 1, 2, 3, 4, or 5
- When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-1D, EOC-2,EOC-2D, EOC-2B, EOC-3, EOC-3B, EOC-5, EOC-5D, EOC-5B, EOC-6D, EOC-7, EOC-7B, EOC-9, EOC-9B, EOC-9D, EOC-9E, EOC-10D, EOC-11, EOC-11B, EOC-11D, EOC-12D, EOC-14,EOC-14B, EOC-15, EOC-15D, EOC-15B, EOC-16D, EOC-17D, EOC-23, EOC-23B, EOC-27D, or EOC-27E then the Inches of Travel (B061) must be 10
- When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-16, EOC-16B, EOC-19, EOC-19B, EOC-22, EOC-22B, or EOC-25E then the inches of travel must be 12
- When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-20 or EOC-20B then the Inches of Travel (B061) must be 14
- When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-1B, EOC-4, EOC-4B, EOC-6, EOC-6B, EOC-8, EOC-8B, EOC-8F, EOC-10, EOC-10B, EOC-10F, EOC-12, EOC-12B, EOC-13, EOC-13B, EOC-17, EOC-17B, EOC-18, EOC-18D, EOC-18B, EOC-21, EOC-21B, EOC-24, or EOC-24B then the Inches of Travel (B061) must be 15
- When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-2, COC-3, COC-4, COC-5, COC-6, or COC-8 then the Inches of Travel (B061) must be 20
- When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-1, and Cushion Unit Type (B563) is 1 or 2, then the Inches of Travel (B061) must be 20
- When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-1, and Cushion Unit Type (B563) is 4, then the Inches of Travel (B061) must be 18
- When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-7, and Cushion Unit Type (B563) is 2, then the Inches of Travel (B061) must be 20
- When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-7, and Cushion Unit Type (B563) is 1, then the Inches of Travel (B061) must be 30
- When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-1 then the Inches of Travel (B061) must be 10, 12, or 15
- When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-26, then the Inches of Travel (B061) must be 18

Note:

Reference AAR Field Manual Interchange Rule(s) 21 and 59.

Cushion Unit Type **B563**

Cushion Unit Type value as listed in AAR Field Manual Interchange Rule 21 and 59 ✹

Carry forward for Single Clone / Multi-Clone / Restencil / Add-Back / Equipment Group Change.

Permissible Values for B563

1 – Type 1
2 – Type 2
3 – Type 3
4 – Type 4
5 – Type 5
S – Type S

Validation Rule(s) for B563

- Cushion Unit Type (B563) is mandatory for equipment built on or after June 13, 2019.
- If Draft Gear Group/Cushion Unit Pocket (B562) is not equal to A, B, C, D, E, F, G, H, J, K, L, M, N, P, Q, R, S, or Z, then Cushion Unit Type (B563) must be populated.
- When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-6, EOC-7, EOC-7B, EOC-8, EOC-8B, EOC-9, EOC-9B, EOC-9D, EOC-10, EOC-10B, EOC-10D, EOC-14, EOC-14B, EOC-18D, EOC-23, EOC-23B, EOC-24, EOC-25E, or EOC-26B then the Cushion Unit Type (B563) must be 1.

-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-9E, EOC-26F, or EOC-27E, then the Cushion Unit Type (B563) must be 2
-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-11, EOC-12, EOC-13, EOC-13B, EOC-15, EOC-15B, EOC-15D, EOC-17, EOC-17B, EOC-17D, EOC-18, EOC-18B, EOC-19, EOC-19B, EOC-20, EOC-20B, EOC-21, EOC-21B, EOC-22, EOC-22B, EOC-24B, COC-3, COC-5, or COC-7 then the Cushion Unit Type (B563) must be 1 or 2.
-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-8F or EOC-10F then the Cushion Unit Type (B563) must be 2 or 3.
-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-5, EOC-5B, EOC-5D, EOC-6, EOC-6B, EOC-6D EOC-11B, EOC-11D, EOC-12B, EOC-12D, or COC-4 then the Cushion Unit Type (B563) must be 1, 2, or 3.
-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-16, EOC-16B, EOC-16D, or COC-1 then the Cushion Unit Type (B563) must be 1, 2, or 4.
-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-2B, EOC-2D, EOC-3, EOC-3B, EOC-4, EOC-4B, or COC-2 then the Cushion Unit Type (B563) must be 1, 2, 3, or 4.
-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-1, EOC-1B, EOC-1D, or EOC-2 then the Cushion Unit Type (B563) must be 1, 2, 3, 4, or S.
-When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-8 then the Cushion Unit Type (B563) must be 1, 2, 3, 4, or 5.
-When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-1, and Cushion Unit Type (B563) is 1 or 2, then the Inches of Travel (B061) must be 20.
-When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-1, and Cushion Unit Type (B563) is 4, then the Inches of Travel (B061) must be 18.
-When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-7, and Cushion Unit Type (B563) is 2, then the Inches of Travel (B061) must be 20.
-When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-7, and Cushion Unit Type (B563) is 1, then the Inches of Travel (B061) must be 30.

Note:
Reference AAR Field Manual Interchange Rule(s) 21 and 59.

Coupler Component ID B353

Coupler Component ID from Component Registry

Data is Confidential. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Cushioning Unit Component ID B361

Component ID from Component Registry

Data is Confidential. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Unit Segment Components

Unit Tare Weight A299

The unit segment weight on rail when empty, sometimes referred to as Light Weight, reported in pounds

Range of Values for A299

Minimum	Maximum
10000	500000

Validation Rule for A299

-Unit Tare Weight must not be reported if the Connected Unit Count (A020) is not reported
-Unit Tare Weight must be reported if Connected Unit Count (A020) is reported
-Unit Tare Weight for Boxcars must be less than or equal 160,000 lbs.
-Unit Tare Weight for Refrigerators must be less than or equal 140,000 lbs.
-Unit Tare Weight for Gondolas must be greater than or equal 30,000 lbs.
-Unit Tare Weight for Gondolas must be less than or equal 110,000 lbs.
-Unit Tare Weight for Hoppers must be greater than or equal 23,000 lbs.
-Unit Tare Weight for Hoppers must be less than 120,000 lbs.
-Unit Tare Weight for Tanks must be greater than 31,000 lbs.
-Unit Tare Weight for Tanks must be less than 200,000 lbs.
-Unit Tare Weight for Vflats must be greater than 55,000 lbs.
-Unit Tare Weight for VFlats must be less than 136,000 lbs.
-Unit Tare Weight for IFLTs must be greater than 10,000 lbs.
-Unit Tare Weight for IFLTs must be less than 72,000 lbs.
-Unit Tare Weight for all flats other than VFlats with ETC Q___ must be greater than 23,000 lbs.
-Unit Tare Weight for all flats other than VFlats with ETC Q___ must be less than 500,000 lbs.
-Unit Segment Tare Weights must add up to the Total Tare Weight (A259)
-Unit Tare Weight (A299) value must be reported to the nearest 100 pounds

Unit Load Limit A300

The maximum permissible weight of the commodity that can be loaded into the unit segment, reported in pounds

Range of Values for A300

Minimum	Maximum
10000	500000

Validation Rule for A300

-Unit Load Limit must not be reported if the Connected Unit Count (A020) is not reported
-Unit Load Limit must be reported if Connected Unit Count (A020) is reported
-Unit Segment Load Limits must add up to the Load Limit (LDLT)

Brake System Components

Emergency Brake Valve CID B354

Component ID from Component Registry

Data is Confidential. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Emergency Valve COTS Date B567

Brake valve emergency portion recondition date

System generated element. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

NOTES:
- Emergency Valve COTS Date is system-generated from a Emergency Brake Valve Inspection.

Emergency Valve OEM Warranty Date B568

Brake valve emergency portion Original Equipment Manufacturer warranty date

System generated element. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

NOTES:
- Emergency Valve OEM Date is system-generated from a Emergency Brake Valve Inspection.

Emergency Valve Part Number B569

Brake valve emergency portion part number

System generated element. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

NOTES:
- Emergency Valve Part Number is system-generated from a Emergency Brake Valve Inspection.

Service Brake Valve CID B357

Component ID from Component Registry

Data is Confidential. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Service Valve COTS Date B564

Brake valve service portion recondition date

System generated element. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

NOTES:

- Service Valve COTS Date is system-generated from a Service Brake Valve Inspection.

Service Valve OEM Warranty Date B565

Brake valve service portion Original Equipment Manufacturer warranty date

System generated element. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

NOTES:

- Service Valve OEM Date is system-generated from a Service Brake Valve Inspection.

Service Valve Part Number B566

Brake valve service portion part number

System generated element. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

NOTES:

Service Valve Part Number is system-generated from a Service Brake Valve Inspection.

Slack Adjuster CID B359

Component ID from Component Registry

Data is Confidential. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Miscellaneous

Umler Effective Date EFDT

The date the rating activity (pre-registration, modification, etc.) is expected to occur

This element is not eligible for Query. Does not Carry Forward.

Validation Rule for EFDT

-Effective Date cannot be set to more than 13 months in the future.

NOTES:

- Effective Date will default to the 1st of the following month that equipment is registered

Inspection

ABT Due Date (Repair Track) DU13

The due date of the air brake test per AAR Field Manual Rule 3

System Generated Field. This element is not eligible for Input. Value does not carry forward for Add Back.

ABT 5-8 Year Due Date DU58

The 5-8 year due date for the air brake test (ABT) after the ABT Due Date (Repair Track)

System Generated Field. This element is not eligible for Input. Value does not carry forward for Add Back.

FRA Drop Dead Date DDNE

FRA Drop Dead Date

System Generated Field. This element is not eligible for Input.

Inspection Certified by CERT

Person certifying inspection

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Inspection Conducted by COND

Person conducting inspection

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Inspection Date Done DTDN

The date the inspection was completed; used for all inspection types reported on equipment

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Validation Rule for DTDN

-The inspection date must not be 60 days before the Build Date

Inspection Due Date INDD

The due date of the next inspection; used for all inspection types reported on equipment

System Generated Field. This element is not eligible for Input. Value does not carry forward for Add Back.

Inspection Performer PERF

The SCAC that completed the inspection; used for all inspection types reported on equipment

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Inspection Reporter REPT

The SCAC that reported the inspection; used for all inspection types reported on equipment

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Scheduled Due Date SCDD

Scheduled Due Date

This element is not eligible for Input. Does not Carry Forward.

Location/SPLC SPLC

The SPLC of the inspecting location; used for all inspection types reported on equipment

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Air Card Item L015

Detail indicating type of items inspected as part of a locomotive Air Card Inspection

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Air Card Description L016

Description of the items inspected as part of a Locomotive Air Card Inspection

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Air Card Frequency Days L017

Locomotive Air Card Frequency Days

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Range of Values for L017

Minimum	Maximum
0	99999

Air Brake Test Device B523

Indicates the type of test device used to perform the Air Brake Test ✹

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Permissible Values for B523

A	Automatic (Non 4-Pressure)
M	Manual
P	Automatic (4-Pressure)

Validation Rule for B523

-Air Brake Test Device (B523) must be reported for Air Brake Test inspection reported on or after December 10, 2020

Insp Service Valve COTS Date **B570**

Brake valve service portion recondition date

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

NOTES:

- Reports of 9999 will be allowed in case the date is illegible and the valve cannot be replaced immediately.
- Valid date format: MMYY

Insp Service Valve OEM Warranty Date **B571**

Brake valve service portion Original Equipment Manufacturer warranty date

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

NOTES:

- Reports of 999999 will be allowed in case the date is illegible and the valve cannot be replaced immediately.
- Valid date format: MMYYYY

Insp Service Valve Part Number **B572**

Brake valve service portion part number

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Insp Emergency Valve COTS Date **B573**

Brake valve emergency portion recondition date

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

NOTES:

- Reports of 9999 will be allowed in case the date is illegible and the valve cannot be replaced immediately.
- Valid date format: MMYY

Insp Emergency Valve OEM Warranty Date **B574**

Brake valve emergency portion Original Equipment Manufacturer warranty date

System generated element. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

NOTES:

- Reports of 999999 will be allowed in case the date is illegible and the valve cannot be replaced immediately.
- Valid date format: MMYYYY

Insp Emergency Valve Part Number **B575**

Brake valve emergency portion part number

System generated element. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Insp Service Valve Location *Mandatory* **B576**

Brake valve service portion location ●

Value does not carry forward for Single Clone / Multi-Clone.

Insp Emergency Valve Location *Mandatory* **B577**

Brake valve emergency portion location reported on an emergency brake valve inspection ●

Value does not carry forward for Single Clone / Multi-Clone.

Tank Cars

General

Status Code *Mandatory* — **USCD**

Identifies the current operational state ●

Does not Carry Forward.

Permissible Values for USCD

A	ACTIVE	I	INACTIVE
P	PRE-REGISTERED		

NOTES:

- For Restencil and Clone process the initial Status of a car should be Pre-Registered.
- All Add-Back processes should initially set the Status to Pre-Registered
- A Pre-registered car will automatically have its Status changed to Active for the initial change when TRAIN detects three (3) movements on the car
- If the Status changes to Active due to movement and the car was created from a Restencil, the Prior Equipment ID (PRID) or source car will have its status changed to Inactive automatically by Umler

Equipment ID — **0001**

The equipment stenciled number

Validation Rule for 0001

-Equipment Number must not be larger than 6 digits (i.e., 999999)

NOTES:

- Equipment ID includes the mark and number stenciled on the equipment. Marks can be up to 4 characters and number up to 6 digits (i.e., ABCD999999).
- Up to 500 cars can be added or updated in a transaction.
- When adding an equipment record, ensure that Prior Equipment ID (PRID) is reported, unless the equipment is new.

Mechanical Designation *Mandatory* — **UMMD**

Equipment description without physical dimensions ●▲

Used in ETC Generation. Used for Transportation Codes.

Permissible Values for UMMD

MWTK	MoW - Tank	T	Tank

Equipment Type Code — **UMET**

An alpha numeric code that describes the physical attributes of equipment

System Generated Field. This element is not eligible for Input.

NOTES:

- Please Refer to Appendix I for More information Regarding ETC Generation

Maint of Way Service Type — **B403**

Identifies equipment Maintenance Of Way function

Value does not carry forward for Equipment Group Change.

Permissible Values for B403

C2	Crane / Boom Support Car
F4	Flat-Wheel Sets
T4	Training Car
T8	Track Geometry Car

Validation Rule for B403

- Maint of Way Service Type can only be listed on records where the Equipment Group (0002) or Pseudo Equipment Group (B547) is listed as MISC

Built Date *Mandatory* — **BLDT**

The date the construction of the equipment is complete ●■

Data is Confidential. Used for Transportation Codes. Affects Rating. Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for BLDT

Minimum	Maximum
1/1/1900	12/31/9999

Validation Rule for BLDT

-Built Date must be within the last 99 years

-Built Date must not be in the future for equipment in Active Status

-Prior and target equipment's Built Date (BLDT) must match for restenciling

-Built Date cannot be updated within 30 days of the End of Service Date (B078)

NOTES:

- Data is public for railroad marked equipment.
- For connected unit cars report the oldest car in the set.

Tank Built Date — **A298**

Tank Built Date

Data is Confidential.

Range of Values for A298

Minimum	Maximum
1/1/1900	12/31/9999

Validation Rule for A298

-When Stub Sill Design Type is reported as Full then Private Tank Year must be reported

Orig Cert of Constr Nbr *Mandatory* — **A183**

The construction certification number of the AAR provides to the equipment manufacturer (Form AAR 4-2) ●

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Validation Rule for A183

-Tank Original Certificate of Construction is required for Tanks that have a Built/Rebuilt (Birth) Date on or after July 1, 1997

Rebuilt / ILS Date — **RBDT**

The date the re-construction of the equipment is complete

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for RBDT

Minimum	Maximum
1/1/1900	12/31/9999

Validation Rule for RBDT

-Rebuilt/Increased Life Service Date must be after the Built Date (BLDT)

-Rebuilt Date must not be more than 70 years after the Built Date (BLDT)

-Rebuilt Date is required for Extended Service Code (A096) 1, 2, or 3 for Increased Life Service

-Rebuilt Date is required for Extended Service Code (A096) R for Rebuilt, or V for 65 years of service

-If Rebuilt Date is reported then the Extended Service Code (A096) must be reported as R for Rebuilt, V, 1, 2, or 3 for Increased Life Service

NOTES:

- Railroad cars -- applicable only to cars meeting status as provided in both STB Accounting Rules, and the AAR Mechanical Interchange Rule 88, Office Manual.
- Private cars -- applicable to all cars meeting AAR Mechanical Interchange Rule 88, Section C, Office Manual and Sections A and B of the Field Manual.
- For connected unit cars report the oldest car in the set. Do not report Rebuilt Date unless car has been approved by the AAR.

Rebuilt Flag — **RBFL**

Identifies the equipment is nearing its end of life cycle

Data is Confidential. System Generated Field. This element is not eligible for Input.

Permissible Values for RBFL

N	No
Y	Yes

Owner *Mandatory* — **UMOW**

Primary reporting mark of the railroad or private company owning the car ●

Value does not carry forward for Single Clone / Multi-Clone / Single Restencil /

Multi-Restencil.

NOTES:

- Report the primary reporting mark of the railroad or private company owning the car. When car's lease or lien is held by a bank, trust holder, capital lease company, etc. not having an assigned mark, report the primary reporting mark affiliated with the stenciled reporting mark.
- Owners are required to submit a form R-1 to the operating and Maintenance Department AAR when reporting marks are changed.

Lessee	LESE
The reporting mark of the company leasing the equipment	

Value does not carry forward for Single Clone / Multi-Clone / Single Restencil / Multi-Restencil.

Validation Rule for LESE

-Umler Owner (UMOW) and Lessee are not allowed to be equal
-Lessee cannot be a child reporting mark

NOTES:

- In order to assign privately marked cars to a pool, a railroad reporting mark must be reported.

Equipment Group *Mandatory*	0002
Identifies the various major car types	●■

Used for Transportation Codes. Affects Rating.

Maintenance Party	MNPT
The parent reporting mark of the company responsible for the maintenance and repairs of the equipment	

Does not Carry Forward.

Mark Owner Category	B201
The company that owns the stenciled mark on the car	

System Generated Field. This element is not eligible for Input. Value does not carry forward for Single Restencil / Multi-Restencil / Equipment Group Change / Add Back.

Permissible Values for B201

B	US Private
C	Canadian Private
F	Foreign Private
H	Canadian Class II
I	Canadian Class I
J	Mexican Class I
K	Canadian Class III
M	Mexican Private
N	US Private Steamship
O	Canadian Private Steamship
P	Mexican Private Steamship
Q	Foreign Private Steamship
R	US Class II Railroad
U	US Class I Railroad
V	US Class III Railroad
W	Mexican Class II Railroad
Y	Mexican Class III Railroad

NOTES:

- This value is stored in the Umler Database for informational purposes and is retrieved from the Roadmark Registry.

Prior Equipment ID	PRID
The previous reporting mark and number of the equipment	

Value does not carry forward for Single Clone / Multi-Clone.

Validation Rule for PRID

-Prior and target equipment's Built Date (BLDT) must match
-The Prior Equipment ID (0001) must belong to the same or comparable Equipment Group (0002) as the current car initial and number

NOTES:

- Prior ID enables equipment records to share the same historical lineage. Equipment Identification Number (EIN) is a generated id that enables these equipment records to share inspections and transaction history.

Last Update Date	B122
Date of the last Umler element change	

System Generated Field. This element is not eligible for Input.

Equipment Add Date	B082
Date the reporting mark and number was added to the Umler system	

System Generated Field. This element is not eligible for Input.

Status Change Reason	USCR
Identifies the reason for the current operational state	

System Generated Field. This element is not eligible for Input. Does not Carry Forward.

Permissible Values for USCR

I	Initial Load
M	Movement
O	Status Changed Manually
R	Restencil

NOTES:

- If movement is detected on equipment, status is changed to Active.
- If an equipment record is changed to Active, any prior equipment record is placed in Inactive status.

Status Change Date	USCT
Identifies the effective date of the current operational state	

System Generated Field. This element is not eligible for Input. Does not Carry Forward.

Extended Service *Mandatory*	A096
A code indicating the eligibility of an increase to the life cycle	●

Used for Transportation Codes. Value does not carry forward for Single Clone / Multi-Clone.

Permissible Values for A096

1	1st ILS Inspection, additional 5 years of Service
2	2nd ILS Inspection, additional 5 years of service (10 years total)
3	3rd ILS Inspection, additional 5 years of service (15 years total)
C	Built New between January 1, 1964 - June 30, 1974, Certified for 50 Years of Service, Built New Before July 1, 1974 & Received AAR Waiver
E	Built new from July 1,1974, Qualified for 50 Years Service
N	Built Before January 1, 1964, Qualified for 40 Years Service
R	Rule 88, Rebuilt cars
U	Built between January 1, 1964 - June 30, 1974, Qualified for 40 Years & eligible for certification for 50 Years Service
V	Car is certified (FRA Waiver & AAR) for 65 years of service from date built new from January 1, 1964

Validation Rule for A096

-If Rebuilt Date (RBDT) is reported, then the Extended Service Code (A096) must be reported as R for Rebuilt, V, 1, 2, or 3 for Increased Life Service
-Extended Service Code of C cannot be reported if the car was built before January 1, 1964 or on/after July 1, 1974
-Extended Service Code of E cannot be reported if the car was built before July 1, 1974
-Extended Service Code of N cannot be reported if the car was built on/after January 1, 1964
-Extended Service Code of U cannot be reported if the car was built before January 1, 1964 or on/after July 1, 1974

NOTES:

- Value is used to calculate End of Service Date (B078).
- Rebuilt Date (RBDT) is required for Extended Service Code (A096) R for

Rebuilt, or V for 65 years service.
- Rebuilt Date (RBDT) is required for Extended Service Code (A096) 1, 2, 3, and V for Increased Life Service.

End of Service Date B078

Indicates the date of the end of equipment life

Data is Confidential. System Generated Field. This element is not eligible for Input.

NOTES:
Data becomes non-confidential two year priors to End of Service Date.

Do Not Load After B590

Equipment should not be loaded after date shown in the element

Data is Confidential.
Validation Rules for B590
-Do Not Load After (B590) cannot be updated thirty days prior to the date shown in the element.
-Do Not Load After (B590) cannot be updated within thirty days of the End of Service Date (B078).
-Do Not Load After (B590) date cannot be on or after the End of Service (B078) date.

NOTES:
- The element will be initially populated by End of Service (B078) minus 30 days.
- Data becomes non-confidential thirty days prior to the Do Not Load After (B590) date.

Equipment Identification EINN

Unique equipment identifier regardless of stenciled mark

System Generated Field. This element is not eligible for Input.

NOTES:
- Specify the Prior ID (PRID) on equipment records to ensure the historical lineage is preserved. Equipment with the same EIN share history and inspections.

Info Conflict Status B355

Indicates that an Informational Conflict exists on the Equipment record

System Generated Field. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Conflict Status B050

Identifies the escalation level of equipment in active conflict ■

System Generated Field. Affects Rating. This element is not eligible for Input. Value does not carry forward for Add Back.
Permissible Values for B050
1 Subject to Zero-Rating
2 Subject to Restricted in Interchange
3 Subject to Deletion

NOTES:
- Subject to Zero-Rating, goes into effect 30 days after Conflict Status occurs
- Subject to Restricted in Interchange, goes into effect 90 days after Conflict Status occurs
- Subject to Deletion, goes into effect 365 days after Conflict Status occurs

Date of Original Conflict B063

The date the equipment was originally placed in the current conflict

System Generated Field. This element is not eligible for Input.

Next Conflict Status B135

Identifies the next escalation level of an equipment in active conflict

System Generated Field. This element is not eligible for Input. Value does not carry forward for Add Back.
Permissible Values for B135
1 Subject to Zero-Rating
2 Subject to Restricted in Interchange
3 Subject to Deletion

NOTES:
- Subject to Zero-Rating, goes into effect 30 days after Conflict Status occurs
- Subject to Restricted in Interchange, goes into effect 90 days after Conflict Status occurs
- Subject to Deletion, goes into effect 365 days after Conflict Status occurs

Notice Indicator B137

Identifies equipment in error in Umler Notice Management

System Generated Field. This element is not eligible for Input.

Conflict Status Next Date B062

The date the conflict status will be escalated

System Generated Field. This element is not eligible for Input. Value does not carry forward for Add Back.

Rate Indicator A070

Indicates the rate type applicable to the unit ■

System Generated Field. Used for Transportation Codes. Affects Rating. This element is not eligible for Input. Does not Carry Forward.
Permissible Values for A070
0 Zero-Rated Due to Conflict Errors
2 Private Mileage Rate
6 Zero-Rated - Scrap (S_,SX), AAR Overage (XA), FRA Overage (YA), Umler Conflict - CHR 1/Tarriff 6007 (XZ). Zero-Rated Private Owner Election to Zero Rate [See Private Zero Rate (B150)].
M Railroad Market Rate
Q Zero-Rated Railroad Market Rate Due to Conflict Errors

NOTES:
- If unit is zero-rated, correction of conflicts will reinstate the appropriate rate indicator code.

Private Zero Rate B150

Indicates a private car is subject to contractual agreement, nullifying mileage rates ■

Affects Rating.
Permissible Values for B150
Y Yes

NOTES:
- Reporting "Y" generates Rate Indicator (A070) value 6 and a zero rate.

First Movement Date USAT

The first movement date under the stenciled mark of the equipment

This element is not eligible for Input. Does not Carry Forward.

Equipment Add Company B083

The reporting mark of the company that added the equipment

System Generated Field. This element is not eligible for Input.

Registration Reason B174

The code indicating the reason this equipment is added

Does not Carry Forward.
Permissible Values for B174
A Add-Back
N New
P Pending Restencil
R Restencil

Restencil Program Ind B177

Identifies the equipment is under a restencil program

Permissible Values for B177
Y Yes

Delete Reason Code	B064
A code that designates the reason the equipment has been deleted	

Value does not carry forward for Add Back.

Permissible Values for B064

A	Restenciled
D	Destroyed or wrecked
L	Lease terminated, removed from fleet
P	Retired unserviceable beyond economic repair
R	Rebuilt
S	Sold Serviceable
W	Over age retired for dismantling
Y	Error, reporting did not exist
Z	Other

Non-Compliant Wheelsets	B544
Equipment record is incomplete and has a missing wheelset component ID association. Refer to AAR Field Manual Rule 44 for industry requirements ✹	

System Generated Field. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Validation Rule for B544

-A Wheelset Component ID is required for each applicable location on equipment built on or after January 1, 2016

-A Wheelset Component ID is required for each applicable location on equipment rebuilt on or after January 1, 2016 and Gross Rail Load (A266) is greater than 268,000 lbs

NOTES:

- A "Y" will be system generated if the equipment is active and the number of Wheelset CID's required is not equal to the Axle Count (A024) on the equipment
- Validation rule applies to equipment that has been in Active status for 60 days

Pseudo Equipment Group	B547
Equipment needs to be identified as a miscellaneous record while maintaining all elements linked to the original equipment group	

System Generated Field.

Permissible Values for B547

MISC	Miscellaneous

Weight

Gross Rail Load/Weight *Mandatory*	A266
The maximum permissible weight on rail of the equipment and the load, reported in pounds ● ■	

Affects Rating.

Range of Values for A266

Minimum	Maximum
43000	1000000

Validation Rule for A266

-UnStarred 4 Axle Cars with a Journal Size of G must have a Gross Weight equal to 315,000 lbs.

-Gross Rail Load must be equal to the Load Limit (LDLT) plus the Tare Weight (A259)

NOTES:

Use Table 1 below to determine Gross Rail Load, if Qualification for Increased Gross Rail Load (B344) does not exist.

TABLE 1 -

Journal Size	Load per Axle	Gross Rail Load for 4-axle Equipment
B - 4 1/2" x 8"	25,750 lbs.	103,000 lbs.
C - 5" x 9"	35,500 lbs.	142,000 lbs.
D - 5 1/2" x 10"	44,250 lbs.	177,000 lbs.
E - 6" x 11"	55,000 lbs.	220,000 lbs.
F - 6 1/2" x 12"	65,750 lbs.	263,000 lbs.
G - 7" x 12"	78,750 lbs.	315,000 lbs.
K - 6 1/2" x 9"	71,500 lbs.	263,000 lbs.
M - 7" x 9"	78,750 lbs.	315,000 lbs.

Use Table 2 below to determine Gross Rail Load for 4-axle equipment if Qualification for Increased Gross Rail Load (B344) exists.

TABLE 2 -

Qualification for Increased Gross Rail Load (B344)	Journal Size	Gross Rail Load
1	K - 6 1/2" x 9"	286,000 lbs.
1	G - 7" x 12"	286,000 lbs.
1	M - 7" x 9"	286,000 lbs.
2	F - 6 1/2" x 12"	286,000 lbs.
2	K - 6 1/2" x 9"	286,000 lbs.
3	F - 6 1/2" x 12"	268,000 lbs.
3	K - 6 1/2" x 9"	268,000 lbs.

- For multi-unit equipment, report the total gross rail load for the entire set.
- Refer to Field Manual Rule 70 if additional information is required.

A Gross Rail Load less than the listed or calculated values may be entered; however:

- Star Code (A247) must be R or S, and
- Load Limit (LDLT) must also be reduced, ensuring Tare Weight (A259) plus Load Limit (LDLT) equals the reported Gross Rail Load.

For equipment having two or more different journal sizes, see following examples:

Example for Drawbar Connected:

- A 3-unit drawbar connected car has 12 axles.
- The end units (Locations A and B) each have 4 axles with E - 6" x 11" journals.
- The intermediate unit (Locations C) has 4 axles with F – 6 1/2" x 12" journals

Using TABLE 1, the Gross Rail Load would be:

8 ea. E-6" x 11" journal axles X 55,000 lbs. per axle = 440,000 lbs.
+ 4 ea. F-6 1/2" x 12" journal axles X 65,750 lbs. per axle = 263,000 lbs.
Gross Rail Load = 703,000 lbs.

Example for Articulated Connected:

- A 5-unit articulated intermodal car has 6 trucks (12 axles).
- The end trucks (Locations A and B) each have 2 axles with E - 6" x 11" journals.
- The intermediate trucks (Locations C, D, E, and F) each have 2 axles with G - 7" x 12" journals

Using TABLE 1, the Gross Rail Load would be:

4 ea. E-6" x 11" journal axles X 55,000 lbs. per axle = 220,000 lbs.
+ 8 ea. G-7" x 12" journal axles X 78,750 lbs. per axle = 630,000 lbs.
Gross Rail Load = 850,000 lbs.

Tare Weight *Mandatory*	A259
The equipment weight on rail when empty, sometimes referred to as Light Weight, reported in pounds ●	

Range of Values for A259

Minimum	Maximum
31000	200000

Validation Rule for A259

-Tare Weight for all non-articulated TANK must be less than 200000 lbs.

- Tare Weight (A259) value must be reported to the nearest 100 pounds if Weighing Date (A288).

NOTES:

- Do not report an average Tare Weight for car series, except for Pre-Registered cars
- When cars are made active, the actual Tare Weight must be recorded

Load Limit *Mandatory* **LDLT**

The maximum permissible weight of the commodity that can be loaded into the equipment, reported in pounds ● ■

Affects Rating.

Range of Values for LDLT

Minimum	Maximum
35000	650000

NOTES:

- For connected unit cars report the sum of the load limits for all units in the set.
- Tank cars in Chlorine service cannot exceed 180,000 value. Reference Star Code (A247) Validation Rules and notes for Chlorine cars in this situation.

Weighing Status *Mandatory* **A289**

Indicates the weight information is an estimate or an actual measurement ●

Value does not carry forward for Single Clone / Multi-Clone.

Permissible Values for A289

A	Actual
E	Estimated
V	Verified correct Tare Weight
X	Tare Weight subject to verification (System Generated)

Validation Rule for A289

-Equipment cannot be within a series of 10 with identical Tare Weights (A259), refer to Appendix P for further information on resolving tare weight conflicts

-When Status Code changes to Active or Inactive Weighing Status must be reported as Actual (A) or Verified (V) within 60 days of Status Code change

Weighing Date **A288**

The date the equipment was actually weighed

Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for A288

Minimum	Maximum
1/1/1900	12/31/9999

Validation Rule for A288

-If Weighing Date is reported the Tare Weight (A259) must be reported

-When Weighing Date is reported then Weighing Status (A289) must be A (Actual) or V (Verified)

-If Weighing Status (A289) is A (Actual) or V (Verified correct Tare Weight) then Weighing Date must be reported

-Weighing Date must be on or before the current date

-Weighing Date cannot be before Built / Rebuilt date

Gallonage Capacity **A297**

The number of gallons the equipment will hold ▲

Used in ETC Generation.

Star Code **A247**

Indicates a reduction of the Load Limit (LDLT) of the equipment per AAR Rule 70 ■

Affects Rating.

Permissible Values for A247

R	Body Capacity less than Truck Capacity
S	Reduced Load Limit

Validation Rule for A247

-4-axle Cars with Star Codes of S or R must not exceed Gross Weight of 263,000 lbs. when Journal Size is A, B, C, D, or E

-Journal Sizes having Star Code of S must have a Gross Weight that is less than the calculated Gross Weight with rounding applied

-UnStarred 4 Axle Cars reporting Increased Gross Rail Load (IGRL) of 2 or 3 must have a Gross Weight greater than or equal to 264,000 lbs.

-Starred 4 axle cars with IGRL of 1 must have a Wheel Size of 36 inches when Gross Weight is less than 286,000 lbs.

-Starred 4 Axle Cars with Increased Gross Rail Load (IGRL) reported must have a Journal Size of K, G, or M

NOTES:

- Tank cars in Chlorine service cannot have a Load Limit (LDLT) greater than 180,000. If the Gross Rail Load (A266) minus the Tare Weight (A259) results in a Load Limit (LDLT) greater than 180,000 the following must be true:
  - Load Limit (LDLT) = 180,000
  - Star Code (A247) = S
  - Gross Rail Load (A266) = Tare Weight (A259) plus 180,000

Qual for Inc GRL **B344**

AAR qualification for increased Rail Load Code designating AAR approval for operating 4-axle equipment at a gross rail load greater than 263,000 lbs per AAR Rule 88

Permissible Values for B344

1	Rule 88 IGRL Code 1 (> 263,000 lbs. and <= 286,000 lbs. GRL per AAR Specification S-286)
2	Rule 88 IGRL Code 2 (> 263,000 lbs. and <= 286,000 lbs. GRL)
3	Rule 88 IGRL Code 3 (> 263,000 lbs. and <= 268,000 lbs. GRL)

Validation Rule for B344

-4-axle Cars reporting Increased Gross Rail Load (IGRL) of 3, or reporting IGRL of 1 or 2 and having an S Star Code must have a Gross Weight that does not exceed 286,000 lbs.

-4-axle Cars with Increased Gross Rail Load (IGRL) of 2 or 3 must have a Journal Size of F or K

-4-axle Rule 88 Cars require a Wheel Size of 36 or 38 inches for Gross Weight greater than 263,000 and less than or equal to 286,000 lbs.

-4-axle Cars with Increased Gross Rail Load (IGRL) of 1 or 2 having no Star Code and a Journal Size of other than F or K, must have a Gross Weight greater than or equal to 263,000 lbs. and less than or equal to 286,000 lbs.

-4-axle equipment with Increased Gross Rail Load (IGRL) of 1 and having no Star Code (A247) must have a Journal Size (A147) of G, K, or M

-4-axle equipment having Qualification for Increased Gross Rail Load of 2 or 3 must have a Journal Size (A147) of F or K

-Unstarred 4 Axle Cars with Increased Gross Rail Load of 2 or IGRL of 1 and Journal Size K must have a Wheel Size of 36 inches

-Unstarred 4 Axle Cars with GRL of 315,000 and no IGRL reported and Unstarred cars with Journal Size of G or M must have a Wheel Size of 38 inches

-Unstarred 4 axle cars must report Qualifications for Increased GRL if the GRL is between 263,000 and 315,000

Dimension

Plate Code *Mandatory* **A046**

Indicates the extreme height and width clearance of the equipment ● ■

Affects Rating.

Permissible Values for A046

B	Plate Code B
C	Plate Code C
E	Plate Code E
F	Plate Code F
G	Clearance Code G
N	Plate Code N

NOTES:

- For a description of Plate Codes, please see Appendix J at the back of this manual.
  - Report B: If clearance does not exceed Plate B

- Report C: If clearance is greater than Plate B. but does not exceed Plate C
- Report E: If clearance is greater than Plates B and C, but does not exceed Plate E.
- Report F: If clearance is greater than Plates B, C and E, but does not exceed Plate F
- Report G: If clearance exceeds Plates B, C, E, F, and N.
- Report N: If clearance is greater than Plates B, C, E, and F, but does not exceed Plate N.

- There is no AAR Plate G. Clearance Code G is included in Umler to represent equipment that does not fit any existing AAR clearance plates.
- For ARTICULATED/MULTI-UNIT SET report the most restrictive clearance plate of UNIT in the set.

Outside Length *Mandatory* **OSLG**

The outside length over pulling faces of couplers in normal position ● ■

Affects Rating. Displayed in feet and inches on the Web. Stored in inches.

Range of Values for OSLG

Minimum	Maximum
26 ft 6 inches	124 ft 0 inches

Validation Rule for OSLG

-Tanks cannot have an Outside Length greater than 80 feet 11 inches.
-Outside Length (OSLG) on freight cars must exceed the Inside Length (A135) by 2 feet or more
-Outside Length (OSLG) on freight cars (except refrigerators) must not exceed Inside Length (A135) by more than 16 feet
-Outside Length (OSLG) on refrigerator cars (Mechanical Designation RB, RBL, RP, RPL, or RC) must not exceed Inside Length (A135) by more than 26 feet

NOTES:

- For connected unit cars report the maximum coupled length of the set.
- Round fraction to the higher inch, e.g., 05 1/4" = 06"

Outside Extreme Width *Mandatory* **A186**

The outside extreme width of the equipment ● ■

Affects Rating. Displayed in feet and inches on the Web. Stored in inches.

Range of Values for A186

Minimum	Maximum
7 ft 0 inches	11 ft 1 inches

Validation Rule for A186

-Outside Extreme Width must not exceed 10 feet 8 inches for Plate Codes B, C, E, F, or N
-Outside Extreme Width (A186) for Plate Code A must not be less than 10 feet 8 inches.
-Outside Extreme Width (A186) for Plate Code A must not exceed 10 feet 10 inches.

NOTES:

- For connected unit cars report the dimension of the largest unit in the set.
- Round fraction to the higher inch, e.g., 05 1/4" = 06"

Outside Extreme Height *Mandatory* **A185**

Height from top of rail to extreme projecting height ● ■

Affects Rating. Displayed in feet and inches on the Web. Stored in inches.

Range of Values for A185

Minimum	Maximum
8 ft 0 inches	17 ft 11 inches

Validation Rule for A185

-Outside Extreme Height for Plate Codes B must be less than or equal to 15 feet 1 inch
-Outside Extreme Height for Plate Codes C or I must be less than or equal to 15 feet 6 inches
-Outside Extreme Height for Plate Code E must be less than or equal to 15 feet 9 inches
-Outside Extreme Height for Plate Code F must be less than or equal to 17 feet 0 inch
-Outside Extreme Height for Plate Code N must be less than or equal to 17 feet 1 inch

NOTES:

- For connected unit cars report the dimension of the largest unit in the set.
- Round fraction to the higher inch, e.g., 05 1/4" = 06"

Outside Height Extr Width *Mandatory* **A187**

The highest point at which the extreme width of the equipment occurs ●

Displayed in feet and inches on the Web. Stored in inches.

Range of Values for A187

Minimum	Maximum
1 ft 0 inches	17 ft 11 inches

Validation Rule for A187

-Outside Extreme Width (A186) for Plate Codes B must not exceed 10 feet 8 inches if Outside Height Extreme Width is 13 feet 10 inches or less
-Outside Extreme Width (A186) for Plate Codes B must not exceed 10 feet 7 inches if Outside Height Extreme Width is 13 feet 11 inches
-Outside Extreme Width (A186) for Plate Codes B must not exceed 10 feet 6 inches if Outside Height Extreme Width is 14 feet 0 inches
-Outside Extreme Width (A186) for Plate Codes B must not exceed 10 feet 4 inches if Outside Height Extreme Width is 14 feet 1 inches
-Outside Extreme Width (A186) for Plate Codes B must not exceed 10 feet 3 inches if Outside Height Extreme Width is 14 feet 2 inches
-Outside Extreme Width (A186) for Plate Codes B must not exceed 10 feet 2 inches if Outside Height Extreme Width is 14 feet 3 inches
-Outside Extreme Width (A186) for Plate Codes B must not exceed 10 feet 0 inches if Outside Height Extreme Width is 14 feet 4 inches
-Outside Extreme Width (A186) for Plate Codes B must not exceed 9 feet 9 inches if Outside Height Extreme Width is 14 feet 5 inches
-Outside Extreme Width (A186) for Plate Codes B must not exceed 9 feet 5 inches if Outside Height Extreme Width is 14 feet 6 inches
-Outside Extreme Width (A186) for Plate Codes B must not exceed 9 feet 2 inches if Outside Height Extreme Width is 14 feet 7 inches
-Outside Extreme Width (A186) for Plate Codes B must not exceed 8 feet 10 inches if Outside Height Extreme Width is 14 feet 8 inches
-Outside Extreme Width (A186) for Plate Codes B must not exceed 8 feet 6 inches if Outside Height Extreme Width is 14 feet 9 inches
-Outside Extreme Width (A186) for Plate Codes B must not exceed 8 feet 3 inches if Outside Height Extreme Width is 14 feet 10 inches
-Outside Extreme Width (A186) for Plate Codes B must not exceed 7 feet 11 inches if Outside Height Extreme Width is 14 feet 11 inches
-Outside Extreme Width (A186) for Plate Codes B must not exceed 7 feet 6 inches if Outside Height Extreme Width is 15 feet 0 inches
-Outside Extreme Width (A186) for Plate Codes B must not exceed 7 feet 4 inches if Outside Height Extreme Width is 15 feet 1 inches
-Outside Extreme Width (A186) for Plate Codes C must not exceed 10 feet 8 inches if Outside Height Extreme Width is 14 feet 3 inches or less
-Outside Extreme Width (A186) for Plate Codes C must not exceed 10 feet 7 inches if Outside Height Extreme Width is 14 feet 4 inches
-Outside Extreme Width (A186) for Plate Codes C must not exceed 10 feet 6 inches if Outside Height Extreme Width is 14 feet 5 inches
-Outside Extreme Width (A186) for Plate Codes C must not exceed 10 feet 4 inches if Outside Height Extreme Width is 14 feet 6 inches
-Outside Extreme Width (A186) for Plate Codes C must not exceed 10 feet 3 inches if Outside Height Extreme Width is 14 feet 7 inches
-Outside Extreme Width (A186) for Plate Codes C must not exceed 10 feet 2 inches if Outside Height Extreme Width is 14 feet 8 inches
-Outside Extreme Width (A186) for Plate Codes C must not exceed 10 feet 0 inches if Outside Height Extreme Width is 14 feet 9 inches
-Outside Extreme Width (A186) for Plate Codes C must not exceed 9 feet 9 inches if Outside Height Extreme Width is 14 feet 10 inches
-Outside Extreme Width (A186) for Plate Codes C must not exceed 9 feet 5 inches if Outside Height Extreme Width is 14 feet 11 inches
-Outside Extreme Width (A186) for Plate Codes C must not exceed 9 feet 2 inches if Outside Height Extreme Width is 15 feet 0 inches
-Outside Extreme Width (A186) for Plate Codes C must not exceed 8 feet 10 inches if Outside Height Extreme Width is 15 feet 1 inches
-Outside Extreme Width (A186) for Plate Codes C must not exceed 8 feet 6 inches if Outside Height Extreme Width is 15 feet 2 inches

-Outside Extreme Width (A186) for Plate Codes C must not exceed 8 feet 3 inches if Outside Height Extreme Width is 15 feet 3 inches
-Outside Extreme Width (A186) for Plate Codes C must not exceed 7 feet 11 inches if Outside Height Extreme Width is 15 feet 4 inches
-Outside Extreme Width (A186) for Plate Codes C must not exceed 7 feet 8 inches if Outside Height Extreme Width is 15 feet 5 inches
-Outside Extreme Width (A186) for Plate Codes C must not exceed 7 feet 4 inches if Outside Height Extreme Width is 15 feet 6 inches
-Outside Extreme Width (A186) for Plate Code E must not exceed 10 feet 8 inches if Outside Height Extreme Width is 15 feet 2 inches or less
-Outside Extreme Width (A186) for Plate Code E must not exceed 10 feet 6 inches if Outside Height Extreme Width is 15 feet 3 inches
-Outside Extreme Width (A186) for Plate Code E must not exceed 10 feet 3 inches if Outside Height Extreme Width is 15 feet 4 inches
-Outside Extreme Width (A186) for Plate Code E must not exceed 9 feet 6 inches if Outside Height Extreme Width is 15 feet 5 inches
-Outside Extreme Width (A186) for Plate Code E must not exceed 8 feet 8 inches if Outside Height Extreme Width is 15 feet 6 inches
-Outside Extreme Width (A186) for Plate Code E must not exceed 7 feet 11 inches if Outside Height Extreme Width is 15 feet 7 inches
-Outside Extreme Width (A186) for Plate Code E must not exceed 7 feet 1 inches if Outside Height Extreme Width is 15 feet 8 inches
-Outside Extreme Width (A186) for Plate Code E must not exceed 6 feet 3 inches if Outside Height Extreme Width is 15 feet 9 inches
-Outside Extreme Width (A186) for Plate Code F must not exceed 10 feet 8 inches if Outside Height Extreme Width is 16 feet 3 inches or less
-Outside Extreme Width (A186) for Plate Code F must not exceed 10 feet 7 inches if Outside Height Extreme Width is between 16 feet 4 inches and 16 feet 6 inches
-Outside Extreme Width (A186) for Plate Code F must not exceed 10 feet 6 inches if Outside Height Extreme Width is 16 feet 7 inches
-Outside Extreme Width (A186) for Plate Code F must not exceed 10 feet 3 inches if Outside Height Extreme Width is 16 feet 8 inches
-Outside Extreme Width (A186) for Plate Code F must not exceed 10 feet 0 inches if Outside Height Extreme Width is 16 feet 9 inches
-Outside Extreme Width (A186) for Plate Code F must not exceed 9 feet 8 inches if Outside Height Extreme Width is 16 feet 10 inches
-Outside Extreme Width (A186) for Plate Code F must not exceed 9 feet 5 inches if Outside Height Extreme Width is 16 feet 11inches
-Outside Extreme Width (A186) for Plate Code F must not exceed 9 feet 2 inches if Outside Height Extreme Width is 17 feet 0 inches
-Outside Extreme Width (A186) for Plate Code N must not exceed 10 feet 8 inches if Outside Height Extreme Width (A187) is 16 feet 9 inches or less
-Outside Extreme Width (A186) for Plate Code N must not exceed 10 feet 6 inches if Outside Height Extreme Width (A187) is 16 feet 10 inches
-Outside Extreme Width (A186) for Plate Code N must not exceed 10 feet 4 inches if Outside Height Extreme Width (A187) is 16 feet 11 inches
-Outside Extreme Width (A186) for Plate Code N must not exceed 10 feet 2 inches if Outside Height Extreme Width (A187) is 17 feet 0 inches
-Outside Extreme Width (A186) for Plate Code N must not exceed 9 feet 11 inches if Outside Height Extreme Width (A187) is 17 feet 1 inch

NOTES:

- For connected unit cars report the dimension of the largest unit in the set.
- Round fraction to the higher inch, e.g., 05 1/4" = 06"

Truck Center Length — **A276**

The length between the centers of the two truck systems ■

Affects Rating. Displayed in feet and inches on the Web. Stored in inches.

Range of Values for A276

Minimum	Maximum
15 ft 0 inches	76 ft 11 inches

Validation Rule for A276

-Truck Center Length is required for cars with an Outside Length of greater than 62 feet 6 inches
-Truck Center Length must be a minimum of 15 feet for cars with an Outside Length greater than 62 feet 6 inches

NOTES:

- For connected unit cars report the dimension of the largest unit in the set.

Specification

Truck Count — **B256**

The total number of trucks on the equipment

System Generated Field. This element is not eligible for Input.

Range of Values for B256

Minimum	Maximum
2	4

Axle Count *Mandatory* — **A024**

The total number of axles on the equipment ● ■

Affects Rating.

Range of Values for A024

Minimum	Maximum
2	999

Validation Rule for A024

-Axle Count must be greater than or equal to 4
-Axle Count for an articulated car must be greater than or equal to ((Connected Unit Count (A020) x 2) + 2)
-Axle Count for a draw bar connected car must be greater than or equal to (Connected Unit Count (A020) x 4)
-Total Axle Count must match sum of truck axle counts

Wheel Bearing Type *Mandatory* — **B191**

Indicates the wheel bearing code for the equipment ● ■

Affects Rating.

Permissible Values for B191

P Plain
R Roller

Validation Rule for B191

-Cars with Plain Bearings will have a Transportation Code (TCOD) and Transportation Condition Code (TCCD) of either YA, S_, SX, or XJ
-Equipment cannot have Plain Bearings if Built Date (BLDT) is on or after January 1, 1993

Bearing Shielded From HBD — **B021**

Indicates the bearing is shielded from the hot box detector on the equipment

Permissible Values for B021

Y Yes

Brake Shoe Type *Mandatory* — **B026**

Indicates the type of brake shoe on the equipment ●

Permissible Values for B026

C Tread Conditioning
H High Friction Composite
L Low Friction Composite/Cast Iron

CC Side Bearing Type — **A146**

Indicates the travel range of the constant contact side bearings installed on the equipment

Permissible Values for A146

LC Long Travel Constant Contact
SC Short Travel Constant Contact

Validation Rule for A146

-Equipment having Qualification for Increased Gross Rail Load (B344) of 1 must have Constant Contact Side Bearing Type of LC
-All Tank cars must be equipped with (M-948) approved Long Travel CC Side Bearings

Empty/Load Device Eqpd — **B075**

Indicates a system that determines if the equipment is empty or loaded, and then varies the braking forces accordingly

Permissible Values for B075
Y Yes

Remote Monitoring Device B176

Indicates the equipment is equipped with a location monitoring device

Permissible Values for B176
Y Yes
N No

Validation Rule for B176
-Remote Monitoring Device (B176) is mandatory for all tank cars on or after August 1, 2021

AEI High Temperature Tag B006

Indicates the equipment is equipped with a high temperature AEI tag

Permissible Values for B006
Y High Temperature Tag

Compartment Count *Mandatory* A052

The number of individual compartments the equipment contains ● ■

Affects Rating.

Range of Values for A052

Minimum	Maximum
1	5

Validation Rule for A052
-Tank Compartment Count cannot be reported for Tank Major Class 77

Connected Unit Count A020

Indicates the number of units within an articulated or multi-unit equipment ■

Affects Rating.

Range of Values for A020

Minimum	Maximum
2	45

Intermediate Conn Style B115

Indicates the method by which two or more pieces of equipment are connected

Permissible Values for B115
A Articulated Connector
D Drawbar Connector

Operating Brakes *Mandatory* A182

The number of air brake control valves on the equipment (excludes hand brakes). One control valve consists of a service portion, emergency portion, and pipe bracket. Example: DB-60 control valve ●

Permissible Values for A182
1 2 3 4 5
6 7 8 9

Validation Rule for A182
-Operating Brakes must be reported for all equipment
-Operating Brakes (A182) must be 1 for non-articulated equipment with an Axle Count (A024) equal to 4

ECP Brake Type B327

Indicates the type of electronic controlled pneumatic brake used on the equipment

Permissible Values for B327
N Not Equipped
O Overlay - Both ECP & Air Brake
S Stand Alone - ECP Only

Validation Rule for B327
-Equipment must have a value entered for ECP Brake Type if built or rebuilt after June 28, 2012

ECP Brake Builder B328

The manufacturer of the electronic controlled pneumatic brake used on the equipment ✹

Permissible Values for B328
NYAB New York Air Brake
WABT WABTEC

Validation Rule for B328
-If ECP Brake Type (B327) is Stand Alone or Overlay then a value must be entered for ECP Brake Builder
-If ECP Brake Type (B327) is Not Equipped then ECP Brake Builder is not reportable

Slack Adjuster Group B538

The slack adjuster group on the equipment per AAR Field Manual Rule #8 ✹

Value does not carry forward for Single Clone / Multi-Clone.

Permissible Values for B538

A	Group A	B	Group B	C	Group C	D	Group D
E	Group E	F	Group F	G	Group G	H	Group H
J	Group J	L	Group L	M	Group M	N	Group N
O	Group O	P	Group P	Q	Group Q	R	Group R
1	Internal	2	Unequipped				

Validation Rule for B538
- Slack Adjuster Group is mandatory for all equipment built or rebuilt on or after January 1, 2016
- If Slack Adjuster Group is reported as "1" then Brake Cylinder Mount Type (B540) must be reported as "T"
- If Slack Adjuster Group is "1" or "2", then Slack Adjuster CID (B359) must not be reported.

NOTES:
- Permissible value of "1 – Internal" identifies special truck mounted internal slack adjuster within brake cylinder.

Brake Cylinder Mount Type B540

Identifies the location of the brake cylinder ✹

Permissible Values for B540
B Body Mounted
T Truck Mounted

Validation Rule for B540
- Brake Cylinder Mount Type is mandatory for all equipment built or rebuilt on or after January 1, 2016

Equipment Builder A035

Identifies the original manufacturer of the equipment ✹

Permissible Values for A035

AB	AMF BEAIRD
ACF	American Car & Foundry
ACFX	ACF Industries
ALCC	Alloy Crafts Company
ARI	ARI Industries
CIPM	Chart Industries, Inc.
CNCF	Carros De Ferrocarril, SA
EVAN	Evans Products
GATX	General American Transportation Corp
GMB	Greenbrier
GULF	Gulf Railcar
GUNM	Gunderson - Mexico
HA	HARGIS RAILCAR
HST	Hawker Siddeley
LAVE	Lavelin
LOX	Lox Equipment Company
MC	MARATHON TANK CAR
NACA	National Alabama Corporation
NACC	North American Car
NSC	National Steel Car
PREE	Process Engineering
PRO	Procor Limited
REBD	Reilly Beard

RICH	Richmond Locomotive Works
RTCX	Richmond Tank Car
TETX	Texana Tank
TRIN	Trinity
TT	TEXANA TANK
TTPM	Tytal
UNKN	Unknown
UTLX	Union Tank Car
VERM	Vertex

Validation Rule for A035

-Equipment Builder must be populated if the Built Date (BLDT) is July 1, 2010 or newer

-Equipment built or rebuilt on or after July 1, 2010 cannot have a Equipment Builder of Unknown

-Equipment with a Built Date (BLDT) on or after July 1, 2010 cannot have an Equipment Builder Code of OWNER RAILROAD.

-Equipment Builder can have a value of MULT only if the equipment has multiple units.

Builder Lot Code **B030**

A unique identifier for a group of equipment built by one manufacturer under the same contract ✹

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Validation Rule for B030

-Equipment built or rebuilt on or after June 28, 2012 must have a value for Builder Lot Code

Built Country **B031**

The country where the equipment was constructed

Data is Confidential.

Permissible Values for B031

CA	Canada	MX	Mexico
US	United States		

Rebuilt Country **B170**

The country where the equipment was re-constructed

Permissible Values for B170

CA	Canada	MX	Mexico
US	United States		

FRA Reflectorization **B096**

Indicates the equipment owner assumes responsibility for applying reflectorization tape

Permissible Values for B096

P	Reflectorization Plan
W	Reflectorization Waiver

Validation Rule for B096

-Reflectorization is mandatory for all equipment after November 28, 2015.

Tank Major Class *Mandatory* **B207**

The high level description of the tank design type ●▲

Used in ETC Generation.

Permissible Values for B207

01	Aluminum Non Pressure
02	High Purity Aluminum Non Pressure
04	Nickel
05	Acid Car Welded or Riveted
06	Stainless Steel Grade 304 or 430
07	Stainless Steel Grade 304L
08	Stainless Steel Grade 316
09	Stainless Steel Grade 316L
10	General Service Carbon Steel Tank Welded or Riveted Includes Rubber Lined
11	Non Pressure Tank Within a Tank Carbon Steel Inner Tank
13	Non Pressure Tank Within a Tank Grade 304 or 430 Stainless Steel Inner Tank
14	Non Pressure Tank Within a Tank Grade 304L Stainless Steel Inner Tank
15	Non Pressure Tank Within a Tank Grade 316 Stainless Steel Inner Tank
16	Non Pressure Tank Within a Tank Grade 316L Stainless Steel Inner Tank
17	Non Pressure Tank HM-251
18	Stainless Clad Steel
19	Nickel Clad Steel
20	Non Pressure Tank With a Head Shield
21	Non Pressure Tank With a Head Shield and Thermal Protection
36	Maintenance Of Way
37	Steel Pressure Non Insulated
38	Steel Pressure Non Insulated
39	Steel Pressure Non Insulated
40	Steel Pressure Non Insulated
41	Steel Pressure Non Insulated
42	Steel Pressure Non Insulated
43	Steel Pressure Non Insulated
44	Steel Pressure Non Insulated
45	Steel Pressure Non Insulated
46	Steel Pressure Non Insulated
47	Steel Pressure Non Insulated
48	Steel Pressure Non Insulated
49	Steel Pressure Non Insulated
50	Aluminum Pressure
51	Aluminum High Pressure
52	Steel Pressure Insulated
53	Steel Pressure Insulated
54	Steel Pressure Insulated
55	Steel Pressure Insulated
56	Steel Pressure Insulated
57	Steel Pressure Insulated
58	Steel Pressure Multi Unit Tanks
59	Steel Pressure Non Insulated
60	Steel Pressure Non Insulated
61	Steel Pressure Non Insulated
62	Steel Pressure Non Insulated
64	Steel Pressure Non Insulated
65	Steel Pressure Non Insulated
67	Pressure Tank Within a Tank
76	Cryogenic Tank Within a Tank
77	Helium
80	Stainless Clad Steel
81	Stainless Clad Steel
84	Pressure Tank for TIH (HM-246)
85	Pressure Tank for TIH (HM-246)
86	Steel Pressure Insulated
87	Steel Pressure Insulated
88	Steel Pressure Insulated
89	Steel Pressure Insulated
90	Steel Pressure Insulated
91	Steel Pressure Insulated
92	Steel Pressure Insulated
93	Steel Pressure Insulated
94	Steel Pressure Insulated
95	Steel Pressure Insulated
96	Steel Pressure Insulated
97	Steel Pressure Insulated

NOTES:

- See Appendix N for data ordered by Tank Major Class.
- This element is used in determining if the tank car meets DOT117.

- This element is used in determining if the tank car meets HM-246.

CPC-1232 Compliant **B522**

System generated element to identify tank cars that meet the CPC-1232 technical requirements. Specifics on the requirements can be found in Chapter 2 of M-1002, paragraph 2.7.

System Generated Field. This element is not eligible for Input, Output or Query. Does not Carry Forward.

Permissible Values for B522

Y Yes

NOTES:

- For a tank car to qualify to element B522 (CPC-1232 compliant), all of the following mandatory elements must be populated:
  - A237 Stenciled Shipping Specs begins with "**111**" or **"117R"**
  - A264 Top Fittings Protection = "**E**" Equipped M1002 Appendix E10.2
  - B105 Head Protection Shield Thickness >= 0.5
  - B203 Tank Head Material Norm = "**Y**"
  - B208 Tank Shell Material Norm = "**Y**"
  - In addition to the above, the car must have one of these interdependent combinations:

	B204 Tank Jacket Material	A118 Head Protection Type	A257 Tank Shell Material Spec =	A258 Tank Shell Thickness >=	A254 Tank Head Material Spec =	A255 Tank Head Thickness >=
1	N or S	F	128B	0.4375	128B	0.4375
2	N or S	F	51670	0.5	51670	0.5
3	U	F or H or T	128B	0.5	128B	0.5
4	U	F or H or T	51670	0.5625	51670	0.5625
5	N or S	F	5167128	0.5	51670 or 128B	0.5
6	U	F or H or T	5167128	0.5625	51670 or 128B	0.5625
7	N or S	F	240304 240304L 240316 240316L	0.4375	240304 240304L 240316 240316L	0.4375
8	U	F or H or T	240304 240304L 240316 240316L	0.5	240304 240304L 240316 240316L	0.5

Stub Sill Variation **B526**

Type of reinforcement on the bottom shell of the tank car

Value does not carry forward for Equipment Group Change.

Permissible Values for B526

C Continuous N Non-Continuous

Validation Rule for B526

-For this tank car, a value for Stub Sill Design Variation is required.

NOTES:

- If the following conditions are met, Stub Sill Design Variation (B526) must be reported.
- If Shipping Container Spec Stenciled (A237) begins with '111' or '211'
  - and Stub Sill Design Type (A251) = any value except 'FULL'
  - and if Tank Shell Material Norm (B208) = any value except 'Y'
  - and if Tank Shell Material Spec (A257) = '51570' or '1997UNK'
  - and if Coils Exterior/Interior (X109) = any value except 'E'
  - then the user must report a value of 'C (Continuous)' or 'N (Non-continuous)' for Stub Sill Design Variation (B526).

Restricted under TC-PD-34 **B527**

Tank Car Subject to restrictions under TC-PD-34

System Generated Field. This element is not eligible for Input, Output or Query. Does not Carry Forward.

Permissible Values for B527

Y Yes

NOTES:

- If the following conditions are met, Restricted Under TC-PD-34 (B527) will be assigned a value of 'Y (Yes)' by the system.
- If Shipping Container Spec Stenciled (A237) begins with '111' or '211'
  - and Stub Sill Design Type (A251) = any value except 'FULL'
  - and Tank Shell Material Norm (B208) = any value except 'Y'
  - and Tank Shell Material Spec (A257) = '51570' or '1997UNK'
  - and Coils Exterior/Interior (X109) = any value except 'E'
  - and Stub Sill Design Variation (B526) = any value except 'C'
  - then the system will assign a value of 'Y (Yes)' for Restricted Under TC-PD-34 (B527).

Design Shipping Cont Spec **A072**

The Department of Transportation (DOT) design specification - as built

Permissible Values for A072

105A100ALW	DOT 105A100ALW
105A100W	DOT 105A100W
105A200ALW	DOT 105A200ALW
105A200W	DOT 105A200W
105A300ALW	DOT 105A300ALW
105A300W	DOT 105A300W
105A400W	DOT 105A400W
105A500W	DOT 105A500W
105A600W	DOT 105A600W
107A	DOT 107A
109A100ALW	DOT 109A100ALW
109A200ALW	DOT 109A200ALW
109A300ALW	DOT 109A300ALW
109A300W	DOT 109A300W
111A100ALW1	DOT 111A100ALW1
111A100ALW2	DOT 111A100ALW2
111A100W	10 and 18 Major Class (ICC or DOT)
111A100W1	DOT 111A100W1
111A100W2	DOT 111A100W2
111A100W3	DOT 111A100W3
111A100W4	DOT 111A100W4
111A100W5	DOT 111A100W5
111A100W6	DOT 111A100W6
111A100W7	DOT 111A100W7
111A60ALW1	DOT 111A60ALW1
111A60ALW2	DOT 111A60ALW2
111A60W1	DOT 111A60W1
111A60W2	DOT 111A60W2
111A60W6	DOT 111A60W6
111A60W7	DOT 111A60W7
112A200W	DOT 112A200W
112A340W	DOT 112A340W
112A400W	DOT 112A400W
112A500W	DOT 112A500W
113A60W	DOT 113A60W
113A90W	DOT 113A90W
113C120W	DOT 113C120W
113C120W9	DOT 113C120W9
113C140W	TC 113C140W
114A340W	DOT 114A340W
114A400W	DOT 114A400W
115A60ALW	DOT 115A60ALW
115A60W1	DOT 115A60W1
115A60W6	DOT 115A60W6
117A100W	DOT 117A100W
117P100W	DOT 117P100W
120A100W	DOT 120A100W
120A200ALW	DOT 120A200ALW
120A200W	DOT 120A200W
120A300W	DOT 120A300W
120A400W	DOT 120A400W
120A500W	DOT 120A500W
204W	AAR 204W
206W	AAR 206W

207A20W	AAR 207A20W
207A28W	AAR 207A28W
207A40W	AAR 207A40W
207A48W	AAR 207A48W
207A60W	AAR 207A60W
207A80W	AAR 207A80W
211A100ALW1	AAR 211A100ALW1
211A100W1	AAR 211A100W1
211A100W3	AAR 211A100W3
211A100W6	AAR 211A100W6
211A60ALW1	AAR 211A60ALW1
211A60W1	AAR 211A60W1
211A60W7	AAR 211A60W7

NOTES:

- Cars can be downgraded, but never upgraded past its design tank test pressure.
- Selection of DOT117P requires approval from the FRA per 49 CFR 179.202-12(a).

Stenciled Shipping Spec *Mandatory* **A237**

The Department of Transportation (DOT) design specification - as stenciled ● ■

Affects Rating.

Permissible Values for A237

105A100ALW	Major Class 50 - DOT 105A100ALW
105A100W	Major Class 52 - DOT 105A100W
105A200ALW	Major Class 50 - DOT 105A200ALW
105A200W	Major Class 53 - DOT 105A200W
105A300W	Major Class 18/54 - DOT 105A300W
105A400W	Major Class 55 - DOT 105A400W
105A500W	Major Class 18/56 - DOT 105A500W
105A600W	Major Class 57 - DOT 105A600W
105H500W	Major Class 84 - DOT 105H500W
105H600W	Major Class 85 - DOT 105H600W
105J100W	Major Class 86 - DOT 105J100W
105J200ALW	Major Class 50 - DOT 105J200ALW
105J200W	Major Class 88 - DOT 105J200W
105J300ALW	Major Class 50 - DOT 105J300ALW
105J300W	Major Class 80/90 - DOT 105J300W
105J400W	Major Class 92 - DOT 105J400W
105J500I	Major Class 84 - DOT 105J500I
105J500W	Major Class 94 - DOT 105J500W
105J600I	Major Class 85 - DOT 105J600I
105J600W	Major Class 96 - DOT 105J600W
105S100W	Major Class 87 - DOT 105S100W
105S200W	Major Class 89 - DOT 105S200W
105S300W	Major Class 81/91 - DOT 105S300W
105S400W	Major Class 81/91 - DOT 105S400W
105S500W	Major Class 95 - DOT 105S500W
105S600W	Major Class 97 - DOT 105S600W
107A	Major Class 77 - DOT 107A
109A100ALW	Major Class 50 - DOT 109A100ALW
109A200ALW	Major Class 50 - DOT 109A200ALW
109A300ALW	Major Class 51 - DOT 109A300ALW
109A300W	Major Class 54 - DOT 109A300W
111A100ALW1	Major Class 01 - DOT 111A100ALW1
111A100ALW2	Major Class 01 - DOT 111A100ALW2
111A100W1	Major Class 10/18 - DOT 111A100W1
111A100W2	Major Class 05/18/19 - DOT 111A100W2
111A100W3	Major Class 10/18 - DOT 111A100W3
111A100W4	Major Class 10 - DOT 111A100W4
111A100W5	Major Class 05 - DOT 111A100W5
111A100W6	Major Class 06/07/08/09 - DOT 111A100W6
111A100W7	Major Class 07 - DOT 111A100W7
111A60ALW1	Major Class 01 - DOT 111A60ALW1
111A60ALW2	Major Class 01 - DOT 111A60ALW2
111A60W1	Major Class 10 - DOT 111A60W1
111A60W2	Major Class 05 - DOT 111A60W2
111A60W5	Major Class 05 - DOT 111A60W5
111A60W6	Major Class 06 - DOT 111A60W6
111A60W7	Major Class 06/07/09 - DOT 111A60W7
111J100W2	Major Class 21 - DOT 111J100W2
111J100W3	Major Class 21 - DOT 111J100W3
111J100W4	Major Class 21 - DOT 111J100W4
111S100ALW1	Major Class 01 - DOT 111S100ALW1
111S100ALW2	Major Class 01 - DOT 111S100ALW2
111S100W1	Major Class 20 - DOT 111S100W1
111S100W2	Major Class 20 - DOT 111S100W2
111S100W3	Major Class 20 - DOT 111S100W3
111S100W5	Major Class 20 - DOT 111S100W5
111S100W6	Major Class 09 - DOT 111S100W6
111S60ALW1	Major Class -01 - DOT 111S60ALW1
111S60ALW2	Major Class 01 - DOT 111S60ALW2
112A200W	Major Class 59 - DOT 112A200W
112A340W	Major Class 60 - DOT 112A340W
112A400W	Major Class 61 - DOT 112A400W
112A500W	Major Class 62 - DOT 112A500W
112H500W	Major Class 84 - DOT 112H500W
112J200W	Major Class 37 - DOT 112J200W
112J340W	Major Class 38 - DOT 112J340W
112J400W	Major Class 41 - DOT 112J400W
112J500I	Major Class 84 - DOT 112J500I
112J500W	Major Class 62 - DOT 112J500W
112S200W	Major Class 37 - DOT 112S200W
112S340W	Major Class 39/60 - DOT 112S340W
112S400W	Major Class 42/61 - DOT 112S400W
112S500I	Major Class 84 - DOT 112S500I
112S500W	Major Class 62 - DOT 112S500W
112T200W	Major Class 37 - DOT 112T200W
112T340W	Major Class 40 - DOT 112T340W
112T400W	Major Class 43 - DOT 112T400W
112T500W	Major Class 62 - DOT 112T500W
113A60W	Major Class 67 - DOT 113A60W
113A90W	Major Class 76 - DOT 113A90W
113C120W	Major Class 67 - DOT 113C120W
113C120W9	Major Class 67 - DOT 113C120W9
113C140W	Major Class 76 - TC 113C140W
113C60W	Major Class 76 - TC 113C60W
113D120W	Major Class 67 - DOT 113D120W
113D60W	Major Class 76 - TC 113D60W
114A340W	Major Class 64 - DOT 114A340W
114A400W	Major Class 65 - DOT 114A400W
114J340W	Major Class 44 - DOT 114J340W
114J400W	Major Class 47 - DOT 114J400W
114S340W	Major Class 45 - DOT 114S340W
114S400W	Major Class 48 - DOT 114S400W
114T340W	Major Class 46 - DOT 114T340W
114T400W	Major Class 49 - DOT 114T400W
115A60ALW	Major Class 67 - DOT 115A60ALW
115A60W1	Major Class 11 - DOT 115A60W1
115A60W6	Major Class 13/14/15/16 - DOT 115A60W6
117J100W	Major Class 17 - DOT 117J100W
117P100W	Major Class 17 - DOT 117P100W
117R100W	Major Class 17 - DOT 117R100W
120A100W	Major Class 52 - DOT 120A100W
120A200ALW	Major Class 50 - DOT 120A200ALW
120A200W	Major Class 53 - DOT 120A200W
120A300W	Major Class 54 - DOT 120A300W
120A400W	Major Class 55 - DOT 120A400W
120A500W	Major Class 56 - DOT 120A500W
120J100W	Major Class 52 - DOT 120J100W
120J200W	Major Class 07/53 - DOT 120J200W
204W	Major Class 76 - AAR 204W
206W	Major Class 11/13/14/15/16 - AAR 206W
207A20W	Major Class 77 - AAR 207A20W
207A28W	Major Class 77 - AAR 207A28W

207A40W	Major Class 77 - AAR 207A40W
207A48W	Major Class 77 - AAR 207A48W
207A60W	Major Class 77 - AAR 207A60W
207A80W	Major Class 77 - AAR 207A80W
211A100ALW1	Major Class 01 - AAR 211A100ALW1
211A100W1	Major Class 10 - AAR 211A100W1
211A100W3	Major Class 10 - AAR 211A100W3
211A100W6	Major Class 06 - AAR 211A100W6
211A200W1	Major Class 10 - AAR 211A200W1
211A60ALW1	Major Class 01 - AAR 211A60ALW1
211A60W1	Major Class 10 - AAR 211A60W1
211A60W7	Major Class 07 - AAR 211A60W7
211J100W1	Major Class 10 - AAR 211J100W1

Validation Rule for A237

-Stencil Shipping Specifications must be reported for Tank Major Class – 94

-The original Built date (BLDT) for a DOT117R must occur before 10/1/2015

NOTES:

- This element is used in determining if the tank car meets CPC-1232 Compliance (B522). See CPC-1232 Compliant (B522) for explanation.
- This element is used in determining tank major class 17. See Appendix N for explanation.
- Selection of DOT117P requires approval from the FRA per 49 CFR 179.202-12(a).
- This element is used in determining if the tank car meets DOT117.
- This element is used in determining if the tank car meets HM-246.

Stub Sill Design Type — A251

Identifies the equipment stub sill

Permissible Values for A251

1997UNK	Unknown, built prior to 7/1/1997
ACF100	ACF100 Stub Sill Design
ACF200	ACF200 Stub Sill Design
ACF230	ACF230 Stub Sill Design
ACF270	ACF270 Stub Sill Design
ACF300	ACF300 Stub Sill Design
AMFABC	AMFABC Stub Sill Design
AMFJKL	AMFJKL Stub Sill Design
ARI300	ARI300 Stub Sill Design
ARI301	ARI301 Stub Sill Design
ARI310	ARI310 Stub Sill Design
ARI330	ARI330 Stub Sill Design
CHT001	CHT001 Stub Sill Design
CNC001	CNC001 Stub Sill Design
CNC002	CNC002 Stub Sill Design
EVAEVA	EVAEVA Stub Sill Design
EVAWBR	EVAWBR Stub Sill Design
FCA001	FCA001 Stub Sill Design
FCA002	FCA002 Stub Sill Design
FULL	FULL Stub Sill Design
GAT017	GAT017 Stub Sill Design
GAT018	GAT018 Stub Sill Design
GAT020	GAT020 Stub Sill Design
GAT098	GAT098 Stub Sill Design
GAT102	GAT102 Stub Sill Design
GAT18B	GAT18B Stub Sill Design
GBR001	GBR001 Stub Sill Design
GUL270	GUL270 Stub Sill Design
GULGUL	GULGUL Stub Sill Design
GULWBR	GULWBR Stub Sill Design
GUN001	GUN001 Stub Sill Design
HST098	HST098 Stub Sill Design
HSTJKL	HSTJKL Stub Sill Design
LAVLIN	LAVLIN Stub Sill Design
LOXLOX	LOXLOX Stub Sill Design
NAC200	NAC200 Stub Sill Design
NACABC	NACABC Stub Sill Design
NACDEF	NACDEF Stub Sill Design
NACGHI	NACGHI Stub Sill Design
NACJKL	NACJKL Stub Sill Design
NACZBN	NACZBN Stub Sill Design
NSC001	NSC001 Stub Sill Design
NSC002	NSC002 Stub Sill Design
PENPEN	PENPEN Stub Sill Design
PROCBO	PROCBO Stub Sill Design
PROCBR	PROCBRS tub Sill Design
PROZBA	PROZBA Stub Sill Design
PROZBD	PROZBD Stub Sill Design
PROZBF	PROZBF Stub Sill Design
PROZBG	PROZBG Stub Sill Design
PROZBH	PROZBH Stub Sill Design
PROZBI	PROZBI Stub Sill Design
PROZBN	PROZBN Stub Sill Design
PROZBR	PROZBR Stub Sill Design
RICRIC	RICRIC Stub Sill Design
RICWBR	RICWBR Stub Sill Design
RILRIL	RILRIL Stub Sill Design
RILWBR	RILWBR Stub Sill Design
SEN001	SEN001 Stub Sill Design
SFE001	SFE001 Stub Sill Design
TEXTEX	TEXTEX Stub Sill Design
TEX012	TEX012 Stub Sill Design
TRN021	TRN021 Stub Sill Design
TRN022	TRN022 Stub Sill Design
TRN023	TRN023 Stub Sill Design
TRN024	TRN024 Stub Sill Design
TRN201	TRN201 Stub Sill Design
TRN211	TRN211 Stub Sill Design
TRN221	TRN221 Stub Sill Design
TRN231	TRN231 Stub Sill Design
TRN31	TRN31 Stub Sill Design
TRNTY1	TRNTY1 Stub Sill Design
TRNTY2	TRNTY2 Stub Sill Design
TRNTY3	TRNTY3 Stub Sill Design
TRNTYA	TRNTYA Stub Sill Design
TYT001	TYT001 Stub Sill Design
UTL00F	UTL00F Stub Sill Design
UTLCBO	UTLCBO Stub Sill Design
UTLCBR	UTLCBR Stub Sill Design
UTLCWO	UTLCWO Stub Sill Design
UTLFBR	UTLFBR Stub Sill Design
UTLZBA	UTLZBA Stub Sill Design
UTLZBB	UTLZBB Stub Sill Design
UTLZBC	UTLZBC Stub Sill Design
UTLZBD	UTLZBD Stub Sill Design
UTLZBE	UTLZBE Stub Sill Design
UTLZBG	UTLZBG Stub Sill Design
UTLZBH	UTLZBH Stub Sill Design
UTLZBI	UTLZBI Stub Sill Design
UTLZBL	UTLZBL Stub Sill Design
UTLZBM	UTLZBM Stub Sill Design
UTLZBN	UTLZBN Stub Sill Design
UTLZBO	UTLZBO Stub Sill Design
UTLZBR	UTLZBR Stub Sill Design
UTLZBT	UTLZBT Stub Sill Design
VRT001	VRT001 Stub Sill Design
VRT002	VRT002 Stub Sill Design
VRT003	VRT003 Stub Sill Design

Tank Lining Material — A315

Describes the construction material lining applied to the interior of the tank ✹

Permissible Values for A315

B	Nickel electroplating, e.g., Bart
F	Fiberglass
K	Electroless plating, e.g., Kanigen
L	Lead

R	Rubber - both natural and synthetic
T	Liquid barrier applied by spray applications of materials such as epoxy and phenolic. Examples of some manufacturers' names are Plasite, PPG and Heresite
U	Unlined
V	PolyVinyl Chloride

Validation Rule for A315

-Tank Lining Material can only be reported as Nickel electro-plating, e.g., Bart, if Tank Major Class is not equal to 19

-Tank Lining Material is required for Tanks that have a Built/Rebuilt (Birth) Date on or after March 14, 2019

Tank Head Thickness — A255

The material thickness of the tank head in inches ✹

Range of Values for A255

Minimum	Maximum
0.25	1.3

Validation Rule for A255

-Tank Head Thickness is required for Tanks that have a Built/Rebuilt (Birth) Date on or after July 1, 1997

-Tank Head Thickness must be reported for tank cars built on or after October 1, 2011 and whose Stenciled Shipping Specification begins with 111 or 211.

NOTES:

- This element is used in determining if the tank car meets CPC-1232 Compliance (B522). See CPC-1232 Compliant (B522) for explanation.
- This element is used in determining if the tank car meets DOT117.
- This element is used in determining if the tank car meets HM-246.

Tank Head Mat Spec *Mandatory* — A254

The equipment material characteristics including specification and grade for the tank head ●

Permissible Values for A254

115	AAR M115
128A	AAR TC128 Gr. A
128B	AAR TC-128, Gr. B
129	AAR TC-129
130	AAR TC-130
131	AAR TC-131
132	AAR TC-132
133	AAR TC-133
134	AAR TC-134
15565	ASTM A515, Gr. 65
162	ASTM B162
1997UNK	Unknown, built prior to 7/1/1997
201A	ASTM A201, Gr. A
201B	ASTM A201, Gr. B
2095052	ASTM B209, ALLOY 5052
2095083	ASTM B209, ALLOY 5083
2095086	ASTM B209, ALLOY 5086
2095154	ASTM B209, ALLOY 5154
2095254	ASTM B209, ALLOY 5254
2095454	ASTM B209, ALLOY 5454
2095652	ASTM B209, ALLOY 5652
212A	ASTM A212, Gr. A
212B	ASTM A212, Gr. B
240304	ASTM A240, TYPE 304
240304L	ASTM A240, TYPE 304L
240316	ASTM A240, TYPE 316
240316L	ASTM A240, TYPE 316L
285A	ASTM A285, Gr. A
285B	ASTM A285, Gr. B
285C	ASTM A285, Gr. C
302B	ASTM A302 Gr. B
304L	ASTMA515, Gr. 70 -- 304L (DOT113)
316L	ASTMA516, Gr. 70 -- 316L (DOT115)
353	ASTM A353
51555	ASTM A515, Gr. 55
51560	ASTM A515, Gr. 60
51570	ASTM A515, Gr. 70
5157128	A -- 515, Grade 70 and AAR TC-128
51655	ASTM A516, Gr. 55
51660	ASTM A516, Gr. 60
51665	ASTM A516, Gr. 65
51670	ASTM A516, Gr. 70
5167128	A -- 516, Grade 70 and AAR TC-128
5371	ASTM A537, C1.1
537A	ASTM A537, Gr. A
537B	ASTM A537, Gr. B
89	ASTM A89

Validation Rule for A254

-Tank Head Material Specification and Grade is required for Tanks having a Built/Rebuilt (Birth) Date on or after July 1, 1997

NOTES:

- This element is used in determining if the tank car meets CPC-1232 Compliance (B522). See CPC-1232 Compliant (B522) for explanation.
- This element is used in determining if the tank car meets DOT117.
- This element is used in determining if the tank car meets HM-246.

Tank Head Material Norm — B203

Indicates the tank head steel is normalized (cooled in still air) ✹

Permissible Values for B203

N No Y Yes Z Unknown

Validation Rule for B203

-Normalized Head Material cannot be YES if Tank Head Material value is equal to 240304, 240316, 2095052, 2095083, 2095086, 2095154, 2095254, 2095454, 2095652, 240304L, 240316L, or 304L

-Normalized Head Material can be YES or NO if Tank Head Material value is equal to 89, 115, 129, 130, 131, 132, 133, 134, 162, 353, 5371, 15565, or 5155

-Tank Head Material Normalized is required. But if tank was built after January 1, 2010 then Z is not a valid option

-Tank Head Material Normalized must be reported for tank cars built on or after October 1, 2011 and whose Stenciled Shipping Specification begins with 111 or 211.

NOTES:

- This element is used in determining if the tank car meets CPC-1232 Compliance (B522). See CPC-1232 Compliant (B522) for explanation.
- 240304, 240316, 240304L and 240316L (Stainless Steel) qualify for CPC -1232
- This element is used in determining if the tank car meets DOT117.
- This element is used in determining if the tank car meets HM-246.

Tank Shell Material Spec *Mandatory* — A257

The equipment material characteristics including specification and grade for the tank shell ●

Permissible Values for A257

115	AAR M115
128A	AAR TC128 Gr.A
128B	AAR TC128, Gr. B
129	AAR TC-129
130	AAR TC-130
131	AAR TC-131
132	AAR TC-132
133	AAR TC 133
134	AAR TC 134
15565	ASTM A515 Gr. 65
162	ASTM B162
1997UNK	Unknown, built prior to 7/1/1997
201A	ASTM A201 Gr. A
201B	ASTM A201 Gr. B
2095052	ASTM B209, Alloy 5052

2095083	ASTM B209, Alloy 5083
2095086	ASTM B209, Alloy 5086
2095154	ASTM B209, Alloy 5154
2095254	ASTM B209, Alloy 5254
2095454	ASTM B209, Alloy 5454
2095652	ASTM B209, Alloy 5652
212A	ASTM A212 Gr. A
212B	ASTM A212 Gr. B
240304	ASTM A240, Type 304
240304L	ASTM A240, Type 304L
240316	ASTM A240, Type 316
240316L	ASTM A240, Type 316L
285A	ASTM A285, Gr. A
285B	ASTM A285, Gr. B
285C	ASTM A285, Gr. C
302B	ASTM A302 Gr. B
304L	ASTMA515, Gr. 70 -- 304L (DOT113)
316L	ASTMA516, Gr. 70 -- 316L (DOT115)
353	ASTM A353
51555	ASTM A515 Gr. 55
51560	ASTM A515 Gr. 60
51570	ASTM A515, Gr. 70
5157128	A -- 515, Grade 70 and AAR TC-128
51655	ASTM A516 Gr. 55
51660	ASTM A516 Gr. 60
51665	ASTM A516 Gr. 65
51670	ASTM A516, Gr. 70
5167128	A -- 516, Grade 70 and AAR TC-128
5371	ASTM A537, C1.1
537A	ASTM A537 Gr. A
537B	ASTM A537 Gr. B
89	ASTM A89

Validation Rule for A257

-Tank Shell Material Specification and Grade is required for Tanks having a Built/Rebuilt (Birth) Date on or after July 1, 1997

NOTES:

- This element is used in determining if the tank car meets CPC-1232 Compliance (B522). See CPC-1232 Compliant (B522) for explanation.
- This element is used in determining if the tank car meets DOT117.
- This element is used in determining if the tank car meets HM-246.

Tank Shell Thickness — A258

The material thickness of the tank shell in inches

Range of Values for A258

Minimum	Maximum
0.1875	1.3

Validation Rule for A258

-Tank Shell Thickness is required for Tanks that have a Built/Rebuilt (Birth) Date on or after July 1, 1997

-Tank Shell Thickness must be reported for tank cars built on or after October 1, 2011 and whose Stenciled Shipping Specification begins with 111 or 211.

NOTES:

- This element is used in determining if the tank car meets CPC-1232 Compliance (B522). See CPC-1232 Compliant (B522) for explanation.
- This element is used in determining if the tank car meets DOT117.
- This element is used in determining if the tank car meets HM-246.

TankShell Material Norm — B208

Indicates the tank shell steel is normalized (cooled in still air) ✹

Permissible Values for B208

N No Y Yes Z Unknown

Validation Rule for B208

-Normalized Tank Shell Material cannot be YES if Tank Head Material value is equal to 240304, 240316, 2095052, 2095083, 2095086, 2095154, 2095254, 2095454, 2095652, 240304L, 240316L, or 304L

-Tank Shell Material Normalized is required. But if tank was built after January 1, 2010 then Z is not a valid option

-Tank Shell Material Normalized must be reported for tank cars built on or after October 1, 2011 and whose Stenciled Shipping Specification begins with 111 or 211.

NOTES:

- This element is used in determining if the tank car meets CPC-1232 Compliance (B522). See CPC-1232 Compliant (B522) for explanation.
- 240304, 240316, 240304L and 240316L (Stainless Steel) qualify for CPC -1232
- This element is used in determining if the tank car meets DOT117.
- This element is used in determining if the tank car meets HM-246.

Coil Material — X111

Indicates the construction material of the coils

Permissible Values for X111

A	Aluminum	B	Brass
C	Carbon Steel	I	Inconel
M	Monel	N	Nickel
S	Stainless Steel		

Coils Exterior/Interior — X109

Indicates the coils are built to the interior or exterior of the tank

Permissible Values for X109

E Exterior I Interior

Validation Rule for X109

-If Coils Exterior/Interior is reported, then Coil Material must be reported

-If the Coils Exterior/Interior is not reported, the Coil Material must not be reported

Head Protection Thickness — B105

The material thickness in inches of the protective head shield.

Range of Values for B105

Minimum	Maximum
0.119	1.3

Validation Rule for B105

-If Head Protection Type (A118) is F, H or T, then Head Protection Thickness is must be greater than or equal to 0.5 inches

-If Head Protection Type (A118) is U, then Head Protection Thickness must not be reported

NOTES:

- This element is used in determining if the tank car meets CPC-1232 Compliance (B522). See CPC-1232 Compliant (B522) for explanation.
- This element is used in determining if the tank car meets DOT117.
- This element is used in determining if the tank car meets HM-246.

Head Protection Type — A118

Indicates the construction design of head protection shield

Permissible Values for A118

C	Head Protection (other than Head Shield)
F	Full Height Head Shield
H	Half Height Head Shield
T	Trapezoidal Head Shield
U	Unequipped
Z	Unknown, built before 7/1/1997

Validation Rule for A118

- If the 4th character of the Stencil Class is J or S and the car was built on or after July 1, 1997, Head Protection Type must be reported as C, F, H, or T

- If the 4th character of the Stencil Class is T and the car was built on or after July 1, 1997, Head Protection Type must be reported as F, H, or T

-Head Protection Type must be reported for tank cars built on or after October 1, 2011 and whose Stenciled Shipping Specification begins with 111 or 211

NOTES:

- This element is used in determining if the tank car meets CPC-1232

Compliance (B522). See CPC-1232 Compliant (B522) for explanation.
- This element is used in determining if the tank car meets DOT117.
- This element is used in determining if the tank car meets HM-246.
- Permissible value C is a performance based head puncture-resistance system meeting 49 CFR 179.16(a).
- Permissible value F is a prescribed head puncture-resistance system meeting 49 CFR 179.16(c)(1).

Jacket Material Category *Mandatory* **B204**

The equipment material characteristics including specification and grade for the tank jacket ●

Permissible Values for B204

N	CARBON STEEL
S	Stainless Steel
U	UNEQUIPPED

NOTES:
- This element is used in determining if the tank car meets CPC-1232 Compliance (B522). See CPC-1232 Compliant (B522) for explanation.
- This element is used in determining if the tank car meets DOT117.
- This element is used in determining if the tank car meets HM-246.

Insulatn/Thrmal Prot Type **A142**

Describes the type of material(s) used for insulation/thermal protection of the tank car.

Permissible Values for A142

CF	Ceramic Fiber
CK	Cork
CR	Cork and Closed Cell Rubber Foam
FC	Fiberglass & Ceramic Fiber
FG	Standard Fiberglass
FS	Fiberglass and Spray On Foam
FT	High Temp Fiberglass
MW	Mineral Wool
PC	Polyurethane Foam and Ceramic Fiber
PE	Perlite
PF	Polyurethane Foam
PI	High Temperature Polyurethane Foam
RF	Rubatex
SP	Spray On Exterior Thermal Protection
UE	Unequipped

Validation Rule for A142
- -If Insulation/Thermal Protection Thickness (B259) is blank, then Insulation/Thermal Protection Type must be blank or Unequipped
- -If Insulation/Thermal Protection Thickness (B259) is reported, then Insulation/Thermal Protection Type must be populated with a permissible value other than UE (Unequipped)
- -When Insulation/Thermal Protection Type is CK - Cork, then Compartment Count (A052) must be 1
- -Insulation/Thermal Protection Type is mandatory if Stenciled Shipping Spec (A237) is 105Axxx, 105Sxxx, 111A100W3, 111A100W4, 113xxx, 115xxx, 204W, 206W (permissible value cannot be UE-Unequipped)
- -Insulation/Thermal Protection Type is mandatory if the 4th character of the Stenciled Shipping Spec (A237) is equal to H, J, P, or R (permissible values cannot be UE – Unequipped or blank)
- -Insulation/Thermal Protection Type must be reported as SP - Spray On Foam if 4th character of the Stenciled Shipping Spec (A237) is T

Insulation Thickness **B259**

The thickness of the insulation/thermal protection

Range of Values for B259

Minimum	Maximum
0.5	12

Validation Rule for B259

-If Insulation/Thermal Protection Type is Unequipped, Insulation/Thermal Thickness must not be reported

NOTES:
- This element is used in determining if the tank car meets DOT117.

Bottom Outlet/Fitting Typ *Mandatory* **A308**

Describes the design of the bottom outlet of the tank ●

Permissible Values for A308

A	Bottom Washout & Sump
B	Bottom Outlet
C	Bottom Outlet & Sump
E	Bottom Outlet by Government Exemption
F	Designed for but not equipped
G	Bottom Outlet & Sump by Government Exemption
S	Sump
U	Not Equipped
W	Bottom Washout
X	Other
Z	Unknown, built prior to 7/1/1997

Validation Rule for A308
- -Tank Bottom Outlet Fitting Type is required for Tanks having a Built/Rebuilt (Birth) Date on or after July 1, 1997
- -If the Tank Bottom Outlet Fitting Type is not reported, then the Bottom Outlet Count must be reported as Zero
- -If the Tank Bottom Outlet/Fitting Type = U (Unequipped), then the Tank Bottom Fitting Protection must equal U (Unequipped)
- -Bottom Outlet Type must be reported as S (Sump) or U (Unequipped) if the Stencil Class (A237) is 105xxx, 111A60W5, 111A60W7, 111A100W5, 111A100W4, 111A100W7, 112xxx, or 211A60W7
- -Bottom Outlet Type may be reported but cannot contain the value B, C or G if the Stencil Class is equal to 103ALW, 103AW, 111A100ALW2, 111A100W2, 111A60ALW2, 111A60W2, 211A60W2, or 211A100W2
- -Tanks with Shipping Container Specs that begin with 120 can only have Bottom Outlet Type of B, W, S, U, or Z
- -Tanks with Shipping Container Specs that begin with 109 can only have Bottom Outlet Type of W, S, U, or Z

Bottom Outlet Count **B142**

The number of bottom unloading devices on the equipment ✹

Range of Values for B142

Minimum	Maximum
0	9

Validation Rule for B142
- -Tanks with Shipping Container Specs that begin with 120 or 109 can only have 1 Bottom Outlet
- -Bottom Outlet Count is required if car was Built or Rebuilt on or after July 1, 1997
- -Tank Bottom Outlet Count is required for Tanks with a Bottom Outlet Fitting Type that is not equal to U and a Built/Rebuilt (Birth) Date on or after July 1, 1997

Bottom Outlet Valve Type **B542**

Describes the type of Bottom Outlet Valve (BOV) design applied to the tank

Permissible Values for B542

A	External Bottom Outlet Ball Valve
B	Internal Bottom Outlet Ball Valve
C	Bottom Operated Plug Valve
D	Top Operated Valve
E	Bottom Operated Butterfly Valve

Validation Rule for B542
- - Bottom Outlet Valve Type is required when Bottom Outlet Fitting Type (A308) equals B, C, E, or G and the Tanks with a Built/Rebuilt date is on or after July 1, 2015

Btm Outlet Vlv Actuation **B543**

Identifies how the bottom outlet valve is to be actuated/operated

Permissible Values for B543

A Handle that is stowed separately
B Handle that is located completely within the skid
C Handle that is disengaged from the valve when in the closed position and located outside the skid
D Alternate means of actuation approved by the AAR Tank Car Committee

Validation Rule for B543

-Bottom Outlet Valve Actuation is required when Bottom Outlet Valve Type (B542) equals A and the tank car Built/Rebuilt date is on or after July 1, 2015
-If Stenciled Shipping Specification (A237) begins with 117J, 117P or 117R, reporting of Bottom Outlet Valve Actuation (B543) becomes conditionally mandatory when:
- Bottom Outlet/Fitting Type (A308) equals B, C, E, or G; and
- Bottom Outlet Valve Type (B542) equals A, B, C, or E.

NOTES:

- This element is used in determining tank major class 17. See Appendix N for explanation.
- This element is used in determining if the tank car meets DOT117.

Bottom Fitting Protection A153

Describes the design protection level around the bottom outlet value

Permissible Values for A153

A Level A > 1"" Protrusion
B Level B Varies By Type
C Level C > 5"" Protrusion
E Level E (meets CPC-1406)
U Unequipped
Z Unknown, built prior to 7/1/1997

Validation Rule for A153

-If Tank Bottom Outlet Count is not reported, then the Tank Bottom Fittings Protection must not be reported
-Tank Bottom Fittings Protection is required for Tanks with a Built/Rebuilt (Birth) Date on or after July 1, 1997

NOTES:

- Tank cars ordered built new on or after January 1, 2024 must have Bottom Fitting Protection (A153) of E or U reported.

Top Fittings Protection *Mandatory* A264

Identifies the existence of top fittings protection associated with preventing loss of commodity due to rollover.

Permissible Values for A264

A Equipped per M-1002 Chapter 2, paragraph 2.2.3.3 (Acid Cars)
E Equipped per M-1002, Appendix E, paragraph 9.2.1 (non-pressure cars)
F Equipped per 49 CFR 179.202-13(h) (DOT117R tank cars)
N Unequipped
P Equipped per 49 CFR 179.100-12(c) (pressure style housing)
R Equipped per 49 CFR §179.102-3(a)(1) (9 MPH Rollover)
S Alternative Protection Shear Off Valves Applied per 49 CFR §179.102(a)(2)
T Equipped with Top Skids
Y Equipped with other than M-1002, Appendix E, paragraph 9.2.1
Z Unknown, built prior to 7/1/1997

Validation Rule for A264

-Top Fittings Protection is required for tank cars with a Built/Rebuilt (Birth) Date on or after July 1, 1997
-Tank cars built on or after July 1, 1997 cannot have a Top Fittings Protection value of Z (unknown)
-Top Fittings Protection cannot be reported as A, E, F, N, or Z for Tank Major Classes of 37 - 62, 64 - 65, 67, 80 - 81, 86 - 97 if the Built/Rebuilt Date is on or after July 1, 1997
-If Stenciled Shipping Specification (A237) beginss with 117R, the Top Fittings Protection must be E or F.
-If Stenciled Shipping Specification (A237) beginss with 117J or 117P, the Top Fittings Protection must be E.
-Tank cars built on or after December 1, 2015 cannot have a Top Fittings Protection value of Y.

NOTES:

- This element is used in determining if the tank car meets CPC-1232 Compliance (B522). See CPC-1232 Compliant (B522) for explanation.
- This element is used in determining tank major class 17. See Appendix N for explanation.
- This element is used in determining if the tank car meets DOT117.
- This element is used in determining if the tank car meets HM-246.
- Permissible value N is intended for tank cars unequipped with top fittings protection or as described by 49 CFR 179.200-16(g). which are only for weather protection.
- Permissible value R is intended for pressure tank cars built on or after March 16, 2009 used for the transportation of PIH materials and marked in accordance with 49 CFR 179.22(e). (Example: DOT105J600I).
- Refer specifically to 49 CFR Part 179, AAR Specification M-1002, and the approved Certificate of Construction to identify the type of top fitting protection appropriate to the tank class.

Safety Relief Device Cnt A181

The number of safety relief devices applied to the tank.

Range of Values for A181

Minimum	Maximum
0	9

Validation Rule for A181

-Tank Safety Relief Device Count is required for Tanks with a Built/Rebuilt (Birth) Date on or after July 1, 1997
-Safety Relief Device Count must be reported for tank cars built on or after October 1, 2011 and whose Stenciled Shipping Specification begins with 111 or 211.

Safety Relief Device Type *Mandatory* A230

Describes the design of the safety relief device.

Permissible Values for A230

C Combination (Valve & Vent)
D Vent
P Fusible Plug
S Special Relief Device (for handling Carbon Dioxide AND Hydrogen Peroxide)
U Unequipped
V Valve
Z Unknown, built prior to 7/1/1997

Validation Rule for A230

-Safety Relief Device Type is required for Tanks with a Built/Rebuilt (Birth) Date on or after July 1, 1997
-Safety Relief Device Type should be reported, if Safety Relief Device Count is reported
-Safety Relief Device Type must be reported as Unequipped (U), when Safety Relief Device Count is reported as 0

NOTES:

- This element is used in determining if the tank car meets DOT117.
- This element is used in determining if the tank car meets HM-246.

Safety Vent w/Surge Prot *Mandatory* A231

Indicates the equipment has a safety vent that is equipped with a surge protector

Permissible Values for A231

N No
Y Yes
Z Unknown, built prior to 7/1/1997

Validation Rule for A231

-Tank Safety Vent with Surge Protector is required for Tanks with a Built/Rebuilt (Birth) Date on or after July 1, 1997

PWHT Not Reworked	B280
Special Train Service Code WK	

Permissible Values for B280

Y Yes

PWHT Re-stress Relieved	B279
Special Train Service Code WJ	

Permissible Values for B279

Y Yes

Year Tank Qualified *Mandatory*	B240
The year the tank car tank was last qualified. ●	

Data is Confidential.

Validation Rule for B240

-The Year the Tank was Qualified cannot be prior to the Year the Tank was Built or Rebuilt

-The Year the Tank was Qualified cannot be prior to 1998

-Year Tank Qualified must be reported when the Year Tank Qualification Due is reported

-Year Tank Qualified must not be reported if Year Tank Qualification Due is not reported

NOTES:

- Year tank qualified must match the Qualification Stencil on the tank car. See figure below:

	STATIONSTENCIL	QUALIFIED	DUE
TANK QUALIFICATION	ABC-1	1999 (B240)	2009 (B241)
THICKNESS TEST	ABC-1	2000	2010
SERVICE EQUIPMENT	ABC-1	1999	2004
PRD:VALVE 175 PSI	DEF-1	1999	2004
INT.HTR ISPGR	EGL-1	1999	2004
LINING	ABC-1	pp	NONE
88.B.2 INSPECTION	ABC-1	1999	2009
STUB SILL INSPECTION	ABC-1	1999	2009

Qualification stencil-sample of completed form

Tank Qualification Due	B241
The year the tank car tank is due for next qualification.	

Data is Confidential.

Validation Rule for B241

-Year Tank Qualification Due must be greater than or equal Year Tank Qualified

NOTES:

- The tank qualification due must match the Qualification Stencil on the tank car. See figure below:

	STATIONSTENCIL	QUALIFIED	DUE
TANK QUALIFICATION	ABC-1	1999 (B240)	2009 (B241)
THICKNESS TEST	ABC-1	2000	2010
SERVICE EQUIPMENT	ABC-1	1999	2004
PRD:VALVE 175 PSI	DEF-1	1999	2004
INT.HTR ISPGR	EGL-1	1999	2004
LINING	ABC-1	pp	NONE
88.B.2 INSPECTION	ABC-1	1999	2009
STUB SILL INSPECTION	ABC-1	1999	2009

Qualification stencil-sample of completed form

Service Equip Qualified	B242
The year the service equipment is inspected	

Data is Confidential.

Validation Rule for B242

-The Year Service Equipment Qualified cannot be prior to the Year the equipment was Built or Rebuilt

-The Year Service Equipment Qualified cannot be prior to 1998

-Year Service Equipment Qualified must be reported when the Year Service Equipment Qualification Due is reported

-Year Service Equipment Qualified must not be reported if Year Service Equipment Qualification Due is not reported

NOTES:

- Service equip qualified year must match the qualification stencil on the tank car.

Service Equipment Due	B243
The year the service equipment is due for next qualification.	

Data is Confidential.

Validation Rule for B243

-Year Service Equipment Qualification Due cannot be prior to the Year the Service Equipment Qualified

NOTES:

- Service equip qualified year must match the qualification stencil on the tank car.

Pressure Relief Vlv Qualified	B244
The year the pressure relief valve was last qualified.	

Data is Confidential.

Validation Rule for B244

-The year the Pressure Relief Valve was Qualified cannot be prior to the year the car was built

-The year the Pressure Relief Valve was Qualified must be on or after the year 1998

-Pressure Relief Valve Qualification Year is required when Year Pressure Relief Valve Qualification Due is reported

-Pressure Relief Valve Qualification Year must not be reported if Year Pressure Relief Valve Qualification Due is not reported

NOTES:

- Pressure relief valve qualified must match the qualification stencil on the tank car.

Pressure Relief Valve Due	B245
The year the pressure relief valve is due for next qualification.	

Data is Confidential.

Validation Rule for B245

-Pressure Relief Valve Qualification Year due cannot be before Pressure Relief Year Due

NOTES:

- Pressure relief valve due must match the qualification stencil on the tank car.

Thickness Qualified Year	B246
The year the service equipment is inspected was last qualified.	

Data is Confidential.

Validation Rule for B246

-Tank Thickness Qualified Year cannot be prior to year car was built

-Tank Thickness Qualified Year must be on or after the year 1998

-Year Tank Thickness Valve Qualified is required when Year Tank Qualification Due reported

-Year Tank Thickness Valve Qualified can only be reported if Year Tank Qualification Due is reported

NOTES:

- Thickness qualified year must match the qualification stencil on the tank car.

Thickness Qualified Due	B247
The year the tank car tank thickness is due for next qualification.	

Data is Confidential.

Validation Rule for B247

-Year Tank Thickness Qualification due cannot be before Thickness Qualified Due

NOTES:

- Thickness qualified due must match the qualification stencil on the tank car.
- Report the year '9999' for next thickness qualification at the time of lining

removal/replacement (LNG RMVL).

Air Hose Arrangement	B524
The type of trainline air hose arrangement	✹

Permissible Values for B524

A	S-424 Angle Cock Location
B	S-425 Angle Cock Location on Cars Equipped with AAR Type F Coupler
C	S-426 Angle Cock Location on Cars with Floating Sills
D	S-427 Angle Cock and Air Brake Hose Location on Cars with Excessive Overhang Preventing Compliance with AAR Standards
E	S-428 Angle Cock Location on Cars Equipped with AAR Type F Coupler and Cushioned Underframe
F	S-4003 (Former Standard)
G	S-4003x (Former Standard Retrofitted to Meet All Dimensions Except Height)
H	S-4003-05 (Current Standard Train Line Arrangement for Cars with F-Shank Couplers)
I	S-4021 Angle Cock and Brake Hose Location on Cars with EOCC (E and F)
J	S-4021 Coupler Mounted Bracket End Arrangement
K	S-4028 Train Line Arrangement with Displaceable Union on Cars with EOCC and Couplers Not Exceeding 45 in. in Length
L	S-4029 Train Line Arrangement with Displaceable Union on Cars with EOCC and Couplers Exceeding 45 in. in Length
M	S-4030 Trolley Arrangement on Cars with EOCC and E-Shank Couplers

Validation Rule for B524

-Air Hose Arrangement must be reported for this equipment if it is Built or Rebuilt on or after April 22, 2014.

NOTES:

- If any of the following conditions apply, Air Hose Arrangement (B524) must be reported for cars Built or Rebuilt on or after April 22, 2014:
  - Draft Gear Type (B073) at any location is C or E.
  - Connected Unit Count (A020) is reported.
  - Outside Length (OSLG) is greater than or equal to 70 feet (840 inches).
  - The overhang is greater than 5 feet 6 inches (66 inches). Overhang is calculated as follows:
  - 0.5 * (Outside Length, in inches, minus Truck Center Length, in inches, minus 31 inches)
    - For all other equipment, reporting Air Hose Arrangement is optional.

4-Pressure ABT Receiver Eqpd	B539
Identifies if the equipment is equipped with a 4-pressure air brake test receiver	

Value does not carry forward for Single Clone / Multi-Clone.

Permissible Values for B539

E	Equipped
N	Not Equipped

NOTES:

- An "E" will be system generated if a 4-Pressure ABT is reported on the equipment.

Jacket Thickness	B541
The nominal thickness for the jacket in inches	

Range of Values for B541

Minimum	Maximum
0.1196	1.3

Validation Rule for B541

-Jacket Thickness is required for tank cars built or rebuilt on or after July 1, 2015 when Tank Jacket Material (B204) equals N or S

NOTES:

- DOT117 jacket thickness requirement (49 CFR §179.202-7)
- This element is used in determining if the tank car meets DOT117.
- This element is used in determining if the tank car meets HM-246.

Thermal Protection System	B555
Identifies the existence of a Thermal Protection System that meets 49 CFR 179.18 (a), (b), or (c).	

System Generated Field. This element is not eligible for input.

Permissible Values for B555

E	Equipped

Validation Rule for B555

-Thermal Protection System is mandatory if the 4th character of the Stencil Shipping Specification (A237) is equal to J, T, P, or R

NOTES:

- When the fourth character of the Stencil Shipping Specification (A237) is equal to J, T, P, or R the system will generate a value of 'E'.
- This element is used to identify when a tank car is equipped with a thermal protection system that meets the requirements of 49 CFR 179.18.
- The applicability of the element is mandatory when specified by one of the following subparts of 49 CFR.
  - § 173.31(b)(4) (Thermal protection requirements for pressure tank cars)
  - § 173.314(k) (Special requirements for chlorine)
  - § 179.202–6 (DOT117J)
  - § 179.202–12 (DOT117P)
  - § 179.202–13 (DOT117R)
- This element is used in determining tank major class 17. See Appendix N for explanation.
- This element is used in determining if the tank car meets DOT117.

Cost

Original Cost	A184
The original manufacturer selling price	✹

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for A184

Minimum	Maximum
0	9999999

Validation Rule for A184

-Original Cost must be equal to the Ledger Value if there are no Additions & Betterments.

-Original Cost must be equal to the Ledger Value if Additions & Betterments Indicator is not reported.

-Railroad marked freight cars except MISC, LOCO, TRLR, CONT, CHSS, STWH, EOTD, and PSGR are required to have an Original Cost

-Private marked freight cars except MISC, LOCO, TRLR, CONT, CHSS, STWH, EOTD, and PSGR are required to have an Original Cost if Built Date (BLDT) is on or after January 1, 2015

NOTES:

- Original Cost is never altered. It is the cost of the equipment to the original owner.
- For railroad-marked cars, report in US dollars the original ledger value of the original owner For cars rebuilt, report the cost prescribed in MR Interchange Rule 88 and Circular Letter OT-24
- The original cost is used in the settlement of AAR Interchange Rule 107 Office Manual.
- For connected unit cars report the total original cost for all units in the set.
- Numeric, applicable to all railroad-marked cars Also, applicable to privately marked covered hopper (LO) cars.
- Raise all cents to the next dollar, e.g. $5,501.02 = 0005502

Ledger Value	A150
The sum of original cost and additions & betterments	

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for A150

Minimum	Maximum
0	9999999

Validation Rule for A150

-Original Cost must be equal to the Ledger Value if there are no Additions & Betterments.
-Ledger Value must equal the Original Cost (A184) plus the additions & betterments, if Total A&B (A003) has been reported. Otherwise Ledger Value should equal Original Cost (A184).

Total A&B **A003**

System generated sum of all reported amounts in A&B Amount (A317), in US dollars

Data is Confidential. System Generated Field. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for A003

Minimum	Maximum
0	99999999

NOTES:

- For railroad-marked cars, report the sum of all additions and betterments applied to the car. This value is for record keeping purposes only and will not be used to report Ledger Value.
- For private Cars report the additions and betterments as qualified under AAR interchange Rule 107 for determination of settlement value.
  - Additions are costs of all new components applied subsequent to the date the car was built or rebuilt and carried in the capital investment account.
  - Betterments are costs of all improvements of components of existing equipment through the substitution of superior parts for inferior parts subsequent to the date the car was built of rebuilt.
- For connected unit cars report the total Truck Location A for all units in the set

Ind for Pos/Neg Total A&B **A128**

A code indicating the positive or negative adjustment to the original cost of the equipment

Data is Confidential. System Generated Field. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Permissible Values for A128

N Negative P Positive

A&B Pos/Neg Ind **A316**

A code indicating the positive or negative adjustment to the individual addition and betterment

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Permissible Values for A316

N Negative P Positive

Validation Rule for A316

-When entering an individual Addition & Betterment, you must enter a value in all 4 fields.
-The A&B Indicator is required when Additions & Betterments are reported.
-The A&B Indicator must not be reported if Additions & Betterments are not reported.

A&B Amount **A317**

The amount of the individual addition and betterment added to or subtracted from the original cost of the equipment

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for A317

Minimum	Maximum
1	999999

Validation Rule for A317

-When entering an individual addition & betterment; A&B Date Done (A319), A&B Type (A318), A&B Pos/Neg Ind (A316), and A&B Amount (A317) must be reported

A&B Date Done **A319**

The date of the individual addition and betterment

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for A319

Minimum	Maximum
1/1/1900	12/31/9999

Validation Rule for A319

-When entering an individual Addition & Betterment, you must enter a value in all 4 fields.
-Addition and Betterment Date Done cannot be earlier than Built Date (BLDT).
-Additions & Betterments Date Done cannot be later than today's date.

A&B Type **A318**

The type of individual addition and betterment as defined by Rule 107

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Permissible Values for A318

COIL	Outside heater coils applied to tank shell by fusion welding. Includes renewal in damaged car.
GNRL	General - Capitalized Additions and Betterments
INIT	Initial load of historical A&B amount as of Umler 4.6 implementation date
JTHR	Jacketed thermal shield with integral headshield
NTHR	Non-jacketed thermal protection system. Includes renewal in damaged cars.
RUBB	Rubber, polyvinyl chloride and polyurethane elastomeric linings applied to inside of tank. Includes renewal in damaged car.
SPAR	Any type Sparger system applied. Includes renewal of lining in damaged cars.
STNS	Stainless steel inner shell, heater coils of other than ordinary steel pipe.
TKLI	Protective coating to inside of tank. Includes renewal of lining in damaged car.

Validation Rule for A318

-For each equipment, only one Individual A&B Type can have a value of INIT.
-When entering an individual Addition & Betterment, you must enter a value in all 4 fields.

Special Permit

Regulatory Agency **B595**

The regulatory agency that issued the special permit or equivalency permit.

Value does not carry forward for Single Clone / Multi-Clone.

Permissible Values for B595

DOT Department of Transportation
TC Transport Canada

Validation Rule for B595

- Regulatory Agency must be selected when adding a Number (B595)

NOTES:

- A special permit from DOT or equivalency certificate from Transport Canada that waives or modifies compliance with a regulatory requirement, related only to the tank construction, interior lining/coating, or service equipment.
- Example Format: SP-xxxxxx for special permit or SR-xxxxxxxxxxx for equivalency certificate.
- If the special permit or equivalency certificate requires the tank car to be stenciled, this element can be reported.
- If the special permit or equivalency certificate does not require the tank car to be stenciled, this element can be reported.
- Does not apply to AAR Service Trial (ST) stenciling or Alternate Inspection Program (AIP) or changes in commodity.

Permit Number B596

Matches special permit or equivalency certificate number stenciled on the tank car.

Value does not carry forward for Single Clone / Multi-Clone.

Validation Rule for B596

- Regulatory Agency (B595) must be selected when adding special permit Number

NOTES:

- A special permit from DOT or equivalency certificate from Transport Canada that waives or modifies compliance with a regulatory requirement, related only to the tank construction, interior lining/coating, or service equipment.
- Example Format: SP-xxxxxx for special permit or SR-xxxxxxxxxxx for equivalency certificate.
- If the special permit or equivalency certificate requires the tank car to be stenciled, this element can be reported.
- If the special permit or equivalency certificate does not require the tank car to be stenciled, this element can be reported.
- Does not apply to AAR Service Trial (ST) stenciling or Alternate Inspection Program (AIP) or changes in commodity.

Car Management

Pool Number P001

Unique number used to indicate the grouping of equipment for a particular purpose

Used for Transportation Codes. This element is not eligible for Input. Value does not carry forward for Equipment Group Change / Add Back.

Pool Control TCPC

Pool Control

System Generated Field. Used for Transportation Codes. This element is not eligible for Input, Output or Query.

NOTES:

- For further explanation reference Appendices C and E.

User Routing Instructions TCUR

The routing instruction reported by the user

Used for Transportation Codes.

Permissible Values for TCUR

2	Trailer Service Rule 2
G	Contaminated commodity service
M	Mark canceled
O	Owner requested return
U	Unassigned equipment

NOTES:

- For further explanation reference Appendix E.

Umler Transportation Code TCOD

The type of assigned service, empty routing or restriction of the equipment

System Generated Field. Used for Transportation Codes. This element is not eligible for Input.

NOTES:

- For further explanation reference Appendix E.

Transportation Cond Code TCCD

The AAR or FRA interchange restriction code

System Generated Field. Used for Transportation Codes. This element is not eligible for Input.

NOTES:

- For further explanation reference Appendix E.

Mechanical Restriction TCME

User reported or system generated type of mechanical restriction

Used for Transportation Codes.

Permissible Values for TCME

S	Scrap
X	AAR Interchange Restriction
Y	FRA Interchange Prohibited

NOTES:

- For further explanation reference Appendix D.1

Mech Restriction Reason TCMR

The explanation of the Mechanical Restriction (TCME)

Used for Transportation Codes.

Permissible Values for TCMR

A	Restricted Due to Age (Over 40-AAR, Over 50-FRA)
B	Restricted Due to Air Brakes
C	Restricted Due to Axles
D	Restricted Due to Couplers and Couplers Parts
F	Restricted Due to Couplers Yokes
G	Restricted Due to Draft Gears
J	Restricted Due to Journal Bearing and Journal Lubrication
N	Restricted Due to Trucks
P	Restricted Due to Truck Side Frames
T	Restricted Due to Trucks Bolsters
U	Restricted by AAR or Owner
W	Restricted Due to Wheels
X	Restricted Due to Scrap or Early Warning
Z	Restricted Due to Umler Conflict (Not Valid for User Input)

NOTES:

- For further explanation reference Appendix D.2.
- The assignment of the Transportation Codes S_, SX, XA, XZ and YA generate the Rate Indicator Code 6 to the CHARM file to zero (0) rate the car hire and mileage rate.

Sys Gen Routing Inst TCGR

The routing instruction generated by the system ■

System Generated Field. Used for Transportation Codes. Affects Rating. This element is not eligible for Input.

NOTES:

- For further explanation reference Appendix E.5.

Loading Authority Fleet Status B597

Identifies when a car is listed on a fleet in the Loading Authority application

System Generated Field. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Permissible Values for B597

Y	Yes
S	Suspended

NOTES:

- • When equipment is on a fleet the Loading Authority (LA) application will update the flag to 'Y – Yes'. When equipment is removed from a fleet the LA application will remove the 'Y – Yes'.
- When equipment is on a LA fleet that is suspended the LA application will update the flag to 'S – Suspended'. When the equipment is on a LA fleet that is no longer suspended the LA application will update the flag to 'Y – Yes'.

Train Service

286K Aprvd COC/FRA Waiver B098

Indicates Tank Car has a valid FRA waiver, or has specifically an AAR-approved Certificate of Construction

Permissible Values for B098

Y	Yes - Tank car approved for GRL 286,000 pounds. Has a valid FRA waiver or specifically an AAR-approved Certificate of Construction

Validation Rule for B098

-Car must be stenciled with AAR specification if Gross Rail Load > 263,000 and the FRA/COC Waiver Allowing > 263,000 GRL is not set to YES

Restricted Speed Empty B180

Describes the maximum restricted speed the equipment can travel when empty

Range of Values for B180

Minimum	Maximum
5	95

Restricted Speed Loaded B181

Describes the maximum restricted speed the equipment can travel when loaded

Range of Values for B181

Minimum	Maximum
5	95

Shove Car to Rest B189

Identifies the car must be moved to rest by locomotive

Permissible Values for B189

Y Yes

Shove Adj. Car to Rest B188

Identifies the adjacent car must be shoved to rest by locomotive

Permissible Values for B188

Y Yes

Train Position Sensitive B211

Indicates there is a physical reason, limiting its position on a train

Permissible Values for B211

Y Yes

End of Train Only B277

Indicates the equipment must be placed at the end of the train (including per AAR RP-2001)

Permissible Values for B277

Y Yes

Check Trailing Tonnage B044

Indicates the equipment has restrictions on trailing tonnage

Permissible Values for B044

Y Yes

Curve Negotiate Exception B178

Describes the requirement for negotiating a curve

Permissible Values for B178

A Restrictive Curve Negotiability, Section 2.1.4 of M-1001
B Does not meet all Chapter XI Curving Requirements

Loaded Net Braking Ratio B551

Indicates calculated minimum loaded net braking ratio per AAR Specifications in place on built or rebuilt date (in percent).
System Generated Field. This element is not eligible for input.

Permissible Values for B551

– 11.0
– 8.5

NOTES:

- Loaded Net Braking Ratio is determined as follows;:
  - If Built Date (BLDT) or Rebuilt Date (RBDT) is less than 1/1/1972, then Loaded Net Braking Ratio will be set to blank.
  - If Built Date (BLDT) or Rebuilt Date (RBDT) is greater than or equal to 1/1/2004, or if Equipment Type Code (UMET) begins with "Q" or "S", then Loaded Net Braking Ratio is 11.0%.
  - For all other equipment, Loaded Net Braking Ratio is 8.5%.

Owner-Provided Loaded Net Braking Ratio B552

Indicates an alternate minimum loaded net braking ratio provided by owner (in percent).

Range of Values for B552

Minimum	Maximum
8.5	14.0

NOTES:

- Owner may enter a documented alternative minimum loaded net braking ratio in this field that is greater than the system calculated Loaded Net Braking Ratio (B551).
- When reported, the Owner-Provided Loaded Net Braking Ratio will be used in PTC stopping distance calculations.
- A change in value for the following elements will cause the Owner-Provided Loaded Net Braking Ratio to reset to blank:
  - Rebuilt Date (RBDT)
  - Gross Rail Load/Weight (A266)
  - Equipment Type Code (UMET)
  - Empty/Load Device Eqpd (B075)

Empty Braking Ratio B553

Indicates calculated empty braking ratio per AAR Specifications in place on built or rebuilt date (in percent).
System Generated Field. This element is not eligible for input.

Range of Values for B553

Minimum	Maximum
15.0	38.0

NOTES:

- Empty Braking Ratio is determined as follows;:
  - If Built Date (BLDT) or Rebuilt Date (RBDT) is less than 1/1/1972, then Empty Braking Ratio will be set to blank.

Owner-Provided Empty Braking Ratio B554

Indicates an owner supplied alternate empty braking ratio (in percent).

Range of Values for B554

Minimum	Maximum
15.0	38.0

NOTES:

- Owner may enter a documented alternative minimum loaded net braking ratio in this field that is greater than the system calculated Loaded Net Braking Ratio (B551).
- When reported, the Owner-Provided Loaded Net Braking Ratio will be used in PTC stopping distance calculations.
- A change in value for the following elements will cause the Owner-Provided Loaded Net Braking Ratio to reset to blank:
  - Rebuilt Date (RBDT)
  - Gross Rail Load/Weight (A266)
  - Equipment Type Code (UMET)
  - Empty/Load Device Eqpd (B075)

Truck Components

Axle Spacing Distance *Mandatory* B020

The distance between axle centers on the same truck ●■

Affects Rating.

Permissible Values for B020

53 53 Inches
54 54 Inches
55 55 Inches
60 60 Inches
61 61 Inches
62 62 Inches
63 63 Inches

64	64 Inches
65	65 Inches
66	66 Inches
68	68 Inches
70	70 Inches
71	71 Inches
72	72 Inches
73	73 Inches
74	74 Inches
76	76 Inches
78	78 Inches
99	Axle Space Unknown

Truck Axle Count B252

The number of axles per truck

Range of Values for B252

Minimum	Maximum
2	4

Validation Rule for B252

- Sum of Truck Axle Count must equal Axle Count (A024)

Journal Size *Mandatory* A147

The size of the journal bearing

Affects Rating.

Permissible Values for A147

A	3-3/4 X 7	B	4-1/4 X 8	C	5 X 9
D	5-1/2 X 10	E	6X11	F	6-1/2 X 12
G	7 X 12	H	7 X 14	K	6-1/ 2X 9
M	7 X 9				

Validation Rule for A147

-4-axle equipment with Journal Size B and Star Code (A247) is not populated, must have Gross Rail Load (A266) of 103,000 lbs.

-Journal Size B (4 1/4 x 8) requires a Gross Weight of 154,000 lbs. for 6-axle cars unless the car is Star Coded

-4-axle equipment with Journal Size C and Star Code (A247) is not populated, must have Gross Rail Load (A266) of 142,000 lbs.

-Journal Size C (5 x 9) requires a Gross Weight of 213,000 lbs. for 6-axle cars unless the car is Star Coded

-4-axle equipment with Journal Size D and Star Code (A247) is not populated, must have Gross Rail Load (A266) of 177,000 lbs.

-Journal Size D (5 1/2 x 10) requires a Gross Weight of 265,000 lbs. for 6-axle cars unless the car is Star Coded

-4-axle equipment with Journal Size E and Star Code (A247) is not populated, must have Gross Rail Load (A266) of 220,000 lbs.

-Journal Size E (6 x 11) requires a Gross Weight of 179,000 lbs. for 4-axles ETC P---, Q---, V--- cars only (cars with 28 inch wheels) unless the car is Star Coded

-Journal Size E (6 x 11) requires a Gross Weight of 330,000 lbs. for 6-axles

-4-axle equipment with Journal Size F or K, Star Code (A247) is not populated, and Qualification for Increased Gross Rail Load (B344) is not populated, must have Gross Rail Load (A266) of 263,000 lbs.

-4-axle equipment with Journal Size F or K, Star Code (A247) is not populated, and Qualification for Increased Gross Rail Load (B344) of 1 or 2, must have Gross Rail Load (A266) of 286,000 lbs.

-Journal Size F requires a Gross Weight of 394,500 lbs. or 429,000 lbs. for 6-axle cars unless the car is Star Coded.

-4-axle equipment with Journal Size G or M, Star Code (A247) is not populated, and Qualification for Increased Gross Rail Load (B344) is not populated, must have Gross Rail Load (A266) of 315,000 lbs.

-4-axle equipment with Journal Size G, K, or M, Star Code (A247) is not populated, and Qualification for Increased Gross Rail Load (B344) of 1, must have Gross Rail Load (A266) of 286,000 lbs.

-Journal Size G (7 x 12) requires a Gross Weight of 472,000 lbs. for 6-axle cars unless the car is Star Coded

-Journal Size H (7 x 14) requires a Gross Weight of 315,000 lbs. for 4-axle cars unless the car is Star Coded

-Journal Size H (7 x 14) requires a Gross Weight of 472,000 lbs. for 6-axle cars unless the car is Star Coded

-Journal Size I (6 x 11 and 6 1/2 x 12) or J (6 x 11 and 7 x 12) are only applicable to articulated or draw-bar cars

-Journal Size Code M (7 x 9) requires a Gross Weight of 472,000 lbs. for 6-axles

-Unstarred 4 Axle Cars with GRL of 315,000 and no IGRL reported and Unstarred cars with Journal Size of G or M must have a Wheel Size of 38 inches

-Gross Weight must be 394,000 lbs. for 6 -axle cars with Journal Size K

NOTES:

- A, B and C Journal Classes are prohibited in Interchange per Rule 90.B.4

Wheel Diameter *Mandatory* A294

The diameter of the wheels

Affects Rating.

Permissible Values for A294

28	28 Inches	30	30 Inches	33	33 Inches
36	36 Inches	38	38 Inches		

Validation Rule for A294

-UnStarred Cars with Gross Weight of 286,000 lbs. and Increased Gross Rail Load of 2 must have a Wheel Diameter of 36 inches

-UnStarred Cars with Gross Weight of 286,000 lbs. and Increased Gross Rail Load of 2 must have a Wheel Diameter of either 36 or 38 inches

-Cars with an Increased Gross Rail Load of 1 and Journal of G or M must have a Wheel Diameter of 38 inches

-If Connected Unit Count (A020) is not reported, different Wheel Diameters cannot be reported

Stability Device Equipped B199

Indicates a stability device is present on the truck

Affects Rating.

Permissible Values for B199

Y	Yes

Bolster Component ID B351

Bolster Component ID from Component Registry

Data is Confidential. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Sideframe Component ID B352

Side Frame Component ID from Component Registry

Data is Confidential. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Wheelset Component ID B350

Component ID from Component Registry

Data is Confidential. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Draft System Components

Coupler Code A057

Defines the equipment coupler type

Permissible Values for A057

1997UNK	Unknown, built prior to 7/1/1997
BE60AHT	Type E (Rule 16) - BE60AHT
BE60BHT	Type E Obsolete (Rule 16) - BE60BHT
BE63AHT	Type E Obsolete (Rule 16) - BE63AHT
BE63HT	Type E (Rule 16) - BE63HT
BE67HT	Type E (Rule 16) - BE67HT
E42BEX	Type E/F (Rule 17) - E42BEX
E50ARE	Type E/F (Rule 17) - E50ARE
E50BEX	Type E/F (Rule 17) - E50BEX

E60CC	Type E (Rule 16) - E60CC
E60CE	Type E (Rule 16) - E60CE
E60CHT	Type E (Rule 16) - E60CHT
E60CHTE	Type E (Rule 16) - E60CHTE
E60DC	Type E (Rule 16) - E60DC
E60DE	Type E (Rule 16) - E60DE
E60EE	Type E (Rule 16) - E60EE
E61	Type E Obsolete (Rule 16) - E61
E67AHT	Type E (Rule 16) - E67AHT
E67BC	Type E (Rule 16) - E67BC
E67BE	Type E (Rule 16) - E67BE
E67BHT	Type E (Rule 16) - E67BHT
E67BHTE	Type E (Rule 16) - E67BHTE
E67CC	Type E (Rule 16) - E67CC
E67CE	Type E (Rule 16) - E67CE
E68AHT	Type E/F Obsolete (Rule 17) - E68AHT
E68AHTE	Type E/F Obsolete (Rule 17) - E68AHTE
E68BC	Type E/F (Rule 17) - E68BC
E68BE	Type E/F (Rule 17) - E68BE
E68BHT	Type E/F (Rule 17) - E68BHT
E68BHTE	Type E/F (Rule 17) - E68BHTE
E68CE	Type E/F (Rule 17) - E68CE
E69AE	Type E/F (Rule 17) - E69AE
E69AHTE	Type E/F (Rule 17) - E69AHTE
E69BE	Type E/F (Rule 17) - E69BE
E69CE	Type E/F (Rule 17) - E69CE
E69CEX	Type E/F (Rule 17) - E69CEX
E69HTE	Type E/F (Rule 17) - E69HTE
E69LCE	Type E/F (Rule 17) - E69LCE
EB7AHT	Type E (Rule 16) - EB7AHT
EF204CE	Type E/F (Rule 17) - EF204CE
EF306CE	Type E/F (Rule 17) - EF306CE
EF511AE	Type E/F (Rule 17) - EF511AE
EF511BE	Type E/F (Rule 17) - EF511BE
EF511CE	Type E/F (Rule 17) - EF511CE
EF511DE	Type E/F (Rule 17) - EF511DE
EF511LCE	Type E/F (Rule 17) - EF511LCE
EF511WE	Type E/F (Rule 17) - EF511WE
EF512CE	Type E/F (Rule 17) - EF512CE
EF512WE	Type E/F (Rule 17) - EF512WE
EF528WE	Type E/F (Rule 17) - EF528WE
EFROTARY	Type E/F Rotary - EFROTARY
EFSPEC	Type E/F Special - EFSPEC
EFUNK	Type E/F Unknown - EFUNK
ESPEC	Type E Special - ESPEC
EUNK	Type E Unknown - EUNK
F70BHT	Type F Obsolete (Rule 18) - F70BHT
F70BHTE	Type F Obsolete (Rule 18) - F70BHTE
F70CC	Type F (Rule 18) - F70CC
F70CE	Type F (Rule 18) - F70CE
F70CHT	Type F (Rule 18) - F70CHT
F70CHTE	Type F (Rule 18) - F70CHTE
F70DE	Type F (Rule 18) - F70DE
F70HT	Type F Obsolete (Rule 18) - F70HT
F71CHT	Type F (Rule 18) - F71CHT
F72HT	Type F (Rule 18) - F72HT
F73AC	Type F (Rule 18) - F73AC
F73AE	Type F (Rule 18) - F73AE
F73AHT	Type F (Rule 18) - F73AHT
F73AHTE	Type F (Rule 18) - F73AHTE
F73BE	Type F (Rule 18) - F73BE
F73HTE	Type F Obsolete (Rule 18) - F73HTE
F79BHT	Type F Obsolete (Rule 18) - F79BHT
F79BHTE	Type F Obsolete (Rule 18) - F79BHTE
F79CC	Type F (Rule 18) - F79CC
F79CE	Type F (Rule 18) - F79CE
F79CHT	Type F (Rule 18) - F79CHT
F79CHTE	Type F (Rule 18) - F79CHTE
F79DE	Type F (Rule 18) - F79DE
FF218AE	Type F (Rule 18) - FF218AE
FR201E	Type F (Rule 18) Rotary - FR201E
FR205AE	Type F (Rule 18) Rotary - FR205AE
FR205BE	Type F (Rule 18) Rotary - FR205BE
FR205E	Type F (Rule 18) Rotary - FR205E
FR206E	Type F (Rule 18) Rotary - FR206E
FR207AE	Type F (Rule 18) Rotary - FR207AE
FR207E	Type F (Rule 18) Rotary - FR207E
FR208AE	Type F (Rule 18) Rotary - FR208AE (without wear insert)
FR208E	Type F (Rule 18) Rotary - FR208E (with wear insert)
FR209E	Type F (Rule 18) Rotary - FR209E
FR301E	Type F (Rule 18) Rotary - FR301E
FR304E	Type F (Rule 18) Rotary - FR304E (with wear plate)
FR304WE	Type F (Rule 18) Rotary - FR304WE (without wear plate)
FROTARY	Type E/F Rotary - FROTARY
FSPEC	Type F Special - FSPEC
FUNK	Type F Unknown - FUNK
S700AE	Type E (Rule 16) - S700AE
SBE60CC	Type E (Rule 16) - SBE60CC
SBE60CE	Type E (Rule 16) - SBE60CE
SBE60DC	Type E (Rule 16) - SBE60DC
SBE60DE	Type E (Rule 16) - SBE60DE
SBE60DREX	Type E (Rule 16) - SBE60DREX
SBE60EE	Type E (Rule 16) - SBE60EE
SBE67BC	Type E (Rule 16) - SBE67BC
SBE67BE	Type E (Rule 16) - SBE67BE
SBE67CC	Type E (Rule 16) - SBE67CC
SBE67CE	Type E (Rule 16) - SBE67CE
SBE67CREX	Type E (Rule 16) - SBE67CREX
SBE67DE	Type E (Rule 16) - SBE67DE
SBE68BC	Type E/F (Rule 17) - SBE68BC
SBE68BE	Type E/F (Rule 17) - SBE68BE
SBE68CE	Type E/F (Rule 17) - SBE68CE
SBE68CREX	Type E/F (Rule 17) - SBE68CREX
SBE68DE	Type E/F (Rule 17) - SBE68DE
SBE68WEX	Type E/F (Rule 17) - SBE68WEX
SBE69AE	Type E/F (Rule 17) - SBE69AE
SBE69BE	Type E/F (Rule 17) - SBE69BE
SBE69BREX	Type E/F (Rule 17) - SBE69BREX
SBE69CE	Type E/F (Rule 17) - SBE69CE
SE60CC	Type E (Rule 16) - SE60CC
SE60CE	Type E (Rule 16) - SE60CE
SE60CHT	Type E (Rule 16) - SE60CHT
SE60CHTE	Type E (Rule 16) - SE60CHTE
SE60DC	Type E (Rule 16) - SE60DC
SE60DE	Type E (Rule 16) - SE60DE
SE60EE	Type E (Rule 16) - SE60EE
SE67BC	Type E (Rule 16) - SE67BC
SE67BE	Type E (Rule 16) - SE67BE
SE67BHT	Type E (Rule 16) - SE67BHT
SE67BHTE	Type E (Rule 16) - SE67BHTE
SE67CC	Type E (Rule 16) - SE67CC
SE67CE	Type E (Rule 16) - SE67CE
SE68BC	Type E/F (Rule 17) - SE68BC
SE68BE	Type E/F (Rule 17) - SE68BE
SE68BHT	Type E/F (Rule 17) - SE68BHT
SE68BHTE	Type E/F (Rule 17) - SE68BHTE
SE68CE	Type E/F (Rule 17) - SE68CE
SE69AE	Type E/F (Rule 17) - SE69AE
SE69BE	Type E/F (Rule 17) - SE69BE
SE69CE	Type E/F (Rule 17) - SE69CE
SF70CC	Type F (Rule 18) - SF70CC
SF70CE	Type F (Rule 18) - SF70CE
SF70CHT	Type F (Rule 18) - SF70CHT
SF70CHTE	Type F (Rule 18) - SF70CHTE
SF70DE	Type F (Rule 18) - SF70DE
SF79CC	Type F (Rule 18) - SF79CC

SF79CE	Type F (Rule 18) - SF79CE
SF79CHT	Type F (Rule 18) - SF79CHT
SF79CHTE	Type F (Rule 18) - SF79CHTE
SF79DE	Type F (Rule 18) - SF79DE

Validation Rule for A057

-If Rotary Coupler Style is reported, then Coupler Code must be a rotary coupler.

-If Coupler Code is a rotary coupler, then Coupler Style must be R (Rotary).

-Coupler Code of Type E Obsolete (Rule 16) can only be reported if the car was built or rebuilt before July 31, 2015

-Coupler Code of Type E/F Obsolete (Rule 17) can only be reported if the car was built or rebuilt before July 31, 2015

-Coupler Code of Type F Obsolete (Rule 18) can only be reported if the car was built or rebuilt before July 31, 2015

-Coupler Code of FROTARY or EFROTARY cannot be reported for cars Built or Rebuilt on or after August 12, 2014.

NOTES:

- Obsolete: All Type D couplers are obsolete and should report code DOBS; cars with this coupler code will be restricted in interchange as discussed below.
- Unknown: If the coupler code is unknown or if the code stamped on the coupler is illegible, the code BUNK FUNK, EFUNK, or LOCOUNK should be reported.
- Special: Codes ESPEC, FSPEC, and EFSPEC have been created to decline coupler bodies that have been manufactured specifically for the equipment owner and are not listed in the attached table.
- The codes FROTARY and EFROTARY cannot be reported for equipment Built or Rebuilt since August 12, 2014.

Coupler Style *Mandatory* — B058

Describes the basic coupler design of the equipment ● ■

Affects Rating.

Permissible Values for B058

B	Bottom Shelf	D	Double Shelf
P	Plain	R	Rotary

Validation Rule for B058

-If Draft System Type (B073) is H (Hydraulic) then Coupler Style cannot be reported as M (Solid Drawbar) or L (Rotary Drawbar)

-If Draft System Type (B073) is not Center Of Car or End Of Car, Inches of Travel (B061) cannot be reported

-If Draft System Type (B073) of Center Of Car or End Of Car is reported then Inches of Travel (B061) must also be reported

Inches of Travel — B061

The number of inches a draft system will travel ■

Affects Rating.

Range of Values for B061

Minimum	Maximum
1	36

Validation Rule for B061

-If Draft System Type (B073) is not Center Of Car or End Of Car, Inches of Travel (B061) cannot be reported

- If Draft System Type (B073) of Center Of Car or End Of Car is reported then Inches of Travel (B061) must also be reported

Draft System Type *Mandatory* — B073

Describes the draft gear/underframe cushion type ● ■

Affects Rating.

Permissible Values for B073

C	Cushioning Center of Car
E	Cushioning End of Car
S	Standard
X	Devices with less than 6 inches buff travel approved under AAR Standard S-060
Y	Devices with 6 to 10 inches of buff travel approved under AAR Standard S-060

Validation Rule for B073

- If Draft System Type (B073) is Standard Draft Gear (S), Inches of Travel (B061) cannot be reported
- If Draft System Type (B073) is reported as C, E, X, or Y then Inches of Travel (B061) must also be reported
- If Draft System Type (B073) of X, or Y is reported then Draft Gear Group/Cushion Unit Pocket (B562) cannot be reported
- If Draft System Type (B073) X is reported, the Inches of Travel (B061) value must be greater than or equal to 1 and less than 6
- If Draft System Type (B073) Y is reported, the Inches of Travel (B061) value must be greater than or equal to 6 and less than or equal to 10

-If Draft System Type (B073) is S then Draft Gear Group/Cushion Unit Pocket (B562) may only be A, B, C, D, E, F, G, H, J, K, L, M, N, P, Q, R, S, or Z (AAR Rule 21)

-If Draft System Type (B073) is E then Draft Gear Group/Cushion Unit Pocket (B562) may only be EOC-1,EOC-1D, EOC-1B, EOC-2, EOC-2D, EOC-2B, EOC-3, EOC-3B,EOC-4, EOC-4B, EOC-5, EOC-5D, EOC-5B, EOC-6, EOC-6D, EOC-6B, EOC-7, EOC-7B, EOC-8, EOC-8B, EOC-8F, EOC-9, EOC-9B, EOC-9D, EOC-9E, EOC-10, EOC-10D, EOC-10B, EOC-10F, EOC-11, EOC-11D, EOC-11B,EOC-12, EOC-12D, EOC-12B, EOC-13, EOC-13B, EOC-14, EOC-14B, EOC-15, EOC-15D, EOC-15B, EOC-16, EOC-16D, EOC-16B, EOC-17, EOC-17D, EOC-17B, EOC-18, EOC-18D, EOC-18B, EOC-19, EOC-19B, EOC-20, EOC-20B, EOC-21, EOC-21B, EOC-22, EOC-22B, EOC-23, EOC-23B, EOC-24, EOC-24B, EOC-25E, EOC-26B, EOC-26F, or EOC-27D, or EOC-27E (AAR Rule 59)

Draft Gear Group/Cushion Unit Pocket — B562

Draft Gear Group/Cushion Unit Pocket value as listed in AAR Field Manual Interchange Rule 21 and 59 ✹

Carry forward for Single Clone / Multi-Clone / Restencil / Add-Back / Equipment Group Change.

Permissible Values for B562EOC-1,EOC-1D, EOC-1B, EOC-2, EOC-2D, EOC-2B, EOC-3, EOC-3B,EOC-4, EOC-4B, EOC-5, EOC-5D, EOC-5B, EOC-6, EOC-6D, EOC-6B, EOC-7, EOC-7B, EOC-8, EOC-8B, EOC-8F, EOC-9, EOC-9B, EOC-9D, EOC-9E, EOC-10, EOC-10D, EOC-10B, EOC-10F, EOC-11, EOC-11D, EOC-11B,EOC-12, EOC-12D, EOC-12B, EOC-13, EOC-13B, EOC-14, EOC-14B, EOC-15, EOC-15D, EOC-15B, EOC-16, EOC-16D, EOC-16B, EOC-17, EOC-17D, EOC-17B, EOC-18, EOC-18D, EOC-18B, EOC-19, EOC-19B, EOC-20, EOC-20B, EOC-21, EOC-21B, EOC-22, EOC-22B, EOC-23, EOC-23B, EOC-24, EOC-24B, EOC-25E, EOC-26B, EOC-26F, EOC-27D, EOC-27E, COC-1, COC-2, COC-3, COC-4, COC-5, COC-6, COC-7, COC-8 (*AAR Rule 59*).

A, B, C, D, E, F, G, H, J, K, L, M, N, P, Q, R, S, Z (*AAR Rule 21*).

Validation Rule(s) for B562

- Draft Gear Group/Cushion Unit Pocket (B562) is mandatory for equipment built on or after June 13, 2019, unless Draft System Type (B073) is reported as X or Y

-If Draft Gear Group/Cushion Unit Pocket (B562) is not equal to A, B, C, D, E, F, G, H, J, K, L, M, N, P, Q, R, S, or Z, then Cushion Unit Type (B563) must be populated

-When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-6, EOC-7, EOC-7B, EOC-8, EOC-8B, EOC-9, EOC-9B, EOC-9D, EOC-10, EOC-10B, EOC-10D, EOC-14, EOC-14B, EOC-18D, EOC-23, EOC-23B, EOC-24, EOC-25E, EOC-26B, or EOC-27D then the Cushion Unit Type (B563) must be 1

-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-9E, EOC-26F, or EOC-27E, then the Cushion Unit Type (B563) must be 2

-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-11, EOC-12, EOC-13, EOC-13B, EOC-15, EOC-15B, EOC-15D, EOC-17, EOC-17B, EOC-17D, EOC-18, EOC-18B, EOC-19, EOC-19B, EOC-20, EOC-20B, EOC-21, EOC-21B, EOC-22, EOC-22B, EOC-24B, COC-3, COC-5, or COC-7 then the Cushion Unit Type (B563) must be 1 or 2

-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-8F or EOC-10F then the Cushion Unit Type (B563) must be 2 or 3

-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-5, EOC-5B, EOC-5D, EOC-6, EOC-6B, EOC-6D EOC-11B, EOC-11D, EOC-12B, EOC-12D, or COC-4 then the Cushion Unit Type (B563) must be 1, 2, or 3

-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-16, EOC-16B, EOC-16D, or COC-1 then the Cushion Unit Type (B563) must be 1, 2, or 4

-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-2B, EOC-2D, EOC-3, EOC-3B, EOC-4, EOC-4B, or COC-2 then the Cushion Unit Type (B563) must be 1, 2, 3, or 4

-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-1, EOC-1B, EOC-1D, or EOC-2 then the Cushion Unit Type (B563) must be 1, 2, 3, 4, or S
-When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-8 then the Cushion Unit Type (B563) must be 1, 2, 3, 4, or 5
-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-1D, EOC-2,EOC-2D, EOC-2B, EOC-3, EOC-3B, EOC-5, EOC-5D, EOC-5B, EOC-6D, EOC-7, EOC-7B, EOC-9, EOC-9B, EOC-9D, EOC-9E, EOC-10D, EOC-11, EOC-11B, EOC-11D, EOC-12D, EOC-14,EOC-14B, EOC-15, EOC-15D, EOC-15B, EOC-16D, EOC-17D, EOC-23, EOC-23B, EOC-27D, or EOC-27E then the Inches of Travel (B061) must be 10
-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-16, EOC-16B, EOC-19, EOC-19B, EOC-22, EOC-22B, or EOC-25E then the inches of travel must be 12
-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-20 or EOC-20B then the Inches of Travel (B061) must be 14
-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-1B, EOC-4, EOC-4B, EOC-6, EOC-6B, EOC-8, EOC-8B, EOC-8F, EOC-10, EOC-10B, EOC-10F, EOC-12, EOC-12B, EOC-13, EOC-13B, EOC-17, EOC-17B, EOC-18, EOC-18D, EOC-18B, EOC-21, EOC-21B, EOC-24, or EOC-24B then the Inches of Travel (B061) must be 15
-When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-2, COC-3, COC-4, COC-5, COC-6, or COC-8 then the Inches of Travel (B061) must be 20
-When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-1, and Cushion Unit Type (B563) is 1 or 2, then the Inches of Travel (B061) must be 20
-When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-1, and Cushion Unit Type (B563) is 4, then the Inches of Travel (B061) must be 18
-When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-7, and Cushion Unit Type (B563) is 2, then the Inches of Travel (B061) must be 20
-When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-7, and Cushion Unit Type (B563) is 1, then the Inches of Travel (B061) must be 30
-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-1 then the Inches of Travel (B061) must be 10, 12, or 15
-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-26, then the Inches of Travel (B061) must be 18

Note:
Reference AAR Field Manual Interchange Rule(s) 21 and 59.

Cushion Unit Type	B563
Cushion Unit Type value as listed in AAR Field Manual Interchange Rule 21 and 59 ✹	

Carry forward for Single Clone / Multi-Clone / Restencil / Add-Back / Equipment Group Change.

Permissible Values for B563

1 – Type 1
2 – Type 2
3 – Type 3
4 – Type 4
5 – Type 5
S – Type S

Validation Rule(s) for B563

- Cushion Unit Type (B563) is mandatory for equipment built on or after June 13, 2019.
-If Draft Gear Group/Cushion Unit Pocket (B562) is not equal to A, B, C, D, E, F, G, H, J, K, L, M, N, P, Q, R, S, or Z, then Cushion Unit Type (B563) must be populated.
-When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-6, EOC-7, EOC-7B, EOC-8, EOC-8B, EOC-9, EOC-9B, EOC-9D, EOC-10, EOC-10B, EOC-10D, EOC-14, EOC-14B, EOC-18D, EOC-23, EOC-23B, EOC-24, EOC-25E, or EOC-26B then the Cushion Unit Type (B563) must be 1.
-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-9E, EOC-26F, or EOC-27E, then the Cushion Unit Type (B563) must be 2
-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-11, EOC-12, EOC-13, EOC-13B, EOC-15, EOC-15B, EOC-15D, EOC-17, EOC-17B, EOC-17D, EOC-18, EOC-18B, EOC-19, EOC-19B, EOC-20, EOC-20B, EOC-21, EOC-21B, EOC-22, EOC-22B, EOC-24B, COC-3, COC-5, or COC-7 then the Cushion Unit Type (B563) must be 1 or 2.
-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-8F or EOC-10F then the Cushion Unit Type (B563) must be 2 or 3.
-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-5, EOC-5B, EOC-5D, EOC-6, EOC-6B, EOC-6D EOC-11B, EOC-11D, EOC-12B, EOC-12D, or COC-4 then the Cushion Unit Type (B563) must be 1, 2, or 3.
-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-16, EOC-16B, EOC-16D, or COC-1 then the Cushion Unit Type (B563) must be 1, 2, or 4.
-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-2B, EOC-2D, EOC-3, EOC-3B, EOC-4, EOC-4B, or COC-2 then the Cushion Unit Type (B563) must be 1, 2, 3, or 4.
-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-1, EOC-1B, EOC-1D, or EOC-2 then the Cushion Unit Type (B563) must be 1, 2, 3, 4, or S.
-When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-8 then the Cushion Unit Type (B563) must be 1, 2, 3, 4, or 5.
-When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-1, and Cushion Unit Type (B563) is 1 or 2, then the Inches of Travel (B061) must be 20.
-When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-1, and Cushion Unit Type (B563) is 4, then the Inches of Travel (B061) must be 18.
-When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-7, and Cushion Unit Type (B563) is 2, then the Inches of Travel (B061) must be 20.
-When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-7, and Cushion Unit Type (B563) is 1, then the Inches of Travel (B061) must be 30.

Note:
Reference AAR Field Manual Interchange Rule(s) 21 and 59.

Coupler Component ID	B353
Coupler Component ID from Component Registry	

Data is Confidential. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Cushioning Unit Component ID	B361
Component ID from Component Registry	

Data is Confidential. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Unit Segment Components

Unit Equipment Group	A307
Describes the equipment type of the platform ■	

Affects Rating.

Permissible Values for A307

BOXC	Box Car	FLAT	Flat Car
GOND	Gondola	HOPP	Hopper
IFLT	Intermodal Flat	TANK	Tank Car
VFLT	Vehicular Flat		

Validation Rule for A307

-Unit Equipment Group cannot be reported if the Connected Unit Count (A020) is not reported
-Unit Equipment Group must be reported if Connected Unit Count (A020) is reported

Unit Tare Weight	A299
The unit segment weight on rail when empty, sometimes referred to as Light Weight, reported in pounds	

Range of Values for A299

Minimum	Maximum
10000	500000

Validation Rule for A299

-Unit Tare Weight must not be reported if the Connected Unit Count (A020) is not reported
-Unit Tare Weight must be reported if Connected Unit Count (A020) is reported

-Unit Tare Weight for Boxcars must be less than or equal 160,000 lbs.
-Unit Tare Weight for Refrigerators must be less than or equal 140,000 lbs.
-Unit Tare Weight for Gondolas must be greater than or equal 30,000 lbs.
-Unit Tare Weight for Gondolas must be less than or equal 110,000 lbs.
-Unit Tare Weight for Hoppers must be greater than or equal 23,000 lbs.
-Unit Tare Weight for Hoppers must be less than 120,000 lbs.
-Unit Tare Weight for Tanks must be greater than 31,000 lbs.
-Unit Tare Weight for Tanks must be less than 200,000 lbs.
-Unit Tare Weight for Vflats must be greater than 55,000 lbs.
-Unit Tare Weight for VFlats must be less than 136,000 lbs.
-Unit Tare Weight for IFLTs must be greater than 10,000 lbs.
-Unit Tare Weight for IFLTs must be less than 72,000 lbs.
-Unit Tare Weight for all flats other than VFlats with ETC Q___ must be greater than 23,000 lbs.
-Unit Tare Weight for all flats other than VFlats with ETC Q___ must be less than 500,000 lbs.
-Unit Segment Tare Weights must add up to the Total Tare Weight (A259)
-Unit Tare Weight (A299) value must be reported to the nearest 100 pounds

Unit Load Limit **A300**

The maximum permissible weight of the commodity that can be loaded into the unit segment, reported in pounds

Range of Values for A300

Minimum	Maximum
20000	500000

Validation Rule for A300

-Unit Load Limit must not be reported if the Connected Unit Count (A020) is not reported
-Unit Load Limit must be reported if Connected Unit Count (A020) is reported
-Unit Segment Load Limits must add up to the Load Limit (LDLT)

Brake System Components

Emergency Brake Valve CID **B354**

Component ID from Component Registry

Data is Confidential. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Emergency Valve COTS Date **B567**

Brake valve emergency portion recondition date

System generated element. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

NOTES:

- Emergency Valve COTS Date is system-generated from a Emergency Brake Valve Inspection.

Emergency Valve OEM Warranty Date **B568**

Brake valve emergency portion Original Equipment Manufacturer warranty date

System generated element. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

NOTES:

- Emergency Valve OEM Date is system-generated from a Emergency Brake Valve Inspection.

Emergency Valve Part Number **B569**

Brake valve emergency portion part number

System generated element. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

NOTES:

- Emergency Valve Part Number is system-generated from a Emergency Brake Valve Inspection.

Service Brake Valve CID **B357**

Component ID from Component Registry

Data is Confidential. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Service Valve COTS Date **B564**

Brake valve service portion recondition date

System generated element. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

NOTES:

- Service Valve COTS Date is system-generated from a Service Brake Valve Inspection.

Service Valve OEM Warranty Date **B565**

Brake valve service portion Original Equipment Manufacturer warranty date

System generated element. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

NOTES:

- Service Valve OEM Date is system-generated from a Service Brake Valve Inspection.

Service Valve Part Number **B566**

Brake valve service portion part number

System generated element. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

NOTES:

Service Valve Part Number is system-generated from a Service Brake Valve Inspection.

Slack Adjuster CID **B359**

Component ID from Component Registry

Data is Confidential. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Tank Car Components

Pressure Relief Valve CID **B360**

Component ID from Component Registry

Data is Confidential. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Miscellaneous

Commercial Owner CIF **B049**

The Customer Identification File (CIF) number for a commercial owner at a specific location

Commercial Lessee CIF **B048**

The Customer Identification File (CIF) number for a commercial lessee at a specific location

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Validation Rule for DTDN

-The inspection date must not be 60 days before the Build Date

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Umler Effective Date **EFDT**

The date the rating activity (pre-registration, modification, etc.) is expected to occur

This element is not eligible for Query. Does not Carry Forward.

Validation Rule for EFDT

-Effective Date cannot be set to more than 13 months in the future.

NOTES:

- Effective Date will default to the 1st of the following month that equipment is registered

Inspection

ABT Due Date (Repair Track) — DU13

The due date of the air brake test per AAR Field Manual Rule 3

System Generated Field. This element is not eligible for Input. Value does not carry forward for Add Back.

Inspection Reporter — REPT

The SCAC that reported the inspection; used for all inspection types reported on equipment

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Location/SPLC — SPLC

The SPLC of the inspecting location; used for all inspection types reported on equipment

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Air Brake Test Device — B523

Indicates the type of test device used to perform the Air Brake Test ✹

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Permissible Values for B523

A Automatic (Non 4-Pressure)
M Manual
P Automatic (4-Pressure)

Validation Rule for B523

-Air Brake Test Device (B523) must be reported for Air Brake Test inspection reported on or after December 10, 2020

Insp Service Valve COTS Date — B570

Brake valve service portion recondition date

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

NOTES:

- Reports of 9999 will be allowed in case the date is illegible and the valve cannot be replaced immediately.
- Valid date format: MMYY

Insp Service Valve OEM Warranty Date — B571

Brake valve service portion Original Equipment Manufacturer warranty date

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Insp Service Valve Part Number — B572

Brake valve service portion part number

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

ABT 5-8 Year Due Date — DU58

The 5-8 year due date for the air brake test (ABT) after the ABT Due Date (Repair Track)

System Generated Field. This element is not eligible for Input. Value does not carry forward for Add Back.

Inspection Date Done — DTDN

The date the inspection was completed; used for all inspection types reported on equipment

NOTES:

- Reports of 999999 will be allowed in case the date is illegible and the valve cannot be replaced immediately.
- Valid date format: MMYYYY

Insp Emergency Valve COTS Date — B573

Brake valve emergency portion recondition date

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

NOTES:

- Reports of 9999 will be allowed in case the date is illegible and the valve cannot be replaced immediately.
- Valid date format: MMYY

Insp Emergency Valve OEM Warranty Date — B574

Brake valve emergency portion Original Equipment Manufacturer warranty date

System generated element. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

NOTES:

- Reports of 999999 will be allowed in case the date is illegible and the valve cannot be replaced immediately.
- Valid date format: MMYYYY

Insp Emergency Valve Part Number — B575

Brake valve emergency portion part number

System generated element. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Insp Service Valve Location *Mandatory* — B576

Brake valve service portion location ●

Value does not carry forward for Single Clone / Multi-Clone.

Insp Emergency Valve Location *Mandatory* — B577

Brake valve emergency portion location reported on an emergency brake valve inspection ●

Value does not carry forward for Single Clone / Multi-Clone.

Flat Cars

General

Status Code *Mandatory* — **USCD**

Identifies the current operational state ●

Does not Carry Forward.

Permissible Values for USCD

A	ACTIVE	I	INACTIVE
P	PRE-REGISTERED		

NOTES:

- For Restencil and Clone process the initial Status of a car should be Pre-Registered.
- All Add-Back processes should initially set the Status to Pre-Registered
- A Pre-registered car will automatically have its Status changed to Active for the initial change when TRAIN detects three (3) movements on the car
- If the Status changes to Active due to movement and the car was created from a Restencil, the Prior Equipment ID (PRID) or source car will have its status changed to Inactive automatically by Umler

Equipment ID — **0001**

The equipment stenciled number

Validation Rule for 0001

-Equipment Number must not be larger than 6 digits (i.e., 999999)

NOTES:

- Equipment ID includes the mark and number stenciled on the equipment. Marks can be up to 4 characters and number up to 6 digits (i.e., ABCD999999).
- Up to 500 cars can be added or updated in a transaction.
- When adding an equipment record, ensure that Prior Equipment ID (PRID) is reported, unless the equipment is new.

Mechanical Designation *Mandatory* — **UMMD**

Equipment description without physical dimensions ●

Used for Transportation Codes.

Permissible Values for UMMD

FB	Flat-Bulkhead
FBC	Flat-Bulkhead Center Beam
FBS	Flat-Bulkhead, Specially Equipped
FD	Flat-Depressed (Heavy Duty)
FDC	Flat-Depressed Center Beam
FL	Flat-Fitted with Cross Supports for Longitudinal Loading
FM	Flat-Straight Deck
FMS	Flat-Straight Deck, Specially Equipped
FW	Flat-Well (Heavy Duty)
LF	Flat-Special Design for demountable containers
LP	Flat-Special Design
LS	Flat-Special Design with two interlocking units
MWF	MoW - Flats
MWG	MoW - Section Gang or Track Inspection Car
MWRC	MoW - Remote Control Equipment

Equipment Type Code — **UMET**

An alpha numeric code that describes the physical attributes of equipment

System Generated Field. This element is not eligible for Input.

NOTES:

- Please Refer to Appendix I for More information Regarding ETC Generation

Dedicated Service — **B346**

Indicates the type of dedicated service car is equipped to handle

Value does not carry forward for Equipment Group Change.

Permissible Values for B346

A	Aluminum Ingot
B	Airplane Wings / Fuselage
C	Coiled Rod
D	Coiled Steel
E	Hot Reinforcement Bars
F	Frames
G	Logs
H	Utility Poles
I	Pipe
J	Plate Steel
K	Steel Rail
L	Wind Turbine

Validation Rule for B346

-Dedicated Service Type can only be reported if Mechanical Designation (UMMD) is FMS

Maint of Way Service Type — **B403**

Identifies equipment Maintenance Of Way function

Value does not carry forward for Equipment Group Change.

Permissible Values for B403

C2	Crane / Boom Support Car
F4	Flat-Wheel Sets
T4	Training Car
T8	Track Geometry Car

Validation Rule for B403

- Maint of Way Service Type can only be listed on records where the Equipment Group (0002) or Pseudo Equipment Group (B547) is listed as MISC

Built Date *Mandatory* — **BLDT**

The date the construction of the equipment is complete ● ■

Data is Confidential. Used for Transportation Codes. Affects Rating. Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for BLDT

Minimum	Maximum
1/1/1900	12/31/9999

Validation Rule for BLDT

-Built Date must be within the last 99 years
-Built Date must not be in the future for equipment in Active Status
-Prior and target equipment's Built Date (BLDT) must match for restenciling
-Built Date cannot be updated within 30 days of the End of Service Date (B078)

NOTES:

- Data is public for railroad marked equipment.
- For connected unit cars report the oldest car in the set.

Rebuilt / ILS Date — **RBDT**

The date the re-construction of the equipment is complete

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for RBDT

Minimum	Maximum
1/1/1900	12/31/9999

Validation Rule for RBDT

-Rebuilt/Increased Life Service Date must be after the Built Date (BLDT)
-Rebuilt Date must not be more than 70 years after the Built Date (BLDT)
-Rebuilt Date is required for Extended Service Code (A096) 1, 2, or 3 for Increased Life Service
-Rebuilt Date is required for Extended Service Code (A096) R for Rebuilt, or V for 65 years of service
-If Rebuilt Date is reported then the Extended Service Code (A096) must be reported as R for Rebuilt, V, 1, 2, or 3 for Increased Life Service

NOTES:

- Railroad cars -- applicable only to cars meeting status as provided in both STB Accounting Rules, and the AAR Mechanical Interchange Rule 88, Office Manual.
- Private cars -- applicable to all cars meeting AAR Mechanical Interchange Rule 88, Section C, Office Manual and Sections A and B of the Field Manual.
- For connected unit cars report the oldest car in the set. Do not report Rebuilt

Date unless car has been approved by the AAR.

Rebuilt Flag	RBFL
Identifies the equipment is nearing its end of life cycle	

Data is Confidential. System Generated Field. This element is not eligible for Input.

Permissible Values for RBFL

N No Y Yes

Owner *Mandatory*	UMOW
Primary reporting mark of the railroad or private company owning the car ●	

Value does not carry forward for Single Clone / Multi-Clone / Single Restencil / Multi-Restencil.

NOTES:

- Report the primary reporting mark of the railroad or private company owning the car. When car's lease or lien is held by a bank, trust holder, capital lease company, etc. not having an assigned mark, report the primary reporting mark affiliated with the stenciled reporting mark.

Lessee	LESE
The reporting mark of the company leasing the equipment	

Value does not carry forward for Single Clone / Multi-Clone / Single Restencil / Multi-Restencil.

Validation Rule for LESE

-Umler Owner (UMOW) and Lessee are not allowed to be equal

-Lessee cannot be a child reporting mark

NOTES:

- In order to assign privately marked cars to a pool, a railroad reporting mark must be reported.

Equipment Group *Mandatory*	0002
Identifies the various major car types ● ■	

Used for Transportation Codes. Affects Rating.

Maintenance Party	MNPT
The parent reporting mark of the company responsible for the maintenance and repairs of the equipment	

Does not Carry Forward.

Mark Owner Category	B201
The company that owns the stenciled mark on the car	

System Generated Field. This element is not eligible for Input. Value does not carry forward for Single Restencil / Multi-Restencil / Equipment Group Change / Add Back.

Permissible Values for B201

B	US Private
C	Canadian Private
F	Foreign Private
H	Canadian Class II
I	Canadian Class I
J	Mexican Class I
K	Canadian Class III
M	Mexican Private
N	US Private Steamship
O	Canadian Private Steamship
P	Mexican Private Steamship
Q	Foreign Private Steamship
R	US Class II Railroad
U	US Class I Railroad
V	US Class III Railroad
W	Mexican Class II Railroad
Y	Mexican Class III Railroad

NOTES:

- This value is stored in the Umler Database for informational purposes and is retrieved from the Roadmark Registry.

Prior Equipment ID	PRID
The previous reporting mark and number of the equipment	

Value does not carry forward for Single Clone / Multi-Clone.

Validation Rule for PRID

-Prior and target equipment's Built Date (BLDT) must match

-The Prior Equipment ID (0001) must belong to the same or comparable Equipment Group (0002) as the current car initial and number

NOTES:

- Prior ID enables equipment records to share the same historical lineage. Equipment Identification Number (EIN) is a generated id that enables these equipment records to share inspections and transaction history.

Last Update Date	B122
Date of the last Umler element change	

System Generated Field. This element is not eligible for Input.

Equipment Add Date	B082
Date the reporting mark and number was added to the Umler system	

System Generated Field. This element is not eligible for Input.

Status Change Reason	USCR
Identifies the reason for the current operational state	

System Generated Field. This element is not eligible for Input. Does not Carry Forward.

Permissible Values for USCR

I	Initial Load
M	Movement
O	Status Changed Manually
R	Restencil

NOTES:

- If movement is detected on equipment, status is changed to Active.
- If an equipment record is changed to Active, any prior equipment record is placed in Inactive status.

Status Change Date	USCT
Identifies the effective date of the current operational state	

System Generated Field. This element is not eligible for Input. Does not Carry Forward.

Extended Service *Mandatory*	A096
A code indicating the eligibility of an increase to the life cycle ●	

Used for Transportation Codes. Value does not carry forward for Single Clone / Multi-Clone.

Permissible Values for A096

1	1st ILS Inspection, additional 5 years of Service
2	2nd ILS Inspection, additional 5 years of service (10 years total)
3	3rd ILS Inspection, additional 5 years of service (15 years total)
C	Built New between January 1, 1964 - June 30, 1974, Certified for 50 Years of Service, Built New Before July 1, 1974 & Received AAR Waiver
E	Built new from July 1,1974, Qualified for 50 Years Service
N	Built Before January 1, 1964, Qualified for 40 Years Service
R	Rule 88, Rebuilt cars
U	Built between January 1, 1964 - June 30, 1974, Qualified for 40 Years & eligible for certification for 50 Years Service
V	Car is certified (FRA Waiver & AAR) for 65 years of service from date built new from January 1, 1964

Validation Rule for A096

-If Rebuilt Date (RBDT) is reported, then the Extended Service Code (A096) must be reported as R for Rebuilt, V, 1, 2, or 3 for Increased Life Service

-Extended Service Code of C cannot be reported if the car was built before January 1, 1964 or on/after July 1, 1974

-Extended Service Code of E cannot be reported if the car was built before July 1, 1974

-Extended Service Code of N cannot be reported if the car was built on/after January 1, 1964
-Extended Service Code of U cannot be reported if the car was built before January 1, 1964 or on/after July 1, 1974

NOTES:

- Value is used to calculate End of Service Date (B078).
- Rebuilt Date (RBDT) is required for Extended Service Code (A096) R for Rebuilt, or V for 65 years service.
- Rebuilt Date (RBDT) is required for Extended Service Code (A096) 1, 2, 3, and V for Increased Life Service.

End of Service Date B078

Indicates the date of the end of equipment life

Data is Confidential. System Generated Field. This element is not eligible for Input.

NOTES:

- Data becomes non-confidential two years prior to End of Service Date.

Do Not Load After B590

Equipment should not be loaded after date shown in the element

Data is Confidential.

Validation Rules for B590

-Do Not Load After (B590) cannot be updated thirty days prior to the date shown in the element.
-Do Not Load After (B590) cannot be updated within thirty days of the End of Service Date (B078).
-Do Not Load After (B590) date cannot be on or after the End of Service (B078) date.

NOTES:

- The element will be initially populated by End of Service (B078) minus 30 days.
- Data becomes non-confidential thirty days prior to the Do Not Load After (B590) date.

Equipment Identification EINN

Unique equipment identifier regardless of stenciled mark

System Generated Field. This element is not eligible for Input.

NOTES:

- Specify the Prior ID (PRID) on equipment records to ensure the historical lineage is preserved. Equipment with the same EIN share history and inspections.

Info Conflict Status B355

Indicates that an Informational Conflict exists on the Equipment record

System Generated Field. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Conflict Status B050

Identifies the escalation level of equipment in active conflict ■

System Generated Field. Affects Rating. This element is not eligible for Input. Value does not carry forward for Add Back.

Permissible Values for B050

1 Subject to Zero-Rating
2 Subject to Restricted in Interchange
3 Subject to Deletion

NOTES:

- Subject to Zero-Rating, goes into effect 30 days after Conflict Status occurs
- Subject to Restricted in Interchange, goes into effect 90 days after Conflict Status occurs
- Subject to Deletion, goes into effect 365 days after Conflict Status occurs

Date of Original Conflict B063

The date the equipment was originally placed in the current conflict

System Generated Field. This element is not eligible for Input.

Next Conflict Status B135

Identifies the next escalation level of an equipment in active conflict

System Generated Field. This element is not eligible for Input. Value does not carry forward for Add Back.

Permissible Values for B135

1 Subject to Zero-Rating
2 Subject to Restricted in Interchange
3 Subject to Deletion

NOTES:

- Subject to Zero-Rating, goes into effect 30 days after Conflict Status occurs
- Subject to Restricted in Interchange, goes into effect 90 days after Conflict Status occurs
- Subject to Deletion, goes into effect 365 days after Conflict Status occurs

Notice Indicator B137

Identifies equipment in error in Umler Notice Management

System Generated Field. This element is not eligible for Input.

Conflict Status Next Date B062

The date the conflict status will be escalated

System Generated Field. This element is not eligible for Input. Value does not carry forward for Add Back.

Rate Indicator A070

Indicates the rate type applicable to the unit ■

System Generated Field. Used for Transportation Codes. Affects Rating. This element is not eligible for Input. Does not Carry Forward.

Permissible Values for A070

0 Zero-Rated Due to Conflict Errors
2 Private Mileage Rate
4 Private Car Owner Designated Rate
6 Zero-Rated - Scrap (S_,SX), AAR Overage (XA), FRA Overage (YA), Umler Conflict - CHR 1/Tarriff 6007 (XZ). Zero-Rated Private Owner Election to Zero Rate [See Private Zero Rate (B150)].
M Railroad Market Rate
Q Zero-Rated Railroad Market Rate Due to Conflict Errors

NOTES:

- If unit is zero-rated, correction of conflicts will reinstate the appropriate rate indicator code.

Private Zero Rate B150

Indicates a private car is subject to contractual agreement, nullifying mileage rates ■

Affects Rating.

Permissible Values for B150

Y Yes

NOTES:

- Reporting "Y" generates Rate Indicator (A070) value 6 and a zero rate.

TTX Hourly Rate B212

Time Charge-The TTX hourly rate for the equipment

Data is Confidential. This element is not eligible for Query.

Range of Values for B212

Minimum	Maximum
0	9

Validation Rule for B212

-TTX Hourly rate can only be set on TTX owned Equipment.

TTX Mileage Rate B213

Mileage Charge-The TTX mileage rate for the equipment

Data is Confidential. This element is not eligible for Query.

Range of Values for B213

Minimum	Maximum
0	1

Validation Rule for B213

-TTX Mileage rate can only be set on TTX owned Equipment.

First Movement Date — **USAT**

The first movement date under the stenciled mark of the equipment

This element is not eligible for Input. Does not Carry Forward.

Equipment Add Company — **B083**

The reporting mark of the company that added the equipment

System Generated Field. This element is not eligible for Input.

Registration Reason — **B174**

The code indicating the reason this equipment is added

Does not Carry Forward.

Permissible Values for B174

A	Add-Back	N	New
P	Pending Restencil	R	Restencil

Restencil Program Ind — **B177**

Identifies the equipment is under a restencil program

Permissible Values for B177

Y Yes

Delete Reason Code — **B064**

A code that designates the reason the equipment has been deleted

Value does not carry forward for Add Back.

Permissible Values for B064

A	Restenciled
D	Destroyed or wrecked
L	Lease terminated, removed from fleet
P	Retired unserviceable beyond economic repair
R	Rebuilt
S	Sold Serviceable
W	Over age retired for dismantling
Y	Error, reporting did not exist
Z	Other

Non-Compliant Wheelsets — **B544**

Equipment record is incomplete and has a missing wheelset component ID association. Refer to AAR Field Manual Rule 44 for industry requirements ✹

System Generated Field. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Validation Rule for B544

-A Wheelset Component ID is required for each applicable location on equipment built on or after January 1, 2016

-A Wheelset Component ID is required for each applicable location on equipment rebuilt on or after January 1, 2016 and Gross Rail Load (A266) is greater than 268,000 lbs

NOTES:

- A "Y" will be system generated if the equipment is active and the number of Wheelset CID's required is not equal to the Axle Count (A024) on the equipment
- Validation rule applies to equipment that has been in Active status for 60 days

Pseudo Equipment Group — **B547**

Equipment needs to be identified as a miscellaneous record while maintaining all elements linked to the original equipment group

System Generated Field.

Permissible Values for B547

MISC Miscellaneous

Weight

Gross Rail Load/Weight *Mandatory* — **A266**

The maximum permissible weight on rail of the equipment and the load, reported in pounds ● ■

Affects Rating.

Range of Values for A266

Minimum	Maximum
108000	2835000

Validation Rule for A266

-Gross Rail Load must be equal to the Load Limit (LDLT) plus the Tare Weight (A259)

NOTES:

Use Table 1 below to determine Gross Rail Load, if Qualification for Increased Gross Rail Load (B344) does not exist.

TABLE 1 -

Journal Size	Load per Axle	Gross Rail Load for 4-axle Equipment
B - 4 1/2" x 8"	25,750 lbs.	103,000 lbs.
C - 5" x 9"	35,500 lbs.	142,000 lbs.
D - 5 1/2" x 10"	44,250 lbs.	177,000 lbs.
E - 6" x 11"	55,000 lbs.	220,000 lbs.
E - 6" x 11" (w/ 28" 1W wheels)	48,750 lbs.	195,000 lbs.
F - 6 1/2" x 12"	65,750 lbs.	263,000 lbs.
G - 7" x 12"	78,750 lbs.	315,000 lbs.
K - 6 1/2" x 9"	71,500 lbs.	263,000 lbs.
M - 7" x 9"	78,750 lbs.	315,000 lbs.

Use Table 2 below to determine Gross Rail Load for 4-axle equipment if Qualification for Increased Gross Rail Load (B344) exists.

TABLE 2 -

Qualification for Increased Gross Rail Load (B344)	Journal Size	Gross Rail Load
1	K - 6 1/2" x 9"	286,000 lbs.
1	G – 7" x 12"	286,000 lbs.
1	M – 7" x 9"	286,000 lbs.
2	F - 6 1/2" x 12"	286,000 lbs.
2	K - 6 1/2" x 9"	286,000 lbs.
3	F - 6 1/2" x 12"	268,000 lbs.
3	K - 6 1/2" x 9"	268,000 lbs.

- For multi-unit equipment, report the total gross rail load for the entire set.
- Refer to Field Manual Rule 70 if additional information is required.

A Gross Rail Load less than the listed or calculated values may be entered if:

- Star Code (A247) is R or S, and
- Load Limit (LDLT) must also be reduced, ensuring Tare Weight (A259) plus Load Limit (LDLT) equals the reported Gross Rail Load.

For equipment having two or more different journal sizes, see following examples:

Example for Drawbar Connected:

- A 3-unit drawbar connected car has 12 axles.
- The end units (Locations A and B) each have 4 axles with E - 6" x 11" journals.
- The intermediate unit (Locations C) has 4 axles with F – 6 1/2" x 12" journals

Using TABLE 1, the Gross Rail Load would be:

8 ea. E-6" x 11" journal axles X 55,000 lbs. per axle = 440,000 lbs.
+ 4 ea. F-6 1/2" x 12" journal axles X 65,750 lbs. per axle = 263,000 lbs.
Gross Rail Load = 703,000 lbs.

Example for Articulated Connected:
A 5-unit articulated car has 6 trucks (12 axles).
The end trucks (Locations A and B) each have 2 axles with E - 6" x 11" journals.
The intermediate trucks (Locations C, D, E, and F) each have 2 axles with G - 7" x 12" journals

Using TABLE 1, the Gross Rail Load would be:

- 4 ea. E-6" x 11" journal axles X 55,000 lbs. per axle = 220,000 lbs.
- + 8 ea. G-7" x 12" journal axles X 78,750 lbs. per axle = 630,000 lbs.
- Gross Rail Load = 850,000 lbs.

Tare Weight *Mandatory* — A259

The equipment weight on rail when empty, sometimes referred to as Light Weight, reported in pounds ● ■

Affects Rating.

Range of Values for A259

Minimum	Maximum
34300	1287000

Validation Rule for A259

- Tare Weight (A259) value must be reported to the nearest 100 pounds

NOTES:

- Do not report an average Tare Weight for car series, except for Pre-Registered cars
- When cars are made active, the actual Tare Weight must be recorded
- For current single-unit FLATs, lowest tare is 34,320 lbs. (Round down to 34,300). Largest tare weight for 4-axle car is approx. 143,000 lbs. Maximum permissible value shown is 143,000 lbs. X 9 = 1,287,000.

Load Limit *Mandatory* — LDLT

The maximum permissible weight of the commodity that can be loaded into the equipment, reported in pounds ● ■ ▲

Used in ETC Generation. Affects Rating.

Range of Values for LDLT

Minimum	Maximum
35000	2225000

NOTES:

- For connected unit cars report the sum of the load limits for all units in the set.
- For current single-unit FLATs, lowest load limit is 35,000 lbs. Largest tare weight for a 4-axle car is approx. 250,000 lbs. Maximum permissible value shown is 250,000 lbs. x 9 = 2,225,000 lbs.

Weighing Status *Mandatory* — A289

Indicates the weight information is an estimate or an actual measurement ●

Value does not carry forward for Single Clone / Multi-Clone.

Permissible Values for A289

A	Actual
E	Estimated
V	Verified correct Tare Weight
X	Tare Weight subject to verification (System Generated)

Validation Rule for A289

-Equipment cannot be within a series of 10 with identical Tare Weights (A259), refer to Appendix P for further information on resolving tare weight conflicts
-When Status Code changes to Active or Inactive Weighing Status must be reported as Actual (A) or Verified (V) within 60 days of Status Code change

Weighing Date — A288

The date the equipment was actually weighed

Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for A288

Minimum	Maximum
1/1/1900	12/31/9999

Validation Rule for A288

-If Weighing Date is reported the Tare Weight (A259) must be reported
-When Weighing Date is reported then Weighing Status (A289) must be A (Actual) or V (Verified)
-If Weighing Status (A289) is A (Actual) or V (Verified correct Tare Weight) then Weighing Date must be reported
-Weighing Date must be on or before the current date
-Weighing Date cannot be before Built / Rebuilt date

Cubic Feet Capacity — A067

The maximum interior cubic feet capacity of the equipment

Range of Values for A067

Minimum	Maximum
2400	8000

Validation Rule for A067

-Cubic Feet Capacity can only be reported on Flat Cars having a Permanent Container

NOTES:

- For connected unit cars report the sum of all units cubic capacity.

Star Code — A247

Indicates a reduction of the Load Limit (LDLT) of the equipment per AAR Rule 70 ■

Affects Rating.

Permissible Values for A247

R	Body Capacity less than Truck Capacity
S	Reduced Load Limit

NOTE:

- Star Code must be reported if Gross Rail Load (A266) is less than the maximum gross rail allowed for the reported combination of Axle Count (A024) and Journal Size (A147)

Qual for Inc GRL — B344

Code designating AAR approval for operating 4-axle equipment at a gross rail load greater than 263,000 lbs. per AAR Rule 88

Permissible Values for B344

1	Rule 88 IGRL Code 1 (> 263,000 lbs. and <= 286,000 lbs. GRL per AAR Specification S-286)
2	Rule 88 IGRL Code 2 (> 263,000 lbs. and <= 286,000 lbs. GRL)
3	Rule 88 IGRL Code 3 (> 263,000 lbs. and <= 268,000 lbs. GRL)

Validation Rules for B344

-Equipment having Qualification for Increased Gross Rail Load of 1 or 2 must have a Gross Rail Load (A266) that does not exceed 286,000 lbs.
-Equipment having Qualification for Increased Gross Rail Load of 3 must have a Gross Rail Load (A266) that does not exceed 268,000 lbs.
-Equipment having Qualification for Increased Gross Rail Load of 1 must have a Journal Size (A147) of K, G, or M
-Equipment having Qualification for Increased Rail Load of 2 or 3 must have a Journal Size (A147) of F or K
-Equipment having Qualification for Increased Gross Rail Load of 1, 2, or 3 must have a Wheel Diameter (A294) of 36 or 38
-Equipment having Qualification for Increased Gross Rail Load (B344) of 3 and a Gross Rail Load (A266) less than 268,000 lbs., must have Star Code of S

NOTES:

- Qualification for Increased Gross Rail Load must be granted by the AAR, and applies only to 4-axle equipment approved for gross rail loads greater than 263,000 lbs. and less than or equal to 286,000 lbs. It does NOT apply to 4-axle, 315,000 lbs. gross rail load equipment operating with a Star Code.

Dimension

Plate Code *Mandatory* — **A046**

Indicates the extreme height and width clearance of the equipment

Affects Rating.

Permissible Values for A046

B	Plate Code B
C	Plate Code C
E	Plate Code E
F	Plate Code F
G	Clearance Code G
N	Plate Code N

NOTES:

- For a description of Plate Codes, please see Appendix J at the back of this manual.
  - Report B: If clearance does not exceed Plate B
  - Report C: If clearance is greater than Plate B. but does not exceed Plate C
  - Report E: If clearance is greater than Plates B and C, but does not exceed Plate E.
  - Report F: If clearance is greater than Plates B, C and E, but does not exceed Plate F
  - Report G: If clearance exceeds Plates B, C, E, F, and N.
  - Report N: If clearance is greater than Plates B, C, E, and F, but does not exceed Plate N.
- There is no AAR Plate G. Clearance Code G is included in Umler to represent equipment that does not fit any existing AAR clearance plates.
- For ARTICULATED/MULTI-UNIT SET report the most restrictive clearance plate of UNIT in the set.

Outside Length *Mandatory* — **OSLG**

The outside length over pulling faces of couplers in normal position

Affects Rating. Displayed in feet and inches on the Web. Stored in inches.

Range of Values for OSLG

Minimum	Maximum
24 ft 0 inches	2330 ft 0 inches

Validation Rule for OSLG

-Non-Articulated Flat Cars cannot have an Outside Length greater than 124 feet

-Outside Length (OSLG) on freight cars must exceed the Inside Length (A135) by 2 feet or more

-Outside Length (OSLG) on freight cars (except refrigerators) must not exceed Inside Length (A135) by more than 16 feet

-Outside Length (OSLG) on refrigerator cars (Mechanical Designation RB, RBL, RP, RPL, or RC) must not exceed Inside Length (A135) by more than 26 feet

NOTES:

- For connected unit cars report the maximum coupled length of the set.
- Round fraction to the higher inch, e.g., 05 1/4" = 06"

Outside Extreme Width *Mandatory* — **A186**

The outside extreme width of the equipment

Affects Rating. Displayed in feet and inches on the Web. Stored in inches.

Range of Values for A186

Minimum	Maximum
7 ft 0 inches	12 ft 7 inches

Validation Rule for A186

-Outside Extreme Width must not exceed 10 feet 8 inches for Plate Codes B, C, E, F, or N

-Outside Extreme Width (A186) for Plate Code A must not be less than 10 feet 8 inches.

-Outside Extreme Width (A186) for Plate Code A must not exceed 10 feet 10 inches.

NOTES:

- For connected unit cars report the dimension of the largest unit in the set.
- Round fraction to the higher inch, e.g., 05 1/4" = 06"

Outside Extreme Height *Mandatory* — **A185**

Height from top of rail to extreme projecting height

Affects Rating. Displayed in feet and inches on the Web. Stored in inches.

Range of Values for A185

Minimum	Maximum
2 ft 0 inches	22 ft 6 inches

Validation Rule for A185

-Flat Cars with Plate Code B must not exceed a Maximum Outside Extreme Height of 15 feet 1 inches

-Flat Cars without (Canopy and (Plate Code C or I)) must not exceed Outside Extreme Height of 15 feet 6 inches

-Flat Cars without (Canopy and (Plate Code E or J)) must not exceed Outside Extreme Height of 15 feet 9 inches

-Flat Cars without (Canopy and (Plate Code F or K)) must not exceed Outside Extreme Height of 17 feet 0 inches

-Flat Cars (UMMD = FMS) without (Canopy and (Plate Code B or H)) must not exceed Outside Extreme Height of 15 feet 1 inches

-Flat Cars (UMMD = FMS) without (Canopy and (Plate Code C or I)) must not exceed Outside Extreme Height of 15 feet 6 inches

-Flat Cars (UMMD = FMS) without Canopy and with Plate Code E or J must have Outside Extreme Height of less than or equal to 15 feet 9 inches

-Flat Cars (UMMD = FMS) without Canopy and with Plate Code F or K must have Outside Extreme Height of less than or equal to 17 feet 0 inches

-Flat Cars (UMMD = FMS) with Canopy must have Outside Extreme Height of less than or equal to 22 feet 6 inches

-Flat Cars (UMMD = FMS) with Canopy must have Outside Extreme Height greater than or equal to 17 feet 0 inches

-Outside Extreme Height for Plate Code N must be less than or equal to 17 feet 1 inch

NOTES:

- For connected unit cars report the dimension of the largest unit in the set.
- Round fraction to the higher inch, e.g., 05 1/4" = 06"

Outside Height Extr Width *Mandatory* — **A187**

The highest point at which the extreme width of the equipment occurs

Displayed in feet and inches on the Web. Stored in inches.

Range of Values for A187

Minimum	Maximum
1 ft 0 inches	20 ft 0 inches

Validation Rule for A187

-Outside Extreme Width (A186) for Plate Codes B must not exceed 10 feet 8 inches if Outside Height Extreme Width is 13 feet 10 inches or less

-Outside Extreme Width (A186) for Plate Codes B must not exceed 10 feet 7 inches if Outside Height Extreme Width is 13 feet 11 inches

-Outside Extreme Width (A186) for Plate Codes B must not exceed 10 feet 6 inches if Outside Height Extreme Width is 14 feet 0 inches

-Outside Extreme Width (A186) for Plate Codes B must not exceed 10 feet 4 inches if Outside Height Extreme Width is 14 feet 1 inches

-Outside Extreme Width (A186) for Plate Codes B must not exceed 10 feet 3 inches if Outside Height Extreme Width is 14 feet 2 inches

-Outside Extreme Width (A186) for Plate Codes B must not exceed 10 feet 2 inches if Outside Height Extreme Width is 14 feet 3 inches

-Outside Extreme Width (A186) for Plate Codes B must not exceed 10 feet 0 inches if Outside Height Extreme Width is 14 feet 4 inches

-Outside Extreme Width (A186) for Plate Codes B must not exceed 9 feet 9 inches if Outside Height Extreme Width is 14 feet 5 inches

-Outside Extreme Width (A186) for Plate Codes B must not exceed 9 feet 5 inches if Outside Height Extreme Width is 14 feet 6 inches

-Outside Extreme Width (A186) for Plate Codes B must not exceed 9 feet 2 inches if Outside Height Extreme Width is 14 feet 7 inches

-Outside Extreme Width (A186) for Plate Codes B must not exceed 8 feet 10 inches if Outside Height Extreme Width is 14 feet 8 inches

-Outside Extreme Width (A186) for Plate Codes B must not exceed 8 feet 6 inches if Outside Height Extreme Width is 14 feet 9 inches

-Outside Extreme Width (A186) for Plate Codes B must not exceed 8 feet 3 inches if Outside Height Extreme Width is 14 feet 10 inches
-Outside Extreme Width (A186) for Plate Codes B must not exceed 7 feet 11 inches if Outside Height Extreme Width is 14 feet 11 inches
-Outside Extreme Width (A186) for Plate Codes B must not exceed 7 feet 6 inches if Outside Height Extreme Width is 15 feet 0 inches
-Outside Extreme Width (A186) for Plate Codes B must not exceed 7 feet 4 inches if Outside Height Extreme Width is 15 feet 1 inches
-Outside Extreme Width (A186) for Plate Codes C must not exceed 10 feet 8 inches if Outside Height Extreme Width is 14 feet 3 inches or less
-Outside Extreme Width (A186) for Plate Codes C must not exceed 10 feet 7 inches if Outside Height Extreme Width is 14 feet 4 inches
-Outside Extreme Width (A186) for Plate Codes C must not exceed 10 feet 6 inches if Outside Height Extreme Width is 14 feet 5 inches
-Outside Extreme Width (A186) for Plate Codes C must not exceed 10 feet 4 inches if Outside Height Extreme Width is 14 feet 6 inches
-Outside Extreme Width (A186) for Plate Codes C must not exceed 10 feet 3 inches if Outside Height Extreme Width is 14 feet 7 inches
-Outside Extreme Width (A186) for Plate Codes C must not exceed 10 feet 2 inches if Outside Height Extreme Width is 14 feet 8 inches
-Outside Extreme Width (A186) for Plate Codes C must not exceed 10 feet 0 inches if Outside Height Extreme Width is 14 feet 9 inches
-Outside Extreme Width (A186) for Plate Codes C must not exceed 9 feet 9 inches if Outside Height Extreme Width is 14 feet 10 inches
-Outside Extreme Width (A186) for Plate Codes C must not exceed 9 feet 5 inches if Outside Height Extreme Width is 14 feet 11 inches
-Outside Extreme Width (A186) for Plate Codes C must not exceed 9 feet 2 inches if Outside Height Extreme Width is 15 feet 0 inches
-Outside Extreme Width (A186) for Plate Codes C must not exceed 8 feet 10 inches if Outside Height Extreme Width is 15 feet 1 inches
-Outside Extreme Width (A186) for Plate Codes C must not exceed 8 feet 6 inches if Outside Height Extreme Width is 15 feet 2 inches
-Outside Extreme Width (A186) for Plate Codes C must not exceed 8 feet 3 inches if Outside Height Extreme Width is 15 feet 3 inches
-Outside Extreme Width (A186) for Plate Codes C must not exceed 7 feet 11 inches if Outside Height Extreme Width is 15 feet 4 inches
-Outside Extreme Width (A186) for Plate Codes C must not exceed 7 feet 8 inches if Outside Height Extreme Width is 15 feet 5 inches
-Outside Extreme Width (A186) for Plate Codes C must not exceed 7 feet 4 inches if Outside Height Extreme Width is 15 feet 6 inches
-Outside Extreme Width (A186) for Plate Code E must not exceed 10 feet 8 inches if Outside Height Extreme Width is 15 feet 2 inches or less
-Outside Extreme Width (A186) for Plate Code E must not exceed 10 feet 6 inches if Outside Height Extreme Width is 15 feet 3 inches
-Outside Extreme Width (A186) for Plate Code E must not exceed 10 feet 3 inches if Outside Height Extreme Width is 15 feet 4 inches
-Outside Extreme Width (A186) for Plate Code E must not exceed 9 feet 6 inches if Outside Height Extreme Width is 15 feet 5 inches
-Outside Extreme Width (A186) for Plate Code E must not exceed 8 feet 8 inches if Outside Height Extreme Width is 15 feet 6 inches
-Outside Extreme Width (A186) for Plate Code E must not exceed 7 feet 11 inches if Outside Height Extreme Width is 15 feet 7 inches
-Outside Extreme Width (A186) for Plate Code E must not exceed 7 feet 1 inches if Outside Height Extreme Width is 15 feet 8 inches
-Outside Extreme Width (A186) for Plate Code E must not exceed 6 feet 3 inches if Outside Height Extreme Width is 15 feet 9 inches
-Outside Extreme Width (A186) for Plate Code F must not exceed 10 feet 8 inches if Outside Height Extreme Width is 16 feet 3 inches or less
-Outside Extreme Width (A186) for Plate Code F must not exceed 10 feet 7 inches if Outside Height Extreme Width is between 16 feet 4 inches and 16 feet 6 inches
-Outside Extreme Width (A186) for Plate Code F must not exceed 10 feet 6 inches if Outside Height Extreme Width is 16 feet 7 inches
-Outside Extreme Width (A186) for Plate Code F must not exceed 10 feet 3 inches if Outside Height Extreme Width is 16 feet 8 inches
-Outside Extreme Width (A186) for Plate Code F must not exceed 10 feet 0 inches if Outside Height Extreme Width is 16 feet 9 inches
-Outside Extreme Width (A186) for Plate Code F must not exceed 9 feet 8 inches if Outside Height Extreme Width is 16 feet 10 inches
-Outside Extreme Width (A186) for Plate Code F must not exceed 9 feet 5 inches if Outside Height Extreme Width is 16 feet 11inches
-Outside Extreme Width (A186) for Plate Code F must not exceed 9 feet 2 inches if Outside Height Extreme Width is 17 feet 0 inches
-Outside Extreme Width (A186) for Plate Code N must not exceed 10 feet 8 inches if Outside Height Extreme Width (A187) is 16 feet 9 inches or less
-Outside Extreme Width (A186) for Plate Code N must not exceed 10 feet 6 inches if Outside Height Extreme Width (A187) is 16 feet 10 inches
-Outside Extreme Width (A186) for Plate Code N must not exceed 10 feet 4 inches if Outside Height Extreme Width (A187) is 16 feet 11 inches
-Outside Extreme Width (A186) for Plate Code N must not exceed 10 feet 2 inches if Outside Height Extreme Width (A187) is 17 feet 0 inches
-Outside Extreme Width (A186) for Plate Code N must not exceed 9 feet 11 inches if Outside Height Extreme Width (A187) is 17 feet 1 inch

NOTES:

- For connected unit cars report the dimension of the largest unit in the set.
- Round fraction to the higher inch, e.g., 05 1/4" = 06"

Inside Length *Mandatory* A135

The inside length of the equipment from end to end inside walls, linings, and permanent bulkheads ●▲

Used in ETC Generation. Displayed in feet and inches on the Web. Stored in inches.

Range of Values for A135

Minimum	Maximum
20 ft 0 inches	99 ft 3 inches

Validation Rule for A135

-Inside Length/Inside Platform Length must be less than or equal to Outside Length (OSLG)

NOTES:

- Round fraction to the lower inch, e.g., 05 1/4" = 05"
- For connected unit cars report the shortest dimension of a unit in the set.

Inside Width A138

The inside width of the equipment from side walls and linings

Displayed in feet and inches on the Web. Stored in inches.

Range of Values for A138

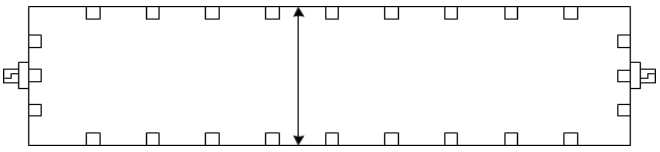
Minimum	Maximum
4 ft 0 inches	12 ft 6 inches

Validation Rule for A138

-Inside Width/Inside Platform Width must not exceed Outside Extreme Width

NOTES:

- For connected unit cars report the shortest dimension of a unit in the set.
- For the inside width of multi-level (FA) flat cars report the most restrictive deck width. Articulated (FA) flat cars report the most restrictive deck width for single unit of the consist. If articulated and the platforms are different widths, report the most restrictive width dimension.



Truck Center Length A276

The length between the centers of the two truck systems ■

Affects Rating. Displayed in feet and inches on the Web. Stored in inches.

Range of Values for A276

Minimum	Maximum
15 ft 0 inches	76 ft 11 inches

Validation Rule for A276

-Truck Center Length is required for cars with an Outside Length of greater than 62 feet 6 inches
-Truck Center Length must be a minimum of 15 feet for cars with an Outside Length greater than 62 feet 6 inches

NOTES:

- For connected unit cars report the dimension of the largest unit in the set.

Inset Stake Pkts Plat Len **A131**

Inset Stake Pockets - Platform Length-Describes the length of platform in inches

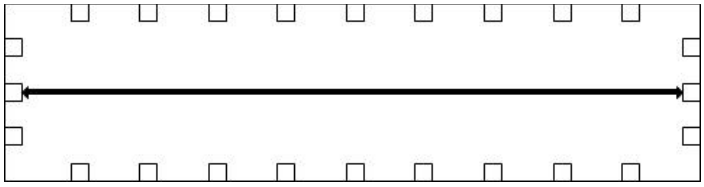
Displayed in feet and inches on the Web. Stored in inches.

Range of Values for A131

Minimum	Maximum
20 ft 0 inches	99 ft 11 inches

NOTES:

- Measurement between stake pockets:



Inset Stake Pkts Plat Wdt **A132**

Describes the width of platform in inches

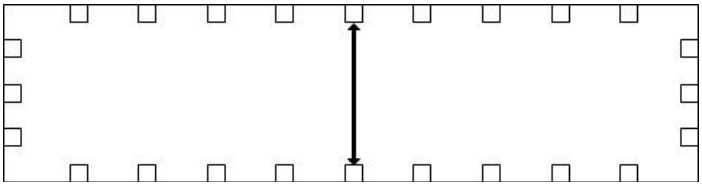
Displayed in feet and inches on the Web. Stored in inches.

Range of Values for A132

Minimum	Maximum
4 ft 0 inches	11 ft 6 inches

NOTES:

- Measurement between stake pockets:



Platform Hght Above Rail *Mandatory* **A192**

Describes the platform height above the rail in inches ●■

Affects Rating. Displayed in feet and inches on the Web. Stored in inches.

Range of Values for A192

Minimum	Maximum
2 ft 0 inches	8 ft 10 inches

Validation Rule for A192

-Flat Cars (UMMD = FM, FMS, FB, FBS, FL, or FBC) must be less than or equal Platform Height Above Rail of 5 feet 11 inches
-Platform Height cannot be greater than Outside Height

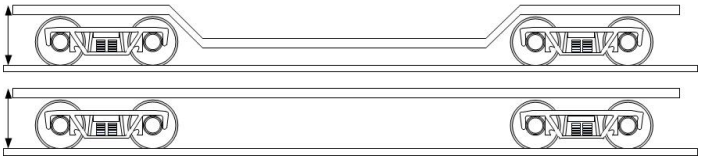
NOTES:

- EXCEPTIONS: For bi-level and tri-level flat cars, measurement is from top of rail to top of floor of lower deck. Feet in Pos. 45-46, inches in Pos. 47-48. Round fraction to the higher inch, e.g., 05 1/4" = 06". This field must agree relationally for V_ _ _ Equipment Type Codes and P_ _ _.

P_ _ _	MINIMUM—1ft 1in MAXIMUM—4ft 9in
Q_ _ _	MINIMUM—10in MAXIMUM—4ft
S_ _ _	MINIMUM—10in MAXIMUM—4ft
All F_ _ _ except F_3_ and F_6_	MINIMUM—2ft MAXIMUM—5ft 11in
All F_3_, F_6_ and F_9_	MINIMUM—2ft MAXIMUM—8ft 11in
Q8_ _	MINIMUM—2ft 6in MAXIMUM—5ft
P1_ _, P2_ _, P5_ _, P6_ _	MINIMUM—2ft MAXIMUM—3ft 3in
P3_ _, P4_ _, P7_ _, P8_ _	MINIMUM—3ft 4in MAXIMUM—5ft 11in
P9_ _	MINIMUM—3ft 2in MAXIMUM—3ft 2in
Q_1_	MINIMUM—2ft MAXIMUM—2ft 8in

- See diagram below for place of measurement on depressed cars (Equipment Type Code F_3_, F_9) and well cars (Equipment Type Code F_6_).

- Side view of car.



Height of Platform **B239**

Describes the height of the lowest point of the platform above the rail in inches

Displayed in feet and inches on the Web. Stored in inches.

Range of Values for B239

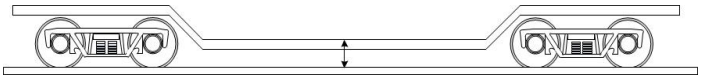
Minimum	Maximum
0 ft 6 inches	5 ft 11 inches

Validation Rule for B239

-Height of Depressed Platform above Rail can only be reported for cars with Mechanical Designations of FD, FDC, or FW

NOTES:

- Side view of car.



Bulkhead Top Width **B038**

Describes the width of the bulkhead

Displayed in feet and inches on the Web. Stored in inches.

Range of Values for B038

Minimum	Maximum
2 ft 1 inches	11 ft 7 inches

Validation Rule for B038

-Bulkhead Top Width requires Bulkheads on cars
-Cars with Plate Codes of B, C, E, F, H, or I can only report a maximum Bulkhead Top Width of 10 feet 8 inches
-Bulkhead Top Width with Plate Code B, E, F, or H must have a Bulkhead Top Width greater than or equal 6 feet
-Bulkhead Top Width must be reported for Mechanical Designations (UMMD) FB, FBC, FBS, FDC, or LP

Bulkhd Height Abov Pltfrm **B035**

Describes the height of the bulkhead

Displayed in feet and inches on the Web. Stored in inches.

Range of Values for B035

Minimum	Maximum
3 ft 0 inches	16 ft 3 inches

Validation Rule for B035

-Bulkhead Height Above Platform must be reported for Mechanical Designations (UMMD) FB, FBC, FBS, FDC, or LP

Depressed/Well Bot Width **B066**

Describes the platform width at the lowest point

Displayed in feet and inches on the Web. Stored in inches.

Range of Values for B066

Minimum	Maximum
3 ft 10 inches	10 ft 10 inches

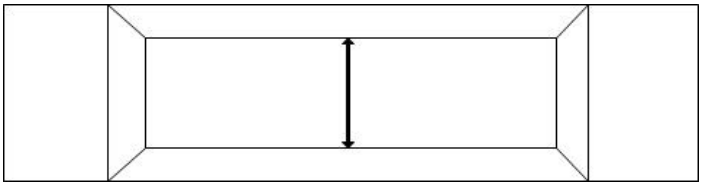
Validation Rule for B066

-Depressed or Well Flat Bottom Width used only for Mechanical Designation of FD, FDC, or FW

-Depressed or Well Flat Bottom Length can only be reported for cars with Mechanical Designation of FD, FDC, or FW

NOTES:

- Measurement at top of depression/well:



Depressed/Well Bot Length — B065

Well Or Depressed Flat--Bottom Length

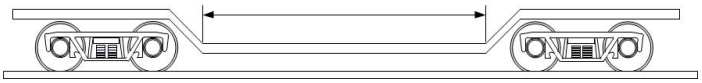
Displayed in feet and inches on the Web. Stored in inches.

Range of Values for B065

Minimum	Maximum
7 ft 6 inches	56 ft 10 inches

NOTES:

- Measurement at bottom of depression/well:



Depressed/Well Top Width — B068

Well Or Depressed Flat--Top Width

Displayed in feet and inches on the Web. Stored in inches.

Range of Values for B068

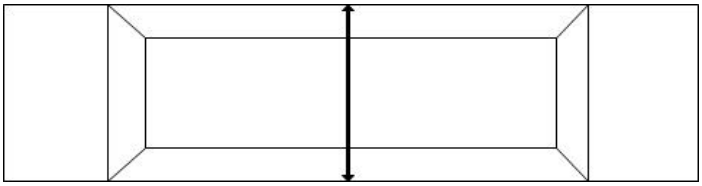
Minimum	Maximum
3 ft 7 inches	11 ft 10 inches

Validation Rule for B068

-Depressed or Well Flat Top Width can only be reported for cars with Mechanical Designation of FD, FDC, or FW

NOTES:

- Measurement at top view of depression/well:



Depressed/Well Top Length — B067

Well Or Depressed Flat--Top Length

Displayed in feet and inches on the Web. Stored in inches.

Range of Values for B067

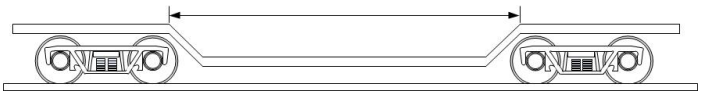
Minimum	Maximum
14 ft 0 inches	61 ft 10 inches

Validation Rule for B067

-Depressed or Well Flat Top Length can only be reported for cars with Mechanical Designation of FD, FDC, or FW

NOTES:

- Measurement at top view of depression/well:



Mid-ordinate Offset (MOO) — A167

Mid-Ordinate Offset (MOO)

Range of Values for A167

Minimum	Maximum
0	9.9990000000000006

Validation Rule for A167

-Mid-Ordinate Offset (MOO) can only be reported for Mechanical Designations of (LS, FD, FW, FM, and FMS) with GRL greater than or equal 200,000 pounds and axle count greater than or equal 6

-Mid-Ordinate Offset (MOO) can only be reported for Flat Cars having an axle count equal to or greater than 6

End-Swing Offset (ESO) — A084

End-Swing Offset (ESO)

Range of Values for A084

Minimum	Maximum
0	9.9990000000000006

Validation Rule for A084

-End-Swing Offset (ESO) can only be reported for Mechanical Designation of (LS, FD, FW, FMS, and FM) with GRL greater than or equal 200,000 pounds and axle count greater than or equal 6

-End-Swing Offset (ESO) is only applicable to Flat Cars having GRL of 200,000 pounds or greater

-End-Swing Offset (ESO) is only applicable to Flat Cars having an axle count equal to or greater than 6

Perm Cont Platform Height — B052

Bulkhead Or Container - Hgt. Above Plat. Well Or Depressed Flat - Height Of Platform

Displayed in feet and inches on the Web. Stored in inches.

Range of Values for B052

Minimum	Maximum
3 ft 0 inches	17 ft 6 inches

Validation Rule for B052

-Bulkhead Height Above Platform and Height of Depressed Platform above Rail are mutually exclusive, either one or the other can be reported but not both

-Permanent Container Top Height Above Platform can only be reported on car having Permanent Containers

-Permanent Container Top Height Above Platform can only be set for cars that have Permanent Containers

Permanent Cont Top Width — B056

Bulkhead Or Container - Top Width

Displayed in feet and inches on the Web. Stored in inches.

Range of Values for B056

Minimum	Maximum
6 ft 0 inches	99 ft 6 inches

Validation Rule for B056

-Permanent Container Top Width can only be set for cars with a permanently mounted container (B054)

-Permanent Container Top Width with Plate Code B, C, E, F, H, or I must be less than or equal 10 feet 8 inches

-Permanent Container Top Width with Plate Code B, E, or F must be greater than or equal 6 feet

Specification

Truck Count B256

The total number of trucks on the equipment

System Generated Field. This element is not eligible for Input.

Range of Values for B256

Minimum	Maximum
2	18

Axle Count *Mandatory* A024

The total number of axles on the equipment ● ■

Affects Rating.

Range of Values for A024

Minimum	Maximum
4	36

Validation Rule for A024

-Axle Count must be greater than or equal to 4

-Axle Count for an articulated car must be greater than or equal to ((Connected Unit Count (A020) x 2) + 2)

-Axle Count for a draw bar connected car must be greater than or equal to (Connected Unit Count (A020) x 4)

-Total Axle Count must match sum of truck axle counts

Wheel Bearing Type *Mandatory* B191

Indicates the wheel bearing code for the equipment ● ■

Affects Rating.

Permissible Values for B191

P Plain R Roller

Validation Rule for B191

-Cars with Plain Bearings will have a Transportation Code (TCOD) and Transportation Condition Code (TCCD) of either YA, S_, SX, or XJ

-Equipment cannot have Plain Bearings if Built Date (BLDT) is on or after January 1, 1993

Bearing Shielded From HBD B021

Indicates the bearing is shielded from the hot box detector

Permissible Values for B021

Y Yes

Brake Shoe Type *Mandatory* B026

Indicates the type of brake shoe on the equipment ●

Permissible Values for B026

C Tread Conditioning

H High Friction Composite

L Low Friction Composite/Cast Iron

CC Side Bearing Type A146

Indicates the travel range of the constant contact side bearings installed on the equipment

Permissible Values for A146

LC Long Travel Constant Contact

SC Short Travel Constant Contact

Validation Rule for A146

-Equipment having Qualification for Increased Gross Rail Load (B344) of 1 must have Constant Contact Side Bearing Type of LC

NOTES:

- For Mechanical Designation (UMMD) FB, FBC, FBS, Constant Contact Side Bearing Type is mandatory. If not reported, Mechanical Restriction "X" and Mechanical Restriction Reason "N" will be applied to car

Empty/Load Device Eqpd B075

Indicates a system that determines if the equipment is empty or loaded, and then varies the braking forces accordingly

Permissible Values for B075

Y Yes

Center of Gravity Empty A045

When empty, indicates the height from Top of Rail to the Center of Gravity ■

Affects Rating.

Range of Values for A045

Minimum	Maximum
22	63

Validation Rule for A045

- All cars that exceed Plate Code (A046) C must report Center of Gravity Empty except for cars with Equipment Type Code (UMET) of J_ _ _
- All Flat Cars with an Equipment Type Code (UMET) of F_ _ _ must report Center of Gravity Empty

Remote Monitoring Device B176

Indicates the equipment is equipped with a location monitoring device

Permissible Values for B176

Y Yes

N No

AEI High Temperature Tag B006

Indicates the equipment is equipped with a high temperature AEI tag

Permissible Values for B006

Y High Temperature Tag

Floor Cradle/Trough Eqpd A103

Indicates the equipment has a floor cradle or trough

Permissible Values for A103

Y Yes

Validation Rule for A103

-If Dedicated Service Type (B346) is set to Coiled Steel then Floor Cradle/Trough must be reported

Non-Fish Belly B136

Indicates that the center sill does not have an increased section depth between the two trucks

Permissible Values for B136

Y Yes

Validation Rule for B136

-Non-Fish Belly is only applicable to cars with Flat Mechanical Designation of FM, FMS, FB, FBC, or FBS

Connected Unit Count A020

Indicates the number of units within an articulated or multi-unit equipment ■

Affects Rating.

Range of Values for A020

Minimum	Maximum
2	9

Validation Rule for A020

-Connected Unit Count must equal the number of Unit Segments

-Unit Segment Component elements must not be reported if the Connected Unit Count is not reported

-Unit Segment Component elements must be reported if Connected Unit Count is reported

Intermediate Conn Style B115

Indicates the method by which two or more pieces of equipment are connected

Permissible Values for B115

A Articulated Connector
D Drawbar Connector

Validation Rule for B115

-Intermediate Connector Style is required for multi-unit equipment
-Intermediate Connector Style must not be reported for single unit equipment

Operating Brakes *Mandatory* **A182**

The number of air brake control valves on the equipment (excludes hand brakes). One control valve consists of a service portion, emergency portion, and pipe bracket. Example: DB-60 control valve ●

Permissible Values for A182

1	2	3	4	5
6	7	8	9	

Validation Rule for A182

-Operating Brakes can only be reported for articulated equipment
-Operating Brakes are required for articulated equipment
-Operating Brakes are required for Heavy Capacity Flat Cars (Mechanical Designation of FD, FM, FMS, FW, or LS) with 6 Unit Axles or More
-Operating Brakes (A182) must be 1 for non-articulated equipment with an Axle Count (A024) equal to 4

ECP Brake Type **B327**

Indicates the type of electronic controlled pneumatic brake used on the equipment ✹

Permissible Values for B327

N Not Equipped
O Overlay - Both ECP & Air Brake
S Stand Alone - ECP Only

Validation Rule for B327

-Equipment must have a value entered for ECP Brake Type if built or rebuilt after June 28, 2012

ECP Brake Builder **B328**

The manufacturer of the electronic controlled pneumatic brake used on the equipment

Permissible Values for B328

NYAB New York Air Brake
WABT WABTEC

Validation Rule for B328

-If ECP Brake Type (B327) is Stand Alone or Overlay then a value must be entered for ECP Brake Builder
-If ECP Brake Type (B327) is Not Equipped then ECP Brake Builder is not reportable

Slack Adjuster Group **B538**

The slack adjuster group on the equipment per AAR Field Manual Rule #8 ✹

Value does not carry forward for Single Clone / Multi-Clone.

Permissible Values for B538

A	Group A	B	Group B	C	Group C	D	Group D
E	Group E	F	Group F	G	Group G	H	Group H
J	Group J	L	Group L	M	Group M	N	Group N
O	Group O	P	Group P	Q	Group Q	R	Group R
1	Internal	2	Unequipped				

Validation Rule for B538

- Slack Adjuster Group is mandatory for all equipment built or rebuilt on or after January 1, 2016
- If Slack Adjuster Group is reported as "1" then Brake Cylinder Mount Type (B540) must be reported as "T"
- If Slack Adjuster Group is "1" or "2", then Slack Adjuster CID (B359) must not be reported.

NOTES:

- Permissible value of "1 – Internal" identifies special truck mounted internal slack adjuster within brake cylinder.

Brake Cylinder Mount Type **B540**

Identifies the location of the brake cylinder ✹

Permissible Values for B540

B Body Mounted
T Truck Mounted

Validation Rule for B540

- Brake Cylinder Mount Type is mandatory for all equipment built or rebuilt on or after January 1, 2016

Equipment Builder **A035**

Identifies the original manufacturer of the equipment ✹

Permissible Values for A035

ACF	American Car & Foundry
ACFX	ACF Industries
ARI	ARI Industries
BERW	Berwick Forge
BETH	Bethlehem Car Works
BSP	Bethlehem Steel Corporation
CFX	Liberty Rail Services
CONC	Concarrill
CURR	Curry Rail Service
DIFC	Difco
EDSP	ESTRATEGIAS DUL S. DE R.L.
ERSB	Ebenezer Railcar
EVAN	Evans Products
FCA	Freight Car America
FMC	FMC Corporation
GENS	General Steel
GMB	Greenbrier
GSC	Greenville Steel Car
GUN4	Gunderson - Trenton Works
GUND	Gunderson Inc
HARS	Harsco
HST	Hawker Siddeley
HYUN	Hyundai
HZGX	Herzog Railroad Services Inc.
ITEL	ITEL Rail Corporation
JAC	Johnstown America Corporation
JKFO	JK-CO LLC
KASG	Kasgro Railcar
MCDW	McDowell Wellman
MRNE	Marine Industries
MULT	Multiple
NACA	National Alabama Corporation
NSC	National Steel Car
ORTN	Ortner
PCF	Pacific Car & Foundry
PS	Pullman-Standard
PSP	Pullman-Standard, Division of Trinity Industries
SLC	Saint Louis Car Company
SLRX	Saint Louis Refrigerator Car Company
THRL	Thrall
TREN	Trenton Works
TRIN	Trinity
UNKN	Unknown
V	OWNER RAILROAD

Validation Rule for A035

-Equipment Builder must be populated if the Built Date (BLDT) is July 1, 2010 or newer
-Equipment built or rebuilt on or after July 1, 2010 cannot have a Equipment Builder of Unknown
-Equipment with a Built Date (BLDT) on or after July 1, 2010 cannot have an Equipment Builder of OWNER RAILROAD.
-Equipment Builder can have a value of MULT only if the equipment has multiple units.

Builder Lot Code B030

A unique identifier for a group of equipment built by one manufacturer under the same builder specification ✹

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Validation Rule for B030

-Equipment built or rebuilt on or after June 28, 2012 must have a value for Builder Lot Code

Built Country B031

The country where the equipment was constructed

Data is Confidential.

Permissible Values for B031

CA	Canada	MX	Mexico
US	United States		

Rebuilt Country B170

The country where the equipment was re-constructed

Permissible Values for B170

CA	Canada	MX	Mexico
US	United States		

FRA Reflectorization B096

Indicates the equipment owner assumes responsibility for applying reflectorization tape

Permissible Values for B096

P	Reflectorization Plan
W	Reflectorization Waiver

Validation Rule for B096

-Reflectorization is mandatory for all equipment after November 28, 2015.

Air Hose Arrangement B524

The type of trainline air hose arrangement ✹

Permissible Values for B524

A	S-424 Angle Cock Location
B	S-425 Angle Cock Location on Cars Equipped with AAR Type F Coupler
C	S-426 Angle Cock Location on Cars with Floating Sills
D	S-427 Angle Cock and Air Brake Hose Location on Cars with Excessive Overhang Preventing Compliance with AAR Standards
E	S-428 Angle Cock Location on Cars Equipped with AAR Type F Coupler and Cushioned Underframe
F	S-4003 (Former Standard)
G	S-4003x (Former Standard Retrofitted to Meet All Dimensions Except Height)
H	S-4003-05 (Current Standard Train Line Arrangement for Cars with F-Shank Couplers)
I	S-4021 Angle Cock and Brake Hose Location on Cars with EOCC (E and F)
J	S-4021 Coupler Mounted Bracket End Arrangement
K	S-4028 Train Line Arrangement with Displaceable Union on Cars with EOCC and Couplers Not Exceeding 45 in. in Length
L	S-4029 Train Line Arrangement with Displaceable Union on Cars with EOCC and Couplers Exceeding 45 in. in Length
M	S-4030 Trolley Arrangement on Cars with EOCC and E-Shank Couplers

Validation Rule for B524

-Air Hose Arrangement must be reported for this equipment if it is Built or Rebuilt on or after April 22, 2014.

NOTES:

- If any of the following conditions apply, Air Hose Arrangement (B524) must be reported for cars Built or Rebuilt on or after April 22, 2014:
  - Draft Gear Type (B073) at any location is C or E.
  - Connected Unit Count (A020) is reported.
  - Outside Length (OSLG) is greater than or equal to 70 feet (840 inches).
  - The overhang is greater than 5 feet 6 inches (66 inches). Overhang is calculated as follows:
    - 0.5 * (Outside Length, in inches, minus Truck Center Length, in inches, minus 31 inches)
      - For all other equipment, reporting Air Hose Arrangement is optional.
      -

4-Pressure ABT Receiver Eqpd B539

Identifies if the equipment is equipped with a 4-pressure air brake test receiver

Value does not carry forward for Single Clone / Multi-Clone.

Permissible Values for B539

E	Equipped
N	Not Equipped

NOTES:

- An "E" will be system generated if a 4-Pressure ABT is reported on the equipment.

Feature

Floor Material A104

Describes the type of construction material used for the equipment floor

Permissible Values for A104

05	Composite Nailable (considered same as wood
06	Composite Nailable, Reinforced (considered same as wood)
14	Other
19	Standard Steel
21	Steel Floor, (straight deck) without risers (F-8-)
22	Steel Floor, permanently mounted steel risers (F-8-)
23	Steel Nailable (includes alternate wood and steel floor
24	Steel Nailable, Reinforced (includes alternate wood and steel floor
25	Standard Steel, Reinforced
27	Unknown (Flats only)
30	Wood
33	Wood, Double, Reinforced
34	Wood Floor with Steel Protective Plates (includes perforated steel)
35	Wood Floor, Reinforced, with Steel Protective Plates (includes perforated steel)
36	Wood Floor, Reinforced

Validation Rule for A104

-Floor Material for Center Beam Flats with Mechanical Designation (UMMD) of (FBC or FDC) must be options 21 (Steel), 22 (Steel w/ Risers), 25 (Steel Reinforced), 27 (Undetermined), 30 (Wood).

-Equipment built or rebuilt on or after June 15, 2023 cannot report a value of Other or Unknown

NOTES:

- If Mechanical Designation (UMMD) is FBC and Floor material is 22 (Steel w/Risers), Steel Riser Equipped (B200) in not reportable.

Bulkhead Type B034

Identifies the type of bulkhead attached to the equipment

Permissible Values for B034

F	Fixed	M	Moveable

Validation Rule for B034

-Bulkhead Type can only be reported on Flat cars with Mechanical Designations (UMMD) of FL, FB, or FBS

-Bulkhead Type on a Flat car with Mechanical Designation (UMMD) of FL can only be reported as Fixed

Canopy Equipped B266

Car is equipped with large, permanent rigid cover with end doors, suitable for transporting large airplane and other components

Permissible Values for B266

Y	Yes

Validation Rule for B266

-Canopy Equipped can only be reported on Flat car with Mechanical Designations (UMMD) of FBS or FMS

-If Dedicated Service Type (B346) is set to Airplane Wings/Fuselage then Canopy Equipped must be set to Y

Interior Rack B114

Indicates the equipment is interior rack equipped

Permissible Values for B114

Y Yes

Lading Strap Anchor Eqpd B121

Indicates the equipment has fixed devices or design features which provide connection points for straps or bands securing the lading

Permissible Values for B121

Y Yes

Chains and Binders Eqpd B267

Car is equipped with attached chains and binders for load securement

Permissible Values for B267

Y Yes

Validation Rule for B267

-Chains and Binders Equipped can only be reported on Flat cars with Mechanical Designation (UMMD) of (FB, FC, FMS, FBS, FBC, or FL)

Tie Down Non Nylon Web B271

Identifies equipment having a non nylon web securement

Permissible Values for B271

Y Yes

Validation Rule for B271

-Non Nylon Web Securement is only applicable to cars with Flat Mechanical Designation (UMMD) of FB, FBC, FBS, FD, FDC, FL, FM, FMS, FW, or LP

Tie-Down Strap Equipped B282

Identifies equipment having securment straps

Permissible Values for B282

Y Yes

Validation Rule for B282

-Tie Down Strap Equipped is only applicable to cars with Flat Mechanical Designations of (FDC, FBC, FL, FM, or FMS)

Spring Tensioning Device B198

Identifies equipment with permanent securement method of spring anchored tie downs

Permissible Values for B198

Y Yes

Validation Rule for B198

-Spring Tensioning Devices (B198) are only applicable to cars with Flat Mechanical Designation of (FB, FBC, FBS, or FMS)

Steel Riser Equipped B200

Equipment has steel risers mounted on the flat deck of the unit to support the load

Permissible Values for B200

Y Yes

Validation Rule for B200

-Steel Riser Equipped (B200) is only applicable to Flat cars with Mechanical Designations (UMMD) of (FB, FBS, FMS, MW, MWG, or MWRC).

NOTES:

- If Mechanical Designation (UMMD) is FBC and Steel Risers are present, then report Floor material (A104) as 22 (Steel floor, permanently mounted steel risers).

Blocking Timbers Equipped B270

Identifies equipment with blocking timbers

Permissible Values for B270

Y Yes

Validation Rule for B270

-Blocking Timbers Equipped can only be reported on Flat cars with the Mechanical Designation of FMS

Stake Pocket Locations B190

The locations of pockets for the installation of temporary vertical side stakes used to confine the lading

Permissible Values for B190

C Center
S Side/End
B Both Side/End and Center

Validation Rule for B190:

- All Flat Cars built after January 1, 2002 with Mechanical Designation (UMMD) of FM with 4 axles must report Stake Pocket Locations of S or B. (Per Field Manual Rule 88, A, 15, b, (2))

Permanent Container B054

Identifies that the equipment has a permanently attached container

Permissible Values for B054

Y Yes

Validation Rule for B054

-Height of Depressed Platform above Rail can only be reported on cars with no Permanent Container

Permanent Cont Material A055

The material of which the container is made

Permissible Values for A055

01 Aluminum
19 Standard Steel

Validation Rule for A055

- Permanent Container Material can only be reported if Permanent Container (B054) is Y

Chain Equipped B402

Identifies the flat car is equipped with chain tie downs

Value does not carry forward for Equipment Group Change.

Permissible Values for B402

Y Yes

Cost

Original Cost A184

The original manufacturer selling price ✹

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for A184

Minimum	Maximum
0	9999999

Validation Rule for A184

-Original Cost must be equal to the Ledger Value if there are no Additions & Betterments.

-Original Cost must be equal to the Ledger Value if Additions & Betterments Indicator is not reported.

-Railroad marked freight cars except MISC, LOCO, TRLR, CONT, CHSS, STWH, EOTD, and PSGR are required to have an Original Cost

-Private marked freight cars except MISC, LOCO, TRLR, CONT, CHSS, STWH, EOTD, and PSGR are required to have an Original Cost if Built Date (BLDT) is on or after January 1, 2015

NOTES:

- Original Cost is never altered. It is the cost of the equipment to the original owner.
- For railroad-marked cars, report in US dollars the original ledger value of the original owner. For cars rebuilt, report the cost prescribed in MR Interchange Rule 88 and Circular Letter OT-24
- The original cost is used in the settlement of AAR Interchange Rule 107 Office Manual.
- For connected unit cars report the total original cost for all units in the set.
- Numeric, applicable to all railroad-marked cars Also, applicable to privately marked covered hopper (LO) cars.
- Raise all cents to the next dollar, e.g. $5,501.02 = 0005502

Ledger Value — A150

The sum of original cost and additions & betterments

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for A150

Minimum	Maximum
0	9999999

Validation Rule for A150

-Original Cost must be equal to the Ledger Value if there are no Additions & Betterments.

-Ledger Value must equal the Original Cost (A184) plus the additions & betterments, if Total A&B (A003) has been reported. Otherwise Ledger Value should equal Original Cost (A184).

Total A&B — A003

System generated sum of all reported amounts in A&B Amount (A317), in US dollars

Data is Confidential. System Generated Field. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for A003

Minimum	Maximum
0	99999999

NOTES:

- For railroad-marked cars, report the sum of all additions and betterments applied to the car. This value is for record keeping purposes only and will not be used to report Ledger Value.
- For private Cars report the additions and betterments as qualified under AAR interchange Rule 107 for determination of settlement value.
  - Additions are costs of all new components applied subsequent to the date the car was built or rebuilt and carried in the capital investment account.
  - Betterments are costs of all improvements of components of existing equipment through the substitution of superior parts for inferior parts subsequent to the date the car was built of rebuilt.
- For connected unit cars report the total Truck Location A for all units in the set

Ind for Pos/Neg Total A&B — A128

A code indicating the positive or negative adjustment to the original cost of the equipment

Data is Confidential. System Generated Field. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Permissible Values for A128

N Negative P Positive

A&B Pos/Neg Ind — A316

A code indicating the positive or negative adjustment to the individual addition and betterment

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Permissible Values for A316

N Negative P Positive

Validation Rule for A316

-When entering an individual Addition & Betterment, you must enter a value in all 4 fields.

-The A&B Indicator is required when Additions & Betterments are reported.

-The A&B Indicator must not be reported if Additions & Betterments are not reported.

A&B Amount — A317

The amount of the individual addition and betterment added to or subtracted from the original cost of the equipment

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for A317

Minimum	Maximum
1	999999

Validation Rule for A317

-When entering an individual addition & betterment; A&B Date Done (A319), A&B Type (A318), A&B Pos/Neg Ind (A316), and A&B Amount (A317) must be reported

A&B Date Done — A319

The date of the individual addition and betterment

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for A319

Minimum	Maximum
1/1/1900	12/31/9999

Validation Rule for A319

-When entering an individual Addition & Betterment, you must enter a value in all 4 fields.

-Addition and Betterment Date Done cannot be earlier than Built Date (BLDT).

-Additions & Betterments Date Done cannot be later than today's date.

A&B Type — A318

The type of individual addition and betterment as defined by Rule 107

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Permissible Values for A318

FLLD	Other permanently installed loading equipment used on flat cars
GNRL	General - Capitalized Additions and Betterments
INIT	Initial load of historical A&B amount as of Umler 4.6 implementation date

Validation Rule for A318

-For each equipment, only one Individual A&B Type can have a value of INIT.

-When entering an individual Addition & Betterment, you must enter a value in all 4 fields.

Car Management

Pool Number — P001

Unique number used to indicate the grouping of equipment for a particular purpose ■

Used for Transportation Codes. Affects Rating. This element is not eligible for Input. Value does not carry forward for Equipment Group Change / Add Back.

Pool Control — TCPC

Pool Control

System Generated Field. Used for Transportation Codes. This element is not eligible for Input, Output or Query.

NOTES:

- For further explanation reference Appendices C and E.

User Routing Instructions TCUR

The routing instruction reported by the user

Used for Transportation Codes.

Permissible Values for TCUR

2 Trailer Service Rule 2
G Contaminated commodity service
M Mark canceled
O Owner requested return
U Unassigned equipment

NOTES:

- For further explanation reference Appendix E.

Umler Transportation Code TCOD

The type of assigned service, empty routing or restriction of the equipment

System Generated Field. Used for Transportation Codes. This element is not eligible for Input.

NOTES:

- For further explanation reference Appendix E.

Transportation Cond Code TCCD

The AAR or FRA interchange restriction code

System Generated Field. Used for Transportation Codes. This element is not eligible for Input.

NOTES:

- For further explanation reference Appendix E.

Mechanical Restriction TCME

User reported or system generated type of mechanical restriction

Used for Transportation Codes.

Permissible Values for TCME

S Scrap
X AAR Interchange Restriction
Y FRA Interchange Prohibited

NOTES:

- For further explanation reference Appendix D.1

Mech Restriction Reason TCMR

The explanation of the Mechanical Restriction (TCME)

Used for Transportation Codes.

Permissible Values for TCMR

A Restricted Due to Age (Over 40-AAR, Over 50-FRA)
B Restricted Due to Air Brakes
C Restricted Due to Axles
D Restricted Due to Couplers and Couplers Parts
F Restricted Due to Couplers Yokes
G Restricted Due to Draft Gears
J Restricted Due to Journal Bearing and Journal Lubrication
N Restricted Due to Trucks
P Restricted Due to Truck Side Frames
T Restricted Due to Trucks Bolsters
U Restricted by AAR or Owner
W Restricted Due to Wheels
X Restricted Due to Scrap or Early Warning
Z Restricted Due to Umler Conflict (Not Valid for User Input)

NOTES:

- For further explanation reference Appendix D.2.
- The assignment of the Transportation Codes S_, SX, XA, XZ and YA generate the Rate Indicator Code 6 to the CHARM file to zero (0) rate the car hire and mileage rate.

Loading Authority Fleet Status B597

Identifies when a car is listed on a fleet in the Loading Authority application

System Generated Field. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Permissible Values for B597

Y Yes
S Suspended

NOTES:

- • When equipment is on a fleet the Loading Authority (LA) application will update the flag to 'Y – Yes'. When equipment is removed from a fleet the LA application will remove the 'Y – Yes'.
- When equipment is on a LA fleet that is suspended the LA application will update the flag to 'S – Suspended'. When the equipment is on a LA fleet that is no longer suspended the LA application will update the flag to 'Y – Yes'.

Sys Gen Routing Inst TCGR

The routing instruction generated by the system

System Generated Field. Used for Transportation Codes. This element is not eligible for Input.

NOTES:

- For further explanation reference Appendix E.5.

Train Service

Restricted Speed Empty B180

Describes the maximum restricted speed the equipment can travel when empty

Range of Values for B180

Minimum	Maximum
5	95

Restricted Speed Loaded B181

Describes the maximum restricted speed the equipment can travel when loaded

Range of Values for B181

Minimum	Maximum
5	95

Shove Car to Rest B189

Identifies the car must be moved to rest by locomotive

Permissible Values for B189

Y Yes

Shove Adj. Car to Rest B188

Identifies the adjacent car must be shoved to rest by locomotive

Permissible Values for B188

Y Yes

Train Position Sensitive B211

Indicates there is a physical reason, limiting its position on a train

Permissible Values for B211

Y Yes

End of Train Only B277

Indicates the equipment must be placed at the end of the train (including per AAR RP-2001)**Permissible Values for B277**

Y Yes

Check Trailing Tonnage B044

Indicates the equipment has restrictions on trailing tonnage

Permissible Values for B044

Y Yes

Curve Negotiate Exception B178

Describes the requirement for negotiating a curve

Permissible Values for B178

A Restrictive Curve Negotiability, Section 2.1.4 of M-1001
B Does not meet all Chapter XI Curving Requirements

Cooper Rating Exception B273

Describes the cooper rating (weight distribution model of the equipment), for use in movement across bridges

Permissible Values for B273

A Excessive Cooper Rating
B Cooper Rating in Excess of E66

Clearance Exception B275

Describes equipment containing nonstandard dimension

Permissible Values for B275

A Excessive Outside Extreme Height (A185)
B Excessive Outside Extreme Width (A186)
C Lower Guides for Loading High Cube Containers
D All other unique clearance issues

Loaded Net Braking Ratio B551

Indicates calculated minimum loaded net braking ratio per AAR Specifications in place on built or rebuilt date (in percent).
System Generated Field. This element is not eligible for input.

Permissible Values for B551

– 11.0
– 8.5

NOTES:

- Loaded Net Braking Ratio is determined as follows:
  - If Built Date (BLDT) or Rebuilt Date (RBDT) is less than 1/1/1972, then Loaded Net Braking Ratio will be set to blank.
  - If Built Date (BLDT) or Rebuilt Date (RBDT) is greater than or equal to 1/1/2004, or if Equipment Type Code (UMET) begins with "Q" or "S", then Loaded Net Braking Ratio is 11.0%.
  - For all other equipment, Loaded Net Braking Ratio is 8.5%.

Owner-Provided Loaded Net Braking Ratio B552

Indicates an alternate minimum loaded net braking ratio provided by owner (in percent).

Range of Values for B552

Minimum	Maximum
8.5	14.0

NOTES:

- Owner may enter a documented alternative minimum loaded net braking ratio in this field that is greater than the system calculated Loaded Net Braking Ratio (B551).
- When reported, the Owner-Provided Loaded Net Braking Ratio will be used in PTC stopping distance calculations.
- A change in value for the following elements will cause the Owner-Provided Loaded Net Braking Ratio to reset to blank:
  - Rebuilt Date (RBDT)
  - Gross Rail Load/Weight (A266)
  - Equipment Type Code (UMET)
  - Empty/Load Device Eqpd (B075)

Empty Braking Ratio B553

Indicates calculated empty braking ratio per AAR Specifications in place on built or rebuilt date (in percent).
System Generated Field. This element is not eligible for input.

Range of Values for B553

Minimum	Maximum
15.0	38.0

NOTES:

- Empty Braking Ratio is determined as follows:
  - If Built Date (BLDT) or Rebuilt Date (RBDT) is less than 1/1/1972, then Empty Braking Ratio will be set to blank.

Owner-Provided Empty Braking Ratio B554

Indicates an owner supplied alternate empty braking ratio (in percent).

Range of Values for B554

Minimum	Maximum
15.0	38.0

NOTES:

- Owner may enter a documented alternative minimum loaded net braking ratio in this field that is greater than the system calculated Loaded Net Braking Ratio (B551).
- When reported, the Owner-Provided Loaded Net Braking Ratio will be used in PTC stopping distance calculations.
- A change in value for the following elements will cause the Owner-Provided Loaded Net Braking Ratio to reset to blank:
  - Rebuilt Date (RBDT)
  - Gross Rail Load/Weight (A266)
  - Equipment Type Code (UMET)
  - Empty/Load Device Eqpd (B075)

Truck Components

Axle Spacing Distance *Mandatory* B020

The distance between adjacent axle centers within the same truck system ●■

Affects Rating.

Permissible Values for B020

53 53 Inches
54 54 Inches
60 60 Inches
61 61 Inches
62 62 Inches
63 63 Inches
64 64 Inches
65 65 Inches
66 66 Inches
68 68 Inches
70 70 Inches
71 71 Inches
72 72 Inches
73 73 Inches
74 74 Inches
76 76 Inches
78 78 Inches
99 Axle Space Unknown

Validation Rule:

- Axle Space Unknown is not a permissible value for equipment with a Built Date (BDLT) on or after January 1, 1980

Truck Axle Count B252

The number of axles per truck

Range of Values for B252

Minimum	Maximum
2	4

Validation Rule for B252

- Sum of Truck Axle Count must equal Axle Count (A024)

Journal Size *Mandatory* A147

The size of the journal bearing ●■

Affects Rating.

Permissible Values for A147

A 3-3/4 X 7 B 4-1/4 X 8 C 5 X 9

D	5-1/2 X 10	E	6X11	F	6-1/2 X 12
G	7 X 12	K	6-1/ 2X 9	M	7 X 9

NOTES:

- A, B and C Journal Classes are prohibited in Interchange per Rule 90.B.4
- 4-axle equipment with 28 inch diameter, 1-wear wheels, are limited to a Gross Rail Load (A266) of 195,000 lbs

Wheel Diameter *Mandatory* — **A294**

The diameter of the wheels ●

Permissible Values for A294

28	28 Inches	33	33 Inches
36	36 Inches	38	38 Inches

Validation Rule for A294

-Equipment with a Qualification for Increased Gross Rail Load (B344) of 1 and Journal Size (A147) of G or M must have a Wheel Diameter of 38

-Equipment with Qualification for Increased Rail Load (B344) of 1, and Journal Size (A147) of K, must have a Wheel Diameter of 36

-If Connected Unit Count (A020) is not reported, different Wheel Diameters cannot be reported

Stability Device Equipped — **B199**

Indicates a stability device is present on the truck ■

Affects Rating.

Permissible Values for B199

Y	Yes

Bolster Component ID — **B351**

Bolster Component ID from Component Registry

Data is Confidential. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Sideframe Component ID — **B352**

Side Frame Component ID from Component Registry

Data is Confidential. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Wheelset Component ID — **B350**

Component ID from Component Registry

Data is Confidential. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Draft System Components

Coupler Code — **A057**

Defines the equipment coupler type

Permissible Values for A057

BE60AHT	Type E (Rule 16) - BE60AHT
BE60BHT	Type E Obsolete (Rule 16) - BE60BHT
BE63AHT	Type E Obsolete (Rule 16) - BE63AHT
BE63HT	Type E (Rule 16) - BE63HT
BE67HT	Type E (Rule 16) - BE67HT
E42BEX	Type E/F (Rule 17) - E42BEX
E50ARE	Type E/F (Rule 17) - E50ARE
E50BEX	Type E/F (Rule 17) - E50BEX
E60CC	Type E (Rule 16) - E60CC
E60CE	Type E (Rule 16) - E60CE
E60CHT	Type E (Rule 16) - E60CHT
E60CHTE	Type E (Rule 16) - E60CHTE
E60DC	Type E (Rule 16) - E60DC
E60DE	Type E (Rule 16) - E60DE
E60EE	Type E (Rule 16) - E60EE
E61	Type E Obsolete (Rule 16) - E61
E67AHT	Type E (Rule 16) - E67AHT
E67BC	Type E (Rule 16) - E67BC
E67BE	Type E (Rule 16) - E67BE
E67BHT	Type E (Rule 16) - E67BHT
E67BHTE	Type E (Rule 16) - E67BHTE
E67CC	Type E (Rule 16) - E67CC
E67CE	Type E (Rule 16) - E67CE
E68AHT	Type E/F Obsolete (Rule 17) - E68AHT
E68AHTE	Type E/F Obsolete (Rule 17) - E68AHTE
E68BC	Type E/F (Rule 17) - E68BC
E68BE	Type E/F (Rule 17) - E68BE
E68BHT	Type E/F (Rule 17) - E68BHT
E68BHTE	Type E/F (Rule 17) - E68BHTE
E68CE	Type E/F (Rule 17) - E68CE
E69AE	Type E/F (Rule 17) - E69AE
E69AHTE	Type E/F (Rule 17) - E69AHTE
E69BE	Type E/F (Rule 17) - E69BE
E69CE	Type E/F (Rule 17) - E69CE
E69CEX	Type E/F (Rule 17) - E69CEX
E69HTE	Type E/F (Rule 17) - E69HTE
E69LCE	Type E/F (Rule 17) - E69LCE
EB7AHT	Type E (Rule 16) - EB7AHT
EF204CE	Type E/F (Rule 17) - EF204CE
EF306CE	Type E/F (Rule 17) - EF306CE
EF511AE	Type E/F (Rule 17) - EF511AE
EF511BE	Type E/F (Rule 17) - EF511BE
EF511CE	Type E/F (Rule 17) - EF511CE
EF511DE	Type E/F (Rule 17) - EF511DE
EF511LCE	Type E/F (Rule 17) - EF511LCE
EF511WE	Type E/F (Rule 17) - EF511WE
EF512CE	Type E/F (Rule 17) - EF512CE
EF512WE	Type E/F (Rule 17) - EF512WE
EF528WE	Type E/F (Rule 17) - EF528WE
EFROTARY	Type E/F Rotary - EFROTARY
EFSPEC	Type E/F Special - EFSPEC
EFUNK	Type E/F Unknown - EFUNK
ESPEC	Type E Special - ESPEC
EUNK	Type E Unknown - EUNK
F70BHT	Type F Obsolete (Rule 18) - F70BHT
F70BHTE	Type F Obsolete (Rule 18) - F70BHTE
F70CC	Type F (Rule 18) - F70CC
F70CE	Type F (Rule 18) - F70CE
F70CHT	Type F (Rule 18) - F70CHT
F70CHTE	Type F (Rule 18) - F70CHTE
F70DE	Type F (Rule 18) - F70DE
F70HT	Type F Obsolete (Rule 18) - F70HT
F71CHT	Type F (Rule 18) - F71CHT
F72HT	Type F (Rule 18) - F72HT
F73AC	Type F (Rule 18) - F73AC
F73AE	Type F (Rule 18) - F73AE
F73AHT	Type F (Rule 18) - F73AHT
F73AHTE	Type F (Rule 18) - F73AHTE
F73BE	Type F (Rule 18) - F73BE
F73HTE	Type F Obsolete (Rule 18) - F73HTE
F79BHT	Type F Obsolete (Rule 18) - F79BHT
F79BHTE	Type F Obsolete (Rule 18) - F79BHTE
F79CC	Type F (Rule 18) - F79CC
F79CE	Type F (Rule 18) - F79CE
F79CHT	Type F (Rule 18) - F79CHT
F79CHTE	Type F (Rule 18) - F79CHTE
F79DE	Type F (Rule 18) - F79DE
FF205E	Type F (Rule 18) - FF205E
FF218AE	Type F (Rule 18) - FF218AE
FR201E	Type F (Rule 18) Rotary - FR201E
FR205AE	Type F (Rule 18) Rotary - FR205AE
FR205BE	Type F (Rule 18) Rotary - FR205BE
FR205E	Type F (Rule 18) Rotary - FR205E
FR206E	Type F (Rule 18) Rotary - FR206E
FR207AE	Type F (Rule 18) Rotary - FR207AE
FR207E	Type F (Rule 18) Rotary - FR207E

FR208AE	Type F (Rule 18) Rotary - FR208AE (without wear insert)
FR208E	Type F (Rule 18) Rotary - FR208E (with wear insert)
FR209E	Type F (Rule 18) Rotary - FR209E
FR301E	Type F (Rule 18) Rotary - FR301E
FR304E	Type F (Rule 18) Rotary - FR304E (with wear plate)
FR304WE	Type F (Rule 18) Rotary - FR304WE (without wear plate)
FROTARY	Type E/F Rotary - FROTARY
FSPEC	Type F Special - FSPEC
FUNK	Type F Unknown - FUNK
S700AE	Type E (Rule 16) - S700AE
SBE60CC	Type E (Rule 16) - SBE60CC
SBE60CE	Type E (Rule 16) - SBE60CE
SBE60DC	Type E (Rule 16) - SBE60DC
SBE60DE	Type E (Rule 16) - SBE60DE
SBE60DREX	Type E (Rule 16) - SBE60DREX
SBE60EE	Type E (Rule 16) - SBE60EE
SBE67BC	Type E (Rule 16) - SBE67BC
SBE67BE	Type E (Rule 16) - SBE67BE
SBE67CC	Type E (Rule 16) - SBE67CC
SBE67CE	Type E (Rule 16) - SBE67CE
SBE67CREX	Type E (Rule 16) - SBE67CREX
SBE67DE	Type E (Rule 16) - SBE67DE
SBE68BC	Type E/F (Rule 17) - SBE68BC
SBE68BE	Type E/F (Rule 17) - SBE68BE
SBE68CE	Type E/F (Rule 17) - SBE68CE
SBE68CREX	Type E/F (Rule 17) - SBE68CREX
SBE68DE	Type E/F (Rule 17) - SBE68DE
SBE68WEX	Type E/F (Rule 17) - SBE68WEX
SBE69AE	Type E/F (Rule 17) - SBE69AE
SBE69BE	Type E/F (Rule 17) - SBE69BE
SBE69BREX	Type E/F (Rule 17) - SBE69BREX
SBE69CE	Type E/F (Rule 17) - SBE69CE
SE60CC	Type E (Rule 16) - SE60CC
SE60CE	Type E (Rule 16) - SE60CE
SE60CHT	Type E (Rule 16) - SE60CHT
SE60CHTE	Type E (Rule 16) - SE60CHTE
SE60DC	Type E (Rule 16) - SE60DC
SE60DE	Type E (Rule 16) - SE60DE
SE60EE	Type E (Rule 16) - SE60EE
SE67BC	Type E (Rule 16) - SE67BC
SE67BE	Type E (Rule 16) - SE67BE
SE67BHT	Type E (Rule 16) - SE67BHT
SE67BHTE	Type E (Rule 16) - SE67BHTE
SE67CC	Type E (Rule 16) - SE67CC
SE67CE	Type E (Rule 16) - SE67CE
SE68BC	Type E/F (Rule 17) - SE68BC
SE68BE	Type E/F (Rule 17) - SE68BE
SE68BHT	Type E/F (Rule 17) - SE68BHT
SE68BHTE	Type E/F (Rule 17) - SE68BHTE
SE68CE	Type E/F (Rule 17) - SE68CE
SE69AE	Type E/F (Rule 17) - SE69AE
SE69BE	Type E/F (Rule 17) - SE69BE
SE69CE	Type E/F (Rule 17) - SE69CE
SF70CC	Type F (Rule 18) - SF70CC
SF70CE	Type F (Rule 18) - SF70CE
SF70CHT	Type F (Rule 18) - SF70CHT
SF70CHTE	Type F (Rule 18) - SF70CHTE
SF70DE	Type F (Rule 18) - SF70DE
SF79CC	Type F (Rule 18) - SF79CC
SF79CE	Type F (Rule 18) - SF79CE
SF79CHT	Type F (Rule 18) - SF79CHT
SF79CHTE	Type F (Rule 18) - SF79CHTE
SF79DE	Type F (Rule 18) - SF79DE

Validation Rule for A057

-If Rotary Coupler Style is reported, then Coupler Code must be a rotary coupler.

-If Coupler Code is a rotary coupler, then Coupler Style must be R (Rotary).

-Coupler Code of Type E Obsolete (Rule 16) can only be reported if the car was built or rebuilt before July 31, 2015

-Coupler Code of Type E/F Obsolete (Rule 17) can only be reported if the car was built or rebuilt before July 31, 2015

-Coupler Code of Type F Obsolete (Rule 18) can only be reported if the car was built or rebuilt before July 31, 2015

-Coupler Code of FROTARY or EFROTARY cannot be reported for cars Built or Rebuilt on or after August 12, 2014.

NOTES:

- Obsolete: All Type D couplers are obsolete and should report code DOBS; cars with this coupler code will be restricted in interchange as discussed below.
- Unknown: If the coupler code is unknown or if the code stamped on the coupler is illegible, the code BUNK FUNK, EFUNK, or LOCOUNK should be reported.
- Special: Codes ESPEC, FSPEC, and EFSPEC have been created to decline coupler bodies that have been manufactured specifically for the equipment owner and are not listed in the attached table.
- The codes FROTARY and EFROTARY cannot be reported for equipment Built or Rebuilt since August 12, 2014.

Coupler Style *Mandatory* — B058

Describes the basic coupler design of the equipment ●■▲

Used in ETC Generation. Affects Rating.

Permissible Values for B058

B	Bottom Shelf	D	Double Shelf
P	Plain	R	Rotary

Validation Rule for B058

-If Draft System Type (B073) is not Center Of Car or End Of Car, Inches of Travel (B061) cannot be reported

-If Draft System Type (B073) is reported as C, E, X, or Y then Inches of Travel (B061) must also be reported

Inches of Travel — B061

The number of inches a draft system will travel ■▲

Used in ETC Generation. Affects Rating.

Range of Values for B061

Minimum	Maximum
1	36

Validation Rule for B061

-If Draft System Type (B073) is not Center Of Car or End Of Car, Inches of Travel (B061) cannot be reported

-If Draft System Type (B073) is reported as Center Of Car or End Of Car is reported then Inches of Travel (B061) must also be reported

Draft System Type *Mandatory* — B073

Describes the draft gear/underframe cushion type ●■▲

Used in ETC Generation. Affects Rating.

Permissible Values for B073

C	Cushioning Center of Car
E	Cushioning End of Car
S	Standard
X	Devices with less than 6 inches buff travel approved under AAR Standard S-060
Y	Devices with 6 to 10 inches of buff travel approved under AAR Standard S-060

Validation Rule for B073

- If Draft System Type (B073) is Standard Draft Gear (S), Inches of Travel (B061) cannot be reported
- If Draft System Type (B073) is reported as C, E, X, or Y then Inches of Travel (B061) must also be reported
- If Draft System Type (B073) of X, or Y is reported then Draft Gear Group/Cushion Unit Pocket (B562) cannot be reported
- If Draft System Type (B073) X is reported, the Inches of Travel (B061) value must be greater than or equal to 1 and less than 6

- If Draft System Type (B073) Y is reported, the Inches of Travel (B061) value must be greater than or equal to 6 and less than or equal to 10
- If Draft System Type (B073) is S then Draft Gear Group/Cushion Unit Pocket (B562) may only be A, B, C, D, E, F, G, H, J, K, L, M, N, P, Q, R, S, or Z (AAR Rule 21)
- If Draft System Type (B073) is E then Draft Gear Group/Cushion Unit Pocket (B562) may only be EOC-1,EOC-1D, EOC-1B, EOC-2, EOC-2D, EOC-2B, EOC-3, EOC-3B,EOC-4, EOC-4B, EOC-5, EOC-5D, EOC-5B, EOC-6, EOC-6D, EOC-6B, EOC-7, EOC-7B, EOC-8, EOC-8B, EOC-8F, EOC-9, EOC-9B, EOC-9D, EOC-9E, EOC-10, EOC-10D, EOC-10B, EOC-10F, EOC-11, EOC-11D, EOC-11B,EOC-12, EOC-12D, EOC-12B, EOC-13, EOC-13B, EOC-14, EOC-14B, EOC-15, EOC-15D, EOC-15B, EOC-16, EOC-16D, EOC-16B, EOC-17, EOC-17D, EOC-17B, EOC-18, EOC-18D, EOC-18B, EOC-19, EOC-19B, EOC-20, EOC-20B, EOC-21, EOC-21B, EOC-22, EOC-22B, EOC-23, EOC-23B, EOC-24, EOC-24B, EOC-25E, EOC-26B, EOC-26F, or EOC-27D, or EOC-27E (AAR Rule 59)

Draft Gear Group/Cushion Unit Pocket	B562
Draft Gear Group/Cushion Unit Pocket value as listed in AAR Field Manual Interchange Rule 21 and 59 ✹	

Carry forward for Single Clone / Multi-Clone / Restencil / Add-Back / Equipment Group Change.

Permissible Values for B562EOC-1,EOC-1D, EOC-1B, EOC-2, EOC-2D, EOC-2B, EOC-3, EOC-3B,EOC-4, EOC-4B, EOC-5, EOC-5D, EOC-5B, EOC-6, EOC-6D, EOC-6B, EOC-7, EOC-7B, EOC-8, EOC-8B, EOC-8F, EOC-9, EOC-9D, EOC-9E, EOC-9B, EOC-10, EOC-10D, EOC-10B, EOC-10F, EOC-11, EOC-11D, EOC-11B,EOC-12, EOC-12D, EOC-12B, EOC-13, EOC-13B, EOC-14, EOC-14B, EOC-15, EOC-15D, EOC-15B, EOC-16, EOC-16D, EOC-16B, EOC-17, EOC-17D, EOC-17B, EOC-18, EOC-18D, EOC-18B, EOC-19, EOC-19B, EOC-20, EOC-20B, EOC-21, EOC-21B, EOC-22, EOC-22B, EOC-23, EOC-23B, EOC-24, EOC-24B, EOC-25E, EOC-26B, EOC-26F, EOC-27D, EOC-27E, COC-1, COC-2, COC-3, COC-4, COC-5, COC-6, COC-7, COC-8 (*AAR Rule 59*).

A, B, C, D, E, F, G, H, J, K, L, M, N, P, Q, R, S, Z (*AAR Rule 21*).

Validation Rule(s) for B562

-Draft Gear Group/Cushion Unit Pocket (B562) is mandatory for equipment built on or after June 13, 2019, unless Draft System Type (B073) is reported as X or Y

-If Draft Gear Group/Cushion Unit Pocket (B562) is not equal to A, B, C, D, E, F, G, H, J, K, L, M, N, P, Q, R, S, or Z, then Cushion Unit Type (B563) must be populated

-When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-6, EOC-7, EOC-7B, EOC-8, EOC-8B, EOC-9, EOC-9B, EOC-9D, EOC-10, EOC-10B, EOC-10D, EOC-14, EOC-14B, EOC-18D, EOC-23, EOC-23B, EOC-24, EOC-25E, EOC-26B, or EOC-27D then the Cushion Unit Type (B563) must be 1

-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-9E, EOC-26F, or EOC-27E, then the Cushion Unit Type (B563) must be 2

-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-11, EOC-12, EOC-13, EOC-13B, EOC-15, EOC-15B, EOC-15D, EOC-17, EOC-17B, EOC-17D, EOC-18, EOC-18B, EOC-19, EOC-19B, EOC-20, EOC-20B, EOC-21, EOC-21B, EOC-22, EOC-22B, EOC-24B, COC-3, COC-5, or COC-7 then the Cushion Unit Type (B563) must be 1 or 2

-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-8F or EOC-10F then the Cushion Unit Type (B563) must be 2 or 3

-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-5, EOC-5B, EOC-5D, EOC-6, EOC-6B, EOC-6D EOC-11B, EOC-11D, EOC-12B, EOC-12D, or COC-4 then the Cushion Unit Type (B563) must be 1, 2, or 3

-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-16, EOC-16B, EOC-16D, or COC-1 then the Cushion Unit Type (B563) must be 1, 2, or 4

-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-2B, EOC-2D, EOC-3, EOC-3B, EOC-4, EOC-4B, or COC-2 then the Cushion Unit Type (B563) must be 1, 2, 3, or 4

-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-1, EOC-1B, EOC-1D, or EOC-2 then the Cushion Unit Type (B563) must be 1, 2, 3, 4, or S

-When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-8 then the Cushion Unit Type (B563) must be 1, 2, 3, 4, or 5

-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-1D, EOC-2,EOC-2D, EOC-2B, EOC-3, EOC-3B, EOC-5, EOC-5D, EOC-5B, EOC-6D, EOC-7, EOC-7B, EOC-9, EOC-9B, EOC-9D,EOC-10D, EOC-11, EOC-11B, EOC-11D, EOC-12D, EOC-14,EOC-14B, EOC-15, EOC-15D, EOC-15B, EOC-16D, EOC-17D, EOC-23, EOC-23B, or EOC-27D then the Inches of Travel (B061) must be 10

-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-16, EOC-16B, EOC-19, EOC-19B, EOC-22, EOC-22B, or EOC-25E then the inches of travel must be 12

-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-20 or EOC-20B then the Inches of Travel (B061) must be 14

-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-1B, EOC-4, EOC-4B, EOC-6, EOC-6B, EOC-8, EOC-8B, EOC-8F, EOC-10, EOC-10B, EOC-10F, EOC-12, EOC-12B, EOC-13, EOC-13B, EOC-17, EOC-17B, EOC-18, EOC-18D, EOC-18B, EOC-21, EOC-21B, EOC-24, or EOC-24B then the Inches of Travel (B061) must be 15

-When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-2, COC-3, COC-4, COC-5, COC-6, or COC-8 then the Inches of Travel (B061) must be 20

-When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-1, and Cushion Unit Type (B563) is 1 or 2, then the Inches of Travel (B061) must be 20

-When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-1, and Cushion Unit Type (B563) is 4, then the Inches of Travel (B061) must be 18

-When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-7, and Cushion Unit Type (B563) is 2, then the Inches of Travel (B061) must be 20

-When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-7, and Cushion Unit Type (B563) is 1, then the Inches of Travel (B061) must be 30

-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-1 then the Inches of Travel (B061) must be 10, 12, or 15

-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-26, then the Inches of Travel (B061) must be 18

Note:

Reference AAR Field Manual Interchange Rule(s) 21 and 59.

Cushion Unit Type	B563
Cushion Unit Type value as listed in AAR Field Manual Interchange Rule 21 and 59 ✹	

Carry forward for Single Clone / Multi-Clone / Restencil / Add-Back / Equipment Group Change.

Permissible Values for B563

1 – Type 1
2 – Type 2
3 – Type 3
4 – Type 4
5 – Type 5
S – Type S

Validation Rule(s) for B563

-Cushion Unit Type (B563) is mandatory for equipment built on or after June 13, 2019.

-If Draft Gear Group/Cushion Unit Pocket (B562) is not equal to A, B, C, D, E, F, G, H, J, K, L, M, N, P, Q, R, S, or Z, then Cushion Unit Type (B563) must be populated.

-When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-6, EOC-7, EOC-7B, EOC-8, EOC-8B, EOC-9, EOC-9B, EOC-9D, EOC-10, EOC-10B, EOC-10D, EOC-14, EOC-14B, EOC-18D, EOC-23, EOC-23B, EOC-24, EOC-25E, or EOC-26B then the Cushion Unit Type (B563) must be 1.

-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-9E, EOC-26F, or EOC-27E, then the Cushion Unit Type (B563) must be 2

-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-11, EOC-12, EOC-13, EOC-13B, EOC-15, EOC-15B, EOC-15D, EOC-17, EOC-17B, EOC-17D, EOC-18, EOC-18B, EOC-19, EOC-19B, EOC-20, EOC-20B, EOC-21, EOC-21B, EOC-22, EOC-22B, EOC-24B, COC-3, COC-5, or COC-7 then the Cushion Unit Type (B563) must be 1 or 2.

-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-8F or EOC-10F then the Cushion Unit Type (B563) must be 2 or 3.

-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-5, EOC-5B, EOC-5D, EOC-6, EOC-6B, EOC-6D EOC-11B, EOC-11D, EOC-12B, EOC-12D, or COC-4 then the Cushion Unit Type (B563) must be 1, 2, or 3.

-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-16, EOC-16B, EOC-16D, or COC-1 then the Cushion Unit Type (B563) must be 1, 2, or 4.

-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-2B, EOC-2D, EOC-3, EOC-3B, EOC-4, EOC-4B, or COC-2 then the Cushion Unit Type (B563) must be 1, 2, 3, or 4.

-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-1, EOC-1B, EOC-1D, or EOC-2 then the Cushion Unit Type (B563) must be 1, 2, 3, 4, or S.

-When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-8 then the Cushion Unit Type (B563) must be 1, 2, 3, 4, or 5.
-When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-1, and Cushion Unit Type (B563) is 1 or 2, then the Inches of Travel (B061) must be 20.
-When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-1, and Cushion Unit Type (B563) is 4, then the Inches of Travel (B061) must be 18.
-When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-7, and Cushion Unit Type (B563) is 2, then the Inches of Travel (B061) must be 20.
-When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-7, and Cushion Unit Type (B563) is 1, then the Inches of Travel (B061) must be 30.

Note:
Reference AAR Field Manual Interchange Rule(s) 21 and 59.

Coupler Component ID B353

Coupler Component ID from Component Registry

Data is Confidential. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Cushioning Unit Component ID B361

Component ID from Component Registry

Data is Confidential. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Unit Segment Components

Unit Equipment Group A307

Describes the equipment type of the platform ■

Affects Rating.

Permissible Values for A307

BOXC	Box Car	FLAT	Flat Car
GOND	Gondola	HOPP	Hopper
IFLT	Intermodal Flat	TANK	Tank Car
VFLT	Vehicular Flat		

Validation Rule for A307

-Unit Equipment Group cannot be reported if the Connected Unit Count (A020) is not reported
-Unit Equipment Group must be reported if Connected Unit Count (A020) is reported

Unit Tare Weight A299

The unit segment weight on rail when empty, sometimes referred to as Light Weight, reported in pounds

Range of Values for A299

Minimum	Maximum
10000	500000

Validation Rule for A299

-Unit Tare Weight must not be reported if the Connected Unit Count (A020) is not reported
-Unit Tare Weight must be reported if Connected Unit Count (A020) is reported
-Unit Tare Weight for Boxcars must be less than or equal 160,000 lbs.
-Unit Tare Weight for Refrigerators must be less than or equal 140,000 lbs.
-Unit Tare Weight for Gondolas must be greater than or equal 30,000 lbs.
-Unit Tare Weight for Gondolas must be less than or equal 110,000 lbs.
-Unit Tare Weight for Hoppers must be greater than or equal 23,000 lbs.
-Unit Tare Weight for Hoppers must be less than 120,000 lbs.
-Unit Tare Weight for Tanks must be greater than 31,000 lbs.
-Unit Tare Weight for Tanks must be less than 200,000 lbs.
-Unit Tare Weight for Vflats must be greater than 55,000 lbs.
-Unit Tare Weight for VFlats must be less than 136,000 lbs.
-Unit Tare Weight for IFLTs must be greater than 10,000 lbs.
-Unit Tare Weight for IFLTs must be less than 72,000 lbs.
-Unit Tare Weight for all flats other than VFlats with ETC Q___ must be greater than 23,000 lbs.
-Unit Tare Weight for all flats other than VFlats with ETC Q___ must be less than 500,000 lbs.
-Unit Segment Tare Weights must add up to the Total Tare Weight (A259)
-Unit Tare Weight (A299) value must be reported to the nearest 100 pounds

Unit Load Limit A300

The maximum permissible weight of the commodity that can be loaded into the unit segment, reported in pounds

Range of Values for A300

Minimum	Maximum
20000	500000

Validation Rule for A300

-Unit Load Limit must not be reported if the Connected Unit Count (A020) is not reported
-Unit Load Limit must be reported if Connected Unit Count (A020) is reported
-Unit Segment Load Limits must add up to the Load Limit (LDLT)

Unit Inside Length A301

The inside length of each unit segment

Displayed in feet and inches on the Web. Stored in inches.

Range of Values for A301

Minimum	Maximum
20 ft 0 inches	99 ft 3 inches

Validation Rule for A301

-Unit Inside Length can only be reported if Connected Unit Count (A020) is reported
-Unit Inside Length must be reported if Connected Unit Count (A020) is reported
-Unit Inside Length for Flats other than Vflats must be greater than or equal to 20 feet.
-Unit Inside Length for Flats and IFlats must be less than or equal to 99 feet 4 inches.

Brake System Components

Emergency Brake Valve CID B354

Component ID from Component Registry

Data is Confidential. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Emergency Valve COTS Date B567

Brake valve emergency portion recondition date

System generated element. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

NOTES:

- Emergency Valve COTS Date is system-generated from a Emergency Brake Valve Inspection.

Emergency Valve OEM Warranty Date B568

Brake valve emergency portion Original Equipment Manufacturer warranty date

System generated element. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

NOTES:

- Emergency Valve OEM Date is system-generated from a Emergency Brake Valve Inspection.

Emergency Valve Part Number B569

Brake valve emergency portion part number

System generated element. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

NOTES:
- Emergency Valve Part Number is system-generated from a Emergency Brake Valve Inspection.

Service Brake Valve CID B357

Component ID from Component Registry

Data is Confidential. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Service Valve COTS Date B564

Brake valve service portion recondition date

System generated element. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

NOTES:
- Service Valve COTS Date is system-generated from a Service Brake Valve Inspection.

Service Valve OEM Warranty Date B565

Brake valve service portion Original Equipment Manufacturer warranty date

System generated element. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

NOTES:
- Service Valve OEM Date is system-generated from a Service Brake Valve Inspection.

Service Valve Part Number B566

Brake valve service portion part number

System generated element. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

NOTES:
- Service Valve Part Number is system-generated from a Service Brake Valve Inspection.

Slack Adjuster CID B359

Component ID from Component Registry

Data is Confidential. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Miscellaneous

Umler Effective Date EFDT

The date the rating activity (pre-registration, modification, etc.) is expected to occur

This element is not eligible for Query. Does not Carry Forward.

Validation Rule for EFDT

-Effective Date cannot be set to more than 13 months in the future.

NOTES:
- Effective Date will default to the 1st of the following month that equipment is registered

Inspection

ABT Due Date (Repair Track) DU13

The due date of the air brake test per AAR Field Manual Rule 3

System Generated Field. This element is not eligible for Input. Value does not carry forward for Add Back.

ABT 5-8 Year Due Date DU58

The 5-8 year due date for the air brake test (ABT) after the ABT Due Date (Repair Track)

System Generated Field. This element is not eligible for Input. Value does not carry forward for Add Back.

Inspection Date Done DTDN

The date the inspection was completed; used for all inspection types reported on equipment

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Validation Rule for DTDN

-The inspection date must not be 60 days before the Build Date

Inspection Due Date INDD

The due date of the next inspection; used for all inspection types reported on equipment

System Generated Field. This element is not eligible for Input. Value does not carry forward for Add Back.

Inspection Performer PERF

The SCAC that completed the inspection; used for all inspection types reported on equipment

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Inspection Reporter REPT

The SCAC that reported the inspection; used for all inspection types reported on equipment

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Location/SPLC SPLC

The SPLC of the inspecting location; used for all inspection types reported on equipment

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Air Brake Test Device B523

Indicates the type of test device used to perform the Air Brake Test ✹

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Permissible Values for B523

A	Automatic (Non 4-Pressure)
M	Manual
P	Automatic (4-Pressure)

Validation Rule for B523

-Air Brake Test Device (B523) must be reported for Air Brake Test inspection reported on or after December 10, 2020

Insp Service Valve COTS Date B570

Brake valve service portion recondition date

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

NOTES:
- Reports of 9999 will be allowed in case the date is illegible and the valve cannot be replaced immediately.
- Valid date format: MMYY

Insp Service Valve OEM Warranty Date B571

Brake valve service portion Original Equipment Manufacturer warranty date

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

NOTES:
- Reports of 999999 will be allowed in case the date is illegible and the valve cannot be replaced immediately.
- Valid date format: MMYYYY

Insp Service Valve Part Number B572

Brake valve service portion part number

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Insp Emergency Valve COTS Date B573

Brake valve emergency portion recondition date

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

NOTES:

- Reports of 9999 will be allowed in case the date is illegible and the valve cannot be replaced immediately.
- Valid date format: MMYY

Insp Emergency Valve OEM Warranty Date	B574
Brake valve emergency portion Original Equipment Manufacturer warranty date	

System generated element. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Insp Emergency Valve Part Number	B575
Brake valve emergency portion part number	

System generated element. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Insp Service Valve Location *Mandatory*	B576
Brake valve service portion location ●	

. Value does not carry forward for Single Clone / Multi-Clone.

Insp Emergency Valve Location *Mandatory*	B577
Brake valve emergency portion location reported on an emergency brake valve inspection ●	

Value does not carry forward for Single Clone / Multi-Clone.

NOTES:

- Reports of 999999 will be allowed in case the date is illegible and the valve cannot be replaced immediately.
- Valid date format: MMYYYY

Intermodal Flat

General

Status Code *Mandatory* — **USCD**

Identifies the current operational state ●

Does not Carry Forward.

Permissible Values for USCD

A	ACTIVE	I	INACTIVE
P	PRE-REGISTERED		

NOTES:

- For Restencil and Clone process the initial Status of a car should be Pre-Registered.
- All Add-Back processes should initially set the Status to Pre-Registered
- A Pre-registered car will automatically have its Status changed to Active for the initial change when TRAIN detects three (3) movements on the car
- If the Status changes to Active due to movement and the car was created from a Restencil, the Prior Equipment ID (PRID) or source car will have its status changed to Inactive automatically by Umler

Equipment ID — **0001**

The equipment stenciled number

Validation Rule for 0001

-Equipment Number must not be larger than 6 digits (i.e., 999999)

NOTES:

- Equipment ID includes the mark and number stenciled on the equipment. Marks can be up to 4 characters and number up to 6 digits (i.e., ABCD999999).
- Up to 500 cars can be added or updated in a transaction.
- When adding an equipment record, ensure that Prior Equipment ID (PRID) is reported, unless the equipment is new.

Mechanical Designation *Mandatory* — **UMMD**

Equipment description without physical dimensions ●

Used for Transportation Codes.

Permissible Values for UMMD

FC	Flat-Intermodal (Standard, Low Profile, Stack)
FCA	Flat-Intermodal Articulated (Standard, Low Profile, Stack)
MWIF	MoW - IFlat

Equipment Descriptor *Mandatory* — **B341**

Additional information about the type of equipment used in conjunction with the Mechanical Designation to generate the Equipment Type Code (ETC) for Intermodal Flat, Locomotive, Chassis, Container, and Trailer equipment groups ●

Value does not carry forward for Equipment Group Change.

Permissible Values for B341

FCC	Standard Intermodal
FCL	Low Profile Intermodal
FCLA	Low Profile Intermodal (Articulated)
FCM	Standard Intermodal Multi-Segment
FCW	Well/Stack Intermodal
FCWA	Well/Stack Intermodal (Articulated)

Validation Rule for B341

- If Mechanical Designation is FC, then Equipment Descriptor must be FCC, FCL, or FCW. (These are all of the single-segment cars.)
- If Mechanical Designation is FCA, the Equipment Descriptor must be FCM, FCLA, or FCWA. (These are all of the multi-segment cars.)
- If Mechanical Designation is MWIF, there is no restriction on the Equipment Descriptor

Equipment Type Code — **UMET**

An alpha numeric code that describes the physical attributes of equipment

System Generated Field. This element is not eligible for Input.

NOTES:

- Please Refer to Appendix I for More information Regarding ETC Generation

Maint of Way Service Type — **B403**

Identifies equipment Maintenance Of Way function

Value does not carry forward for Equipment Group Change.

Permissible Values for B403

C2	Crane / Boom Support Car
F4	Flat-Wheel Sets
T4	Training Car
T8	Track Geometry Car

Validation Rule for B403

- Maint of Way Service Type can only be listed on records where the Equipment Group (0002) or Pseudo Equipment Group (B547) is listed as MISC

Built Date *Mandatory* — **BLDT**

The date the construction of the equipment is complete ● ■

Data is Confidential. Used for Transportation Codes. Affects Rating. Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for BLDT

Minimum	Maximum
1/1/1900	12/31/9999

Validation Rule for BLDT

-Built Date must be within the last 99 years
-Built Date must not be in the future for equipment in Active Status
-Prior and target equipment's Built Date (BLDT) must match for restenciling
-Built Date cannot be updated within 30 days of the End of Service Date (B078)

NOTES:

- Data is public for railroad marked equipment.
- For connected unit cars report the oldest car in the set.

Rebuilt / ILS Date — **RBDT**

The date the re-construction of the equipment is complete

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for RBDT

Minimum	Maximum
1/1/1900	12/31/9999

Validation Rule for RBDT

-Rebuilt/Increased Life Service Date must be after the Built Date (BLDT)
-Rebuilt Date must not be more than 70 years after the Built Date (BLDT)
-Rebuilt Date is required for Extended Service Code (A096) 1, 2, or 3 for Increased Life Service
-Rebuilt Date is required for Extended Service Code (A096) R for Rebuilt, or V for 65 years of service
-If Rebuilt Date is reported then the Extended Service Code (A096) must be reported as R for Rebuilt, V, 1, 2, or 3 for Increased Life Service

NOTES:

- Railroad cars -- applicable only to cars meeting status as provided in both STB Accounting Rules, and the AAR Mechanical Interchange Rule 88, Office Manual.
- Private cars -- applicable to all cars meeting AAR Mechanical Interchange Rule 88, Section C, Office Manual and Sections A and B of the Field Manual.
- For connected unit cars report the oldest car in the set. Do not report Rebuilt Date unless car has been approved by the AAR.

Rebuilt Flag — **RBFL**

Identifies the equipment is nearing its end of life cycle

Data is Confidential. System Generated Field. This element is not eligible for Input.

Permissible Values for RBFL

N	No	Y	Yes

Owner *Mandatory* — **UMOW**

Primary reporting mark of the railroad or private company owning the car ●

Value does not carry forward for Single Clone / Multi-Clone / Single Restencil / Multi-Restencil.

NOTES:

- Report the primary reporting mark of the railroad or private company owning the car. When car's lease or lien is held by a bank, trust holder, capital lease company, etc. not having an assigned mark, report the primary reporting mark affiliated with the stenciled reporting mark.

Equipment Group *Mandatory* — **0002**

Identifies the various major car types ●■

Used for Transportation Codes. Affects Rating.

Lessee — **LESE**

The reporting mark of the company leasing the equipment

Value does not carry forward for Single Clone / Multi-Clone / Single Restencil / Multi-Restencil.

Validation Rule for LESE

-Umler Owner (UMOW) and Lessee are not allowed to be equal

-Lessee cannot be a child reporting mark

NOTES:

- In order to assign privately marked cars to a pool, a railroad reporting mark must be reported.

Maintenance Party — **MNPT**

The parent reporting mark of the company responsible for the maintenance and repairs of the equipment

Does not Carry Forward.

Mark Owner Category — **B201**

The company that owns the stenciled mark on the car

System Generated Field. This element is not eligible for Input. Value does not carry forward for Single Restencil / Multi-Restencil / Equipment Group Change / Add Back.

Permissible Values for B201

B	US Private
C	Canadian Private
F	Foreign Private
H	Canadian Class II
I	Canadian Class I
J	Mexican Class I
K	Canadian Class III
M	Mexican Private
N	US Private Steamship
O	Canadian Private Steamship
P	Mexican Private Steamship
Q	Foreign Private Steamship
R	US Class II Railroad
U	US Class I Railroad
V	US Class III Railroad
W	Mexican Class II Railroad
Y	Mexican Class III Railroad

NOTES:

- This value is stored in the Umler Database for informational purposes and is retrieved from the Roadmark Registry.

Prior Equipment ID — **PRID**

The previous reporting mark and number of the equipment

Value does not carry forward for Single Clone / Multi-Clone.

Validation Rule for PRID

-Prior and target equipment's Built Date (BLDT) must match

-The Prior Equipment ID (0001) must belong to the same or comparable Equipment Group (0002) as the current car initial and number

NOTES:

- Prior ID enables equipment records to share the same historical lineage. Equipment Identification Number (EIN) is a generated id that enables these equipment records to share inspections and transaction history.

Last Update Date — **B122**

Date of the last Umler element change

System Generated Field. This element is not eligible for Input.

Equipment Add Date — **B082**

Date the reporting mark and number was added to the Umler system

System Generated Field. This element is not eligible for Input.

Status Change Reason — **USCR**

Identifies the reason for the current operational state

System Generated Field. This element is not eligible for Input. Does not Carry Forward.

Permissible Values for USCR

I	Initial Load
M	Movement
O	Status Changed Manually
R	Restencil

NOTES:

- If movement is detected on equipment, status is changed to Active.
- If an equipment record is changed to Active, any prior equipment record is placed in Inactive status.

Status Change Date — **USCT**

Identifies the effective date of the current operational state

System Generated Field. This element is not eligible for Input. Does not Carry Forward.

Extended Service *Mandatory* — **A096**

A code indicating the eligibility of an increase to the life cycle ●

Used for Transportation Codes. Value does not carry forward for Single Clone / Multi-Clone.

Permissible Values for A096

1	1st ILS Inspection, additional 5 years of Service
2	2nd ILS Inspection, additional 5 years of service (10 years total)
3	3rd ILS Inspection, additional 5 years of service (15 years total)
C	Built New between January 1, 1964 - June 30, 1974, Certified for 50 Years of Service, Built New Before July 1, 1974 & Received AAR Waiver
E	Built new from July 1,1974, Qualified for 50 Years Service
N	Built Before January 1, 1964, Qualified for 40 Years Service
R	Rule 88, Rebuilt cars
U	Built between January 1, 1964 - June 30, 1974, Qualified for 40 Years & eligible for certification for 50 Years Service
V	Car is certified (FRA Waiver & AAR) for 65 years of service from date built new from January 1, 1964

Validation Rule for A096

-If Rebuilt Date (RBDT) is reported, then the Extended Service Code (A096) must be reported as R for Rebuilt, V, 1, 2, or 3 for Increased Life Service

-Extended Service Code of C cannot be reported if the car was built before January 1, 1964 or on/after July 1, 1974

-Extended Service Code of E cannot be reported if the car was built before July 1, 1974

-Extended Service Code of N cannot be reported if the car was built on/after January 1, 1964

-Extended Service Code of U cannot be reported if the car was built before January 1, 1964 or on/after July 1, 1974

NOTES:
- Value is used to calculate End of Service Date (B078).
- Rebuilt Date (RBDT) is required for Extended Service Code (A096) R for Rebuilt, or V for 65 years service.
- Rebuilt Date (RBDT) is required for Extended Service Code (A096) 1, 2, 3, and V for Increased Life Service.

End of Service Date — B078

Indicates the date of the end of equipment life

Data is Confidential. System Generated Field. This element is not eligible for Input.

NOTES:
- Data becomes non-confidential two years prior to End of Service Date.

Do Not Load After — B590

Equipment should not be loaded after date shown in the element

Data is Confidential.

Validation Rules for B590

-Do Not Load After (B590) cannot be updated thirty days prior to the date shown in the element.

-Do Not Load After (B590) cannot be updated within thirty days of the End of Service Date (B078).

-Do Not Load After (B590) date cannot be on or after the End of Service (B078) date.

NOTES:
- The element will be initially populated by End of Service (B078) minus 30 days.
- Data becomes non-confidential thirty days prior to the Do Not Load After (B590) date.

Equipment Identification — EINN

Unique equipment identifier regardless of stenciled mark

System Generated Field. This element is not eligible for Input.

NOTES:
- Specify the Prior ID (PRID) on equipment records to ensure the historical lineage is preserved. Equipment with the same EIN share history and inspections.

Info Conflict Status — B355

Indicates that an Informational Conflict exists on the Equipment record

System Generated Field. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Conflict Status — B050

Identifies the escalation level of equipment in active conflict ■

System Generated Field. Affects Rating. This element is not eligible for Input. Value does not carry forward for Add Back.

Permissible Values for B050

1 Subject to Zero-Rating
2 Subject to Restricted in Interchange
3 Subject to Deletion

NOTES:
- Subject to Zero-Rating, goes into effect 30 days after Conflict Status occurs
- Subject to Restricted in Interchange, goes into effect 90 days after Conflict Status occurs
- Subject to Deletion, goes into effect 365 days after Conflict Status occurs

Date of Original Conflict — B063

The date the equipment was originally placed in the current conflict

System Generated Field. This element is not eligible for Input.

Next Conflict Status — B135

Identifies the next escalation level of an equipment in active conflict

System Generated Field. This element is not eligible for Input. Value does not carry forward for Add Back.

Permissible Values for B135

1 Subject to Zero-Rating
2 Subject to Restricted in Interchange
3 Subject to Deletion

NOTES:
- Subject to Zero-Rating, goes into effect 30 days after Conflict Status occurs
- Subject to Restricted in Interchange, goes into effect 90 days after Conflict Status occurs
- Subject to Deletion, goes into effect 365 days after Conflict Status occurs

Notice Indicator — B137

Identifies equipment in error in Umler Notice Management

System Generated Field. This element is not eligible for Input.

Conflict Status Next Date — B062

The date the conflict status will be escalated

System Generated Field. This element is not eligible for Input. Value does not carry forward for Add Back.

Rate Indicator — A070

Indicates the rate type applicable to the unit ■

System Generated Field. Used for Transportation Codes. Affects Rating. This element is not eligible for Input. Does not Carry Forward.

Permissible Values for A070

0 Zero-Rated Due to Conflict Errors
2 Private Mileage Rate
4 Private Car Owner Designated Rate
6 Zero-Rated - Scrap (S_,SX), AAR Overage (XA), FRA Overage (YA), Umler Conflict - CHR 1/Tarriff 6007 (XZ). Zero-Rated Private Owner Election to Zero Rate [See Private Zero Rate (B150)].
M Railroad Market Rate
Q Zero-Rated Railroad Market Rate Due to Conflict Errors

NOTES:
- If unit is zero-rated, correction of conflicts will reinstate the appropriate rate indicator code.

Private Zero Rate — B150

Indicates a private car is subject to contractual agreement, nullifying mileage rates ■

Affects Rating.

Permissible Values for B150

Y Yes

NOTES:
- Reporting "Y" generates Rate Indicator (A070) value 6 and a zero rate.

TTX Hourly Rate — B212

Time Charge-The TTX hourly rate for the equipment

Data is Confidential. This element is not eligible for Query.

Range of Values for B212

Minimum	Maximum
0	9

Validation Rule for B212

-TTX Hourly rate can only be set on TTX owned Equipment.

TTX Mileage Rate — B213

Mileage Charge-The TTX mileage rate for the equipment

Data is Confidential. This element is not eligible for Query.

Range of Values for B213

Minimum	Maximum
0	1

Validation Rule for B213

-TTX Mileage rate can only be set on TTX owned Equipment.

First Movement Date **USAT**

The first movement date under the stenciled mark of the equipment

This element is not eligible for Input. Does not Carry Forward.

Equipment Add Company **B083**

The reporting mark of the company that added the equipment

System Generated Field. This element is not eligible for Input.

Registration Reason **B174**

The code indicating the reason this equipment is added

Does not Carry Forward.

Permissible Values for B174

A	Add-Back	N	New
P	Pending Restencil	R	Restencil

Restencil Program Ind **B177**

Identifies the equipment is under a restencil program

Permissible Values for B177

Y Yes

Delete Reason Code **B064**

A code that designates the reason the equipment has been deleted

Value does not carry forward for Add Back.

Permissible Values for B064

A	Restenciled
D	Destroyed or wrecked
L	Lease terminated, removed from fleet
P	Retired unserviceable beyond economic repair
R	Rebuilt
S	Sold Serviceable
W	Over age retired for dismantling
Y	Error, reporting did not exist
Z	Other

Non-Compliant Wheelsets **B544**

Equipment record is incomplete and has a missing wheelset component ID association. Refer to AAR Field Manual Rule 44 for industry requirements ✹

System Generated Field. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Validation Rule for B544

-A Wheelset Component ID is required for each applicable location on equipment built on or after January 1, 2016

-A Wheelset Component ID is required for each applicable location on equipment rebuilt on or after January 1, 2016 and Gross Rail Load (A266) is greater than 268,000 lbs

NOTES:

- A "Y" will be system generated if the equipment is active and the number of Wheelset CID's required is not equal to the Axle Count (A024) on the equipment
- Validation rule applies to equipment that has been in Active status for 60 days

Pseudo Equipment Group **B547**

Equipment needs to be identified as a miscellaneous record while maintaining all elements linked to the original equipment group

System Generated Field.

Permissible Values for B547

MISC Miscellaneous

Weight

Gross Rail Load/Weight *Mandatory* **A266**

The maximum permissible weight on rail of the equipment and the load, reported in pounds ●■

Affects Rating.

Range of Values for A266

Minimum	Maximum
113000	2835000

Validation Rule for A266

-Gross Rail Load must be equal to the Load Limit (LDLT) plus the Tare Weight (A259)

NOTES:

- For current single-unit IFLTs, lowest GRL is 113,000 lbs. Maximum GRL for 36 axles with 7" bearings is 2,835,000 lbs.

Use Table 1 below to determine Gross Rail Load, if Qualification for Increased Gross Rail Load (B344) does not exist.

TABLE 1 -

Journal Size	Load per Axle	Gross Rail Load for 4-axle Equipment
B - 4 1/2" x 8"	25,750 lbs.	103,000 lbs.
C - 5" x 9"	35,500 lbs.	142,000 lbs.
D - 5 1/2" x 10"	44,250 lbs.	177,000 lbs.
E - 6" x 11" (w/28" 1W wheels)	48,750 lbs.	195,000 lbs.
E - 6" x 11" (w/all other wheels	55,000 lbs.	220,000 lbs.
F - 6 1/2" x 12"	65,750 lbs.	263,000 lbs.
G - 7" x 12"	78,750 lbs.	315,000 lbs.
K - 6 1/2" x 9"	71,500 lbs.	263,000 lbs.
M - 7" x 9"	78,750 lbs.	315,000 lbs.

Use Table 2 below to determine Gross Rail Load for 4-axle equipment if Qualification for Increased Gross Rail Load (B344) exists.

TABLE 2 -

Qualification for Increased Gross Rail Load (B344)	Journal Size	Gross Rail Load
1	K - 6 1/2" x 9"	286,000 lbs.
1	G - 7" x 12"	286,000 lbs.
1	M - 7" x 9"	286,000 lbs.
2	F - 6 1/2" x 12"	286,000 lbs.
2	K - 6 1/2" x 9"	286,000 lbs.
3	F - 6 1/2" x 12"	268,000 lbs.
3	K - 6 1/2" x 9"	268,000 lbs.

- For multi-unit equipment, report the total gross rail load for the entire set.
- Refer to Field Manual Rule 70 if additional information is required.

A Gross Rail Load less than the listed or calculated values may be entered; however:

- Star Code (A247) must be R or S, and
- Load Limit (LDLT) must also be reduced, ensuring Tare Weight (A259) plus Load Limit (LDLT) equals the reported Gross Rail Load.

For equipment having two or more different journal sizes, see following examples:

Example for Drawbar Connected:

- A 3-unit drawbar connected car has 12 axles.
- The end units (Locations A and B) each have 4 axles with E - 6" x 11" journals.
- The intermediate unit (Locations C) has 4 axles with F – 6 1/2" x 12" journals

Using TABLE 1, the Gross Rail Load would be:

8 ea. E-6" x 11" journal axles X 55,000 lbs. per axle = 440,000 lbs.
+ 4 ea. F-6 1/2" x 12" journal axles X 65,750 lbs. per axle = 263,000 lbs.
Gross Rail Load = 703,000 lbs.

Example for Articulated Connected:
A 5-unit articulated car has 6 trucks (12 axles).
The end trucks (Locations A and B) each have 2 axles with E - 6" x 11" journals.
The intermediate trucks (Locations C, D, E, and F) each have 2 axles with G - 7" x 12" journals

Using TABLE 1, the Gross Rail Load would be:

4 ea. E-6" x 11" journal axles X 55,000 lbs. per axle = 220,000 lbs.
- + 8 ea. G-7" x 12" journal axles X 78,750 lbs. per axle = 630,000 lbs.
- Gross Rail Load = 850,000 lbs.

Tare Weight *Mandatory* A259

The equipment weight on rail when empty, sometimes referred to as Light Weight, reported in pounds

Affects Rating.

Range of Values for A259

Minimum	Maximum
43000	918000

Validation Rule for A259

-Tare Weight (A259) of IFLT with a blank Connected Unit Count (A020) must contain values between 43000 lbs. and 102000 lbs.
-Tare Weight (A259) of IFLT where Connected Unit Count (A020) is 2, must contain values between 86000 lbs. and 204000 lbs.
-Tare Weight (A259) of IFLT where Connected Unit Count (A020) is 3, must contain values between 96000 lbs. and 306000 lbs.
-Tare Weight (A259) of IFLT where Connected Unit Count (A020) is 4, must contain values between 141000 lbs. and 408000 lbs.
-Tare Weight (A259) of IFLT where Connected Unit Count (A020) is 5, must contain values between 152000 lbs. and 510000 lbs.
-Tare Weight (A259) of IFLT where Connected Unit Count (A020) is 6, must contain values between 258000 lbs. and 612000 lbs.
-Tare Weight (A259) of IFLT where Connected Unit Count (A020) is 7, must contain values between 301000 lbs. and 714000 lbs.
-Tare Weight (A259) of IFLT where Connected Unit Count (A020) is 8, must contain values between 344000 lbs. and 816000 lbs.
-Tare Weight (A259) of IFLT where Connected Unit Count (A020) is 9, must contain values between 387000 lbs. and 918000 lbs
-IFlat Cars of ETC Q_1_ can only have a maximum Tare Weight of 70,000 lbs.
-IFlat Cars of ETC Q_2_ to Q_0_ and S_3_ to S_8_ can only have a maximum Tare Weight of 360,000 lbs.
- Tare Weight (A259) value must be reported to the nearest 100 pounds

NOTES:

- Do not report an average Tare Weight for car series, except for Pre-Registered cars
- When cars are made active, the actual Tare Weight must be recorded

Load Limit *Mandatory* LDLT

The maximum permissible weight of the commodity that can be loaded into the equipment, reported in pounds

Affects Rating.

Range of Values for LDLT

Minimum	Maximum
69000	2061000

Validation Rule for LDLT

-Load Limit (LDLT) of IFLT with a blank Connected Unit Count (A020) must contain values between 69000 lbs. and 229000 lbs.
-Load Limit (LDLT) of IFLT where Connected Unit Count (A020) is 2, must contain values between 138000 lbs. and 458000 lbs.
-Load Limit (LDLT) of IFLT where Connected Unit Count (A020) is 3, must contain values between 207000 lbs. and 687000 lbs.
-Load Limit (LDLT) of IFLT where Connected Unit Count (A020) is 4, must contain values between 276000 lbs. and 916000 lbs.
-Load Limit (LDLT) of IFLT where Connected Unit Count (A020) is 5, must contain values between 336000 lbs. and 1145000 lbs.
-Load Limit (LDLT) of IFLT where Connected Unit Count (A020) is 6, must contain values between 414000 lbs. and 1374000 lbs.
-Load Limit (LDLT) of IFLT where Connected Unit Count (A020) is 7, must contain values between 483000 lbs. and 1603000 lbs.
-Load Limit (LDLT) of IFLT where Connected Unit Count (A020) is 8, must contain values between 552000 lbs. and 1832000 lbs.
-Load Limit (LDLT) of IFLT where Connected Unit Count (A020) is 9, must contain values between 621000 lbs. and 2061000 lbs.
-Iflat Cars of Equipment Type codes Q-2- to Q-9- and S-3- to S-8- can only have a max Load Limit of 200000 lbs.

NOTES:

- For connected unit cars report the sum of the load limits for all units in the set.
- For current single-unit IFLTs, lowest load limit is 69,200 lbs. (rounded down to 69000). Largest load limit is 228,900 lbs. (rounded up to 229,000). Maximum permissible value shown above is 229,000 lbs. X 9 = 2,061,000 lbs.]

Weighing Status *Mandatory* A289

Indicates the weight information is an estimate or an actual measurement

Value does not carry forward for Single Clone / Multi-Clone.

Permissible Values for A289

A	Actual
E	Estimated
V	Verified correct Tare Weight
X	Tare Weight subject to verification (System Generated)

Validation Rule for A289

-Equipment cannot be within a series of 10 with identical Tare Weights (A259), refer to Appendix P for further information on resolving tare weight conflicts
-When Status Code changes to Active or Inactive Weighing Status must be reported as Actual (A) or Verified (V) within 60 days of Status Code change

Weighing Date A288

The date the equipment was actually weighed

Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for A288

Minimum	Maximum
1/1/1900	12/31/9999

Validation Rule for A288

-If Weighing Date is reported the Tare Weight (A259) must be reported
-When Weighing Date is reported then Weighing Status (A289) must be A (Actual) or V (Verified)
-If Weighing Status (A289) is A (Actual) or V (Verified correct Tare Weight) then Weighing Date must be reported
-Weighing Date must be on or before the current date
-Weighing Date cannot be before Built / Rebuilt date

Star Code A247

Indicates a reduction of the Load Limit (LDLT) of the equipment per AAR Rule 70

Affects Rating.

Permissible Values for A247

R	Body Capacity less than Truck Capacity
S	Reduced Load Limit

NOTES:

- Star Code must be reported if Gross Rail Load (A266) is less than the maximum gross rail load allowed for the reported combination of Axle Count (A024) and Journal Size (A147).

Qual for Inc GRL B344

Code designating AAR approval for operating 4-axle equipment at a gross rail load greater than 263,000 lbs per AAR Rule 88

Permissible Values for B344

1 Rule 88 IGRL Code 1 (> 263,000 lbs. and <= 286,000 lbs. GRL per AAR Specification S-286)
2 Rule 88 IGRL Code 2 (> 263,000 lbs. and <= 286,000 lbs. GRL)
3 Rule 88 IGRL Code 3 (> 263,000 lbs. and <= 268,000 lbs. GRL)

Validation Rule for B344

- Equipment having Qualification for Increased Gross Rail Load of 1 or 2 must have a Gross Rail Load (A266) that does not exceed 286,000 lbs.
- Equipment having Qualification for Increased Gross Rail Load of 3 must have a Gross Rail Load (A266) that does not exceed 268,000 lbs.
- Equipment having Qualification for Increased Gross Rail Load of 1 must have a Journal Size (A147) of K, G, or M
- Equipment having Qualification for Increased Gross Rail Load of 2 or 3 must have a Journal Size (A147) of F or K
- Equipment having Qualification for Increased Gross Rail Load of 1, 2, or 3 must have a Wheel Diameter (A294) of 36 or 38
- Equipment having Qualification for Increased Gross Rail Load (B344) of 3, and a Gross Rail Load (A266) less than 268,000 lbs., must have Star Code of S
- Equipment having Qualification for Increased Gross Rail Load of 1 or 2 must have a Gross Rail Load (A266) that does not exceed 286,000 lbs.

NOTES:

- Qualification for Increased Gross Rail Load must be granted by the AAR, and applies only to 4-axle equipment approved for gross rail loads greater than 263,000 lbs. and less than or equal to 286,000 lbs. It does NOT apply to 4-axle, 315,000 lbs. gross rail load equipment operating with a Star Code.

Dimension

Plate Code *Mandatory* A046

Indicates the extreme height and width clearance of the equipment ●■

Affects Rating.

Permissible Values for A046

B Plate Code B
C Plate Code C
E Plate Code E
F Plate Code F
G Clearance Code G
H Plate Code H
N Plate Code N

NOTES:

- For a description of Plate Codes, please see Appendix J at the back of this manual.
  - Report B: If clearance does not exceed Plate B
  - Report C: If clearance is greater than Plate B. but does not exceed Plate C
  - Report E: If clearance is greater than Plates B and C, but does not exceed Plate E.
  - Report F: If clearance is greater than Plates B, C and E, but does not exceed Plate F
  - Report G: If clearance exceeds Plates B, C, E, F, H, and N.
  - Report H: If clearance is greater than Plates B, C, E, and F, but does not exceed Plate H
  - Report N: If clearance is greater than Plates B, C, E, and F, but does not exceed Plate N.
- There is no AAR Plate G. Clearance Code G is included in Umler to represent equipment that does not fit any existing AAR clearance plates.
- For ARTICULATED/MULTI-UNIT SET report the most restrictive clearance plate of UNIT in the set. (For ARTICULATION see Section VII).

Outside Length *Mandatory* OSLG

The outside length over pulling faces of couplers in normal position ●■

Affects Rating. Displayed in feet and inches on the Web. Stored in inches.

Range of Values for OSLG

Minimum	Maximum
24 ft 0 inches	720 ft 0 inches

Validation Rule for OSLG

-Non-Articulated I-Flats cannot have an Outside Length greater than 124 feet
-Outside Length (OSLG) on freight cars (except refrigerators) must not exceed Inside Length (A135) by more than 16 feet
-Outside Length (OSLG) on refrigerator cars (Mechanical Designation RB, RBL, RP, RPL, or RC) must not exceed Inside Length (A135) by more than 26 feet

NOTES:

- For connected unit cars report the maximum coupled length of the set.
- Round fraction to the higher inch, e.g., 05 1/4" = 06"

Outside Extreme Width *Mandatory* A186

The outside extreme width of the equipment ●■

Affects Rating. Displayed in feet and inches on the Web. Stored in inches.

Range of Values for A186

Minimum	Maximum
7 ft 0 inches	12 ft 7 inches

Validation Rule for A186

-Outside Extreme Width must not exceed 10 feet 8 inches for Plate Codes B, C, E, F, or N
-Outside Extreme Width (A186) for Plate Code A must not be less than 10 feet 8 inches.
-Outside Extreme Width (A186) for Plate Code A must not exceed 10 feet 10 inches.

NOTES:

- For connected unit cars report the dimension of the largest unit in the set.
- Round fraction to the higher inch, e.g., 05 1/4" = 06"

Outside Extreme Height *Mandatory* A185

Height from top of rail to extreme projecting height ●■

Affects Rating. Displayed in feet and inches on the Web. Stored in inches.

Range of Values for A185

Minimum	Maximum
2 ft 0 inches	22 ft 6 inches

Validation Rule for A185

-Outside Extreme Height for Plate Code B must be less than or equal to 15 feet 1 inch
-Outside Extreme Height for Plate Codes C or I must be less than or equal to 15 feet 6 inches
-Outside Extreme Height for Plate Code E must be less than or equal to 15 feet 9 inches
-Outside Extreme Height for Plate Code F must be less than or equal to 17 feet 0 inch
-Outside Extreme Height for Plate Code H must be less than or equal to 20 feet 3 inches
-Outside Extreme Height for Plate Code N must be less than or equal to 17 feet 1 inch

NOTES:

- For connected unit cars report the dimension of the largest unit in the set.
- Round fraction to the higher inch, e.g., 05 1/4" = 06"

Outside Height Extr Width *Mandatory* A187

The highest point at which the extreme width of the equipment occurs ●

Displayed in feet and inches on the Web. Stored in inches.

Range of Values for A187

Minimum	Maximum
1 ft 0 inches	20 ft 0 inches

Validation Rule for A187

-Outside Extreme Width (A186) for Plate Codes B must not exceed 10 feet 8 inches if Outside Height Extreme Width is 13 feet 10 inches or less
-Outside Extreme Width (A186) for Plate Codes B must not exceed 10 feet 7 inches if Outside Height Extreme Width is 13 feet 11 inches
-Outside Extreme Width (A186) for Plate Codes B must not exceed 10 feet 6 inches if Outside Height Extreme Width is 14 feet 0 inches
-Outside Extreme Width (A186) for Plate Codes B must not exceed 10 feet 4 inches if Outside Height Extreme Width is 14 feet 1 inches
-Outside Extreme Width (A186) for Plate Codes B must not exceed 10 feet 3 inches if Outside Height Extreme Width is 14 feet 2 inches
-Outside Extreme Width (A186) for Plate Codes B must not exceed 10 feet 2 inches if Outside Height Extreme Width is 14 feet 3 inches
-Outside Extreme Width (A186) for Plate Codes B must not exceed 10 feet 0 inches if Outside Height Extreme Width is 14 feet 4 inches
-Outside Extreme Width (A186) for Plate Codes B must not exceed 9 feet 9 inches if Outside Height Extreme Width is 14 feet 5 inches
-Outside Extreme Width (A186) for Plate Codes B must not exceed 9 feet 5 inches if Outside Height Extreme Width is 14 feet 6 inches
-Outside Extreme Width (A186) for Plate Codes B must not exceed 9 feet 2 inches if Outside Height Extreme Width is 14 feet 7 inches
-Outside Extreme Width (A186) for Plate Codes B must not exceed 8 feet 10 inches if Outside Height Extreme Width is 14 feet 8 inches
-Outside Extreme Width (A186) for Plate Codes B must not exceed 8 feet 6 inches if Outside Height Extreme Width is 14 feet 9 inches
-Outside Extreme Width (A186) for Plate Codes B must not exceed 8 feet 3 inches if Outside Height Extreme Width is 14 feet 10 inches
-Outside Extreme Width (A186) for Plate Codes B must not exceed 7 feet 11 inches if Outside Height Extreme Width is 14 feet 11 inches
-Outside Extreme Width (A186) for Plate Codes B must not exceed 7 feet 6 inches if Outside Height Extreme Width is 15 feet 0 inches
-Outside Extreme Width (A186) for Plate Codes B must not exceed 7 feet 4 inches if Outside Height Extreme Width is 15 feet 1 inches
-Outside Extreme Width (A186) for Plate Codes C must not exceed 10 feet 8 inches if Outside Height Extreme Width is 14 feet 3 inches or less
-Outside Extreme Width (A186) for Plate Codes C must not exceed 10 feet 7 inches if Outside Height Extreme Width is 14 feet 4 inches
-Outside Extreme Width (A186) for Plate Codes C must not exceed 10 feet 6 inches if Outside Height Extreme Width is 14 feet 5 inches
-Outside Extreme Width (A186) for Plate Codes C must not exceed 10 feet 4 inches if Outside Height Extreme Width is 14 feet 6 inches
-Outside Extreme Width (A186) for Plate Codes C must not exceed 10 feet 3 inches if Outside Height Extreme Width is 14 feet 7 inches
-Outside Extreme Width (A186) for Plate Codes C must not exceed 10 feet 2 inches if Outside Height Extreme Width is 14 feet 8 inches
-Outside Extreme Width (A186) for Plate Codes C must not exceed 10 feet 0 inches if Outside Height Extreme Width is 14 feet 9 inches
-Outside Extreme Width (A186) for Plate Codes C must not exceed 9 feet 9 inches if Outside Height Extreme Width is 14 feet 10 inches
-Outside Extreme Width (A186) for Plate Codes C must not exceed 9 feet 5 inches if Outside Height Extreme Width is 14 feet 11 inches
-Outside Extreme Width (A186) for Plate Codes C must not exceed 9 feet 2 inches if Outside Height Extreme Width is 15 feet 0 inches
-Outside Extreme Width (A186) for Plate Codes C must not exceed 8 feet 10 inches if Outside Height Extreme Width is 15 feet 1 inches
-Outside Extreme Width (A186) for Plate Codes C must not exceed 8 feet 6 inches if Outside Height Extreme Width is 15 feet 2 inches
-Outside Extreme Width (A186) for Plate Codes C must not exceed 8 feet 3 inches if Outside Height Extreme Width is 15 feet 3 inches
-Outside Extreme Width (A186) for Plate Codes C must not exceed 7 feet 11 inches if Outside Height Extreme Width is 15 feet 4 inches
-Outside Extreme Width (A186) for Plate Codes C must not exceed 7 feet 8 inches if Outside Height Extreme Width is 15 feet 5 inches
-Outside Extreme Width (A186) for Plate Codes C must not exceed 7 feet 4 inches if Outside Height Extreme Width is 15 feet 6 inches
-Outside Extreme Width (A186) for Plate Code E must not exceed 10 feet 8 inches if Outside Height Extreme Width is 15 feet 2 inches or less
-Outside Extreme Width (A186) for Plate Code E must not exceed 10 feet 6 inches if Outside Height Extreme Width is 15 feet 3 inches
-Outside Extreme Width (A186) for Plate Code E must not exceed 10 feet 3 inches if Outside Height Extreme Width is 15 feet 4 inches
-Outside Extreme Width (A186) for Plate Code E must not exceed 9 feet 6 inches if Outside Height Extreme Width is 15 feet 5 inches
-Outside Extreme Width (A186) for Plate Code E must not exceed 8 feet 8 inches if Outside Height Extreme Width is 15 feet 6 inches
-Outside Extreme Width (A186) for Plate Code E must not exceed 7 feet 11 inches if Outside Height Extreme Width is 15 feet 7 inches
-Outside Extreme Width (A186) for Plate Code E must not exceed 7 feet 1 inches if Outside Height Extreme Width is 15 feet 8 inches
-Outside Extreme Width (A186) for Plate Code E must not exceed 6 feet 3 inches if Outside Height Extreme Width is 15 feet 9 inches
-Outside Extreme Width (A186) for Plate Code F must not exceed 10 feet 8 inches if Outside Height Extreme Width is 16 feet 3 inches or less
-Outside Extreme Width (A186) for Plate Code F must not exceed 10 feet 7 inches if Outside Height Extreme Width is between 16 feet 4 inches and 16 feet 6 inches
-Outside Extreme Width (A186) for Plate Code F must not exceed 10 feet 6 inches if Outside Height Extreme Width is 16 feet 7 inches
-Outside Extreme Width (A186) for Plate Code F must not exceed 10 feet 3 inches if Outside Height Extreme Width is 16 feet 8 inches
-Outside Extreme Width (A186) for Plate Code F must not exceed 10 feet 0 inches if Outside Height Extreme Width is 16 feet 9 inches
-Outside Extreme Width (A186) for Plate Code F must not exceed 9 feet 8 inches if Outside Height Extreme Width is 16 feet 10 inches
-Outside Extreme Width (A186) for Plate Code F must not exceed 9 feet 5 inches if Outside Height Extreme Width is 16 feet 11inches
-Outside Extreme Width (A186) for Plate Code F must not exceed 9 feet 2 inches if Outside Height Extreme Width is 17 feet 0 inches
-Outside Extreme Width (A186) for Plate Code N must not exceed 10 feet 8 inches if Outside Height Extreme Width (A187) is 16 feet 9 inches or less
-Outside Extreme Width (A186) for Plate Code N must not exceed 10 feet 6 inches if Outside Height Extreme Width (A187) is 16 feet 10 inches
-Outside Extreme Width (A186) for Plate Code N must not exceed 10 feet 4 inches if Outside Height Extreme Width (A187) is 16 feet 11 inches
-Outside Extreme Width (A186) for Plate Code N must not exceed 10 feet 2 inches if Outside Height Extreme Width (A187) is 17 feet 0 inches
-Outside Extreme Width (A186) for Plate Code N must not exceed 9 feet 11 inches if Outside Height Extreme Width (A187) is 17 feet 1 inch

NOTES:

- For connected unit cars report the dimension of the largest unit in the set.
- Round fraction to the higher inch, e.g., 05 1/4" = 06"

Inside Length — A135

The inside length of the equipment from end to end inside walls, linings, and permanent bulkheads ▲

Used in ETC Generation. Displayed in feet and inches on the Web. Stored in inches.

Range of Values for A135

Minimum	Maximum
20 ft 0 inches	99 ft 3 inches

Validation Rule for A135

-Inside Length/Inside Platform Length must be less than or equal to Outside Length (OSLG)

NOTES:

- Round fraction to the lower inch, e.g., 05 1/4" = 05"
- For connected unit cars report the shortest dimension of a unit in the set.

Inside Width — A138

The inside width of the equipment from side walls and linings

Displayed in feet and inches on the Web. Stored in inches.

Range of Values for A138

Minimum	Maximum

4 ft 0 inches	10 ft 6 inches

Validation Rule for A138

-IFlat Cars of ETC S and Q can only have a minimum Inside Platform Width of 8 feet 0 inches

-IFlat Cars of ETC S and Q can only have a maximum Inside Platform Width of 10 feet 6 inches

-Inside Width/Inside Platform Width must not exceed Outside Extreme Width

NOTES:

- For connected unit cars report the shortest dimension of a unit in the set.

Inside Height A133

The inside height of the equipment from the floor to the top of the side, or to the lowest point of the interior ceiling

Range of Values for A133

Minimum	Maximum
12	169

NOTES:

- For connected unit cars report the shortest dimension of a unit in the set.

DimensionUnit Segment Components

Side Wall Height B195

Measurement from top face of loading pad to top of inside wall on well cars. Component of Unit Segment (ICPSC)

Range of Values for B195

Minimum	Maximum
0.10000000000000001	99.900000000000006

NOTES:

- For connected unit cars report the dimension of the smallest side door height of a unit in the set.

Truck Center Length A276 ■

The length between the centers of the two truck systems

Affects Rating. Displayed in feet and inches on the Web. Stored in inches.

Range of Values for A276

Minimum	Maximum
15 ft 0 inches	64 ft 0 inches

Validation Rule for A276

- Truck Center Length is required for cars with an Outside Length (OSLG) of greater than 62 feet 6 inches

NOTES:

- For connected unit cars report the dimension of the largest unit in the set.

Platform Hght Above Rail *Mandatory* A192 ●■▲

Describes the platform height above the rail in inches

Used in ETC Generation. Affects Rating. Displayed in feet and inches on the Web. Stored in inches.

Range of Values for A192

Minimum	Maximum
0 ft 10 inches	6 ft 0 inches

Validation Rule for A192

-IFlat Cars of ETC Q and S can only have a maximum Platform Height Above Rail/Deck Height Above Ground of 4 feet 0 inches

-IFlat Cars of ETC Q_1_ can only have a minimum Platform Height Above Rail/Deck Height Above Ground of 2 feet 0 inches

-IFlat Cars of ETC Q_1_can only have a maximum Platform Height Above Rail/Deck Height Above Ground of 2 feet 8 inches

-IFlat Cars of Equipment Type codes Q1, Q2, Q3, Q4, Q5, Q6, Q7, Q9 and S, can only have a minimum Platform Height Above Rail/Deck Height Above Ground of 10 feet

-IFlat Cars with Equipment Type codes P1__, P2__, P5__, or P6__ can only have a minimum Platform Height Above Rail/Deck Height Above Ground of 2 feet

-IFlat Cars with Equipment Type codes P1__, P2__, P5__, or P6__ can only have a maximum Platform Height Above Rail/Deck Height Above Ground of 3 feet 3 inches

-IFlat Cars with Equipment Type codes P3__, P4__, P7__, or P8__ can only have a minimum Platform Height Above Rail/Deck Height Above Ground of 3 feet 4 inches

-IFlat Cars of Equipment Type codes P3__, P4__, P7__, P8__, can only have a Max Platform Height Above Rail/Deck Height Above Ground of 05 feet 11 inches

-IFlat Cars of Equipment Type codes P9__can only have Platform Height Above Rail/Deck Height Above Ground of 03 feet 02 inches

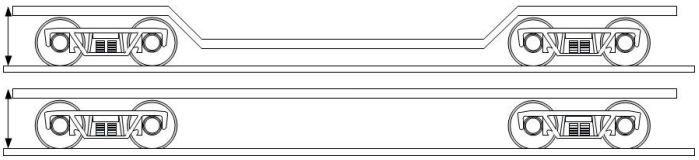
-Platform Height cannot be greater than Outside Height

NOTES:

- EXCEPTIONS: For bi-level and tri-level flat cars, measurement is from top of rail to top of floor of lower deck. Feet in Pos. 45-46, inches in Pos. 47-48. Round fraction to the higher inch, e.g., 05 1/4" = 06". This field must agree relationally for V_ _ _ Equipment Type Codes and P_ _ _.

P_ _ _	MINIMUM—1ft 1in MAXIMUM—4ft 9in
Q_ _ _	MINIMUM—10in MAXIMUM—4ft
S_ _ _	MINIMUM—10in MAXIMUM—4ft
All F_ _ _ except F_3_ and F_6_	MINIMUM—2ft MAXIMUM—5ft 11in
All F_3_, F_6_ and F_9_	MINIMUM—2ft MAXIMUM—8ft 11in
Q8_ _	MINIMUM—2ft 6in MAXIMUM—5ft
P1_ _, P2_ _, P5_ _, P6_ _	MINIMUM—2ft MAXIMUM—3ft 3in
P3_ _, P4_ _, P7_ _, P8_ _	MINIMUM—3ft 4in MAXIMUM—5ft 11in
P9_ _	MINIMUM—3ft 2in MAXIMUM—3ft 2in
Q_1_	MINIMUM—2ft MAXIMUM—2ft 8in

- See diagram below for place of measurement on depressed cars (Equipment Type Code F_3_, F_9) and well cars (Equipment Type Code F_6_).



Bulkhead Top Width B038

Describes the width of the bulkhead

Value does not carry forward for Equipment Group Change.

Range of Values for B038

Minimum	Maximum
25	139

Validation Rule for B038

-If Bulkhead Type is set then Bulkhead Top Width must be set

-If Bulkhead Height Above Platform is set then Bulkhead Top Width must be set

Bulkhd Height Abov Pltfrm B035

Describes the height of the bulkhead

Value does not carry forward for Equipment Group Change.

Range of Values for B035

Minimum	Maximum
36	195

Validation Rule for B035

-If Bulkhead Type is set then Bulkhead Height Above Platform must be set

-If Bulkhead Top Width is set then Bulkhead Height Above Platform must be set

Well Interior Width B226

Most Restrictive Width in Well.

Range of Values for B226

Minimum	Maximum
96	114

Well Interior Length B229

Most Restrictive Length in Well.

Range of Values for B229

Minimum	Maximum
480	720

Well Length Not Defined B301

Stack Well Length Not Classified ▲

Used in ETC Generation.

Permissible Values for B301

Y Yes

Wdth Btween Ext. Rub Rail B209

Measurement between rub rails; Component of Unit Segment (ICPSC)

Range of Values for B209

Minimum	Maximum
0.10000000000000001	99.900000000000006

Specification

Truck Count B256

The total number of trucks on the equipment

System Generated Field. This element is not eligible for Input.

Range of Values for B256

Minimum	Maximum
2	18

Axle Count *Mandatory* A024

The total number of axles on the equipment ● ■

Affects Rating.

Range of Values for A024

Minimum	Maximum
4	36

Validation Rule for A024

-Axle Count must be greater than or equal to 4

-Axle Count for an articulated car must be greater than or equal to ((Connected Unit Count (A020) x 2) + 2)

-Axle Count for a draw bar connected car must be greater than or equal to (Connected Unit Count (A020) x 4)

-Total Axle Count must match sum of truck axle counts

Wheel Bearing Type *Mandatory* B191

Indicates the wheel bearing code for the equipment ● ■

Affects Rating.

Permissible Values for B191

P Plain R Roller

Validation Rule for B191

-Cars with Plain Bearings will have a Transportation Code (TCOD) and Transportation Condition Code (TCCD) of either YA, S_, SX, or XJ

-Equipment cannot have Plain Bearings if Built Date (BLDT) is on or after January 1, 1993

Connector Manufacturer B545

The connector manufacturer, based on the Intermediate Connector Style (B115) of the intermodal flatcar ✹

Permissible Values for B545

AS ASF

CC Columbus Castings (AKA Buckeye)

NA National

SA Cardwell Westinghouse

Validation Rule for B545

-Connector Manufacturer is mandatory for equipment with a Built Date (BLDT) or Rebuilt Date (RBDT) on or after April 1, 2016

-Connector Manufacturer must not be reported if the Intermediate Connector Style (B115) is not reported

-The Connector Manufacturer must be AS, NA, or SA when the Intermediate Connector Style (B115) is Articulated

-The Connector Manufacturer must be AS, NA, or CC when the Intermediate Connector Style (B115) is Drawbar

-The Connector Manufacturer NA can only be reported on cars built or rebuilt prior to January 1, 2003

Deck Container Securement B546

The type of deck container securement of the intermodal flatcar

Permissible Values for B546

NE Not Equipped

PA Pedestal Lock Adjustable

PB Pedestal Lock Adjustable and Retractable

PF Pedestal Lock Fixed

PR Pedestal Lock Retractable

TL Twist Lock

Validation Rule for B546

-Light Weight and Conventional Intermodal Cars, with Equipment Type Codes (UMET) of Q_ _ _ and P_ _ _, that have a Built Date (BLDT) or Rebuilt Date (RBDT) on or after April 1, 2016 must report the type of Deck Container Securement

-Deck Container Securement cannot be reported for Stack Cars with an Equipment Type Code (UMET) of S_ _ _

Bearing Shielded From HBD B021

Indicates the bearing is shielded from the hot box detector

Permissible Values for B021

Y Yes

Brake Shoe Type *Mandatory* B026

Indicates the type of brake shoe on the equipment ●

Permissible Values for B026

C Tread Conditioning

H High Friction Composite

L Low Friction Composite/Cast Iron

CC Side Bearing Type A146

Indicates the travel range of the constant contact side bearings installed on the equipment

Permissible Values for A146

LC Long Travel Constant Contact

SC Short Travel Constant Contact

Validation Rule for A146

-Equipment having Qualification for Increased Gross Rail Load (B344) of 1 must have Constant Contact Side Bearing Type of LC

Empty/Load Device Eqpd B075

Indicates a system that determines if the equipment is empty or loaded, and then varies the braking forces accordingly

Permissible Values for B075

Y Yes

Center of Gravity Empty A045

When empty, indicates the height from Top of Rail to the Center of Gravity

Range of Values for A045

Minimum	Maximum
22	98

Validation Rule for A045

- All cars that exceed Plate Code (A046) C must report Center of Gravity Empty except for cars with Equipment Type Code (UMET) of J_ _ _

Remote Monitoring Device	B176
Indicates the equipment is equipped with a location monitoring device	

Permissible Values for B176

Y Yes
N No

Unit Segment Components

Intermodal Loading Method	B286
Intermodal Flat Loading Method LOLO (ICPSC)	▲

Used in ETC Generation.

Permissible Values for B286

CL Circus and Lift On-Lift Off
LO Lift On-Lift Off
Y Yes
N No

TOFC/COFC Load Wdth Cde	B283
TOFC/COFC Loading Width Code	▲

Used in ETC Generation.

Permissible Values for B283

1 8 feet
2 8 feet 6 inches
3 8 feet and 8 feet 6 inches

Intermodal Transport Serv	B287
Intermodal Flat Transport Service	▲

Used in ETC Generation.

Permissible Values for B287

CO Container Only
TC Trailer or Container
TO Trailer Only

Single Lngth Load Config	B288
Umler Intermodal ETC Loading Configuration	▲

Used in ETC Generation.

Permissible Values for B288

DB0 DBL BOTH Cars not otherwise classified--contact car owner
DB1 DBL BOTH Trailers and/or containers as follows -- 1-40 ft trailer without and 1-45ft trailer with nose mounted reefer, or 2-40 ft trailers with nose mounted reefer, or various combinations of 20ft and 40ft containers and/or trailers, or 1-45ft container with one other container up to 35 ft long
DB2 DBL BOTH Trailers and/or containers as follows -- 2-45ft trailers without nose mounted reefers or various combinations of 20ft and 40ft containers and/or trailers, or 1-45ft container with one other container up to 35ft long
DB3 DBL BOTH Trailers or Containers as follows -- 2-40 ft. trailers or 2-45 ft. trailers or 3-28 ft. trailers, all without front mounted refrigeration units. Cars equipped with container pedestals for carrying various length containers ranging from 20 ft. to 45 ft
DC0 DBL CNTR Cars not otherwise classified--contact car owner
DC1 DBL CNTR 2-40ft containers only
DC2 DBL CNTR 2-40ft or 4-20ft containers and various combinations
DC3 DBL CNTR 2-40ft or 4-20ft containers and various combinations or 1-45ft container with one other container up to 35ft long
DT0 DBL TRLR Cars not otherwise classified, contact owner
DT1 DBL TRLR 2-40ft trailers with or without nose mounted reefers (If 1st Numeric equals 9, car will not handle nose mounted reefers)
DT2 DBL TRLR 1-40ft trailer without and 1-45ft trailer with nose mounted reefer, or 2-40ft trailers with nose mounted reefer
DT3 DBL TRLR 2-45ft trailers
DT4 DBL TRLR Any two trailers with aggregate length up to 90ft
DT5 DBL TRLR 1-40ft trailer without and 1-45ft trailer with nose mounted reefer, or 3-28ft Pups or 2-40ft trailers with nose mounted reefer
DT6 DBL TRLR Any two trailers with aggregate length up to 90ft or 3-28ft Pups
PB0 SGL BOTH All cars
PC0 SGL CNTR Cars not otherwise classified, contact owner
PC1 SGL CNTR 1-40ft and 1-20ft container or 3-20ft containers
PC2 SGL CNTR 1-40ft or 1-40ft 03in container
PT0 SGL TRLR Cars not otherwise classified, contact owner
PT1 SGL TRLR Trailer up to 40ft long
PT2 SGL TRLR Trailer up to 45ft long
PT3 SGL TRLR Trailer up to 48ft long
PT4 SGL TRLR Trailer up to 50ft long
PT5 SGL TRLR Trailer up to 53ft long
PT6 SGL TRLR Trailer up to 57ft long
QB0 Q BOTH Cars not otherwise classified--contact car owner
QB1 Q BOTH One 28ft through 48ft trailer on all platforms or one 40ft through 48ft by 96in or 102in container on all platforms, or two 20ft by 96in or 102in containers on A and B platforms Only
QB2 Q BOTH One 28ft through 53ft trailer on all platforms or one 40ft through 53ft by 96in or 102in container on all platforms, or two 20ft by 96in or 102in containers on A and B platforms Only
QB3 Q BOTH 1-28ft, 1-40ft, 1-45ft, 1-48ft, 1-53ft Trailer on each segment or 1-40ft, 1-45ft, 1-48ft, 1-53ft Container on each segment
QB4 Q BOTH 2-28ft trailer, or 1-40ft or 1-45ft or 1-48ft or 1-53ft or 1-57ft trailer on all platforms, or 1-40ft or 1-45ft or 1-48ft or 1-53ft by 96in or 102in container on all platforms
QB5 Q BOTH 1-20ft, 1-40ft, 1-53ft trailer; 2-20-ft, 2-40ft, 2-53ft containers
QC0 Q CNTR Cars not otherwise classified--contact car owner
QC1 Q CNTR Two 20ft or one 40ft, 45ft or 48ft by 96in by 96in or 102in container(s) on A, B, and D platforms and one 40ft, 45ft or 48ft by 96in or 102in container on C and E platforms
QC2 Q CNTR Two 20ft or one 40ft, 45ft or 48ft by 96in or 102in container(s) on all platforms
QT0 Q TRLR Cars not otherwise classified--contact car owner
QT1 Q TRLR One 40ft-45ft trailer per platform
QT2 Q TRLR One 40ft-48ft trailer per platform
QT3 Q TRLR One 40ft-53ft trailer per platform
QT4 Q TRLR One 40ft-57ft trailer per platform
QT5 Q TRLR One 40ft-45ft trailer per platform with nose mounted reefer units on trailers on A and B platforms Only
QT6 Q TRLR One 28ft-48ft trailer per platform
QT7 Q TRLR Four trailers up to 45ft long, without nose-mounted reefer units per car, or three trailers, up to 56ft long per car, where the center trailer must be 48ft long or longer and Only the center trailer may be equipped with nose-mounted reefer unit and/or 42in king pin settings (deck height is 3ft6in ATR)
QT8 Q TRLR Three trailers up to 56ft long per car, with up to 42in king pin settings and/or nose-mounted reefer units per car. The center trailer must be 48ft long or longer (deck height is 3ft6in ATR)
SA0 IBC Cars not otherwise classified--contact car owner
SA1 IBC 1-40ft, 45ft or 48ft container in well and 1-40, 45ft, 48ft or 53ft container stacked on top of well
SA2 IBC 2-20ft, 1-40ft, 45ft or 48ft container in well and 1-40ft, 45ft, 48ft or 53ft container stacked on top of well
SA3 IBC 2-20ft, 1-40ft, 45ft or 48ft container in well and 1-40ft, 48ft or 53ft container stacked on top of well or 2-28ft trailers or 1-40ft through 53ft trailer in well. Trailers can be either 96in or 102in wide and can be equipped with nose-mounted refrigerator units
SA4 IBC 2-20ft or 28ft containers or 1-40ft, 45ft, 48ft or 53ft container in well and 2-28ft containers, 1-40ft, 45ft, 48ft or 53ft container stacked on top of well
SA5 IBC 2-20ft, 1-40ft, 45ft, 48ft or 53ft container in well and 1-40ft, 45ft, 48ft or 53ft container stacked on top of well

SA6 IBC Container only, Bottom: 2-20ft or 1-40ft; Top: 1 - 40ft, 45ft, 48ft or 53ft container

SA7 IBC Container only, Bottom: 2-20ft or 1-40ft; Top: 1 - 40ft, 45ft, or 48ft container; 53ft container can be loaded in the A and B units if the C unit has a 40ft or 45ft container loaded in it

SA8 IBC Container and Trailer capability, Bottom: 2-20ft or 1-40ft container or 1-28ft trailer; Top: 1 - 40ft, 45ft, or 48ft container; 53ft container can be loaded in the A and B units if the C unit has a 40ft container

SA9 IBC Container and trailer capability, Bottom: 2-20ft, 1-40ft, 45ft, 48ft or 53ft container; Top: 1 - 40ft, 45ft, 48ft , or 53ft container. Trailer: 2-28ft, 1-40ft, 1-45ft, 1-48ft, 1-53ft or 1-57ft

SB0 5Well IBC Cars not otherwise classified--contact car owner

SB1 5Well IBC 2-20ft or 1-40ft container(s) in end wells and 1-40ft container only in intermediate wells with 1-40ft, 45ft or 48ft container stacked on top of all wells

SB2 5Well IBC 2-20ft or 1-40ft container(s) in all wells and 1-40ft, 45ft or 48ft container stacked on top of all wells

SB3 5Well IBC 1-40ft or 45ft container in all wells and 1-40ft, 45ft, 48ft or 53ft container stacked on top of all wells

SB4 5Well IBC 1-40ft, 45ft or 48ft container in all wells and 1-40ft, 45ft, 48ft or 53ft container stacked on top of all wells

SB5 5 Well IBC 2-20ft or 1-40ft container(s) in end wells and 1-40ft or 45ft container in intermediate wells with 1-40ft, 45ft or 48ft container stacked on top of all wells and 53ft on A, B, D units if 40ft on C & E units

SB6 5Well IBC 2-20ft or 1-40ft container(s) in end wells and 1-40ft, 45ft or 48ft container in intermediate wells with 1-40ft, 45ft or 48ft container stacked on top of all wells and 53ft containers stacked only on top of intermediate wells

SB7 5Well IBC 2-20ft or 2-24ft or 1-40ft or 1-45ft or 1-48ft container(s) in all wells with 1-40ft or 1-45ft or 1-48ft or 1-53ft container stacked on top of all wells

SB8 5Well IBC 2-20ft or 24ft or 1-40ft or 1-45ft or 1-48ft container(s) in the end wells and 1-40ft or 1-45ft or 1-48ft container in the intermediate wells with 1-40ft or 1-45ft or 1-48ft or 1-53ft stacked on top of all wells

SB9 5well IBC Container only, Bottom: 2-20ft or 1-40ft container; Top: 1 - 40ft, 45ft, or 48ft container; a 53ft container could be loaded in the A, B, and D units if the C and E unit has a 40ft container

SC0 5Well BLK Cars not otherwise classified--contact car owner

SC1 5Well BLK 2-20ft or 1-40ft container(s) in end wells and 40ft containers only in intermediate wells with 40ft or 48ft containers stacked on top of all wells

SC2 5Well BLK 2-20ft or 1-40ft container(s) in end wells and 40ft containers only in intermediate wells with 40ft, 45ft or 48ft containers stacked on top of all wells

SC3 5Well BLK 2-20ft or 1-40ft container(s) in end wells and 40ft containers only in intermediate wells with 40ft containers stacked on end wells and 40ft or 45ft containers stacked on intermediate wells

SC4 5Well BLK 2-20ft or 1-40ft container(s) in all wells with 40ft or 48ft containers stacked on top of all wells

SC5 5Well BLK 2-20ft or 1-40ft container(s) in all wells with 40ft, 45ft or 48ft containers stacked on top of all wells

SC6 5Well BLK 1-40ft container only in end wells and 2-20ft or 1-40ft container(s) in intermediate wells with 40ft or 48ft containers stacked on top of all wells

SC7 5Well BLK 1-40ft container only in end wells and 2-20ft or 1-40ft container(s) in intermediate wells with 40ft, 45ft or 48ft containers stacked on top of all wells

SC8 5Well BLK 1-40ft container in all wells with 1-40ft or 1-45ft container stacked on top of all wells

SC9 5Well BLK 2-20ft or 1-40ft container(s) in all wells with 1-40ft or 1-45ft container stacked on top of all wells

SD1 5Well, IBC Container, Bottom: 1-40ft container; Top: 1 - 40ft, 45ft, or 48ft container; 53ft container can be loaded on A, B, D units when 40ft containers are in C & E units. No 20ft containers, no Trailers

SD2 5Well, IBC Container, Bottom: End Units: 2-20ft, 1-40ft, 45ft container in well; Intermediate Units: 1-40ft or 45ft; Top: 1 - 40ft, 45ft, or 48ft container; 53ft container can be loaded on A, B, D units when 40ft containers are in C & E units

SD3 IBC Container, Bottom: 1-40ft, 45ft, 48ft or 53ft container; Top: 1 - 40ft, 45ft, 48ft, or 53ft container. No 20ft containers, no Trailers

SD4 5Well IBC 2-20ft or 1-40ft container(s) in end wells and 1-40ft container only in intermediate wells with 1-40ft, 45ft, or 48ft container stacked on top of all wells. 53ft on A, B, D units if 40ft on C & E units

SD5 5Well IBC 2-20ft or 1-40ft container(s) in A Unit; 1-40ft container(s) in B Unit, 1-40ft or 1-45ft container in intermediate wells with 1-40ft, 45ft or 48ft container stacked on top of all wells. 53ft on A. B, D units if 40ft on C & E units

SD6 5 Well BLK 2-20ft or 1-40ft container(s) in end wells and 40ft containers only in intermediate wells, with 40ft containers stacked on top of intermediate wells and 40ft or 45ft containers stacked on top of end wells

SD7 5Well IBC 2-20ft or 1-40ft or 1-45ft or 1-48ft container(s) in the end wells and 1-40ft or 1-45ft or 1-48ft container in the intermediate wells with 1-40ft or 1-45ft or 1-48ft or 1-53ft stacked on top of all wells, with SGL TRLR trailer up to 53 ft long, hitched

Validation Rule for B288

-Equipment with Mechanical Designation of FCC can only have Single Length Load Configurations of PT#, PB#, PC#, DT#, DB#, or DC#

-Equipment with Equipment Descriptors of FCW or FCWA can only have Single Length Load Configurations of SA#, SB#, SC# or SD#

-Equipment with Equipment Descriptors of FCL or FLCA can only have Single Length Load Configuration of QT#, QB#, or QC#

Stack Design Not Defined B299

Stack Connection/Design Not Classified ▲

Used in ETC Generation.

Permissible Values for B299

Y Yes

Truck Tonnage Capacity B300

Truck Capacity For Stack Cars Only ▲

Used in ETC Generation.

Permissible Values for B300

70 70 Ton 100 100 Ton 125 125 Ton

Validation Rule for B300

- Intermodal Truck Tonnage Capacity must equal 70 when the Connected Unit Count (A020) is blank and the Wheel Diameter (A294) equals 33 or less
- Intermodal Truck Tonnage Capacity must equal 100 when the Connected Unit Count (A020) is blank and the Wheel Diameter (A294) equals 36
- Intermodal Truck Tonnage Capacity must equal 125 when the Connected Unit Count (A020) is blank and the Wheel Diameter (A294) equals 38

Securement Type ETC Gen B302

Securement Type For ETC Gen ▲

Used in ETC Generation.

Permissible Values for B302

BLK Bulkhead IBC

AEI High Temperature Tag B006

Indicates the equipment is equipped with a high temperature AEI tag

Permissible Values for B006

Y High Temperature Tag

Connected Unit Count A020

Indicates the number of units within an articulated or multi-unit equipment ■▲

Used in ETC Generation. Affects Rating.

Range of Values for A020

Minimum	Maximum
1	9

Validation Rule for A020

-Connected Unit Count must equal the number of Unit Segments
-Connected Unit Count must be reported for equipment with equipment descriptors of FCLA or FCWA
-Unit Segment Component elements must not be reported if the Connected Unit Count is not reported
-Connected Unit Count cannot be reported for equipment with equipment descriptors of FCL, FCW, or FCC
-Unit Segment Component elements must be reported if Connected Unit Count is reported
-Equipment Type Codes P---, Q-1-, and S-1- cannot have a Connected Unit Count

Intermediate Conn Style — B115

Indicates the method by which two or more pieces of equipment are connected

Permissible Values for B115

A Articulated Connector
D Drawbar Connector

Validation Rule for B115

-Intermediate Connector Style is required for multi-unit equipment
-Intermediate Connector Style must not be reported for single unit equipment

Operating Brakes *Mandatory* — A182

The number of air brake control valves on the equipment (excludes hand brakes). One control valve consists of a service portion, emergency portion, and pipe bracket. Example: DB-60 control valve ●

Permissible Values for A182

1 2 3 4 5
6 7 8 9

Validation Rule for A182

-Operating Brakes must be reported for all equipment
-Operating Brakes (A182) must be 1 for non-articulated equipment with an Axle Count (A024) equal to 4

ECP Brake Type — B327

Indicates the type of electronic controlled pneumatic brake used on the equipment ✹

Permissible Values for B327

N Not Equipped
O Overlay - Both ECP & Air Brake
S Stand Alone - ECP Only

Validation Rule for B327

-Equipment must have a value entered for ECP Brake Type if built or rebuilt after June 28, 2012

ECP Brake Builder — B328

The manufacturer of the electronic controlled pneumatic brake used on the equipment

Permissible Values for B328

NYAB New York Air Brake
WABT WABTEC

Validation Rule for B328

-If ECP Brake Type (B327) is Stand Alone or Overlay then a value must be entered for ECP Brake Builder
-If ECP Brake Type (B327) is Not Equipped then ECP Brake Builder is not reportable

Slack Adjuster Group — B538

The slack adjuster group on the equipment per AAR Field Manual Rule #8 ✹

Value does not carry forward for Single Clone / Multi-Clone.

Permissible Values for B538

A	Group A	B	Group B	C	Group C	D	Group D
E	Group E	F	Group F	G	Group G	H	Group H
J	Group J	L	Group L	M	Group M	N	Group N
O	Group O	P	Group P	Q	Group Q	R	Group R
1	Internal	2	Unequipped				

Validation Rule for B538

- Slack Adjuster Group is mandatory for all equipment built or rebuilt on or after January 1, 2016
- If Slack Adjuster Group is reported as "1" then Brake Cylinder Mount Type (B540) must be reported as "T"
- If Slack Adjuster Group is "1" or "2", then Slack Adjuster CID (B359) must not be reported.

NOTES:

- Permissible value of "1 – Internal" identifies special truck mounted internal slack adjuster within brake cylinder.

Brake Cylinder Mount Type — B540

Identifies the location of the brake cylinder ✹

Permissible Values for B540

B Body Mounted
T Truck Mounted

Validation Rule for B540

- Brake Cylinder Mount Type is mandatory for all equipment built or rebuilt on or after January 1, 2016

Equipment Builder — A035

Identifies the original manufacturer of the equipment ✹

Permissible Values for A035

ACF	American Car & Foundry
ACFX	ACF Industries
ARI	ARI Industries
BETH	Bethlehem Car Works
BSP	Bethlehem Steel Corporation
CONC	Concarrill
CURR	Curry Rail Service
DIFC	Difco
EDSP	ESTRATEGIAS DUL S. DE R.L.
ERSB	Ebenezer Railcar
FCA	Freight Car America
FMC	FMC Corporation
GMB	Greenbrier
GSC	Greenville Steel Car
GUN4	Gunderson - Trenton Works
GUND	Gunderson Inc
GUNM	Gunderson - Mexico
HST	Hawker Siddeley
HYUN	Hyundai
JAC	Johnstown America Corporation
KASG	Kasgro Railcar
MRNE	Marine Industries
NACA	National Alabama Corporation
NSC	National Steel Car
PS	Pullman-Standard
THRL	Thrall
TREN	Trenton Works
TRIN	Trinity
UNKN	Unknown
V	OWNER RAILROAD
WABN	Wabash National

Validation Rule for A035

-Equipment Builder must be populated if the Built Date (BLDT) is July 1, 2010 or newer
-Equipment built or rebuilt on or after July 1, 2010 cannot have a Equipment Builder of Unknown

-Equipment with a Built Date (BLDT) on or after July 1, 2010 cannot have an Equipment Builder of OWNER RAILROAD.
-Equipment Builder can have a value of MULT only if the equipment has multiple units.

Builder Lot Code B030

A unique identifier for a group of equipment built by one manufacturer under the same builder specification ✹

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Validation Rule for B030

-Equipment built or rebuilt on or after June 28, 2012 must have a value for Builder Lot Code

Built Country B031

The country where the equipment was constructed

Data is Confidential.

Permissible Values for B031

CA	Canada	MX	Mexico
US	United States		

Rebuilt Country B170

The country where the equipment was re-constructed

Permissible Values for B170

CA	Canada	MX	Mexico
US	United States		

FRA Reflectorization B096

Indicates the equipment owner assumes responsibility for applying reflectorization tape

Permissible Values for B096

P	Reflectorization Plan
W	Reflectorization Waiver

Validation Rule for B096

-Reflectorization is mandatory for all equipment after November 28, 2015.

Air Hose Arrangement B524

The type of trainline air hose arrangement ✹

Permissible Values for B524

A	S-424 Angle Cock Location
B	S-425 Angle Cock Location on Cars Equipped with AAR Type F Coupler
C	S-426 Angle Cock Location on Cars with Floating Sills
D	S-427 Angle Cock and Air Brake Hose Location on Cars with Excessive Overhang Preventing Compliance with AAR Standards
E	S-428 Angle Cock Location on Cars Equipped with AAR Type F Coupler and Cushioned Underframe
F	S-4003 (Former Standard)
G	S-4003x (Former Standard Retrofitted to Meet All Dimensions Except Height)
H	S-4003-05 (Current Standard Train Line Arrangement for Cars with F-Shank Couplers)
I	S-4021 Angle Cock and Brake Hose Location on Cars with EOCC (E and F)
J	S-4021 Coupler Mounted Bracket End Arrangement
K	S-4028 Train Line Arrangement with Displaceable Union on Cars with EOCC and Couplers Not Exceeding 45 in. in Length
L	S-4029 Train Line Arrangement with Displaceable Union on Cars with EOCC and Couplers Exceeding 45 in. in Length
M	S-4030 Trolley Arrangement on Cars with EOCC and E-Shank Couplers

Validation Rule for B524

-Air Hose Arrangement must be reported for this equipment if it is Built or Rebuilt on or after April 22, 2014.

NOTES:

- If any of the following conditions apply, Air Hose Arrangement (B524) must be reported for cars Built or Rebuilt on or after April 22, 2014:
  - Draft Gear Type (B073) at any location is C or E.
  - Connected Unit Count (A020) is reported.
  - Outside Length (OSLG) is greater than or equal to 70 feet (840 inches).
  - The overhang is greater than 5 feet 6 inches (66 inches). Overhang is calculated as follows:
  - 0.5 * (Outside Length, in inches, minus Truck Center Length, in inches, minus 31 inches)
  - For all other equipment, reporting Air Hose Arrangement is optional.

4-Pressure ABT Receiver Eqpd B539

Identifies if the equipment is equipped with a 4-pressure air brake test receiver

Value does not carry forward for Single Clone / Multi-Clone.

Permissible Values for B539

E	Equipped
N	Not Equipped

NOTES:

- An "E" will be system generated if a 4-Pressure ABT is reported on the equipment.

Feature

Floor Material A104

Describes the type of construction material used for the equipment floor

Permissible Values for A104

05	Composite Nailable (considered same as wood
06	Composite Nailable, Reinforced (considered same as wood)
14	Other
15	Other, Reinforced
19	Standard Steel
21	Steel Floor, (straight deck) without risers (F-8-)
23	Steel Nailable (includes alternate wood and steel floor
24	Steel Nailable, Reinforced (includes alternate wood and steel floor
25	Standard Steel, Reinforced
27	Unknown
30	Wood
33	Wood, Double, Reinforced
34	Wood Floor with Steel Protective Plates (includes perforated steel)
35	Wood Floor, Reinforced, with Steel Protective Plates (includes perforated steel)
36	Wood Floor, Reinforced

Bridge Plate Type B029

Component (ICPSC) ▲

Used in ETC Generation.

Permissible Values for B029

B	Both Stub Bridge Plate & Portable Bridge Plate
P	Portable

Portable Brdge Plate Cap. B284

Portable Bridge Plate Capable ▲

Used in ETC Generation.

Permissible Values for B284

Y	Yes

Bulkhead Type B034

Identifies the type of bulkhead attached to the equipment

Value does not carry forward for Equipment Group Change.

Permissible Values for B034

F	Fixed	L	Fixed with Flipper

Validation Rule for B034

-If Bulkhead Height Above Platform is set then Bulkhead Type must be set
-If Bulkhead Top Width is set then Bulkhead Type must be set

Cost

Original Cost A184

The original manufacturer selling price ✹

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for A184

Minimum	Maximum
0	9999999

Validation Rule for A184

-Original Cost must be equal to the Ledger Value if there are no Additions & Betterments.

-Original Cost must be equal to the Ledger Value if Additions & Betterments Indicator is not reported.

-Railroad marked freight cars except MISC, LOCO, TRLR, CONT, CHSS, STWH, EOTD, and PSGR are required to have an Original Cost

-Private marked freight cars except MISC, LOCO, TRLR, CONT, CHSS, STWH, EOTD, and PSGR are required to have an Original Cost if Built Date (BLDT) is on or after January 1, 2015

NOTES:

- Original Cost is never altered. It is the cost of the equipment to the original owner.
- For railroad-marked cars, report in US dollars the original ledger value of the original owner For cars rebuilt, report the cost prescribed in MR Interchange Rule 88 and Circular Letter OT-24
- The original cost is used in the settlement of AAR Interchange Rule 107 Office Manual.
- For connected unit cars report the total original cost for all units in the set. Numeric, applicable to all railroad-marked cars Also, applicable to privately marked covered hopper (LO) cars.
- Raise all cents to the next dollar, e.g. $5,501.02 = 0005502

Ledger Value A150

The sum of original cost and additions & betterments

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for A150

Minimum	Maximum
0	9999999

Validation Rule for A150

-Original Cost must be equal to the Ledger Value if there are no Additions & Betterments.

-Ledger Value must equal the Original Cost (A184) plus the additions & betterments, if Total A&B (A003) has been reported. Otherwise Ledger Value should equal Original Cost (A184).

Total A&B A003

System generated sum of all reported amounts in A&B Amount (A317), in US dollars

Data is Confidential. System Generated Field. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for A003

Minimum	Maximum
0	99999999

NOTES:

- For railroad-marked cars, report the sum of all additions and betterments applied to the car. This value is for record keeping purposes only and will not be used to report Ledger Value.
- For private Cars report the additions and betterments as qualified under AAR interchange Rule 107 for determination of settlement value.
  - Additions are costs of all new components applied subsequent to the date the car was built or rebuilt and carried in the capital investment account.
  - Betterments are costs of all improvements of components of existing equipment through the substitution of superior parts for inferior parts subsequent to the date the car was built of rebuilt.
- For connected unit cars report the total Truck Location A for all units in the set

Ind for Pos/Neg Total A&B A128

A code indicating the positive or negative adjustment to the original cost of the equipment

Data is Confidential. System Generated Field. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Permissible Values for A128

N Negative P Positive

A&B Pos/Neg Ind A316

A code indicating the positive or negative adjustment to the individual addition and betterment

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Permissible Values for A316

N Negative P Positive

Validation Rule for A316

-When entering an individual Addition & Betterment, you must enter a value in all 4 fields.

-The A&B Indicator is required when Additions & Betterments are reported.

-The A&B Indicator must not be reported if Additions & Betterments are not reported.

A&B Amount A317

The amount of the individual addition and betterment added to or subtracted from the original cost of the equipment

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for A317

Minimum	Maximum
1	999999

Validation Rule for A317

-When entering an individual addition & betterment; A&B Date Done (A319), A&B Type (A318), A&B Pos/Neg Ind (A316), and A&B Amount (A317) must be reported

A&B Date Done A319

The date of the individual addition and betterment

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for A319

Minimum	Maximum
1/1/1900	12/31/9999

Validation Rule for A319

-When entering an individual Addition & Betterment, you must enter a value in all 4 fields.

-Addition and Betterment Date Done cannot be earlier than Built Date (BLDT).

-Additions & Betterments Date Done cannot be later than today's date.

A&B Type A318

The type of individual addition and betterment as defined by Rule 107

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Permissible Values for A318

FLLD	Other permanently installed loading equipment used on flat cars
GNRL	General - Capitalized Additions and Betterments
INIT	Initial load of historical A&B amount as of Umler 4.6 implementation date

Validation Rule for A318

-For each equipment, only one Individual A&B Type can have a value of INIT.

-When entering an individual Addition & Betterment, you must enter a value in all 4 fields.

Car Management

Pool Number P001

Unique number used to indicate the grouping of equipment for a particular purpose

Used for Transportation Codes. This element is not eligible for Input. Value does not carry forward for Equipment Group Change / Add Back.

Pool Control TCPC

Pool Control

System Generated Field. Used for Transportation Codes. This element is not eligible for Input, Output or Query.

NOTES:

- For further explanation reference Appendices C and E.

User Routing Instructions TCUR

The routing instruction reported by the user

Used for Transportation Codes.

Permissible Values for TCUR

2	Trailer Service Rule 2
G	Contaminated commodity service
M	Mark canceled
O	Owner requested return
U	Unassigned equipment

NOTES:

- For further explanation reference Appendix E.

Umler Transportation Code TCOD

The type of assigned service, empty routing or restriction of the equipment

System Generated Field. Used for Transportation Codes. This element is not eligible for Input.

NOTES:

- For further explanation reference Appendix E.

Transportation Cond Code TCCD

The AAR or FRA interchange restriction code

System Generated Field. Used for Transportation Codes. This element is not eligible for Input.

NOTES:

- For further explanation reference Appendix E.

Mechanical Restriction TCME

User reported or system generated type of mechanical restriction

Used for Transportation Codes.

Permissible Values for TCME

S	Scrap
X	AAR Interchange Restriction
Y	FRA Interchange Prohibited

NOTES:

- For further explanation reference Appendix D.1

Mech Restriction Reason TCMR

The explanation of the Mechanical Restriction (TCME)

Used for Transportation Codes.

Permissible Values for TCMR

A	Restricted Due to Age (Over 40-AAR, Over 50-FRA)
B	Restricted Due to Air Brakes
C	Restricted Due to Axles
D	Restricted Due to Couplers and Couplers Parts
F	Restricted Due to Couplers Yokes
G	Restricted Due to Draft Gears
J	Restricted Due to Journal Bearing and Journal Lubrication
N	Restricted Due to Trucks
P	Restricted Due to Truck Side Frames
T	Restricted Due to Trucks Bolsters
U	Restricted by AAR or Owner
W	Restricted Due to Wheels
X	Restricted Due to Scrap or Early Warning
Z	Restricted Due to Umler Conflict (Not Valid for User Input)

NOTES:

- For further explanation reference Appendix D.2.
- The assignment of the Transportation Codes S_, SX, XA, XZ and YA generate the Rate Indicator Code 6 to the CHARM file to zero (0) rate the car hire and mileage rate.

Sys Gen Routing Inst TCGR

The routing instruction generated by the system

System Generated Field. Used for Transportation Codes. This element is not eligible for Input.

NOTES:

- For further explanation reference Appendix E.5.

Loading Authority Fleet Status B597

Identifies when a car is listed on a fleet in the Loading Authority application

System Generated Field. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Permissible Values for B597

Y	Yes
S	Suspended

NOTES:

- • When equipment is on a fleet the Loading Authority (LA) application will update the flag to 'Y – Yes'. When equipment is removed from a fleet the LA application will remove the 'Y – Yes'.
- When equipment is on a LA fleet that is suspended the LA application will update the flag to 'S – Suspended'. When the equipment is on a LA fleet that is no longer suspended the LA application will update the flag to 'Y – Yes'.

Train Service

Restricted Speed Empty B180

Describes the maximum restricted speed the equipment can travel when empty

Range of Values for B180

Minimum	Maximum
5	95

Restricted Speed Loaded B181

Describes the maximum restricted speed the equipment can travel when loaded

Range of Values for B181

Minimum	Maximum
5	95

Shove Car to Rest B189

Identifies the car must be moved to rest by locomotive

Permissible Values for B189

Y	Yes

Shove Adj. Car to Rest B188

Identifies the adjacent car must be shoved to rest by locomotive

Permissible Values for B188

Y	Yes

Train Position Sensitive B211

Indicates there is a physical reason, limiting its position on a train

Permissible Values for B211

Y	Yes

End of Train Only B277

Indicates the equipment must be placed at the end of the train (including per AAR RP-2001)

Permissible Values for B277

Y Yes

Check Trailing Tonnage B044

Indicates the equipment has restrictions on trailing tonnage

Permissible Values for B044

Y Yes

Curve Negotiate Exception B178

Describes the requirement for negotiating a curve

Permissible Values for B178

A Restrictive Curve Negotiability, Section 2.1.4 of M-1001

B Does not meet all Chapter XI Curving Requirements

Cooper Rating Exception B273

Describes the cooper rating (weight distribution model of the equipment), for use in movement across bridges

Permissible Values for B273

A Excessive Cooper Rating

B Cooper Rating in Excess of E66

Clearance Exception B275

Describes equipment containing nonstandard dimension

Permissible Values for B275

A Excessive Outside Extreme Height (A185)

B Excessive Outside Extreme Width (A186)

C Lower Guides for Loading High Cube Containers

D All other unique clearance issues

Loaded Net Braking Ratio B551

Indicates calculated minimum loaded net braking ratio per AAR Specifications in place on built or rebuilt date (in percent).
System Generated Field. This element is not eligible for input.

Permissible Values for B551

– 11.0

– 8.5

NOTES:

- Loaded Net Braking Ratio is determined as follows:
  - If Built Date (BLDT) or Rebuilt Date (RBDT) is less than 1/1/1972, then Loaded Net Braking Ratio will be set to blank.
  - If Built Date (BLDT) or Rebuilt Date (RBDT) is greater than or equal to 1/1/2004, or if Equipment Type Code (UMET) begins with "Q" or "S", then Loaded Net Braking Ratio is 11.0%.
  - For all other equipment, Loaded Net Braking Ratio is 8.5%.

Owner-Provided Loaded Net Braking Ratio B552

Indicates an alternate minimum loaded net braking ratio provided by owner (in percent).

Range of Values for B552

Minimum	Maximum
8.5	14.0

NOTES:

- Owner may enter a documented alternative minimum loaded net braking ratio in this field that is greater than the system calculated Loaded Net Braking Ratio (B551).
- When reported, the Owner-Provided Loaded Net Braking Ratio will be used in PTC stopping distance calculations.
- A change in value for the following elements will cause the Owner-Provided Loaded Net Braking Ratio to reset to blank:
  - Rebuilt Date (RBDT)
  - Gross Rail Load/Weight (A266)
  - Equipment Type Code (UMET)
  - Empty/Load Device Eqpd (B075)

Empty Braking Ratio B553

Indicates calculated empty braking ratio per AAR Specifications in place on built or rebuilt date (in percent).
System Generated Field. This element is not eligible for input.

Range of Values for B553

Minimum	Maximum
15.0	38.0

NOTES:

- Empty Braking Ratio is determined as follows:
  - If Built Date (BLDT) or Rebuilt Date (RBDT) is less than 1/1/1972, then Empty Braking Ratio will be set to blank.

Owner-Provided Empty Braking Ratio B554

Indicates an owner supplied alternate empty braking ratio (in percent).

Range of Values for B554

Minimum	Maximum
15.0	38.0

NOTES:

- Owner may enter a documented alternative minimum loaded net braking ratio in this field that is greater than the system calculated Loaded Net Braking Ratio (B551).
- When reported, the Owner-Provided Loaded Net Braking Ratio will be used in PTC stopping distance calculations.
- A change in value for the following elements will cause the Owner-Provided Loaded Net Braking Ratio to reset to blank:
  - Rebuilt Date (RBDT)
  - Gross Rail Load/Weight (A266)
  - Equipment Type Code (UMET)
  - Empty/Load Device Eqpd (B075)

Truck Components

Axle Spacing Distance *Mandatory* B020

The distance between axle centers on the same truck ●■

Affects Rating.

Permissible Values for B020

53 53 Inches
54 54 Inches
55 55 Inches
60 60 Inches
61 61 Inches
62 62 Inches
63 63 Inches
64 64 Inches
65 65 Inches
66 66 Inches
68 68 Inches
70 70 Inches
71 71 Inches
72 72 Inches
73 73 Inches
74 74 Inches
76 76 Inches
78 78 Inches
99 Axle Space Unknown

Truck Axle Count B252

The number of axles per truck

Range of Values for B252

Minimum	Maximum
1	4

Validation Rule for B252

- Sum of Truck Axle Counts must equal Axle Count (A024)

Journal Size *Mandatory* **A147**

The size of the journal bearing ● ■

Affects Rating.

Permissible Values for A147

A	3-3/4 X 7	B	4-1/4 X 8	C	5 X 9
D	5-1/2 X 10	E	6X11	F	6-1/2 X 12
G	7 X 12	H	7 X 14	K	6-1/ 2X 9
M	7 X 9				

Validation Rule for A147

-4-axle equipment with Journal Size B and Star Code (A247) is not populated, must have Gross Rail Load (A266) of 103,000 lbs.

-4-axle equipment with Journal Size C and Star Code (A247) is not populated, must have Gross Rail Load (A266) of 142,000 lbs.

-4-axle equipment with Journal Size D and Star Code (A247) is not populated, must have Gross Rail Load (A266) of 177,000 lbs.

-4-axle equipment with Journal Size E and Star Code (A247) is not populated, must have Gross Rail Load (A266) of 220,000 lbs.

-4-axle equipment with Journal Size F or K, Star Code (A247) is not populated, and Qualification for Increased Gross Rail Load (B344) is not populated, must have Gross Rail Load (A266) of 263,000 lbs.

-4-axle equipment with Journal Size F or K, Star Code (A247) is not populated, and Qualification for Increased Gross Rail Load (B344) of 2, must have Gross Rail Load (A266) of 286,000 lbs.

-4-axle equipment with Journal Size F or K, Star Code (A247) is not populated, and Qualification for Increased Gross Rail Load (B344) of 3, must have Gross Rail Load (A266) of 286,000 lbs.

-4-axle equipment with Journal Size G, K, or M, Star Code (A247) is not populated, and Qualification for Increased Gross Rail Load (B344) of 1, must have Gross Rail Load (A266) of 286,000 lbs.

-4-axle equipment with Journal Size G, K, or M, Star Code (A247) is not populated, and Qualification for Increased Gross Rail Load (B344) is not populated, must have Gross Rail Load (A266) of 315,000 lbs.

-4-axle equipment with Journal Size G, K, or M, Star Code (A247) is not populated, and Qualification for Increased Gross Rail Load (B344) of 1, must have Gross Rail Load (A266) of 286,000 lbs.

-4-axle equipment with Journal Size B and Star Code (A247) is not populated, must have Gross Rail Load (A266) of 103,000 lbs.

-4-axle equipment with Journal Size C and Star Code (A247) is not populated, must have Gross Rail Load (A266) of 142,000 lbs.

-4-axle equipment with Journal Size D and Star Code (A247) is not populated, must have Gross Rail Load (A266) of 177,000 lbs.

-4-axle equipment with Journal Size E and Star Code (A247) is not populated, must have Gross Rail Load (A266) of 220,000 lbs.

-4-axle equipment with Journal Size F or K, Star Code (A247) is not populated, and Qualification for Increased Gross Rail Load (B344) is not populated, must have Gross Rail Load (A266) of 263,000 lbs.

-4-axle equipment with Journal Size F or K, Star Code (A247) is not populated, and Qualification for Increased Gross Rail Load (B344) of 2, must have Gross Rail Load (A266) of 286,000 lbs.

-4-axle equipment with Journal Size F or K, Star Code (A247) is not populated, and Qualification for Increased Gross Rail Load (B344) of 3, must have Gross Rail Load (A266) of 286,000 lbs.

-4-axle equipment with Journal Size G, K, or M, Star Code (A247) is not populated, and Qualification for Increased Gross Rail Load (B344) of 1, must have Gross Rail Load (A266) of 286,000 lbs.

-4-axle equipment with Journal Size G, K, or M, Star Code (A247) is not populated, and Qualification for Increased Gross Rail Load (B344) is not populated, must have Gross Rail Load (A266) of 315,000 lbs.

NOTES:

- A, B and C Journal Classes are prohibited in Interchange per Rule 90.B.4
- A, B, and C Journal Sizes are restricted from interchange and will receive the Mechanical Restriction XJ

Wheel Diameter *Mandatory* **A294**

The diameter of the wheels ●

Permissible Values for A294

33 33 Inches 36 36 Inches 38 38 Inches

Validation Rule for A294

-Equipment with a Qualification for Increased Gross Rail Load of 1 and Journal Size (A147) of G or M must have a Wheel Diameter of 38

- Equipment with Qualification for Increased Gross Rail Load (B344) of 1, and Journal Size (A147) of K, must have Wheel Diameter of 36

-If Connected Unit Count (A020) is not reported, different Wheel Diameters cannot be reported

Stability Device Equipped **B199**

Indicates a stability device is present on the truck ■

Affects Rating.

Permissible Values for B199

Y Yes

Bolster Component ID **B351**

Bolster Component ID from Component Registry

Data is Confidential. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Sideframe Component ID **B352**

Side Frame Component ID from Component Registry

Data is Confidential. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Wheelset Component ID **B350**

Component ID from Component Registry

Data is Confidential. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Draft System Components

Coupler Code **A057**

Defines the equipment coupler type

Permissible Values for A057

BE60AHT	Type E (Rule 16) - BE60AHT
BE60BHT	Type E Obsolete (Rule 16) - BE60BHT
BE63AHT	Type E Obsolete (Rule 16) - BE63AHT
BE63HT	Type E (Rule 16) - BE63HT
BE67HT	Type E (Rule 16) - BE67HT
E42BEX	Type E/F (Rule 17) - E42BEX
E50ARE	Type E/F (Rule 17) - E50ARE
E50BEX	Type E/F (Rule 17) - E50BEX
E60CC	Type E (Rule 16) - E60CC
E60CE	Type E (Rule 16) - E60CE
E60CEX	Type E (Rule 16) - E60CEX
E60CHT	Type E (Rule 16) - E60CHT
E60CHTE	Type E (Rule 16) - E60CHTE
E60CHTQ	Type E (Rule 16) - E60CHTQ
E60DC	Type E (Rule 16) - E60DC
E60DE	Type E (Rule 16) - E60DE
E60EE	Type E (Rule 16) - E60EE
E61	Type E Obsolete (Rule 16) - E61
E67AHT	Type E (Rule 16) - E67AHT
E67BC	Type E (Rule 16) - E67BC
E67BE	Type E (Rule 16) - E67BE
E67BHT	Type E (Rule 16) - E67BHT

E67BHTE	Type E (Rule 16) - E67BHTE
E68BHTQ	Type E/F (Rule 17) - E68BHTQ
E67CC	Type E (Rule 16) - E67CC
E67CE	Type E (Rule 16) - E67CE
E68AHT	Type E/F Obsolete (Rule 17) - E68AHT
E68AHTE	Type E/F Obsolete (Rule 17) - E68AHTE
E68BC	Type E/F (Rule 17) - E68BC
E68BE	Type E/F (Rule 17) - E68BE
E68BHT	Type E/F (Rule 17) - E68BHT
E68BHTE	Type E/F (Rule 17) - E68BHTE
E68CE	Type E/F (Rule 17) - E68CE
E68DE	Type E/F Obsolete (Rule 17) - E68DE
E69AE	Type E/F (Rule 17) - E69AE
E69AHTE	Type E/F (Rule 17) - E69AHTE
E69BE	Type E/F (Rule 17) - E69BE
E69CE	Type E/F (Rule 17) - E69CE
E69CEX	Type E/F (Rule 17) - E69CEX
E69HTE	Type E/F (Rule 17) - E69HTE
E69LCE	Type E/F (Rule 17) - E69LCE
EB7AHT	Type E (Rule 16) - EB7AHT
EF204CE	Type E/F (Rule 17) - EF204CE
EF306CE	Type E/F (Rule 17) - EF306CE
EF511AE	Type E/F (Rule 17) - EF511AE
EF511BE	Type E/F (Rule 17) - EF511BE
EF511CE	Type E/F (Rule 17) - EF511CE
EF511DE	Type E/F (Rule 17) - EF511DE
EF511LCE	Type E/F (Rule 17) - EF511LCE
EF511WE	Type E/F (Rule 17) - EF511WE
EF512CE	Type E/F (Rule 17) - EF512CE
EF512WE	Type E/F (Rule 17) - EF512WE
EF528WE	Type E/F (Rule 17) - EF528WE
EFROTARY	Type E/F Rotary - EFROTARY
EFSPEC	Type E/F Special - EFSPEC
EFUNK	Type E/F Unknown - EFUNK
EK323CE	Type E (Rule 16) - EK323CE (Long Travel)
ESPEC	Type E Special - ESPEC
EUNK	Type E Unknown - EUNK
F70BHT	Type F Obsolete (Rule 18) - F70BHT
F70BHTE	Type F Obsolete (Rule 18) - F70BHTE
F70CC	Type F (Rule 18) - F70CC
F70CE	Type F (Rule 18) - F70CE
F70CHT	Type F (Rule 18) - F70CHT
F70CHTE	Type F (Rule 18) - F70CHTE
F70DE	Type F (Rule 18) - F70DE
F70HT	Type F Obsolete (Rule 18) - F70HT
F71CHT	Type F (Rule 18) - F71CHT
F72HT	Type F (Rule 18) - F72HT
F73AC	Type F (Rule 18) - F73AC
F73AE	Type F (Rule 18) - F73AE
F73AHT	Type F (Rule 18) - F73AHT
F73AHTE	Type F (Rule 18) - F73AHTE
F73BE	Type F (Rule 18) - F73BE
F73HTE	Type F Obsolete (Rule 18) - F73HTE
F79BHT	Type F Obsolete (Rule 18) - F79BHT
F79BHTE	Type F Obsolete (Rule 18) - F79BHTE
F79CC	Type F (Rule 18) - F79CC
F79CE	Type F (Rule 18) - F79CE
F79CHT	Type F (Rule 18) - F79CHT
F79CHTE	Type F (Rule 18) - F79CHTE
F79DE	Type F (Rule 18) - F79DE
FF205E	Type F (Rule 18) - FF205E
FF218AE	Type F (Rule 18) - FF218AE
FR201E	Type F (Rule 18) Rotary - FR201E
FR205AE	Type F (Rule 18) Rotary - FR205AE
FR205BE	Type F (Rule 18) Rotary - FR205BE
FR205E	Type F (Rule 18) Rotary - FR205E
FR206E	Type F (Rule 18) Rotary - FR206E
FR206EA	Type F (Rule 18) Rotary - FR206EA
FR207AE	Type F (Rule 18) Rotary - FR207AE
FR207E	Type F (Rule 18) Rotary - FR207E
FR208AE	Type F (Rule 18) Rotary - FR208AE (without wear insert)
FR208E	Type F (Rule 18) Rotary - FR208E (with wear insert)
FR209E	Type F (Rule 18) Rotary - FR209E
FR301E	Type F (Rule 18) Rotary - FR301E
FR304E	Type F (Rule 18) Rotary - FR304E (with wear plate)
FR304WE	Type F (Rule 18) Rotary - FR304WE (without wear plate)
FROTARY	Type E/F Rotary - FROTARY
FSPEC	Type F Special - FSPEC
FUNK	Type F Unknown - FUNK
S700AE	Type E (Rule 16) - S700AE
SBE60CC	Type E (Rule 16) - SBE60CC
SBE60CE	Type E (Rule 16) - SBE60CE
SBE60DC	Type E (Rule 16) - SBE60DC
SBE60DE	Type E (Rule 16) - SBE60DE
SBE60DREX	Type E (Rule 16) - SBE60DREX
SBE60EE	Type E (Rule 16) - SBE60EE
SBE60EEX	Type E (Rule 16) - SBE60EEX
SBE67BC	Type E (Rule 16) - SBE67BC
SBE67BE	Type E (Rule 16) - SBE67BE
SBE67CC	Type E (Rule 16) - SBE67CC
SBE67CE	Type E (Rule 16) - SBE67CE
SBE67CREX	Type E (Rule 16) - SBE67CREX
SBE67DE	Type E (Rule 16) - SBE67DE
SBE68BC	Type E/F (Rule 17) - SBE68BC
SBE68BE	Type E/F (Rule 17) - SBE68BE
SBE68CE	Type E/F (Rule 17) - SBE68CE
SBE68CREX	Type E/F (Rule 17) - SBE68CREX
SBE68DE	Type E/F (Rule 17) - SBE68DE
SBE68WEX	Type E/F (Rule 17) - SBE68WEX
SBE69AE	Type E/F (Rule 17) - SBE69AE
SBE69BE	Type E/F (Rule 17) - SBE69BE
SBE69BREX	Type E/F (Rule 17) - SBE69BREX
SBE69CE	Type E/F (Rule 17) - SBE69CE
SE60CC	Type E (Rule 16) - SE60CC
SE60CE	Type E (Rule 16) - SE60CE
SE60CHT	Type E (Rule 16) - SE60CHT
SE60CHTE	Type E (Rule 16) - SE60CHTE
SE60DC	Type E (Rule 16) - SE60DC
SE60DE	Type E (Rule 16) - SE60DE
SE60DEX	Type E (Rule 16) - SE60DEX
SE60EE	Type E (Rule 16) - SE60EE
SE67BC	Type E (Rule 16) - SE67BC
SE67BE	Type E (Rule 16) - SE67BE
SE67BHT	Type E (Rule 16) - SE67BHT
SE67BHTE	Type E (Rule 16) - SE67BHTE
SE67CC	Type E (Rule 16) - SE67CC
SE67CE	Type E (Rule 16) - SE67CE
SE68BC	Type E/F (Rule 17) - SE68BC
SE68BE	Type E/F (Rule 17) - SE68BE
SE68BHT	Type E/F (Rule 17) - SE68BHT
SE68BHTE	Type E/F (Rule 17) - SE68BHTE
SE68CE	Type E/F (Rule 17) - SE68CE
SE69AE	Type E/F (Rule 17) - SE69AE
SE69BE	Type E/F (Rule 17) - SE69BE
SE69CE	Type E/F (Rule 17) - SE69CE
SF70CC	Type F (Rule 18) - SF70CC
SF70CE	Type F (Rule 18) - SF70CE
SF70CHT	Type F (Rule 18) - SF70CHT
SF70CHTE	Type F (Rule 18) - SF70CHTE
SF70DE	Type F (Rule 18) - SF70DE
SF79CC	Type F (Rule 18) - SF79CC
SF79CE	Type F (Rule 18) - SF79CE
SF79CHT	Type F (Rule 18) - SF79CHT
SF79CHTE	Type F (Rule 18) - SF79CHTE
SF79DE	Type F (Rule 18) - SF79DE

Validation Rule for A057

-If Rotary Coupler Style is reported, then Coupler Code must be a rotary coupler.
-If Coupler Code is a rotary coupler, then Coupler Style must be R (Rotary).
-Coupler Code of Type E Obsolete (Rule 16) can only be reported if the car was built or rebuilt before July 31, 2015
-Coupler Code of Type E/F Obsolete (Rule 17) can only be reported if the car was built or rebuilt before July 31, 2015
-Coupler Code of Type F Obsolete (Rule 18) can only be reported if the car was built or rebuilt before July 31, 2015
-Coupler Code of FROTARY or EFROTARY cannot be reported for cars Built or Rebuilt on or after August 12, 2014.

NOTES:

- Obsolete: All Type D couplers are obsolete and should report code DOBS; cars with this coupler code will be restricted in interchange as discussed below.
- Unknown: If the coupler code is unknown or if the code stamped on the coupler is illegible, the code BUNK FUNK, EFUNK, or LOCOUNK should be reported.
- Special: Codes ESPEC, FSPEC, and EFSPEC have been created to decline coupler bodies that have been manufactured specifically for the equipment owner and are not listed in the attached table.
- The codes FROTARY and EFROTARY cannot be reported for equipment Built or Rebuilt since August 12, 2014.

Coupler Style *Mandatory* **B058**

Describes the basic coupler design of the equipment ● ■

Affects Rating.

Permissible Values for B058

B	Bottom Shelf	D	Double Shelf
P	Plain	R	Rotary

Validation Rule for B058

-If Draft System Type (B073) is H (Hydraulic) then Coupler Style (B058) cannot be reported as M (Solid Drawbar) or L (Rotary Drawbar)
-If Draft System Type (B073) is not Center Of Car or End Of Car, Inches of Travel (B061) cannot be reported
-If Draft System Type (B073) of Center Of Car or End Of Car is reported then Inches of Travel (B061) must also be reported
-If Draft System Type (B073) is E then Coupler Style (B058) cannot be reported as L or R

Inches of Travel **B061**

The number of inches a draft system will travel ■

Affects Rating.

Range of Values for B061

Minimum	Maximum
1	30

Validation Rule for B061

-If Draft System Type (B073) is not Center Of Car or End Of Car, Inches of Travel (B061) cannot be reported
-If Draft System Type (B073) of Center Of Car or End Of Car is reported then Inches of Travel (B061) must also be reported
-Inches of Travel cannot be greater than 20 for equipment with a Built Date (BLDT) on or after January 1, 1974

Draft System Type *Mandatory* **B073**

Describes the draft gear/underframe cushion type ● ■

Affects Rating.

Permissible Values for B073

C	Cushioning at Center of Car (COC)
E	Cushioning at End of Car (EOC)
S	Standard Draft Gear
X	Devices with less than 6 inches buff travel approved under AAR Standard S-060
Y	Devices with 6 to 10 inches of buff travel approved under AAR Standard S-060

Validation Rule for B073

- If Draft System Type (B073) is Standard Draft Gear (S), Inches of Travel (B061) cannot be reported
- If Draft System Type (B073) is reported as C, E, X, or Y then Inches of Travel (B061) must also be reported
- If Draft System Type (B073) of X, or Y is reported then Draft Gear Group/Cushion Unit Pocket (B562) cannot be reported
- If Draft System Type (B073) X is reported, the Inches of Travel (B061) value must be greater than or equal to 1 and less than 6
- If Draft System Type (B073) Y is reported, the Inches of Travel (B061) value must be greater than or equal to 6 and less than or equal to 10

-If Draft System Type (B073) is S then Draft Gear Group/Cushion Unit Pocket (B562) may only be A, B, C, D, E, F, G, H, J, K, L, M, N, P, Q, R, S, or Z (AAR Rule 21)
-If Draft System Type (B073) is E then Draft Gear Group/Cushion Unit Pocket (B562) may only be EOC-1,EOC-1D, EOC-1B, EOC-2, EOC-2D, EOC-2B, EOC-3, EOC-3B,EOC-4, EOC-4B, EOC-5, EOC-5D, EOC-5B, EOC-6, EOC-6D, EOC-6B, EOC-7, EOC-7B, EOC-8, EOC-8B, EOC-8F, EOC-9, EOC-9B, EOC-9D, EOC-9E, EOC-10, EOC-10D, EOC-10B, EOC-10F, EOC-11, EOC-11D, EOC-11B,EOC-12, EOC-12D, EOC-12B, EOC-13, EOC-13B, EOC-14, EOC-14B, EOC-15, EOC-15D, EOC-15B, EOC-16, EOC-16D, EOC-16B, EOC-17, EOC-17D, EOC-17B, EOC-18, EOC-18D, EOC-18B, EOC-19, EOC-19B, EOC-20, EOC-20B, EOC-21, EOC-21B, EOC-22, EOC-22B, EOC-23, EOC-23B, EOC-24, EOC-24B, EOC-25E, EOC-26B, EOC-26F, or EOC-27D, or EOC-27E (AAR Rule 59)

Draft Gear Group/Cushion Unit Pocket **B562**

Draft Gear Group/Cushion Unit Pocket value as listed in AAR Field Manual Interchange Rule 21 and 59 ✹

Carry forward for Single Clone / Multi-Clone / Restencil / Add-Back / Equipment Group Change.

Permissible Values for B562EOC-1,EOC-1D, EOC-1B, EOC-2, EOC-2D, EOC-2B, EOC-3, EOC-3B,EOC-4, EOC-4B, EOC-5, EOC-5D, EOC-5B, EOC-6, EOC-6D, EOC-6B, EOC-7, EOC-7B, EOC-8, EOC-8B, EOC-8F, EOC-9, EOC-9B, EOC-9D, EOC-9E, EOC-10, EOC-10D, EOC-10B, EOC-10F, EOC-11, EOC-11D, EOC-11B,EOC-12, EOC-12D, EOC-12B, EOC-13, EOC-13B, EOC-14, EOC-14B, EOC-15, EOC-15D, EOC-15B, EOC-16, EOC-16D, EOC-16B, EOC-17, EOC-17D, EOC-17B, EOC-18, EOC-18D, EOC-18B, EOC-19, EOC-19B, EOC-20, EOC-20B, EOC-21, EOC-21B, EOC-22, EOC-22B, EOC-23, EOC-23B, EOC-24, EOC-24B, EOC-25E, EOC-26B, EOC-26F, EOC-27D, EOC-27E, COC-1, COC-2, COC-3, COC-4, COC-5, COC-6, COC-7, COC-8 (*AAR Rule 59*).

A, B, C, D, E, F, G, H, J, K, L, M, N, P, Q, R, S, Z (*AAR Rule 21*).

Validation Rule(s) for B562

-Draft Gear Group/Cushion Unit Pocket (B562) is mandatory for equipment built on or after June 13, 2019, unless Draft System Type (B073) is reported as X or Y
-If Draft Gear Group/Cushion Unit Pocket (B562) is not equal to A, B, C, D, E, F, G, H, J, K, L, M, N, P, Q, R, S, or Z, then Cushion Unit Type (B563) must be populated
-When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-6, EOC-7, EOC-7B, EOC-8, EOC-8B, EOC-9, EOC-9B, EOC-9D, EOC-10, EOC-10B, EOC-10D, EOC-14, EOC-14B, EOC-18D, EOC-23, EOC-23B, EOC-24, EOC-25E, EOC-26B, or EOC-27D then the Cushion Unit Type (B563) must be 1
-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-9E, EOC-26F, or EOC-27E, then the Cushion Unit Type (B563) must be 2
-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-11, EOC-12, EOC-13, EOC-13B, EOC-15, EOC-15B, EOC-15D, EOC-17, EOC-17B, EOC-17D, EOC-18, EOC-18B, EOC-19, EOC-19B, EOC-20, EOC-20B, EOC-21, EOC-21B, EOC-22, EOC-22B, EOC-24B, COC-3, COC-5, or COC-7 then the Cushion Unit Type (B563) must be 1 or 2
-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-8F or EOC-10F then the Cushion Unit Type (B563) must be 2 or 3
-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-5, EOC-5B, EOC-5D, EOC-6, EOC-6B, EOC-6D EOC-11B, EOC-11D, EOC-12B, EOC-12D, or COC-4 then the Cushion Unit Type (B563) must be 1, 2, or 3
-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-16, EOC-16B, EOC-16D, or COC-1 then the Cushion Unit Type (B563) must be 1, 2, or 4
-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-2B, EOC-2D, EOC-3, EOC-3B, EOC-4, EOC-4B, or COC-2 then the Cushion Unit Type (B563) must be 1, 2, 3, or 4
-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-1, EOC-1B, EOC-1D, or EOC-2 then the Cushion Unit Type (B563) must be 1, 2, 3, 4, or S
-When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-8 then the Cushion Unit Type (B563) must be 1, 2, 3, 4, or 5
-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-1D, EOC-2,EOC-2D, EOC-2B, EOC-3, EOC-3B, EOC-5, EOC-5D, EOC-5B, EOC-6D, EOC-7, EOC-7B, EOC-9, EOC-9B, EOC-9D, EOC-9E, EOC-10D, EOC-11, EOC-

11B, EOC-11D, EOC-12D, EOC-14,EOC-14B, EOC-15, EOC-15D, EOC-15B, EOC-16D, EOC-17D, EOC-23, EOC-23B, EOC-27D, or EOC-27E then the Inches of Travel (B061) must be 10
-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-16, EOC-16B, EOC-19, EOC-19B, EOC-22, EOC-22B, or EOC-25E then the inches of travel must be 12
-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-20 or EOC-20B then the Inches of Travel (B061) must be 14
-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-1B, EOC-4, EOC-4B, EOC-6, EOC-6B, EOC-8, EOC-8B, EOC-8F, EOC-10, EOC-10B, EOC-10F, EOC-12, EOC-12B, EOC-13, EOC-13B, EOC-17, EOC-17B, EOC-18, EOC-18D, EOC-18B, EOC-21, EOC-21B, EOC-24, or EOC-24B then the Inches of Travel (B061) must be 15
-When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-2, COC-3, COC-4, COC-5, COC-6, or COC-8 then the Inches of Travel (B061) must be 20
-When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-1, and Cushion Unit Type (B563) is 1 or 2, then the Inches of Travel (B061) must be 20
-When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-1, and Cushion Unit Type (B563) is 4, then the Inches of Travel (B061) must be 18
-When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-7, and Cushion Unit Type (B563) is 2, then the Inches of Travel (B061) must be 20
-When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-7, and Cushion Unit Type (B563) is 1, then the Inches of Travel (B061) must be 30
-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-1 then the Inches of Travel (B061) must be 10, 12, or 15
-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-26, then the Inches of Travel (B061) must be 18

Note:
Reference AAR Field Manual Interchange Rule(s) 21 and 59.

Cushion Unit Type — **B563**

Cushion Unit Type value as listed in AAR Field Manual Interchange Rule 21 and 59 ✹

Carry forward for Single Clone / Multi-Clone / Restencil / Add-Back / Equipment Group Change.

Permissible Values for B563

1 – Type 1
2 – Type 2
3 – Type 3
4 – Type 4
5 – Type 5
S – Type S

Validation Rule(s) for B563

- Cushion Unit Type (B563) is mandatory for equipment built on or after June 13, 2019.
-If Draft Gear Group/Cushion Unit Pocket (B562) is not equal to A, B, C, D, E, F, G, H, J, K, L, M, N, P, Q, R, S, or Z, then Cushion Unit Type (B563) must be populated.
-When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-6, EOC-7, EOC-7B, EOC-8, EOC-8B, EOC-9, EOC-9B, EOC-9D, EOC-10, EOC-10B, EOC-10D, EOC-14, EOC-14B, EOC-18D, EOC-23, EOC-23B, EOC-24, EOC-25E, or EOC-26B then the Cushion Unit Type (B563) must be 1.
-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-9E, EOC-26F, or EOC-27E, then the Cushion Unit Type (B563) must be 2
-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-11, EOC-12, EOC-13, EOC-13B, EOC-15, EOC-15B, EOC-15D, EOC-17, EOC-17B, EOC-17D, EOC-18, EOC-18B, EOC-19, EOC-19B, EOC-20, EOC-20B, EOC-21, EOC-21B, EOC-22, EOC-22B, EOC-24B, COC-3, COC-5, or COC-7 then the Cushion Unit Type (B563) must be 1 or 2.
-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-8F or EOC-10F then the Cushion Unit Type (B563) must be 2 or 3.
-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-5, EOC-5B, EOC-5D, EOC-6, EOC-6B, EOC-6D EOC-11B, EOC-11D, EOC-12B, EOC-12D, or COC-4 then the Cushion Unit Type (B563) must be 1, 2, or 3.
-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-16, EOC-16B, EOC-16D, or COC-1 then the Cushion Unit Type (B563) must be 1, 2, or 4.
-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-2B, EOC-2D, EOC-3, EOC-3B, EOC-4, EOC-4B, or COC-2 then the Cushion Unit Type (B563) must be 1, 2, 3, or 4.
-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-1, EOC-1B, EOC-1D, or EOC-2 then the Cushion Unit Type (B563) must be 1, 2, 3, 4, or S.
-When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-8 then the Cushion Unit Type (B563) must be 1, 2, 3, 4, or 5.
-When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-1, and Cushion Unit Type (B563) is 1 or 2, then the Inches of Travel (B061) must be 20.
-When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-1, and Cushion Unit Type (B563) is 4, then the Inches of Travel (B061) must be 18.
-When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-7, and Cushion Unit Type (B563) is 2, then the Inches of Travel (B061) must be 20.
-When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-7, and Cushion Unit Type (B563) is 1, then the Inches of Travel (B061) must be 30.

Note:
Reference AAR Field Manual Interchange Rule(s) 21 and 59.

Coupler Component ID — **B353**

Coupler Component ID from Component Registry

Data is Confidential. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Cushioning Unit Component ID — **B361**

Component ID from Component Registry

Data is Confidential. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Unit Segment Components

Unit Equipment Group — **A307**

Describes the equipment type of the platform

Permissible Values for A307

BOXC	Box Car	FLAT	Flat Car
GOND	Gondola	HOPP	Hopper
IFLT	Intermodal Flat	TANK	Tank Car
VFLT	Vehicular Flat		

Validation Rule for A307

-Unit Equipment Group cannot be reported if the Connected Unit Count (A020) is not reported
-Unit Equipment Group can only be reported if Connected Unit Count (A020) is reported

Unit Tare Weight — **A299**

The unit segment weight on rail when empty, sometimes referred to as Light Weight, reported in pounds

Range of Values for A299

Minimum	Maximum
23000	120000

Validation Rule for A299

-Unit Tare Weight must not be reported if the Connected Unit Count (A020) is not reported
-Unit Tare Weight must be reported if Connected Unit Count (A020) is reported
-Unit Segment Tare Weights must add up to the Total Tare Weight (A259)
-Unit Tare Weight (A299) value must be reported to the nearest 100 pounds

Unit Load Limit — A300

The maximum permissible weight of the commodity that can be loaded into the unit segment, reported in pounds

Range of Values for A300

Minimum	Maximum
70000	300000

Validation Rule for A300

-Unit Load Limit can not be reported if the Connected Unit Count (A020) is not reported

-Unit Load Limit must be reported if Connected Unit Count (A020) is reported

-Unit Segment Load Limits must add up to the Load Limit (LDLT)

Lower Load Width — B506

Allowable Lower Load Widths (ICPSC-II)

Permissible Values for B506

80	8 Ft (96 in) Container Only
86	8 Ft 6 in (102 in) Container Only
BB	Both 8 ft and 8 ft 6 in Containers

Unit Inside Length — A301 ▲

The inside length of each unit segment

Used in ETC Generation. Displayed in feet and inches on the Web. Stored in inches.

Range of Values for A301

Minimum	Maximum
20 ft 0 inches	99 ft 3 inches

Validation Rule for A301

-Unit Inside Length can only be reported if Connected Unit Count (A020) is reported

-Unit Inside Length must be reported if Connected Unit Count (A020) is reported

-Unit Inside Length for Flats other than Vflats must be greater than or equal to 20 feet.

-Unit Inside Length for Flats and IFlats must be less than or equal to 99 feet 4 inches.

Cont Load Restrictions — B509

Container Load Limit Restrictions (ICPSC-II)

Flat Rack Capable — B510

Flat Rack Capable (ICPSC-II)

Permissible Values for B510

1	1 Flat Rack can be Stacked on this Platform
2	2 Flat Racks can be Stacked on this Platform
3	3 Flat Racks can be Stacked on this Platform
4	4 Flat Racks can be Stacked on this Platform
5	5 Flat Racks can be Stacked on this Platform
6	6 Flat Racks can be Stacked on this Platform
7	7 Flat Racks can be Stacked on this Platform
8	8 Flat Racks can be Stacked on this Platform
9	9 Flat Racks can be Stacked on this Platform
N	No Flat Racks can be Stacked on this Platform

Lower Clearance Outline — B128

Three measurements that describe the lower position of the platform that are free of restrictions: 1) from cone point to bottom of restriction, 2) length of restriction, 3) width of restriction; Component of Unit Segment (ICPSC)

Permissible Values for B128

N	Well does not meet Standard Clearance
X	MSRP standard not developed
Y	Well meets or exceeds Standard Clearance

Hitches per unit — B140

Number of Trailer Hitches per car?; Component of Unit Segment (ICPSC)

Permissible Values for B140

0	No Hitches on this Platform
1	1 Hitch on this Platform
2	2 Hitches on this Platform
3	3 Hitches on this Platform
4	4 Hitches on this Platform
5	5 Hitches on this Platform
6	6 Hitches on this Platform
7	7 Hitches on this Platform
8	8 Hitches on this Platform
9	9 Hitches on this Platform

CONT Loading Cap — A054

Container Loading Capacity C1

Permissible Values for A054

1	One 40 ft Container
2	One 40 ft Container or Two 20 ft Containers
3	Two 40 ft Containers Stacked
4	Two 40 ft Containers Stacked or Two 20 ft Containers and One 40 ft Container Stacked
5	One 35 FT Container
6	One 45 ft Container
7	One 40 ft and One 45 ft Container Stacked
8	One 40 ft and One 48 ft Container Stacked
9	Two 48 ft Containers Stacked
A	Two 45 ft Containers Stacked
B	One 45 ft and One 48 ft Container Stacked
C	Two 35 ft Containers Stacked
D	Two 20 ft Containers-Stacked and One 40, 45 or 48 ft Container Stacked
E	Two 20 ft Containers Stacked and One 40 or 48 ft Container Stacked
F	Two 20 ft or One 40 ft and One 40, 45 or 48 Container Stacked
G	One 40 ft Container and One 40, 45 or 48 Container Stacked
H	One 40 ft Container or 45 ft
I	One 40 ft or 45 or 48 ft Container and One 40, 45 or 48 ft Container Stacked
J	One 48 ft Container and One 40, 45, 48 or 53 Container Stacked
K	Two 20 ft Containers or One 40 or 45 ft and One 40, 45 or 48 ft Container Stacked
L	One 45 ft Container and One 40, 45, 48 or 53 ft Container Stacked
M	Two 20 ft Containers or One 40 ft and One 40 or 48 ft Container Stacked
N	Two 24 ft Containers and ONE 40, 45, 48 or 53 Container Stacked
O	Two 20 ft Containers or One 40 ft or One 45 ft or One 48 ft and One 40, 45, 48 or 53 ft Container Stacked
P	Two 20 ft Containers or One 40, 45 or 48 Containers Stacked
Q	Two 20 ft or 28 ft Containers or One 40, 45, 48 or 53 ft and TWO 20 ft or 28 ft Containers or One 40, 45, 48 or 53 ft Container Stacked
R	One 40 ft or 45 or 48 ft Container and One 40, 45, 48, or 53 ft Container Stacked

Validation Rule for A054

-Unit Container Loading Capacity is only applicable to FCA Equipment

-Unit Container Loading Capacity is only applicable to Articulated cars

Trailer Loading Capacity — A272

Trailer Loading Capacity C1

Permissible Values for A272

1	One 40 Ft Trailer
2	One 40 to 45 Ft Trailer
3	One 40 to 48 ft Trailer
4	One 40 to 50 ft Trailer
5	One 26 to 40 ft Trailer
6	26 to 45 ft Trailer

7 26 to 48 ft Trailer
8 26 to 50 ft Trailer
9 40 to 53 ft Trailer
A 28 to 31 ft Trailer
B 48 ft Well, Two 28 ft Trailers, up to 53 ft Single with Nose Extended Over Hitches, Intermediate - 53 Ft and Kingpin-Axle Length not Greater than 45 ft

Validation Rule for A272
-Unit Trailer Loading Capacity is only applicable to FCA Equipment
-Unit Trailer Loading Capacity is only applicable to Articulated cars

Number of Handbrakes B138

Number of Handbrakes (ICPSC)

Permissible Values for B138
1 Car has One Hand Brake
2 Car has Two Hand Brakes
3 Car has Three Hand Brakes
4 Car has Four Hand Brakes
5 Car has Five Hand Brakes
6 Car has Six Hand Brakes
7 Car has Seven Hand Brakes
8 Car has Eight Hand Brakes
9 Car has Nine Hand Brakes

Circus Loading Method B517

Intermodal Flat Loading Method Circus (ICPSC-II)

Permissible Values for B517
N No Y Yes

Side Loading Method B518

Intermodal Flat Loading Method Side (ICPSC-II)

Permissible Values for B518
N No Y Yes

Inter-Box Securement B113

Type of securement device used to connect the upper container to the lower container

Permissible Values for B113
IA IBC Automatic
IM IBC Manual
IS IBC Semi-Automatic

Validation Rule for B113
-Stack Cars, with an Equipment Type Code (UMET) of S_ _ _, that have a Built Date (BLDT) or Rebuilt Date (RBDT) on or after April 1, 2016 must report Inter-Box Securement
-Inter-Box Securement cannot not be reported for Light Weight and Conventional Intermodal Cars with Equipment Type Codes (UMET) of Q_ _ _ and P_ _ _

IFLT 20ft Container Lmt B548

Indicates the maximum weight 20 foot container that a unit can carry, when all 20 foot container positions on the car are simultaneously loaded with 20 foot containers at their maximum weights

Permissible Values for B548
0 Not Equipped
37500 37,500 lbs.
44800 44,800 lbs.
52900 52,900 lbs.
57500 57,500 lbs.
61500 61,500 lbs.
64000 64,000 lbs.
67200 67,200 lbs.
71650 71,650 lbs.
75000 75,000 lbs.
79370 79,370 lbs.

Validation Rule for B548
-IFLT 20 ft Container Lmt must not exceed half the Unit Load Limit (A300) reported.
-IFLT 20 ft Container Lmt should be populated when Single Length Loading Configuration (B288) is listed as DB1, DB2, DB3, DC1, DC2, DC3, DT1, DT2, DT3, DT4, DT5, DT6, PC1, PC2, PT1, PT2, PT3, PT4, PT5, PT6, QB1, QB2, QB3, QC1, QC2, QT1, QT2, QT3, QT4, QT5, QT6, QT7, QT8, SA1, SA2, SA3, SA4, SA5, SA6, SA7, SA8, SA9, SB1, SB2, SB3, SB4, SB5, SB6, SB7, SB8, SB9, SC1, SC2, SC3, SC4, SC5, SC6, SC7, SC8, SC9, SD1, SD2, SD3, SD4, or SD5 and Built/Rebuilt on/after September 20, 2018.

NOTES:
- If the desired 20 foot Container Limit is not an available choice, select the closest value that does not exceed your 20 foot Container Limit.
- Listing zero is a permissible value is applicable dependent on the loading configuration
- If your Single Length Load Configuration (B288) states the IFLT is designed to carry 20 foot containers, this element (B548) must be reported using the correct weight value based on equipment owners' specification.

IFLT 20 Ft Cont Capable B549

Identifies if the unit segment is capable of loading 20 foot containers based on the Single Length Loading Configuration (B288)

System Generated Field.

Permissible Values for B549
Y Yes
N No

Brake System Components

Emergency Brake Valve CID B354

Component ID from Component Registry

Data is Confidential. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Emergency Valve COTS Date B567

Brake valve emergency portion recondition date

System generated element. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

NOTES:
- Emergency Valve COTS Date is system-generated from a Emergency Brake Valve Inspection.

Emergency Valve OEM Warranty Date B568

Brake valve emergency portion Original Equipment Manufacturer warranty date

System generated element. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

NOTES:
- Emergency Valve OEM Date is system-generated from a Emergency Brake Valve Inspection.

Emergency Valve Part Number B569

Brake valve emergency portion part number

System generated element. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

NOTES:
- Emergency Valve Part Number is system-generated from a Emergency Brake Valve Inspection.

Service Brake Valve CID B357

Component ID from Component Registry

Data is Confidential. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Service Valve COTS Date — **B564**

Brake valve service portion recondition date

System generated element. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

NOTES:

- Service Valve COTS Date is system-generated from a Service Brake Valve Inspection.

Service Valve OEM Warranty Date — **B565**

Brake valve service portion Original Equipment Manufacturer warranty date

System generated element. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

NOTES:

- Service Valve OEM Date is system-generated from a Service Brake Valve Inspection.

Service Valve Part Number — **B566**

Brake valve service portion part number

System generated element. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

NOTES:

- Service Valve Part Number is system-generated from a Service Brake Valve Inspection.

Slack Adjuster CID — **B359**

Component ID from Component Registry

Data is Confidential. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Miscellaneous

Umler Effective Date — **EFDT**

The date the rating activity (pre-registration, modification, etc.) is expected to occur

This element is not eligible for Query. Does not Carry Forward.

Validation Rule for EFDT

-Effective Date cannot be set to more than 13 months in the future.

NOTES:

- Effective Date will default to the 1st of the following month that equipment is registered

Inspection

ABT Due Date (Repair Track) — **DU13**

The due date of the air brake test per AAR Field Manual Rule 3

System Generated Field. This element is not eligible for Input. Value does not carry forward for Add Back.

ABT 5-8 Year Due Date — **DU58**

The 5-8 year due date for the air brake test (ABT) after the ABT Due Date (Repair Track)

System Generated Field. This element is not eligible for Input. Value does not carry forward for Add Back.

Inspection Date Done — **DTDN**

The date the inspection was completed; used for all inspection types reported on equipment

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Validation Rule for DTDN

-The inspection date must not be 60 days before the Build Date

Inspection Due Date — **INDD**

The due date of the next inspection; used for all inspection types reported on equipment

System Generated Field. This element is not eligible for Input. Value does not carry forward for Add Back.

Inspection Performer — **PERF**

The SCAC that completed the inspection; used for all inspection types reported on equipment

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Inspection Reporter — **REPT**

The SCAC that reported the inspection; used for all inspection types reported on equipment

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Location/SPLC — **SPLC**

The SPLC of the inspecting location; used for all inspection types reported on equipment

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Interior Shear Panel — **INSP**

Interior Shear Panel

Data is Confidential. This element is not eligible for Input, Output or Query. Does not Carry Forward.

Air Brake Test Device — **B523**

Indicates the type of test device used to perform the Air Brake Test ✹

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Permissible Values for B523

A Automatic (Non 4-Pressure)
M Manual
P Automatic (4-Pressure)

Validation Rule for B523

-Air Brake Test Device (B523) must be reported for Air Brake Test inspection reported on or after December 10, 2020

Insp Service Valve COTS Date — **B570**

Brake valve service portion recondition date

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

NOTES:

- Reports of 9999 will be allowed in case the date is illegible and the valve cannot be replaced immediately.
- Valid date format: MMYY

Insp Service Valve OEM Warranty Date — **B571**

Brake valve service portion Original Equipment Manufacturer warranty date

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

NOTES:

- Reports of 999999 will be allowed in case the date is illegible and the valve cannot be replaced immediately.
- Valid date format: MMYYYY

Insp Service Valve Part Number — **B572**

Brake valve service portion part number

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Insp Emergency Valve COTS Date — **B573**

Brake valve emergency portion recondition date

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

NOTES:

- Reports of 9999 will be allowed in case the date is illegible and the valve cannot be replaced immediately.
- Valid date format: MMYY

Insp Emergency Valve OEM Warranty Date	B574
Brake valve emergency portion Original Equipment Manufacturer warranty date	

System generated element. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

NOTES:

- Reports of 999999 will be allowed in case the date is illegible and the valve cannot be replaced immediately.
- Valid date format: MMYYYY

Insp Emergency Valve Part Number	B575
Brake valve emergency portion part number	

System generated element. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Insp Service Valve Location *Mandatory*	B576
Brake valve service portion location	●

. Value does not carry forward for Single Clone / Multi-Clone.

Insp Emergency Valve Location *Mandatory*	B577
Brake valve emergency portion location reported on an emergency brake valve inspection	●

Value does not carry forward for Single Clone / Multi-Clone.

Vehicular Flat

General

Status Code *Mandatory* — **USCD**

Identifies the current operational state ●

Does not Carry Forward.

Permissible Values for USCD

A	ACTIVE	I	INACTIVE
P	PRE-REGISTERED		

NOTES:

- For Restencil and Clone process the initial Status of a car should be Pre-Registered.
- All Add-Back processes should initially set the Status to Pre-Registered
- A Pre-registered car will automatically have its Status changed to Active for the initial change when TRAIN detects three (3) movements on the car
- If the Status changes to Active due to movement and the car was created from a Restencil, the Prior Equipment ID (PRID) or source car will have its status changed to Inactive automatically by Umler

Equipment ID — **0001**

The equipment stenciled number

Validation Rule for 0001

-Equipment Number must not be larger than 6 digits (i.e., 999999)

NOTES:

- Equipment ID includes the mark and number stenciled on the equipment. Marks can be up to 4 characters and number up to 6 digits (i.e., ABCD999999).
- Up to 500 cars can be added or updated in a transaction.
- When adding an equipment record ensure, that Prior Equipment ID (PRID) is reported, unless the equipment is new.

Mechanical Designation *Mandatory* — **UMMD**

Equipment description without physical dimensions ●

Used for Transportation Codes.

Permissible Values for UMMD

FA	Flat-Vehicular
MWVF	MoW - VFlat

Equipment Type Code — **UMET**

An alpha numeric code that describes the physical attributes of equipment

System Generated Field. This element is not eligible for Input.

NOTES:

- Please Refer to Appendix I for More information Regarding ETC Generation

Maint of Way Service Type — **B403**

Identifies equipment Maintenance Of Way function

Value does not carry forward for Equipment Group Change.

Permissible Values for B403

C2	Crane / Boom Support Car
F4	Flat-Wheel Sets
T4	Training Car
T8	Track Geometry Car

Validation Rule for B403

- Maint of Way Service Type can only be listed on records where the Equipment Group (0002) or Pseudo Equipment Group (B547) is listed as MISC

Built Date *Mandatory* — **BLDT**

The date the construction of the equipment is complete ● ■

Data is Confidential. Used for Transportation Codes. Affects Rating. Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for BLDT

Minimum	Maximum
1/1/1900	12/31/9999

Validation Rule for BLDT

-Built Date must be within the last 99 years
-Built Date must not be in the future for equipment in Active Status
-Prior and target equipment's Built Date (BLDT) must match for restenciling
-Built Date cannot be updated within 30 days of the End of Service Date (B078)

NOTES:

- Data is public for railroad marked equipment.
- For connected unit cars report the oldest car in the set.

Rebuilt / ILS Date — **RBDT**

The date the re-construction of the equipment is complete

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for RBDT

Minimum	Maximum
1/1/1900	12/31/9999

Validation Rule for RBDT

-Rebuilt/Increased Life Service Date must be after the Built Date (BLDT)
-Rebuilt Date must not be more than 70 years after the Built Date (BLDT)
-Rebuilt Date is required for Extended Service Code (A096) 1, 2, or 3 for Increased Life Service
-Rebuilt Date is required for Extended Service Code (A096) R for Rebuilt, or V for 65 years of service
-If Rebuilt Date is reported then the Extended Service Code (A096) must be reported as R for Rebuilt, V, 1, 2, or 3 for Increased Life Service

NOTES:

- Railroad cars -- applicable only to cars meeting status as provided in both STB Accounting Rules, and the AAR Mechanical Interchange Rule 88, Office Manual.
- Private cars -- applicable to all cars meeting AAR Mechanical Interchange Rule 88, Section C, Office Manual and Sections A and B of the Field Manual.
- For connected unit cars report the oldest car in the set. Do not report Rebuilt Date unless car has been approved by the AAR.

Rebuilt Flag — **RBFL**

Identifies the equipment is nearing its end of life cycle

Data is Confidential. System Generated Field. This element is not eligible for Input.

Permissible Values for RBFL

N	No	Y	Yes

Owner *Mandatory* — **UMOW**

Primary reporting mark of the railroad or private company owning the car ●

Value does not carry forward for Single Clone / Multi-Clone / Single Restencil / Multi-Restencil.

NOTES:

- Report the primary reporting mark of the railroad or private company owning the car. When car's lease or lien is held by a bank, trust holder, capital lease company, etc. not having an assigned mark, report the primary reporting mark affiliated with the stenciled reporting mark.

Equipment Group *Mandatory* — **0002**

Identifies the various major car types ● ■

Used for Transportation Codes. Affects Rating.

Lessee — **LESE**

The reporting mark of the company leasing the equipment

Value does not carry forward for Single Clone / Multi-Clone / Single Restencil / Multi-Restencil.

Validation Rule for LESE

-Umler Owner (UMOW) and Lessee are not allowed to be equal
-Lessee cannot be a reporting child mark

NOTES:

- If reported, the reporting mark cannot be equal to the owner or be a family reporting mark.
- In order to assign privately marked cars to a pool, a railroad reporting mark must be reported.

Maintenance Party	MNPT
The parent reporting mark of the company responsible for the maintenance and repairs of the equipment	

Does not Carry Forward.

Mark Owner Category	B201
The company that owns the stenciled mark on the car	

System Generated Field. This element is not eligible for Input. Value does not carry forward for Single Restencil / Multi-Restencil / Equipment Group Change / Add Back.

Permissible Values for B201

B	US Private
C	Canadian Private
F	Foreign Private
H	Canadian Class II
I	Canadian Class I
J	Mexican Class I
K	Canadian Class III
M	Mexican Private
N	US Private Steamship
O	Canadian Private Steamship
P	Mexican Private Steamship
Q	Foreign Private Steamship
R	US Class II Railroad
U	US Class I Railroad
V	US Class III Railroad
W	Mexican Class II Railroad
Y	Mexican Class III Railroad

NOTES:

- This value is stored in the Umler Database for informational purposes and is retrieved from the Roadmark Registry.

Prior Equipment ID	PRID
The previous reporting mark and number of the equipment	

Value does not carry forward for Single Clone / Multi-Clone.

Validation Rule for PRID

-Prior and target equipment's Built Date (BLDT) must match

-The Prior Equipment ID (0001) must belong to the same or comparable Equipment Group (0002) as the current car initial and number

NOTES:

- Prior ID enables equipment records to share the same historical lineage. Equipment Identification Number (EIN) is a generated id that enables these equipment records to share inspections and transaction history.

Last Update Date	B122
Date of the last Umler element change	

System Generated Field. This element is not eligible for Input.

Equipment Add Date	B082
Date the reporting mark and number was added to the Umler system	

System Generated Field. This element is not eligible for Input.

Status Change Reason	USCR
Identifies the reason for the current operational state	

System Generated Field. This element is not eligible for Input. Does not Carry Forward.

Permissible Values for USCR

I	Initial Load
M	Movement
O	Status Changed Manually
R	Restencil

NOTES:

- If movement is detected on equipment, status is changed to Active.
- If an equipment record is changed to Active, any prior equipment record is placed in Inactive status.

Status Change Date	USCT
Identifies the effective date of the current operational state	

System Generated Field. This element is not eligible for Input. Does not Carry Forward.

Extended Service *Mandatory*	A096
A code indicating the eligibility of an increase to the life cycle ●	

Used for Transportation Codes. Value does not carry forward for Single Clone / Multi-Clone.

Permissible Values for A096

1	1st ILS Inspection, additional 5 years of Service
2	2nd ILS Inspection, additional 5 years of service (10 years total)
3	3rd ILS Inspection, additional 5 years of service (15 years total)
C	Built New between January 1, 1964 - June 30, 1974, Certified for 50 Years of Service, Built New Before July 1, 1974 & Received AAR Waiver
E	Built new from July 1,1974, Qualified for 50 Years Service
N	Built Before January 1, 1964, Qualified for 40 Years Service
R	Rule 88, Rebuilt cars
U	Built between January 1, 1964 - June 30, 1974, Qualified for 40 Years & eligible for certification for 50 Years Service
V	Car is certified (FRA Waiver & AAR) for 65 years of service from date built new from January 1, 1964

Validation Rule for A096

-If Rebuilt Date (RBDT) is reported, then the Extended Service Code (A096) must be reported as R for Rebuilt, V, 1, 2, or 3 for Increased Life Service

-Extended Service Code of C cannot be reported if the car was built before January 1, 1964 or on/after July 1, 1974

-Extended Service Code of E cannot be reported if the car was built before July 1, 1974

-Extended Service Code of N cannot be reported if the car was built on/after January 1, 1964

-Extended Service Code of U cannot be reported if the car was built before January 1, 1964 or on/after July 1, 1974

NOTES:

- Value is used to calculate End of Service Date (B078).
- Rebuilt Date (RBDT) is required for Extended Service Code (A096) R for Rebuilt, or V for 65 years service.
- Rebuilt Date (RBDT) is required for Extended Service Code (A096) 1, 2, 3, and V for Increased Life Service.

End of Service Date	B078
Indicates the date of the end of equipment life	

Data is Confidential. System Generated Field. This element is not eligible for Input.

NOTES:

Data becomes non-confidential two years prior to End of Service Date.

Do Not Load After	B590
Equipment should not be loaded after date shown in the element	

Data is Confidential.

Validation Rules for B590

-Do Not Load After (B590) cannot be updated thirty days prior to the date shown in the element.

-Do Not Load After (B590) cannot be updated within thirty days of the End of Service Date (B078).
-Do Not Load After (B590) date cannot be on or after the End of Service (B078) date.

NOTES:

- The element will be initially populated by End of Service (B078) minus 30 days.
- Data becomes non-confidential thirty days prior to the Do Not Load After (B590) date.

Equipment Identification — EINN

Unique equipment identifier regardless of stenciled mark

System Generated Field. This element is not eligible for Input.

NOTES:

- Specify the Prior ID (PRID) on equipment records to ensure the historical lineage is preserved. Equipment with the same EIN share history and inspections.

Info Conflict Status — B355

Indicates that an Informational Conflict exists on the Equipment record

System Generated Field. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Conflict Status — B050

Identifies the escalation level of equipment in active conflict ■

System Generated Field. Affects Rating. This element is not eligible for Input. Value does not carry forward for Add Back.

Permissible Values for B050

1 Subject to Zero-Rating
2 Subject to Restricted in Interchange
3 Subject to Deletion

NOTES:

- Subject to Zero-Rating, goes into effect 30 days after Conflict Status occurs
- Subject to Restricted in Interchange, goes into effect 90 days after Conflict Status occurs
- Subject to Deletion, goes into effect 365 days after Conflict Status occurs

Date of Original Conflict — B063

The date the equipment was originally placed in the current conflict

System Generated Field. This element is not eligible for Input.

Next Conflict Status — B135

Identifies the next escalation level of an equipment in active conflict

System Generated Field. This element is not eligible for Input. Value does not carry forward for Add Back.

Permissible Values for B135

1 Subject to Zero-Rating
2 Subject to Restricted in Interchange
3 Subject to Deletion

NOTES:

- Subject to Zero-Rating, goes into effect 30 days after Conflict Status occurs
- Subject to Restricted in Interchange, goes into effect 90 days after Conflict Status occurs
- Subject to Deletion, goes into effect 365 days after Conflict Status occurs

Notice Indicator — B137

Identifies equipment in error in Umler Notice Management

System Generated Field. This element is not eligible for Input.

Conflict Status Next Date — B062

The date the conflict status will be escalated

System Generated Field. This element is not eligible for Input. Value does not carry forward for Add Back.

Rate Indicator — A070

Indicates the rate type applicable to the unit ■

System Generated Field. Used for Transportation Codes. Affects Rating. This element is not eligible for Input. Does not Carry Forward.

Permissible Values for A070

0 Zero-Rated Due to Conflict Errors
2 Private Mileage Rate
4 Private Car Owner Designated Rate
6 Zero-Rated - Scrap (S_,SX), AAR Overage (XA), FRA Overage (YA), Umler Conflict - CHR 1/Tarriff 6007 (XZ). Zero-Rated Private Owner Election to Zero Rate [See Private Zero Rate (B150)].
M Railroad Market Rate
Q Zero-Rated Railroad Market Rate Due to Conflict Errors

NOTES:

- If unit is zero-rated, correction of conflicts will reinstate the appropriate rate indicator code.

Private Zero Rate — B150

Indicates a private car is subject to contractual agreement, nullifying mileage rates ■

Affects Rating.

Permissible Values for B150

Y Yes

NOTES:

- Reporting "Y" generates Rate Indicator (A070) value 6 and a zero rate.

TTX Hourly Rate — B212

Time Charge-The TTX hourly rate for the equipment

Data is Confidential. This element is not eligible for Query.

Range of Values for B212

Minimum	Maximum
0	9

Validation Rule for B212

-TTX Hourly rate can only be set on TTX owned Equipment.

TTX Mileage Rate — B213

Mileage Charge-The TTX mileage rate for the equipment

Data is Confidential. This element is not eligible for Query.

Range of Values for B213

Minimum	Maximum
0	1

Validation Rule for B213

-TTX Mileage rate can only be set on TTX owned Equipment.

First Movement Date — USAT

The first movement date under the stenciled mark of the equipment

This element is not eligible for Input. Does not Carry Forward.

Equipment Add Company — B083

The reporting mark of the company that added the equipment

System Generated Field. This element is not eligible for Input.

Registration Reason — B174

The code indicating the reason this equipment is added

Does not Carry Forward.

Permissible Values for B174

A Add-Back
N New
P Pending Restencil
R Restencil

Restencil Program Ind — B177

Identifies the equipment is under a restencil program

Permissible Values for B177

Y Yes

Delete Reason Code	B064
A code that designates the reason the equipment has been deleted	

Value does not carry forward for Add Back.

Permissible Values for B064

A	Restenciled
D	Destroyed or wrecked
L	Lease terminated, removed from fleet
P	Retired unserviceable beyond economic repair
R	Rebuilt
S	Sold Serviceable
W	Over age retired for dismantling
Y	Error, reporting did not exist
Z	Other

Non-Compliant Wheelsets	B544
Equipment record is incomplete and has a missing wheelset component ID association. Refer to AAR Field Manual Rule 44 for industry requirements ✹	

System Generated Field. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Validation Rule for B544

-A Wheelset Component ID is required for each applicable location on equipment built on or after January 1, 2016

-A Wheelset Component ID is required for each applicable location on equipment rebuilt on or after January 1, 2016 and Gross Rail Load (A266) is greater than 268,000 lbs

NOTES:

- A "Y" will be system generated if the equipment is active and the number of Wheelset CID's required is not equal to the Axle Count (A024) on the equipment
- Validation rule applies to equipment that has been in Active status for 60 days

Pseudo Equipment Group	B547
Equipment needs to be identified as a miscellaneous record while maintaining all elements linked to the original equipment group	

System Generated Field.

Permissible Values for B547

MISC	Miscellaneous

Weight

Gross Rail Load/Weight *Mandatory*	A266
The maximum permissible weight on rail of the equipment and the load, reported in pounds ● ■	

Affects Rating.

Range of Values for A266

Minimum	Maximum
157000	2835000

Validation Rule for A266

-Gross Rail Load must be equal to the Load Limit (LDLT) plus the Tare Weight (A259)

NOTES:

Use Table 1 below to determine Gross Rail Load, if Qualification for Increased Gross Rail Load (B344) does not exist.

TABLE 1 -

Journal Size	Load per Axle	Gross Rail Load for 4-axle Equipment
B - 4 1/2" x 8"	25,750 lbs.	103,000 lbs.
C - 5" x 9"	35,500 lbs.	142,000 lbs.
D - 5 1/2" x 10"	44,250 lbs.	177,000 lbs.
E - 6" x 11" (w/28" 1W wheels)	48,750 lbs.	195,000 lbs.
E - 6" x 11" (w/all other wheels)	55,000 lbs.	220,000 lbs.
F - 6 1/2" x 12"	65,750 lbs.	263,000 lbs.
G - 7" x 12"	78,750 lbs.	315,000 lbs.
K - 6 1/2" x 9"	71,500 lbs.	263,000 lbs.
M - 7" x 9"	78,750 lbs.	315,000 lbs.

Use Table 2 below to determine Gross Rail Load for 4-axle equipment if Qualification for Increased Gross Rail Load (B344) exists.

TABLE 2 -

Qualification for Increased Gross Rail Load (B344)	Journal Size	Gross Rail Load
1	K - 6 1/2" x 9"	286,000 lbs.
1	G - 7" x 12"	286,000 lbs.
1	M - 7" x 9"	286,000 lbs.
2	F - 6 1/2" x 12"	286,000 lbs.
2	K - 6 1/2" x 9"	286,000 lbs.
3	F - 6 1/2" x 12"	268,000 lbs.
3	K - 6 1/2" x 9"	268,000 lbs.

- For multi-unit equipment, report the total gross rail load for the entire set.
- Refer to Field Manual Rule 70 if additional information is required.

A Gross Rail Load less than the listed or calculated values may be entered; however:

- Star Code (A247) must be R or S, and
- Load Limit (LDLT) must also be reduced, ensuring Tare Weight (A259) plus Load Limit (LDLT) equals the reported Gross Rail Load.

For equipment having two or more different journal sizes, see following examples:

Example for Drawbar Connected:

- A 3-unit drawbar connected car has 12 axles.
- The end units (Locations A and B) each have 4 axles with E - 6" x 11" journals.
- The intermediate unit (Locations C) has 4 axles with F – 6 1/2" x 12" journals

Using TABLE 1, the Gross Rail Load would be:

8 ea. E-6" x 11" journal axles X 55,000 lbs. per axle = 440,000 lbs.
+ 4 ea. F-6 1/2" x 12" journal axles X 65,750 lbs. per axle = 263,000 lbs.
Gross Rail Load = 703,000 lbs.

Example for Articulated Connected:

- A 5-unit articulated intermodal car has 6 trucks (12 axles).
- The end trucks (Locations A and B) each have 2 axles with E - 6" x 11" journals.
- The intermediate trucks (Locations C, D, E, and F) each have 2 axles with G - 7" x 12" journals

Using TABLE 1, the Gross Rail Load would be:

4 ea. E-6" x 11" journal axles X 55,000 lbs. per axle = 220,000 lbs.
+ 8 ea. G-7" x 12" journal axles X 78,750 lbs. per axle = 630,000 lbs.
Gross Rail Load = 850,000 lbs.

Tare Weight *Mandatory*	A259
The equipment weight on rail when empty, sometimes referred to as Light Weight, reported in pounds ● ■	

Affects Rating.

Range of Values for A259

Minimum	Maximum
70000	1224000

Validation Rule for A259

-Tare Weight (A259) of VFLT with a blank Connected Unit Count (A020) must contain values between 70000 lbs. and 136000 lbs.

-Tare Weight (A259) of VFLT where Connected Unit Count (A020) is 2 must contain values between 130000 lbs. and 272000 lbs.

-Tare Weight (A259) of VFLT where Connected Unit Count (A020) is 3 must contain values between 210000 lbs. and 408000 lbs.

-Tare Weight (A259) of VFLT where Connected Unit Count (A020) is 4 must contain values between 280000 lbs. and 544000 lbs.

-Tare Weight (A259) of VFLT where Connected Unit Count (A020) is 5 must contain values between 350000 lbs. and 680000 lbs.

-Tare Weight (A259) of VFLT where Connected Unit Count (A020) is 6 must contain values between 420000 lbs. and 816000 lbs.

-Tare Weight (A259) of VFLT where Connected Unit Count (A020) is 7 must contain values between 490000 lbs. and 952000 lbs.

-Tare Weight (A259) of VFLT where Connected Unit Count (A020) is 8 must contain values between 560000 lbs. and 1088000 lbs.

-Tare Weight (A259) of VFLT where Connected Unit Count (A020) is 9 must contain values between 630000 lbs. and 1224000 lbs.

- Tare Weight (A259) value must be reported to the nearest 100 pounds if Weighing Date (A288).

NOTES:

- Do not report an average Tare Weight for car series, except for Pre-Registered cars
- When cars are made active, the actual Tare Weight must be recorded
- For current single-unit VFLTs, lowest tare weight is 70,000 lbs. Largest tare weight is 136,000lbs. Maximum permissible value shown above is 136,000 lbs. X 9 = 1,224,000 lbs.

Load Limit *Mandatory* — LDLT

The maximum permissible weight of the commodity that can be loaded into the equipment, reported in pounds ● ■

Affects Rating.

Range of Values for LDLT

Minimum	Maximum
50000	650000

Validation Rules for LDLT

-Load Limit (LDLT) of VFLT with a blank Connected Unit Count (A020) must contain values between 50000 lbs. and 150000 lbs.

- Load Limit (LDLT) of VFLT where Connected Unit Count (A020) is 2 must contain values between 80000 lbs. and 300000 lbs.

- Load Limit (LDLT) of VFLT where Connected Unit Count (A020) is 3 must contain values between 150000 lbs. and 450000 lbs.

- Load Limit (LDLT) of VFLT where Connected Unit Count (A020) is 4 must contain values between 200000 lbs. and 600000 lbs.

- Load Limit (LDLT) of VFLT where Connected Unit Count (A020) is 5 must contain values between 250000 lbs. and 750000 lbs.

- Load Limit (LDLT) of VFLT where Connected Unit Count (A020) is 6 must contain values between 300000 lbs. and 900000 lbs.

- Load Limit (LDLT) of VFLT where Connected Unit Count (A020) is 7 must contain values between 350000 lbs. and 1050000 lbs.

- Load Limit (LDLT) of VFLT where Connected Unit Count (A020) is 8 must contain values between 400000 lbs. and 1200000 lbs.

- Load Limit (LDLT) of VFLT where Connected Unit Count (A020) is 9 must contain values between 450000 lbs. and 1350000 lbs.

NOTES:

- For connected unit cars report the sum of the load limits for all units in the set.
- For current single-unit VFLTs, lowest load limit is 50,500 lbs. (rounded down to 50,000). Largest load limit is 150,000 lbs. Maximum permissible value shown above is 150,000 lbs. X 9 = 1,350,000 lbs.

Weighing Status *Mandatory* — A289

Indicates the weight information is an estimate or an actual measurement ●

Value does not carry forward for Single Clone / Multi-Clone.

Permissible Values for A289

A Actual
E Estimated
V Verified correct Tare Weight
X Tare Weight subject to verification (System Generated)

Validation Rule for A289

-Equipment cannot be within a series of 10 with identical Tare Weights (A259), refer to Appendix P for further information on resolving tare weight conflicts

-When Status Code changes to Active or Inactive Weighing Status must be reported as Actual (A) or Verified (V) within 60 days of Status Code change

Weighing Date — A288

The date the equipment was actually weighed

Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for A288

Minimum	Maximum
1/1/1900	12/31/9999

Validation Rule for A288

-If Weighing Date is reported the Tare Weight (A259) must be reported

-When Weighing Date is reported then Weighing Status (A289) must be A (Actual) or V (Verified)

-If Weighing Status (A289) is A (Actual) or V (Verified correct Tare Weight) then Weighing Date must be reported

-Weighing Date must be on or before the current date

-Weighing Date cannot be before Built / Rebuilt date

Star Code — A247

Indicates a reduction of the Load Limit (LDLT) of the equipment per AAR Rule 70 ■

Affects Rating.

Permissible Values for A247

R Body Capacity less than Truck Capacity
S Reduced Load Limit

NOTES:

- Equipment having Qualification for Increased Rail Load of 1 or 2, and a Gross Rail Load (A266) less than 286,000 lbs., must have Star Code (A247) of S.
- Equipment having Qualification for Increased Gross Rail Load (B344) of 3, and a Gross Rail Load (A266) less than 268,000 lbs., must have Star code of S.
- Star Code must be reported if Gross Rail Load (A266) is less than the maximum gross rail load allowed for the reported combination of Axle Count (A024) and Journal Size (A147).

Qual for Inc GRL — B344

Code designating AAR approval for operating 4-axle equipment at a gross rail load greater than 263,000 lbs per AAR Rule 88

Permissible Values for B344

1 Rule 88 IGRL Code 1 (> 263,000 lbs. and <= 286,000 lbs. GRL per AAR Specification S-286)
2 Rule 88 IGRL Code 2 (> 263,000 lbs. and <= 286,000 lbs. GRL)
3 Rule 88 IGRL Code 3 (> 263,000 lbs. and <= 268,000 lbs. GRL)

Validation Rules for B344

-Equipment having Qualification for Increased Gross Rail Load of 1 or 2 must have a Gross Rail Load (A266) that does not exceed 286,000 lbs.

-Equipment having Qualification for Increased Gross Rail Load of 3 must have a Gross Rail Load (A266) that does not exceed 268,000 lbs.

-Equipment having Qualification for Increased Gross Rail Load of 1 must have a Journal Size (A147) of K, G, or M

-Equipment having Qualification for Increased Rail Load of 2 or 3 must have a Journal Size (A147) of F or K

-Equipment having Qualification for Increased Gross Rail Load of 1, 2, or 3 must have a Wheel Diameter (A294) of 36 or 38
-Equipment having Qualification for Increased Gross Rail Load (B344) of 3 and a Gross Rail Load (A266) less than 268,000 lbs., must have Star Code of S

Dimension

Plate Code *Mandatory* — **A046**

Indicates the extreme height and width clearance of the equipment

Affects Rating.

Permissible Values for A046

J	Plate Code J	K	Plate Code K
G	Clearance Code G		

NOTES:

- For ARTICULATED/MULTI-UNIT SET report the most restrictive clearance plate of UNIT in the set.

Outside Length *Mandatory* — **OSLG**

The outside length over pulling faces of couplers in normal position

Affects Rating. Displayed in feet and inches on the Web. Stored in inches.

Range of Values for OSLG

Minimum	Maximum
86 ft 2 inches	854 ft 3 inches

Validation Rule for OSLG

-Outside Length (OSLG) on freight cars must exceed the Inside Length (A135) by 2 feet or more
-Outside Length (OSLG) on freight cars (except refrigerators) must not exceed Inside Length (A135) by more than 16 feet
- Outside Length (OSLG) of VFLT with a blank Connected Unit Count (A020) must contain values between 86 feet 2 inches and 94 feet 11 inches
- Outside Length (OSLG) of VFLT where Connected Unit Count (A020) is 2 must contain values between 172 feet 4 inches and 189 feet 4 inches
- Outside Length (OSLG) of VFLT where Connected Unit Count (A020) is 3 must contain values between 258 feet 6 inches and 284 feet 9 inches
- Outside Length (OSLG) of VFLT where Connected Unit Count (A020) is 4 must contain values between 344 feet 8 inches and 379 feet 8 inches
- Outside Length (OSLG) of VFLT where Connected Unit Count (A020) is 5 must contain values between 430 feet 10 inches and 474 feet 7 inches
- Outside Length (OSLG) of VFLT where Connected Unit Count (A020) is 6 must contain values between 517 feet 0 inches and 569 feet 6 inches
- Outside Length (OSLG) of VFLT where Connected Unit Count (A020) is 7 must contain values between 603 feet 2 inches and 664 feet 5 inches
- Outside Length (OSLG) of VFLT where Connected Unit Count (A020) is 8 must contain values between 689 feet 4 inches and 759 ft 4 inches
- Outside Length (OSLG) of VFLT where Connected Unit Count (A020) is 9 must contain values between 775 feet 6 inches and 854 feet 3 inches

NOTES:

- For connected unit cars report the maximum coupled length of the set.
- Round fraction to the higher inch, e.g., 05 1/4" = 06"

Outside Extreme Width *Mandatory* — **A186**

The outside extreme width of the equipment

Affects Rating. Displayed in feet and inches on the Web. Stored in inches.

Range of Values for A186

Minimum	Maximum
9 ft 6 inches	10 ft 8 inches

NOTES:

- For connected unit cars report the dimension of the largest unit in the set.
- Round fraction to the higher inch, e.g., 05 1/4" = 06"

Outside Extreme Height *Mandatory* — **A185**

Height from top of rail to extreme projecting height

Used in ETC Generation. Affects Rating. Displayed in feet and inches on the Web. Stored in inches.

Range of Values for A185

Minimum	Maximum
2 ft 0 inches	22 ft 6 inches

NOTES:

- For connected unit cars report the dimension of the largest unit in the set.
- Round fraction to the higher inch, e.g., 05 1/4" = 06"

Outside Height Extr Width *Mandatory* — **A187**

The highest point at which the extreme width of the equipment occurs

Displayed in feet and inches on the Web. Stored in inches.

Range of Values for A187

Minimum	Maximum
1 ft 0 inches	20 ft 0 inches

Validation Rule for A187

-Outside Extreme Width (A186) for Plate Code J must not exceed 10 feet 8 inches if Outside Height Extreme Width is 16 feet 4 inches or less
-Outside Extreme Width (A186) for Plate Code K must not exceed 10 feet 8 inches if Outside Height Extreme Width is 18 feet 5 inches or less

NOTES:

- For connected unit cars report the dimension of the largest unit in the set.
- Round fraction to the higher inch, e.g., 05 1/4" = 06"

Inside Length — **A135**

The inside length of the equipment from end to end inside walls, linings, and permanent bulkheads

Displayed in feet and inches on the Web. Stored in inches.

Range of Values for A135

Minimum	Maximum
69 ft 0 inches	145 ft 0 inches

Validation Rule for A135

-Inside Length must be at least 42 inches less than Outside Length (OSLG)
-If Connected Unit Count (A020) is not reported, Inside Length of Vehicular Flat must be less than or equal to 99 feet 3 inches
-If Connected Unit Count (A020) is reported, and Intermediate Conn Style (B115) is "A – Articulated", the Inside Length of Vehicular Flat must be greater than or equal to 139 feet 0 inches

NOTES:

- Round fraction to the lower inch, e.g., 05 1/4" = 05"
- For connected unit cars report the shortest dimension of a unit in the set.

Inside Width — **A138**

The inside width of the equipment from side walls and linings

Displayed in feet and inches on the Web. Stored in inches.

Range of Values for A138

Minimum	Maximum
4 ft 0 inches	12 ft 6 inches

Validation Rule for A138

-Inside Width/Inside Platform Width must not exceed Outside Extreme Width

NOTES:

- For connected unit cars report the shortest dimension of a unit in the set.

Inside Height — **A133**

The inside height of the equipment from the floor to the top of the side, or to the lowest point of the interior ceiling

Value does not carry forward for Equipment Group Change.

Range of Values for A133

Minimum	Maximum
12	169

NOTES:

- For connected unit cars report the shortest dimension of a unit in the set.

Truck Center Length A276

The length between the centers of the two truck systems ■

Affects Rating. Displayed in feet and inches on the Web. Stored in inches.

Range of Values for A276

Minimum	Maximum
15 ft 0 inches	76 ft 11 inches

Validation Rule for A276

-Truck Center Length is required for cars with an Outside Length of greater than 62 feet 6 inches

-Truck Center Length must be a minimum of 15 feet for cars with an Outside Length greater than 62 feet 6 inches

NOTES:

- For connected unit cars report the dimension of the largest unit in the set.

Platform Hght Above Rail *Mandatory* A192

Describes the platform height above the rail in inches ●▲

Used in ETC Generation. Displayed in feet and inches on the Web. Stored in inches.

Range of Values for A192

Minimum	Maximum
1 ft 3 inches	6 ft 0 inches

Validation Rule for A192

-Platform Height cannot be greater than Outside Height

NOTES:

- EXCEPTIONS: For bi-level and tri-level flat cars, measurement is from top of rail to top of floor of lower deck. Feet in Pos. 45-46, inches in Pos. 47-48. Round fraction to the higher inch, e.g., 05 1/4" = 06. This field must agree relationally for V_ _ _ Equipment Type Codes and P_ _ _.

P_ _ _	MINIMUM—1ft 1in MAXIMUM—4ft 9in
Q_ _ _	MINIMUM—10in MAXIMUM—4ft
S_ _ _	MINIMUM—10in MAXIMUM—4ft
All F_ _ _ except F_3_ and F_6_	MINIMUM—2ft MAXIMUM—5ft 11in
All F_3_, F_6_ and F_9_	MINIMUM—2ft MAXIMUM—8ft 11in
Q8_ _	MINIMUM—2ft 6in MAXIMUM—5ft
P1_ _, P2_ _, P5_ _, P6_ _	MINIMUM—2ft MAXIMUM—3ft 3in
P3_ _, P4_ _, P7_ _, P8_ _	MINIMUM—3ft 4in MAXIMUM—5ft 11in
P9_ _	MINIMUM—3ft 2in MAXIMUM—3ft 2in
Q_1_	MINIMUM—2ft MAXIMUM—2ft 8in

See diagram below for place of measurement on depressed cars (Equipment Type Code F_3_, F_9) and well cars (Equipment Type Code F_6_).

Door

Anti-Pilferage Locking B016

Indicates that the doors are equipped with an anti-pilferage locking device

Value does not carry forward for Equipment Group Change.

Permissible Values for B016

Y Yes

Specification

Truck Count B256

The total number of trucks on the equipment

System Generated Field. This element is not eligible for Input.

Range of Values for B256

Minimum	Maximum
2	18

Axle Count *Mandatory* A024

The total number of axles on the equipment ●■

Affects Rating.

Range of Values for A024

Minimum	Maximum
4	36

Validation Rule for A024

-Axle Count must be greater than or equal to 4

-Axle Count for an articulated car must be greater than or equal to ((Connected Unit Count (A020) x 2) + 2)

-Axle Count for a draw bar connected car must be greater than or equal to (Connected Unit Count (A020) x 4)

-Total Axle Count must match sum of truck axle counts

Wheel Bearing Type *Mandatory* B191

Indicates the wheel bearing code for the equipment ●■

Affects Rating.

Permissible Values for B191

P Plain R Roller

Validation Rule for B191

-Cars with Plain Bearings will have a Transportation Code (TCOD) and Transportation Condition Code (TCCD) of either YA, S_, SX, or XJ

-Equipment cannot have Plain Bearings if Built Date (BLDT) is on or after January 1, 1993

Bearing Shielded From HBD B021

Indicates the bearing is shielded from the hot box detector

Permissible Values for B021

Y Yes

Brake Shoe Type *Mandatory* B026

Indicates the type of brake shoe on the equipment ●

Permissible Values for B026

C Tread Conditioning

H High Friction Composite

L Low Friction Composite/Cast Iron

CC Side Bearing Type A146

Indicates the travel range of the constant contact side bearings installed on the equipment

Permissible Values for A146

LC Long Travel Constant Contact

SC Short Travel Constant Contact

Validation Rule for A146

-Equipment having Qualification for Increased Gross Rail Load (B344) of 1 must have Constant Contact Side Bearing Type of LC

Empty/Load Device Eqpd B075

Indicates a system that determines if the equipment is empty or loaded, and then varies the braking forces accordingly

Permissible Values for B075

Y Yes

Center of Gravity Empty A045

When empty, indicates the height from Top of Rail to the Center of Gravity

Range of Values for A045

Minimum	Maximum
22	98

Validation Rule for A045

-All cars that exceed Plate Code (A046) C must report Center of Gravity Empty except for cars with Equipment Type Code (UMET) of J_ _ _

Remote Monitoring Device — B176

Indicates the equipment is equipped with a location monitoring device

Permissible Values for B176

Y	Yes
N	No

AEI High Temperature Tag — B006

Indicates the equipment is equipped with a high temperature AEI tag

Permissible Values for B006

Y	High Temperature Tag

Connected Unit Count — A020

Indicates the number of units within an articulated or multi-unit equipment ■▲

Used in ETC Generation. Affects Rating.

Range of Values for A020

Minimum	Maximum
2	45

Validation Rule for A020

-Connected Unit Count must equal the number of Unit Segments

-Unit Segment Component elements must not be reported if the Connected Unit Count is not reported

-Unit Segment Component elements must be reported if Connected Unit Count is reported

Intermediate Conn Style — B115

Indicates the method by which two or more pieces of equipment are connected

Permissible Values for B115

A	Articulated Connector
D	Drawbar Connector

Validation Rule for B115

-Intermediate Connector Style is required for multi-unit equipment

-Intermediate Connector Style must not be reported for single unit equipment

Operating Brakes *Mandatory* — A182

The number of air brake control valves on the equipment (excludes hand brakes). One control valve consists of a service portion, emergency portion, and pipe bracket. Example: DB-60 control valve ●

Permissible Values for A182

1	2	3	4	5
6	7	8	9	

Validation Rule for A182

-Operating Brakes can only be reported for articulated equipment

-Operating Brakes are required for articulated equipment

-Operating Brakes (A182) must be 1 for non-articulated equipment with an Axle Count (A024) equal to 4

ECP Brake Type — B327

Indicates the type of electronic controlled pneumatic brake used on the equipment ✹

Permissible Values for B327

N	Not Equipped
O	Overlay - Both ECP & Air Brake
S	Stand Alone - ECP Only

Validation Rule for B327

-Equipment must have a value entered for ECP Brake Type if built or rebuilt after June 28, 2012

ECP Brake Builder — B328

The manufacturer of the electronic controlled pneumatic brake used on the equipment

Permissible Values for B328

NYAB	New York Air Brake
WABT	WABTEC

Validation Rule for B328

-If ECP Brake Type (B327) is Stand Alone or Overlay then a value must be entered for ECP Brake Builder

-If ECP Brake Type (B327) is Not Equipped then ECP Brake Builder is not reportable

Slack Adjuster Group — B538

The slack adjuster group on the equipment per AAR Field Manual Rule #8 ✹

Value does not carry forward for Single Clone / Multi-Clone.

Permissible Values for B538

A	Group A	B	Group B	C	Group C	D	Group D
E	Group E	F	Group F	G	Group G	H	Group H
J	Group J	L	Group L	M	Group M	N	Group N
O	Group O	P	Group P	Q	Group Q	R	Group R
1	Internal	2	Unequipped				

Validation Rule for B538

- Slack Adjuster Group is mandatory for all equipment built or rebuilt on or after January 1, 2016

- If Slack Adjuster Group is reported as "1" then Brake Cylinder Mount Type (B540) must be reported as "T"

- If Slack Adjuster Group is "1" or "2", then Slack Adjuster CID (B359) must not be reported.

NOTES:

- Permissible value of "1 – Internal" identifies special truck mounted internal slack adjuster within brake cylinder.

Brake Cylinder Mount Type — B540

Identifies the location of the brake cylinder ✹

Permissible Values for B540

B	Body Mounted
T	Truck Mounted

Validation Rule for B540

- Brake Cylinder Mount Type is mandatory for all equipment built or rebuilt on or after January 1, 2016

Equipment Builder — A035

Identifies the original manufacturer of the equipment ✹

Permissible Values for A035

ACF	American Car & Foundry
ACFX	ACF Industries
ARI	ARI Industries
BETH	Bethlehem Car Works
CONC	Concarrill
DIFC	Difco
EDSP	ESTRATEGIAS DUL S. DE R.L.
FMC	FMC Corporation
GMB	Greenbrier
GUN4	Gunderson - Trenton Works
GUND	Gunderson Inc
HST	Hawker Siddeley
HYUN	Hyundai
JAC	Johnstown America Corporation
KASG	Kasgro Railcar
MULT	Multiple
NACA	National Alabama Corporation
NSC	National Steel Car
PS	Pullman-Standard
PSP	Pullman-Standard, Division of Trinity Industries
THRL	Thrall
TRIN	Trinity
UNKN	Unknown

Validation Rule for A035-Equipment Builder must be populated if the Built Date (BLDT) is July 1, 2010 or newer

-Equipment built or rebuilt on or after July 1, 2010 cannot have a Equipment Builder of Unknown

-Equipment with a Built Date (BLDT) on or after July 1, 2010 cannot have an Equipment Builder Code of OWNER RAILROAD.
-Equipment Builder can have a value of MULT only if the equipment has multiple units.

Builder Lot Code B030

A unique identifier for a group of equipment built by one manufacturer under the same contract ✹

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Validation Rule for B030

-Equipment built or rebuilt on or after June 28, 2012 must have a value for Builder Lot Code

Built Country B031

The country where the equipment was constructed

Data is Confidential.

Permissible Values for B031

CA	Canada	MX	Mexico
US	United States		

Rebuilt Country B170

The country where the equipment was re-constructed

Permissible Values for B170

CA	Canada	MX	Mexico
US	United States		

FRA Reflectorization B096

Indicates the equipment owner assumes responsibility for applying reflectorization tape

Permissible Values for B096

P	Reflectorization Plan
W	Reflectorization Waiver

Validation Rule for B096

-Reflectorization is mandatory for all equipment after November 28, 2015.

Air Hose Arrangement B524

The type of trainline air hose arrangement ✹

Permissible Values for B524

A	S-424 Angle Cock Location
B	S-425 Angle Cock Location on Cars Equipped with AAR Type F Coupler
C	S-426 Angle Cock Location on Cars with Floating Sills
D	S-427 Angle Cock and Air Brake Hose Location on Cars with Excessive Overhang Preventing Compliance with AAR Standards
E	S-428 Angle Cock Location on Cars Equipped with AAR Type F Coupler and Cushioned Underframe
F	S-4003 (Former Standard)
G	S-4003x (Former Standard Retrofitted to Meet All Dimensions Except Height)
H	S-4003-05 (Current Standard Train Line Arrangement for Cars with F-Shank Couplers)
I	S-4021 Angle Cock and Brake Hose Location on Cars with EOCC (E and F)
J	S-4021 Coupler Mounted Bracket End Arrangement
K	S-4028 Train Line Arrangement with Displaceable Union on Cars with EOCC and Couplers Not Exceeding 45 in. in Length
L	S-4029 Train Line Arrangement with Displaceable Union on Cars with EOCC and Couplers Exceeding 45 in. in Length
M	S-4030 Trolley Arrangement on Cars with EOCC and E-Shank Couplers

Validation Rule for B524

-Air Hose Arrangement must be reported for this equipment if it is Built or Rebuilt on or after April 22, 2014.

NOTES:

- If any of the following conditions apply, Air Hose Arrangement (B524) must be reported for cars Built or Rebuilt on or after April 22, 2014:
  - Draft Gear Type (B073) at any location is C or E.
  - Connected Unit Count (A020) is reported.
  - Outside Length (OSLG) is greater than or equal to 70 feet (840 inches).
  - The overhang is greater than 5 feet 6 inches (66 inches). Overhang is calculated as follows:
  - 0.5 * (Outside Length, in inches, minus Truck Center Length, in inches, minus 31 inches)
  - For all other equipment, reporting Air Hose Arrangement is optional.

4-Pressure ABT Receiver Eqpd B539

Identifies if the equipment is equipped with a 4-pressure air brake test receiver

Value does not carry forward for Single Clone / Multi-Clone.

Permissible Values for B539

E	Equipped
N	Not Equipped

NOTES:

- An "E" will be system generated if a 4-Pressure ABT is reported on the equipment.

Feature

Floor Material A104

Describes the type of construction material used for the equipment floor

Permissible Values for A104

01	Aluminum
19	Standard Steel
25	Standard Steel, Reinforced

Tie-Down Strap Type B400

Indicates the type of tie-down strap used with the chocks

Value does not carry forward for Equipment Group Change.

Permissible Values for B400

H	Harness	S	Single

Supplemental Restraint B401

Supplemental Restraint

Value does not carry forward for Equipment Group Change.

Permissible Values for B401

A	Holden	B	ZefTek AVR

Chain Equipped B402

Indicates the vehicular flat is equipped with chains to tie down the vehicles. This is in addition to Chock Type

Value does not carry forward for Equipment Group Change.

Permissible Values for B402

Y	Yes

Cost

Original Cost A184

The original manufacturer selling price ✹

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for A184

Minimum	Maximum
0	9999999

Validation Rule for A184-Original Cost must be equal to the Ledger Value if there are no Additions & Betterments.

-Original Cost must be equal to the Ledger Value if Additions & Betterments Indicator is not reported.

-Railroad marked freight cars except MISC, LOCO, TRLR, CONT, CHSS, STWH, EOTD, and PSGR are required to have an Original Cost

-Private marked freight cars except MISC, LOCO, TRLR, CONT, CHSS, STWH, EOTD, and PSGR are required to have an Original Cost if Built Date (BLDT) is on or after January 1, 2015

NOTES:

- Original Cost is never altered. It is the cost of the equipment to the original owner.
- For railroad-marked cars, report in US dollars the original ledger value of original owner For cars rebuilt, report the cost prescribed in MR Interchange Rule 88 and Circular Letter OT-24
- The original cost is used in the settlement of AAR Interchange Rule 107 Office Manual.
- For connected unit cars report the total original cost for all units in the set.
- Numeric, applicable to all railroad-marked cars Also, applicable to privately marked covered hopper (LO) cars.
- NOTE: Raise all cents to the next dollar, e.g. $5,501.02 = 0005502

Ledger Value — A150

The sum of original cost and additions & betterments

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for A150

Minimum	Maximum
0	9999999

Validation Rule for A150-Original Cost must be equal to the Ledger Value if there are no Additions & Betterments.

-Ledger Value must equal the Original Cost (A184) plus the additions & betterments, if Total A&B (A003) has been reported. Otherwise Ledger Value should equal Original Cost (A184).

Total A&B — A003

System generated sum of all reported amounts in A&B Amount (A317), in US dollars

Data is Confidential. System Generated Field. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for A003

Minimum	Maximum
0	99999999

NOTES:

- For railroad-marked cars, report the sum of all additions and betterments applied to the car. This value is for record keeping purposes only and will not be used to report Ledger Value.
- For private Cars report the additions and betterments as qualified under AAR interchange Rule 107 for determination of settlement value.
  - Additions are costs of all new components applied subsequent to the date the car was built or rebuilt and carried in the capital investment account.
  - Betterments are costs of all improvements of components of existing equipment through the substitution of superior parts for inferior parts subsequent to the date the car was built of rebuilt.
- For connected unit cars report the total Truck Location A for all units in the set

Ind for Pos/Neg Total A&B — A128

A code indicating the positive or negative adjustment to the original cost of the equipment

Data is Confidential. System Generated Field. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Permissible Values for A128

N Negative P Positive

A&B Pos/Neg Ind — A316

A code indicating the positive or negative adjustment to the individual addition and betterment

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Permissible Values for A316

N Negative P Positive

Validation Rule for A316

-When entering an individual Addition & Betterment, you must enter a value in all 4 fields.

-The A&B Indicator is required when Additions & Betterments are reported.

-The A&B Indicator must not be reported if Additions & Betterments are not reported.

A&B Amount — A317

The amount of the individual addition and betterment added to or subtracted from the original cost of the equipment

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for A317

Minimum	Maximum
1	999999

Validation Rule for A317

-When entering an individual addition & betterment; A&B Date Done (A319), A&B Type (A318), A&B Pos/Neg Ind (A316), and A&B Amount (A317) must be reported

A&B Date Done — A319

The date of the individual addition and betterment

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for A319

Minimum	Maximum
1/1/1900	12/31/9999

Validation Rule for A319

-When entering an individual Addition & Betterment, you must enter a value in all 4 fields.

-Addition and Betterment Date Done cannot be earlier than Built Date (BLDT).

-Additions & Betterments Date Done cannot be later than today's date.

A&B Type — A318

The type of individual addition and betterment as defined by Rule 107

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Permissible Values for A318

FLLD Other permanently installed loading equipment used on flat cars
GNRL General - Capitalized Additions and Betterments
INIT Initial load of historical A&B amount as of Umler 4.6 implementation date
RACK Multi-deck racks used on flat cars for automobiles

Validation Rule for A318

-For each equipment, only one Individual A&B Type can have a value of INIT.

-When entering an individual Addition & Betterment, you must enter a value in all 4 fields.

Superstructure

SS Identification — B156

The Superstructure (rack) identification stenciled number

Value does not carry forward for Equipment Group Change.

Validation Rule for B156

-SS Identification (B156) is mandatory for all superstructures not integrated with the flat car built on or after September 14, 2023

Superstructure Built Date — SBDT

The date the construction of the Superstructure is complete

Value does not carry forward for Equipment Group Change.

Range of Values for SBDT

Minimum	Maximum

1/1/1970	12/31/9999

Validation Rule for SBDT

- Superstructure Built Date cannot be set if Superstructure is integrated with car
- Superstructure Built Date must be set if SS integrated with car (B342) is blank

SS Rebuilt Date — **SRDT**

The date the reconstruction of the Superstructure is complete

Value does not carry forward for Equipment Group Change.

Range of Values for SRDT

Minimum	Maximum
1/1/1900	12/31/9999

Validation Rule for SRDT

-Superstructure Built Date on VFlat must be prior to Superstructure Rebuilt Date

- Superstructure Rebuilt Date cannot be set if Superstructure is integrated with car

Superstructure Owner — **B159**

Rack Owner; Changed Name from Rack to Superstructure-New

Value does not carry forward for Equipment Group Change.

Validation Rule for B159

-Vehicular Flat cars without Integrated Superstructures must report a Superstructure Owner

NOTES:

- Report the primary reporting mark of the railroad or private company owning the superstructure.

Superstructure Lessee — **B158**

Rack Lessee; Changed Name from Rack to Superstructure-New

Value does not carry forward for Equipment Group Change.

Validation Rule for B158

-VFlat Superstructure Lessee should not be set if Superstructure is integrated with car

NOTES:

- Report the primary reporting mark of the railroad or private company leasing the superstructure.

SS Integrated With Car — **B342**

Superstructure Integrated with Car

Value does not carry forward for Equipment Group Change.

Permissible Values for B342

Y Yes

SS Original Cost Status — **B598**

The status of the SS Original Cost from the Original Cost Self Service system

Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Permissible Values for B598

E Estimated
V Verified

Validation Rule for B598

- SS Orig Cost Status (B598) can only be updated by the Original Cost Self Service (OCSS) application if Verified (V)

NOTES:

- The element will be initially populated with 'V-Verified'.
- When the Original Cost Self Service (OCSS) application has verified the SS Original Cost and/or the SS Addition & Betterment, the SS Original Cost Status will be updated to 'V-Verified'.
- When superstructure has a new SS Rebuilt Date reported, the SS Original Cost Status (B598) will be set to 'E - Estimated'.
- New superstructures added to Umler will have the SS Orig Cost Status (B598) set to 'E'.

SS Original Cost — **A252**

RR Superstructure Cost ($)

Data is Confidential. Value does not carry forward for Equipment Group Change.

Range of Values for A252

Minimum	Maximum
4000	175000

Validation Rule for A252

-If Superstructure Integrated with Car (B342) is not reported, Superstructure Original Cost (A252) must have a value.

-Superstructure Original Cost on VFlat requires a Superstructure Owner other than privately owned

-VFlat Superstructure Original Cost should not be set if Superstructure is integrated with car.

- SS Original Cost (A252) can only be updated by the Original Cost Self Service (OCSS) application when SS Orig Cost Status (B598) is Verified (V)

SS Indicator A&B — **A296**

Rack Indicator For Positive/Negative A&B

Data is Confidential. Value does not carry forward for Equipment Group Change.

Permissible Values for A296

N Negative P Positive

Validation Rule for A296

-Superstructure Indicator for Positive/Negative A and B on VFlat must be reported if Superstructure Additions & Betterments is reported

-Superstructure Indicator for Positive/Negative A and B on VFlat must not be reported if Superstructure Additions & Betterments is not reported

-VFlat Superstructure Indicator for Positive/Negative A and B must not be reported if Superstructure Integrated with car is reported as Y

-VFlat Superstructure Indicator A and B should not be set if Superstructure is integrated with car.

- SS A&B Indicator (A296) can only be updated by the Original Cost Self Service (OCSS) application when SS Orig Cost Status (B598) is Verified (V)

SS Addition &Betterment — **A004**

Rack Addition & Betterment

Data is Confidential. Value does not carry forward for Equipment Group Change.

Range of Values for A004

Minimum	Maximum
0	35000

Validation Rule for A004

-VFlat Superstructure Additions & Betterments must not be reported if the Superstructure Integrated with car is reported as Y

-VFlat Superstructure Additions & Betterments should not be set if Superstructure is integrated with car.

- SS Addition & Betterment (A004) can only be updated by the Original Cost Self Service (OCSS) application when SS Orig Cost Status (B598) is Verified (V)

SS A&B Date Done — **B599**

The date of the superstructure addition and betterment

Confidential; Do not carry forward on single/multiple clone.

Range of Values for B599

Minimum	Maximum
1/1/1900	12/31/9999

Validation Rule for B599

-SS A&B Date Done (B599) can only be updated by the Original Cost Self Service (OCSS) application if Verified (V)

Superstructure Deck Level *Mandatory* **B406**

Superstructure Deck Levels ●▲

Used in ETC Generation. Value does not carry forward for Equipment Group Change.

Permissible Values for B406

BCC	Bi-Level, Convertible, Collapsible
BCR	Bi-Level, Convertible, Removable
BHI	Bi-Level, High A Deck
BI	Bi-Level, Standard
TCC	Tri-Level, Convertible, Collapsible
TCR	Tri-Level, Convertible, Removable
TRI	Tri-Level, Standard
UNI	Uni-Level

Validation Rule for B406

-When Superstructure Deck Levels (B406) is UNI, Superstructure Top Deck Setting Enclosed (A215) must be reported.

-When Superstructure Deck Levels (B406) is BI, BCC, BCR, or BHI Superstructure Deck A/B Setting (A210) must be reported. Additionally, either Superstructure Top Deck Setting Enclosed (A215) or Top Deck Height No Roof (A263) must be reported.

-When Superstructure Deck Levels (B406) is TRI, TCC, or TCR, Superstructure Deck A/B Setting (A210) and Superstructure Deck B/C Setting (A211) must be reported. Additionally, either Superstructure Top Deck Setting Enclosed (A215) or Top Deck Height No Roof (A263) must be reported.

-When Superstructure Deck Levels (B406) is TRI, TCC, or TCR, Superstructure Deck A/B Setting (A210) and Superstructure Deck B/C Setting (A211) must be reported. Additionally, either Superstructure Top Deck Setting Enclosed (A215) or Top Deck Height No Roof (A263) must be reported.

Autorack Category **ARCG**

Autorack Category is based from the Autorack Score

System Generated Field. This element is not eligible for Input. Value does not carry forward for Equipment Group Change.

NOTES:

- For an explanation of how the Autorack Category value is derived, please reference Manual of Standards and Recommended Practices Specification M-970 Appendix A
- When the SS Built Date (SBDT) or the SS Rebuilt Date (SRDT) is changed, and an Autorack Inspection has been reported; the value for Autorack Category (ARCG) will be reset to 1.
- When the SS Integrated with Car (B342) equals Y, and a change in the Built Date (BLDT) should not reset the Autorack Category – only a change in the Rebuilt Date (RBDT) of the VFLT is changed, and an Autorack Inspection has been reported, the value of Autorack Category (ARCG) will be reset to 1.
- If SS Integrated with Car (B342) is blank, and a newer SS Rebuilt Date (SRDT) or Autorack Certification Inspection (ARC) date is entered, a new Autorack Inspection (ARI) is generated, and the Autorack Category is reset to "1"
- If SS Integrated with Car (B342) is "Y", and a newer Rebuilt Date (RBDT) or Autorack Certification Inspection (ARC) date is entered, a new Autorack Inspection (ARI) is generated, and the Autorack Category is reset to "1".

Superstructure Builder **A212**

Rack Manufacturer

Value does not carry forward for Equipment Group Change.

Permissible Values for A212

A	AMERICAN CAR & FOUNDRY
B	JOHNSTOWN AMERICA
C	THRALL TRINITY FREIGHT CAR, INC.
F	GREENVILLE STEEL CAR
G	GREENBRIER
H	PACIFIC CAR & FOUNDRY
J	PARAGON
K	PORTEC
L	PULLMAN STANDARD
M	THRALL
N	TRINITY INDUSTRIES
P	WHITEHEAD & KALES
R	RAILROAD MFG.
S	NATIONAL STEEL CAR LIMITED

SS Rate Indicator **A019**

Appurtenance Change Indicator, element utilized for Car Hire purposes

Value does not carry forward for Equipment Group Change.

Permissible Values for A019

0	Zero Rated
E	Estimated Hourly Charge
H	Actual Hourly Charge

Validation Rule for A019

- Superstructure Rate Indicator must not be reported if Superstructure Integrated with Car (B342) is Y
- Superstructure Rate Indicator must be reported if Superstructure Integrated with Car (B342) is blank

SS Deck A/B Setting **A210**

Rack Deck Setting (A/B Deck), lower deck closest to rail

Value does not carry forward for Equipment Group Change.

Range of Values for A210

Minimum	Maximum
54	130

Validation Rule for A210

-Superstructure Deck A/B Setting on VFlat for ETC V6, V7, V8 and V9 must be greater than or equal to 75 inches

-VFlat Superstructure Deck A/B Setting for ETC V1, V2, V3, and V4 must be higher than 54 inches

-Superstructure Deck A/B Setting on VFlat for ETC V1, V3 & V4 must be less than or equal to 74 inches

-Superstructure Deck A/B Setting on VFlat for ETC V2 must be less than or equal to 80 inches

-Superstructure Deck A/B Setting on VFlat for ETC V6 and V9 must be less than or equal to 92 inches, and V9 is not reported with Superstructure Deck Level (B406) as BHI

-Superstructure Deck A/B Setting on VFlat for ETC V9 must greater than or equal to 100 inches and be less than or equal to 130 inches when Superstructure Deck Level (B406) is reported as BHI

-Superstructure Deck A/B Setting on VFlat for ETC V7 must be less than or equal to 118 inches.

-Superstructure Deck A/B Setting (A210) cannot be reported when Superstructure Deck Levels (B406) is UNI. Superstructure Deck A/B Setting must be reported when Superstructure Deck Levels is any other value.

-Superstructure Deck A/B Setting (A210) plus Superstructure Top Deck Setting (A215) cannot exceed Outside Extreme Height (A185) minus Platform Height Above Rail (A192) for a Bi-Level Superstructure Deck

-Superstructure Deck A/B Setting (A210) plus Top Deck Height No Roof (A263) cannot exceed Outside Extreme Height (A185) minus Platform Height Above Rail (A192) for a Bi-Level Superstructure Deck

-Superstructure Deck A/B Setting (A210) plus Superstructure Deck B/C Setting (A211) plus Superstructure Top Deck Setting (A215) cannot exceed Outside Extreme Height (A185) minus Platform Height Above Rail (A192) for a Tri-Level Superstructure Deck

SS Deck B/C Setting **A211**

Rack Deck Setting (B/C Deck), this only applies to the middle deck of a Tri-Level

Value does not carry forward for Equipment Group Change.

Range of Values for A211

Minimum	Maximum
54 inches	115 inches

Validation Rule for A211

-Superstructure Deck B/C Setting on VFlats having ETC V0, V6, V8 or V9 is not permitted

-Superstructure Deck B/C Setting on VFlat for ETC V1, V3 and V4 must be less than 74 inches
-VFlat Superstructure Deck B/C Setting for ETC V1, V2, V3, V4, and V7 cannot be more than 54 inches.
-Superstructure Deck B/C Setting (A211) must be reported when Superstructure Deck Levels (B406) is TRI, TCC, or TCR. Superstructure Deck B/C Setting cannot be reported when Superstructure Deck Levels is any other value.
-Superstructure Deck B/C Setting (A211) must be reported when Superstructure Deck Levels (B406) is TRI, TCC, or TCR. Superstructure Deck B/C Setting cannot be reported when Superstructure Deck Levels is any other value.

SS Top Deck Setting A215

Rack Top Deck Setting Enclosed ▲

Used in ETC Generation. Value does not carry forward for Equipment Group Change.

Range of Values for A215

Minimum	Maximum
54 inches	180 inches

Validation Rule for A215

-When Superstructure Deck Levels (B406) is any value other than UNI, either Superstructure Top Deck Setting Enclosed (A215) or Top Deck Height No Roof (A263) must be reported, but not both.
-Superstructure Top Deck Setting (Enclosed) on VFlat must be greater than or equal to 65 inches for V6, V8, and V9, when Superstructure Deck Level (B406) as BHI
-VFlat Superstructure Top Deck Setting (Enclosed) must be greater than 54 inches for V1, V2, V3 and V4
-Superstructure Top Deck Setting (Enclosed) on VFlat must be greater than or equal to 60 inches for V7.
-Superstructure Top Deck Setting (A215) cannot exceed Outside Extreme Height (A185) minus Platform Height Above Rail (A192) for a Uni-Level Superstructure Deck

Top Deck Height No Roof A263

Top Deck Height No Roof ■

Affects Rating. Value does not carry forward for Equipment Group Change.

Range of Values for A263

Minimum	Maximum
108 inches	174 inches

Validation Rule for A263

-VFlat with Top Deck Height No Roof can only be reported on Vflats with ETC codes of V3__ or V8__
-VFlat with Top Deck Height No Roof for ETC V3__ must be greater than or equal 12 feet 6 inches
-VFlat Top Deck Height No Roof for ETC V3-- cannot be greater than 14 feet 06 inches
-VFlat with Top Deck Height No Roof for ETC V8__ must be less than or equal 11 feet 3 inches
-VFlat Top Deck Height No Roof for ETC V8-- cannot be less than 9 feet 00 inches
-Top Deck Height No Roof (A263) cannot be reported when Superstructure Deck Levels (B406) is UNI.

Perforated Sidewalls B146

Indicates the superstructure is equipped with perforated sidewalls

Value does not carry forward for Equipment Group Change.

Permissible Values for B146

Y Yes

SS Door Edge Protection A074

Door Edge Protection

Value does not carry forward for Equipment Group Change.

Permissible Values for A074

D0 No door edge protection
D1 Butyl Based tape
D2 Polyester Strap
D3 Silicon Beading
D4 Tubing or Hose (e.g. Pensy, etc.)
D5 Vinyl extrusion or polymer (e.g. Zev., Tech., etc.)
D6 Closed cell foam (e.g. creative foam, etc.)
D7 Thrall extruded
D8 Thrall molded
D9 Protection of unknown type

SS Enclosure Type *Mandatory* B153

Describes the superstructure enclosure type ●▲

Used in ETC Generation. Value does not carry forward for Equipment Group Change.

Permissible Values for B153

F Full Height P Partial Height

Validation Rule for B153

-Superstructure Enclosure Type on vehicular flats must be reported if Superstructure End Door Design (B154) is reported
-Superstructure Enclosure Type on vehicular flats must not be reported if Superstructure End Door Design (B154) is not reported
-P (Partial Height) Superstructure Enclosure Type on vehicular flats is only applicable to Superstructure End Door Design (B154) reported as either OTHR (Other)

SS End Door Design *Mandatory* B154

Indicates the superstructure end door design type ●▲

Used in ETC Generation. Value does not carry forward for Equipment Group Change.

Permissible Values for B154

PICK		OTHR	Other
RADL	Radial	RAP	RAVE, Portec
SEAL	Seal Safe	RATR	RAVE, Trinity
TFLD	TRI-FOLD	TARC	TRI-ARC
		UNKN	Unknown

SS End Door M941-90 Qual B155

Please reference Manual of Standards and Recommended Practices Specification M941

Value does not carry forward for Equipment Group Change.

Permissible Values for B155

Y Yes

SS Chock Type Deck A *Mandatory* B151

Superstructure Chock Type ●

Value does not carry forward for Equipment Group Change.

Permissible Values for B151

A Zeftek (SCT) Co-Polymer Chocks (3rd Rail)
B Trinity (Thrall) Polymer Wedge Chocks (3rd Rail)
C Trinity (Thrall) Steel Wedge Chocks (3rd Rail)
D Chocks, All others
E Holden Grate-Lock Chocks (Grating)
F Zeftek Low-Profile Polymer Chocks (3rd Rail)
G Zeftek Low-Profile Steel Chocks (3rd Rail)
H Trinity Low-Profile Polymer Chocks (3rd Rail)
I Zeftek Low-Profile Stay-Put Chocks (Grating)
J Holland Low-Profile VRS Chocks (Grating)
K Holden Low-Profile Grip-Lock Chocks 96 (Grating)
L Holland Low-Profile Tri-Low Steel Chocks (3rd Rail)
M Holden Low-Profile Grip-Lock Chocks 48 (Grating)
P Zeftek Low-Profile Steel Hybrid Chocks (3rd Rail)
Q TrinityRail Low – Profile TTM (3rd Rail)

R Holland Low-Profile Lock N Load Chocks 48 (Grating)
S Zeftek LoPro Polymer Model 2 (3rd Rail)

SS Chock Type Deck B *Mandatory* **B160**

Superstructure Chock Type Deck B ●

Value does not carry forward for Equipment Group Change.

Permissible Values for B160

A Zeftek (SCT) Co-Polymer Chocks (3rd Rail)
B Trinity (Thrall) Polymer Wedge Chocks (3rd Rail)
C Trinity (Thrall) Steel Wedge Chocks (3rd Rail)
D Chocks, All others
E Holden Grate-Lock Chocks (Grating)
F Zeftek Low-Profile Polymer Chocks (3rd Rail)
G Zeftek Low-Profile Steel Chocks (3rd Rail)
H Trinity Low-Profile Polymer Chocks (3rd Rail)
I Zeftek Low-Profile Stay-Put Chocks (Grating)
J Holland Low-Profile VRS Chocks (Grating)
K Holden Low-Profile Grip-Lock Chocks (Grating)
L Holland Low-Profile Tri-Low Steel Chocks (3rd Rail)
M Holden Low-Profile Grip-Lock Chocks 48 (Grating)
N Not Applicable
P Zeftek Low-Profile Steel Hybrid Chocks (3rd Rail)
Q TrinityRail Low – Profile TTM (3rd Rail)
R Holland Low-Profile Lock N Load Chocks 48 (Grating)
S Zeftek LoPro Polymer Model 2 (3rd Rail)

Validation Rule for B160

-SS Chock Type of N cannot be reported on SS Chock Type Deck A (B151) or SS Chock Type Deck B (B160) if the Superstructure Deck Level (B406) is listed as BCC, BI, or BCR
-SS Chock Type of N cannot be reported on SS Chock Type Deck A (B151), SS Chock Type Deck B (B160) or SS Chock Type Deck C (B161) when the Superstructure Deck Level (B406) is listed as TCC, TRI, or TCR
-SS Chock Type Deck B must be reported as N when the Superstructure Deck Level (B406) is listed as UNI

SS Chock Type Deck C *Mandatory* **B161**

Superstructure Chock Type Deck C ●

Value does not carry forward for Equipment Group Change.

Permissible Values for B160

A Zeftek (SCT) Co-Polymer Chocks (3rd Rail)
B Trinity (Thrall) Polymer Wedge Chocks (3rd Rail)
C Trinity (Thrall) Steel Wedge Chocks (3rd Rail)
D Chocks, All others
E Holden Grate-Lock Chocks (Grating)
F Zeftek Low-Profile Polymer Chocks (3rd Rail)
G Zeftek Low-Profile Steel Chocks (3rd Rail)
H Trinity Low-Profile Polymer Chocks (3rd Rail)
I Zeftek Low-Profile Stay-Put Chocks (Grating)
J Holland Low-Profile VRS Chocks (Grating)
K Holden Low-Profile Grip-Lock Chocks (Grating)
L Holland Low-Profile Tri-Low Steel Chocks (3rd Rail)
M Holden Low-Profile Grip-Lock Chocks 48 (Grating)
N Not Applicable
P Zeftek Low-Profile Steel Hybrid Chocks (3rd Rail)
Q TrinityRail Low – Profile TTM (3rd Rail)
R Holland Low-Profile Lock N Load Chocks 48 (Grating)
S Zeftek LoPro Polymer Model 2 (3rd Rail)

Validation Rule for B161

-SS Chock Type of N cannot be reported on SS Chock Type Deck A (B151), SS Chock Type Deck B (B160) or SS Chock Type Deck C (B161) when the Superstructure Deck Level (B406) is listed as TCC, TRI, or TCR
-SS Chock Type Deck C must be reported as N when the Superstructure Deck Level (B406) is listed as UNI, BCC, BI, or BRC

Car Management

Pool Number **P001**

Unique number used to indicate the grouping of equipment for a particular purpose

Used for Transportation Codes. This element is not eligible for Input. Value does not carry forward for Equipment Group Change / Add Back.

Pool Control **TCPC**

Pool Control

System Generated Field. Used for Transportation Codes. This element is not eligible for Input, Output or Query.

NOTES:

- For further explanation reference Appendices C and E.

User Routing Instructions **TCUR**

The routing instruction reported by the user

Used for Transportation Codes.

Permissible Values for TCUR

2 Trailer Service Rule 2
G Contaminated commodity service
M Mark canceled
O Owner requested return
U Unassigned equipment

NOTES:

- For further explanation reference Appendix E.

Umler Transportation Code **TCOD**

The type of assigned service, empty routing or restriction of the equipment

System Generated Field. Used for Transportation Codes. This element is not eligible for Input.

NOTES:

- For further explanation reference Appendix E.

Transportation Cond Code **TCCD**

The AAR or FRA interchange restriction code

System Generated Field. Used for Transportation Codes. This element is not eligible for Input.

NOTES:

- For further explanation reference Appendix E.

Mechanical Restriction **TCME**

User reported or system generated type of mechanical restriction

Used for Transportation Codes.

Permissible Values for TCME

S Scrap
X AAR Interchange Restriction
Y FRA Interchange Prohibited

NOTES:

- For further explanation reference Appendix D.1

Mech Restriction Reason **TCMR**

The explanation of the Mechanical Restriction (TCME)

Used for Transportation Codes.

Permissible Values for TCMR

A Restricted Due to Age (Over 40-AAR, Over 50-FRA)
B Restricted Due to Air Brakes
C Restricted Due to Axles
D Restricted Due to Couplers and Couplers Parts
F Restricted Due to Couplers Yokes
G Restricted Due to Draft Gears

J Restricted Due to Journal Bearing and Journal Lubrication
N Restricted Due to Trucks
P Restricted Due to Truck Side Frames
T Restricted Due to Trucks Bolsters
U Restricted by AAR or Owner
W Restricted Due to Wheels
X Restricted Due to Scrap or Early Warning
Z Restricted Due to Umler Conflict (Not Valid for User Input)

NOTES:

- For further explanation reference Appendix D.2.
- The assignment of the Transportation Codes S_, SX, XA, XZ and YA generate the Rate Indicator Code 6 to the CHARM file to zero (0) rate the car hire and mileage rate.

Sys Gen Routing Inst TCGR

The routing instruction generated by the system

System Generated Field. Used for Transportation Codes. This element is not eligible for Input.

NOTES:

- For further explanation reference Appendix E.5.

Loading Authority Fleet Status B597

Identifies when a car is listed on a fleet in the Loading Authority application

System Generated Field. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Permissible Values for B597

Y Yes
S Suspended

NOTES:

- • When equipment is on a fleet the Loading Authority (LA) application will update the flag to 'Y – Yes'. When equipment is removed from a fleet the LA application will remove the 'Y – Yes'.
- When equipment is on a LA fleet that is suspended the LA application will update the flag to 'S – Suspended'. When the equipment is on a LA fleet that is no longer suspended the LA application will update the flag to 'Y – Yes'.

Train Service

Restricted Speed Empty B180

Describes the maximum restricted speed the equipment can travel when empty

Range of Values for B180

Minimum	Maximum
5	95

Restricted Speed Loaded B181

Describes the maximum restricted speed the equipment can travel when loaded

Range of Values for B181

Minimum	Maximum
5	95

Shove Car to Rest B189

Identifies the car must be moved to rest by locomotive

Permissible Values for B189

Y Yes

Shove Adj. Car to Rest B188

Identifies the adjacent car must be shoved to rest by locomotive

Permissible Values for B188

Y Yes

Train Position Sensitive B211

Indicates there is a physical reason, limiting its position on a train

Permissible Values for B211

Y Yes

End of Train Only B277

Indicates the equipment must be placed at the end of the train (including per AAR RP-2001)

Permissible Values for B277

Y Yes

Check Trailing Tonnage B044

Indicates the equipment has restrictions on trailing tonnage

Permissible Values for B044

Y Yes

Curve Negotiate Exception B178

Describes the requirement for negotiating a curve

Permissible Values for B178

A Restrictive Curve Negotiability, Section 2.1.4 of M-1001
B Does not meet all Chapter XI Curving Requirements

Loaded Net Braking Ratio B551

Indicates calculated minimum loaded net braking ratio per AAR Specifications in place on built or rebuilt date (in percent).
System Generated Field. This element is not eligible for input.

Permissible Values for B551

– 11.0
– 8.5

NOTES:

- Loaded Net Braking Ratio is determined as follows:
  - If Built Date (BLDT) or Rebuilt Date (RBDT) is less than 1/1/1972, then Loaded Net Braking Ratio will be set to blank.
  - If Built Date (BLDT) or Rebuilt Date (RBDT) is greater than or equal to 1/1/2004, or if Equipment Type Code (UMET) begins with "Q" or "S", then Loaded Net Braking Ratio is 11.0%.
  - For all other equipment, Loaded Net Braking Ratio is 8.5%.

Owner-Provided Loaded Net Braking Ratio B552

Indicates an alternate minimum loaded net braking ratio provided by owner (in percent).

Range of Values for B552

Minimum	Maximum
8.5	14.0

NOTES:

- Owner may enter a documented alternative minimum loaded net braking ratio in this field that is greater than the system calculated Loaded Net Braking Ratio (B551).
- When reported, the Owner-Provided Loaded Net Braking Ratio will be used in PTC stopping distance calculations.
- A change in value for the following elements will cause the Owner-Provided Loaded Net Braking Ratio to reset to blank:
  - Rebuilt Date (RBDT)
  - Gross Rail Load/Weight (A266)
  - Equipment Type Code (UMET)
  - Empty/Load Device Eqpd (B075)

Empty Braking Ratio B553

Indicates calculated empty braking ratio per AAR Specifications in place on built or rebuilt date (in percent).
System Generated Field. This element is not eligible for input.

Range of Values for B553

Minimum	Maximum

15.0	38.0

NOTES:

- Empty Braking Ratio is determined as follows:
  - If Built Date (BLDT) or Rebuilt Date (RBDT) is less than 1/1/1972, then Empty Braking Ratio will be set to blank.

Owner-Provided Empty Braking Ratio B554

Indicates an owner supplied alternate empty braking ratio (in percent).

Range of Values for B554

Minimum	Maximum
15.0	38.0

NOTES:

- Owner may enter a documented alternative minimum loaded net braking ratio in this field that is greater than the system calculated Loaded Net Braking Ratio (B551).
- When reported, the Owner-Provided Loaded Net Braking Ratio will be used in PTC stopping distance calculations.
- A change in value for the following elements will cause the Owner-Provided Loaded Net Braking Ratio to reset to blank:
  - Rebuilt Date (RBDT)
  - Gross Rail Load/Weight (A266)
  - Equipment Type Code (UMET)
  - Empty/Load Device Eqpd (B075)

Truck Components

Axle Spacing Distance *Mandatory* B020

The distance between axle centers on the same truck

Affects Rating.

Permissible Values for B020

53	53 Inches
54	54 Inches
55	55 Inches
60	60 Inches
61	61 Inches
62	62 Inches
63	63 Inches
64	64 Inches
65	65 Inches
66	66 Inches
68	68 Inches
70	70 Inches
71	71 Inches
72	72 Inches
73	73 Inches
74	74 Inches
76	76 Inches
78	78 Inches
99	Axle Space Unknown

Truck Axle Count B252

The number of axles per truck

Range of Values for B252

Minimum	Maximum
2	4

Validation Rule for B252

- Sum of Truck Axle Counts must equal Axle Count (A024)

Journal Size *Mandatory* A147

The size of the journal bearing

Affects Rating.

Permissible Values for A147

A	3-3/4 X 7	B	4-1/4 X 8	C	5 X 9
D	5-1/2 X 10	E	6X11	F	6-1/2 X 12
G	7 X 12	K	6-1/ 2X 9	M	7 X 9

Validation Rule for A147

-4-axle equipment with Journal Size B and Star Code (A247) is not populated, must have Gross Rail Load (A266) of 103,000 lbs.
-4-axle equipment with Journal Size C and Star Code (A247) is not populated, must have Gross Rail Load (A266) of 142,000 lbs.
-4-axle equipment with Journal Size D and Star Code (A247) is not populated, must have Gross Rail Load (A266) of 177,000 lbs.
-4-axle equipment with Journal Size E and Star Code (A247) is not populated, must have Gross Rail Load (A266) of 220,000 lbs.
-4-axle equipment with Journal Size F or K, Star Code (A247) is not populated, and Qualification for Increased Gross Rail Load (B344) is not populated, must have Gross Rail Load (A266) of 263,000 lbs.
-4-axle equipment with Journal Size F or K, Star Code (A247) is not populated, and Qualification for Increased Gross Rail Load (B344) of 1 or 2, must have Gross Rail Load (A266) of 286,000 lbs.
-4-axle equipment with Journal Size G or M, Star Code (A247) is not populated, and Qualification for Increased Gross Rail Load (B344) is not populated, must have Gross Rail Load (A266) of 315,000 lbs.
-4-axle equipment with Journal Size G, K, or M, Star Code (A247) is not populated, and Qualification for Increased Gross Rail Load (B344) of 1, must have Gross Rail Load (A266) of 286,000 lbs.

NOTES:

- A, B and C Journal Classes are prohibited in Interchange per Rule 90.B.4
- A, B, and C Journal Sizes are restricted from interchange and will receive the Mechanical Restriction XJ
- 4-axle equipment with 28 inch diameter, 1-wear wheels, is limited to a Gross Rail Load (A266) of 195,000 lbs.

Wheel Diameter *Mandatory* A294

The diameter of the wheels

Permissible Values for A294

28	28 Inches	33	33 Inches
36	36 Inches	38	38 Inches

Validation Rule for A294

-Equipment with a Qualification for Increased Gross Rail Load (B344) of 1 and Journal Size (A147) of G or M must have a Wheel Diameter of 38
-Equipment with a Qualification for Increased Gross Rail Load (B344) of 1 and Journal Size (A147) of K, must have a wheel diameter of 36
-If Connected Unit Count (A020) is not reported, different Wheel Diameters cannot be reported

Stability Device Equipped B199

Indicates a stability device is present on the truck

Affects Rating.

Permissible Values for B199

Y	Yes

Bolster Component ID B351

Bolster Component ID from Component Registry

Data is Confidential. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Sideframe Component ID B352

Side Frame Component ID from Component Registry

Data is Confidential. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Wheelset Component ID B350

Component ID from Component Registry

Data is Confidential. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Draft System Components

Coupler Code — **A057**

Defines the equipment coupler type

Permissible Values for A057

BE60AHT	Type E (Rule 16) - BE60AHT
BE60BHT	Type E Obsolete (Rule 16) - BE60BHT
BE63AHT	Type E Obsolete (Rule 16) - BE63AHT
BE63HT	Type E (Rule 16) - BE63HT
BE67HT	Type E (Rule 16) - BE67HT
E42BEX	Type E/F (Rule 17) - E42BEX
E50ARE	Type E/F (Rule 17) - E50ARE
E50BEX	Type E/F (Rule 17) - E50BEX
E60CC	Type E (Rule 16) - E60CC
E60CE	Type E (Rule 16) - E60CE
E60CEX	Type E (Rule 16) - E60CEX
E60CHT	Type E (Rule 16) - E60CHT
E60CHTE	Type E (Rule 16) - E60CHTE
E60CHTQ	Type E (Rule 16) - E60CHTQ
E60DC	Type E (Rule 16) - E60DC
E60DE	Type E (Rule 16) - E60DE
E60EE	Type E (Rule 16) - E60EE
E61	Type E Obsolete (Rule 16) - E61
E67AHT	Type E (Rule 16) - E67AHT
E67BC	Type E (Rule 16) - E67BC
E67BE	Type E (Rule 16) - E67BE
E67BHT	Type E (Rule 16) - E67BHT
E67BHTE	Type E (Rule 16) - E67BHTE
E67CC	Type E (Rule 16) - E67CC
E67CE	Type E (Rule 16) - E67CE
E68AHT	Type E/F Obsolete (Rule 17) - E68AHT
E68AHTE	Type E/F Obsolete (Rule 17) - E68AHTE
E68BC	Type E/F (Rule 17) - E68BC
E68BE	Type E/F (Rule 17) - E68BE
E68BHT	Type E/F (Rule 17) - E68BHT
E68BHTE	Type E/F (Rule 17) - E68BHTE
E68BHTQ	Type E/F (Rule 17) - E68BHTQ
E68CE	Type E/F (Rule 17) - E68CE
E68DE	Type E/F Obsolete (Rule 17) - E68DE
E69AE	Type E/F (Rule 17) - E69AE
E69AHTE	Type E/F (Rule 17) - E69AHTE
E69BE	Type E/F (Rule 17) - E69BE
E69CE	Type E/F (Rule 17) - E69CE
E69CEX	Type E/F (Rule 17) - E69CEX
E69HTE	Type E/F (Rule 17) - E69HTE
E69LCE	Type E/F (Rule 17) - E69LCE
EB7AHT	Type E (Rule 16) - EB7AHT
EF204CE	Type E/F (Rule 17) - EF204CE
EF306CE	Type E/F (Rule 17) - EF306CE
EF511AE	Type E/F (Rule 17) - EF511AE
EF511BE	Type E/F (Rule 17) - EF511BE
EF511CE	Type E/F (Rule 17) - EF511CE
EF511DE	Type E/F (Rule 17) - EF511DE
EF511LCE	Type E/F (Rule 17) - EF511LCE
EF511WE	Type E/F (Rule 17) - EF511WE
EF512CE	Type E/F (Rule 17) - EF512CE
EF512WE	Type E/F (Rule 17) - EF512WE
EF528WE	Type E/F (Rule 17) - EF528WE
EFROTARY	Type E/F Rotary - EFROTARY
EFSPEC	Type E/F Special - EFSPEC
EFUNK	Type E/F Unknown - EFUNK
ESPEC	Type E Special - ESPEC
EUNK	Type E Unknown - EUNK
EK323CE	Type E (Rule 16) - EK323CE (Long Travel)
F70BHT	Type F Obsolete (Rule 18) - F70BHT
F70BHTE	Type F Obsolete (Rule 18) - F70BHTE
F70CC	Type F (Rule 18) - F70CC
F70CE	Type F (Rule 18) - F70CE
F70CHT	Type F (Rule 18) - F70CHT
F70CHTE	Type F (Rule 18) - F70CHTE
F70DE	Type F (Rule 18) - F70DE
F70HT	Type F Obsolete (Rule 18) - F70HT
F71CHT	Type F (Rule 18) - F71CHT
F72HT	Type F (Rule 18) - F72HT
F73AC	Type F (Rule 18) - F73AC
F73AE	Type F (Rule 18) - F73AE
F73AHT	Type F (Rule 18) - F73AHT
F73AHTE	Type F (Rule 18) - F73AHTE
F73BE	Type F (Rule 18) - F73BE
F73HTE	Type F Obsolete (Rule 18) - F73HTE
F79BHT	Type F Obsolete (Rule 18) - F79BHT
F79BHTE	Type F Obsolete (Rule 18) - F79BHTE
F79CC	Type F (Rule 18) - F79CC
F79CE	Type F (Rule 18) - F79CE
F79CHT	Type F (Rule 18) - F79CHT
F79CHTE	Type F (Rule 18) - F79CHTE
F79DE	Type F (Rule 18) - F79DE
FF218AE	Type F (Rule 18) - FF218AE
FR201E	Type F (Rule 18) Rotary - FR201E
FR205AE	Type F (Rule 18) Rotary - FR205AE
FR205BE	Type F (Rule 18) Rotary - FR205BE
FR205E	Type F (Rule 18) Rotary - FR205E
FR206E	Type F (Rule 18) Rotary - FR206E
FR206EA	Type F (Rule 18) Rotary - FR206EA
FR207AE	Type F (Rule 18) Rotary - FR207AE
FR207E	Type F (Rule 18) Rotary - FR207E
FR208AE	Type F (Rule 18) Rotary - FR208AE (without wear insert)
FR208E	Type F (Rule 18) Rotary - FR208E (with wear insert)
FR209E	Type F (Rule 18) Rotary - FR209E
FR301E	Type F (Rule 18) Rotary - FR301E
FR304E	Type F (Rule 18) Rotary - FR304E (with wear plate)
FR304WE	Type F (Rule 18) Rotary - FR304WE (without wear plate)
FROTARY	Type E/F Rotary - FROTARY
FSPEC	Type F Special - FSPEC
FUNK	Type F Unknown - FUNK
S700AE	Type E (Rule 16) - S700AE
SBE60CC	Type E (Rule 16) - SBE60CC
SBE60CE	Type E (Rule 16) - SBE60CE
SBE60DC	Type E (Rule 16) - SBE60DC
SBE60DE	Type E (Rule 16) - SBE60DE
SE60DEX	Type E (Rule 16) - SE60DEX
SBE60DREX	Type E (Rule 16) - SBE60DREX
SBE60EE	Type E (Rule 16) - SBE60EE
SBE60EEX	Type E (Rule 16) - SBE60EEX
SBE67BC	Type E (Rule 16) - SBE67BC
SBE67BE	Type E (Rule 16) - SBE67BE
SBE67CC	Type E (Rule 16) - SBE67CC
SBE67CE	Type E (Rule 16) - SBE67CE
SBE67CREX	Type E (Rule 16) - SBE67CREX
SBE67DE	Type E (Rule 16) - SBE67DE
SBE68BC	Type E/F (Rule 17) - SBE68BC
SBE68BE	Type E/F (Rule 17) - SBE68BE
SBE68CE	Type E/F (Rule 17) - SBE68CE
SBE68CREX	Type E/F (Rule 17) - SBE68CREX
SBE68DE	Type E/F (Rule 17) - SBE68DE
SBE68WEX	Type E/F (Rule 17) - SBE68WEX
SBE69AE	Type E/F (Rule 17) - SBE69AE
SBE69BE	Type E/F (Rule 17) - SBE69BE
SBE69BREX	Type E/F (Rule 17) - SBE69BREX
SBE69CE	Type E/F (Rule 17) - SBE69CE
SE60CC	Type E (Rule 16) - SE60CC
SE60CE	Type E (Rule 16) - SE60CE
SE60CHT	Type E (Rule 16) - SE60CHT
SE60CHTE	Type E (Rule 16) - SE60CHTE
SE60DC	Type E (Rule 16) - SE60DC

SE60DE	Type E (Rule 16) - SE60DE
SE60EE	Type E (Rule 16) - SE60EE
SE67BC	Type E (Rule 16) - SE67BC
SE67BE	Type E (Rule 16) - SE67BE
SE67BHT	Type E (Rule 16) - SE67BHT
SE67BHTE	Type E (Rule 16) - SE67BHTE
SE67CC	Type E (Rule 16) - SE67CC
SE67CE	Type E (Rule 16) - SE67CE
SE68BC	Type E/F (Rule 17) - SE68BC
SE68BE	Type E/F (Rule 17) - SE68BE
SE68BHT	Type E/F (Rule 17) - SE68BHT
SE68BHTE	Type E/F (Rule 17) - SE68BHTE
SE68CE	Type E/F (Rule 17) - SE68CE
SE69AE	Type E/F (Rule 17) - SE69AE
SE69BE	Type E/F (Rule 17) - SE69BE
SE69CE	Type E/F (Rule 17) - SE69CE
SF70CC	Type F (Rule 18) - SF70CC
SF70CE	Type F (Rule 18) - SF70CE
SF70CHT	Type F (Rule 18) - SF70CHT
SF70CHTE	Type F (Rule 18) - SF70CHTE
SF70DE	Type F (Rule 18) - SF70DE
SF79CC	Type F (Rule 18) - SF79CC
SF79CE	Type F (Rule 18) - SF79CE
SF79CHT	Type F (Rule 18) - SF79CHT
SF79CHTE	Type F (Rule 18) - SF79CHTE
SF79DE	Type F (Rule 18) - SF79DE

Validation Rule for A057

-If Rotary Coupler Style is reported, then Coupler Code must be a rotary coupler.

-If Coupler Code is a rotary coupler, then Coupler Style must be R (Rotary).

-Coupler Code of Type E Obsolete (Rule 16) can only be reported if the car was built or rebuilt before July 31, 2015

-Coupler Code of Type E/F Obsolete (Rule 17) can only be reported if the car was built or rebuilt before July 31, 2015

-Coupler Code of Type F Obsolete (Rule 18) can only be reported if the car was built or rebuilt before July 31, 2015

-Coupler Code of FROTARY or EFROTARY cannot be reported for cars Built or Rebuilt on or after August 12, 2014.

NOTES:

- Obsolete: All Type D couplers are obsolete and should report code DOBS; cars with this coupler code will be restricted in interchange as discussed below.
- Unknown: If the coupler code is unknown or if the code stamped on the coupler is illegible, the code BUNK FUNK, EFUNK, or LOCOUNK should be reported.
- Special: Codes ESPEC, FSPEC, and EFSPEC have been created to decline coupler bodies that have been manufactured specifically for the equipment owner and are not listed in the attached table.
- The codes FROTARY and EFROTARY cannot be reported for equipment Built or Rebuilt since August 12, 2014.

Coupler Style *Mandatory* — B058

Describes the basic coupler design of the equipment ●■

Affects Rating.

Permissible Values for B058

B	Bottom Shelf	D	Double Shelf
P	Plain	R	Rotary

Validation Rule for B058

-If Draft System Type (B073) is H (Hydraulic) then Coupler Style (B058) cannot be reported as M (Solid Drawbar) or L (Rotary Drawbar)

-If Draft System Type (B073) is not Center Of Car or End Of Car, Inches of Travel (B061) cannot be reported

-If Draft System Type (B073) of Center Of Car or End Of Car is reported then Inches of Travel (B061) must also be reported

-If Draft System Type (B073) is E then Coupler Style (B058) cannot be reported as L or R

Inches of Travel — B061

The number of inches a draft system will travel ■

Affects Rating.

Range of Values for B061

Minimum	Maximum
1	30

Validation Rule for B061

-If Draft System Type (B073) is not Center Of Car or End Of Car, Inches of Travel (B061) cannot be reported

-If Draft System Type (B073) of Center Of Car or End Of Car is reported then Inches of Travel (B061) must also be reported

-Inches of Travel cannot be greater than 20 for equipment with a Built Date (BLDT) on or after January 1, 1974

Draft System Type *Mandatory* — B073

Describes the draft gear/underframe cushion type ●■

Affects Rating.

Permissible Values for B073

C	Cushioning at Center of Car (COC)
E	Cushioning at End of Car (EOC)
S	Standard Draft Gear
X	Devices with less than 6 inches buff travel approved under AAR Standard S-060
Y	Devices with 6 to 10 inches of buff travel approved under AAR Standard S-060

Validation Rule for B073

- If Draft System Type (B073) is Standard Draft Gear (S), Inches of Travel (B061) cannot be reported

- If Draft System Type (B073) is reported as C, E, X, or Y then Inches of Travel (B061) must also be reported

- If Draft System Type (B073) of X, or Y is reported then Draft Gear Group/Cushion Unit Pocket (B562) cannot be reported

- If Draft System Type (B073) X is reported, the Inches of Travel (B061) value must be greater than or equal to 1 and less than 6

- If Draft System Type (B073) Y is reported, the Inches of Travel (B061) value must be greater than or equal to 6 and less than or equal to 10

-If Draft System Type (B073) is S then Draft Gear Group/Cushion Unit Pocket (B562) may only be A, B, C, D, E, F, G, H, J, K, L, M, N, P, Q, R, S, or Z (AAR Rule 21)

-If Draft System Type (B073) is E then Draft Gear Group/Cushion Unit Pocket (B562) may only be EOC-1,EOC-1D, EOC-1B, EOC-2, EOC-2D, EOC-2B, EOC-3, EOC-3B,EOC-4, EOC-4B, EOC-5, EOC-5D, EOC-5B, EOC-6, EOC-6D, EOC-6B, EOC-7, EOC-7B, EOC-8, EOC-8B, EOC-8F, EOC-9, EOC-9B, EOC-9D, EOC-9E, EOC-10, EOC-10D, EOC-10B, EOC-10F, EOC-11, EOC-11D, EOC-11B,EOC-12, EOC-12D, EOC-12B, EOC-13, EOC-13B, EOC-14, EOC-14B, EOC-15, EOC-15D, EOC-15B, EOC-16, EOC-16D, EOC-16B, EOC-17, EOC-17D, EOC-17B, EOC-18, EOC-18D, EOC-18B, EOC-19, EOC-19B, EOC-20, EOC-20B, EOC-21, EOC-21B, EOC-22, EOC-22B, EOC-23, EOC-23B, EOC-24, EOC-24B, EOC-25E, EOC-26B, EOC-26F, or EOC-27D, or EOC-27E (AAR Rule 59)

Draft Gear Group/Cushion Unit Pocket — B562

Draft Gear Group/Cushion Unit Pocket value as listed in AAR Field Manual Interchange Rule 21 and 59 ✹

Carry forward for Single Clone / Multi-Clone / Restencil / Add-Back / Equipment Group Change.

Permissible Values for B562EOC-1,EOC-1D, EOC-1B, EOC-2, EOC-2D, EOC-2B, EOC-3, EOC-3B,EOC-4, EOC-4B, EOC-5, EOC-5D, EOC-5B, EOC-6, EOC-6D, EOC-6B, EOC-7, EOC-7B, EOC-8, EOC-8B, EOC-8F, EOC-9, EOC-9B, EOC-9D, EOC-9E, EOC-10, EOC-10D, EOC-10B, EOC-10F, EOC-11, EOC-11D, EOC-11B,EOC-12, EOC-12D, EOC-12B, EOC-13, EOC-13B, EOC-14, EOC-14B, EOC-15, EOC-15D, EOC-15B, EOC-16, EOC-16D, EOC-16B, EOC-17, EOC-17D, EOC-17B, EOC-18, EOC-18D, EOC-18B, EOC-19, EOC-19B, EOC-20, EOC-20B, EOC-21, EOC-21B, EOC-22, EOC-22B, EOC-23, EOC-23B, EOC-24, EOC-24B, EOC-25E, EOC-26B, EOC-26F, EOC-27D, EOC-27E, COC-1, COC-2, COC-3, COC-4, COC-5, COC-6, COC-7, COC-8 (*AAR Rule 59*).

A, B, C, D, E, F, G, H, J, K, L, M, N, P, Q, R, S, Z (*AAR Rule 21*).

Validation Rule(s) for B562

-Draft Gear Group/Cushion Unit Pocket (B562) is mandatory for equipment built on or after June 13, 2019, unless Draft System Type (B073) is reported as X or Y

-If Draft Gear Group/Cushion Unit Pocket (B562) is not equal to A, B, C, D, E, F, G, H, J, K, L, M, N, P, Q, R, S, or Z, then Cushion Unit Type (B563) must be populated

-When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-6, EOC-7, EOC-7B, EOC-8, EOC-8B, EOC-9, EOC-9B, EOC-9D, EOC-10, EOC-10B, EOC-10D, EOC-14, EOC-14B, EOC-18D, EOC-23, EOC-23B, EOC-24, EOC-25E, EOC-26B, or EOC-27D then the Cushion Unit Type (B563) must be 1

-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-9E, EOC-26F, or EOC-27E, then the Cushion Unit Type (B563) must be 2

-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-11, EOC-12, EOC-13, EOC-13B, EOC-15, EOC-15B, EOC-15D, EOC-17, EOC-17B, EOC-17D, EOC-18, EOC-18B, EOC-19, EOC-19B, EOC-20, EOC-20B, EOC-21, EOC-21B, EOC-22, EOC-22B, EOC-24B, COC-3, COC-5, or COC-7 then the Cushion Unit Type (B563) must be 1 or 2

-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-8F or EOC-10F then the Cushion Unit Type (B563) must be 2 or 3

-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-5, EOC-5B, EOC-5D, EOC-6, EOC-6B, EOC-6D EOC-11B, EOC-11D, EOC-12B, EOC-12D, or COC-4 then the Cushion Unit Type (B563) must be 1, 2, or 3

-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-16, EOC-16B, EOC-16D, or COC-1 then the Cushion Unit Type (B563) must be 1, 2, or 4

-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-2B, EOC-2D, EOC-3, EOC-3B, EOC-4, EOC-4B, or COC-2 then the Cushion Unit Type (B563) must be 1, 2, 3, or 4

-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-1, EOC-1B, EOC-1D, or EOC-2 then the Cushion Unit Type (B563) must be 1, 2, 3, 4, or S

-When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-8 then the Cushion Unit Type (B563) must be 1, 2, 3, 4, or 5

-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-1D, EOC-2,EOC-2D, EOC-2B, EOC-3, EOC-3B, EOC-5, EOC-5D, EOC-5B, EOC-6D, EOC-7, EOC-7B, EOC-9, EOC-9B, EOC-9D, EOC-9E, EOC-10D, EOC-11, EOC-11B, EOC-11D, EOC-12D, EOC-14,EOC-14B, EOC-15, EOC-15D, EOC-15B, EOC-16D, EOC-17D, EOC-23, EOC-23B, EOC-27D, or EOC-27E then the Inches of Travel (B061) must be 10

-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-16, EOC-16B, EOC-19, EOC-19B, EOC-22, EOC-22B, or EOC-25E then the inches of travel must be 12

-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-20 or EOC-20B then the Inches of Travel (B061) must be 14

-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-1B, EOC-4, EOC-4B, EOC-6, EOC-6B, EOC-8, EOC-8B, EOC-8F, EOC-10, EOC-10B, EOC-10F, EOC-12, EOC-12B, EOC-13, EOC-13B, EOC-17, EOC-17B, EOC-18, EOC-18D, EOC-18B, EOC-21, EOC-21B, EOC-24, or EOC-24B then the Inches of Travel (B061) must be 15

-When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-2, COC-3, COC-4, COC-5, COC-6, or COC-8 then the Inches of Travel (B061) must be 20

-When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-1, and Cushion Unit Type (B563) is 1 or 2, then the Inches of Travel (B061) must be 20

-When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-1, and Cushion Unit Type (B563) is 4, then the Inches of Travel (B061) must be 18

-When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-7, and Cushion Unit Type (B563) is 2, then the Inches of Travel (B061) must be 20

-When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-7, and Cushion Unit Type (B563) is 1, then the Inches of Travel (B061) must be 30

-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-1 then the Inches of Travel (B061) must be 10, 12, or 15

-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-26, then the Inches of Travel (B061) must be 18

Note:

Reference AAR Field Manual Interchange Rule(s) 21 and 59.

Cushion Unit Type	B563
Cushion Unit Type value as listed in AAR Field Manual Interchange Rule 21 and 59	✹

Carry forward for Single Clone / Multi-Clone / Restencil / Add-Back / Equipment Group Change.

Permissible Values for B563

1 – Type 1
2 – Type 2
3 – Type 3
4 – Type 4
5 – Type 5
S – Type S

Validation Rule(s) for B563

- Cushion Unit Type (B563) is mandatory for equipment built on or after June 13, 2019.

-If Draft Gear Group/Cushion Unit Pocket (B562) is not equal to A, B, C, D, E, F, G, H, J, K, L, M, N, P, Q, R, S, or Z, then Cushion Unit Type (B563) must be populated.

-When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-6, EOC-7, EOC-7B, EOC-8, EOC-8B, EOC-9, EOC-9B, EOC-9D, EOC-10, EOC-10B, EOC-10D, EOC-14, EOC-14B, EOC-18D, EOC-23, EOC-23B, EOC-24, EOC-25E, or EOC-26B then the Cushion Unit Type (B563) must be 1.

-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-9E, EOC-26F, or EOC-27E, then the Cushion Unit Type (B563) must be 2

-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-11, EOC-12, EOC-13, EOC-13B, EOC-15, EOC-15B, EOC-15D, EOC-17, EOC-17B, EOC-17D, EOC-18, EOC-18B, EOC-19, EOC-19B, EOC-20, EOC-20B, EOC-21, EOC-21B, EOC-22, EOC-22B, EOC-24B, COC-3, COC-5, or COC-7 then the Cushion Unit Type (B563) must be 1 or 2.

-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-8F or EOC-10F then the Cushion Unit Type (B563) must be 2 or 3.

-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-5, EOC-5B, EOC-5D, EOC-6, EOC-6B, EOC-6D EOC-11B, EOC-11D, EOC-12B, EOC-12D, or COC-4 then the Cushion Unit Type (B563) must be 1, 2, or 3.

-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-16, EOC-16B, EOC-16D, or COC-1 then the Cushion Unit Type (B563) must be 1, 2, or 4.

-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-2B, EOC-2D, EOC-3, EOC-3B, EOC-4, EOC-4B, or COC-2 then the Cushion Unit Type (B563) must be 1, 2, 3, or 4.

-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-1, EOC-1B, EOC-1D, or EOC-2 then the Cushion Unit Type (B563) must be 1, 2, 3, 4, or S.

-When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-8 then the Cushion Unit Type (B563) must be 1, 2, 3, 4, or 5.

-When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-1, and Cushion Unit Type (B563) is 1 or 2, then the Inches of Travel (B061) must be 20.

-When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-1, and Cushion Unit Type (B563) is 4, then the Inches of Travel (B061) must be 18.

-When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-7, and Cushion Unit Type (B563) is 2, then the Inches of Travel (B061) must be 20.

-When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-7, and Cushion Unit Type (B563) is 1, then the Inches of Travel (B061) must be 30.

Note:

Reference AAR Field Manual Interchange Rule(s) 21 and 59.

Coupler Component ID	B353
Coupler Component ID from Component Registry	

Data is Confidential. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Cushioning Unit Component ID	B361
Component ID from Component Registry	

Data is Confidential. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Unit Segment Components

Unit Equipment Group	A307
Describes the equipment type of the platform	■

Affects Rating.

Permissible Values for A307

BOXC	Box Car	FLAT	Flat Car
GOND	Gondola	HOPP	Hopper
IFLT	Intermodal Flat	TANK	Tank Car
VFLT	Vehicular Flat		

Validation Rule for A307

-Unit Equipment Group cannot be reported if the Connected Unit Count (A020) is not reported

-Unit Equipment Group can only be reported if Connected Unit Count (A020) is reported

Unit Tare Weight — A299

The unit segment weight on rail when empty, sometimes referred to as Light Weight, reported in pounds

Range of Values for A299

Minimum	Maximum
65000	136000

Validation Rule for A299

-Unit Tare Weight must not be reported if the Connected Unit Count (A020) is not reported

-Unit Tare Weight must be reported if Connected Unit Count (A020) is reported

-Unit Segment Tare Weights must add up to the Total Tare Weight (A259)

-Unit Tare Weight (A299) value must be reported to the nearest 100 pounds

Unit Load Limit — A300

The maximum permissible weight of the commodity that can be loaded into the unit segment, reported in pounds

Range of Values for A300

Minimum	Maximum
36000	150000

Validation Rule for A300

-Unit Load Limit can not be reported if the Connected Unit Count (A020) is not reported

-Unit Load Limit must be reported if Connected Unit Count (A020) is reported

-Unit Segment Load Limits must add up to the Load Limit (LDLT)

Unit Inside Length — A301

The inside length of each unit segment

Displayed in feet and inches on the Web. Stored in inches.

Range of Values for A301

Minimum	Maximum
69 ft 0 inches	99 ft 3 inches

Validation Rule for A301

-Unit Inside Length can only be reported if Connected Unit Count (A020) is reported

-Unit Inside Length must be reported if Connected Unit Count (A020) is reported

Brake System Components

Emergency Brake Valve CID — B354

Component ID from Component Registry

Data is Confidential. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Emergency Valve COTS Date — B567

Brake valve emergency portion recondition date

System generated element. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

NOTES:

- Emergency Valve COTS Date is system-generated from a Emergency Brake Valve Inspection.

Emergency Valve OEM Warranty Date — B568

Brake valve emergency portion Original Equipment Manufacturer warranty date

System generated element. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

NOTES:

- Emergency Valve OEM Date is system-generated from a Emergency Brake Valve Inspection.

Emergency Valve Part Number — B569

Brake valve emergency portion part number

System generated element. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

NOTES:

- Emergency Valve Part Number is system-generated from a Emergency Brake Valve Inspection.

Service Brake Valve CID — B357

Component ID from Component Registry

Data is Confidential. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Service Valve COTS Date — B564

Brake valve service portion recondition date

System generated element. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

NOTES:

- Service Valve COTS Date is system-generated from a Service Brake Valve Inspection.

Service Valve OEM Warranty Date — B565

Brake valve service portion Original Equipment Manufacturer warranty date

System generated element. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

NOTES:

- Service Valve OEM Date is system-generated from a Service Brake Valve Inspection.

Service Valve Part Number — B566

Brake valve service portion part number

System generated element. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

NOTES:

- Service Valve Part Number is system-generated from a Service Brake Valve Inspection.

Slack Adjuster CID — B359

Component ID from Component Registry

Data is Confidential. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Miscellaneous

Umler Effective Date — EFDT

The date the rating activity (pre-registration, modification, etc.) is expected to occur

This element is not eligible for Query. Does not Carry Forward.

Validation Rule for EFDT

-Effective Date cannot be set to more than 13 months in the future.

NOTES:
- Effective Date will default to the 1st of the following month that equipment is registered

Inspection

ABT Due Date (Repair Track) DU13

The due date of the air brake test per AAR Field Manual Rule 3

System Generated Field. This element is not eligible for Input. Value does not carry forward for Add Back.

ABT 5-8 Year Due Date DU58

The 5-8 year due date for the air brake test (ABT) after the ABT Due Date (Repair Track)

System Generated Field. This element is not eligible for Input. Value does not carry forward for Add Back.

SS Inspection Due Date DUAI

Autorack Inspection Due Date

System Generated Field. This element is not eligible for Input. Value does not carry forward for Equipment Group Change / Add Back.

Inspection Date Done DTDN

The date the inspection was completed; used for all inspection types reported on equipment

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Validation Rule for DTDN

-The inspection date must not be 60 days before the Build Date

Exterior Door EXDR

Exterior Door

Data is Confidential. This element is not eligible for Input, Output or Query. Does not Carry Forward.

Exterior Roof Sheets EXRS

Exterior Roof Sheets

Data is Confidential. This element is not eligible for Input, Output or Query. Does not Carry Forward.

Exterior Shear Panel EXSP

Exterior Shear Panel

Data is Confidential. This element is not eligible for Input, Output or Query. Does not Carry Forward.

Exterior Side Screens EXSS

Exterior Side Screens

Data is Confidential. This element is not eligible for Input, Output or Query. Does not Carry Forward.

Inspection Due Date INDD

The due date of the next inspection; used for all inspection types reported on equipment

System Generated Field. This element is not eligible for Input. Value does not carry forward for Add Back.

Interior Door INDR

Interior Door

Data is Confidential. Does not Carry Forward.

Inspector ID INID

Inspector ID

Does not Carry Forward.

Interior Side Posts INSI

Interior Side Posts

Data is Confidential. Does not Carry Forward.

Inspection Performer PERF

The SCAC that completed the inspection; used for all inspection types reported on equipment

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Inspection Reporter REPT

The SCAC that reported the inspection; used for all inspection types reported on equipment

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Location/SPLC SPLC

The SPLC of the inspecting location; used for all inspection types reported on equipment

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Top Deck Surface TPDS

Top Deck Surface

Data is Confidential. This element is not eligible for Input, Output or Query. Does not Carry Forward.

Underside of Deck UNOD

Underside Of Deck

Data is Confidential. This element is not eligible for Input, Output or Query. Does not Carry Forward.

Insp Service Valve COTS Date B570

Brake valve service portion recondition date

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

NOTES:
- Reports of 9999 will be allowed in case the date is illegible and the valve cannot be replaced immediately.
- Valid date format: MMYY

Insp Service Valve OEM Warranty Date B571

Brake valve service portion Original Equipment Manufacturer warranty date

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

NOTES:
- Reports of 999999 will be allowed in case the date is illegible and the valve cannot be replaced immediately.
- Valid date format: MMYYYY

Insp Service Valve Part Number B572

Brake valve service portion part number

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Insp Emergency Valve COTS Date B573

Brake valve emergency portion recondition date

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

NOTES:
- Reports of 9999 will be allowed in case the date is illegible and the valve cannot be replaced immediately.
- Valid date format: MMYY

Insp Emergency Valve OEM Warranty Date	B574
Brake valve emergency portion Original Equipment Manufacturer warranty date	

System generated element. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

NOTES:

- Reports of 999999 will be allowed in case the date is illegible and the valve cannot be replaced immediately.
- Valid date format: MMYYYY

Insp Emergency Valve Part Number	B575
Brake valve emergency portion part number	

System generated element. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Insp Service Valve Location *Mandatory*	B576
Brake valve service portion location	●

. Value does not carry forward for Single Clone / Multi-Clone.

Insp Emergency Valve Location *Mandatory*	B577
Brake valve emergency portion location reported on an emergency brake valve inspection	●

Value does not carry forward for Single Clone / Multi-Clone.

Locomotives

General

Status Code *Mandatory* — **USCD**

Identifies the current operational state

Does not Carry Forward.

Permissible Values for USCD

A	ACTIVE	I	INACTIVE
P	PRE-REGISTERED		

NOTES:

- For Restencil and Clone process the initial Status of a car should be Pre-Registered.
- All Add-Back processes should initially set the Status to Pre-Registered
- A Pre-registered car will automatically have its Status changed to Active for the initial change when TRAIN detects three (3) movements on the car
- If the Status changes to Active due to movement and the car was created from a Restencil, the Prior Equipment ID (PRID) or source car will have its status changed to Inactive automatically by Umler

Equipment ID — **0001**

The equipment stenciled number

Validation Rule for 0001

-Equipment Number must not be larger than 6 digits (i.e., 999999)

NOTES:

- Equipment ID includes the mark and number stenciled on the equipment. Marks can be up to 4 characters and number up to 6 digits (i.e., ABCD999999).
- Up to 500 cars can be added or updated in a transaction.
- When adding an equipment record, ensure that Prior Equipment ID (PRID) is reported, unless the equipment is new.

Mechanical Designation *Mandatory* — **UMMD**

Equipment description without physical dimensions

Used for Transportation Codes.

Permissible Values for UMMD

D	Locomotive

Equipment Descriptor *Mandatory* — **B341**

Additional information about the type of equipment used in conjunction with the Mechanical Designation to generate the Equipment Type Code (ETC) for Intermodal Flat, Locomotive, Chassis, Container, and Trailer equipment groups

Value does not carry forward for Equipment Group Change.

Permissible Values for B341

DA	Auxiliary Unit
DE	All Electric
DFGT	Freight Diesel-Electric
DNCF	Non-Cab Freight
DNCP	Non-Cab Passenger
DPAS	Passenger Diesel-Electric
DSTM	Steam (New)
DSW	Switching

Equipment Type Code — **UMET**

An alpha numeric code that describes the physical attributes of equipment

System Generated Field. This element is not eligible for Input.

NOTES:

- Please Refer to Appendix I for More information Regarding ETC Generation

Built Date *Mandatory* — **BLDT**

The date the construction of the equipment is complete

Data is Confidential. Used for Transportation Codes. Affects Rating. Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for BLDT

Minimum	Maximum
1/1/1900	12/31/9999

Validation Rule for BLDT

-Built Date must not be in the future for equipment in Active Status

-Prior and target equipment's Built Date (BLDT) must match

NOTES:

- Data is public for railroad marked equipment.
- For connected unit cars report the oldest car in the set.

Rebuilt / ILS Date — **RBDT**

The date the re-construction of the equipment is complete

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for RBDT

Minimum	Maximum
1/1/1900	12/31/9999

Validation Rule for RBDT

-Rebuilt/Increased Life Service Date must be after the Built Date (BLDT)

-Rebuilt Date is required for Extended Service Code (A096) 1, 2, or 3 for Increased Life Service

-Rebuilt Date is required for Extended Service Code (A096) R for Rebuilt, or V for 65 years of service

-If Rebuilt Date is reported then the Extended Service Code (A096) must be reported as R for Rebuilt, V, 1, 2, or 3 for Increased Life Service

NOTES:

- Railroad cars -- applicable only to cars meeting status as provided in both STB Accounting Rules, and the AAR Mechanical Interchange Rule 88, Office Manual.
- Private cars -- applicable to all cars meeting AAR Mechanical Interchange Rule 88, Section C, Office Manual and Sections A and B of the Field Manual.
- For connected unit cars report the oldest car in the set. Do not report Rebuilt Date unless car has been approved by the AAR.

Rebuilt Flag — **RBFL**

Identifies the equipment is nearing its end of life cycle

Data is Confidential. System Generated Field. This element is not eligible for Input.

Permissible Values for RBFL

N	No	Y	Yes

Owner *Mandatory* — **UMOW**

Primary reporting mark of the railroad or private company owning the car

Value does not carry forward for Single Clone / Multi-Clone / Single Restencil / Multi-Restencil.

NOTES:

- Report the primary reporting mark of the railroad or private company owning the car. When car's lease or lien is held by a bank, trust holder, capital lease company, etc. not having an assigned mark, report the primary reporting mark affiliated with the stenciled reporting mark.

Equipment Group *Mandatory* — **0002**

Identifies the various major car types

Used for Transportation Codes. Affects Rating.

Lessee — **LESE**

The reporting mark of the company leasing the equipment

Value does not carry forward for Single Clone / Multi-Clone / Single Restencil / Multi-Restencil.

Validation Rule for LESE

-Umler Owner (UMOW) and Lessee are not allowed to be equal

NOTES:

- In order to assign privately marked cars to a pool, a railroad reporting mark must be reported.

Maintenance Party — MNPT

The parent reporting mark of the company responsible for the maintenance and repairs of the equipment

Does not Carry Forward.

Mark Owner Category — B201

The company that owns the stenciled mark on the car

System Generated Field. This element is not eligible for Input. Value does not carry forward for Single Restencil / Multi-Restencil / Equipment Group Change / Add Back.

Permissible Values for B201

B	US Private
C	Canadian Private
F	Foreign Private
H	Canadian Class II
I	Canadian Class I
J	Mexican Class I
K	Canadian Class III
M	Mexican Private
N	US Private Steamship
O	Canadian Private Steamship
P	Mexican Private Steamship
Q	Foreign Private Steamship
R	US Class II Railroad
U	US Class I Railroad
V	US Class III Railroad
W	Mexican Class II Railroad
Y	Mexican Class III Railroad

NOTES:

- This value is stored in the Umler Database for informational purposes and is retrieved from the Roadmark Registry.

Prior Equipment ID — PRID

The previous reporting mark and number of the equipment

Value does not carry forward for Single Clone / Multi-Clone.

Validation Rule for PRID

-Prior and target equipment's Built Date (BLDT) must match

-The Prior Equipment ID (0001) must belong to the same or comparable Equipment Group (0002) as the current car initial and number

NOTES:

- Prior ID enables equipment records to share the same historical lineage. Equipment Identification Number (EIN) is a generated id that enables these equipment records to share inspections and transaction history.

Last Update Date — B122

Date of the last Umler element change

System Generated Field. This element is not eligible for Input.

Equipment Add Date — B082

Date the reporting mark and number was added to the Umler system

System Generated Field. This element is not eligible for Input.

Status Change Reason — USCR

Identifies the reason for the current operational state

System Generated Field. This element is not eligible for Input. Does not Carry Forward.

Permissible Values for USCR

I	Initial Load
M	Movement
O	Status Changed Manually
R	Restencil

NOTES:

- If movement is detected on equipment, status is changed to Active.
- If an equipment record is changed to Active, any prior equipment record is placed in Inactive status.

Status Change Date — USCT

Identifies the effective date of the current operational state

System Generated Field. This element is not eligible for Input. Does not Carry Forward.

Equipment Identification — EINN

Unique equipment identifier regardless of stenciled mark

System Generated Field. This element is not eligible for Input.

NOTES:

- Specify the Prior ID (PRID) on equipment records to ensure the historical lineage is preserved. Equipment with the same EIN share history and inspections.

Conflict Status — B050

Identifies the escalation level of equipment in active conflict

System Generated Field. This element is not eligible for Input. Value does not carry forward for Add Back.

Permissible Values for B050

1	Subject to Zero-Rating
2	Subject to Restricted in Interchange
3	Subject to Deletion

NOTES:

- Subject to Zero-Rating, goes into effect 30 days after Conflict Status occurs
- Subject to Restricted in Interchange, goes into effect 90 days after Conflict Status occurs
- Subject to Deletion, goes into effect 365 days after Conflict Status occurs

Date of Original Conflict — B063

The date the equipment was originally placed in the current conflict

System Generated Field. This element is not eligible for Input.

Next Conflict Status — B135

Identifies the next escalation level of an equipment in active conflict

System Generated Field. This element is not eligible for Input. Value does not carry forward for Add Back.

Permissible Values for B135

1	Subject to Zero-Rating
2	Subject to Restricted in Interchange
3	Subject to Deletion

NOTES:

- Subject to Zero-Rating, goes into effect 30 days after Conflict Status occurs
- Subject to Restricted in Interchange, goes into effect 90 days after Conflict Status occurs
- Subject to Deletion, goes into effect 365 days after Conflict Status occurs

Notice Indicator — B137

Identifies equipment in error in Umler Notice Management

System Generated Field. This element is not eligible for Input.

Conflict Status Next Date — B062

The date the conflict status will be escalated

System Generated Field. This element is not eligible for Input. Value does not carry forward for Add Back.

Rate Indicator — A070

Indicates the rate type applicable to the unit ■

System Generated Field. Used for Transportation Codes. Affects Rating. This

element is not eligible for Input. Does not Carry Forward.

Permissible Values for A070

0 Zero-Rated Due to Conflict Errors

6 Zero-Rated - Scrap (S_,SX), AAR Overage (XA), FRA Overage (YA), Umler Conflict - CHR 1/Tarriff 6007 (XZ). Zero-Rated Private Owner Election to Zero Rate [See Private Zero Rate (B150)].

NOTES:

- If unit is zero-rated, correction of conflicts will reinstate the appropriate rate indicator code.

First Movement Date — **USAT**

The first movement date under the stenciled mark of the equipment

This element is not eligible for Input. Does not Carry Forward.

Equipment Add Company — **B083**

The reporting mark of the company that added the equipment

System Generated Field. This element is not eligible for Input.

Registration Reason — **B174**

The code indicating the reason this equipment is added

Does not Carry Forward.

Permissible Values for B174

A	Add-Back	N	New
P	Pending Restencil	R	Restencil

Restencil Program Ind — **B177**

Identifies the equipment is under a restencil program

Permissible Values for B177

Y Yes

Delete Reason Code — **B064**

A code that designates the reason the equipment has been deleted

Value does not carry forward for Add Back.

Permissible Values for B064

A Restenciled

D Destroyed or wrecked

L Lease terminated, removed from fleet

P Retired unserviceable beyond economic repair

R Rebuilt

S Sold Serviceable

W Over age retired for dismantling

Y Error, reporting did not exist

Z Other

Weight

Loco Gross Weight *Mandatory* — **A115**

Weight On Drivers ●

Range of Values for A115

Minimum	Maximum
100000	999999

Dimension

Plate Code — **A046**

Indicates the extreme height and width clearance of the equipment

Permissible Values for A046

B Plate Code B

C Plate Code C

E Plate Code E

F Plate Code F

G Clearance Code G

L Plate Code L

M Plate Code M

N Plate Code N

NOTES:

- For a description of Plate Codes, please see Appendix J at the back of this manual.
  - Report B: If clearance does not exceed Plate B
  - Report C: If clearance is greater than Plate B. but does not exceed Plate C
  - Report E: If clearance is greater than Plates B and C, but does not exceed Plate E.
  - Report F: If clearance is greater than Plates B, C and E, but does not exceed Plate F
  - Report M: If clearance does not exceed Plate M.
  - Report G: If clearance exceeds Plates B, C, E, F, L, M, and N.
- There is no AAR Plate G. Clearance Code G is included in Umler to represent equipment that does not fit any existing AAR clearance plates.
- Plate L is not reportable for locomotives built on or after January 1, 2018.
- For ARTICULATED/MULTI-UNIT SET report the most restrictive clearance plate of UNIT in the set.

Outside Length *Mandatory* — **OSLG**

The outside length over pulling faces of couplers in normal position ●

Displayed in feet and inches on the Web. Stored in inches.

Range of Values for OSLG

Minimum	Maximum
37 ft 0 inches	140 ft 0 inches

NOTES:

- For connected unit cars report the maximum coupled length of the set.
- Round fraction to the higher inch, e.g., 05 1/4" = 06"

Outside Extreme Width *Mandatory* — **A186**

The outside extreme width of the equipment ●

Displayed in feet and inches on the Web. Stored in inches.

Range of Values for A186

Minimum	Maximum
9 ft 0 inches	11 ft 10 inches

Validation Rules for A186

- Outside Extreme Width must not exceed 10 feet 8 inches for Plate Codes B, C, E, F, or N

NOTES:

- For connected unit cars report the dimension of the largest unit in the set.
- Round fraction to the higher inch, e.g., 05 1/4" = 06"

Outside Extreme Height — **A185**

Height from top of rail to extreme projecting height

Displayed in feet and inches on the Web. Stored in inches.

Range of Values for A185

Minimum	Maximum
6 ft 0 inches	18 ft 0 inches

Validation Rules for A185

-Outside Extreme Height for Plate Code N must be less than or equal to 17 feet 1 inch

NOTES:

- For connected unit cars report the dimension of the largest unit in the set.
- Round fraction to the higher inch, e.g., 05 1/4" = 06"

Truck Center Length — **A276**

The length between the centers of the two truck systems

Displayed in feet and inches on the Web. Stored in inches.

Range of Values for A276

Minimum	Maximum
15 ft 0 inches	76 ft 11 inches

NOTES:

- For connected unit cars report the dimension of the largest unit in the set.

Front Snow Plow Height B101

Snow Plow (Height)

Displayed in feet and inches on the Web. Stored in inches.

Range of Values for B101

Minimum	Maximum
0 ft 5 inches	8 ft 3 inches

Rear-End Snow Plow Height B169

Snow Plow (Height)

Displayed in feet and inches on the Web. Stored in inches.

Range of Values for B169

Minimum	Maximum
0 ft 5 inches	8 ft 3 inches

Specification

Truck Count B256

The total number of trucks on the equipment

System Generated Field. This element is not eligible for Input.

Range of Values for B256

Minimum	Maximum
2	4

Axle Count *Mandatory* A024

The total number of axles on the equipment ●

Range of Values for A024

Minimum	Maximum
2	16

Validation Rule for A024

-Total Axle Count must match sum of truck axle counts

Wheel Bearing Type B191

Indicates the wheel bearing code for the equipment

Permissible Values for B191

P Plain R Roller

Remote Monitoring Device B176

Indicates the equipment is equipped with a location monitoring device

Permissible Values for B176

Y Yes

N No

Asset Tracking B324

Remote Monitoring Device Builder

Permissible Values for B324

EMD		GE	General Electric
INON	Inonix	INVS	Invensys
NEQ	Not Equipped	OTH	Other
UNK	Unknown	WABT	Wabtec
WTRX	Wi-Tronix		

ECP Brake Builder B328

The manufacturer of the electronic controlled pneumatic brake used on the equipment ✹

Permissible Values for B328

NONE Not Equipped

NYAB New York Air Brake

PASS Train-line pass-through

WABT WABTEC

Validation Rule for B328

-Equipment must have a value entered for ECP Brake Builder (B328) if built or rebuilt after June 28, 2012.

DB Modem Equipped *Mandatory* B348

Locomotive is capable of reporting the operational status of its dynamic brake system via the MU train line to other locomotives in the consist. ●

Value does not carry forward for Equipment Group Change.

Permissible Values for B348

N No Y Yes

Air Brake Model Number ABMD

Air Brake Model

Permissible Values for ABMD

14EL	14ET	24L
24RL	26C	26D
26FNL	26L	26LIC
26LN	26LPS	26LUM
26N	26NL	30CDW
3102	6BL	6BLM
6DS	6ET	6L
6SL	8ET	ABMOD
CCB1	CCB2	CCB26
EPIC2	FSTBK	K14

Air Brake Multi Hookup A014

Air Brake Multi Unit Hookup

Permissible Values for A014

N Not Equipped

X Non AAR Standard Equipped

Y AAR Standard Equipped

Dynamic Brake Type A078

Dynamic Brakes

Permissible Values for A078

A Dynamic Brake , AC Locomotive

D Dynamic Brake Equipped -Range Unknown

E Extended Range Tapered

F Extended Range Flat

L Standard Range -Field Loop

N Not Equipped

S Standard Flat

T Standard Tapered

X Dynamic Brake Equipped-Disconnected

Z Dynamic Brake AC Locomotive (Full Braking to Zero(0)

Dynamic Brake Interlock *Mandatory* A077

Dynamic Brake Interlock (DBI) ●

Permissible Values for A077

N Not Equipped Y Equipped

Validation Rule for A077

-Locomotive Dynamic Brake Interlock is required for Locomotives with a Built/Rebuilt (Birth) Date on or after July 1, 1997

Max Braking Force A163

Maximum Dynamic Braking (KLBF) ✹

Range of Values for A163

Minimum	Maximum
0	1100

Validation Rule for A163

-Locomotive Maximum Dynamic Braking Force is required for Locomotives with a Built/Rebuilt (Birth) Date on or after July 1, 1997

-Locomotive Maximum Dynamic Braking Force must be reported as 0 for DC Traction Motor Types, when the Pneumatic Control Knockdown Undesired Application Time Delay is reported as NN

-Locomotive Maximum Dynamic Braking Force is 0, when Pneumatic Control Knockdown Undesired Application Time Delay is NN
-Locomotive Maximum Dynamic Braking Force with DC Traction Motors is not applicable to Traction Motor Type of AC
-Locomotive Maximum Dynamic Braking Force with AC Traction Motors requires the Traction Motor Type is AC

NOTES:

- Max Braking Force is in Kilo Pounds.

Max Braking Force (AC) — **B407**

Maximum Dynamic Braking Force AC Traction Motor

Range of Values for B407

Minimum	Maximum
0	1100

DB Holding Equipped — **B593**

Dynamic Brake Holding equipped

Permissible Values for B593

Y Equipped
N Not Equipped

Validation Rule for B593

- DB Holding Equipped (B593) can be reported only if Dynamic Brake Type (A078) is equipped.

Equipment Builder — **A035**

Identifies the original manufacturer of the equipment ✹

Permissible Values for A035

5	WABTEC
8	NOT USED
B	BALDWIN-LIMA-HAMILTON
BL	Boise Locomotive
BLPA	Brookville Locomotive Works
C	BALDWIN-LOCOMOTIVE CO.
D	BOMBARDIER
E	CANADIAN GENERAL ELECTRIC
F	CANADIAN LOCOMOTIVE CO.
G	DAVENPORT LOCOMOTIVE CO.
H	ELECTRO-MOTIVE DIVISION, GENERAL MOTORS CORP.
I	FAIRBANKS MORSE
J	GENERAL ELECTRIC
K	GENERAL ELECTRIC AGUASCALIENTES
LOCO	AMERICAN LOCOMOTIVE CO.
M	GENERAL MOTORS-DIESEL DIV. CANADA
N	GENERAL MOTORS-DIESEL DIV.
NRE	National Railway Equipment
O	J.G. BRILL CO.
OTH	Other
P	KRAUSS-MAFFEI, A.G.
PRMK	Progress Rail
Q	LIMA-HAMILTON
R	MORRISON-KNUDSEN
RP	RailPower
S	MONTREAL LOCOMOTIVE WORKS
T	PLYMOUTH LOCOMOTIVE WORKS
U	H.J.POTTER
UNKN	Unknown
V	OWNER RAILROAD
W	WHITECOMP LOCOMOTIVE WORKS
X	PEORIA LOCOMOTIVE WORKS
Y	REPUBLIC LOCOMOTIVES

Validation Rule for A035

-Equipment Builder must be populated if the Built Date (BLDT) is July 1, 2010 or newer
-Equipment built or rebuilt on or after July 1, 2010 cannot have a Equipment Builder of Unknown
-Equipment with a Built Date (BLDT) on or after July 1, 2010 cannot have an Equipment Builder Code of OWNER RAILROAD.
-Equipment Builder can have a value of MULT only if the equipment has multiple units.

ETIS — **A083**

End Of Train Information System (ETIS)

Permissible Values for A083

A	Glenayre Electronics (Digitair I) Permanently Mounted
B	Glenayre Electronics (DIGITAIR I) Demountable
C	SAB Harmone Industries (Electronic Caboose) Permanently Mounted
D	SAB Harmon Industries (Electronic Caboose) Demountable
E	Pulse Electronics (Train -Link) Permanently Mounted
F	Pulse Electronics (Train-Link) Demountable
G	Norfolk Southern Railroad VHF Only-Permanently Mountable
H	Norfolk Southern Railroad VHF Only-Demountable
I	Union Switch & Signal (Trail Guard) Permanently Mounted
J	Union Switch & Signal (Trail Guard) Demountable)
K	Westinghouse Air Brake-Permanently Mounted
L	Westinghouse Air Brake-Demountable
M	Permanently Mounted-Type Unknown
N	Not Equipped (Default)
O	Demountable Type Unknown
P	Glenayre Electronics (Digitair II) Permanently Mounted
Q	Glenayre Electronics (DIGITAIR II) Demountable
R	Colt Technology (Model 1006)-Two Way Communications, Permanently Mounted
S	Colt Technology (Model 1005)-One Way Communications, Permanently Mounted
T	Quantum Engineering VHF/UHF Dual Mode-Permanently Mounted
U	Quantum Engineering VHF/UHF Dual Mode-Demountable
V	Quantum Engineering UHF Only-Permanently Mounted
W	Quantum Engineering UHF Only-Demountable

Locomotive Model Number *Mandatory* — **A068**

Manufacturer Model Number ●

Horsepower *Mandatory* — **A123**

Horsepower ●▲

Used in ETC Generation.

Range of Values for A123

Minimum	Maximum
0	8046

Validation Rule for A123

-Locomotives with Equipment Descriptor of DA have Horsepower equal 0
-Locomotives must have an Equipment Descriptor of 'DE-All Electric' to have Horsepower greater than 6600

Remote Control Equipped *Mandatory* — **RCLE**

RCL Equipped Flag ●

Value does not carry forward for Equipment Group Change.

Permissible Values for RCLE

N No Y Yes

Powered Axles Count *Mandatory* — **A200**

Powered Axles Count ●

Range of Values for A200

Minimum	Maximum
2	16

Validation Rule for A200

-If Locomotive Truck Config (B003) is OV8 then Axle Count must be greater than or equal to 9

Locomotive Truck Config *Mandatory*	B003
New ETC D Component-New ETC D (Locomotive), Component	●▲

Used in ETC Generation.

Permissible Values for B003

A1A	4 Powered Axles
B-B	4 Powered Axles
B-C	5 Powered Axles
C-C	6 Powered Axles
D-D	8 Powered Axles
OTH	Less than 9 Powered Axles but not defined in list of configurations
OV8	More than 8 Powered Axles

Validation Rule for B003

-Powered Axle Count must be less than or equal Axle Count

Air Dryer Equipped	AIRD
Air Dryer Equipped Flag	

Does not Carry Forward.

Permissible Values for AIRD

N	No
Y	Yes

PC Emerg NI Delay *Mandatory*	B235
Pneumatic Control Knockdown Delays	●

Permissible Values for B235

00	00 - Instantaneous
01	1 Second
02	2 Seconds
03	3 Seconds
04	4 Seconds
05	5 Seconds
06	6 Seconds
07	7 Seconds
08	8 Seconds
09	9 Seconds
10	10 Seconds
11	11 Seconds
12	12 Seconds
13	13 Seconds
14	14 Seconds
15	15 Seconds
16	16 Seconds
17	17 Seconds
18	18 Seconds
19	19 Seconds
20	20 Seconds
21	21 Seconds
22	22 Seconds
23	23 Seconds
24	24 Seconds
25	25 Seconds
26	26 Seconds
27	27 Seconds
28	28 Seconds
29	29 Seconds
30	30 Seconds
31	31 Seconds
32	32 Seconds
33	33 Seconds
34	34 Seconds
35	35 Seconds
36	36 Seconds
37	37 Seconds
38	38 Seconds
39	39 Seconds
40	40 Seconds
41	41 Seconds
42	42 Seconds
43	43 Seconds
44	44 Seconds
45	45 Seconds
46	46 Seconds
47	47 Seconds
48	48 Seconds
49	49 Seconds
50	50 Seconds
51	51 Seconds
52	52 Seconds
53	53 Seconds
54	54 Seconds
55	55 Seconds
56	56 Seconds
57	57 Seconds
58	58 Seconds
59	59 Seconds
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62	62 Seconds
63	63 Seconds
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67	67 Seconds
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71	71 Seconds
72	72 Seconds
73	73 Seconds
74	74 Seconds
75	75 Seconds
76	76 Seconds
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79	79 Seconds
80	80 Seconds
81	81 Seconds
82	82 Seconds
83	83 Seconds
84	84 Seconds
85	85 Seconds
86	86 Seconds
87	87 Seconds
88	88 Seconds
89	89 Seconds
90	90 Seconds
91	91 Seconds
92	92 Seconds
93	93 Seconds
94	94 Seconds
95	95 Seconds
96	96 Seconds
97	97 Seconds
98	98 Seconds
99	99 Seconds
NN	Does not apply
VT	P.C. knockdown time varies with train speed
XX	P.C. will not knockdown

PC Penalty App Delay *Mandatory*	B236
Pneumatic Control Knockdown Delays	●

Permissible Values for B236

00	00 - Instantaneous
01	1 Second
02	2 Seconds

03	3 Seconds
04	4 Seconds
05	5 Seconds
06	6 Seconds
07	7 Seconds
08	8 Seconds
09	9 Seconds
10	10 Seconds
11	11 Seconds
12	12 Seconds
13	13 Seconds
14	14 Seconds
15	15 Seconds
16	16 Seconds
17	17 Seconds
18	18 Seconds
19	19 Seconds
20	20 Seconds
21	21 Seconds
22	22 Seconds
23	23 Seconds
24	24 Seconds
25	25 Seconds
26	26 Seconds
27	27 Seconds
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42	42 Seconds
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85	85 Seconds
86	86 Seconds
87	87 Seconds
88	88 Seconds
89	89 Seconds
90	90 Seconds
91	91 Seconds
92	92 Seconds
93	93 Seconds
94	94 Seconds
95	95 Seconds
96	96 Seconds
97	97 Seconds
98	98 Seconds
99	99 Seconds
NN	Does not apply
VT	P.C. knockdown time varies with train speed
XX	P.C. will not knockdown

PC Undesired App Delay *Mandatory* **B237**

Pneumatic Control Knockdown Delays ●

Permissible Values for B237

00	00 - Instantaneous
01	1 Second
02	2 Seconds
03	3 Seconds
04	4 Seconds
05	5 Seconds
06	6 Seconds
07	7 Seconds
08	8 Seconds
09	9 Seconds
10	10 Seconds
11	11 Seconds
12	12 Seconds
13	13 Seconds
14	14 Seconds
15	15 Seconds
16	16 Seconds
17	17 Seconds
18	18 Seconds
19	19 Seconds
20	20 Seconds
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41	41 Seconds
42	42 Seconds
43	43 Seconds
44	44 Seconds
45	45 Seconds
46	46 Seconds
47	47 Seconds
48	48 Seconds
49	49 Seconds
50	50 Seconds
51	51 Seconds
52	52 Seconds
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54	54 Seconds
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56	56 Seconds
57	57 Seconds
58	58 Seconds
59	59 Seconds
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62	62 Seconds
63	63 Seconds
64	64 Seconds
65	65 Seconds
66	66 Seconds
67	67 Seconds
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75	75 Seconds
76	76 Seconds
77	77 Seconds
78	78 Seconds
79	79 Seconds
80	80 Seconds
81	81 Seconds
82	82 Seconds
83	83 Seconds
84	84 Seconds
85	85 Seconds
86	86 Seconds
87	87 Seconds
88	88 Seconds
89	89 Seconds
90	90 Seconds
91	91 Seconds
92	92 Seconds
93	93 Seconds
94	94 Seconds
95	95 Seconds
96	96 Seconds
97	97 Seconds
98	98 Seconds
99	99 Seconds
NN	Does not apply
VT	P.C. knockdown time varies with train speed
XX	P.C. will not knockdown

PC Emerg Initiated Delay *Mandatory* **B234**

Pneumatic Control Knockdown Delays ●

Permissible Values for B234

00	00 - Instantaneous
01	1 Second
02	2 Seconds
03	3 Seconds
04	4 Seconds
05	5 Seconds
06	6 Seconds
07	7 Seconds
08	8 Seconds
09	9 Seconds
10	10 Seconds
11	11 Seconds
12	12 Seconds
13	13 Seconds
14	14 Seconds
15	15 Seconds
16	16 Seconds
17	17 Seconds
18	18 Seconds
19	19 Seconds
20	20 Seconds
21	21 Seconds
22	22 Seconds
23	23 Seconds
24	24 Seconds
25	25 Seconds
26	26 Seconds
27	27 Seconds
28	28 Seconds
29	29 Seconds
30	30 Seconds
31	31 Seconds
32	32 Seconds
33	33 Seconds
34	34 Seconds
35	35 Seconds
36	36 Seconds
37	37 Seconds
38	38 Seconds
39	39 Seconds
40	40 Seconds
41	41 Seconds
42	42 Seconds
43	43 Seconds
44	44 Seconds
45	45 Seconds
46	46 Seconds
47	47 Seconds
48	48 Seconds
49	49 Seconds
50	50 Seconds
51	51 Seconds
52	52 Seconds
53	53 Seconds
54	54 Seconds
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56	56 Seconds
57	57 Seconds
58	58 Seconds

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72	72 Seconds
73	73 Seconds
74	74 Seconds
75	75 Seconds
76	76 Seconds
77	77 Seconds
78	78 Seconds
79	79 Seconds
80	80 Seconds
81	81 Seconds
82	82 Seconds
83	83 Seconds
84	84 Seconds
85	85 Seconds
86	86 Seconds
87	87 Seconds
88	88 Seconds
89	89 Seconds
90	90 Seconds
91	91 Seconds
92	92 Seconds
93	93 Seconds
94	94 Seconds
95	95 Seconds
96	96 Seconds
97	97 Seconds
98	98 Seconds
99	99 Seconds
NN	Does not apply
VT	P.C. knockdown time varies with train speed
XX	P.C. will not knockdown

Cab Signal Configuration *Mandatory* **CBSI**

Cab Signal Configuration ●

Permissible Values for CBSI

D Double Ended N Not Equipped S Single Ended

Validation Rule for CBSI

-Locomotive Cab Signal Configuration must agree with Cab Signal Type, and cannot be Not Equipped N if the Cab Signal I Magnetic Valve - no C.C.S (A) or Not Equipped (N)

Fuel Tank Capacity **A113**

Fuel Tank Capacity

Range of Values for A113

Minimum	Maximum
0	0
500	8200

Validation Rule for A113

-Locomotives with Equipment Descriptor of DA reporting anything other than a Fuel Tank Capacity of 0, must be reported within the minimum and maximum range specifications of 1000 to 8200.

Cab Signal Type *Mandatory* **A041**

Cab Signal Type ●

Permissible Values for A041

A	Magnetic Valve no CCS
B	BN CCS
C	CR CCS
D	Dual UP and CNW CCS
E	Type E
G	US and S Type EL
H	US and S Type EL and CNW
I	US and S Type EL with LSL
J	US and S Type EH
K	US and S Type EH with LSL
L	US and S Type EM
M	US and S Type EM and CNW
N	Not Equipped
R	RFP CCS
S	Type GRS
U	UP CCS
W	CNW CSS

PTC System Control *Mandatory* **A006**

Advance Train Control System (A.T.C.S.) ●

Permissible Values for A006

A	ACSES
B	Dual (ACSES and Train Guard)
D	Dual (ACSES and IETMS)
E	ETMS
I	ITCS
M	Dual (ITCS and IETMS)
N	Not Equipped
P	Partially Equipped
Q	Train Guard
T	ATCS
V	IETMS

Fuel Preheater Equipped **A110**

Fuel Preheater

Permissible Values for A110

Y Yes

EPA Emissions Tier Level **B081**

Indicates the EPA emissions Tier level for the diesel engine on a Locomotive.

Permissible Values for B081

A	Tier 0
B	Tier 0+
C	Tier 1
D	Tier 1+
E	Tier 2
F	Tier 2+
G	Tier 3
H	Tier 4
I	Tier 4C
N	None - Post 1973 Locomotives that are currently non Tier but will become Tier at first Engine change.
X	Exempt - Locomotive will never require a Tier engine. All pre-1973 Locomotives are exempt unless replaced with a Tier engine, then it becomes Tier forever
Z	Export Only - Subject to restriction of operating < 25 miles within US Border and certified as "export-only/not for use in US"

Validation Rule for B081

-Only Locomotives built prior to January 1, 1973 are allowed exemptions from EPA emissions standards

Control Stand Type	B057
Type of control stand	

Permissible Values for B057

A	Console	B	Dual	C	Standard AAR
Z	Other				

Safety Control	A228
Safety Control	

Permissible Values for A228

A	Alerter
E	Electric
F	Foot Pedal
G	Foot Pedal and Speed Governor
H	Alerter and Speed Governor
I	Interval
N	Not Equipped
S	Speed Governor
U	Equipped-Type Unknown
Z	Other

Gear Ratio	A114
Gear Ratio	

Permissible Values for A114

55:12	55 axle teeth : 12 gear teeth
55:19	55 axle teeth : 19 gear teeth
55:21	55 axle teeth : 21 gear teeth
55:22	55 axle teeth : 22 gear teeth
55:25	55 axle teeth : 25 gear teeth
56:21	56 axle teeth : 21 gear teeth
57:18	57 axle teeth : 18 gear teeth
57:20	57 axle teeth : 20 gear teeth
58:19	58 axle teeth : 19 gear teeth
59:15	59 axle teeth : 15 gear teeth
59:18	59 axle teeth : 18 gear teeth
59:20	59 axle teeth : 20 gear teeth
60:17	60 axle teeth : 17 gear teeth
61:16	61 axle teeth : 16 gear teeth
62:13	62 axle teeth : 13 gear teeth
62:15	62 axle teeth : 15 gear teeth
62:18	62 axle teeth : 18 gear teeth
62:45	62 axle teeth : 45 gear teeth
62:50	62 axle teeth : 50 gear teeth
62:51	62 axle teeth : 51 gear teeth
62:95	62 axle teeth : 95 gear teeth
63:15	63 axle teeth : 15 gear teeth
65:12	65 axle teeth : 12 gear teeth
65:15	65 axle teeth : 15 gear teeth
65:18	65 axle teeth : 18 gear teeth
65:20	65 axle teeth : 20 gear teeth
66:12	66 axle teeth : 12 gear teeth
66:20	66 axle teeth : 20 gear teeth
68:14	68 axle teeth : 14 gear teeth
69:18	69 axle teeth : 18 gear teeth
70:17	70 axle teeth : 17 gear teeth
70:27	70 axle teeth : 27 gear teeth
71:13	71 axle teeth : 13 gear teeth
71:23	71 axle teeth : 23 gear teeth
73:13	73 axle teeth : 13 gear teeth
74:12	74 axle teeth : 12 gear teeth
74:15	74 axle teeth : 15 gear teeth
74:18	74 axle teeth : 18 gear teeth
74:29	74 axle teeth : 29 gear teeth
75:16	75 axle teeth : 16 gear teeth
78:14	78 axle teeth : 14 gear teeth
79:13	79 axle teeth : 13 gear teeth
81:22	81 axle teeth : 22 gear teeth
82:19	82 axle teeth : 19 gear teeth
83:16	83 axle teeth : 16 gear teeth
83:18	83 axle teeth : 18 gear teeth
83:20	83 axle teeth : 20 gear teeth
83:21	83 axle teeth : 21 gear teeth
84:22	84 axle teeth : 22 gear teeth
85:16	85 axle teeth : 16 gear teeth
85:36	85 axle teeth : 36 gear teeth
87:16	87 axle teeth : 16 gear teeth
99:12	99 axle teeth : 12 gear teeth
DRCT	Direct Drive
NONE	

Validation Rule for A114

-If Gear Ratio is not set then Direct Drive must be set

Hood Configuration	A122
Hood Configuration	

Permissible Values for A122

B	Booster--No Cab
C	Carbody (F7, F45, ETC.)
E	Extended Low Hood
H	High Hood
L	Low Hood
O	Other
S	Switcher
T	Tapered Carbody
W	Full Width Cab

Maximum Speed	A165
Maximum Speed	

Range of Values for A165

Minimum	Maximum
25	150

Validation Rule for A165

-Locomotives (Equipment Descriptor of DFGT, DSW, DNCF, or DA) can only report a Maximum Speed less than or equal to 86 mph

-Locomotives (Equipment Descriptor of DPAS, DNCP, or DE) must repot a Maximum Speed greater than or equal to 41 mph

Minimum Speed	A172
Minimum Speed	

Range of Values for A172

Minimum	Maximum
7	40

Speed Control	A246
Speed Control	

Permissible Values for A246

H	Hump
L	Lead
P	Hump and Trail
R	Lead and Trail
S	Lead , Hump and Trail
T	Trail
Y	Equipped (Not Specified)

Minimum Coupled Curvature	A169
Minimum Coupled Curvature	

Range of Values for A169

Minimum	Maximum
0	99

Min Curvature 50 ft Cpld A170

Minimum Coupled Curvature - 50 Foot Car

Range of Values for A170

Minimum	Maximum
0	99

Min Curvature Uncoupl A171

Minimum Curvature Uncoupled

Range of Values for A171

Minimum	Maximum
0	99

Starter Type A249

Starter Type

Permissible Values for A249

A Air
E Electric
S Starter

Traction Motor Type A271

Traction Motor Type ✹

Permissible Values for A271

AC Alternating Current
DC Direct Current

Validation Rule for A271

-Locomotive Traction Motor Type is required for Locomotives with a Built/Rebuilt (Birth) Date on or after July 1, 1997

Traction Motor Cutouts A270

Traction Motor Cutouts

Permissible Values for A270

Y Yes

Ind Pressure Swit X113

Independent Pressure Switch

Permissible Values for X113

N No
Y Yes

Jumper Cable Connection A148

Jumper Cable Connection

Permissible Values for A148

B 27-Pin AAR Standard
C 27-Pin Non-AAR
N Not MU Equipped
O Other, Nonstandard
P 27-Pin AAR with Permanent Cable Attached

Ditch Light Equipped *Mandatory* B071

Warning Lights ●

Permissible Values for B071

D Double Ended
N Not Equipped
S Single Ended

Mexican Service Qualified B250

International Service

Permissible Values for B250

Y Yes

Canadian Serve Qualified B251

International Service

Permissible Values for B251

Y Yes

Qualified for US Service B249

International Service

Permissible Values for B249

Y Yes

Mother for Slug B262

Auxiliary Device M

Permissible Values for B262

Y Yes

Distributed Power Eqpd B070

The unit is equipped with a distributed power device ✹

Permissible Values for B070

Y Yes
N No

Validation Rule for B070

-Distributed Power Eqpd (B070) must be reported effective December 9, 2021

DP System Type B578

The Distributed Power system type

Permissible Values for B578

L3 Locotrol 3
IPM IPM
LXA LXA

Validation Rule for B578

-DP System Type (B578) must be reported if Distributed Power Eqpd (B070) is Y

NOTES:

- IPM includes EIPM.

DP Remote EOT Emergency Test B579

The Distributed Power system is capable of running an end of train Emergency Test

Permissible Values for B579

Y Yes
N No

Validation Rule for B579

-DP Remote EOT Emerg Test (B579) must be reported if Distributed Power Eqpd (B070) is Y.

NOTES:

- This feature allows verification of end of train emergency braking functionality when using a tail end DP Remote and no traditional EOT device. DP accomplishes this by providing an EOT test button in the DP Remote Session screen on the DP Lead locomotive, requiring the closing of the angle cock behind the Lead, and putting the Lead's automatic brake handle in emergency. DP sends a message to all mid-train Remotes to ignore the impending emergency command and ensures the tail-end Remote is able to initiate an emergency on its own, based on the received command, not the brake pipe. This functionality is similar to a conventional EOT Dump test, which is performed after HOT-EOT arming.
- To use this functionality, all DP units on the train must be equipped with this feature.

DP BP Test Supplemental Reduction B580

The Distributed Power system has an enhanced brake pipe test algorithm

Permissible Values for B580

Y Yes
N No

Validation Rule for B580

-DP BP Test Supplemental Reduction (B580) must be reported if Distributed Power Eqpd (B070) is Y.

NOTES:

- This functionality improves the likelihood of passing the DP brake pipe test on longer trains and in cold temperatures. After failing a brake pipe test, the algorithm makes a supplemental reduction on the next test. To use this

functionality, only the Lead DP unit must be equipped with this feature.

DP Comm Loss Idle Down BV Cut In **B581**

The Distributed Power system is capable of automatically cutting in the brake valve after Comm Loss Idle Down (CLID)

Permissible Values for B581

Y Yes
N No

Validation Rule for B581

-DP Comm Loss Idle Down BV Cut In (B581) must be reported if Distributed Power Eqpd (B070) is Y.

NOTES:

- This feature enables automatic recovery of the brake valve on a DP Remote after a CLID event if certain conditions are met. Prior to the CLID, the DP must have been in NORMAL mode and the brake valve Cut-in (i.e., the CLID was due to unexpected airflow). After the CLID, if the following conditions are met, the Remote will automatically Cut-in the brake valve without requiring a brake application/release: (1) radio communications is restored within 90 minutes of CLID; (2) the Lead is commanding automatic brake RELEASE at the time radio communication is restored; and (3) operator commands Remote back to NORMAL mode prior to the train being stopped for longer than 10 minutes. If any of the above conditions are not met, the Remote will enforce normal CLID recovery interlocks and will require the operator to perform the usual brake application and release.
- To use this functionality, only the DP Remote must be equipped with this feature.

DP DB Comm Loss Idle Down At 0 MPH **B582**

The Distributed Power system on a Remote is capable of idling the Dynamic Brake when locomotive speed reaches zero mph after a Comm Loss Idle Down event

Permissible Values for B582

Y Yes
N No

Validation Rule for B582

-DP DB Comm Loss Idle Down At 0 MPH (B582) must be reported if Distributed Power Eqpd (B070) is Y.

NOTES:

- To use this functionality, only the DP Remote unit must be equipped with this feature.

DP Setout Mode With BV Cut In **B583**

The Distributed Power system has the ability to leave the Remote Brake Valve Cut-In while in SETOUT Mode

Permissible Values for B583

Y Yes
N No

Validation Rule for B583

-DP Setout Mode With BV Cut In (B583) must be reported if Distributed Power Eqpd (B070) is Y.

NOTES:

- This feature allows the DP Remote to maintain the pressure in the brake pipe, avoiding an Emergency Application.
- To use this functionality, both the Lead and individual Remote must be equipped with this feature.

DP Incremental Link/Unlink **B584**

The Distributed Power system on a Remote is capable of being linked and unlinked without impact to other linked units

Permissible Values for B584

Y Yes
N No

Validation Rule for B584

-DP Incremental Link/Unlink (B584) must be reported if Distributed Power Eqpd (B070) is Y.

NOTES:

- The feature allows an operator to link new Remotes or drop linked Remotes without unlinking the train.
- To use this functionality for incremental linking, the Lead must be equipped with this feature.
- To use this functionality to unlink a Remote, both the Lead and the Remote must be equipped with this feature.

DP Suspend Mode **B585**

The Distributed Power system is capable of Suspend Mode enabling a Remote to be operated locally in a conventional manner

Permissible Values for B585

NBPT Brake Pipe Test is not required on exiting Suspend Mode
YBPT Brake Pipe Test is required on exiting Suspend Mode
N No

Validation Rule for B585

-DP Suspend Mode (B585) must be reported if Distributed Power Eqpd (B070) is Y.

NOTES:

- This feature allows a DP Remote to be temporarily suspended from DP operation. In Suspended Mode, the DP Remote is functions as a conventional, non-DP unit, providing a local operator full control over propulsion and air brakes to perform movements. In Suspended Mode, the DP system maintains link information. After movements are completed and the train is recoupled, the operator can resume normal DP operation from the DP Lead without having to re-link the train. The need for the operator to run a Brake Pipe Test depends on the permissible value of this element.
- To use this functionality, the Lead and the individual Remote being suspended must be equipped with this feature. To resume operations without a brake pipe test only the Lead must have the NBPT attribute.

DP Lead Remote Swap **B586**

The Distributed Power system is capable of turning the DP Lead into the DP Remote and the Remote into the Lead

Permissible Values for B586

Y Yes
N No

Validation Rule for B586

-DP Lead Remote Swap (B586) must be reported if Distributed Power Eqpd (B070) is Y.

NOTES:

- This feature enables swapping of the Lead and Remote configuration in a DP train without undergoing a unlink/relink procedure.
- To use this functionality, the Lead and Remotes must be equipped with this feature.

Loco Controlled Tractive Effort **B587**

The Locomotive is capable of Controlled Tractive Effort (CTE)

Permissible Values for B587

Y Yes
N No

Validation Rule for B587

-Loco Controlled Tractive Effort (B587) must be reported if Distributed Power Eqpd (B070) is Y.

NOTES:

- This is a Locomotive characteristic, not a Distributed Power characteristic.

DP Selection of CTE **B588**

The Distributed Power system on a DP Lead is capable of selecting Controlled Tractive Effort (CTE) on a DP Remote

Permissible Values for B588

L Linking
A Anytime

N No

Validation Rule for B588

-DP Selection of CTE (B588) must be reported if Distributed Power Eqpd (B070) is Y.

NOTES:

- To use this functionality, the Lead must be equipped with this feature and the Remote should be equipped with CTE.
- **On Linking**: After linking, DP presents the operator with the choice of putting the Remote into RUN CTE or RUN FTE mode. The Remote will stay in the chosen RUN mode until the end of the DP session. To toggle the Remote between CTE and FTE, the operator must stop, unlink, and relink. Note, the Lead does not know if the Remote supports CTE. If the operator selects RUN CTE mode, the Lead will send a CTE command to the Remote and an unsupported Remote will respond with a status message saying it is still in FTE.
- **Anytime:** After linking, DP allows the operator to toggle between CTE and FTE at any time (but must be stopped). DP does not require unlinking and relinking. Note: the Lead does not know if the Remote supports CTE. The operator can attempt to change the Remote RUN mode to CTE, but the unsupported Remote will respond saying it is still in FTE.

DP Elimination Transition Penalty — B589

The Distributed Power system will not enforce a penalty brake application upon entering DP

Permissible Values for B589

Y Yes

N No

Validation Rule for B589

-DP Elimination Transition Penalty (B589) must be reported if Distributed Power Eqpd (B070) is Y.

NOTES:

- On a Remote, the DP system will no longer initiate a penalty brake application when DP is set up that locomotive.
- On a Lead, the DP system will no longer initiate a penalty brake application when linking.
- To benefit from this functionality, the Lead and all Remotes must be equipped with this feature.

DP Remote Dynamic Brake Holding During PCS — B591

- The Distributed Power system is capable of remote DB Holding During PCS

Permissible Values for B591

Y Yes

N No

Validation Rule for B591

-DP Rem Dyn Brake Hold PCS (B591) must be reported if Distributed Power Eqpd (B070) is Y

NOTES:

- DP Feature ID: F05
- The pneumatic control switch (PCS) on a Distributed Power Remote opens upon penalty and emergency air brake applications and certain system faults. Currently, Distributed Power's response to PCS open is to immediately transition the Remote to throttle Idle. This holding feature allows the Distributed Power Remote to maintain Dynamic Braking when PCS opens to help stop a moving train more quickly or prevent a stopped train from accelerating.
- To use this functionality, all Distributed Power units on the train must be equipped with this feature.

Truck Components

Locomotive Truck Type — A278

Truck Type, Component

Permissible Values for A278

AB Alco Hi-Adhesion B

AC Alco Hi-Adhesion C

AS Alco Blunt (Switch Unit)

AT Alco Trimount

BB Blomberg - B (Swinghanger)

BL Bolster-Less GE-Passenger

BM Blomberg + M

DB Dofasco-DFP-B

EP EMD-Passenger (Swinghanger), 3 Axles

FB EMD, Flexicoil, 2 Axles

FC EMD, Flexicoil, 3 Axles

FD EMD, Flexicoil, 4 Axles

GF General Electric-Floating Bolster

GH General Electric Hi-Adhesion

GP EMD, GP, Standard 2-Axle Truck

GR General Electric Radial, 3 Axles

GX General Electric-Flexicoil

HB HT-EMD, HTB, High Traction, 2 Axles

HC H-EMD, HTC, High Traction, 3 Axles

HR HT EMD, HTC, High Traction, Radial, 3 Axles

MB MLW AAR-B

MF MLW Flexicoil

MT MLZ ZWT-Zero wgt. Transfer (Hi-Adhesion)

RA AAR Type A(Switch Unit)

RB AAR Type B

RC EMD 'C-C' Radial

XB Experimental B-B

ZZ Other

Feature

Air Condition Equipped — A017

Air Conditioner

Permissible Values for A017

Y Yes

Toilet Type — A262

Toilet Type

Permissible Values for A262

B Biology Flow Through

C Chemical

D Direct to Ground

I Incinerator

N Not Equipped

P Plastic Bag

U Equipped-Type Unknown

Z Other

Cab Seat Count — A233

Seating Capacity

Range of Values for A233

Minimum	Maximum
0	10

Validation Rule for A233

-Locomotive Cab Seat Count cannot be set, if the Locomotive has no Hood

Water Cooler — A287

Water Cooler

Permissible Values for A287

A Refrigerated Non-Ice

B Ice Cooled

N Not Equipped

Event Recorder Type — A093

Manufacturer Make and Model of Locomotive Event Recorder

Value does not carry forward for Single Clone / Multi-Clone.

Permissible Values for A093

BE	BARCO ELECTRIC
BS	BARCO SIS 800
BS53	BACH-SIMPSON 53000
BS54	BACH-SIMPSON 54000
BSTS	BACH-SIMPSON TS324
CM	CHICAGO PNEUMATIC MECHANICAL
CRMF	CENTRAL RAILWAY MANUFACTURING F3000
CRM3	CENTRAL RAILWAY MANUFACTURING F3050
D3	WABTEC DATACORD 300
D5	WABTEC DATACORD 5000
EDIE	EDI EDI-PCM-2M
EDII	EDI IFC-PCM-04
EQPD	Equipped
F0	EMD FIRE
F1	EMD FIRE GEN 1
F2	EMD FIRE GEN 2
F3	EMD FIRE GEN 3
FI	EMD FIRE INTEGRATED
G1	GE G1-GEER 32
IW	WABTEC WRE25539P
JW	WABTEC WRE3289-8-DUAL STREAM ETMS AND QES
LD	WABTEC LDARS
M2	QUANTUM ETR
M4	QUANTUM Q1046 UP SOLID STATE
MS	QUANTUM SOLID STATE/ALERTER
NE	NOT EQUIPPED
O	OTHER
P2	POWERVIEW 251467-000
PD	PULSE TTX-REC-06H AEROQUIP
PE	PULSE TTX-REC-03W
PF	PULSE TTX-REC-SF01
PG	PULSE TTX-REC-M4W
PH	PULSE TTX-REC-M6W
PI	PULSE TTX REC-I3
PJ	PULSE/EMD CAB CONSOLE COMPUTER
PK	PULSE IFC-PCM-04
PL	PULSE TTX-REC-M6
PM	PULSE TTX-IDR-01
PN	PULSE TTX-REC-MTR
PO	BACH-SIMPSON CHM
PP	PULSE TTX-REC-CAT-01 CAT RCL
PQ	PULSE TTX-REC-RCL-01 RCL
PR	PULSE TTX-REC-M6W GE INT ALT
PS	BACH-SIMPSON 54360-512 CHM
PSS	PULSE SOLID STATE 1054418R3
PT	PULSE TTX-REC-M6FRA
PU	PULSE TTX-IDR-02
PV	PULSE IFC-PCM-02
PW	WABTEC/PULSE IDR-03
PX	WABTEC/PULSE IDR-02
Q1	QTRON 5100
Q146	QUANTUM Q1046
Q2	QUANTUM 1048
Q3	QTRON Q-92251/33
Q4	QUANTUM TTX-REC-M6
Q44E	QUANTUM Q1044E
Q45B	QUANTUM Q1045B
Q45E	QUANTUM Q1045E
Q5	QTRON 5000
Q6	QUANTUM Q1067E
Q7	QUANTUM Q1067D
QA	QUANTUM A/AIR MANFLD 1058
QB	QUANTUM Q1026
QC	QUANTUM Q1027
QCHM	QUANTUM Q1045CHM
QD	QUANTUM Q1028
QE	QUANTUM Q1029
QECA	QUANTUM Q1045ECA
QH	QUANTUM Q1046E
QI	QUANTUM Q1055
QJ	QUANTUM Q1057
QK	QUANTUM Q1058
QL	QUANTUM Q1059
QM	QUANTUM Q1017
QN	QUANTUM Q1049
QO	QUANTUM Q1069
QP	QUANTUM Q1070
QS	QTRON SOLID STATE(MODEL UNK)
QT20	QTRON 2000
QT52	QTRON 5200
QTD	QTRON DC 6000 (Q-93271/1)
QTE	QTRON DC 6000 (Q-93271/6)
QU	QUANTUM Q1044 SOLID STATE
QV	QUANTUM Q1040B
QW	QUANTUM Q1040E
RK	ROCKWELL ICE
T1	WABTEC TTX-IDR-01
T3	WABTEC TTX-IDR-03
T4	WABTEC/PULSE IDR-01
TM87	TMACS 8709
UN	UNKNOWN
V8	VIOLET WI-PU 800
W1	WABTEC WRE26432P
W2	WABTEC ICF-CPCM-02
W4	WABTEC ICF-CPCM-04
W5	WABTEC TTX-REC-F5
W6	WABTEC TTX-REC-M6
W7	WABTEC TTX-REC-F7ST
W8	WABTEC TTX-REC-401
WA	WABTEC TTX-REC-F11E
WB	WABTEC TTX-REC-M6E
WL	WABTEC LDRS-V
WS	WABTEC SOLID STATE - PCM 04
WT	WABTEC/PULSE F7S
WU	WABTEC/PULSE FE-133
WV	WABTEC/PULSE ICE
WW	WABTEC/PULSE TTX
WX	WABTEC/PULSE IDR
WY	WABTEC/PULSE PCM/IFC
WZ1	WABTEC/PULSE FIRE
WZ2	WABTEC/PULSE QES

Camera Front Image *Mandatory* **B100**

Manufacturer of image storage (camera) in the front ●

Value does not carry forward for Single Clone / Multi-Clone.

Permissible Values for B100

ANTX	AngelTrax	GE	General Electric
NTEQ	Not Equipped	OTHR	Other
PRMK	Progress Rail	PROV	Pro-Vision
RAVW	Railview	RLHD	Railhead
WBTC	Wabtec	WLDX	Weldex
WTRX	Wi-Tronix		

Camera Cab Image *Mandatory* **B108**

Manufacturer of image storage (camera) in the cab ●

Value does not carry forward for Single Clone / Multi-Clone.

Permissible Values for B108

ANTX	AngelTrax	GE	General Electric
NTEQ	Not Equipped	OTHR	Other
PRMK	Progress Rail	PROV	Pro-Vision
RAVW	Railview	RLHD	Railhead

WBTC	Wabtec	WLDX	Weldex
WTRX	Wi-Tronix		

LVVR Compliant **B594**

The unit is Voice and Video Recorder Compliant

Permissible Values for B594

Y	Yes
N	No

Validation Rule for B594

- LVVR Compliant cannot be Y-Yes if Cab Camara (B108) = NTEQ – Not Equipped

NOTES:

- Transport Canada requirements defined in SOR/2020-178
- Units operating in the lead in Canada are required to be LVVR capable
- Cab cameras must be able to determine status of instrument displays and controls, and operator facial features and expressions
- Microphones must be able to record the voice of the locomotive engineer distinctly and clearly from the conductor; record the voice of the conductor distinctly and clearly from the locomotive engineer; and safety-related sounds and aural warnings in the controlling locomotive
- System must store 48 hours of data in crash-hardened memory

Camera Rear Image *Mandatory* **B110**

Manufacturer of image storage (camera) in the rear ●

Value does not carry forward for Single Clone / Multi-Clone.

Permissible Values for B110

ANTX	AngelTrax	GE	General Electric
NTEQ	Not Equipped	OTHR	Other
PRMK	Progress Rail	PROV	Pro-Vision
RAVW	Railview	RLHD	Railhead
WBTC	Wabtec	WLDX	Weldex
WTRX	Wi-Tronix		

Rail Lubricator Sys Type **B165**

Auxiliary Device L; Code Z=Equipped For Conversion, Codes A-G Assigned (Refer To Locomotive Committee Document And Permitted Values

Permissible Values for B165

Z	Equipped

Auto Cool Water Drain Eqp **A021**

Automatic Cooling Water Drain

Permissible Values for A021

Y	Yes

Aux Side Wall Heat **B349**

Indicates whether a LOCO is equipped with Auxiliary Side Wall Heaters

Value does not carry forward for Equipment Group Change.

Permissible Values for B349

Y	Yes

Energy Management Systems **A303**

The type of Energy Management System installed ✹

Value does not carry forward for Equipment Group Change.

Permissible Values for A303

A	EMD
B	GE
HPT	Trip Optimizer with Smart HPT
LDP	LEADER/PTC-Integrated
LDR	LEADER
LPS	LEADER/PTC-Integrated and Smart Consist
LSC	LEADER and Smart Consist
N	Not Equipped
OTH	Other
R	Equipped by RR
SC	Smart Consist
TAC	TALOS and Smart Consist
TAL	TALOS
TAP	TALOS/PTC-Integrated
TO	Trip Optimizer
TOC	Trip Optimizer Smart Consist
TOP	Trip Optimizer/PTC-Integrated
TPC	Trip Optimizer/PTC-Integrated and Smart Consist
TPH	Trip Optimizer/PTC-Integrated with Smart HPT
TPS	TALOS/PTC-Integrated and Smart Consist

Validation Rule for A303

- Energy Management System (A303) is mandatory for locomotives built or rebuilt on or after January 1, 2016

Air Flow Meter *Mandatory* **B528**

The type of Air Flow Meter on the Locomotive ●

Value does not carry forward for Single Clone / Multi-Clone.

Permissible Values for B528

E	Electrical	M	Mechanical	N	Not Equipped

Annual Test Required *Mandatory* **B529**

Annual Test Required ●

Value does not carry forward for Single Clone / Multi-Clone.

Permissible Values for B529

N	No	Y	Yes

NOTES:

- If Annual Test Required is listed as No, then NA will be displayed in the Annual Tests 229.27 section of the Locomotive Blue Card.

Vehicle/Track Interaction Equipped **B550**

Identifies if locomotive is equipped with Vehicle/Track Interaction (VTI) Monitor

Permissible Values for B550

A	Automated Track Geometry Measurement System
E	Enhanced System (Extra Sensors or DGPS Antenna)
K	Kawasaki GEO System
N	ENSCO GEO System
O	BNSF ODIN GEO System
S	Standard GPS System

Blue Card

Propelled By *Mandatory* **L013**

Identifies how the locomotive is propelled ●

Permissible Values for L013

DE	Diesel-Electric
DMU	Diesel Multiple Unit
E	Electric
MU	Electric Multiple Unit
MUC	MU Control Cab
NMUC	Non-MU Control Cab
O	Other
T	Turbine
TC	Torque Converter

Type of Service *Mandatory* **L018**

Identifies the type of service for the locomotive ●

Permissible Values for L018

O Other P Passenger R Road
Y Yard

Steam Gen No L019

Locomotive Steam Generator Number

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Max Piston *Mandatory* L001

Maximum distance travel ●

Range of Values for L001

Minimum	Maximum
1	10

Out of Use Credit Days L002

Number of days of out of use credit

System Generated Field. Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Range of Values for L002

Minimum	Maximum
0	99999

Periodic Insp Interval *Mandatory* L020

Indicates the number of days between Locomotive inspections ●

Value does not carry forward for Single Clone / Multi-Clone.

Permissible Values for L020

184 184 Days 92 92 Days

Waiver-Part 229 L004

Locomotive Waiver Part 229 No and description information

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Waiver-Other L005

Locomotive Waiver No and description information

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Event Recorder No Days L006

Number of days between Event Recorder Inspections

Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for L006

Minimum	Maximum
0	99999

ABT L2 Periodic Interval L007

Comments related to the number of days between Locomotive Air Brake L2 Inspections

Value does not carry forward for Single Clone / Multi-Clone.

ABT L3 Periodic Interval L008

Comments related to the number of days between Locomotive Air Brake L3 Inspections

Value does not carry forward for Single Clone / Multi-Clone.

Loco Repair Comments L009

Locomotive special notes relating to repairs performed to restore compliance

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Loco Noise Comments L010

Locomotive notes for any noise tests or related information in accordance with 49 CFR 210.31

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Loco Remarks Comments L011

Locomotive additional explanatory or clarifying information

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Pilot Height GT Max L012

Locomotive Pilot Height that is above 6 inches

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Permissible Values for L012

Y Yes

Waiver-Air Card L014

Locomotive Air Card Waiver Part 229 No

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

PTC Operating Status *Mandatory* L024

Indicates whether or not a locomotive is in a PTC operable state ●

Value does not carry forward for Single Clone / Multi-Clone.

Permissible Values for L024

Y Yes
N No

Validation Rule for L024

-PTC Operating Status (L024) cannot be Yes (Y) if the PTC System Control (A006) is Not Equipped (N) or Partially Equipped (P)

LBP Reduction *Mandatory* L025

Limiting Brake Pressure Reduction indicates whether or not a locomotive is equipped with software or hardware controls to limit a penalty brake pipe pressure reduction to no more than 2/7 of the feed valve pressure ●

Value does not carry forward for Single Clone / Multi-Clone.

Permissible Values for L025

Y Yes
N No

Power Cut-Off Switch *Mandatory* L026

Device / circuit on a locomotive, that when opened, disables tractive effort ●

Value does not carry forward for Single Clone / Multi-Clone.

Permissible Values for L026

Y Yes
N No

Dynamic Brake Interlock *Mandatory* L027

Indicates what type of dynamic brake interlock is currently configured on the locomotive ●

Value does not carry forward for Single Clone / Multi-Clone.

Permissible Values for L027

1 Automatic brake application is restored (reapplies) when dynamic brake is released
2 Automatic brake application does not restore (does not reapply) when dynamic brake is released
N Not equipped with Dynamic Brake Interlock (DBI)

Inspection Interval Days

Interval Days L2 Vent Valve (Front) L030

Indicates the number of days between L2 Vent Valve (Front) Inspections

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Interval Days L2 Vent Valve (Rear) L031

Indicates the number of days between L2 Vent Valve (Rear) Inspections

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Interval Days L2 Safety Valve 150# L032

Indicates the number of days between L2 Safety Valve 150# Inspections

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Interval Days L2 Check Valve (MR) L033

Indicates the number of days between L2 Check Valve (MR) Inspections

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Interval Days L2 Check Valve (EQ RES) L034

Indicates the number of days between L2 Check Valve (EQ RES) Inspections

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Interval Days L3 Brake Pipe Control Portion L035

Indicates the number of days between L3 Brake Pipe Control Portion Inspections

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Interval Days L3 Equalizing Reservoir Control Portion L036

Indicates the number of days between L3 Equalizing Reservoir Control Portion Inspections

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Interval Days L3 DB Triple Valve Portion L037

Indicates the number of days between L3 DB Triple Valve Portion Inspections

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Interval Days L3 16 Control Portion L038

Indicates the number of days between L3 16 Control Portion Inspections

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Interval Days L3 20 Pipe Block Assy L039

Indicates the number of days between L3 20 Pipe Block Assy Inspections

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Interval Days L3 Brake Cylinder Control Portion L040

Indicates the number of days between L3 Brake Cylinder Control Portion Inspections

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Interval Days L3 13 Control Portion L041

Indicates the number of days between L3 13 Control Portion Inspections

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Interval Days L3 21 Pipe Vent Valve L042

Indicates the number of days between L3 21 Pipe Vent Valve Inspections

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Interval Days L3 FastBrake MC-31 Control Valve L043

Indicates the number of days between L3 FastBrake MC-31 Control Valve Inspections

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Interval Days L3 FastBrake Independent Application and Release Portion L044

Indicates the number of days between L3 FastBrake Independent Application and Release Portion Inspections

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Interval Days L3 FastBrake Quick Service Valve L045

Indicates the number of days between L3 FastBrake Quick Service Valve Inspections

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Interval Days L3 FastBrake Dead In Train Portion L046

Indicates the number of days between L3 FastBrake Dead In Train Portion Inspections

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Interval Days L3 FastBrake 16 Control Portion L047

Indicates the number of days between L3 FastBrake 16 Control Portion Inspections

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Interval Days L3 FastBrake 20 Control Portion L048

Indicates the number of days between L3 FastBrake 20 Control Portion Inspections

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Interval Days L3 FastBrake Brake Cylinder Control Portion L049

Indicates the number of days between L3 FastBrake 20 Control Portion Inspections

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Interval Days L3 FastBrake Brake Pipe Control Portion L050

Indicates the number of days between L3 FastBrake Brake Pipe Control Portion Inspections

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Interval Days L3 CCB1 20 Control Portion Independent Brake L051

Indicates the number of days between L3 CCB1 20 Control Portion Independent Brake Inspections

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Interval Days L3 CCB1 DB-10 Service Portion L052

Indicates the number of days between L3 CCB1 DB-10 Service Portion Inspections

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Interval Days L3 CCB1 Analog Converter ER L053

Indicates the number of days between L3 CCB1 Analog Converter ER Inspections

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Interval Days L3 CCB1 Analog Converter 16 L054

Indicates the number of days between L3 CCB1 Analog Converter 16 Inspections

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Interval Days L3 CCB1 Cut-off Valve Assembly L055

Indicates the number of days between L3 CCB1 Cut-off Valve Assembly Inspections

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Interval Days L3 CCB1 Brake Pipe Relay Valve L056

Indicates the number of days between L3 CCB1 Brake Pipe Relay Valve Inspections

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Interval Days L3 CCB1 Brake Pipe Cutoff Valve L057

Indicates the number of days between L3 CCB1 Brake Pipe Cutoff Valve Inspections

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Interval Days L3 CCB1 Double Check Valve L058

Indicates the number of days between L3 CCB1 Double Check Valve Inspections

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Interval Days L3 CCB1 Emergency Limit Valve L059

Indicates the number of days between L3 CCB1 Emergency Limit Valve Inspections

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Interval Days L3 CCB1 Emergency Magnet Valve L060

Indicates the number of days between L3 CCB1 Emergency Magnet Valve Inspections

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Interval Days L3 CCB1 Equalizing Reservoir Magnet Valve L061

Indicates the number of days between L3 CCB1 Equalizing Reservoir Magnet Valve Inspections

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Interval Days L3 CCB1 Bail Off Exhaust Magnet Valve L062

Indicates the number of days between L3 CCB1 Bail Off Exhaust Magnet Valve Inspections

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Interval Days L3 CCB1 Bail Off Supply Valve L063

Indicates the number of days between L3 CCB1 Bail Off Supply Valve Inspections

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Interval Days L3 CCB1 16 Pipe Magnet Valve L064

Indicates the number of days between L3 CCB1 16 Pipe Magnet Valve Inspections

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Interval Days L3 CCB1 Brake Pipe Cutoff Pilot L065

Indicates the number of days between L3 CCB1 Brake Pipe Cutoff Pilot Inspections

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Interval Days L3 CCB1 Emergency Detection Pilot L066

Indicates the number of days between L3 CCB1 Emergency Detection Pilot Inspections

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Interval Days L3 CCB1 Emergency Pilot Valve L067

Indicates the number of days between L3 CCB1 Emergency Pilot Valve Inspections

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Interval Days L3 CCB1 Backup Actuating Valve GE L068

Indicates the number of days between L3 CCB1 Backup Actuating Valve GE Inspections

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Interval Days L3 CCB1 Backup Double Check Valve L069

Indicates the number of days between L3 CCB1 Backup Double Check Valve Inspections

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Interval Days L3 CCB1 Emergency Detection Pilot Dynamic Brake Interlock L070

Indicates the number of days between L3 CCB1 Emergency Detection Pilot Dynamic Brake Interlock Inspections

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Interval Days L3 CCB1 Backup Actuating Valve EMD L071

Indicates the number of days between L3 CCB1 Backup Actuating Valve EMD Inspections

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Interval Days AFMC L072

Indicates the number of days between AFMC Inspections

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

NOTES:

- The element will be initially populated with 92 days.
- This element will be updated through an ECC and would default to 92 after an AFMC Inspection is reported.

Emissions

Emissions Switch - HC B530

Report the HC - Hydrocarbon emission levels for switch locomotive

Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for B530

Minimum	Maximum
0	99.99

NOTES:

- Report the grams per brake horsepower hour (G/BHP-HR)

Emissions Switch - PM B531

Report the PM - Particulate matter emission levels for switch locomotive

Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for B531

Minimum	Maximum
0	99.99

NOTES:

- Report the grams per brake horsepower hour (G/BHP-HR)

Emissions Switch - CO B532

Report the CO - Carbon monoxide emission levels for switch locomotive

Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for B532

Minimum	Maximum
0	99.99

NOTES:

- Report the grams per brake horsepower hour (G/BHP-HR)

Emissions Switch - NOx B533

Report the NOx - Oxides of nitrogen emission levels for switch locomotive

Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for B533

Minimum	Maximum
0	99.99

NOTES:

- Report the grams per brake horsepower hour (G/BHP-HR)

Emissions Line - HC B534

Report the HC - Hydrocarbon emission levels for line locomotive

Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for B534

Minimum	Maximum
0	99.99

NOTES:

- Report the grams per brake horsepower hour (G/BHP-HR)

Emissions Line - PM B535

Report the PM - Particulate matter emission levels for line locomotive

Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for B535

Minimum	Maximum
0	99.99

NOTES:

- Report the grams per brake horsepower hour (G/BHP-HR)

Emissions Line - CO B536

Report the CO - Carbon monoxide emission levels for line locomotive

Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for B536

Minimum	Maximum
0	99.99

NOTES:

- Report the grams per brake horsepower hour (G/BHP-HR)

Emissions Line - NOx B537

Report the NOx - Oxides of nitrogen emission levels for line locomotive

Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for B537

Minimum	Maximum
0	99.99

NOTES:

- Report the grams per brake horsepower hour (G/BHP-HR)

Cost

Original Cost A184

The original manufacturer selling price ✹

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for A184

Minimum	Maximum
0	9999999

Validation Rule for A184

-Original Cost must be equal to the Ledger Value if there are no Additions & Betterments.

-Original Cost must be equal to the Ledger Value if Additions & Betterments Indicator is not reported.

-Railroad marked freight cars except MISC, LOCO, TRLR, CONT, CHSS, STWH, EOTD, and PSGR are required to have an Original Cost

-Private marked freight cars except MISC, LOCO, TRLR, CONT, CHSS, STWH, EOTD, and PSGR are required to have an Original Cost if Built Date (BLDT) is on or after January 1, 2015

NOTES:

- Original Cost is never altered. It is the cost of the equipment to the original owner.
- For railroad-marked cars, report in US dollars the original ledger value of the original owner For cars rebuilt, report the cost prescribed in MR Interchange Rule 88 and Circular Letter OT-24
- The original cost is used in the settlement of AAR Interchange Rule 107 Office Manual.
- For connected unit cars report the total original cost for all units in the set.
- Numeric, applicable to all railroad-marked cars Also, applicable to privately marked covered hopper (LO) cars.
- Raise all cents to the next dollar, e.g. $5,501.02 = 0005502

Ledger Value A150

The sum of original cost and additions & betterments

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for A150

Minimum	Maximum
0	9999999

Validation Rule for A150

-Original Cost must be equal to the Ledger Value if there are no Additions & Betterments.

-Ledger Value must equal the Original Cost (A184) plus the additions & betterments, if Total A&B (A003) has been reported. Otherwise Ledger Value should equal Original Cost (A184).

Total A&B A003

System generated sum of all reported amounts in A&B Amount (A317), in US dollars

Data is Confidential. System Generated Field. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for A003

Minimum	Maximum
0	99999999

NOTES:

- For railroad-marked cars, report the sum of all additions and betterments applied to the car. This value is for record keeping purposes only and will not be used to report Ledger Value.
- For private Cars report the additions and betterments as qualified under AAR interchange Rule 107 for determination of settlement value.
  - Additions are costs of all new components applied subsequent to the date the car was built or rebuilt and carried in the capital investment account.
  - Betterments are costs of all improvements of components of existing equipment through the substitution of superior parts for inferior parts subsequent to the date the car was built of rebuilt.
- For connected unit cars report the total Truck Location A for all units in the set

Ind for Pos/Neg Total A&B A128

A code indicating the positive or negative adjustment to the original cost of the equipment

Data is Confidential. System Generated Field. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Permissible Values for A128

N Negative P Positive

A&B Pos/Neg Ind A316

A code indicating the positive or negative adjustment to the individual addition and betterment

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Permissible Values for A316

N Negative P Positive

Validation Rule for A316

-When entering an individual Addition & Betterment, you must enter a value in all 4 fields.

-The A&B Indicator is required when Additions & Betterments are reported.

-The A&B Indicator must not be reported if Additions & Betterments are not reported.

A&B Amount A317

The amount of the individual addition and betterment added to or subtracted from the original cost of the equipment

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for A317

Minimum	Maximum
1	999999

Validation Rule for A317

-When entering an individual addition & betterment; A&B Date Done (A319), A&B Type (A318), A&B Pos/Neg Ind (A316), and A&B Amount (A317) must be reported

A&B Date Done A319

The date of the individual addition and betterment

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for A319

Minimum	Maximum
1/1/1900	12/31/9999

Validation Rule for A319

-When entering an individual Addition & Betterment, you must enter a value in all 4 fields.

-Addition and Betterment Date Done cannot be earlier than Built Date (BLDT).

-Additions & Betterments Date Done cannot be later than today's date.

A&B Type A318

The type of individual addition and betterment as defined by Rule 107

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Permissible Values for A318

GNRL	General - Capitalized Additions and Betterments
INIT	Initial load of historical A&B amount as of Umler 4.6 implementation date

Validation Rule for A318

-For each equipment, only one Individual A&B Type can have a value of INIT.

-When entering an individual Addition & Betterment, you must enter a value in all 4 fields.

Car Management

Pool Number P001

Unique number used to indicate the grouping of equipment for a particular purpose

Used for Transportation Codes. This element is not eligible for Input. Value does not carry forward for Equipment Group Change / Add Back.

User Routing Instructions TCUR

The routing instruction reported by the user

Used for Transportation Codes.

Permissible Values for TCUR

2	Trailer Service Rule 2
G	Contaminated commodity service
M	Mark canceled
O	Owner requested return
U	Unassigned equipment

NOTES:

- For further explanation reference Appendix E.

Umler Transportation Code TCOD

The type of assigned service, empty routing or restriction of the equipment

System Generated Field. Used for Transportation Codes. This element is not eligible for Input.

NOTES:

- For further explanation reference Appendix E.

Transportation Cond Code TCCD

The AAR or FRA interchange restriction code

System Generated Field. Used for Transportation Codes. This element is not eligible for Input.

NOTES:

- For further explanation reference Appendix E.

Mechanical Restriction TCME

User reported or system generated type of mechanical restriction

Used for Transportation Codes.

Permissible Values for TCME

S	Scrap
X	AAR Interchange Restriction

NOTES:

- For further explanation reference Appendix D.1

Mech Restriction Reason TCMR

The explanation of the Mechanical Restriction (TCME)

Used for Transportation Codes.

Permissible Values for TCMR

J	Restricted Due to Journal Bearing and Journal Lubrication
X	Restricted Due to Scrap or Early Warning
Z	Restricted Due to Umler Conflict (Not Valid for User Input)

NOTES:

- For further explanation reference Appendix D.2.
- The assignment of the Transportation Codes S_, SX, XA, XZ and YA generate the Rate Indicator Code 6 to the CHARM file to zero (0) rate the car hire and mileage rate.

Truck Components

Truck Axle Count B252

The number of axles per truck

Range of Values for B252

Minimum	Maximum
2	4

Validation Rule for B252

- Sum of Truck Axle Counts must equal Axle Count (A024)

Wheel Diameter A294

The diameter of the wheels

Permissible Values for A294

36	36 Inches	37	37 Inches	38	38 Inches
39	39 Inches	40	40 Inches	41	41 Inches
42	42 Inches	43	43 Inches	44	44 Inches
45	45 Inches	46	46 Inches	47	47 Inches
48	48 Inches	49	49 Inches	50	50 Inches
51	51 Inches	52	52 Inches	53	53 Inches
54	54 Inches	55	55 Inches	56	56 Inches
57	57 Inches	58	58 Inches	59	59 Inches
60	60 Inches				

Draft System Components

Alignment Control Eqpd *Mandatory* B008

Alignment Control Coupler, Component ●

Permissible Values for B008

N	No	Y	Yes

Miscellaneous

Commercial Owner CIF B049

The Customer Identification File (CIF) number for a commercial owner at a specific location

Commercial Lessee CIF B048

The Customer Identification File (CIF) number for a commercial lessee at a specific location

Umler Effective Date EFDT

The date the rating activity (pre-registration, modification, etc.) is expected to occur

This element is not eligible for Query. Does not Carry Forward.

Validation Rule for EFDT

-Effective Date cannot be set to more than 13 months in the future.

NOTES:

- Effective Date will default to the 1st of the following month that equipment is registered

Inspection

Periodic Insp Interval B356

Indicates the number of days between Locomotive inspections

Value does not carry forward for Single Clone / Multi-Clone / Equipment Group Change.

Permissible Values for B356

184 92

FRA Drop Dead Date DDNE

FRA Drop Dead Date

System Generated Field. This element is not eligible for Input.

Inspection Certified by CERT

Person certifying inspection

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Inspection Conducted by COND

Person conducting inspection

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Inspection Date Done DTDN

The date the inspection was completed; used for all inspection types reported on equipment

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Validation Rule for DTDN

-The inspection date must not be 60 days before the Build Date

Inspection Due Date INDD

The due date of the next inspection; used for all inspection types reported on equipment

System Generated Field. This element is not eligible for Input. Value does not carry forward for Add Back.

Inspection Item Codes L003

Code indicating type of items inspected as part of a locomotive periodic inspection

Value does not carry forward for Single Clone / Multi-Clone.

Permissible Values for L003

1	Brakes	2	Running Gear	3	Cab Equip
4	Mech Equip	5	Elect Equip	6	Steam Gen
7	Safety Appl				

Inspection Performer PERF

The SCAC that completed the inspection; used for all inspection types reported on equipment

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Inspection Reporter REPT

The SCAC that reported the inspection; used for all inspection types reported on equipment

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Scheduled Due Date SCDD

Scheduled Due Date

This element is not eligible for Input. Does not Carry Forward.

Location/SPLC SPLC

The SPLC of the inspecting location; used for all inspection types reported on equipment

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

OOS From Date L021

The first day eligible for Out of Service Credit

Value does not carry forward for Single Clone / Multi-Clone.

OOS To Date L022

The last day eligible for Out of Service Credit

Value does not carry forward for Single Clone / Multi-Clone.

OOS Number of Days L023

The number of out of service days for that occurrence

Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for L023

Minimum	Maximum
0	99999

Air Card Item L015

Detail indicating type of items inspected as part of a locomotive Air Card Inspection

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Air Card Description L016

Description of the items inspected as part of a Locomotive Air Card Inspection

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Air Card Frequency Days L017

Locomotive Air Card Frequency Days

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Range of Values for L017

Minimum	Maximum
0	99999

Air Brake Test Device B523

Indicates the type of test device used to perform the Air Brake Test ✹

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Permissible Values for B523

A Automatic (Non 4-Pressure)
M Manual
P Automatic (4-Pressure)

Validation Rule for B523

-Air Brake Test Device (B523) must be reported for Air Brake Test inspection reported on or after December 10, 2020

Cab Signals Inspection Due Date DU21

Cab Signals Inspection Due Date

This element is not eligible for Input. Does not Carry Forward.

Locomotive Periodic Inspection Due Date DU22

Locomotive Periodic Inspection Due Date

This element is not eligible for Input. Does not Carry Forward.

Qualified Locomotive Manual Inspection Due Date DU23

Qualified Locomotive Manual Inspection Due Date

This element is not eligible for Input. Does not Carry Forward.

AFMC Inspection Due Date DU24

AFMC Inspection Due Date

This element is not eligible for Input. Does not Carry Forward.

Locomotive Annual Inspection Due Date DU25

Locomotive Annual Inspection Due Date

This element is not eligible for Input. Does not Carry Forward.

Locomotive Event Recorder Inspection Due Date DU26

Locomotive Event Recorder Inspection Due Date

This element is not eligible for Input. Does not Carry Forward.

Locomotive Hand Brake Inspection Due Date DU27

Locomotive Hand Brake Inspection Due Date

This element is not eligible for Input. Does not Carry Forward.

Locomotive Air Brake L1 Inspection Due Date DU28

Locomotive Air Brake L1 Inspection Due Date

This element is not eligible for Input. Does not Carry Forward.

Locomotive Air Brake L2 Inspection Due Date DU29

Locomotive Air Brake L2 Inspection Due Date

This element is not eligible for Input. Does not Carry Forward.

Locomotive Air Brake L3 Inspection Due Date DU30

Locomotive Air Brake L3 Inspection Due Date

This element is not eligible for Input. Does not Carry Forward.

Locomotive L2 Vent Valve Front Inspection Due Date DU31

Locomotive L2 Vent Valve Front Inspection Due Date

This element is not eligible for Input. Does not Carry Forward.

Locomotive L2 Vent Valve Rear Inspection Due Date DU32

Locomotive L2 Vent Valve Rear Inspection Due Date

This element is not eligible for Input. Does not Carry Forward.

Locomotive L2 Safety Valve 150 Inspection Due Date DU33

Locomotive L2 Safety Valve 150 Inspection Due Date

This element is not eligible for Input. Does not Carry Forward.

Locomotive L2 Check Valve Main Res Inspection Due Date DU34

Locomotive L2 Check Valve Main Res Inspection Due Date

This element is not eligible for Input. Does not Carry Forward.

Locomotive L2 Check Valve EQ RES Inspection Due Date DU35

Locomotive L2 Check Valve EQ RES Inspection Due Date

This element is not eligible for Input. Does not Carry Forward.

Locomotive L3 Brake Pipe Control Portion Inspection Due Date DU36

Locomotive L3 Brake Pipe Control Portion Inspection Due Date

This element is not eligible for Input. Does not Carry Forward.

Locomotive L3 Equalizing Reservoir Control Portion Inspection Due Date DU37

Locomotive L3 Equalizing Reservoir Control Portion Inspection Due Date

This element is not eligible for Input. Does not Carry Forward.

Locomotive L3 DB Triple Valve Portion Inspection Due Date DU38

Locomotive L3 DB Triple Valve Portion Inspection Due Date

This element is not eligible for Input. Does not Carry Forward.

Locomotive L3 16 Control Portion Inspection Due Date DU39

Locomotive L3 16 Control Portion Inspection Due Date

This element is not eligible for Input. Does not Carry Forward.

Locomotive L3 20 Pipe Block Assy Inspection Due Date DU40

Locomotive L3 20 Pipe Block Assy Inspection Due Date

This element is not eligible for Input. Does not Carry Forward.

Locomotive L3 Brake Cylinder Control Portion Inspection Due Date DU41

Locomotive L3 Brake Cylinder Control Portion Inspection Due Date

This element is not eligible for Input. Does not Carry Forward.

Locomotive L3 16 Control Portion Inspection Due Date DU42

Locomotive L3 16 Control Portion Inspection Due Date

This element is not eligible for Input. Does not Carry Forward.

Locomotive L3 21 Pipe Vent Valve Inspection Due Date DU43

Locomotive L3 21 Pipe Vent Valve Inspection Due Date

This element is not eligible for Input. Does not Carry Forward.

Locomotive L3 FastBrake MC-31 Control Valve Inspection Due Date DU44

Locomotive L3 FastBrake MC-31 Control Valve Inspection Due Date

This element is not eligible for Input. Does not Carry Forward.

Locomotive L3 FastBrake Independent Application and Release Portion Inspection Due Date DU45

Locomotive L3 FastBrake Independent Application and Release Portion Inspection Due Date

This element is not eligible for Input. Does not Carry Forward.

Locomotive L3 FastBrake Quick Service Valve Inspection Due Date DU46

Locomotive L3 FastBrake Quick Service Valve Inspection Due Date

This element is not eligible for Input. Does not Carry Forward.

Locomotive L3 FastBrake Dead in Train Portion Inspection Due Date DU47

Locomotive L3 FastBrake Dead in Train Portion Inspection Due Date

This element is not eligible for Input. Does not Carry Forward.

Locomotive L3 FastBrake 16 Control Portion Inspection Due Date DU48

Locomotive L3 FastBrake 16 Control Portion Inspection Due Date

This element is not eligible for Input. Does not Carry Forward.

Locomotive L3 FastBrake 20 Control Portion Inspection Due Date DU49

Locomotive L3 FastBrake 20 Control Portion Inspection Due Date

This element is not eligible for Input. Does not Carry Forward.

Locomotive L3 FastBrake Brake Cylinder Control Portion Inspection Due Date DU50

Locomotive L3 FastBrake Brake Cylinder Control Portion Inspection Due Date

This element is not eligible for Input. Does not Carry Forward.

Locomotive L3 FastBrake Brake Pipe Control Portion Inspection Due Date DU51

Locomotive L3 FastBrake Brake Pipe Control Portion Inspection Due Date

This element is not eligible for Input. Does not Carry Forward.

Locomotive L3 CCB1 20 Control Portion Independent Brake Inspection Due Date **DU52**

Locomotive L3 CCB1 20 Control Portion Independent Brake Inspection Due Date

This element is not eligible for Input. Does not Carry Forward.

Locomotive L3 CCB1 DB-10 Service Portion Inspection Due Date **DU53**

Locomotive L3 CCB1 DB-10 Service Portion Inspection Due Date

This element is not eligible for Input. Does not Carry Forward.

Locomotive L3 CCB1 Analog Converter ER Inspection Due Date **DU54**

Locomotive L3 CCB1 Analog Converter ER Inspection Due Date

This element is not eligible for Input. Does not Carry Forward.

Locomotive L3 CCB1 Analog Converter 16 Inspection Due Date **DU55**

Locomotive L3 CCB1 Analog Converter 16 Inspection Due Date

This element is not eligible for Input. Does not Carry Forward.

Locomotive L3 CCB1 Cutoff Valve Assembly Inspection Due Date **DU56**

Locomotive L3 CCB1 Cutoff Valve Assembly Inspection Due Date

This element is not eligible for Input. Does not Carry Forward.

Locomotive L3 CCB1 Brake Pipe Relay Valve Inspection Due Date **DU57**

Locomotive L3 CCB1 Brake Pipe Relay Valve Inspection Due Date

This element is not eligible for Input. Does not Carry Forward.

Locomotive L3 CCB1 Brake Pipe Cutoff Valve Inspection Due Date **DU59**

Locomotive L3 CCB1 Brake Pipe Cutoff Valve Inspection Due Date

This element is not eligible for Input. Does not Carry Forward.

Locomotive L3 CCB1 Double Check Valve Inspection Due Date **DU60**

Locomotive L3 CCB1 Double Check Valve Inspection Due Date

This element is not eligible for Input. Does not Carry Forward.

Locomotive L3 CCB1 Emergency Limit Valve Inspection Due Date **DU61**

Locomotive L3 CCB1 Emergency Limit Valve Inspection Due Date

This element is not eligible for Input. Does not Carry Forward.

Locomotive L3 CCB1 Emergency Magnet Valve Inspection Due Date **DU62**

Locomotive L3 CCB1 Emergency Magnet Valve Inspection Due Date

This element is not eligible for Input. Does not Carry Forward.

Locomotive L3 CCB1 Equalizing Reservoir Magnet Valve Inspection Due Date **DU63**

Locomotive L3 CCB1 Equalizing Reservoir Magnet Valve Inspection Due Date

This element is not eligible for Input. Does not Carry Forward.

Locomotive L3 CCB1 Bail Off Exhaust Magnet Valve Inspection Due Date **DU64**

Locomotive L3 CCB1 Bail Off Exhaust Magnet Valve Inspection Due Date

This element is not eligible for Input. Does not Carry Forward.

Locomotive L3 CCB1 Bail Off Supply Valve Inspection Due Date **DU65**

Locomotive L3 CCB1 Bail Off Supply Valve Inspection Due Date

This element is not eligible for Input. Does not Carry Forward.

Locomotive L3 CCB1 16 Pipe Magnet Valve Inspection Due Date **DU66**

Locomotive L3 CCB1 16 Pipe Magnet Valve Inspection Due Date

This element is not eligible for Input. Does not Carry Forward.

Locomotive L3 CCB1 Brake Pipe Cutoff Pilot Inspection Due Date **DU67**

Locomotive L3 CCB1 Brake Pipe Cutoff Pilot Inspection Due Date

This element is not eligible for Input. Does not Carry Forward.

Locomotive L3 CCB1 Emergency Detection Pilot Inspection **DU68**

Locomotive L3 CCB1 Emergency Detection Pilot Inspection

This element is not eligible for Input. Does not Carry Forward.

Locomotive L3 CCB1 Emergency Pilot Valve Inspection Due Date **DU69**

Locomotive L3 CCB1 Emergency Pilot Valve Inspection Due Date

This element is not eligible for Input. Does not Carry Forward.

Locomotive L3 CCB1 Backup Actuating Valve GE Inspection Due Date **DU70**

Locomotive L3 CCB1 Backup Actuating Valve GE Inspection Due Date

This element is not eligible for Input. Does not Carry Forward.

Locomotive L3 CCB1 Backup Double Check Valve Inspection Due Date **DU71**

Locomotive L3 CCB1 Backup Double Check Valve Inspection Due Date

This element is not eligible for Input. Does not Carry Forward.

Locomotive L3 CCB1 Emergency Detection Pilot Dynamic Brake Interlock Inspection Due Date **DU72**

Locomotive L3 CCB1 Emergency Detection Pilot Dynamic Brake Interlock Inspection Due Date

This element is not eligible for Input. Does not Carry Forward.

Locomotive L3 CCB1 Backup Actuating Valve EMD Inspection Due Date **DU73**

Locomotive L3 CCB1 Backup Actuating Valve EMD Inspection Due Date

This element is not eligible for Input. Does not Carry Forward.

Passenger Cars

General

Status Code *Mandatory* — **USCD**

Identifies the current operational state ●

Does not Carry Forward.

Permissible Values for USCD

A	ACTIVE	I	INACTIVE
P	PRE-REGISTERED		

NOTES:

- For Restencil and Clone process the initial Status of a car should be Pre-Registered.
- All Add-Back processes should initially set the Status to Pre-Registered
- A Pre-registered car will automatically have its Status changed to Active for the initial change when TRAIN detects three (3) movements on the car
- If the Status changes to Active due to movement and the car was created from a Restencil, the Prior Equipment ID (PRID) or source car will have its status changed to Inactive automatically by Umler

Equipment ID — **0001**

The equipment stenciled number

Validation Rule for 0001

-Equipment Number must not be larger than 6 digits (i.e., 999999)

NOTES:

- Equipment ID includes the mark and number stenciled on the equipment. Marks can be up to 4 characters and number up to 6 digits (i.e., ABCD999999).
- Up to 500 cars can be added or updated in a transaction.
- When adding an equipment record, ensure that Prior Equipment ID (PRID) is reported, unless the equipment is new.

Mechanical Designation *Mandatory* — **UMMD**

Equipment description without physical dimensions ●▲

Used in ETC Generation. Used for Transportation Codes.

Permissible Values for UMMD

PA	Passenger - Passenger Service
PAB	Passenger - Passenger and Baggage Service
PB	Passenger - Baggage Service only
PD	Passenger - Dining car
PS	Passenger - Company Service car
PSD	Passenger - Company Service car with Dining

Equipment Type Code — **UMET**

An alpha numeric code that describes the physical attributes of equipment

System Generated Field. This element is not eligible for Input.

NOTES:

- Please Refer to Appendix I for More information Regarding ETC Generation

Maint of Way Service Type — **B403**

Identifies equipment Maintenance Of Way function

Value does not carry forward for Equipment Group Change.

Permissible Values for B403

C2	Crane / Boom Support Car
F4	Flat-Wheel Sets
T4	Training Car
T8	Track Geometry Car

Built Date *Mandatory* — **BLDT**

The date the construction of the equipment is complete ●

Data is Confidential. Used for Transportation Codes. Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for BLDT

Minimum	Maximum
1/1/1900	12/31/9999

Validation Rule for BLDT

-Built Date must not be in the future for equipment in Active Status

-Prior and target equipment's Built Date (BLDT) must match for restencling

NOTES:

- Data is public for railroad marked equipment.
- For connected unit cars report the oldest car in the set.

Rebuilt / ILS Date — **RBDT**

The date the re-construction of the equipment is complete

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for RBDT

Minimum	Maximum
1/1/1900	12/31/9999

Validation Rule for RBDT

-Rebuilt/Increased Life Service Date must be after the Built Date (BLDT)

-Rebuilt Date must not be more than 70 years after the Built Date (BLDT)

NOTES:

- Railroad cars -- applicable only to cars meeting status as provided in both STB Accounting Rules, and the AAR Mechanical Interchange Rule 88, Office Manual.
- Private cars -- applicable to all cars meeting AAR Mechanical Interchange Rule 88, Section C, Office Manual and Sections A and B of the Field Manual.
- For connected unit cars report the oldest car in the set. Do not report Rebuilt Date unless car has been approved by the AAR.

Rebuilt Flag — **RBFL**

Identifies the equipment is nearing its end of life cycle

Data is Confidential. System Generated Field. This element is not eligible for Input.

Permissible Values for RBFL

N	No	Y	Yes

Owner *Mandatory* — **UMOW**

Primary reporting mark of the railroad or private company owning the car ●

Value does not carry forward for Single Clone / Multi-Clone / Single Restencil / Multi-Restencil.

NOTES:

- Report the primary reporting mark of the railroad or private company owning the car. When car's lease or lien is held by a bank, trust holder, capital lease company, etc. not having an assigned mark, report the primary reporting mark affiliated with the stenciled reporting mark.

Equipment Group *Mandatory* — **0002**

Identifies the various major car types ●■

Used for Transportation Codes. Affects Rating.

Lessee — **LESE**

The reporting mark of the company leasing the equipment

Value does not carry forward for Single Clone / Multi-Clone / Single Restencil / Multi-Restencil.

Validation Rule for LESE

-Umler Owner (UMOW) and Lessee are not allowed to be equal

NOTES:

- In order to assign privately marked cars to a pool, a railroad reporting mark must be reported.

Maintenance Party — **MNPT**

The parent reporting mark of the company responsible for the maintenance and repairs of the equipment

Does not Carry Forward.

Mark Owner Category B201

The company that owns the stenciled mark on the car

System Generated Field. This element is not eligible for Input. Value does not carry forward for Single Restencil / Multi-Restencil / Equipment Group Change / Add Back.

Permissible Values for B201

B	US Private
C	Canadian Private
F	Foreign Private
H	Canadian Class II
I	Canadian Class I
J	Mexican Class I
K	Canadian Class III
M	Mexican Private
N	US Private Steamship
O	Canadian Private Steamship
P	Mexican Private Steamship
Q	Foreign Private Steamship
R	US Class II Railroad
U	US Class I Railroad
V	US Class III Railroad
W	Mexican Class II Railroad
Y	Mexican Class III Railroad

NOTES:

- This value is stored in the Umler Database for informational purposes and is retrieved from the Roadmark Registry.

Prior Equipment ID PRID

The previous reporting mark and number of the equipment

Value does not carry forward for Single Clone / Multi-Clone.

Validation Rule for PRID

-Prior and target equipment's Built Date (BLDT) must match

-The Prior Equipment ID (0001) must belong to the same or comparable Equipment Group (0002) as the current car initial and number

NOTES:

- Prior ID enables equipment records to share the same historical lineage. Equipment Identification Number (EIN) is a generated id that enables these equipment records to share inspections and transaction history.

Last Update Date B122

Date of the last Umler element change

System Generated Field. This element is not eligible for Input.

Equipment Add Date B082

Date the reporting mark and number was added to the Umler system

System Generated Field. This element is not eligible for Input.

Status Change Reason USCR

Identifies the reason for the current operational state

System Generated Field. This element is not eligible for Input. Does not Carry Forward.

Permissible Values for USCR

I	Initial Load
M	Movement
O	Status Changed Manually
R	Restencil

NOTES:

- If movement is detected on equipment, status is changed to Active.
- If an equipment record is changed to Active, any prior equipment record is placed in Inactive status.

Status Change Date USCT

Identifies the effective date of the current operational state

System Generated Field. This element is not eligible for Input. Does not Carry Forward.

Equipment Identification EINN

Unique equipment identifier regardless of stenciled mark

System Generated Field. This element is not eligible for Input.

NOTES:

- Specify the Prior ID (PRID) on equipment records to ensure the historical lineage is preserved. Equipment with the same EIN share history and inspections.

Info Conflict Status B355

Indicates that an Informational Conflict exists on the Equipment record

System Generated Field. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Conflict Status B050

Identifies the escalation level of equipment in active conflict

System Generated Field. This element is not eligible for Input. Value does not carry forward for Add Back.

Permissible Values for B050

1	Subject to Zero-Rating
2	Subject to Restricted in Interchange
3	Subject to Deletion

NOTES:

- Subject to Zero-Rating, goes into effect 30 days after Conflict Status occurs
- Subject to Restricted in Interchange, goes into effect 90 days after Conflict Status occurs
- Subject to Deletion, goes into effect 365 days after Conflict Status occurs

Date of Original Conflict B063

The date the equipment was originally placed in the current conflict

System Generated Field. This element is not eligible for Input.

Next Conflict Status B135

Identifies the next escalation level of an equipment in active conflict

System Generated Field. This element is not eligible for Input. Value does not carry forward for Add Back.

Permissible Values for B135

1	Subject to Zero-Rating
2	Subject to Restricted in Interchange
3	Subject to Deletion

NOTES:

- Subject to Zero-Rating, goes into effect 30 days after Conflict Status occurs
- Subject to Restricted in Interchange, goes into effect 90 days after Conflict Status occurs
- Subject to Deletion, goes into effect 365 days after Conflict Status occurs

Notice Indicator B137

Identifies equipment in error in Umler Notice Management

System Generated Field. This element is not eligible for Input.

Conflict Status Next Date B062

The date the conflict status will be escalated

System Generated Field. This element is not eligible for Input. Value does not carry forward for Add Back.

Rate Indicator A070

Indicates the rate type applicable to the unit ■

System Generated Field. Used for Transportation Codes. Affects Rating. This

element is not eligible for Input. Does not Carry Forward.

Permissible Values for A070

0 Zero-Rated Due to Conflict Errors

6 Zero-Rated - Scrap (S_,SX), AAR Overage (XA), FRA Overage (YA), Umler Conflict - CHR 1/Tarriff 6007 (XZ). Zero-Rated Private Owner Election to Zero Rate [See Private Zero Rate (B150)].

NOTES:

- If unit is zero-rated, correction of conflicts will reinstate the appropriate rate indicator code.

First Movement Date — **USAT**

The first movement date under the stenciled mark of the equipment

This element is not eligible for Input. Does not Carry Forward.

Equipment Add Company — **B083**

The reporting mark of the company that added the equipment

System Generated Field. This element is not eligible for Input.

Registration Reason — **B174**

The code indicating the reason this equipment is added

Does not Carry Forward.

Permissible Values for B174

A	Add-Back	N	New
P	Pending Restencil	R	Restencil

Restencil Program Ind — **B177**

Identifies the equipment is under a restencil program

Permissible Values for B177

Y Yes

Delete Reason Code — **B064**

A code that designates the reason the equipment has been deleted

Value does not carry forward for Add Back.

Permissible Values for B064

A Restenciled

D Destroyed or wrecked

L Lease terminated, removed from fleet

P Retired unserviceable beyond economic repair

R Rebuilt

S Sold Serviceable

W Over age retired for dismantling

Y Error, reporting did not exist

Z Other

Non-Compliant Wheelsets — **B544**

Equipment record is incomplete and has a missing wheelset component ID association. Refer to AAR Field Manual Rule 44 for industry requirements ✹

System Generated Field. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Validation Rule for B544

-A Wheelset Component ID is required for each applicable location on equipment built on or after January 1, 2016

-A Wheelset Component ID is required for each applicable location on equipment rebuilt on or after January 1, 2016 and Gross Rail Load (A266) is greater than 268,000 lbs

NOTES:

- A "Y" will be system generated if the equipment is active and the number of Wheelset CID's required is not equal to the Axle Count (A024) on the equipment
- Validation rule applies to equipment that has been in Active status for 60 days

Weight

Gross Rail Load/Weight *Mandatory* — **A266**

The maximum permissible weight on rail of the equipment and the load, reported in pounds ●

Range of Values for A266

Minimum	Maximum
42500	495000

Validation Rule for A266

-Gross Rail Load must be equal to the Load Limit (LDLT) plus the Tare Weight (A259)

Use Table 1 below to determine Gross Rail Load

TABLE 1 -

Journal Size	Load per Axle	Gross Rail Load for 4-axle Equipment
B - 4 1/2" x 8"	25,750 lbs.	103,000 lbs.
C - 5" x 9"	35,500 lbs.	142,000 lbs.
D - 5 1/2" x 10"	44,250 lbs.	177,000 lbs.
E - 6" x 11"	55,000 lbs.	220,000 lbs.
F - 6 1/2" x 12"	65,750 lbs.	263,000 lbs.
G - 7" x 12"	78,750 lbs.	315,000 lbs.
K - 6 1/2" x 9"	71,500 lbs.	263,000 lbs.
M - 7" x 9"	78,750 lbs.	315,000 lbs.

NOTES:

- For multi-unit equipment, report the total gross rail load for the entire set.
- Refer to Field Manual Rule 70 if additional information is required.

A Gross Rail Load less than the listed or calculated values may be entered; however:

1. Star Code (A247) must be R or S, and
2. Load Limit (LDLT) must also be reduced, ensuring Tare Weight (A259) plus Load Limit (LDLT) equals the reported Gross Rail Load.

For equipment having two or more different journal sizes, see following examples:

Example for Drawbar Connected:

- A 3-unit drawbar connected car has 12 axles.
- The end units (Locations A and B) each have 4 axles with E - 6" x 11" journals.
- The intermediate unit (Locations C) has 4 axles with F – 6 1/2" x 12" journals

Using TABLE 1, the Gross Rail Load would be:

8 ea. E-6" x 11" journal axles X 55,000 lbs. per axle = 440,000 lbs.
+ 4 ea. F-6 1/2" x 12" journal axles X 65,750 lbs. per axle = 263,000 lbs.
Gross Rail Load = 703,000 lbs.

Example for Articulated Connected:

- A 5-unit articulated intermodal car has 6 trucks (12 axles).
- The end trucks (Locations A and B) each have 2 axles with E - 6" x 11" journals.
- The intermediate trucks (Locations C, D, E, and F) each have 2 axles with G - 7" x 12" journals

Using TABLE 1, the Gross Rail Load would be:

4 ea. E-6" x 11" journal axles X 55,000 lbs. per axle = 220,000 lbs.
+ 8 ea. G-7" x 12" journal axles X 78,750 lbs. per axle = 630,000 lbs.
Gross Rail Load = 850,000 lbs.

Tare Weight *Mandatory* **A259**

The equipment weight on rail when empty, sometimes referred to as Light Weight, reported in pounds ●

Range of Values for A259

Minimum	Maximum
16000	320000

NOTES:

- Do not report an average Tare Weight for car series, except for Pre-Registered cars
- When cars are made active, the actual Tare Weight must be recorded

Load Limit *Mandatory* **LDLT**

The maximum permissible weight of the commodity that can be loaded into the equipment, reported in pounds ●

Range of Values for LDLT

Minimum	Maximum
2500	145000

Star Code **A247**

Indicates a reduction of the Load Limit (LDLT) of the equipment per AAR Rule 70

Permissible Values for A247

R Body Capacity less than Truck Capacity
S Reduced Load Limit

Dimension

Plate Code **A046**

Indicates the extreme height and width clearance of the equipment

Permissible Values for A046

B Plate Code B
C Plate Code C
E Plate Code E
F Plate Code F
G Clearance Code G
N Plate Code N

NOTES:

- For a description of Plate Codes, please see Appendix J at the back of this manual.
  - Report B: If clearance does not exceed Plate B
  - Report C: If clearance is greater than Plate B. but does not exceed Plate C
  - Report E: If clearance is greater than Plates B and C, but does not exceed Plate E.
  - Report F: If clearance is greater than Plates B, C and E, but does not exceed Plate F
  - Report G: If clearance exceeds Plates B, C, E, F, and N.
  - Report N: If clearance is greater than Plates B, C, E, and F, but does not exceed Plate N.
- There is no AAR Plate G. Clearance Code G is included in Umler to represent equipment that does not fit any existing AAR clearance plates.
- For ARTICULATED/MULTI-UNIT SET report the most restrictive clearance plate of UNIT in the set.

Outside Length *Mandatory* **OSLG**

The outside length over pulling faces of couplers in normal position ●

Displayed in feet and inches on the Web. Stored in inches.

Range of Values for OSLG

Minimum	Maximum
20 ft 0 inches	133 ft 0 inches

NOTES:

- For connected unit cars report the maximum coupled length of the set.
- Round fraction to the higher inch, e.g., 05 1/4" = 06"

Outside Extreme Width *Mandatory* **A186**

The outside extreme width of the equipment ●

Displayed in feet and inches on the Web. Stored in inches.

Range of Values for A186

Minimum	Maximum
7 ft 0 inches	11 ft 10 inches

Validation Rule for A186

-Outside Extreme Width must not exceed 10 feet 8 inches for Plate Codes B, C, E, F, or N
-Outside Extreme Width (A186) for Plate Code A must not be less than 10 feet 8 inches.
-Outside Extreme Width (A186) for Plate Code A must not exceed 10 feet 10 inches.

NOTES:

- For connected unit cars report the dimension of the largest unit in the set.
- Round fraction to the higher inch, e.g., 05 1/4" = 06"

Outside Extreme Height **A185**

Height from top of rail to extreme projecting height

Displayed in feet and inches on the Web. Stored in inches.

Range of Values for A185

Minimum	Maximum
2 ft 0 inches	22 ft 0 inches

Validation Rule for A185

-Outside Extreme Height for Plate Codes A, B, or H must be less than or equal to 15 feet 1 inch
-Outside Extreme Height for Plate Codes C or I must be less than or equal to 15 feet 6 inches
-Outside Extreme Height for Plate Code E must be less than or equal to 15 feet 9 inches
-Outside Extreme Height for Plate Code F must be less than or equal to 17 feet 0 inch
-Outside Extreme Height for Plate Code N must be less than or equal to 17 feet 1 inch

NOTES:

- For connected unit cars report the dimension of the largest unit in the set.
- Round fraction to the higher inch, e.g., 05 1/4" = 06"

Outside Height Extr Width **A187**

The highest point at which the extreme width of the equipment occurs

Displayed in feet and inches on the Web. Stored in inches.

Range of Values for A187

Minimum	Maximum
1 ft 0 inches	22 ft 0 inches

Validation Rule for A187

-Outside Extreme Width (A186) for Plate Codes B must not exceed 10 feet 8 inches if Outside Height Extreme Width is 13 feet 10 inches or less
-Outside Extreme Width (A186) for Plate Codes B must not exceed 10 feet 7 inches if Outside Height Extreme Width is 13 feet 11 inches
-Outside Extreme Width (A186) for Plate Codes B must not exceed 10 feet 6 inches if Outside Height Extreme Width is 14 feet 0 inches
-Outside Extreme Width (A186) for Plate Codes B must not exceed 10 feet 4 inches if Outside Height Extreme Width is 14 feet 1 inches
-Outside Extreme Width (A186) for Plate Codes B must not exceed 10 feet 3 inches if Outside Height Extreme Width is 14 feet 2 inches
-Outside Extreme Width (A186) for Plate Codes B must not exceed 10 feet 2 inches if Outside Height Extreme Width is 14 feet 3 inches
-Outside Extreme Width (A186) for Plate Codes B must not exceed 10 feet 0 inches if Outside Height Extreme Width is 14 feet 4 inches
-Outside Extreme Width (A186) for Plate Codes B must not exceed 9 feet 9 inches if Outside Height Extreme Width is 14 feet 5 inches

-Outside Extreme Width (A186) for Plate Codes B must not exceed 9 feet 5 inches if Outside Height Extreme Width is 14 feet 6 inches
-Outside Extreme Width (A186) for Plate Codes B must not exceed 9 feet 2 inches if Outside Height Extreme Width is 14 feet 7 inches
-Outside Extreme Width (A186) for Plate Codes B must not exceed 8 feet 10 inches if Outside Height Extreme Width is 14 feet 8 inches
-Outside Extreme Width (A186) for Plate Codes B must not exceed 8 feet 6 inches if Outside Height Extreme Width is 14 feet 9 inches
-Outside Extreme Width (A186) for Plate Codes B must not exceed 8 feet 3 inches if Outside Height Extreme Width is 14 feet 10 inches
-Outside Extreme Width (A186) for Plate Codes B must not exceed 7 feet 11 inches if Outside Height Extreme Width is 14 feet 11 inches
-Outside Extreme Width (A186) for Plate Codes B must not exceed 7 feet 6 inches if Outside Height Extreme Width is 15 feet 0 inches
-Outside Extreme Width (A186) for Plate Codes B must not exceed 7 feet 4 inches if Outside Height Extreme Width is 15 feet 1 inches
-Outside Extreme Width (A186) for Plate Codes C must not exceed 10 feet 8 inches if Outside Height Extreme Width is 14 feet 3 inches or less
-Outside Extreme Width (A186) for Plate Codes C must not exceed 10 feet 7 inches if Outside Height Extreme Width is 14 feet 4 inches
-Outside Extreme Width (A186) for Plate Codes C must not exceed 10 feet 6 inches if Outside Height Extreme Width is 14 feet 5 inches
-Outside Extreme Width (A186) for Plate Codes C must not exceed 10 feet 4 inches if Outside Height Extreme Width is 14 feet 6 inches
-Outside Extreme Width (A186) for Plate Codes C must not exceed 10 feet 3 inches if Outside Height Extreme Width is 14 feet 7 inches
-Outside Extreme Width (A186) for Plate Codes C must not exceed 10 feet 2 inches if Outside Height Extreme Width is 14 feet 8 inches
-Outside Extreme Width (A186) for Plate Codes C must not exceed 10 feet 0 inches if Outside Height Extreme Width is 14 feet 9 inches
-Outside Extreme Width (A186) for Plate Codes C must not exceed 9 feet 9 inches if Outside Height Extreme Width is 14 feet 10 inches
-Outside Extreme Width (A186) for Plate Codes C must not exceed 9 feet 5 inches if Outside Height Extreme Width is 14 feet 11 inches
-Outside Extreme Width (A186) for Plate Codes C must not exceed 9 feet 2 inches if Outside Height Extreme Width is 15 feet 0 inches
-Outside Extreme Width (A186) for Plate Codes C must not exceed 8 feet 10 inches if Outside Height Extreme Width is 15 feet 1 inches
-Outside Extreme Width (A186) for Plate Codes C must not exceed 8 feet 6 inches if Outside Height Extreme Width is 15 feet 2 inches
-Outside Extreme Width (A186) for Plate Codes C must not exceed 8 feet 3 inches if Outside Height Extreme Width is 15 feet 3 inches
-Outside Extreme Width (A186) for Plate Codes C must not exceed 7 feet 11 inches if Outside Height Extreme Width is 15 feet 4 inches
-Outside Extreme Width (A186) for Plate Codes C must not exceed 7 feet 8 inches if Outside Height Extreme Width is 15 feet 5 inches
-Outside Extreme Width (A186) for Plate Codes C must not exceed 7 feet 4 inches if Outside Height Extreme Width is 15 feet 6 inches
-Outside Extreme Width (A186) for Plate Code E must not exceed 10 feet 8 inches if Outside Height Extreme Width is 15 feet 2 inches or less
-Outside Extreme Width (A186) for Plate Code E must not exceed 10 feet 6 inches if Outside Height Extreme Width is 15 feet 3 inches
-Outside Extreme Width (A186) for Plate Code E must not exceed 10 feet 3 inches if Outside Height Extreme Width is 15 feet 4 inches
-Outside Extreme Width (A186) for Plate Code E must not exceed 9 feet 6 inches if Outside Height Extreme Width is 15 feet 5 inches
-Outside Extreme Width (A186) for Plate Code E must not exceed 8 feet 8 inches if Outside Height Extreme Width is 15 feet 6 inches
-Outside Extreme Width (A186) for Plate Code E must not exceed 7 feet 11 inches if Outside Height Extreme Width is 15 feet 7 inches
-Outside Extreme Width (A186) for Plate Code E must not exceed 7 feet 1 inches if Outside Height Extreme Width is 15 feet 8 inches
-Outside Extreme Width (A186) for Plate Code E must not exceed 6 feet 3 inches if Outside Height Extreme Width is 15 feet 9 inches
-Outside Extreme Width (A186) for Plate Code F must not exceed 10 feet 8 inches if Outside Height Extreme Width is 16 feet 3 inches or less
-Outside Extreme Width (A186) for Plate Code F must not exceed 10 feet 7 inches if Outside Height Extreme Width is between 16 feet 4 inches and 16 feet 6 inches
-Outside Extreme Width (A186) for Plate Code F must not exceed 10 feet 6 inches if Outside Height Extreme Width is 16 feet 7 inches
-Outside Extreme Width (A186) for Plate Code F must not exceed 10 feet 3 inches if Outside Height Extreme Width is 16 feet 8 inches
-Outside Extreme Width (A186) for Plate Code F must not exceed 10 feet 0 inches if Outside Height Extreme Width is 16 feet 9 inches
-Outside Extreme Width (A186) for Plate Code F must not exceed 9 feet 8 inches if Outside Height Extreme Width is 16 feet 10 inches
-Outside Extreme Width (A186) for Plate Code F must not exceed 9 feet 5 inches if Outside Height Extreme Width is 16 feet 11inches
-Outside Extreme Width (A186) for Plate Code F must not exceed 9 feet 2 inches if Outside Height Extreme Width is 17 feet 0 inches
-Outside Extreme Width (A186) for Plate Code N must not exceed 10 feet 8 inches if Outside Height Extreme Width (A187) is 16 feet 9 inches or less
-Outside Extreme Width (A186) for Plate Code N must not exceed 10 feet 6 inches if Outside Height Extreme Width (A187) is 16 feet 10 inches
-Outside Extreme Width (A186) for Plate Code N must not exceed 10 feet 4 inches if Outside Height Extreme Width (A187) is 16 feet 11 inches
-Outside Extreme Width (A186) for Plate Code N must not exceed 10 feet 2 inches if Outside Height Extreme Width (A187) is 17 feet 0 inches
-Outside Extreme Width (A186) for Plate Code N must not exceed 9 feet 11 inches if Outside Height Extreme Width (A187) is 17 feet 1 inch

NOTES:

- For connected unit cars report the dimension of the largest unit in the set.
- Round fraction to the higher inch, e.g., 05 1/4" = 06"

Outside Upper Eaves Width — A194

The width between the outside uppermost corners of the equipment

Displayed in feet and inches on the Web. Stored in inches.

Range of Values for A194

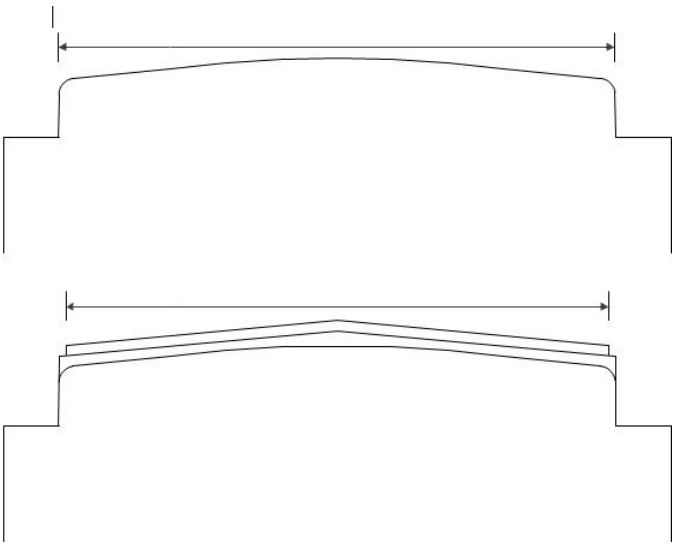
Minimum	Maximum
4 ft 0 inches	10 ft 10 inches

Validation Rule for A194

-Outside Upper Eaves Width must be less than or equal to the Outside Extreme Width (A186)
-Outside Upper Eaves Width must be less than or equal to the Outside Lower Eaves Width (A190)
-Outside Upper Eaves Width for Plate Code A must not exceed 10 feet 10 inches
-Outside Upper Eaves Width for Plate Code B, C, E, F, H, or I must not exceed 10 feet 8 inches
-Outside Upper Eaves Width for Plate Code N must not exceed 10 feet 8 inches if Outside Upper Eaves Height (A193) is 16 feet 9 inches or less
-Outside Upper Eaves Width for Plate Code N must not exceed 10 feet 6 inches if Outside Upper Eaves Height (A193) is 16 feet 10 inches
-Outside Upper Eaves Width for Plate Code N must not exceed 10 feet 4 inches if Outside Upper Eaves Height (A193) is 16 feet 11 inches
-Outside Upper Eaves Width for Plate Code N must not exceed 10 feet 2 inches if Outside Upper Eaves Height (A193) is 17 feet 0 inches
-Outside Upper Eaves Width for Plate Code N must not exceed 9 feet 11 inches if Outside Upper Eaves Height (A193) is 17 feet 1 inch

NOTES:

- For connected unit cars report the dimension of the largest unit in the set



Outside Upper Eaves Hght	A193
Height from the top of rail to the uppermost outside corner of the equipment	

Displayed in feet and inches on the Web. Stored in inches.

Range of Values for A193

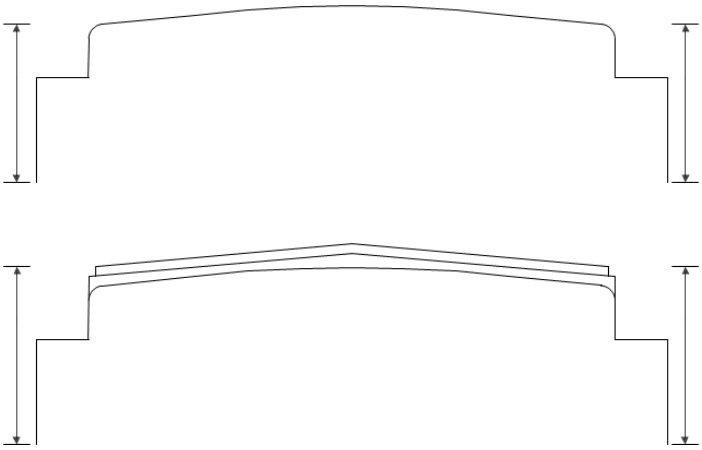
Minimum	Maximum
2 ft 0 inches	20 ft 0 inches

Validation Rule for A193

-Outside Upper Eaves Height must not exceed the Outside Extreme Height
-Outside Upper Eaves Height must be greater than or equal to the Outside Lower Eaves Height (A189)
-Outside Upper Eaves Height for Plate Codes A, B, or H must not exceed 15 feet 1 inch
-Outside Upper Eaves Height for Plate Codes C or I must not exceed 15 feet 6 inches
-Outside Upper Eaves Height for Plate Code E must not exceed 15 feet 9 inches
-Outside Upper Eaves Height for Plate Code F must not exceed 17 feet 0 inches
-Outside Upper Eaves Height for Plate Code N must not exceed 17 feet 1 inch

NOTES:

- For connected unit cars report the dimension of the largest unit in the set.



Outside Lower Eaves Width	A190
Width over lower eaves at sides of car (see diagram)	

Displayed in feet and inches on the Web. Stored in inches.

Range of Values for A190

Minimum	Maximum
7 ft 0 inches	10 ft 10 inches

Validation Rule for A190

-Outside Lower Eaves Width must not exceed the Outside Extreme Width (A186)
-Outside Lower Eaves Width for Plate Code A must not exceed 10 feet 10 inches
-Outside Lower Eaves Width for Plate Codes B, C, E, F, H, or I must not exceed 10 feet 8 inches
-Outside Lower Eaves Width for Plate Code N must not exceed 10 feet 8 inches if Outside Lower Eaves Height (A189) is 16 feet 9 inches or less
-Outside Lower Eaves Width for Plate Code N must not exceed 10 feet 6 inches if Outside Lower Eaves Height (A189) is 16 feet 10 inches
-Outside Lower Eaves Width for Plate Code N must not exceed 10 feet 4 inches if Outside Lower Eaves Height (A189) is 16 feet 11 inches
-Outside Lower Eaves Width for Plate Code N must not exceed 10 feet 2 inches if Outside Lower Eaves Height (A189) is 17 feet 0 inches
-Outside Lower Eaves Width for Plate Code N must not exceed 9 feet 11 inches if Outside Lower Eaves Height (A189) is 17 feet 1 inch

NOTES:

- Round fraction to the higher inch, e.g., 05 1/4" = 06"
- For connected unit cars report the dimension of the largest unit in the set.

Outside Lower Eaves Hght	A189
Height from top of rail to lower eaves at side of car (see diagrams)	

Displayed in feet and inches on the Web. Stored in inches.

Range of Values for A189

Minimum	Maximum
8 ft 0 inches	20 ft 0 inches

Validation Rule for A189

-Outside Lower Eaves Height must not exceed the Outside Extreme Height (A185)
-Outside Lower Eaves Height for Plate Codes A, B or H must not exceed 15 feet 1 inch
-Outside Lower Eaves Height for Plate Codes C or I must not exceed 15 feet 6 inches
-Outside Lower Eaves Height for Plate Code E must not exceed 15 feet 9 inches
-Outside Lower Eaves Height for Plate Code F must not exceed 17 feet 0 inches
-Outside Lower Eaves Height for Plate Code N must not exceed 17 feet 1 inch

NOTES:
- Round fraction to the higher inch, e.g., 05 1/4" = 06"
- For connected unit cars report the dimension of the largest unit in the set.

Truck Center Length — A276

The length between the centers of the two truck systems

Displayed in feet and inches on the Web. Stored in inches.

Range of Values for A276

Minimum	Maximum
15 ft 0 inches	76 ft 11 inches

Validation Rule for A276

-Truck Center Length is required for cars with an Outside Length of greater than 62 feet 6 inches

-Truck Center Length must be a minimum of 15 feet for cars with an Outside Length greater than 62 feet 6 inches

NOTES:
- For connected unit cars report the dimension of the largest unit in the set.

Specification

Truck Count — B256

The total number of trucks on the equipment

System Generated Field. This element is not eligible for Input.

Range of Values for B256

Minimum	Maximum
2	4

Axle Count *Mandatory* — A024

The total number of axles on the equipment ●

Range of Values for A024

Minimum	Maximum
2	40

Validation Rule for A024

-Axle Count must be greater than or equal to 4

-Axle Count for an articulated car must be greater than or equal to ((Connected Unit Count (A020) x 2) + 2)

-Axle Count for a draw bar connected car must be greater than or equal to (Connected Unit Count (A020) x 4)

-Total Axle Count must match sum of truck axle counts

Wheel Bearing Type *Mandatory* — B191

Indicates the wheel bearing code for the equipment ● ■

Affects Rating.

Permissible Values for B191

P Plain R Roller

Validation Rule for B191

-Cars with Plain Bearings will have a Transportation Code (TCOD) and Transportation Condition Code (TCCD) of either YA, S_, SX, or XJ

-Equipment cannot have Plain Bearings if Built Date (BLDT) is on or after January 1, 1993

Brake Shoe Type *Mandatory* — B026

Indicates the type of brake shoe on the equipment ●

Permissible Values for B026

C Tread Conditioning
H High Friction Composite
L Low Friction Composite/Cast Iron
P DISC PADS
T DISC AND TREADS

CC Side Bearing Type — A146

Indicates the travel range of the constant contact side bearings installed on the equipment

Permissible Values for A146

LC Long Travel Constant Contact
SC Short Travel Constant Contact

Empty/Load Device Eqpd — B075

Indicates a system that determines if the equipment is empty or loaded, and then varies the braking forces accordingly

Permissible Values for B075

Y Yes

Body Material — A030

The material that composes the body of the equipment

Permissible Values for A030

01 Aluminum
04 Combination
09 Fiberglass Reinforced Composite
18 Stainless Steel
19 Standard Steel
30 Wood

Remote Monitoring Device — B176

Indicates the equipment is equipped with a location monitoring device

Permissible Values for B176

Y Yes

Connected Unit Count — A020

Indicates the number of units within an articulated or multi-unit equipment ■

Affects Rating.

Range of Values for A020

Minimum	Maximum
2	45

Intermediate Conn Style — B115

Indicates the method by which two or more pieces of equipment are connected

Permissible Values for B115

A Articulated Connector
D Drawbar Connector

Validation Rule for B115

-Intermediate Connector Style is required for multi-unit equipment

-Intermediate Connector Style must not be reported for single unit equipment

Operating Brakes *Mandatory* — A182

The number of air brake control valves on the equipment (excludes hand brakes). One control valve consists of a service portion, emergency portion, and pipe bracket. Example: DB-60 control valve ●

Permissible Values for A182

1 2 3 4 5
6 7 8 9

Validation Rule for A182

-Operating Brakes must be reported for all equipment

-Operating Brakes (A182) must be 1 for non-articulated equipment with an Axle Count (A024) equal to 4

ECP Brake Type — B327

Indicates the type of electronic controlled pneumatic brake used on the equipment

Permissible Values for B327

N Not Equipped
O Overlay - Both ECP & Air Brake
S Stand Alone - ECP Only

ECP Brake Builder — B328

The manufacturer of the electronic controlled pneumatic brake used on the equipment

Permissible Values for B328

NYAB	New York Air Brake
WABT	WABTEC

Brake Cylinder Mount Type — B540

Identifies the location of the brake cylinder ✹

Permissible Values for B540

B	Body Mounted
T	Truck Mounted

Validation Rule for B540

- Brake Cylinder Mount Type is mandatory for all equipment built or rebuilt on or after January 1, 2016

Air Brake Model Number — ABMD

Air Brake Model

Permissible Values for ABMD

26C	26C8	26CDW
26CF	26DX	26L
27A	AB	ABC
ABD	ABDW	ABDWP
ABDX	AC1B	D22
D22A	D22AR	D22BR
KE5	L2	L3 (obsolete)
LN3 (obsolete)	U12	U12B
U12BC	U12BD	

Equipment Builder — A035

Identifies the original manufacturer of the equipment ✹

Permissible Values for A035

ACF	American Car & Foundry
BUDD	Ed G Budd Company
CFF	Canadian Car & Foundry
D	BOMBARDIER
EMD	ElectroMotive Diesel
NIPP	Nippon-Sharyo
NSC	National Steel Car
PCM	Pullman Car & Manufacturing
PS	Pullman-Standard
SLC	Saint Louis Car Company
TLGA	Talgo America
UNKN	Unknown

Validation Rule for A035

-Equipment built or rebuilt on or after July 1, 2010 cannot have a Equipment Builder of Unknown

-Equipment with a Built Date (BLDT) on or after July 1, 2010 cannot have an Equipment Builder Code of OWNER RAILROAD.

-Equipment Builder can have a value of MULT only if the equipment has multiple units.

Builder Lot Code — B030

A unique identifier for a group of equipment built by one manufacturer under the same contract ✹

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Validation Rule for B030

-Equipment built or rebuilt on or after June 28, 2012 must have a value for Builder Lot Code

Built Country — B031

The country where the equipment was constructed

Data is Confidential.

Permissible Values for B031

CA	Canada	MX	Mexico
US	United States		

Rebuilt Country — B170

The country where the equipment was re-constructed

Permissible Values for B170

CA	Canada	MX	Mexico
US	United States		

FRA Reflectorization — B096

Indicates the equipment owner assumes responsibility for applying reflectorization tape

Permissible Values for B096

P	Reflectorization Plan
W	Reflectorization Waiver

Air Hose Arrangement — B524

The type of trainline air hose arrangement ✹

Permissible Values for B524

A	S-424 Angle Cock Location
B	S-425 Angle Cock Location on Cars Equipped with AAR Type F Coupler
C	S-426 Angle Cock Location on Cars with Floating Sills
D	S-427 Angle Cock and Air Brake Hose Location on Cars with Excessive Overhang Preventing Compliance with AAR Standards
E	S-428 Angle Cock Location on Cars Equipped with AAR Type F Coupler and Cushioned Underframe
F	S-4003 (Former Standard)
G	S-4003x (Former Standard Retrofitted to Meet All Dimensions Except Height)
H	S-4003-05 (Current Standard Train Line Arrangement for Cars with F-Shank Couplers)
I	S-4021 Angle Cock and Brake Hose Location on Cars with EOCC (E and F)
J	S-4021 Coupler Mounted Bracket End Arrangement
K	S-4028 Train Line Arrangement with Displaceable Union on Cars with EOCC and Couplers Not Exceeding 45 in. in Length
L	S-4029 Train Line Arrangement with Displaceable Union on Cars with EOCC and Couplers Exceeding 45 in. in Length
M	S-4030 Trolley Arrangement on Cars with EOCC and E-Shank Couplers

Validation Rule for B524

-Air Hose Arrangement must be reported for this equipment if it is Built or Rebuilt on or after April 22, 2014.

NOTES:

- If any of the following conditions apply, Air Hose Arrangement (B524) must be reported for cars Built or Rebuilt on or after April 22, 2014:
  - Draft Gear Type (B073) at any location is C or E.
  - Connected Unit Count (A020) is reported.
  - Outside Length (OSLG) is greater than or equal to 70 feet (840 inches).
  - The overhang is greater than 5 feet 6 inches (66 inches). Overhang is calculated as follows:
  - 0.5 * (Outside Length, in inches, minus Truck Center Length, in inches, minus 31 inches)
  - For all other equipment, reporting Air Hose Arrangement is optional.

4-Pressure ABT Receiver Eqpd — B539

Identifies if the equipment is equipped with a 4-pressure air brake test receiver

Value does not carry forward for Single Clone / Multi-Clone.

Permissible Values for B539

E	Equipped

N Not Equipped

NOTES:

- An "E" will be system generated if a 4-Pressure ABT is reported on the equipment.

Cost

Original Cost A184

The original manufacturer selling price ✹

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for A184

Minimum	Maximum
0	9999999

Validation Rule for A184

-Original Cost must be equal to the Ledger Value if there are no Additions & Betterments.

-Original Cost must be equal to the Ledger Value if Additions & Betterments Indicator is not reported.

-Railroad marked freight cars except MISC, LOCO, TRLR, CONT, CHSS, STWH, EOTD, and PSGR are required to have an Original Cost

-Private marked freight cars except MISC, LOCO, TRLR, CONT, CHSS, STWH, EOTD, and PSGR are required to have an Original Cost if Built Date (BLDT) is on or after January 1, 2015

NOTES:

- Original Cost is never altered. It is the cost of the equipment to the original owner.
- For railroad-marked cars, report in US dollars the original ledger value of the original owner For cars rebuilt, report the cost prescribed in MR Interchange Rule 88 and Circular Letter OT-24
- The original cost is used in the settlement of AAR Interchange Rule 107 Office Manual.
- For connected unit cars report the total original cost for all units in the set.
- Numeric, applicable to all railroad-marked cars Also, applicable to privately marked covered hopper (LO) cars.
- Raise all cents to the next dollar, e.g. $5,501.02 = 0005502

Ledger Value A150

The sum of original cost and additions & betterments

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for A150

Minimum	Maximum
0	9999999

Validation Rule for A150

-Original Cost must be equal to the Ledger Value if there are no Additions & Betterments.

-Ledger Value must equal the Original Cost (A184) plus the additions & betterments, if Total A&B (A003) has been reported. Otherwise Ledger Value should equal Original Cost (A184).

Total A&B A003

System generated sum of all reported amounts in A&B Amount (A317), in US dollars

Data is Confidential. System Generated Field. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for A003

Minimum	Maximum
0	99999999

NOTES:

- For railroad-marked cars, report the sum of all additions and betterments applied to the car. This value is for record keeping purposes only and will not be used to report Ledger Value.
- For private Cars report the additions and betterments as qualified under AAR interchange Rule 107 for determination of settlement value.
  - Additions are costs of all new components applied subsequent to the date the car was built or rebuilt and carried in the capital investment account.
  - Betterments are costs of all improvements of components of existing equipment through the substitution of superior parts for inferior parts subsequent to the date the car was built of rebuilt.
- For connected unit cars report the total Truck Location A for all units in the set

Ind for Pos/Neg Total A&B A128

A code indicating the positive or negative adjustment to the original cost of the equipment

Data is Confidential. System Generated Field. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Permissible Values for A128

N Negative P Positive

A&B Pos/Neg Ind A316

A code indicating the positive or negative adjustment to the individual addition and betterment

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Permissible Values for A316

N Negative P Positive

Validation Rule for A316

-When entering an individual Addition & Betterment, you must enter a value in all 4 fields.

-The A&B Indicator is required when Additions & Betterments are reported.

-The A&B Indicator must not be reported if Additions & Betterments are not reported.

A&B Amount A317

The amount of the individual addition and betterment added to or subtracted from the original cost of the equipment

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for A317

Minimum	Maximum
1	999999

Validation Rule for A317

-When entering an individual addition & betterment; A&B Date Done (A319), A&B Type (A318), A&B Pos/Neg Ind (A316), and A&B Amount (A317) must be reported

A&B Date Done A319

The date of the individual addition and betterment

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for A319

Minimum	Maximum
1/1/1900	12/31/9999

Validation Rule for A319

-When entering an individual Addition & Betterment, you must enter a value in all 4 fields.

-Addition and Betterment Date Done cannot be earlier than Built Date (BLDT).

-Additions & Betterments Date Done cannot be later than today's date.

A&B Type A318

The type of individual addition and betterment as defined by Rule 107

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Permissible Values for A318

GNRL General - Capitalized Additions and Betterments

INIT Initial load of historical A&B amount as of Umler 4.6 implementation date

Validation Rule for A318

-For each equipment, only one Individual A&B Type can have a value of INIT.

-When entering an individual Addition & Betterment, you must enter a value in all 4 fields.

Car Management

Pool Number P001

Unique number used to indicate the grouping of equipment for a particular purpose

Used for Transportation Codes. This element is not eligible for Input. Value does not carry forward for Equipment Group Change / Add Back.

User Routing Instructions TCUR

The routing instruction reported by the user

Used for Transportation Codes.

Permissible Values for TCUR

2 Trailer Service Rule 2
G Contaminated commodity service
M Mark canceled
O Owner requested return
U Unassigned equipment

NOTES:

- For further explanation reference Appendix E.

Umler Transportation Code TCOD

The type of assigned service, empty routing or restriction of the equipment

System Generated Field. Used for Transportation Codes. This element is not eligible for Input.

NOTES:

- For further explanation reference Appendix E.

Transportation Cond Code TCCD

The AAR or FRA interchange restriction code

System Generated Field. Used for Transportation Codes. This element is not eligible for Input.

NOTES:

- For further explanation reference Appendix E.

Mechanical Restriction TCME

User reported or system generated type of mechanical restriction

Used for Transportation Codes.

Permissible Values for TCME

S Scrap
X AAR Interchange Restriction
Y FRA Interchange Prohibited

NOTES:

- For further explanation reference Appendix D.1

Mech Restriction Reason TCMR

The explanation of the Mechanical Restriction (TCME)

Used for Transportation Codes.

Permissible Values for TCMR

A Restricted Due to Age (Over 40-AAR, Over 50-FRA)
B Restricted Due to Air Brakes
C Restricted Due to Axles
D Restricted Due to Couplers and Couplers Parts
F Restricted Due to Couplers Yokes
G Restricted Due to Draft Gears
J Restricted Due to Journal Bearing and Journal Lubrication
N Restricted Due to Trucks
P Restricted Due to Truck Side Frames
T Restricted Due to Trucks Bolsters
U Restricted by AAR or Owner
W Restricted Due to Wheels
X Restricted Due to Scrap or Early Warning
Z Restricted Due to Umler Conflict (Not Valid for User Input)

NOTES:

- For further explanation reference Appendix D.2.
- The assignment of the Transportation Codes S_, SX, XA, XZ and YA generate the Rate Indicator Code 6 to the CHARM file to zero (0) rate the car hire and mileage rate.

Train Service

Restricted Speed Empty B180

Describes the maximum restricted speed the equipment can travel when empty

Range of Values for B180

Minimum	Maximum
5	95

Restricted Speed Loaded B181

Describes the maximum restricted speed the equipment can travel when loaded

Range of Values for B181

Minimum	Maximum
5	95

Shove Car to Rest B189

Identifies the car must be moved to rest by locomotive

Permissible Values for B189

Y Yes

Validation Rule for B189

-If Shove Adjacent Car to Rest is reported, then Shove Car to Rest must be reported

Shove Adj. Car to Rest B188

Identifies the adjacent car must be shoved to rest by locomotive

Permissible Values for B188

Y Yes

Train Position Sensitive B211

Indicates there is a physical reason, limiting its position on a train

Permissible Values for B211

Y Yes

End of Train Only B277

Indicates the equipment must be placed at the end of the train (including per AAR RP-2001)

Permissible Values for B277

Y Yes

Check Trailing Tonnage B044

Indicates the equipment has restrictions on trailing tonnage

Permissible Values for B044

Y Yes

Coupler Restriction B278

Special Train Service Code WI

Permissible Values for B278

Y Yes

Clearance Exception B275

Describes equipment containing nonstandard dimension

Permissible Values for B275

A	Excessive Outside Extreme Height (A185)
B	Excessive Outside Extreme Width (A186)
P	Passenger equipment with Undercarriage Exceptions below 3 ft 4-1/2 in.
Q	Passenger equipment with both Excessive Outside Extreme Width (A186) (calculated for swingout) and Undercarriage Exceptions below 3 ft 4-1/2 in.

Owner-Provided Loaded Net Braking Ratio — B552

Indicates an alternate minimum loaded net braking ratio provided by owner (in percent).

Range of Values for B552

Minimum	Maximum
8.5	14.0

NOTES:

- Owner may enter a documented alternative minimum loaded net braking ratio in this field that is greater than the system calculated Loaded Net Braking Ratio (B551).
- When reported, the Owner-Provided Loaded Net Braking Ratio will be used in PTC stopping distance calculations.
- A change in value for the following elements will cause the Owner-Provided Loaded Net Braking Ratio to reset to blank:
  - Rebuilt Date (RBDT)
  - Gross Rail Load/Weight (A266)
  - Equipment Type Code (UMET)
  - Empty/Load Device Eqpd (B075)

Owner-Provided Empty Braking Ratio — B554

Indicates an owner supplied alternate empty braking ratio (in percent).

Range of Values for B554

Minimum	Maximum
15.0	38.0

NOTES:

- Owner may enter a documented alternative minimum loaded net braking ratio in this field that is greater than the system calculated Loaded Net Braking Ratio (B551).
- When reported, the Owner-Provided Loaded Net Braking Ratio will be used in PTC stopping distance calculations.
- A change in value for the following elements will cause the Owner-Provided Loaded Net Braking Ratio to reset to blank:
  - Rebuilt Date (RBDT)
  - Gross Rail Load/Weight (A266)
  - Equipment Type Code (UMET)
  - Empty/Load Device Eqpd (B075)

Truck Components

Axle Spacing Distance — B020

Describes the distance between axles on the same truck

Permissible Values for B020

154	154 Inches
53	53 Inches
54	54 Inches
55	55 Inches
60	60 Inches
61	61 Inches
62	62 Inches
63	63 Inches
64	64 Inches
65	65 Inches
66	66 Inches
68	68 Inches
70	70 Inches
71	71 Inches
72	72 Inches
73	73 Inches
74	74 Inches
76	76 Inches
78	78 Inches
96	96 Inches
99	Axle Space Unknown

Truck Axle Count — B252

The number of axles per truck

Range of Values for B252

Minimum	Maximum
1	4

Validation Rule for B252

- Sum of Truck Axle Counts must equal Axle Count (A024)

Journal Size — A147

The size of the journal bearing

Permissible Values for A147

A	3-3/4 X 7	B	4-1/4 X 8	C	5 X 9
D	5-1/2 X 10	E	6X11	F	6-1/2 X 12
G	7 X 12	H	7 X 14	K	6-1/ 2X 9
M	7 X 9				

Wheel Diameter — A294

The diameter of the wheels

Permissible Values for A294

28	28 Inches	30	30 Inches	33	33 Inches
36	36 Inches	38	38 Inches		

Validation Rule for A294

- -UnStarred Cars with Gross Weight of 286,000 lbs. and Increased Gross Rail Load of 2 must have a Wheel Diameter of 36 inches
- -UnStarred Cars with Gross Weight of 286,000 lbs. and Increased Gross Rail Load of 2 must have a Wheel Diameter of either 36 or 38 inches
- -Cars with an Increased Gross Rail Load of 1 and Journal of G or M must have a Wheel Diameter of 38 inches
- -If Connected Unit Count (A020) is not reported, different Wheel Diameters cannot be reported

Stability Device Equipped — B199

Indicates a stability device is present on the truck

Permissible Values for B199

Y	Yes

Bolster Component ID — B351

Bolster Component ID from Component Registry

Data is Confidential. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Sideframe Component ID — B352

Side Frame Component ID from Component Registry

Data is Confidential. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Wheelset Component ID — B350

Component ID from Component Registry

Data is Confidential. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Draft System Components

Coupler Code — **A057**

Defines the equipment coupler type

Permissible Values for A057

BE60AHT	Type E (Rule 16) - BE60AHT
BE60BHT	Type E Obsolete (Rule 16) - BE60BHT
BE63AHT	Type E Obsolete (Rule 16) - BE63AHT
BE63HT	Type E (Rule 16) - BE63HT
BE67HT	Type E (Rule 16) - BE67HT
E42BEX	Type E/F (Rule 17) - E42BEX
E50ARE	Type E/F (Rule 17) - E50ARE
E50BEX	Type E/F (Rule 17) - E50BEX
E60CC	Type E (Rule 16) - E60CC
E60CE	Type E (Rule 16) - E60CE
E60CEX	Type E (Rule 16) - E60CEX
E60CHT	Type E (Rule 16) - E60CHT
E60CHTE	Type E (Rule 16) - E60CHTE
E60CHTQ	Type E (Rule 16) - E60CHTQ
E60DC	Type E (Rule 16) - E60DC
E60DE	Type E (Rule 16) - E60DE
E60EE	Type E (Rule 16) - E60EE
E61	Type E Obsolete (Rule 16) - E61
E67AHT	Type E (Rule 16) - E67AHT
E67BC	Type E (Rule 16) - E67BC
E67BE	Type E (Rule 16) - E67BE
E67BHT	Type E (Rule 16) - E67BHT
E67BHTE	Type E (Rule 16) - E67BHTE
E67CC	Type E (Rule 16) - E67CC
E67CE	Type E (Rule 16) - E67CE
E68AHT	Type E/F Obsolete (Rule 17) - E68AHT
E68AHTE	Type E/F Obsolete (Rule 17) - E68AHTE
E68BC	Type E/F (Rule 17) - E68BC
E68BE	Type E/F (Rule 17) - E68BE
E68BHT	Type E/F (Rule 17) - E68BHT
E68BHTE	Type E/F (Rule 17) - E68BHTE
E68BHTQ	Type E/F (Rule 17) - E68BHTQ
E68CE	Type E/F (Rule 17) - E68CE
E68DE	Type E/F Obsolete (Rule 17) - E68DE
E69AE	Type E/F (Rule 17) - E69AE
E69AHTE	Type E/F (Rule 17) - E69AHTE
E69BE	Type E/F (Rule 17) - E69BE
E69CE	Type E/F (Rule 17) - E69CE
E69CEX	Type E/F (Rule 17) - E69CEX
E69HTE	Type E/F (Rule 17) - E69HTE
E69LCE	Type E/F (Rule 17) - E69LCE
EB7AHT	Type E (Rule 16) - EB7AHT
EF204CE	Type E/F (Rule 17) - EF204CE
EF306CE	Type E/F (Rule 17) - EF306CE
EF511CE	Type E/F (Rule 17) - EF511CE
EF511DE	Type E/F (Rule 17) - EF511DE
EF511LCE	Type E/F (Rule 17) - EF511LCE
EF511WE	Type E/F (Rule 17) - EF511WE
EF528WE	Type E/F (Rule 17) - EF528WE
EFROTARY	Type E/F Rotary - EFROTARY
EFSPEC	Type E/F Special - EFSPEC
EFUNK	Type E/F Unknown - EFUNK
EK323CE	Type E (Rule 16) - EK323CE (Long Travel)
ESPEC	Type E Special - ESPEC
EUNK	Type E Unknown - EUNK
F70BHT	Type F Obsolete (Rule 18) - F70BHT
F70BHTE	Type F Obsolete (Rule 18) - F70BHTE
F70CC	Type F (Rule 18) - F70CC
F70CE	Type F (Rule 18) - F70CE
F70CHT	Type F (Rule 18) - F70CHT
F70CHTE	Type F (Rule 18) - F70CHTE
F70DE	Type F (Rule 18) - F70DE
F70HT	Type F Obsolete (Rule 18) - F70HT
F71CHT	Type F (Rule 18) - F71CHT
F72HT	Type F (Rule 18) - F72HT
F73AC	Type F (Rule 18) - F73AC
F73AE	Type F (Rule 18) - F73AE
F73AHT	Type F (Rule 18) - F73AHT
F73AHTE	Type F (Rule 18) - F73AHTE
F73BE	Type F (Rule 18) - F73BE
F73HTE	Type F Obsolete (Rule 18) - F73HTE
F79BHT	Type F Obsolete (Rule 18) - F79BHT
F79BHTE	Type F Obsolete (Rule 18) - F79BHTE
F79CC	Type F (Rule 18) - F79CC
F79CE	Type F (Rule 18) - F79CE
F79CHT	Type F (Rule 18) - F79CHT
F79CHTE	Type F (Rule 18) - F79CHTE
F79DE	Type F (Rule 18) - F79DE
FF205E	Type F (Rule 18) - FF205E
FF218AE	Type F (Rule 18) - FF218AE
FR201E	Type F (Rule 18) Rotary - FR201E
FR205AE	Type F (Rule 18) Rotary - FR205AE
FR205BE	Type F (Rule 18) Rotary - FR205BE
FR205E	Type F (Rule 18) Rotary - FR205E
FR206E	Type F (Rule 18) Rotary - FR206E
FR206EA	Type F (Rule 18) Rotary - FR206EA
FR207AE	Type F (Rule 18) Rotary - FR207AE
FR207E	Type F (Rule 18) Rotary - FR207E
FR208AE	Type F (Rule 18) Rotary - FR208AE (without wear insert)
FR208E	Type F (Rule 18) Rotary - FR208E (with wear insert)
FR209E	Type F (Rule 18) Rotary - FR209E
FR301E	Type F (Rule 18) Rotary - FR301E
FR304E	Type F (Rule 18) Rotary - FR304E (with wear plate)
FR304WE	Type F (Rule 18) Rotary - FR304WE (without wear plate)
FROTARY	Type E/F Rotary - FROTARY
FSPEC	Type F Special - FSPEC
FUNK	Type F Unknown - FUNK
PUNK	Passenger Unknown
S700AE	Type E (Rule 16) - S700AE
SBE60CC	Type E (Rule 16) - SBE60CC
SBE60CE	Type E (Rule 16) - SBE60CE
SBE60DC	Type E (Rule 16) - SBE60DC
SBE60DE	Type E (Rule 16) - SBE60DE
SBE60DREX	Type E (Rule 16) - SBE60DREX
SBE60EE	Type E (Rule 16) - SBE60EE
SBE60EEX	Type E (Rule 16) - SBE60EEX
SBE67BC	Type E (Rule 16) - SBE67BC
SBE67BE	Type E (Rule 16) - SBE67BE
SBE67CC	Type E (Rule 16) - SBE67CC
SBE67CE	Type E (Rule 16) - SBE67CE
SBE67CREX	Type E (Rule 16) - SBE67CREX
SBE67DE	Type E (Rule 16) - SBE67DE
SBE68BC	Type E/F (Rule 17) - SBE68BC
SBE68BE	Type E/F (Rule 17) - SBE68BE
SBE68CE	Type E/F (Rule 17) - SBE68CE
SBE68CREX	Type E/F (Rule 17) - SBE68CREX
SBE68DE	Type E/F (Rule 17) - SBE68DE
SBE68WEX	Type E/F (Rule 17) - SBE68WEX
SBE69AE	Type E/F (Rule 17) - SBE69AE
SBE69BE	Type E/F (Rule 17) - SBE69BE
SBE69BREX	Type E/F (Rule 17) - SBE69BREX
SBE69CE	Type E/F (Rule 17) - SBE69CE
SE60CC	Type E (Rule 16) - SE60CC
SE60CE	Type E (Rule 16) - SE60CE
SE60CHT	Type E (Rule 16) - SE60CHT
SE60CHTE	Type E (Rule 16) - SE60CHTE
SE60DC	Type E (Rule 16) - SE60DC
SE60DE	Type E (Rule 16) - SE60DE
SE60DEX	Type E (Rule 16) - SE60DEX
SE60EE	Type E (Rule 16) - SE60EE

SE67BC	Type E (Rule 16) - SE67BC
SE67BE	Type E (Rule 16) - SE67BE
SE67BHT	Type E (Rule 16) - SE67BHT
SE67BHTE	Type E (Rule 16) - SE67BHTE
SE67CC	Type E (Rule 16) - SE67CC
SE67CE	Type E (Rule 16) - SE67CE
SE68BC	Type E/F (Rule 17) - SE68BC
SE68BE	Type E/F (Rule 17) - SE68BE
SE68BHT	Type E/F (Rule 17) - SE68BHT
SE68BHTE	Type E/F (Rule 17) - SE68BHTE
SE68CE	Type E/F (Rule 17) - SE68CE
SE69AE	Type E/F (Rule 17) - SE69AE
SE69BE	Type E/F (Rule 17) - SE69BE
SE69CE	Type E/F (Rule 17) - SE69CE
SF70CC	Type F (Rule 18) - SF70CC
SF70CE	Type F (Rule 18) - SF70CE
SF70CHT	Type F (Rule 18) - SF70CHT
SF70CHTE	Type F (Rule 18) - SF70CHTE
SF70DE	Type F (Rule 18) - SF70DE
SF79CC	Type F (Rule 18) - SF79CC
SF79CE	Type F (Rule 18) - SF79CE
SF79CHT	Type F (Rule 18) - SF79CHT
SF79CHTE	Type F (Rule 18) - SF79CHTE
SF79DE	Type F (Rule 18) - SF79DE
TUNK	Transit Unknown

Validation Rule for A057

-If Rotary Coupler Style is reported, then Coupler Code must be a rotary coupler.

-If Coupler Code is a rotary coupler, then Coupler Style must be R (Rotary).

-Coupler Code of Type E Obsolete (Rule 16) can only be reported if the car was built or rebuilt before July 31, 2015

-Coupler Code of Type E/F Obsolete (Rule 17) can only be reported if the car was built or rebuilt before July 31, 2015

-Coupler Code of Type F Obsolete (Rule 18) can only be reported if the car was built or rebuilt before July 31, 2015

-Coupler Code of FROTARY or EFROTARY cannot be reported for cars Built or Rebuilt on or after August 12, 2014.

NOTES:

- Obsolete: All Type D couplers are obsolete and should report code DOBS; cars with this coupler code will be restricted in interchange as discussed below.
- Unknown: If the coupler code is unknown or if the code stamped on the coupler is illegible, the code BUNK FUNK, EFUNK, or LOCOUNK should be reported.
- Special: Codes ESPEC, FSPEC, and EFSPEC have been created to decline coupler bodies that have been manufactured specifically for the equipment owner and are not listed in the attached table.
- The codes FROTARY and EFROTARY cannot be reported for equipment Built or Rebuilt since August 12, 2014.

Coupler Style — B058

Describes the basic coupler design of the equipment

Permissible Values for B058

B	Bottom Shelf	D	Double Shelf
L	Drawbar Rotary	M	Drawbar
P	Plain	R	Rotary

Validation Rule for B058

-If Draft System Type (B073) is H (Hydraulic) then Coupler Style (B058) cannot be reported as M (Solid Drawbar) or L (Rotary Drawbar)

-If Draft System Type (B073) is not Center Of Car or End Of Car, Inches of Travel (B061) cannot be reported

-If Draft System Type (B073) of Center Of Car or End Of Car is reported then Inches of Travel (B061) must also be reported

-If Draft System Type (B073) is E then Coupler Style (B058) cannot be reported as L or R

Inches of Travel — B061

The number of inches a draft system will travel ■

Affects Rating.

Range of Values for B061

Minimum	Maximum
1	30

Validation Rule for B061

-If Draft System Type (B073) is not Center Of Car or End Of Car, Inches of Travel (B061) cannot be reported

-If Draft System Type (B073) of Center Of Car or End Of Car is reported then Inches of Travel (B061) must also be reported

-Inches of Travel cannot be greater than 20 for equipment with a Built Date (BLDT) on or after January 1, 1974

Draft System Type — B073

Describes the draft gear/underframe cushion type

Permissible Values for B073

C	Cushioning at Center of Car (COC)
E	Cushioning at End of Car (EOC)
S	Standard Draft Gear
X	Devices with less than 6 inches buff travel approved under AAR Standard S-060
Y	Devices with 6 to 10 inches of buff travel approved under AAR Standard S-060

Validation Rule for B073

- If Draft System Type (B073) is Standard Draft Gear (S), Inches of Travel (B061) cannot be reported
- If Draft System Type (B073) is reported as C, E, X, or Y then Inches of Travel (B061) must also be reported
- If Draft System Type (B073) of X, or Y is reported then Draft Gear Group/Cushion Unit Pocket (B562) cannot be reported
- If Draft System Type (B073) X is reported, the Inches of Travel (B061) value must be greater than or equal to 1 and less than 6
- If Draft System Type (B073) Y is reported, the Inches of Travel (B061) value must be greater than or equal to 6 and less than or equal to 10

-If Draft System Type (B073) is S then Draft Gear Group/Cushion Unit Pocket (B562) may only be A, B, C, D, E, F, G, H, J, K, L, M, N, P, Q, R, S, or Z (AAR Rule 21)

-If Draft System Type (B073) is E then Draft Gear Group/Cushion Unit Pocket (B562) may only be EOC-1,EOC-1D, EOC-1B, EOC-2, EOC-2D, EOC-2B, EOC-3, EOC-3B,EOC-4, EOC-4B, EOC-5, EOC-5D, EOC-5B, EOC-6, EOC-6D, EOC-6B, EOC-7, EOC-7B, EOC-8, EOC-8B, EOC-8F, EOC-9, EOC-9B, EOC-9D, EOC-9E, EOC-10, EOC-10D, EOC-10B, EOC-10F, EOC-11, EOC-11D, EOC-11B,EOC-12, EOC-12D, EOC-12B, EOC-13, EOC-13B, EOC-14, EOC-14B, EOC-15, EOC-15D, EOC-15B, EOC-16, EOC-16D, EOC-16B, EOC-17, EOC-17D, EOC-17B, EOC-18, EOC-18D, EOC-18B, EOC-19, EOC-19B, EOC-20, EOC-20B, EOC-21, EOC-21B, EOC-22, EOC-22B, EOC-23, EOC-23B, EOC-24, EOC-24B, EOC-25E, EOC-26B, EOC-26F, or EOC-27D, or EOC-27E (AAR Rule 59)

Draft Gear Group/Cushion Unit Pocket — B562

Draft Gear Group/Cushion Unit Pocket value as listed in AAR Field Manual Interchange Rule 21 and 59 ✹

Carry forward for Single Clone / Multi-Clone / Restencil / Add-Back / Equipment Group Change.

Permissible Values for B562

EOC-1,EOC-1D, EOC-1B, EOC-2, EOC-2D, EOC-2B, EOC-3, EOC-3B,EOC-4, EOC-4B, EOC-5, EOC-5D, EOC-5B, EOC-6, EOC-6D, EOC-6B, EOC-7, EOC-7B, EOC-8, EOC-8B, EOC-8F, EOC-9, EOC-9B, EOC-9D, EOC-9E, EOC-10, EOC-10D, EOC-10B, EOC-10F, EOC-11, EOC-11D, EOC-11B,EOC-12, EOC-12D, EOC-12B, EOC-13, EOC-13B, EOC-14, EOC-14B, EOC-15, EOC-15D, EOC-15B, EOC-16, EOC-16D, EOC-16B, EOC-17, EOC-17D, EOC-17B, EOC-18, EOC-18D, EOC-18B, EOC-19, EOC-19B, EOC-20, EOC-20B, EOC-21, EOC-21B, EOC-22, EOC-22B, EOC-23, EOC-23B, EOC-24, EOC-24B, EOC-25E, EOC-26B, EOC-26F, EOC-27D, EOC-27E, COC-1, COC-2, COC-3, COC-4, COC-5, COC-6, COC-7, COC-8 (*AAR Rule 59*).

A, B, C, D, E, F, G, H, J, K, L, M, N, P, Q, R, S, Z (*AAR Rule 21*).

Validation Rule(s) for B562

-Draft Gear Group/Cushion Unit Pocket (B562) is mandatory for equipment built on or after June 13, 2019, unless Draft System Type (B073) is reported as X or Y
-If Draft Gear Group/Cushion Unit Pocket (B562) is not equal to A, B, C, D, E, F, G, H, J, K, L, M, N, P, Q, R, S, or Z, then Cushion Unit Type (B563) must be populated
-When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-6, EOC-7, EOC-7B, EOC-8, EOC-8B, EOC-9, EOC-9B, EOC-9D, EOC-10, EOC-10B, EOC-10D, EOC-14, EOC-14B, EOC-18D, EOC-23, EOC-23B, EOC-24, EOC-25E, EOC-26B, or EOC-27D then the Cushion Unit Type (B563) must be 1
-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-9E, EOC-26F, or EOC-27E, then the Cushion Unit Type (B563) must be 2
-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-11, EOC-12, EOC-13, EOC-13B, EOC-15, EOC-15B, EOC-15D, EOC-17, EOC-17B, EOC-17D, EOC-18, EOC-18B, EOC-19, EOC-19B, EOC-20, EOC-20B, EOC-21, EOC-21B, EOC-22, EOC-22B, EOC-24B, COC-3, COC-5, or COC-7 then the Cushion Unit Type (B563) must be 1 or 2
-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-8F or EOC-10F then the Cushion Unit Type (B563) must be 2 or 3
-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-5, EOC-5B, EOC-5D, EOC-6, EOC-6B, EOC-6D EOC-11B, EOC-11D, EOC-12B, EOC-12D, or COC-4 then the Cushion Unit Type (B563) must be 1, 2, or 3
-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-16, EOC-16B, EOC-16D, or COC-1 then the Cushion Unit Type (B563) must be 1, 2, or 4
-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-2B, EOC-2D, EOC-3, EOC-3B, EOC-4, EOC-4B, or COC-2 then the Cushion Unit Type (B563) must be 1, 2, 3, or 4
-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-1, EOC-1B, EOC-1D, or EOC-2 then the Cushion Unit Type (B563) must be 1, 2, 3, 4, or S
-When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-8 then the Cushion Unit Type (B563) must be 1, 2, 3, 4, or 5
-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-1D, EOC-2,EOC-2D, EOC-2B, EOC-3, EOC-3B, EOC-5, EOC-5D, EOC-5B, EOC-6D, EOC-7, EOC-7B, EOC-9, EOC-9B, EOC-9D, EOC-9E, EOC-10D, EOC-11, EOC-11B, EOC-11D, EOC-12D, EOC-14,EOC-14B, EOC-15, EOC-15D, EOC-15B, EOC-16D, EOC-17D, EOC-23, EOC-23B, EOC-27D, or EOC-27E then the Inches of Travel (B061) must be 10
-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-16, EOC-16B, EOC-19, EOC-19B, EOC-22, EOC-22B, or EOC-25E then the inches of travel must be 12
-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-20 or EOC-20B then the Inches of Travel (B061) must be 14
-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-1B, EOC-4, EOC-4B, EOC-6, EOC-6B, EOC-8, EOC-8B, EOC-8F, EOC-10, EOC-10B, EOC-10F, EOC-12, EOC-12B, EOC-13, EOC-13B, EOC-17, EOC-17B, EOC-18, EOC-18D, EOC-18B, EOC-21, EOC-21B, EOC-24, or EOC-24B then the Inches of Travel (B061) must be 15
-When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-2, COC-3, COC-4, COC-5, COC-6, or COC-8 then the Inches of Travel (B061) must be 20
-When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-1, and Cushion Unit Type (B563) is 1 or 2, then the Inches of Travel (B061) must be 20
-When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-1, and Cushion Unit Type (B563) is 4, then the Inches of Travel (B061) must be 18
-When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-7, and Cushion Unit Type (B563) is 2, then the Inches of Travel (B061) must be 20
-When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-7, and Cushion Unit Type (B563) is 1, then the Inches of Travel (B061) must be 30
-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-1 then the Inches of Travel (B061) must be 10, 12, or 15
-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-26, then the Inches of Travel (B061) must be 18

Note:
Reference AAR Field Manual Interchange Rule(s) 21 and 59.

Cushion Unit Type	B563
Cushion Unit Type value as listed in AAR Field Manual Interchange Rule 21 and 59 ✹	

Carry forward for Single Clone / Multi-Clone / Restencil / Add-Back / Equipment Group Change.

Permissible Values for B563

1 – Type 1
2 – Type 2
3 – Type 3
4 – Type 4
5 – Type 5
S – Type S

Validation Rule(s) for B563

- Cushion Unit Type (B563) is mandatory for equipment built on or after June 13, 2019.
-If Draft Gear Group/Cushion Unit Pocket (B562) is not equal to A, B, C, D, E, F, G, H, J, K, L, M, N, P, Q, R, S, or Z, then Cushion Unit Type (B563) must be populated.
-When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-6, EOC-7, EOC-7B, EOC-8, EOC-8B, EOC-9, EOC-9B, EOC-9D, EOC-10, EOC-10B, EOC-10D, EOC-14, EOC-14B, EOC-18D, EOC-23, EOC-23B, EOC-24, EOC-25E, or EOC-26B then the Cushion Unit Type (B563) must be 1.
-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-9E, EOC-26F, or EOC-27E, then the Cushion Unit Type (B563) must be 2
-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-11, EOC-12, EOC-13, EOC-13B, EOC-15, EOC-15B, EOC-15D, EOC-17, EOC-17B, EOC-17D, EOC-18, EOC-18B, EOC-19, EOC-19B, EOC-20, EOC-20B, EOC-21, EOC-21B, EOC-22, EOC-22B, EOC-24B, COC-3, COC-5, or COC-7 then the Cushion Unit Type (B563) must be 1 or 2.
-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-8F or EOC-10F then the Cushion Unit Type (B563) must be 2 or 3.
-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-5, EOC-5B, EOC-5D, EOC-6, EOC-6B, EOC-6D EOC-11B, EOC-11D, EOC-12B, EOC-12D, or COC-4 then the Cushion Unit Type (B563) must be 1, 2, or 3.
-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-16, EOC-16B, EOC-16D, or COC-1 then the Cushion Unit Type (B563) must be 1, 2, or 4.
-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-2B, EOC-2D, EOC-3, EOC-3B, EOC-4, EOC-4B, or COC-2 then the Cushion Unit Type (B563) must be 1, 2, 3, or 4.
-When the Draft Gear Group/Cushion Unit Pocket (B562) is EOC-1, EOC-1B, EOC-1D, or EOC-2 then the Cushion Unit Type (B563) must be 1, 2, 3, 4, or S.
-When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-8 then the Cushion Unit Type (B563) must be 1, 2, 3, 4, or 5.
-When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-1, and Cushion Unit Type (B563) is 1 or 2, then the Inches of Travel (B061) must be 20.
-When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-1, and Cushion Unit Type (B563) is 4, then the Inches of Travel (B061) must be 18.
-When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-7, and Cushion Unit Type (B563) is 2, then the Inches of Travel (B061) must be 20.
-When the Draft Gear Group/Cushion Unit Pocket (B562) is COC-7, and Cushion Unit Type (B563) is 1, then the Inches of Travel (B061) must be 30.

Note:
Reference AAR Field Manual Interchange Rule(s) 21 and 59.

Coupler Component ID	B353
Coupler Component ID from Component Registry	

Data is Confidential. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Cushioning Unit Component ID	B361
Component ID from Component Registry	

Data is Confidential. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Brake System Components

Emergency Brake Valve CID	B354
Component ID from Component Registry	

Data is Confidential. This element is not eligible for Input. Value does not carry

forward for Single Clone / Multi-Clone.

Emergency Valve COTS Date B567

Brake valve emergency portion recondition date

System generated element. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

NOTES:

- Emergency Valve COTS Date is system-generated from a Emergency Brake Valve Inspection.

Emergency Valve OEM Warranty Date B568

Brake valve emergency portion Original Equipment Manufacturer warranty date

System generated element. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

NOTES:

- Emergency Valve OEM Date is system-generated from a Emergency Brake Valve Inspection.

Emergency Valve Part Number B569

Brake valve emergency portion part number

System generated element. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

NOTES:

- Emergency Valve Part Number is system-generated from a Emergency Brake Valve Inspection.

Service Brake Valve CID B357

Component ID from Component Registry

Data is Confidential. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Service Valve COTS Date B564

Brake valve service portion recondition date

System generated element. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

NOTES:

- Service Valve COTS Date is system-generated from a Service Brake Valve Inspection.

Service Valve OEM Warranty Date B565

Brake valve service portion Original Equipment Manufacturer warranty date

System generated element. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

NOTES:

- Service Valve OEM Date is system-generated from a Service Brake Valve Inspection.

Service Valve Part Number B566

Brake valve service portion part number

System generated element. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

NOTES:

- Service Valve Part Number is system-generated from a Service Brake Valve Inspection.

Slack Adjuster CID B359

Component ID from Component Registry

Data is Confidential. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Miscellaneous

Commercial Owner CIF B049

The Customer Identification File (CIF) number for a commercial owner at a specific location

Commercial Lessee CIF B048

The Customer Identification File (CIF) number for a commercial lessee at a specific location

Umler Effective Date EFDT

The date the rating activity (pre-registration, modification, etc.) is expected to occur

This element is not eligible for Query. Does not Carry Forward.

Validation Rule for EFDT

-Effective Date cannot be set to more than 13 months in the future.

NOTES:

- Effective Date will default to the 1st of the following month that equipment is registered

Inspection

ABT Due Date (Repair Track) DU13

The due date of the air brake test per AAR Field Manual Rule 3

System Generated Field. This element is not eligible for Input. Value does not carry forward for Add Back.

ABT 5-8 Year Due Date DU58

The 5-8 year due date for the air brake test (ABT) after the ABT Due Date (Repair Track)

System Generated Field. This element is not eligible for Input. Value does not carry forward for Add Back.

Inspection Date Done DTDN

The date the inspection was completed; used for all inspection types reported on equipment

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Validation Rule for DTDN

-The inspection date must not be 60 days before the Build Date

Inspection Due Date INDD

The due date of the next inspection; used for all inspection types reported on equipment

System Generated Field. This element is not eligible for Input. Value does not carry forward for Add Back.

Inspection Performer PERF

The SCAC that completed the inspection; used for all inspection types reported on equipment

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Inspection Reporter REPT

The SCAC that reported the inspection; used for all inspection types reported on equipment

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Location/SPLC SPLC

The SPLC of the inspecting location; used for all inspection types reported on equipment

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Air Brake Test Device B523

Indicates the type of test device used to perform the Air Brake Test ✹

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Permissible Values for B523

A Automatic (Non 4-Pressure)

M Manual
P Automatic (4-Pressure)

Validation Rule for B523

-Air Brake Test Device (B523) must be reported for Air Brake Test inspection reported on or after December 10, 2020

Insp Service Valve COTS Date	B570
Brake valve service portion recondition date	

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

NOTES:

- Reports of 9999 will be allowed in case the date is illegible and the valve cannot be replaced immediately.
- Valid date format: MMYY

Insp Service Valve OEM Warranty Date	B571
Brake valve service portion Original Equipment Manufacturer warranty date	

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

NOTES:

- Reports of 999999 will be allowed in case the date is illegible and the valve cannot be replaced immediately.
- Valid date format: MMYYYY

Insp Service Valve Part Number	B572
Brake valve service portion part number	

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Insp Emergency Valve COTS Date	B573
Brake valve emergency portion recondition date	

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

NOTES:

- Reports of 9999 will be allowed in case the date is illegible and the valve cannot be replaced immediately.
- Valid date format: MMYY

Insp Emergency Valve OEM Warranty Date	B574
Brake valve emergency portion Original Equipment Manufacturer warranty date	

System generated element. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

NOTES:

- Reports of 999999 will be allowed in case the date is illegible and the valve cannot be replaced immediately.
- Valid date format: MMYYYY

Insp Emergency Valve Part Number	B575
Brake valve emergency portion part number	

System generated element. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Insp Service Valve Location *Mandatory*	B576
Brake valve service portion location	●

. Value does not carry forward for Single Clone / Multi-Clone.

Insp Emergency Valve Location *Mandatory*	B577
Brake valve emergency portion location reported on an emergency brake valve inspection	●

Value does not carry forward for Single Clone / Multi-Clone.

EOT Devices

General

Status Code *Mandatory* — **USCD**

Identifies the current operational state ●

Does not Carry Forward.

Permissible Values for USCD

A	ACTIVE	I	INACTIVE
P	PRE-REGISTERED		

NOTES:

- For Restencil and Clone process the initial Status of a car should be Pre-Registered.
- All Add-Back processes should initially set the Status to Pre-Registered
- A Pre-registered car will automatically have its Status changed to Active for the initial change when TRAIN detects three (3) movements on the car
- If the Status changes to Active due to movement and the car was created from a Restencil, the Prior Equipment ID (PRID) or source car will have its status changed to Inactive automatically by Umler

Equipment ID — **0001**

The equipment stenciled number

Validation Rule for 0001

-Equipment Number must not be larger than 6 digits (i.e., 999999)

NOTES:

- Equipment ID includes the mark and number stenciled on the equipment. Marks can be up to 4 characters and number up to 6 digits (i.e., ABCD999999).
- Up to 500 cars can be added or updated in a transaction.
- When adding an equipment record, ensure that Prior Equipment ID (PRID) is reported, unless the equipment is new.

Mechanical Designation *Mandatory* — **UMMD**

Equipment description without physical dimensions ●▲

Used in ETC Generation. Used for Transportation Codes.

Permissible Values for UMMD

NF	EOTD-Two-Way Sensing and Braking Unit (SBT)

Equipment Type Code — **UMET**

An alpha numeric code that describes the physical attributes of equipment

System Generated Field. This element is not eligible for Input.

NOTES:

- Please Refer to Appendix I for More information Regarding ETC Generation

Built Date *Mandatory* — **BLDT**

The date the construction of the equipment is complete ●

Data is Confidential. Used for Transportation Codes. Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for BLDT

Minimum	Maximum
1/1/1900	12/31/9999

Validation Rule for BLDT

-Prior and target equipment's Built Date (BLDT) must match for restenciling

NOTES:

- Data is public for railroad marked equipment.
- For connected unit cars report the oldest car in the set.

Rebuilt / ILS Date — **RBDT**

The date the re-construction of the equipment is complete

Data is Confidential. Value does not carry forward for Single Clone/Multi-Clone.

Range of Values for RBDT

Minimum	Maximum
1/1/1900	12/31/9999

NOTES:

- Railroad cars -- applicable only to cars meeting status as provided in both STB Accounting Rules, and the AAR Mechanical Interchange Rule 88, Office Manual.
- Private cars -- applicable to all cars meeting AAR Mechanical Interchange Rule 88, Section C, Office Manual and Sections A and B of the Field Manual.
- For connected unit cars report the oldest car in the set. Do not report Rebuilt Date unless car has been approved by the AAR.

Rebuilt Flag — **RBFL**

Identifies the equipment is nearing its end of life cycle

Data is Confidential. System Generated Field. This element is not eligible for Input.

Permissible Values for RBFL

N	No	Y	Yes

Owner *Mandatory* — **UMOW**

Primary reporting mark of the railroad or private company owning the car ●

Value does not carry forward for Single Clone / Multi-Clone / Single Restencil / Multi-Restencil.

NOTES:

- Report the primary reporting mark of the railroad or private company owning the car. When car's lease or lien is held by a bank, trust holder, capital lease company, etc. not having an assigned mark, report the primary reporting mark affiliated with the stenciled reporting mark.

Lessee — **LESE**

The reporting mark of the company leasing the equipment

Value does not carry forward for Single Clone / Multi-Clone / Single Restencil / Multi-Restencil.

Validation Rule for LESE

-Umler Owner (UMOW) and Lessee are not allowed to be equal

NOTES:

- In order to assign privately marked cars to a pool, a railroad reporting mark must be reported.

Equipment Group *Mandatory* — **0002**

Identifies the various major car types ●■

Used for Transportation Codes. Affects Rating.

Maintenance Party — **MNPT**

The parent reporting mark of the company responsible for the maintenance and repairs of the equipment

Does not Carry Forward.

Mark Owner Category — **B201**

The company that owns the stenciled mark on the car

System Generated Field. This element is not eligible for Input. Value does not carry forward for Single Restencil / Multi-Restencil / Equipment Group Change /Add Back.

Permissible Values for B201

B	US Private
C	Canadian Private
F	Foreign Private
H	Canadian Class II
I	Canadian Class I
J	Mexican Class I
K	Canadian Class III
M	Mexican Private
N	US Private Steamship
O	Canadian Private Steamship
P	Mexican Private Steamship
Q	Foreign Private Steamship
R	US Class II Railroad
U	US Class I Railroad
V	US Class III Railroad

W Mexican Class II Railroad
Y Mexican Class III Railroad

NOTES:

- This value is stored in the Umler Database for informational purposes and is retrieved from the Roadmark Registry.

Prior Equipment ID — **PRID**

The previous reporting mark and number of the equipment

Value does not carry forward for Single Clone / Multi-Clone.

Validation Rule for PRID

-Prior and target equipment's Built Date (BLDT) must match
-The Prior Equipment ID (0001) must belong to the same or comparable Equipment Group (0002) as the current car initial and number

NOTES:

- Prior ID enables equipment records to share the same historical lineage. Equipment Identification Number (EIN) is a generated id that enables these equipment records to share inspections and transaction history.

Last Update Date — **B122**

Date of the last Umler element change

System Generated Field. This element is not eligible for Input.

Equipment Add Date — **B082**

Date the reporting mark and number was added to the Umler system

System Generated Field. This element is not eligible for Input.

Status Change Reason — **USCR**

Identifies the reason for the current operational state

System Generated Field. This element is not eligible for Input. Does not Carry Forward.

Permissible Values for USCR

I Initial Load
M Movement
O Status Changed Manually
R Restencil

NOTES:

- If movement is detected on equipment, status is changed to Active.
- If an equipment record is changed to Active, any prior equipment record is placed in Inactive status.

Status Change Date — **USCT**

Identifies the effective date of the current operational state

System Generated Field. This element is not eligible for Input. Does not Carry Forward.

Equipment Identification — **EINN**

Unique equipment identifier regardless of stenciled mark

System Generated Field. This element is not eligible for Input.

NOTES:

- Specify the Prior ID (PRID) on equipment records to ensure the historical lineage is preserved. Equipment with the same EIN share history and inspections.

Conflict Status — **B050**

Identifies the escalation level of equipment in active conflict

System Generated Field. This element is not eligible for Input. Value does not carry forward for Add Back.

Permissible Values for B050

1 Subject to Zero-Rating
2 Subject to Restricted in Interchange
3 Subject to Deletion

NOTES:

- Subject to Zero-Rating, goes into effect 30 days after Conflict Status occurs
- Subject to Restricted in Interchange, goes into effect 90 days after Conflict Status occurs
- Subject to Deletion, goes into effect 365 days after Conflict Status occurs

Date of Original Conflict — **B063**

The date the equipment was originally placed in the current conflict

System Generated Field. This element is not eligible for Input.

Next Conflict Status — **B135**

Identifies the next escalation level of an equipment in active conflict

System Generated Field. This element is not eligible for Input. Value does not carry forward for Add Back.

Permissible Values for B135

1 Subject to Zero-Rating
2 Subject to Restricted in Interchange
3 Subject to Deletion

NOTES:

- Subject to Zero-Rating, goes into effect 30 days after Conflict Status occurs
- Subject to Restricted in Interchange, goes into effect 90 days after Conflict Status occurs
- Subject to Deletion, goes into effect 365 days after Conflict Status occurs

Notice Indicator — **B137**

Identifies equipment in error in Umler Notice Management

System Generated Field. This element is not eligible for Input.

Conflict Status Next Date — **B062**

The date the conflict status will be escalated

System Generated Field. This element is not eligible for Input. Value does not carry forward for Add Back.

Rate Indicator — **A070** ■

Indicates the rate type applicable to the unit

System Generated Field. Used for Transportation Codes. Affects Rating. This element is not eligible for Input. Does not Carry Forward.

Permissible Values for A070

0 Zero-Rated Due to Conflict Errors
6 Zero-Rated - Scrap (S_,SX), AAR Overage (XA), FRA Overage (YA), Umler Conflict - CHR 1/Tarriff 6007 (XZ). Zero-Rated Private Owner Election to Zero Rate [See Private Zero Rate (B150)].

NOTES:

- If unit is zero-rated, correction of conflicts will reinstate the appropriate rate indicator code.

First Movement Date — **USAT**

The first movement date under the stenciled mark of the equipment

This element is not eligible for Input. Does not Carry Forward.

Equipment Add Company — **B083**

The reporting mark of the company that added the equipment

System Generated Field. This element is not eligible for Input.

Registration Reason — **B174**

The code indicating the reason this equipment is added

Does not Carry Forward.

Permissible Values for B174

A Add-Back
N New
P Pending Restencil
R Restencil

Restencil Program Ind — **B177**

Identifies the equipment is under a restencil program

Permissible Values for B177

Y Yes

Serial Number	A234
Manufacturer's Serial Number	

Range of Values for A234

Minimum	Maximum
1000	999999

Delete Reason Code	B064
A code that designates the reason the equipment has been deleted	

Value does not carry forward for Add Back.

Permissible Values for B064

A Restenciled
D Destroyed or wrecked
L Lease terminated, removed from fleet
P Retired unserviceable beyond economic repair
R Rebuilt
S Sold Serviceable
W Over age retired for dismantling
Y Error, reporting did not exist
Z Other

Specification

Internal Data Logging	B080
EOT Internal Data Logging can plug in a laptop and download multiple fields (ie: locomotive event recorder). The fields include: GPS lat/long, battery voltage, speed, brake pipe pressure, light on/off, emergency valve stat-New	

Permissible Values for B080

Y Yes

ECP Brake Equipped	B347
Indicates whether an EOTD is equipped for ECP type brakes	

Value does not carry forward for Equipment Group Change.

Permissible Values for B347

Y Yes

Equipment Builder	A035
Identifies the original manufacturer of the equipment	✹

Permissible Values for A035

1 QUANTUM
2 GLENAYRE (DSL)
4 PULSE ELEC. INC.
5 WABTEC
7 U.S. & S
8 NOT USED
9 NORFOLK SOUTHERN RWY
B BALDWIN-LIMA-HAMILTON
DPS DPS Electronics
INVS Invensys Rail Corporation
PRMK Progress Rail
SIEM Siemens
UNKN Unknown

Validation Rule for A035

-Equipment Builder must be populated if the Built Date (BLDT) is July 1, 2010 or newer
-Equipment built or rebuilt on or after July 1, 2010 cannot have a Equipment Builder of Unknown
-Equipment with a Built Date (BLDT) on or after July 1, 2010 cannot have an Equipment Builder Code of OWNER RAILROAD.
-Equipment Builder can have a value of MULT only if the equipment has multiple units.

Builder Lot Code	B030
A unique identifier for a group of equipment built by one manufacturer under the same contract	✹

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Validation Rule for B030

-Equipment built or rebuilt on or after June 28, 2012 must have a value for Builder Lot Code

Built Country	B031
The country where the equipment was constructed	

Data is Confidential.

Permissible Values for B031

CA Canada MX Mexico
US United States

Battery Composition	B556
Indicates the type of composition in the internal battery	

Permissible Values for B556

A Lead Acid
P Lithium-Iron Phosphate

NOTES:

- This element is used to identify the battery composition within the EOTD main battery to support shipping and safety requirements.
- All EOTD internal batteries are non-spillable.
- Package shippers require lithium-ion batteries to contain less than 10kg of lithium. All EOTD batteries comply.

GPS Equipped	B557
Indicates the presence of a global positioning device through the following communication method.	

Permissible Values for B557

3G Cellular 3G
4G Cellular 4G
5G Cellular 5G
NE Not Equipped
SA Satellite

Validation Rule for B557

-GPS Equipped cannot be Cellular 3G if Built Date (BLDT) is on or after January 1, 2019

NOTES:

- This element is used to identify whether the device contains cellular and GPS device capabilities. When new cellular technologies are deployed cellular companies plan for older technologies to expire.
- Cellular 2G expired on January 1, 2018, and 3G is planned to expire January 1, 2019.

Radio Wattage	B558
Indicates the device radio transmitter wattage	

Permissible Values for B558

2 2W
5 5W
8 8W

NOTES:

- This element is to identify the radio wattage.

Remote Disable	B559
Indicates the device can be disabled remotely	

Permissible Values for B559

N Not Equipped

Y Yes

NOTES:
- This element is used to identify whether the device is capable of being remotely disabled.

Remote Asset Health Monitoring	B560
Indicates the equipment contains an asset health and status monitoring accessible remotely	

Permissible Values for B560

E Equipped
N Not Equipped

Validation Rule for B560

- If Remote Asset Health Monitoring Equipment is Equipped then GPS Equipped (B557) cannot be Not Equipped.

NOTES:
- This element is used to identify whether the device is capable of remote asset health monitoring, e.g. battery level. Providing battery level enables EOTD Managers to prioritize finding low battery level devices higher than those that are not. Devices with deplenished battery power cannot send GPS pings.

Weight	B561
Total weight of the EOT Device including the air hose in pounds	

Range of Values for B561

Minimum 5
Maximum 45

NOTES:
- Supports improving shipping weights and understanding how much devices weigh for safety
- This element is used to identify the total weight of an EOT device including the air hose

Cost

Original Cost	A184
The original manufacturer selling price	✹

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for A184

Minimum	Maximum
0	9999999

Validation Rule for A184

-Original Cost must be equal to the Ledger Value if there are no Additions & Betterments.
-Original Cost must be equal to the Ledger Value if Additions & Betterments Indicator is not reported.
-Railroad marked freight cars except MISC, LOCO, TRLR, CONT, CHSS, STWH, EOTD, and PSGR are required to have an Original Cost
-Private marked freight cars except MISC, LOCO, TRLR, CONT, CHSS, STWH, EOTD, and PSGR are required to have an Original Cost if Built Date (BLDT) is on or after January 1, 2015

NOTES:
- Original Cost is never altered. It is the cost of the equipment to the original owner.
- For railroad-marked cars, report in US dollars the original ledger value of the original owner For cars rebuilt, report the cost prescribed in MR Interchange Rule 88 and Circular Letter OT-24
- The original cost is used in the settlement of AAR Interchange Rule 107 Office Manual.
- For connected unit cars report the total original cost for all units in the set.
- Numeric, applicable to all railroad-marked cars Also, applicable to privately marked covered hopper (LO) cars.
- Raise all cents to the next dollar, e.g. $5,501.02 = 0005502

Ledger Value	A150
The sum of original cost and additions & betterments	

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for A150

Minimum	Maximum
0	9999999

Validation Rule for A150

-Original Cost must be equal to the Ledger Value if there are no Additions & Betterments.
-Ledger Value must equal the Original Cost (A184) plus the additions & betterments, if Total A&B (A003) has been reported. Otherwise Ledger Value should equal Original Cost (A184).

Total A&B	A003
System generated sum of all reported amounts in A&B Amount (A317), in US dollars	

Data is Confidential. System Generated Field. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for A003

Minimum	Maximum
0	99999999

NOTES:
- For railroad-marked cars, report the sum of all additions and betterments applied to the car. This value is for record keeping purposes only and will not be used to report Ledger Value.
- For private Cars report the additions and betterments as qualified under AAR interchange Rule 107 for determination of settlement value.
  - Additions are costs of all new components applied subsequent to the date the car was built or rebuilt and carried in the capital investment account.
  - Betterments are costs of all improvements of components of existing equipment through the substitution of superior parts for inferior parts subsequent to the date the car was built of rebuilt.
- For connected unit cars report the total Truck Location A for all units in the set

Ind for Pos/Neg Total A&B	A128
A code indicating the positive or negative adjustment to the original cost of the equipment	

Data is Confidential. System Generated Field. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Permissible Values for A128

N Negative P Positive

A&B Pos/Neg Ind	A316
A code indicating the positive or negative adjustment to the individual addition and betterment	

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Permissible Values for A316

N Negative P Positive

Validation Rule for A316

-When entering an individual Addition & Betterment, you must enter a value in all 4 fields.
-The A&B Indicator is required when Additions & Betterments are reported.
-The A&B Indicator must not be reported if Additions & Betterments are not reported.

A&B Amount	A317
The amount of the individual addition and betterment added to or subtracted from the original cost of the equipment	

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for A317

Minimum	Maximum
1	999999

Validation Rule for A317

-When entering an individual addition & betterment; A&B Date Done (A319), A&B Type (A318), A&B Pos/Neg Ind (A316), and A&B Amount (A317) must be reported

A&B Date Done — A319

The date of the individual addition and betterment

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for A319

Minimum	Maximum
1/1/1900	12/31/9999

Validation Rule for A319

-When entering an individual Addition & Betterment, you must enter a value in all 4 fields.

-Addition and Betterment Date Done cannot be earlier than Built Date (BLDT).

-Additions & Betterments Date Done cannot be later than today's date.

A&B Type — A318

The type of individual addition and betterment as defined by Rule 107

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Permissible Values for A318

GNRL General - Capitalized Additions and Betterments

INIT Initial load of historical A&B amount as of Umler 4.6 implementation date

Validation Rule for A318

-For each equipment, only one Individual A&B Type can have a value of INIT.

-When entering an individual Addition & Betterment, you must enter a value in all 4 fields.

Car Management

Pool Number — P001

Unique number used to indicate the grouping of equipment for a particular purpose

Used for Transportation Codes. This element is not eligible for Input. Value does not carry forward for Equipment Group Change / Add Back.

User Routing Instructions — TCUR

The routing instruction reported by the user

Used for Transportation Codes.

Permissible Values for TCUR

2 Trailer Service Rule 2

G Contaminated commodity service

M Mark canceled

O Owner requested return

U Unassigned equipment

NOTES:

- For further explanation reference Appendix E.

Umler Transportation Code — TCOD

The type of assigned service, empty routing or restriction of the equipment

System Generated Field. Used for Transportation Codes. This element is not eligible for Input.

NOTES:

- For further explanation reference Appendix E.

Transportation Cond Code — TCCD

The AAR or FRA interchange restriction code

System Generated Field. Used for Transportation Codes. This element is not eligible for Input.

NOTES:

- For further explanation reference Appendix E.

Mechanical Restriction — TCME

User reported or system generated type of mechanical restriction

Used for Transportation Codes.

Permissible Values for TCME

S Scrap

X AAR Interchange Restriction

NOTES:

- For further explanation reference Appendix D.1

Mech Restriction Reason — TCMR

The explanation of the Mechanical Restriction (TCME)

Used for Transportation Codes.

Permissible Values for TCMR

X Restricted Due to Scrap or Early Warning

Z Restricted Due to Umler Conflict (Not Valid for User Input)

NOTES:

- For further explanation reference Appendix D.2.
- The assignment of the Transportation Codes S_, SX, XA, XZ and YA generate the Rate Indicator Code 6 to the CHARM file to zero (0) rate the car hire and mileage rate.

Miscellaneous

Commercial Owner CIF — B049

The Customer Identification File (CIF) number for a commercial owner at a specific location

Commercial Lessee CIF — B048

The Customer Identification File (CIF) number for a commercial lessee at a specific location

Umler Effective Date — EFDT

The date the rating activity (pre-registration, modification, etc.) is expected to occur

This element is not eligible for Query. Does not Carry Forward.

Validation Rule for EFDT

-Effective Date cannot be set to more than 13 months in the future.

NOTES:

- Effective Date will default to the 1st of the following month that equipment is registered

Inspection

Inspection Date Done — DTDN

The date the inspection was completed; used for all inspection types reported on equipment

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Validation Rule for DTDN

-The inspection date must not be 60 days before the Build Date

Inspection Due Date — INDD

The due date of the next inspection; used for all inspection types reported on equipment

System Generated Field. This element is not eligible for Input. Value does not carry forward for Add Back.

Inspection Performer — PERF

The SCAC that completed the inspection; used for all inspection types reported

on equipment

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Inspection Reporter	REPT
The SCAC that reported the inspection; used for all inspection types reported on equipment	

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Location/SPLC	SPLC
The SPLC of the inspecting location; used for all inspection types reported on equipment	

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Steel Wheel Set

General

Status Code *Mandatory* — **USCD**

Identifies the current operational state ●

Does not Carry Forward.

Permissible Values for USCD

A	ACTIVE	I	INACTIVE
P	PRE-REGISTERED		

NOTES:

- For Restencil and Clone process the initial Status of a car should be Pre-Registered.
- All Add-Back processes should initially set the Status to Pre-Registered
- A Pre-registered car will automatically have its Status changed to Active for the initial change when TRAIN detects three (3) movements on the car
- If the Status changes to Active due to movement and the car was created from a Restencil, the Prior Equipment ID (PRID) or source car will have its status changed to Inactive automatically by Umler

Equipment ID — **0001**

The equipment stenciled number

Validation Rule for 0001

-Equipment Number must not be larger than 6 digits (i.e., 999999)

NOTES:

- Equipment ID includes the mark and number stenciled on the equipment. Marks can be up to 4 characters and number up to 6 digits (i.e., ABCD999999).
- Up to 500 cars can be added or updated in a transaction.
- When adding an equipment record, ensure that Prior Equipment ID (PRID) is reported, unless the equipment is new.

Mechanical Designation *Mandatory* — **UMMD**

Equipment description without physical dimensions ●

Used for Transportation Codes.

Permissible Values for UMMD

ST	Steel Wheel Set

Equipment Type Code — **UMET**

An alpha numeric code that describes the physical attributes of equipment

System Generated Field. This element is not eligible for Input.

NOTES:

- Please Refer to Appendix I for More information Regarding ETC Generation

Built Date *Mandatory* — **BLDT**

The date the construction of the equipment is complete ●

Data is Confidential. Used for Transportation Codes. Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for BLDT

Minimum	Maximum
1/1/1900	12/31/9999

Validation Rule for BLDT

-Built Date must be within the last 99 years

-Built Date must not be in the future for equipment in Active Status

-Prior and target equipment's Built Date (BLDT) must match for restenciling

NOTES:

- Data is public for railroad marked equipment.
- For connected unit cars report the oldest car in the set.

Rebuilt / ILS Date — **RBDT**

The date the re-construction of the equipment is complete

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for RBDT

Minimum	Maximum
1/1/1900	12/31/9999

Validation Rule for RBDT

-Rebuilt/Increased Life Service Date must be after the Built Date (BLDT)

-Rebuilt Date must not be more than 70 years after the Built Date (BLDT)

NOTES:

- Railroad cars -- applicable only to cars meeting status as provided in both STB Accounting Rules, and the AAR Mechanical Interchange Rule 88, Office Manual.
- Private cars -- applicable to all cars meeting AAR Mechanical Interchange Rule 88, Section C, Office Manual and Sections A and B of the Field Manual.
- For connected unit cars report the oldest car in the set. Do not report Rebuilt Date unless car has been approved by the AAR.

Rebuilt Flag — **RBFL**

Identifies the equipment is nearing its end of life cycle

Data is Confidential. System Generated Field. This element is not eligible for Input.

Permissible Values for RBFL

N	No	Y	Yes

Owner *Mandatory* — **UMOW**

Primary reporting mark of the railroad or private company owning the car ●

Value does not carry forward for Single Clone / Multi-Clone / Single Restencil / Multi-Restencil.

NOTES:

- Report the primary reporting mark of the railroad or private company owning the car. When car's lease or lien is held by a bank, trust holder, capital lease company, etc. not having an assigned mark, report the primary reporting mark affiliated with the stenciled reporting mark.

Equipment Group *Mandatory* — **0002**

Identifies the various major car types ● ■

Used for Transportation Codes. Affects Rating.

Lessee — **LESE**

The reporting mark of the company leasing the equipment

Value does not carry forward for Single Clone / Multi-Clone / Single Restencil / Multi-Restencil.

Validation Rule for LESE

-Umler Owner (UMOW) and Lessee are not allowed to be equal

NOTES:

- In order to assign privately marked cars to a pool, a railroad reporting mark must be reported.

Maintenance Party — **MNPT**

The parent reporting mark of the company responsible for the maintenance and repairs of the equipment

Does not Carry Forward.

Mark Owner Category — **B201**

The company that owns the stenciled mark on the car

System Generated Field. This element is not eligible for Input. Value does not carry forward for Single Restencil / Multi-Restencil / Equipment Group Change / Add Back.

Permissible Values for B201

B	US Private
C	Canadian Private
F	Foreign Private
H	Canadian Class II

I	Canadian Class I
J	Mexican Class I
K	Canadian Class III
M	Mexican Private
N	US Private Steamship
O	Canadian Private Steamship
P	Mexican Private Steamship
Q	Foreign Private Steamship
R	US Class II Railroad
U	US Class I Railroad
V	US Class III Railroad
W	Mexican Class II Railroad
Y	Mexican Class III Railroad

NOTES:

- This value is stored in the Umler Database for informational purposes and is retrieved from the Roadmark Registry.

Prior Equipment ID — **PRID**

The previous reporting mark and number of the equipment

Value does not carry forward for Single Clone / Multi-Clone.

Validation Rule for PRID

-Prior and target equipment's Built Date (BLDT) must match

-The Prior Equipment ID (0001) must belong to the same or comparable Equipment Group (0002) as the current car initial and number

NOTES:

- Prior ID enables equipment records to share the same historical lineage. Equipment Identification Number (EIN) is a generated id that enables these equipment records to share inspections and transaction history.

Last Update Date — **B122**

Date of the last Umler element change

System Generated Field. This element is not eligible for Input.

Equipment Add Date — **B082**

Date the reporting mark and number was added to the Umler system

System Generated Field. This element is not eligible for Input.

Status Change Reason — **USCR**

Identifies the reason for the current operational state

System Generated Field. This element is not eligible for Input. Does not Carry Forward.

Permissible Values for USCR

I	Initial Load
M	Movement
O	Status Changed Manually
R	Restencil

NOTES:

- If movement is detected on equipment, status is changed to Active.
- If an equipment record is changed to Active, any prior equipment record is placed in Inactive status.

Status Change Date — **USCT**

Identifies the effective date of the current operational state

System Generated Field. This element is not eligible for Input. Does not Carry Forward.

Equipment Identification — **EINN**

Unique equipment identifier regardless of stenciled mark

System Generated Field. This element is not eligible for Input.

NOTES:

- Specify the Prior ID (PRID) on equipment records to ensure the historical lineage is preserved. Equipment with the same EIN share history and inspections.

Conflict Status — **B050**

Identifies the escalation level of equipment in active conflict

System Generated Field. This element is not eligible for Input. Value does not carry forward for Add Back.

Permissible Values for B050

1	Subject to Zero-Rating
2	Subject to Restricted in Interchange
3	Subject to Deletion

NOTES:

- Subject to Zero-Rating, goes into effect 30 days after Conflict Status occurs
- Subject to Restricted in Interchange, goes into effect 90 days after Conflict Status occurs
- Subject to Deletion, goes into effect 365 days after Conflict Status occurs

Date of Original Conflict — **B063**

The date the equipment was originally placed in the current conflict

System Generated Field. This element is not eligible for Input.

Next Conflict Status — **B135**

Identifies the next escalation level of an equipment in active conflict

System Generated Field. This element is not eligible for Input. Value does not carry forward for Add Back.

Permissible Values for B135

1	Subject to Zero-Rating
2	Subject to Restricted in Interchange
3	Subject to Deletion

NOTES:

- Subject to Zero-Rating, goes into effect 30 days after Conflict Status occurs
- Subject to Restricted in Interchange, goes into effect 90 days after Conflict Status occurs
- Subject to Deletion, goes into effect 365 days after Conflict Status occurs

Notice Indicator — **B137**

Identifies equipment in error in Umler Notice Management

System Generated Field. This element is not eligible for Input.

Conflict Status Next Date — **B062**

The date the conflict status will be escalated

System Generated Field. This element is not eligible for Input. Value does not carry forward for Add Back.

Rate Indicator — **A070** ■

Indicates the rate type applicable to the unit

System Generated Field. Used for Transportation Codes. Affects Rating. This element is not eligible for Input. Does not Carry Forward.

Permissible Values for A070

0	Zero-Rated Due to Conflict Errors
6	Zero-Rated - Scrap (S_,SX), AAR Overage (XA), FRA Overage (YA), Umler Conflict - CHR 1/Tarriff 6007 (XZ). Zero-Rated Private Owner Election to Zero Rate [See Private Zero Rate (B150)].

NOTES:

- If unit is zero-rated, correction of conflicts will reinstate the appropriate rate indicator code.

First Movement Date — **USAT**

The first movement date under the stenciled mark of the equipment

This element is not eligible for Input. Does not Carry Forward.

Equipment Add Company B083

The reporting mark of the company that added the equipment

System Generated Field. This element is not eligible for Input.

Registration Reason B174

The code indicating the reason this equipment is added

Does not Carry Forward.

Permissible Values for B174

A	Add-Back	N	New
P	Pending Restencil	R	Restencil

Restencil Program Ind B177

Identifies the equipment is under a restencil program

Permissible Values for B177

Y Yes

Delete Reason Code B064

A code that designates the reason the equipment has been deleted

Value does not carry forward for Add Back.

Permissible Values for B064

A	Restenciled
D	Destroyed or wrecked
L	Lease terminated, removed from fleet
P	Retired unserviceable beyond economic repair
R	Rebuilt
S	Sold Serviceable
W	Over age retired for dismantling
Y	Error, reporting did not exist
Z	Other

Weight

Tare Weight *Mandatory* A259

The equipment weight on rail when empty, sometimes referred to as Light Weight, reported in pounds ● ■

Affects Rating.

Range of Values for A259

Minimum	Maximum
9000	15000

NOTES:

- Do not report an average Tare Weight for car series, except for Pre-Registered cars
- When cars are made active, the actual Tare Weight must be recorded

Weighing Status *Mandatory* A289

Indicates the weight information is an estimate or an actual measurement ●

Value does not carry forward for Single Clone / Multi-Clone.

Permissible Values for A289

A Actual E Estimated

Validation Rule for A289

-When Status Code changes to Active or Inactive Weighing Status must be reported as Actual (A) or Verified (V) within 60 days of Status Code change

Dimension

Height of Bogey *Mandatory* A120

Height Of Bogie ●

Displayed in feet and inches on the Web. Stored in inches.

Range of Values for A120

Minimum	Maximum
2 ft 6 inches	5 ft 0 inches

Specification

Truck Count B256

The total number of trucks on the equipment

System Generated Field. This element is not eligible for Input.

Range of Values for B256

Minimum	Maximum
1	1

Axle Count *Mandatory* A024

The total number of axles on the equipment ●

Range of Values for A024

Minimum	Maximum
2	999

Validation Rule for A024

-Axle Count for an articulated car must be greater than or equal to ((Connected Unit Count x 2) + 2)

-Axle Count for a draw bar connected car must be greater than or equal to (Connected Unit Count x 4)

Wheel Bearing Type *Mandatory* B191

Indicates the wheel bearing code for the equipment ●

Permissible Values for B191

P Plain R Roller

Validation Rule for B191

-Cars with Plain Bearings will have a Transportation Code (TCOD) and Transportation Condition Code (TCCD) of either YA, S_, SX, or XJ

-Equipment cannot have Plain Bearings if Built Date (BLDT) is on or after January 1, 1993

Brake Shoe Type *Mandatory* B026

Indicates the type of brake shoe on the equipment ●

Permissible Values for B026

C	Tread Conditioning
H	High Friction Composite
L	Low Friction Composite/Cast Iron

Non-Rail Connector Eqpd B295

Bogey Coupler Equipped ▲

Used in ETC Generation.

Permissible Values for B295

Y Yes

CC Side Bearing Type A146

Indicates the travel range of the constant contact side bearings installed on the equipment

Permissible Values for A146

LC	Long Travel Constant Contact
SC	Short Travel Constant Contact

Empty/Load Device Eqpd B075

Indicates a system that determines if the equipment is empty or loaded, and then varies the braking forces accordingly

Permissible Values for B075

Y Yes

Remote Monitoring Device B176

Indicates the equipment is equipped with a location monitoring device

Permissible Values for B176

Y Yes

Intermediate Conn Style	B115
Indicates the method by which two or more pieces of equipment are connected	

Permissible Values for B115

A Articulated Connector
D Drawbar Connector

Validation Rule for B115

-Intermediate Connector Style is required for multi-unit equipment
-Intermediate Connector Style must not be reported for single unit equipment

Equipment Builder	A035
Identifies the original manufacturer of the equipment	✹

Permissible Values for A035

2	GLENAYRE (DSL)
3	GLENAYRE
4	PULSE ELEC. INC.
5	WABTEC
6	HARMON
7	U.S. & S
8	NOT USED
9	NORFOLK SOUTHERN RWY
ABB	Asea Brown Bavari
ACC	American Crane Company
ACCI	Accurate Industries
ACF	American Car & Foundry
ACFX	ACF Industries
ALCC	Alloy Crafts Company
ALCO	American Locomotive Company
ALGE	Alco-GE
ALST	Alstom
ALTN	Altoona
ALWO	Alco-Worthington
ARI	ARI Industries
B	BALDWIN-LIMA-HAMILTON
BERW	Berwick Forge
BETH	Bethlehem Car Works
BL	Boise Locomotive
BLH	Baldwin Lima Hamilton
BLW	Baldwin Locomotive Works
BOMB	Bombardier
BRIL	Brill
BRKS	Brooks Locomotive Works
BS	Barney & Smith
BSP	Bethlehem Steel Corporation
BUDD	Ed G Budd Company
BURR	Burro Crane Works
C	BALDWIN-LOCOMOTIVE CO.
CAN	Canadian Car
CFF	Canadian Car & Foundry
CHIN	Chinese builders (various)
CLC	Canadian Locomotive Company
CLW	Climax Locomotive Works
CN	Canadian National
CNCF	Carros De Ferrocarril, SA
CNR	Canadian National Railway
CONC	Concarrill
CPR	Canadian Pacific
CRMX	Colorado Railcar Manufacturing
CSXR	CSX Remanufacture
D	BOMBARDIER
DARB	Darby
DAV	Davenport Locomotive Company
DETR	Detroit Car Works
DIFC	Difco
DSL	Davies Ship Building
E	CANADIAN GENERAL ELECTRIC
EASX	East Rail Car Division
EMAB	ElectroMotive Diesel - Asea Brown Bavari
EMC	ElectroMotive Corporation
EMD	ElectroMotive Diesel
ETIS	QUANTUM
EVAN	Evans Products
F	CANADIAN LOCOMOTIVE CO.
FCA	Freight Car America
FGRW	FRTGRW
FM	Fairbanks Morse
FMC	FMC Corporation
FRCE	Freight Car Engineering
FREU	Freuhauf Corporation
G	DAVENPORT LOCOMOTIVE CO.
GATX	General American Transportation Corp
GE	General Electric
GEC	GEC Alsthom
GENS	General Steel
GLOB	Global Lot
GMB	Greenbrier
GMDD	General Motors Diesel Division
GREX	Georgetown Rail Equipment Company
GROV	Grove
GSC	Greenville Steel Car
GSWI	Gunderson Southwest Inc
GULF	Gulf Railcar
GUN4	Gunderson - Trenton Works
GUND	Gunderson Inc
GUNM	Gunderson - Mexico
H	ELECTRO-MOTIVE DIVISION, GENERAL MOTORS CORP.
HAMB	Hamburg Fab Shop
HARS	Harsco
HB	Haskell & Baker
HEIS	Heisler Locomotive Works
HIIX	Hamburg
HPA	HPA Monon Corporation
HST	Hawker Siddeley
HYUN	Hyundai
I	FAIRBANKS MORSE
IBH	Industrial Brown Hoist
ICC	International Car Company
ICG	Interglobal Capital
IR	Ingersoll Rand
J	GENERAL ELECTRIC
JAC	Johnstown America Corporation
JACK	Jackson Equipment Company
JLW	Juniata Locomotive Works
JORD	Jordan Machine Works
JS	Jackson & Sharp
K	GENERAL ELECTRIC AGUASCALIENTES
KASG	Kasgro Railcar
KM	Krauss Maffei
KRCA	Kawasaki Railcar America
L	GENERAL ELECTRIC DE BRAZIL
LAVE	Lavelin
LH	Lima-Hamilton
LIMA	Lima Locomotive Works
LOCO	AMERICAN LOCOMOTIVE CO.
LOX	Lox Equipment Company
M	GENERAL MOTORS-DIESEL DIV. CANADA
MCDW	McDowell Wellman
MILW	CMSTP & P Railroad
MK	Morrison-Knudson
MLW	Montreal Locomotive Works
MRCD	Millennium Railcar, Dome Division
MRNE	Marine Industries
N	GENERAL MOTORS-DIESEL DIV.
NACC	North American Car

NIPP	Nippon-Sharyo
NRE	National Railway Equipment
NSC	National Steel Car
O	J.G. BRILL CO.
OB	Osgood Bradley Car Company
ORTN	Ortner
P	KRAUSS-MAFFEI, A.G.
PCF	Pacific Car & Foundry
PCM	Pullman Car & Manufacturing
PLAS	Plasser America
PLC	Paducah Locomotive Company
PORT	Porter Locomotive Company
PORW	Thrall-Winder
PRAT	Pratt Enterprises
PRO	Procor Limited
PS	Pullman-Standard
PSCC	Pressed Steel Car Company
PSP	Pullman-Standard, Division of Trinity Industries
PT	Plasser & Theurer
Q	LIMA-HAMILTON
R	MORRISON-KNUDSEN
RCC	Raceland Car Corporation
REBD	Reilly Beard
RELC	Relco
RICH	Richmond Locomotive Works
ROAN	Roanoke Shops
ROTA	Rota Car Company
RP	RailPower
RTCX	Richmond Tank Car
RUSS	Russian builders (various)
S	MONTREAL LOCOMOTIVE WORKS
SCM	Standard Car Manufacturing
SIEM	Siemens
SLC	Saint Louis Car Company
SRSC	Springfield Railcar
SSCC	Standard Steel Car Company
T	PLYMOUTH LOCOMOTIVE WORKS
TA	Transit America
TERX	Terex Corporation
THR	Thrall Car Service Parts
THR4	Thrall - Cartersville
THRL	Thrall
TLGA	Talgo America
TRAN	Tranzrail
TRIN	Trinity
TRIS	Trinity - Springfield MO
TRIX	Trinity Mexico
U	H.J.POTTER
UNAM	United America
UNKN	Unknown
UTLX	Union Tank Car
V	OWNER RAILROAD
VENT	Ventrns
VULC	Vulcan Locomotive Works
W	WHITECOMP LOCOMOTIVE WORKS
WABN	Wabash National
WAG	Wagner Car Company
X	PEORIA LOCOMOTIVE WORKS
Y	REPUBLIC LOCOMOTIVES

Validation Rule for A035

-Equipment built or rebuilt on or after July 1, 2010 cannot have a Equipment Builder of Unknown

-Equipment with a Built Date (BLDT) on or after July 1, 2010 cannot have an Equipment Builder Code of OWNER RAILROAD

-Equipment Builder can have a value of MULT only if the equipment has multiple units

Builder Lot Code — B030

A unique identifier for a group of equipment built by one manufacturer under the same contract ✹

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Validation Rule for B030

-Equipment built or rebuilt on or after June 28, 2012 must have a value for Builder Lot Code

Built Country — B031

The country where the equipment was constructed

Data is Confidential.

Permissible Values for B031

CA	Canada	MX	Mexico
US	United States		

Rebuilt Country — B170

The country where the equipment was re-constructed

Permissible Values for B170

CA	Canada	MX	Mexico
US	United States		

Cost

Original Cost — A184

The original manufacturer selling price ✹

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for A184

Minimum	Maximum
0	999999

Validation Rule for A184

-Original Cost must be equal to the Ledger Value if there are no Additions & Betterments.

-Original Cost must be equal to the Ledger Value if Additions & Betterments Indicator is not reported.

-Railroad marked freight cars except MISC, LOCO, TRLR, CONT, CHSS, STWH, EOTD, and PSGR are required to have an Original Cost

-Private marked freight cars except MISC, LOCO, TRLR, CONT, CHSS, STWH, EOTD, and PSGR are required to have an Original Cost if Built Date (BLDT) is on or after January 1, 2015

NOTES:

- Original Cost is never altered. It is the cost of the equipment to the original owner.
- For railroad-marked cars, report in US dollars the original ledger value of the original owner For cars rebuilt, report the cost prescribed in MR Interchange Rule 88 and Circular Letter OT-24
- The original cost is used in the settlement of AAR Interchange Rule 107 Office Manual.
- For connected unit cars report the total original cost for all units in the set.
- Numeric, applicable to all railroad-marked cars Also, applicable to privately marked covered hopper (LO) cars.
- Raise all cents to the next dollar, e.g. $5,501.02 = 0005502

Ledger Value — A150

The sum of original cost and additions & betterments

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for A150

Minimum	Maximum
0	999999

Validation Rule for A150

-Original Cost must be equal to the Ledger Value if there are no Additions & Betterments.

-Ledger Value must equal the Original Cost (A184) plus the additions & betterments, if Total A&B (A003) has been reported. Otherwise Ledger Value should equal Original Cost (A184).

Total A&B — **A003**

System generated sum of all reported amounts in A&B Amount (A317), in US dollars

Data is Confidential. System Generated Field. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for A003

Minimum	Maximum
0	99999999

NOTES:

- For railroad-marked cars, report the sum of all additions and betterments applied to the car. This value is for record keeping purposes only and will not be used to report Ledger Value.
- For private Cars report the additions and betterments as qualified under AAR interchange Rule 107 for determination of settlement value.
  - Additions are costs of all new components applied subsequent to the date the car was built or rebuilt and carried in the capital investment account.
  - Betterments are costs of all improvements of components of existing equipment through the substitution of superior parts for inferior parts subsequent to the date the car was built of rebuilt.
- For connected unit cars report the total Truck Location A for all units in the set

Ind for Pos/Neg Total A&B — **A128**

A code indicating the positive or negative adjustment to the original cost of the equipment

Data is Confidential. System Generated Field. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Permissible Values for A128

N Negative P Positive

A&B Pos/Neg Ind — **A316**

A code indicating the positive or negative adjustment to the individual addition and betterment

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Permissible Values for A316

N Negative P Positive

Validation Rule for A316

-When entering an individual Addition & Betterment, you must enter a value in all 4 fields.

-The A&B Indicator is required when Additions & Betterments are reported.

-The A&B Indicator must not be reported if Additions & Betterments are not reported.

A&B Amount — **A317**

The amount of the individual addition and betterment added to or subtracted from the original cost of the equipment

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for A317

Minimum	Maximum
1	999999

Validation Rule for A317

-When entering an individual addition & betterment; A&B Date Done (A319), A&B Type (A318), A&B Pos/Neg Ind (A316), and A&B Amount (A317) must be reported

A&B Date Done — **A319**

The date of the individual addition and betterment

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for A319

Minimum	Maximum
1/1/1900	12/31/9999

Validation Rule for A319

-When entering an individual Addition & Betterment, you must enter a value in all 4 fields.

-Addition and Betterment Date Done cannot be earlier than Built Date (BLDT).

-Additions & Betterments Date Done cannot be later than today's date.

A&B Type — **A318**

The type of individual addition and betterment as defined by Rule 107

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Permissible Values for A318

GNRL General - Capitalized Additions and Betterments

INIT Initial load of historical A&B amount as of Umler 4.6 implementation date

Validation Rule for A318

-For each equipment, only one Individual A&B Type can have a value of INIT.

-When entering an individual Addition & Betterment, you must enter a value in all 4 fields.

Car Management

Pool Number — **P001**

Unique number used to indicate the grouping of equipment for a particular purpose ■

Used for Transportation Codes. Affects Rating. This element is not eligible for Input. Value does not carry forward for Equipment Group Change / Add Back.

User Routing Instructions — **TCUR**

The routing instruction reported by the user

Used for Transportation Codes.

Permissible Values for TCUR

2 Trailer Service Rule 2

G Contaminated commodity service

M Mark canceled

O Owner requested return

U Unassigned equipment

NOTES:

- For further explanation reference Appendix E.

Umler Transportation Code — **TCOD**

The type of assigned service, empty routing or restriction of the equipment

System Generated Field. Used for Transportation Codes. This element is not eligible for Input.

NOTES:

- For further explanation reference Appendix E.

Transportation Cond Code — **TCCD**

The AAR or FRA interchange restriction code

System Generated Field. Used for Transportation Codes. This element is not eligible for Input.

NOTES:

- For further explanation reference Appendix E.

Mechanical Restriction — **TCME**

User reported or system generated type of mechanical restriction

Used for Transportation Codes.

Permissible Values for TCME

S Scrap

X AAR Interchange Restriction

Y FRA Interchange Prohibited

NOTES:
- For further explanation reference Appendix D.1

Mech Restriction Reason	TCMR
The explanation of the Mechanical Restriction (TCME)	

Used for Transportation Codes.

Permissible Values for TCMR

A	Restricted Due to Age (Over 40-AAR, Over 50-FRA)
B	Restricted Due to Air Brakes
C	Restricted Due to Axles
D	Restricted Due to Couplers and Couplers Parts
F	Restricted Due to Couplers Yokes
G	Restricted Due to Draft Gears
J	Restricted Due to Journal Bearing and Journal Lubrication
N	Restricted Due to Trucks
P	Restricted Due to Truck Side Frames
T	Restricted Due to Trucks Bolsters
U	Restricted by AAR or Owner
W	Restricted Due to Wheels
X	Restricted Due to Scrap or Early Warning
Z	Restricted Due to Umler Conflict (Not Valid for User Input)

NOTES:
- For further explanation reference Appendix D.2.
- The assignment of the Transportation Codes S_, SX, XA, XZ and YA generate the Rate Indicator Code 6 to the CHARM file to zero (0) rate the car hire and mileage rate.

Sys Gen Routing Inst	TCGR
The routing instruction generated by the system	■

System Generated Field. Used for Transportation Codes. Affects Rating. This element is not eligible for Input.

NOTES:
- For further explanation reference Appendix E.5.

Truck Components

Axle Spacing Distance	B020
The distance between axle centers on the same truck	

Permissible Values for B020

53	53 Inches
54	54 Inches
55	55 Inches
60	60 Inches
61	61 Inches
62	62 Inches
63	63 Inches
64	64 Inches
65	65 Inches
68	68 Inches
70	70 Inches
71	71 Inches
72	72 Inches
73	73 Inches
74	74 Inches
76	76 Inches
78	78 Inches
99	Axle Space Unknown

Truck Axle Count	B252
The number of axles per truck	

Range of Values for B252

Minimum	Maximum
1	2

Journal Size	A147
The size of the journal bearing	

Permissible Values for A147

A	3-3/4 X 7	B	4-1/4 X 8	C	5 X 9
D	5-1/2 X 10	E	6X11	F	6-1/2 X 12
G	7 X 12	H	7 X 14	K	6-1/ 2X 9
M	7 X 9				

Validation Rule for A147

-4-axle equipment with Journal Size B and Star Code (A247) is not populated, must have Gross Rail Load (A266) of 103,000 lbs.

-Journal Size B (4 1/4 x 8) requires a Gross Weight of 154,000 lbs. for 6-axle cars unless the car is Star Coded

-4-axle equipment with Journal Size C and Star Code (A247) is not populated, must have Gross Rail Load (A266) of 142,000 lbs.

-Journal Size C (5 x 9) requires a Gross Weight of 213,000 lbs. for 6-axle cars unless the car is Star Coded

-4-axle equipment with Journal Size D and Star Code (A247) is not populated, must have Gross Rail Load (A266) of 177,000 lbs.

-Journal Size D (5 1/2 x 10) requires a Gross Weight of 265,000 lbs. for 6-axle cars unless the car is Star Coded

-4-axle equipment with Journal Size E and Star Code (A247) is not populated, must have Gross Rail Load (A266) of 220,000 lbs.

-Journal Size E (6 x 11) requires a Gross Weight of 179,000 lbs. for 4-axles ETC P---, Q---, V--- cars only (cars with 28 inch wheels) unless the car is Star Coded

-Journal Size E (6 x 11) requires a Gross Weight of 330,000 lbs. for 6-axles

-4-axle equipment with Journal Size F or K, Star Code (A247) is not populated, and Qualification for Increased Gross Rail Load (B344) is not populated, must have Gross Rail Load (A266) of 263,000 lbs.

-4-axle equipment with Journal Size F or K, Star Code (A247) is not populated, and Qualification for Increased Gross Rail Load (B344) of 1 or 2, must have Gross Rail Load (A266) of 286,000 lbs.

-Journal Size F requires a Gross Weight of 394,500 lbs. or 429,000 lbs. for 6-axle cars unless the car is Star Coded.

-4-axle equipment with Journal Size G or M, Star Code (A247) is not populated, and Qualification for Increased Gross Rail Load (B344) is not populated, must have Gross Rail Load (A266) of 315,000 lbs.

-4-axle equipment with Journal Size G, K, or M, Star Code (A247) is not populated, and Qualification for Increased Gross Rail Load (B344) of 1, must have Gross Rail Load (A266) of 286,000 lbs.

-Journal Size G (7 x 12) requires a Gross Weight of 472,000 lbs. for 6-axle cars unless the car is Star Coded

-Journal Size H (7 x 14) requires a Gross Weight of 315,000 lbs. for 4-axle cars unless the car is Star Coded

-Journal Size H (7 x 14) requires a Gross Weight of 472,000 lbs. for 6-axle cars unless the car is Star Coded

-Journal Size I (6 x 11 and 6 1/2 x 12) or J (6 x 11 and 7 x 12) are only applicable to articulated or draw-bar cars

-Journal Size Code M (7 x 9) requires a Gross Weight of 472,000 lbs. for 6-axles

-Unstarred 4 Axle Cars with GRL of 315,000 and no IGRL reported and Unstarred cars with Journal Size of G or M must have a Wheel Size of 38 inches

-Gross Weight must be 394,000 lbs. for 6 -axle cars with Journal Size K

NOTES:
- A, B and C Journal Classes are prohibited in Interchange per Rule 90.B.4

Wheel Diameter	A294
The diameter of the wheels	

Permissible Values for A294

28	28 Inches	30	30 Inches	33	33 Inches
36	36 Inches	38	38 Inches		

Validation Rule for A294

-UnStarred Cars with Gross Weight of 286,000 lbs. and Increased Gross Rail Load of 2 must have a Wheel Diameter of 36 inches

-UnStarred Cars with Gross Weight of 286,000 lbs. and Increased Gross Rail Load of 2 must have a Wheel Diameter of either 36 or 38 inches

-Cars with an Increased Gross Rail Load of 1 and Journal of G or M must have a Wheel Diameter of 38 inches

Stability Device Equipped	B199
Indicates a stability device is present on the truck	

Permissible Values for B199

Y Yes

Miscellaneous

Commercial Owner CIF	B049
The Customer Identification File (CIF) number for a commercial owner at a specific location	

Commercial Lessee CIF	B048
The Customer Identification File (CIF) number for a commercial lessee at a specific location	

Umler Effective Date	EFDT
The date the rating activity (pre-registration, modification, etc.) is expected to occur	

This element is not eligible for Query. Does not Carry Forward.

Validation Rule for EFDT

-Effective Date cannot be set to more than 13 months in the future.

NOTES:

- Effective Date will default to the 1st of the following month that equipment is registered

Inspection

ABT Due Date (Repair Track)	DU13
The due date of the air brake test per AAR Field Manual Rule 3	

System Generated Field. This element is not eligible for Input. Value does not carry forward for Add Back.

ABT 5-8 Year Due Date	DU58
The 5-8 year due date for the air brake test (ABT) after the ABT Due Date (Repair Track)	

System Generated Field. This element is not eligible for Input. Value does not carry forward for Add Back.

Inspection Date Done	DTDN
The date the inspection was completed; used for all inspection types reported on equipment	

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Validation Rule for DTDN

-The inspection date must not be 60 days before the Build Date

Inspection Due Date	INDD
The due date of the next inspection; used for all inspection types reported on equipment	

System Generated Field. This element is not eligible for Input. Value does not carry forward for Add Back.

Inspection Performer	PERF
The SCAC that completed the inspection; used for all inspection types reported on equipment	

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Inspection Reporter	REPT
The SCAC that reported the inspection; used for all inspection types reported on equipment	

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Location/SPLC	SPLC
The SPLC of the inspecting location; used for all inspection types reported on equipment	

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Air Brake Test Device	B523
Indicates the type of test device used to perform the Air Brake Test ✹	

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Permissible Values for B523

A Automatic (Non 4-Pressure)
M Manual
P Automatic (4-Pressure)

Validation Rule for B523

-Air Brake Test Device (B523) must be reported for Air Brake Test inspection reported on or after December 10, 2020

Containers

General

Status Code *Mandatory* — **USCD**

Identifies the current operational state ●

Does not Carry Forward.

Permissible Values for USCD

A	ACTIVE	I	INACTIVE
P	PRE-REGISTERED		

NOTES:

- For Restencil and Clone process the initial Status of a car should be Pre-Registered.
- All Add-Back processes should initially set the Status to Pre-Registered
- A Pre-registered car will automatically have its Status changed to Active for the initial change when TRAIN detects three (3) movements on the car
- If the Status changes to Active due to movement and the car was created from a Restencil, the Prior Equipment ID (PRID) or source car will have its status changed to Inactive automatically by Umler

Equipment ID — **0001**

The equipment stenciled number

Validation Rule for 0001

-Equipment Number must not be larger than 6 digits (i.e., 999999)

NOTES:

- Equipment ID includes the mark and number stenciled on the equipment. Marks can be up to 4 characters and number up to 6 digits (i.e., ABCD999999).
- Up to 500 cars can be added or updated in a transaction.
- When adding an equipment record, ensure that Prior Equipment ID (PRID) is reported, unless the equipment is new.

Mechanical Designation *Mandatory* — **UMMD**

Equipment description without physical dimensions ●

Used for Transportation Codes.

Permissible Values for UMMD

U	Container

Equipment Descriptor *Mandatory* — **B341**

Additional information about the type of equipment used in conjunction with the Mechanical Designation to generate the Equipment Type Code (ETC) for Intermodal Flat, Locomotive, Chassis, Container, and Trailer equipment groups ●

Value does not carry forward for Equipment Group Change.

Permissible Values for B341

UB	General Service Dry Box Container
UBE	Special Equipped (Straight Floor Closed) Container
UBI	Container - Insulated
UBR	Mechanical Refrigerator Container
UFB	Flat Rack/Flat Bed Container
UH	Bulk Hopper Container
UOT	Open Top Container
UTK	Tank Container

Equipment Type Code — **UMET**

An alpha numeric code that describes the physical attributes of equipment

System Generated Field. This element is not eligible for Input.

NOTES:

- Please Refer to Appendix I for More information Regarding ETC Generation

Built Date *Mandatory* — **BLDT**

The date the construction of the equipment is complete ●

Data is Confidential. Used for Transportation Codes. Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for BLDT

Minimum	Maximum
1/1/1900	12/31/9999

Validation Rule for BLDT

-For Trailers, Containers and Chassis, the age of the equipment if not rebuilt cannot be in excess of 50 years from today

-Prior and target equipment's Built Date (BLDT) must match for restenciling

NOTES:

- Data is public for railroad marked equipment.
- For connected unit cars report the oldest car in the set.

Rebuilt / ILS Date — **RBDT**

The date the re-construction of the equipment is complete

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for RBDT

Minimum	Maximum
1/1/1900	12/31/9999

Validation Rule for RBDT

-For Trailers, Containers and Chassis, the Built Date cannot be on or before 25 years before the Rebuilt Date

-For Trailers, Containers and Chassis, the Built Date cannot be on or after the Rebuilt Date

NOTES:

- Railroad cars -- applicable only to cars meeting status as provided in both STB Accounting Rules, and the AAR Mechanical Interchange Rule 88, Office Manual.
- Private cars -- applicable to all cars meeting AAR Mechanical Interchange Rule 88, Section C, Office Manual and Sections A and B of the Field Manual.
- For connected unit cars report the oldest car in the set. Do not report Rebuilt Date unless car has been approved by the AAR.

Rebuilt Flag — **RBFL**

Identifies the equipment is nearing its end of life cycle

Data is Confidential. System Generated Field. This element is not eligible for Input. Does not Carry Forward.

Permissible Values for RBFL

N	No	Y	Yes

Owner *Mandatory* — **UMOW**

Primary reporting mark of the railroad or private company owning the car ●

Value does not carry forward for Single Clone / Multi-Clone / Single Restencil / Multi-Restencil.

NOTES:

- Report the primary reporting mark of the railroad or private company owning the car. When car's lease or lien is held by a bank, trust holder, capital lease company, etc. not having an assigned mark, report the primary reporting mark affiliated with the stenciled reporting mark.

Equipment Group *Mandatory* — **0002**

Identifies the various major car types ● ■

Used for Transportation Codes. Affects Rating.

Lessee — **LESE**

The reporting mark of the company leasing the equipment

Value does not carry forward for Single Clone / Multi-Clone / Single Restencil / Multi-Restencil.

Validation Rule for LESE

-Umler Owner (UMOW) and Lessee are not allowed to be equal

NOTES:

- In order to assign privately marked cars to a pool, a railroad reporting mark must be reported.

Maintenance Party	MNPT
The parent reporting mark of the company responsible for the maintenance and repairs of the equipment	

Does not Carry Forward.

Mark Owner Category	B201
The company that owns the stenciled mark on the car	

System Generated Field. This element is not eligible for Input. Value does not carry forward for Single Restencil / Multi-Restencil / Equipment Group Change / Add Back.

Permissible Values for B201

B	US Private
C	Canadian Private
F	Foreign Private
H	Canadian Class II
I	Canadian Class I
J	Mexican Class I
K	Canadian Class III
M	Mexican Private
N	US Private Steamship
O	Canadian Private Steamship
P	Mexican Private Steamship
Q	Foreign Private Steamship
R	US Class II Railroad
U	US Class I Railroad
V	US Class III Railroad
W	Mexican Class II Railroad
Y	Mexican Class III Railroad

NOTES:

- This value is stored in the Umler Database for informational purposes and is retrieved from the Roadmark Registry.

Prior Equipment ID	PRID
The previous reporting mark and number of the equipment	

Value does not carry forward for Single Clone / Multi-Clone.

Validation Rule for PRID

-Prior and target equipment's Built Date (BLDT) must match

-The Prior Equipment ID (0001) must belong to the same or comparable Equipment Group (0002) as the current car initial and number

NOTES:

- Prior ID enables equipment records to share the same historical lineage. Equipment Identification Number (EIN) is a generated id that enables these equipment records to share inspections and transaction history.

Last Update Date	B122
Date of the last Umler element change	

System Generated Field. This element is not eligible for Input.

Equipment Add Date	B082
Date the reporting mark and number was added to the Umler system	

System Generated Field. This element is not eligible for Input.

Status Change Reason	USCR
Identifies the reason for the current operational state	

System Generated Field. This element is not eligible for Input. Does not Carry Forward.

Permissible Values for USCR

I	Initial Load
M	Movement
O	Status Changed Manually
R	Restencil

NOTES:

- If movement is detected on equipment, status is changed to Active.
- If an equipment record is changed to Active, any prior equipment record is placed in Inactive status.

Status Change Date	USCT
Identifies the effective date of the current operational state	

System Generated Field. This element is not eligible for Input. Does not Carry Forward.

Licensing State/Province	A154
Licensing State / Province	

Permissible Values for A154

AB	Canada-Alberta
AG	Mexico-Aguascalientes
AK	US-Alaska
AL	US-Alabama
AR	US-Arkansas
AZ	US-Arizona
BC	Canada-British Columbia
BJ	Mexico-Baja California
BS	Mexico-Baja California Sur
CA	US-California
CH	Mexico-Chiapas
CI	Mexico-Chihuahua
CL	Mexico-Colima
CO	US-Colorado
CP	Mexico-Campeche
CT	US-Connecticut
CU	Mexico-Coahuila De Zargoza
DC	US-District of Columbia
DE	US-Delaware
DF	Mexico-Districto Federal
DG	Mexico-Durango
EM	Mexico-Estado Mexico
FL	US-Florida
GA	US-Georgia
GJ	Mexico-Guanajuato
GR	Mexico-Guerrero
HG	Mexico-Hidalgo
HI	US-Hawaii
IA	US-Iowa
ID	US-Idaho
IL	US-Illinois
IN	US-Indiana
JA	Mexico-Jalisco
KS	US-Kansas
KY	US-Kentucky
LA	US-Louisiana
MA	US-Massachusetts
MB	Canada-Manitoba
MD	US-Maryland
ME	US-Maine
MH	US-Marshall Islands
MI	US-Michigan
MN	US-Minnesota
MO	US-Missouri
MR	Mexico-Morelos
MS	US-Mississippi
MT	US-Montana
MX	Mexico-Other
NA	Mexico-Nayarit
NB	Canada-New Brunswick
NC	US-North Carolina
ND	US-North Dakota
NE	US-Nebraska

NF	Canada-Newfoundland
NH	US-New Hampshire
NJ	US-New Jersey
NL	Mexico-Nuevo Leon
NM	US-New Mexico
NS	Canada-Nova Scotia
NT	Canada-Northwest Territories
NU	Canada-Nunavut
NV	US-Nevada
NW	Northwest Territory
NY	US-New York
OA	Mexico-Oaxaca
OH	US-Ohio
OK	US-Oklahoma
ON	Canada-Ontario
OR	US-Oregon
PA	US-Pennsylvania
PE	Canada-Prince Edward Island
PQ	Canada-Quebec
PR	US-Puerto Rico
PU	Mexico-Puebla
QA	Mexico-Queratero
QR	Mexico-Quintana Roo
RI	US-Rhode Island
SC	US-South Carolina
SD	US-South Dakota
SI	Mexico-Sinaloa
SK	Canada-Saskatchewan
SL	Mexico-San Luis Potosi
SO	Mexico-Sonora
TA	Mexico-Tabasco
TL	Mexico-Tlaxcala
TM	Mexico-Tamaulipas
TN	US-Tennessee
TX	US-Texas
UT	US-Utah
VA	US-Virginia
VI	US-Virgin Islands
VL	Mexico-Veracruz-Llave
VT	US-Vermont
WA	US-Washington
WI	US-Wisconsin
WV	US-West Virginia
WY	US-Wyoming
XX	Exception (Intl. TOFC/COFC or No License)
YC	Mexico-Yucatan
YK	Canada-Yukon
YT	Canada-Yukon
ZT	Mexico-Zacatecas

Equipment Identification — EINN

Unique equipment identifier regardless of stenciled mark

System Generated Field. This element is not eligible for Input.

NOTES:

- Specify the Prior ID (PRID) on equipment records to ensure the historical lineage is preserved. Equipment with the same EIN share history and inspections.

Conflict Status — B050

Identifies the escalation level of equipment in active conflict

System Generated Field. This element is not eligible for Input. Value does not carry forward for Add Back.

Permissible Values for B050

1	Subject to Zero-Rating
2	Subject to Restricted in Interchange
3	Subject to Deletion

NOTES:

- Subject to Zero-Rating, goes into effect 30 days after Conflict Status occurs
- Subject to Restricted in Interchange, goes into effect 90 days after Conflict Status occurs
- Subject to Deletion, goes into effect 365 days after Conflict Status occurs

Date of Original Conflict — B063

The date the equipment was originally placed in the current conflict

System Generated Field. This element is not eligible for Input.

Next Conflict Status — B135

Identifies the next escalation level of an equipment in active conflict

System Generated Field. This element is not eligible for Input. Value does not carry forward for Add Back.

Permissible Values for B135

1	Subject to Zero-Rating
2	Subject to Restricted in Interchange
3	Subject to Deletion

NOTES:

- Subject to Zero-Rating, goes into effect 30 days after Conflict Status occurs
- Subject to Restricted in Interchange, goes into effect 90 days after Conflict Status occurs
- Subject to Deletion, goes into effect 365 days after Conflict Status occurs

Notice Indicator — B137

Identifies equipment in error in Umler Notice Management

System Generated Field. This element is not eligible for Input.

Conflict Status Next Date — B062

The date the conflict status will be escalated

System Generated Field. This element is not eligible for Input. Value does not carry forward for Add Back.

Rate Indicator — A070

Indicates the rate type applicable to the unit ■

System Generated Field. Used for Transportation Codes. Affects Rating. This element is not eligible for Input. Does not Carry Forward.

Permissible Values for A070

0	Zero-Rated Due to Conflict Errors
1	Units subject to special lease arrangement
6	Zero-Rated - Scrap (S_,SX), AAR Overage (XA), FRA Overage (YA), Umler Conflict - CHR 1/Tarriff 6007 (XZ). Zero-Rated Private Owner Election to Zero Rate [See Private Zero Rate (B150)].

NOTES:

- If unit is zero-rated, correction of conflicts will reinstate the appropriate rate indicator code.

First Movement Date — USAT

The first movement date under the stenciled mark of the equipment

This element is not eligible for Input. Does not Carry Forward.

Equipment Add Company — B083

The reporting mark of the company that added the equipment

System Generated Field. This element is not eligible for Input.

Registration Reason — B174

The code indicating the reason this equipment is added

Does not Carry Forward.

Permissible Values for B174

A	Add-Back	N	New
P	Pending Restencil	R	Restencil

Restencil Program Ind	B177
Identifies the equipment is under a restencil program	

Permissible Values for B177

Y Yes

Delete Reason Code	B064
A code that designates the reason the equipment has been deleted	

Value does not carry forward for Add Back.

Permissible Values for B064

A Restenciled
D Destroyed or wrecked
L Lease terminated, removed from fleet
P Retired unserviceable beyond economic repair
R Rebuilt
S Sold Serviceable
W Over age retired for dismantling
Y Error, reporting did not exist
Z Other

Weight

Gross Rail Load/Weight	A266
The maximum permissible weight on rail of the equipment and the load, reported in pounds	

Range of Values for A266

Minimum	Maximum
4900	94000

Validation Rule for A266

-Container Gross Weight must not exceed 92,500 lbs. for Tank Containers (Equipment Descriptor of UTK)
-Gross Rail Load must be equal to the Load Limit (LDLT) plus the Tare Weight (A259)

NOTES:

- Gross Rail Load must be equal to the Load Limit (LDLT) plus the Tare Weight (A259)
- For connected unit cars report the total gross rail load of the entire set

Use Table 1 below to determine Gross Rail Load, if Qualification for Increased Gross Rail Load (B344) does not exist.

TABLE 1 -

Journal Size	Load per Axle	Gross Rail Load for 4-axle Equipment
B - 4 1/2" x 8"	25,750 lbs.	103,000 lbs.
C - 5" x 9"	35,500 lbs.	142,000 lbs.
D - 5 1/2" x 10"	44,250 lbs.	177,000 lbs.
E - 6" x 11"	55,000 lbs.	220,000 lbs.
F - 6 1/2" x 12"	65,750 lbs.	263,000 lbs.
G - 7" x 12"	78,750 lbs.	315,000 lbs.
K - 6 1/2" x 9"	71,500 lbs.	263,000 lbs.
M - 7" x 9"	78,750 lbs.	315,000 lbs.

Use Table 2 below to determine Gross Rail Load for 4-axle equipment if Qualification for Increased Gross Rail Load (B344) exists.

TABLE 2 -

Qualification for Increased Gross Rail Load (B344)	Journal Size	Gross Rail Load
1	K - 6 1/2" x 9"	286,000 lbs.
1	G – 7" x 12"	286,000 lbs.
1	M – 7" x 9"	286,000 lbs.
2	F - 6 1/2" x 12"	286,000 lbs.
2	K - 6 1/2" x 9"	286,000 lbs.
3	F - 6 1/2" x 12"	268,000 lbs.
3	K - 6 1/2" x 9"	268,000 lbs.

A Gross Rail Load less than the listed or calculated values may be entered; however:

3. Star Code (A247) must be R or S, and
4. Load Limit (LDLT) must also be reduced, ensuring Tare Weight (A259) plus Load Limit (LDLT) equals the reported Gross Rail Load.

For equipment having two or more different journal sizes, see following examples:

Example for Drawbar Connected:
A 5-unit drawbar connected car has 20 axles.
The end units (Locations A and B) each have 4 axles with E - 6" x 11" journals.
The intermediate units (Locations C, D, and E) each have 4 axles with F – 6 1/2" x 12" journals.

- Using TABLE 1, the Gross Rail Load would be:
- 8 ea. E-6" x 11" journal axles X 55,000 lbs. per axle = 440,000 lbs.
- +12 ea. F-6 1/2" x 12" journal axles X 65,750 lbs. per axle = 789,000 lbs. Gross Rail Load = 1,229,000 lbs.

- Example for IFLT & VFLT:
- A 5-unit articulated intermodal car has 6 trucks (12 axles).
- The end trucks (Locations A and B) each have 2 axles with E - 6" x 11" journals.

The intermediate trucks (Locations C, D, E, and F) each have 2 axles with G - 7" x 12" journals.

Using TABLE 1, the Gross Rail Load would be:

4 ea. E-6" x 11" journal axles X 55,000 lbs. per axle =	220,000 lbs.
+ 8 ea. G-7" x 12" journal axles X 78,750 lbs. per axle =	630,000 lbs.
Gross Rail Load =	850,000 lbs.

Tare Weight	A259
The equipment weight on rail when empty, sometimes referred to as Light Weight, reported in pounds	

Range of Values for A259

Minimum	Maximum
600	31000

Validation Rule for A259

-Container Tare Weight must not exceed 19,000 lbs. for Containers other than Tanks (Equipment Descriptor other than UTK)
-Container Tare Weight cannot be greater than 19000 lbs. for all Containers other than Tanks (Equipment Descriptor - not UTK)
-Container Tare Weight cannot be less than 1,000 lbs. for Tank Containers (Equipment Descriptor of UTK)
-Container Tare Weight cannot be greater than 31000 lbs. for Tank Containers (Equipment Descriptor - UTK)
-Container Gross Weight cannot be greater than 92500 lbs. for Tank Containers (Equipment Descriptor - UTK)
-Container Refrigeration Unit Fuel Capacity cannot be greater than 1500 gallons for Mechanical Refrigerator Containers (Equipment Descriptor UBR)
-Container Gallonage Capacity is only applicable to Tanks
-Container Gallonage Capacity is only applicable to Tanks

NOTES:

- Do not report an average Tare Weight for car series, except for Pre-Registered cars
- When cars are made active, the actual Tare Weight must be recorded

Load Limit	LDLT

The maximum permissible weight of the commodity that can be loaded into the equipment, reported in pounds

Range of Values for LDLT

Minimum	Maximum
0	70000

Cubic Feet Capacity A067

The maximum interior cubic feet capacity of the equipment

Range of Values for A067

Minimum	Maximum
200	4500

Validation Rule for A067

-Container Cubic Feet Capacity is not applicable to Tanks and Flats (Equipment Descriptor UFB or UTK)

Gallonage Capacity A297

The number of gallons the equipment will hold

Range of Values for A297

Minimum	Maximum
1500	9000

Dimension

Outside Length *Mandatory* OSLG

The outside length over pulling faces of couplers in normal position ●▲

Used in ETC Generation. Displayed in feet and inches on the Web. Stored in inches.

Range of Values for OSLG

Minimum	Maximum
5 ft 11 inches	57 ft 0 inches

NOTES:

- For connected unit cars report the maximum coupled length of the set.
- Round fraction to the higher inch, e.g., 05 1/4" = 06"

Outside Extreme Width *Mandatory* A186

The outside extreme width of the equipment ●▲

Used in ETC Generation. Displayed in feet and inches on the Web. Stored in inches.

Range of Values for A186

Minimum	Maximum
4 ft 6 inches	8 ft 7 inches

NOTES:

- For connected unit cars report the dimension of the largest unit in the set.
- Round fraction to the higher inch, e.g., 05 1/4" = 06"

Outside Extreme Height *Mandatory* A185

Height from top of rail to extreme projecting height ●▲

Used in ETC Generation. Displayed in feet and inches on the Web. Stored in inches.

Range of Values for A185

Minimum	Maximum
1 ft 0 inches	13 ft 6 inches

Validation Rule for A185

-Container Outside Extreme Height for Tank Containers (Equipment Descriptor of UTK) must be greater than or equal 4 feet

-Container Outside Extreme Height for Tank Containers (Equipment Descriptor of UTK) must be less than or equal 8 feet 6 inches

NOTES:

- For connected unit cars report the dimension of the largest unit in the set.
- Round fraction to the higher inch, e.g., 05 1/4" = 06"

Outside Height Extr Width *Mandatory* A187

The highest point at which the extreme width of the equipment occurs ●

Displayed in feet and inches on the Web. Stored in inches.

Range of Values for A187

Minimum	Maximum
0 ft 8 inches	13 ft 6 inches

Validation Rule for A187

-Outside Height Extreme Width must be less than or equal to Outside Extreme Height

NOTES:

- For connected unit cars report the dimension of the largest unit in the set.
- Round fraction to the higher inch, e.g., 05 1/4" = 06"

Inside Length A135

The inside length of the equipment from end to end inside walls, linings, and permanent bulkheads

Displayed in feet and inches on the Web. Stored in inches.

Range of Values for A135

Minimum	Maximum
5 ft 0 inches	53 ft 0 inches

Validation Rule for A135

-Inside Length must not be greater than Outside Length

-Inside Length/Inside Platform Length must be less than or equal to Outside Length (OSLG)

-Is not applicable to Inside Length/Inside Platform Length for Trailer/Container - Bulk Hopper, Tank or Flat (Mechanical Designation of UH, or UTK)

NOTES:

- Round fraction to the lower inch, e.g., 05 1/4" = 05"
- For connected unit cars report the shortest dimension of a unit in the set.

Inside Width A138

The inside width of the equipment from side walls and linings

Displayed in feet and inches on the Web. Stored in inches.

Range of Values for A138

Minimum	Maximum
4 ft 0 inches	8 ft 4 inches

Validation Rule for A138

-Inside Width/Inside Platform Width must not exceed Outside Extreme Width

-Inside Width/Inside Platform Width must not exceed Outside Extreme Width

-Inside Width/Inside Platform Width is not applicable to Trailer/Container - Tank or Flat (Mechanical Designation of UTK)

NOTES:

- For connected unit cars report the shortest dimension of a unit in the set.

Inside Height A133

The inside height of the equipment from the floor to the top of the side, or to the lowest point of the interior ceiling

Displayed in feet and inches on the Web. Stored in inches.

Range of Values for A133

Minimum	Maximum
1 ft 0 inches	12 ft 6 inches

Validation Rule for A133

-Container Inside Height is only applicable to Containers with Equipment Descriptor other than UFB, UTK, UOT, or UH

-Inside Height must not exceed Outside Extreme Height (A185)

NOTES:

- For connected unit cars report the shortest dimension of a unit in the set.

Deck Height Above Ground B149

Inside Height/Deck Hgt.

Displayed in feet and inches on the Web. Stored in inches.

Range of Values for B149

Minimum	Maximum
1 ft 0 inches	12 ft 6 inches

Validation Rule for B149

-Container Platform Deck Height is only applicable to Flat Rack/Flat Bed Containers (Equipment Descriptor of UFB)

CONT Gooseneck Width B051

For CONT only. The measurement of the width of the container gooseneck tunnel where the gooseneck from the Chassis is inserted. This centers the container to the gooseneck chassis for a more secured transport.-New

Displayed in feet and inches on the Web. Stored in inches.

Door

End Door Type A081

End Door Type

Permissible Values for A081

1 Hinged
2 Overhead/Rollup
3 Other

Validation Rule for A081

-Container End Door Type is not applicable to Bulk Hoppers, Tanks, and Flats (Equipment Descriptor UH, UFB, or UTK)

End Door Width A082

The width of the end door opening in inches

Displayed in feet and inches on the Web. Stored in inches.

Range of Values for A082

Minimum	Maximum
3 ft 0 inches	8 ft 4 inches

Validation Rule for A082

-End Door Width must not be reported if Trailer/Container End Door Type is not reported

-End Door Width requires End Door Type of Trailer/Container with other than 0

-End Door Width is not applicable to Trailer/Container - Bulk Hopper, Tank or Flat (Mechanical Designation of UH, UFB, UTK, ZBH, ZTK, or ZFB)

NOTES:

- Round fraction to the lower inch, e.g., 05 1/4" = 05"
- For connected unit cars report the dimension of the smallest end door width of a unit in the set.

End Door Height A080

The height of the end door opening in inches

Displayed in feet and inches on the Web. Stored in inches.

Range of Values for A080

Minimum	Maximum
5 ft 0 inches	12 ft 6 inches

Validation Rule for A080

-End Door Height must not be reported if End Door Width is not reported

-End Door Height must be reported if End Door Width is reported

-End Door Height must not be reported if Trailer/Container End Door Type is not reported

-End Door Height must be reported if End Door Type of Trailer/Container is reported

-End Door Height is not applicable to a Trailer/Container - Bulk Hopper, Tank or Flat (Mechanical Designation of UH, UFB, UTK, ZBH, ZTK, or ZFB)

NOTES:

- Round fraction to the lower inch, e.g., 05 1/4" = 05"
- For connected unit cars report the dimension of the smallest end door height of a unit in the set.

Specification

Corner Casting A053

Container Corner Casting

Permissible Values for A053

ISO ISO Type Only, Oval Opening 1 1/8 inch bottom wall
MAT Matson Only
OTH Other designs of corner castings
SEA Sea Land Only
USA Includes ASA and ANSI Oval Opening 9/16 inch bottom wall

Stackability Count B055

For CONT only. The maximum number of containers that can be stacked on this container. 0-Not Stackable; 1-8 Stackable-New

Range of Values for B055

Minimum	Maximum
0	8

TRLR/CONT Body Material A031

Body Type TRLR/CONT

Permissible Values for A031

01 Aluminum
04 Combination
18 Stainless Steel
19 Standard Steel
30 Wood
37 PultrusionComposite
38 Fiberglass or Fiberglass Reinforced Material
39 Miscellaneous Material

Validation Rule for A031

-No Body Material (Body/Shell Type) for Flat type Trailer/Containers

-Body Material (Body/Shell Type) can only be reported as C-Pultrued Composite for Equipment Designators of ZVE, ZV, or UB

Frame Type-Center Loading A109

Frame Type-Center Loading

Permissible Values for A109

Y Yes

Validation Rule for A109

-Container Frame Type with Center Loading is only applicable to Tank Containers (Equipment Descriptor of UTK)

Wide Top Picker Frame B248

Container is equipped with wide top picker frame

Permissible Values for B248

Y Yes

Electrical Voltage System A079

Electrical Voltage System

Permissible Values for A079

00 Unused or restricted
06 06 Volts
11 110 Volts
12 12 Volts
22 220 Volts
24 24 Volts
33 330 Volts
44 440 Volts

Validation Rule for A079

-Trailer/Container Electrical Voltage System is only applicable to Equipment Descriptor of UBR, UBI, UBE, ZVR, ZVI, or ZVE

Forward Extension A106

Forward Extension

Value does not carry forward for Single Clone.

Range of Values for A106

Minimum	Maximum
18	60

Validation Rule for A106

-Forward Extension is required for nose mounted refrigeration with Refrigeration Unit Location of Code N

Remote Monitoring Device	B176
Indicates the equipment is equipped with a location monitoring device	

Permissible Values for B176

Y Yes

AEI High Temperature Tag	B006
Indicates the equipment is equipped with a high temperature AEI tag	

Permissible Values for B006

Y High Temperature Tag

Equipment Builder	A035
Identifies the original manufacturer of the equipment ✹	

Permissible Values for A035

ACCI	Accurate Industries
CHIN	Chinese builders (various)
CIPM	Chart Industries, Inc.
HYUN	Hyundai
INOX	INOXCVA
JNS	JINDO SEOUL
NACA	National Alabama Corporation
SING	Singamas
SU	STOUGHTON
UNKN	Unknown

Validation Rule for A035

-Equipment built or rebuilt on or after July 1, 2010 cannot have a Equipment Builder of Unknown

-Equipment with a Built Date (BLDT) on or after July 1, 2010 cannot have an Equipment Builder Code of OWNER RAILROAD.

-Equipment Builder can have a value of MULT only if the equipment has multiple units.

Builder Lot Code	B030
A unique identifier for a group of equipment built by one manufacturer under the same contract ✹	

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Validation Rule for B030

-Equipment built or rebuilt on or after June 28, 2012 must have a value for Builder Lot Code

Built Country	B031
The country where the equipment was constructed	

Data is Confidential.

Permissible Values for B031

CA	Canada	CN	China
CZ	Czech Republic	IN	India
KR	South Korea	MX	Mexico
SG	Singapore	US	United States

Rebuilt Country	B170
The country where the equipment was re-constructed	

Permissible Values for B170

CA	Canada	CN	China
KR	South Korea	MX	Mexico
SG	Singapore	US	United States

Refrig Emission Code	B345
California State Emission standards for refrigeration units	

Value does not carry forward for Single Clone / Multi-Clone.

Permissible Values for B345

N	Not Qualified	Q	Qualified
U	Ultra-Qualified		

Feature

Floor Material	A104
Describes the type of construction material used for the equipment floor	

Permissible Values for A104

01	Aluminum
02	Aluminum (Ribbed)
05	Composite Nailable (considered same as wood
06	Composite Nailable, Reinforced (considered same as wood)
14	Other
19	Standard Steel
23	Steel Nailable (includes alternate wood and steel floor
24	Steel Nailable, Reinforced (includes alternate wood and steel floor
25	Standard Steel, Reinforced
30	Wood
32	Wood, Double
33	Wood, Double, Reinforced
34	Wood Floor with Steel Protective Plates (includes perforated steel)
35	Wood Floor, Reinforced, with Steel Protective Plates (includes perforated steel)
36	Wood Floor, Reinforced

Validation Rule for A104

-Floor Material is not applicable to Bulk Hopper type Containers (Equipment Descriptor of UH)

Floor Anchor Builder	B335
Floor Anchor Builder	

Permissible Values for B335

ABB	Asea Brown Bavari
ACC	American Crane Company
ACCI	Accurate Industries
ACF	American Car & Foundry
ACFX	ACF Industries
ALCC	Alloy Crafts Company
ALCO	American Locomotive Company
ALGE	Alco-GE
ALST	Alstom
ALTN	Altoona
ALWO	Alco-Worthington
ARI	ARI Industries
BERW	Berwick Forge
BETH	Bethlehem Car Works
BL	Boise Locomotive
BLH	Baldwin Lima Hamilton
BLW	Baldwin Locomotive Works
BOMB	Bombardier
BRIL	Brill
BRKS	Brooks Locomotive Works
BS	Barney & Smith
BSP	Bethlehem Steel Corporation
BUDD	Ed G Budd Company
BURR	Burro Crane Works
CAN	Canadian Car
CFF	Canadian Car & Foundry
CHIN	Chinese builders (various)
CLC	Canadian Locomotive Company
CLW	Climax Locomotive Works
CN	Canadian National
CNCF	Carros De Ferrocarril, SA
CNR	Canadian National Railway
CONC	Concarrill
CPR	Canadian Pacific
CRMX	Colorado Railcar Manufacturing

CSXR	CSX Remanufacture
DARB	Darby
DAV	Davenport Locomotive Company
DETR	Detroit Car Works
DIFC	Difco
DSL	Davies Ship Building
EASX	East Rail Car Division
EMAB	ElectroMotive Diesel - Asea Brown Bavari
EMC	ElectroMotive Corporation
EMD	ElectroMotive Diesel
EVAN	Evans Products
FCA	Freight Car America
FGRW	FRTGRW
FM	Fairbanks Morse
FMC	FMC Corporation
FRCE	Freight Car Engineering
FREU	Freuhauf Corporation
GATX	General American Transportation Corp
GE	General Electric
GEC	GEC Alsthom
GENS	General Steel
GLOB	Global Lot
GMB	Greenbrier
GMDD	General Motors Diesel Division
GREX	Georgetown Rail Equipment Company
GROV	Grove
GSC	Greenville Steel Car
GSWI	Gunderson Southwest Inc
GULF	Gulf Railcar
GUN4	Gunderson - Trenton Works
GUND	Gunderson Inc
GUNM	Gunderson - Mexico
HAMB	Hamburg Fab Shop
HARS	Harsco
HB	Haskell & Baker
HEIS	Heisler Locomotive Works
HIIX	Hamburg
HPA	HPA Monon Corporation
HST	Hawker Siddeley
HYUN	Hyundai
IBH	Industrial Brown Hoist
ICC	International Car Company
ICG	Interglobal Capital
IR	Ingersoll Rand
JAC	Johnstown America Corporation
JACK	Jackson Equipment Company
JLW	Juniata Locomotive Works
JORD	Jordan Machine Works
JS	Jackson & Sharp
KASG	Kasgro Railcar
KM	Krauss Maffei
KRCA	Kawasaki Railcar America
LAVE	Lavelin
LH	Lima-Hamilton
LIMA	Lima Locomotive Works
LOX	Lox Equipment Company
MAGR	Magor Car Manufacturing
MCDW	McDowell Wellman
MILW	CMSTP & P Railroad
MK	Morrison-Knudson
MLW	Montreal Locomotive Works
MRCD	Millennium Railcar, Dome Division
MRNE	Marine Industries
NACC	North American Car
NIPP	Nippon-Sharyo
NRE	National Railway Equipment
NSC	National Steel Car
OB	Osgood Bradley Car Company
ORTN	Ortner
PCF	Pacific Car & Foundry
PCM	Pullman Car & Manufacturing
PLAS	Plasser America
PLC	Paducah Locomotive Company
PORT	Porter Locomotive Company
PORW	Thrall-Winder
PRAT	Pratt Enterprises
PRO	Procor Limited
PS	Pullman-Standard
PSCC	Pressed Steel Car Company
PSP	Pullman-Standard, Division of Trinity Industries
PT	Plasser & Theurer
RCC	Raceland Car Corporation
REBD	Reilly Beard
RELC	Relco
RICH	Richmond Locomotive Works
ROAN	Roanoke Shops
ROTA	Rota Car Company
RP	RailPower
RTCX	Richmond Tank Car
RUSS	Russian builders (various)
SCM	Standard Car Manufacturing
SIEM	Siemens
SLC	Saint Louis Car Company
SRSC	Springfield Railcar
SSCC	Standard Steel Car Company
TA	Transit America
TERX	Terex Corporation
THR	Thrall Car Service Parts
THR4	Thrall - Cartersville
THRL	Thrall
TLGA	Talgo America
TRAN	Tranzrail
TRIN	Trinity
TRIS	Trinity - Springfield MO
TRIX	Trinity Mexico
UNAM	United America
UTLX	Union Tank Car
VENT	Ventrns
VULC	Vulcan Locomotive Works
WABN	Wabash National
WAG	Wagner Car Company

Floor Anchor Count **B336**

Floor Anchor Count

Floor Anchor Loc Spacing **B337**

Floor Anchor Location Spacing

Floor Load Rating **B338**

Floor Load Rating

Floor Load PSI **B339**

Floor Load PSI

Floor Drain Equipped **B095**

Indicates the equipment floor has a drain

Permissible Values for B095

Y Yes

Lining Material **A158**

Describes the type of construction material used in the lining of equipment

Permissible Values for A158

03 Cement
07 Composite Wood and Steel
08 Fiberglass
10 Glass
11 Kanigen
12 Metal Clad
13 Metal Spray
16 Rubber
17 Sheet Metal
26 Synthetic
28 Unlined
29 Vinyl
30 Wood

Validation Rule for A158

-Lining Material is not applicable to Flat type Containers (Equipment Descriptor of UFB)

Bulkhead Type B034

Identifies the type of bulkhead attached to the equipment

Permissible Values for B034

F Fixed I Inflatable M Moveable

Belt Rail Equipped B024

Indicates the equipment is belt rail equipped

Permissible Values for B024

Y Yes

Vent Openings B222

Indicates the equipment has vent openings

Permissible Values for B222

Y Yes

Controlled Atmosphere Typ A056

Type Of Controlled Atmosphere

Permissible Values for A056

N Nitrogen Blanket O Oxytrol
T Tectrol U Other Type System

Validation Rule for A056

-Container Controlled Atmosphere Type is only applicable to Mechanical Refrigerator Containers (Equipment Descriptor of UBR)
-Controlled Atmosphere Type is only applicable to Refrigerator type Trailer/Containers

Refrigeration Fuel Type A207

Type of fuel used in the refrigeration unit

Permissible Values for A207

B Butane D Diesel G Gasoline
M Other type N Nitrogen P Propane

Validation Rule for A207

-Refrigeration Fuel Type required when Refrigeration System Builder is supplied

Refrigeration Level B172

Describes the level of refrigeration to be used within the equipment

Permissible Values for B172

F Zero Only (Frozen)
N Non-Frozen
W Wide Range (Frozen to Non-Frozen)

Refrigeration Unit Loc A221

Refrigeration Unit Location

Permissible Values for A221

N Nose or Front Mounting
P Pod Mounting
S Side Mounting
U Under of Belly Mounting

Validation Rule for A221

-Container Refrigeration Unit Location with I (Interior Mounting) is only applicable to Mechanical Refrigerator Containers (Equipment Descriptor of UBR)
-Refrigeration Unit Location required when Refrigeration System Builder is supplied

Refrigerator Fuel Cap A222

Refrigerator Fuel Capacity

Range of Values for A222

Minimum	Maximum
10	1500

Validation Rule for A222

-Container Refrigeration Unit Fuel Capacity must not exceed 250 gallons for Containers except Mechanical Refrigerator Containers (Equipment Descriptor other than UBR)

Refrigerator System Bldr A223

Refrigerator System Manufacturer

Permissible Values for A223

C Carrier-Transicold
F Trane-Artic Traveler
M Other
P Polarstream
T Thermo-King
W Worthington-York

Cost

Original Cost A184 ✹

The original manufacturer selling price

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for A184

Minimum	Maximum
0	999999

Validation Rule for A184

-Original Cost must be equal to the Ledger Value if there are no Additions & Betterments.
-Original Cost must be equal to the Ledger Value if Additions & Betterments Indicator is not reported.
-Railroad marked freight cars except MISC, LOCO, TRLR, CONT, CHSS, STWH, EOTD, and PSGR are required to have an Original Cost
-Private marked freight cars except MISC, LOCO, TRLR, CONT, CHSS, STWH, EOTD, and PSGR are required to have an Original Cost if Built Date (BLDT) is on or after January 1, 2015

NOTES:

- Original Cost is never altered. It is the cost of the equipment to the original owner.
- For railroad-marked cars, report in US dollars the original ledger value of the original owner For cars rebuilt, report the cost prescribed in MR Interchange Rule 88 and Circular Letter OT-24
- The original cost is used in the settlement of AAR Interchange Rule 107 Office Manual.
- For connected unit cars report the total original cost for all units in the set.
- Numeric, applicable to all railroad-marked cars Also, applicable to privately marked covered hopper (LO) cars.
- Raise all cents to the next dollar, e.g. $5,501.02 = 0005502

Ledger Value A150

The sum of original cost and additions & betterments

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for A150

Minimum	Maximum
0	999999

Validation Rule for A150

-Original Cost must be equal to the Ledger Value if there are no Additions & Betterments.

-Ledger Value must equal the Original Cost (A184) plus the additions & betterments, if Total A&B (A003) has been reported. Otherwise Ledger Value should equal Original Cost (A184).

Total A&B — A003

System generated sum of all reported amounts in A&B Amount (A317), in US dollars

Data is Confidential. System Generated Field. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for A003

Minimum	Maximum
0	99999999

NOTES:

- For railroad-marked cars, report the sum of all additions and betterments applied to the car. This value is for record keeping purposes only and will not be used to report Ledger Value.
- For private Cars report the additions and betterments as qualified under AAR interchange Rule 107 for determination of settlement value.
  - Additions are costs of all new components applied subsequent to the date the car was built or rebuilt and carried in the capital investment account.
  - Betterments are costs of all improvements of components of existing equipment through the substitution of superior parts for inferior parts subsequent to the date the car was built of rebuilt.
- For connected unit cars report the total Truck Location A for all units in the set

Ind for Pos/Neg Total A&B — A128

A code indicating the positive or negative adjustment to the original cost of the equipment

Data is Confidential. System Generated Field. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Permissible Values for A128

N Negative P Positive

A&B Pos/Neg Ind — A316

A code indicating the positive or negative adjustment to the individual addition and betterment

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Permissible Values for A316

N Negative P Positive

Validation Rule for A316

-When entering an individual Addition & Betterment, you must enter a value in all 4 fields.

-The A&B Indicator is required when Additions & Betterments are reported.

-The A&B Indicator must not be reported if Additions & Betterments are not reported.

A&B Amount — A317

The amount of the individual addition and betterment added to or subtracted from the original cost of the equipment

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for A317

Minimum	Maximum
1	999999

Validation Rule for A317

-When entering an individual addition & betterment; A&B Date Done (A319), A&B Type (A318), A&B Pos/Neg Ind (A316), and A&B Amount (A317) must be reported

A&B Date Done — A319

The date of the individual addition and betterment

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for A319

Minimum	Maximum
1/1/1900	12/31/9999

Validation Rule for A319

-When entering an individual Addition & Betterment, you must enter a value in all 4 fields.

-Addition and Betterment Date Done cannot be earlier than Built Date (BLDT).

-Additions & Betterments Date Done cannot be later than today's date.

A&B Type — A318

The type of individual addition and betterment as defined by Rule 107

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Permissible Values for A318

CONT Containers (metal, rubber, or combination metal/rubber)
GNRL General - Capitalized Additions and Betterments
INIT Initial load of historical A&B amount as of Umler 4.6 implementation date

Validation Rule for A318

-For each equipment, only one Individual A&B Type can have a value of INIT.

-When entering an individual Addition & Betterment, you must enter a value in all 4 fields.

Car Management

Pool Number — P001

Unique number used to indicate the grouping of equipment for a particular purpose

Used for Transportation Codes. This element is not eligible for Input. Value does not carry forward for Equipment Group Change / Add Back.

User Routing Instructions — TCUR

The routing instruction reported by the user

Used for Transportation Codes.

Permissible Values for TCUR

2 Trailer Service Rule 2
G Contaminated commodity service
M Mark canceled
O Owner requested return
U Unassigned equipment

NOTES:

- For further explanation reference Appendix E.

Umler Transportation Code — TCOD

The type of assigned service, empty routing or restriction of the equipment

System Generated Field. Used for Transportation Codes. This element is not eligible for Input.

NOTES:

- For further explanation reference Appendix E.

Transportation Cond Code — TCCD

The AAR or FRA interchange restriction code

System Generated Field. Used for Transportation Codes. This element is not eligible for Input.

NOTES:

- For further explanation reference Appendix E.

Mechanical Restriction — TCME

User reported or system generated type of mechanical restriction ■

Used for Transportation Codes. Affects Rating.

Permissible Values for TCME

S Scrap

X AAR Interchange Restriction

NOTES:

- For further explanation reference Appendix D.1

Mech Restriction Reason	TCMR
The explanation of the Mechanical Restriction (TCME)	

Used for Transportation Codes.

Permissible Values for TCMR

X Restricted Due to Scrap or Early Warning

Z Restricted Due to Umler Conflict (Not Valid for User Input)

NOTES:

- For further explanation reference Appendix D.2.
- The assignment of the Transportation Codes S_, SX, XA, XZ and YA generate the Rate Indicator Code 6 to the CHARM file to zero (0) rate the car hire and mileage rate.

Miscellaneous

Commercial Owner CIF	B049
The Customer Identification File (CIF) number for a commercial owner at a specific location	

Commercial Lessee CIF	B048
The Customer Identification File (CIF) number for a commercial lessee at a specific location	

Umler Effective Date	EFDT
The date the rating activity (pre-registration, modification, etc.) is expected to occur	

This element is not eligible for Query. Does not Carry Forward.

Validation Rule for EFDT

-Effective Date cannot be set to more than 13 months in the future.

NOTES:

- Effective Date will default to the 1st of the following month that equipment is registered

Inspection

Inspection Date Done	DTDN
The date the inspection was completed; used for all inspection types reported on equipment	

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Validation Rule for DTDN

-The inspection date must not be 60 days before the Build Date

Inspection Due Date	INDD
The due date of the next inspection; used for all inspection types reported on equipment	

System Generated Field. This element is not eligible for Input. Value does not carry forward for Add Back.

Inspection Performer	PERF
The SCAC that completed the inspection; used for all inspection types reported on equipment	

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Inspection Reporter	REPT
The SCAC that reported the inspection; used for all inspection types reported on equipment	

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Location/SPLC	SPLC
The SPLC of the inspecting location; used for all inspection types reported on equipment	

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Trailers

General

Status Code *Mandatory* — **USCD**

Identifies the current operational state ●

Does not Carry Forward.

Permissible Values for USCD

A	ACTIVE	I	INACTIVE
P	PRE-REGISTERED		

NOTES:

- For Restencil and Clone process the initial Status of a car should be Pre-Registered.
- All Add-Back processes should initially set the Status to Pre-Registered
- A Pre-registered car will automatically have its Status changed to Active for the initial change when TRAIN detects three (3) movements on the car
- If the Status changes to Active due to movement and the car was created from a Restencil, the Prior Equipment ID (PRID) or source car will have its status changed to Inactive automatically by Umler

Equipment ID — **0001**

The equipment stenciled number

Validation Rule for 0001

-Equipment Number must not be larger than 6 digits (i.e., 999999)

NOTES:

- Equipment ID includes the mark and number stenciled on the equipment. Marks can be up to 4 characters and number up to 6 digits (i.e., ABCD999999).
- Up to 500 cars can be added or updated in a transaction.
- When adding an equipment record, ensure that Prior Equipment ID (PRID) is reported, unless the equipment is new.

Mechanical Designation *Mandatory* — **UMMD**

Equipment description without physical dimensions ●

Used for Transportation Codes.

Permissible Values for UMMD

Z	Chassis/Trailer

Equipment Descriptor *Mandatory* — **B341**

Additional information about the type of equipment used in conjunction with the Mechanical Designation to generate the Equipment Type Code (ETC) for Intermodal Flat, Locomotive, Chassis, Container, and Trailer equipment groups ●

Value does not carry forward for Equipment Group Change.

Permissible Values for B341

ZFB	Flat Bed Trailer
ZOT	Open Top Trailer
ZRV	Rail Compatible - Mark V
ZV	General Service Dry Van Trailer
ZVE	Special Equipped (Straight Floor Closed) Trailer
ZVI	Insulated Trailer
ZVR	Mechanical Refrigerator Trailer

Validation Rule for B341

-Equipment Designator does not agree with the TRLR allowable Mechanical Designations

Equipment Type Code — **UMET**

An alpha numeric code that describes the physical attributes of equipment

System Generated Field. This element is not eligible for Input.

NOTES:

- Please Refer to Appendix I for More information Regarding ETC Generation

Built Date *Mandatory* — **BLDT**

The date the construction of the equipment is complete ●

Data is Confidential. Used for Transportation Codes. Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for BLDT

Minimum	Maximum
1/1/1900	12/31/9999

Validation Rule for BLDT

-For Trailers, Containers and Chassis, the age of the equipment if not rebuilt cannot be in excess of 50 years from today

-Prior and target equipment's Built Date (BLDT) must match for restenciling

NOTES:

- Data is public for railroad marked equipment.
- For connected unit cars report the oldest car in the set.

Rebuilt / ILS Date — **RBDT**

The date the re-construction of the equipment is complete

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for RBDT

Minimum	Maximum
1/1/1900	12/31/9999

Validation Rule for RBDT

-For Trailers, Containers and Chassis, the Built Date cannot be on or before 25 years before the Rebuilt Date

-For Trailers, Containers and Chassis, the Built Date cannot be on or after the Rebuilt Date

NOTES:

- Railroad cars -- applicable only to cars meeting status as provided in both STB Accounting Rules, and the AAR Mechanical Interchange Rule 88, Office Manual.
- Private cars -- applicable to all cars meeting AAR Mechanical Interchange Rule 88, Section C, Office Manual and Sections A and B of the Field Manual.
- For connected unit cars report the oldest car in the set. Do not report Rebuilt Date unless car has been approved by the AAR.

Rebuilt Flag — **RBFL**

Identifies the equipment is nearing its end of life cycle

Data is Confidential. System Generated Field. This element is not eligible for Input.

Permissible Values for RBFL

N	No	Y	Yes

Owner *Mandatory* — **UMOW**

Primary reporting mark of the railroad or private company owning the car ●

Value does not carry forward for Single Clone / Multi-Clone / Single Restencil / Multi-Restencil.

NOTES:

- Report the primary reporting mark of the railroad or private company owning the car. When car's lease or lien is held by a bank, trust holder, capital lease company, etc. not having an assigned mark, report the primary reporting mark affiliated with the stenciled reporting mark.

Lessee — **LESE**

The reporting mark of the company leasing the equipment

Value does not carry forward for Single Clone / Multi-Clone / Single Restencil / Multi-Restencil.

Validation Rule for LESE

-Umler Owner (UMOW) and Lessee are not allowed to be equal

NOTES:

- In order to assign privately marked cars to a pool, a railroad reporting mark must be reported.

Equipment Group *Mandatory* — **0002**

Identifies the various major car types ● ■

Used for Transportation Codes. Affects Rating.

Maintenance Party	MNPT
The parent reporting mark of the company responsible for the maintenance and repairs of the equipment	

Does not Carry Forward.

Mark Owner Category	B201
The company that owns the stenciled mark on the car	

System Generated Field. This element is not eligible for Input. Value does not carry forward for Single Restencil / Multi-Restencil / Equipment Group Change / Add Back.

Permissible Values for B201

B	US Private
C	Canadian Private
F	Foreign Private
H	Canadian Class II
I	Canadian Class I
J	Mexican Class I
K	Canadian Class III
M	Mexican Private
N	US Private Steamship
O	Canadian Private Steamship
P	Mexican Private Steamship
Q	Foreign Private Steamship
R	US Class II Railroad
U	US Class I Railroad
V	US Class III Railroad
W	Mexican Class II Railroad
Y	Mexican Class III Railroad

NOTES:

- This value is stored in the Umler Database for informational purposes and is retrieved from the Roadmark Registry.

Prior Equipment ID	PRID
The previous reporting mark and number of the equipment	

Value does not carry forward for Single Clone / Multi-Clone.

Validation Rule for PRID

-Prior and target equipment's Built Date (BLDT) must match

-The Prior Equipment ID (0001) must belong to the same or comparable Equipment Group (0002) as the current car initial and number

NOTES:

- Prior ID enables equipment records to share the same historical lineage. Equipment Identification Number (EIN) is a generated id that enables these equipment records to share inspections and transaction history.

Last Update Date	B122
Date of the last Umler element change	

System Generated Field. This element is not eligible for Input.

Equipment Add Date	B082
Date the reporting mark and number was added to the Umler system	

System Generated Field. This element is not eligible for Input.

Status Change Reason	USCR
Identifies the reason for the current operational state	

System Generated Field. This element is not eligible for Input. Does not Carry Forward.

Permissible Values for USCR

I	Initial Load
M	Movement
O	Status Changed Manually
R	Restencil

NOTES:

- If movement is detected on equipment, status is changed to Active.
- If an equipment record is changed to Active, any prior equipment record is placed in Inactive status.

Status Change Date	USCT
Identifies the effective date of the current operational state	

System Generated Field. This element is not eligible for Input. Does not Carry Forward.

Licensing State/Province	A154
Licensing State / Province	

Permissible Values for A154

AB	Canada-Alberta
AG	Mexico-Aguascalientes
AK	US-Alaska
AL	US-Alabama
AR	US-Arkansas
AZ	US-Arizona
BC	Canada-British Columbia
BJ	Mexico-Baja California
BS	Mexico-Baja California Sur
CA	US-California
CH	Mexico-Chiapas
CI	Mexico-Chihuahua
CL	Mexico-Colima
CO	US-Colorado
CP	Mexico-Campeche
CT	US-Connecticut
CU	Mexico-Coahuila De Zargoza
DC	US-District of Columbia
DE	US-Delaware
DF	Mexico-Districto Federal
DG	Mexico-Durango
EM	Mexico-Estado Mexico
FL	US-Florida
GA	US-Georgia
GJ	Mexico-Guanajuato
GR	Mexico-Guerrero
HG	Mexico-Hidalgo
HI	US-Hawaii
IA	US-Iowa
ID	US-Idaho
IL	US-Illinois
IN	US-Indiana
JA	Mexico-Jalisco
KS	US-Kansas
KY	US-Kentucky
LA	US-Louisiana
MA	US-Massachusetts
MB	Canada-Manitoba
MD	US-Maryland
ME	US-Maine
MH	US-Marshall Islands
MI	US-Michigan
MN	US-Minnesota
MO	US-Missouri
MR	Mexico-Morelos
MS	US-Mississippi
MT	US-Montana
MX	Mexico-Other
NA	Mexico-Nayarit
NB	Canada-New Brunswick
NC	US-North Carolina

ND	US-North Dakota
NE	US-Nebraska
NF	Canada-Newfoundland
NH	US-New Hampshire
NJ	US-New Jersey
NL	Mexico-Nuevo Leon
NM	US-New Mexico
NS	Canada-Nova Scotia
NT	Canada-Northwest Territories
NU	Canada-Nunavut
NV	US-Nevada
NW	Northwest Territory
NY	US-New York
OA	Mexico-Oaxaca
OH	US-Ohio
OK	US-Oklahoma
ON	Canada-Ontario
OR	US-Oregon
PA	US-Pennsylvania
PE	Canada-Prince Edward Island
PQ	Canada-Quebec
PR	US-Puerto Rico
PU	Mexico-Puebla
QA	Mexico-Queratero
QR	Mexico-Quintana Roo
RI	US-Rhode Island
SC	US-South Carolina
SD	US-South Dakota
SI	Mexico-Sinaloa
SK	Canada-Saskatchewan
SL	Mexico-San Luis Potosi
SO	Mexico-Sonora
TA	Mexico-Tabasco
TL	Mexico-Tlaxcala
TM	Mexico-Tamaulipas
TN	US-Tennessee
TX	US-Texas
UT	US-Utah
VA	US-Virginia
VI	US-Virgin Islands
VL	Mexico-Veracruz-Llave
VT	US-Vermont
WA	US-Washington
WI	US-Wisconsin
WV	US-West Virginia
WY	US-Wyoming
XX	Exception (Intl. TOFC/COFC or No License)
YC	Mexico-Yucatan
YK	Canada-Yukon
YT	Canada-Yukon
ZT	Mexico-Zacatecas

Equipment Identification — EINN

Unique equipment identifier regardless of stenciled mark

System Generated Field. This element is not eligible for Input.

NOTES:

- Specify the Prior ID (PRID) on equipment records to ensure the historical lineage is preserved. Equipment with the same EIN share history and inspections.

Conflict Status — B050

Identifies the escalation level of equipment in active conflict

System Generated Field. This element is not eligible for Input. Value does not carry forward for Add Back.

Permissible Values for B050

1 Subject to Zero-Rating
2 Subject to Restricted in Interchange
3 Subject to Deletion

NOTES:

- Subject to Zero-Rating, goes into effect 30 days after Conflict Status occurs
- Subject to Restricted in Interchange, goes into effect 90 days after Conflict Status occurs
- Subject to Deletion, goes into effect 365 days after Conflict Status occurs

Date of Original Conflict — B063

The date the equipment was originally placed in the current conflict

System Generated Field. This element is not eligible for Input.

Next Conflict Status — B135

Identifies the next escalation level of an equipment in active conflict

System Generated Field. This element is not eligible for Input. Value does not carry forward for Add Back.

Permissible Values for B135

1 Subject to Zero-Rating
2 Subject to Restricted in Interchange
3 Subject to Deletion

NOTES:

- Subject to Zero-Rating, goes into effect 30 days after Conflict Status occurs
- Subject to Restricted in Interchange, goes into effect 90 days after Conflict Status occurs
- Subject to Deletion, goes into effect 365 days after Conflict Status occurs

Notice Indicator — B137

Identifies equipment in error in Umler Notice Management

System Generated Field. This element is not eligible for Input.

Conflict Status Next Date — B062

The date the conflict status will be escalated

System Generated Field. This element is not eligible for Input. Value does not carry forward for Add Back.

Rate Indicator — A070

Indicates the rate type applicable to the unit ■

System Generated Field. Used for Transportation Codes. Affects Rating. This element is not eligible for Input. Does not Carry Forward.

Permissible Values for A070

0 Zero-Rated Due to Conflict Errors
1 Units subject to special lease arrangement
6 Zero-Rated - Scrap (S_,SX), AAR Overage (XA), FRA Overage (YA), Umler Conflict - CHR 1/Tarriff 6007 (XZ). Zero-Rated Private Owner Election to Zero Rate [See Private Zero Rate (B150)].

NOTES:

- If unit is zero-rated, correction of conflicts will reinstate the appropriate rate indicator code.

First Movement Date — USAT

The first movement date under the stenciled mark of the equipment

This element is not eligible for Input. Does not Carry Forward.

Equipment Add Company — B083

The reporting mark of the company that added the equipment

System Generated Field. This element is not eligible for Input.

Registration Reason — B174

The code indicating the reason this equipment is added

Does not Carry Forward.

Permissible Values for B174

A	Add-Back	N	New
P	Pending Restencil	R	Restencil

Restencil Program Ind	B177
Identifies the equipment is under a restencil program	

Permissible Values for B177

Y Yes

Delete Reason Code	B064
A code that designates the reason the equipment has been deleted	

Value does not carry forward for Add Back.

Permissible Values for B064

A Restenciled
D Destroyed or wrecked
L Lease terminated, removed from fleet
P Retired unserviceable beyond economic repair
R Rebuilt
S Sold Serviceable
W Over age retired for dismantling
Y Error, reporting did not exist
Z Other

Weight

Gross Rail Load/Weight	A266
The maximum permissible weight on rail of the equipment and the load, reported in pounds	

Range of Values for A266

Minimum	Maximum
4900	98000

Validation Rule for A266

-Gross Rail Load must be equal to the Load Limit (LDLT) plus the Tare Weight (A259)

NOTES:

Use Table 1 below to determine Gross Rail Load, if Qualification for Increased Gross Rail Load (B344) does not exist.

TABLE 1 -

Journal Size	Load per Axle	Gross Rail Load for 4-axle Equipment
B - 4 1/2" x 8"	25,750 lbs.	103,000 lbs.
C - 5" x 9"	35,500 lbs.	142,000 lbs.
D - 5 1/2" x 10"	44,250 lbs.	177,000 lbs.
E - 6" x 11"	55,000 lbs.	220,000 lbs.
F - 6 1/2" x 12"	65,750 lbs.	263,000 lbs.
G - 7" x 12"	78,750 lbs.	315,000 lbs.
K - 6 1/2" x 9"	71,500 lbs.	263,000 lbs.
M - 7" x 9"	78,750 lbs.	315,000 lbs.

Use Table 2 below to determine Gross Rail Load for 4-axle equipment if Qualification for Increased Gross Rail Load (B344) exists.

TABLE 2 -

Qualification for Increased Gross Rail Load (B344)	Journal Size	Gross Rail Load
1	K - 6 1/2" x 9"	286,000 lbs.
1	G - 7" x 12"	286,000 lbs.
1	M - 7" x 9"	286,000 lbs.
2	F - 6 1/2" x 12"	286,000 lbs.
2	K - 6 1/2" x 9"	286,000 lbs.
3	F - 6 1/2" x 12"	268,000 lbs.
3	K - 6 1/2" x 9"	268,000 lbs.

- For multi-unit equipment, report the total gross rail load for the entire set.
- Refer to Field Manual Rule 70 if additional information is required.

A Gross Rail Load less than the listed or calculated values may be entered; however:

5. Star Code (A247) must be R or S, and
6. Load Limit (LDLT) must also be reduced, ensuring Tare Weight (A259) plus Load Limit (LDLT) equals the reported Gross Rail Load.

For equipment having two or more different journal sizes, see following examples:

Example for Drawbar Connected:

- A 5-unit drawbar connected car has 20 axles.
- The end units (Locations A and B) each have 4 axles with E - 6" x 11" journals.
- The intermediate units (Locations C, D, and E) each have 4 axles with F – 6 1/2" x 12" journals.

Using TABLE 1, the Gross Rail Load would be:

8 ea. E-6" x 11" journal axles X 55,000 lbs. per axle = 440,000 lbs.
+12 ea. F-6 1/2" x 12" journal axles X 65,750 lbs. per axle = 789,000 lbs.
Gross Rail Load = 1,229,000 lbs.

Example for Articulated Connected:

- A 5-unit articulated intermodal car has 6 trucks (12 axles).
- The end trucks (Locations A and B) each have 2 axles with E - 6" x 11" journals.
- The intermediate trucks (Locations C, D, E, and F) each have 2 axles with G - 7" x 12" journals

Using TABLE 1, the Gross Rail Load would be:

4 ea. E-6" x 11" journal axles X 55,000 lbs. per axle = 220,000 lbs.
+ 8 ea. G-7" x 12" journal axles X 78,750 lbs. per axle = 630,000 lbs.
Gross Rail Load = 850,000 lbs.

Tare Weight	A259
The equipment weight on rail when empty, sometimes referred to as Light Weight, reported in pounds	

Range of Values for A259

Minimum	Maximum
600	33000

NOTES:

Do not report an average Tare Weight for car series, except for Pre-Registered cars
When cars are made active, the actual Tare Weight must be recorded

Load Limit	LDLT
The maximum permissible weight of the commodity that can be loaded into the equipment, reported in pounds	

Range of Values for LDLT

Minimum	Maximum
0	70000

Cubic Feet Capacity	A067
The maximum interior cubic feet capacity of the equipment	

Range of Values for A067

Minimum	Maximum
1000	4200

Validation Rule for A067

-Trailer Cubic Feet Capacity is not applicable to Flat Bed Trailers (Equipment Descriptor - VFB)

Gallonage Capacity	A297
The number of gallons the equipment will hold	

Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for A297

Minimum	Maximum
4000	12000

Dimension

Outside Length *Mandatory* — **OSLG**

The outside length over pulling faces of couplers in normal position ●▲

Used in ETC Generation. Displayed in feet and inches on the Web. Stored in inches.

Range of Values for OSLG

Minimum	Maximum
15 ft 7 inches	57 ft 0 inches

NOTES:

- For connected unit cars report the maximum coupled length of the set.
- Round fraction to the higher inch, e.g., 05 1/4" = 06"

Outside Extreme Width *Mandatory* — **A186**

The outside extreme width of the equipment ●▲

Used in ETC Generation. Displayed in feet and inches on the Web. Stored in inches.

Range of Values for A186

Minimum	Maximum
7 ft 3 inches	8 ft 6 inches

NOTES:

- For connected unit cars report the dimension of the largest unit in the set.
- Round fraction to the higher inch, e.g., 05 1/4" = 06"

Outside Extreme Height *Mandatory* — **A185**

Height from top of rail to extreme projecting height ●▲

Used in ETC Generation. Displayed in feet and inches on the Web. Stored in inches.

Range of Values for A185

Minimum	Maximum
4 ft 3 inches	14 ft 0 inches

NOTES:

- For connected unit cars report the dimension of the largest unit in the set.
- Round fraction to the higher inch, e.g., 05 1/4" = 06"

Outside Height Extr Width *Mandatory* — **A187**

The highest point at which the extreme width of the equipment occurs ●

Displayed in feet and inches on the Web. Stored in inches.

Range of Values for A187

Minimum	Maximum
1 ft 0 inches	14 ft 0 inches

Validation Rule for A187

-Outside Height Extreme Width must be less than or equal to Outside Extreme Height

NOTES:

- For connected unit cars report the dimension of the largest unit in the set.
- Round fraction to the higher inch, e.g., 05 1/4" = 06"

Undercarriage Width — **B217**

Undercarriage Width ▲

Used in ETC Generation.

Permissible Values for B217

102 102 inches 96 96 inches

Validation Rule for B217

-Undercarriage Width must be set if Undercarriage Type is set

Inside Length — **A135**

The inside length of the equipment from end to end inside walls, linings, and permanent bulkheads

Displayed in feet and inches on the Web. Stored in inches.

Range of Values for A135

Minimum	Maximum
15 ft 6 inches	55 ft 4 inches

Validation Rule for A135

-Inside Length must not be greater than Outside Length

-Inside Length/Inside Platform Length must be less than or equal to Outside Length (OSLG)

-Is not applicable to Inside Length/Inside Platform Length for Trailer/Container - Bulk Hopper, Tank or Flat (Mechanical Designation of UH, or UTK)

NOTES:

- Round fraction to the lower inch, e.g., 05 1/4" = 05"
- For connected unit cars report the shortest dimension of a unit in the set.

Inside Width — **A138**

The inside width of the equipment from side walls and linings

Displayed in feet and inches on the Web. Stored in inches.

Range of Values for A138

Minimum	Maximum
7 ft 0 inches	8 ft 4 inches

Validation Rule for A138

-Inside Width/Inside Platform Width must not exceed Outside Extreme Width

-Inside Width/Inside Platform Width is not applicable to Trailer/Container - Tank or Flat (Mechanical Designation of UTK)

Inside Height — **A133**

The inside height of the equipment from the floor to the top of the side, or to the lowest point of the interior ceiling

Displayed in feet and inches on the Web. Stored in inches.

Range of Values for A133

Minimum	Maximum
1 ft 0 inches	11 ft 1 inches

Validation Rule for A133

-Trailer Inside Height cannot be set for Flat Bed Trailers (Equipment Descriptors ZFB)

-Inside Height must not exceed Outside Extreme Height (A185)

NOTES:

- For connected unit cars report the shortest dimension of a unit in the set.

Deck Height Above Ground — **B149**

Inside Height/Deck Hgt.

Displayed in feet and inches on the Web. Stored in inches.

Range of Values for B149

Minimum	Maximum
1 ft 0 inches	11 ft 1 inches

Validation Rule for B149

-Trailer Platform Deck Height can only be set for Flat Bed Trailers (Equipment Descriptor - VFB)

Height Trailer @ Lift Pts — **B107**

The measurement in feet and inches at the lift point of a trailer-New

Door

End Door Type — **A081**

End Door Type

Permissible Values for A081

1 Hinged 2 Overhead/Rollup

3 Other

Validation Rule for A081

-Trailer End Door Type is not applicable to Flat Bed Trailers (Equipment Descriptor - VFB)

End Door Width — A082

The width of the end door opening in inches

Displayed in feet and inches on the Web. Stored in inches.

Range of Values for A082

Minimum	Maximum
4 ft 0 inches	8 ft 4 inches

Validation Rule for A082

-End Door Width must not be reported if Trailer/Container End Door Type is not reported

-End Door Width requires End Door Type of Trailer/Container with other than 0

-End Door Width is not applicable to Trailer/Container - Bulk Hopper, Tank or Flat (Mechanical Designation of UH, UFB, UTK, ZBH, ZTK, or ZFB)

NOTES:

- Round fraction to the lower inch, e.g., 05 1/4" = 05"
- For connected unit cars report the dimension of the smallest end door width of a unit in the set.

End Door Height — A080

The height of the end door opening in inches

Displayed in feet and inches on the Web. Stored in inches.

Range of Values for A080

Minimum	Maximum
4 ft 0 inches	10 ft 6 inches

Validation Rule for A080

-End Door Height must not be reported if End Door Width is not reported

-End Door Height must be reported if End Door Width is reported

-End Door Height must not be reported if Trailer/Container End Door Type is not reported

-End Door Height must be reported if End Door Type of Trailer/Container is reported

-End Door Height is not applicable to a Trailer/Container - Bulk Hopper, Tank or Flat (Mechanical Designation of UH, UFB, UTK, ZBH, ZTK, or ZFB)

NOTES:

- Round fraction to the lower inch, e.g., 05 1/4" = 05"
- For connected unit cars report the dimension of the smallest end door height of a unit in the set.

Specification

Undercarriage Type — B216

Undercarriage Type ▲

Used in ETC Generation.

Permissible Values for B216

F Fix Forward R Fixed Rear S Sliding

Validation Rule for B216

-Undercarriage Type must be set if Undercarriage Width is set

TRLR/CONT Body Material — A031

Body Type TRLR/CONT

Permissible Values for A031

01 Aluminum
04 Combination
18 Stainless Steel
19 Standard Steel
30 Wood
37 PultrusionComposite
38 Fiberglass or Fiberglass Reinforced Material
39 Miscellaneous Material

Validation Rule for A031

-No Body Material (Body/Shell Type) for Flat type Trailer/Containers

-Body Material (Body/Shell Type) can only be reported as C-Pultrued Composite for Equipment Designators of ZVE, ZV, or UB

Electrical Voltage System — A079

Electrical Voltage System

Permissible Values for A079

00 Unused or restricted
06 06 Volts
11 110 Volts
12 12 Volts
22 220 Volts
24 24 Volts
33 330 Volts
44 440 Volts

Validation Rule for A079

-Trailer/Container Electrical Voltage System is only applicable to Equipment Descriptor of UBR, UBI, UBE, ZVR, ZVI, or ZVE

King Pin Setting — A149

King Pin Setting

Permissible Values for A149

18 18 Inches
28 28 inches
30 30 inches
32 32 inches
36 36 inches (standard)
42 42 inches

Forward Extension — A106

Forward Extension

Range of Values for A106

Minimum	Maximum
18	60

Validation Rule for A106

-Forward Extension is required for nose mounted refrigeration with Refrigeration Unit Location of Code N

Brake Type — A034

Brake System

Permissible Values for A034

A Air E Electric V Vacuum

Axle Count — A024

The total number of axles on the equipment

Range of Values for A024

Minimum	Maximum
2	999

Validation Rule for A024

-Axle Count for an articulated car must be greater than or equal to ((Connected Unit Count (A020) x 2) + 2)

-Axle Count for a draw bar connected car must be greater than or equal to (Connected Unit Count (A020) x 4)

Tire Size & Wheel Size — A261

Tire Size & Wheel Size

Range of Values for A261

Minimum	Maximum
7351400	12002500

Insid Wdth Btwn TOFC Tire — B332

Inside Width Between Trailer Tires

Remote Monitoring Device — B176

Indicates the equipment is equipped with a location monitoring device

Permissible Values for B176

Y Yes

AEI High Temperature Tag **B006**

Indicates the equipment is equipped with a high temperature AEI tag

Permissible Values for B006

Y High Temperature Tag

Equipment Builder **A035**

Identifies the original manufacturer of the equipment ✹

Permissible Values for A035

HPA HPA Monon Corporation
NACA National Alabama Corporation
UNKN Unknown
WABN Wabash National

Validation Rule for A035

-Equipment built or rebuilt on or after July 1, 2010 cannot have a Equipment Builder of Unknown
-Equipment with a Built Date (BLDT) on or after July 1, 2010 cannot have an Equipment Builder Code of OWNER RAILROAD.
-Equipment Builder can have a value of MULT only if the equipment has multiple units.

Builder Lot Code **B030**

A unique identifier for a group of equipment built by one manufacturer under the same contract ✹

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Validation Rule for B030

-Equipment built or rebuilt on or after June 28, 2012 must have a value for Builder Lot Code

Built Country **B031**

The country where the equipment was constructed

Data is Confidential.

Permissible Values for B031

CA Canada MX Mexico
US United States

Rebuilt Country **B170**

The country where the equipment was re-constructed

Permissible Values for B170

CA Canada MX Mexico
US United States

Refrig Emission Code **B345**

California State Emission standards for refrigeration units

Value does not carry forward for Single Clone / Multi-Clone.

Permissible Values for B345

N Not Qualified Q Qualified
U Ultra-Qualified

Feature

Floor Material **A104**

Describes the type of construction material used for the equipment floor

Permissible Values for A104

01 Aluminum
02 Aluminum (Ribbed)
05 Composite Nailable (considered same as wood
06 Composite Nailable, Reinforced (considered same as wood)
14 Other
15 Other, Reinforced
19 Standard Steel
21 Steel Floor, (straight deck) without risers (F-8-)
22 Steel Floor, permanently mounted steel risers (F-8-)
23 Steel Nailable (includes alternate wood and steel floor
24 Steel Nailable, Reinforced (includes alternate wood and steel floor
25 Standard Steel, Reinforced
27 Unknown (Flats only)
30 Wood
32 Wood, Double
33 Wood, Double, Reinforced
34 Wood Floor with Steel Protective Plates (includes perforated steel)
35 Wood Floor, Reinforced, with Steel Protective Plates (includes perforated steel)
36 Wood Floor, Reinforced

Floor Anchor Builder **B335**

Floor Anchor Builder

Permissible Values for B335

ABB Asea Brown Bavari
ACC American Crane Company
ACCI Accurate Industries
ACF American Car & Foundry
ACFX ACF Industries
ALCC Alloy Crafts Company
ALCO American Locomotive Company
ALGE Alco-GE
ALST Alstom
ALTN Altoona
ALWO Alco-Worthington
ARI ARI Industries
BERW Berwick Forge
BETH Bethlehem Car Works
BL Boise Locomotive
BLH Baldwin Lima Hamilton
BLW Baldwin Locomotive Works
BOMB Bombardier
BRIL Brill
BRKS Brooks Locomotive Works
BS Barney & Smith
BSP Bethlehem Steel Corporation
BUDD Ed G Budd Company
BURR Burro Crane Works
CAN Canadian Car
CFF Canadian Car & Foundry
CHIN Chinese builders (various)
CLC Canadian Locomotive Company
CLW Climax Locomotive Works
CN Canadian National
CNCF Carros De Ferrocarril, SA
CNR Canadian National Railway
CONC Concarrill
CPR Canadian Pacific
CRMX Colorado Railcar Manufacturing
CSXR CSX Remanufacture
DARB Darby
DAV Davenport Locomotive Company
DETR Detroit Car Works
DIFC Difco
DSL Davies Ship Building
EASX East Rail Car Division
EMAB ElectroMotive Diesel - Asea Brown Bavari
EMC ElectroMotive Corporation
EMD ElectroMotive Diesel
EVAN Evans Products
FCA Freight Car America

FGRW	FRTGRW
FM	Fairbanks Morse
FMC	FMC Corporation
FRCE	Freight Car Engineering
FREU	Freuhauf Corporation
GATX	General American Transportation Corp
GE	General Electric
GEC	GEC Alsthom
GENS	General Steel
GLOB	Global Lot
GMB	Greenbrier
GMDD	General Motors Diesel Division
GREX	Georgetown Rail Equipment Company
GROV	Grove
GSC	Greenville Steel Car
GSWI	Gunderson Southwest Inc
GULF	Gulf Railcar
GUN4	Gunderson - Trenton Works
GUND	Gunderson Inc
GUNM	Gunderson - Mexico
HAMB	Hamburg Fab Shop
HARS	Harsco
HB	Haskell & Baker
HEIS	Heisler Locomotive Works
HIIX	Hamburg
HPA	HPA Monon Corporation
HST	Hawker Siddeley
HYUN	Hyundai
IBH	Industrial Brown Hoist
ICC	International Car Company
ICG	Interglobal Capital
IR	Ingersoll Rand
JAC	Johnstown America Corporation
JACK	Jackson Equipment Company
JLW	Juniata Locomotive Works
JORD	Jordan Machine Works
JS	Jackson & Sharp
KASG	Kasgro Railcar
KM	Krauss Maffei
KRCA	Kawasaki Railcar America
LAVE	Lavelin
LH	Lima-Hamilton
LIMA	Lima Locomotive Works
LOX	Lox Equipment Company
MAGR	Magor Car Manufacturing
MCDW	McDowell Wellman
MILW	CMSTP & P Railroad
MK	Morrison-Knudson
MLW	Montreal Locomotive Works
MRCD	Millennium Railcar, Dome Division
MRNE	Marine Industries
NACC	North American Car
NIPP	Nippon-Sharyo
NRE	National Railway Equipment
NSC	National Steel Car
OB	Osgood Bradley Car Company
ORTN	Ortner
PCF	Pacific Car & Foundry
PCM	Pullman Car & Manufacturing
PLAS	Plasser America
PLC	Paducah Locomotive Company
PORT	Porter Locomotive Company
PORW	Thrall-Winder
PRAT	Pratt Enterprises
PRO	Procor Limited
PS	Pullman-Standard
PSCC	Pressed Steel Car Company
PSP	Pullman-Standard, Division of Trinity Industries
PT	Plasser & Theurer
RCC	Raceland Car Corporation
REBD	Reilly Beard
RELC	Relco
RICH	Richmond Locomotive Works
ROAN	Roanoke Shops
ROTA	Rota Car Company
RP	RailPower
RTCX	Richmond Tank Car
RUSS	Russian builders (various)
SCM	Standard Car Manufacturing
SIEM	Siemens
SLC	Saint Louis Car Company
SRSC	Springfield Railcar
SSCC	Standard Steel Car Company
TA	Transit America
TERX	Terex Corporation
THR	Thrall Car Service Parts
THR4	Thrall - Cartersville
THRL	Thrall
TLGA	Talgo America
TRAN	Tranzrail
TRIN	Trinity
TRIS	Trinity - Springfield MO
TRIX	Trinity Mexico
UNAM	United America
UTLX	Union Tank Car
VENT	Ventrns
VULC	Vulcan Locomotive Works
WABN	Wabash National
WAG	Wagner Car Company

Floor Anchor Count **B336**

Floor Anchor Count

Floor Anchor Loc Spacing **B337**

Floor Anchor Location Spacing

Floor Load Rating **B338**

Floor Load Rating

Floor Load PSI **B339**

Floor Load PSI

Floor Drain Equipped **B095**

Indicates the equipment floor has a drain

Permissible Values for B095

Y	Yes

Lining Material **A158**

Describes the type of construction material used in the lining of equipment

Permissible Values for A158

03	Cement
07	Composite Wood and Steel
08	Fiberglass
10	Glass
11	Kanigen
12	Metal Clad
13	Metal Spray
16	Rubber
17	Sheet Metal
26	Synthetic
28	Unlined
29	Vinyl

30 Wood

Validation Rule for A158

-Lining Material cannot be set for Flat bed trailers (Equipment Descriptor - VFB)

Bulkhead Type	B034
Identifies the type of bulkhead attached to the equipment	

Permissible Values for B034

F Fixed I Inflatable M Moveable

Belt Rail Equipped	B024
Indicates the equipment is belt rail equipped	

Permissible Values for B024

Y Yes

Belt Builder	B331
Belt Builder	

Permissible Values for B331

ABB	Asea Brown Bavari
ACC	American Crane Company
ACCI	Accurate Industries
ACF	American Car & Foundry
ACFX	ACF Industries
ALCC	Alloy Crafts Company
ALCO	American Locomotive Company
ALGE	Alco-GE
ALST	Alstom
ALTN	Altoona
ALWO	Alco-Worthington
ARI	ARI Industries
BERW	Berwick Forge
BETH	Bethlehem Car Works
BL	Boise Locomotive
BLH	Baldwin Lima Hamilton
BLW	Baldwin Locomotive Works
BOMB	Bombardier
BRIL	Brill
BRKS	Brooks Locomotive Works
BS	Barney & Smith
BSP	Bethlehem Steel Corporation
BUDD	Ed G Budd Company
BURR	Burro Crane Works
CAN	Canadian Car
CFF	Canadian Car & Foundry
CHIN	Chinese builders (various)
CLC	Canadian Locomotive Company
CLW	Climax Locomotive Works
CN	Canadian National
CNCF	Carros De Ferrocarril, SA
CNR	Canadian National Railway
CONC	Concarrill
CPR	Canadian Pacific
CRMX	Colorado Railcar Manufacturing
CSXR	CSX Remanufacture
DARB	Darby
DAV	Davenport Locomotive Company
DETR	Detroit Car Works
DIFC	Difco
DSL	Davies Ship Building
EASX	East Rail Car Division
EMAB	ElectroMotive Diesel - Asea Brown Bavari
EMC	ElectroMotive Corporation
EMD	ElectroMotive Diesel
EVAN	Evans Products
FCA	Freight Car America
FGRW	FRTGRW
FM	Fairbanks Morse
FMC	FMC Corporation
FRCE	Freight Car Engineering
FREU	Freuhauf Corporation
GATX	General American Transportation Corp
GE	General Electric
GEC	GEC Alsthom
GENS	General Steel
GLOB	Global Lot
GMB	Greenbrier
GMDD	General Motors Diesel Division
GREX	Georgetown Rail Equipment Company
GROV	Grove
GSC	Greenville Steel Car
GSWI	Gunderson Southwest Inc
GULF	Gulf Railcar
GUN4	Gunderson - Trenton Works
GUND	Gunderson Inc
GUNM	Gunderson - Mexico
HAMB	Hamburg Fab Shop
HARS	Harsco
HB	Haskell & Baker
HEIS	Heisler Locomotive Works
HIIX	Hamburg
HPA	HPA Monon Corporation
HST	Hawker Siddeley
HYUN	Hyundai
IBH	Industrial Brown Hoist
ICC	International Car Company
ICG	Interglobal Capital
IR	Ingersoll Rand
JAC	Johnstown America Corporation
JACK	Jackson Equipment Company
JLW	Juniata Locomotive Works
JORD	Jordan Machine Works
JS	Jackson & Sharp
KASG	Kasgro Railcar
KM	Krauss Maffei
KRCA	Kawasaki Railcar America
LAVE	Lavelin
LH	Lima-Hamilton
LIMA	Lima Locomotive Works
LOX	Lox Equipment Company
MAGR	Magor Car Manufacturing
MCDW	McDowell Wellman
MILW	CMSTP & P Railroad
MK	Morrison-Knudson
MLW	Montreal Locomotive Works
MRCD	Millennium Railcar, Dome Division
MRNE	Marine Industries
NACC	North American Car
NIPP	Nippon-Sharyo
NRE	National Railway Equipment
NSC	National Steel Car
OB	Osgood Bradley Car Company
ORTN	Ortner
PCF	Pacific Car & Foundry
PCM	Pullman Car & Manufacturing
PLAS	Plasser America
PLC	Paducah Locomotive Company
PORT	Porter Locomotive Company
PORW	Thrall-Winder
PRAT	Pratt Enterprises
PRO	Procor Limited
PS	Pullman-Standard
PSCC	Pressed Steel Car Company
PSP	Pullman-Standard, Division of Trinity Industries

PT	Plasser & Theurer
RCC	Raceland Car Corporation
REBD	Reilly Beard
RELC	Relco
RICH	Richmond Locomotive Works
ROAN	Roanoke Shops
ROTA	Rota Car Company
RP	RailPower
RTCX	Richmond Tank Car
RUSS	Russian builders (various)
SCM	Standard Car Manufacturing
SIEM	Siemens
SLC	Saint Louis Car Company
SRSC	Springfield Railcar
SSCC	Standard Steel Car Company
TA	Transit America
TERX	Terex Corporation
THR	Thrall Car Service Parts
THR4	Thrall - Cartersville
THRL	Thrall
TLGA	Talgo America
TRAN	Tranzrail
TRIN	Trinity
TRIS	Trinity - Springfield MO
TRIX	Trinity Mexico
UNAM	United America
UTLX	Union Tank Car
VENT	Ventrns
VULC	Vulcan Locomotive Works
WABN	Wabash National
WAG	Wagner Car Company

Vent Openings — B222

Indicates the equipment has vent openings

Permissible Values for B222

Y	Yes

Controlled Atmosphere Typ — A056

Type Of Controlled Atmosphere

Permissible Values for A056

N	Nitrogen Blanket	O	Oxytrol
T	Tectrol	U	Other Type System

Validation Rule for A056

-Trailer Controlled Atmosphere Type can only be set for Refrigerator Trailers (Equipment Descriptor - ZVR)

-Controlled Atmosphere Type is only applicable to Refrigerator type Trailer/Containers

Refrigeration Fuel Type — A207

Type of fuel used in the refrigeration unit

Permissible Values for A207

B	Butane	D	Diesel	G	Gasoline
M	Other type	N	Nitrogen	P	Propane

Validation Rule for A207

-Refrigeration Fuel Type required when Refrigeration System Builder is supplied

Refrigeration Level — B172

Describes the level of refrigeration to be used within the equipment

Permissible Values for B172

F	Zero Only (Frozen)
N	Non-Frozen
W	Wide Range (Frozen to Non-Frozen)

Refrigeration Unit Loc — A221

Refrigeration Unit Location

Permissible Values for A221

I	Interior Mounting
N	Nose or Front Mounting
P	Pod Mounting
S	Side Mounting
U	Under of Belly Mounting

Validation Rule for A221

-Trailer Refrigeration Unit Location can only be set for Refrigerator Trailers (Equipment Descriptor - ZVR)

-Refrigeration Unit Location required when Refrigeration System Builder is supplied

Refrigerator Fuel Cap — A222

Refrigerator Fuel Capacity

Range of Values for A222

Minimum	Maximum
10	250

Refrigerator System Bldr — A223

Refrigerator System Manufacturer

Permissible Values for A223

C	Carrier-Transicold
F	Trane-Artic Traveler
M	Other
P	Polarstream
T	Thermo-King
W	Worthington-York

Cost

Original Cost — A184

The original manufacturer selling price ✹

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for A184

Minimum	Maximum
0	999999

Validation Rule for A184

-Original Cost must be equal to the Ledger Value if there are no Additions & Betterments.

-Original Cost must be equal to the Ledger Value if Additions & Betterments Indicator is not reported.

-Railroad marked freight cars except MISC, LOCO, TRLR, CONT, CHSS, STWH, EOTD, and PSGR are required to have an Original Cost

-Private marked freight cars except MISC, LOCO, TRLR, CONT, CHSS, STWH, EOTD, and PSGR are required to have an Original Cost if Built Date (BLDT) is on or after January 1, 2015

NOTES:

- Original Cost is never altered. It is the cost of the equipment to the original owner.
- For railroad-marked cars, report in US dollars the original ledger value of the original owner For cars rebuilt, report the cost prescribed in MR Interchange Rule 88 and Circular Letter OT-24
- The original cost is used in the settlement of AAR Interchange Rule 107 Office Manual.
- For connected unit cars report the total original cost for all units in the set.
- Numeric, applicable to all railroad-marked cars Also, applicable to privately marked covered hopper (LO) cars.
- Raise all cents to the next dollar, e.g. $5,501.02 = 0005502

Ledger Value — A150

The sum of original cost and additions & betterments

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for A150

Minimum	Maximum
0	999999

Validation Rule for A150

-Original Cost must be equal to the Ledger Value if there are no Additions & Betterments.

-Ledger Value must equal the Original Cost (A184) plus the additions & betterments, if Total A&B (A003) has been reported. Otherwise Ledger Value should equal Original Cost (A184).

Total A&B — A003

System generated sum of all reported amounts in A&B Amount (A317), in US dollars

Data is Confidential. System Generated Field. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for A003

Minimum	Maximum
0	99999999

NOTES:

- For railroad-marked cars, report the sum of all additions and betterments applied to the car. This value is for record keeping purposes only and will not be used to report Ledger Value.
- For private Cars report the additions and betterments as qualified under AAR interchange Rule 107 for determination of settlement value.
  - Additions are costs of all new components applied subsequent to the date the car was built or rebuilt and carried in the capital investment account.
  - Betterments are costs of all improvements of components of existing equipment through the substitution of superior parts for inferior parts subsequent to the date the car was built of rebuilt.
- For connected unit cars report the total Truck Location A for all units in the set

Ind for Pos/Neg Total A&B — A128

A code indicating the positive or negative adjustment to the original cost of the equipment

Data is Confidential. System Generated Field. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Permissible Values for A128

N Negative P Positive

A&B Pos/Neg Ind — A316

A code indicating the positive or negative adjustment to the individual addition and betterment

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Permissible Values for A316

N Negative P Positive

Validation Rule for A316

-When entering an individual Addition & Betterment, you must enter a value in all 4 fields.

-The A&B Indicator is required when Additions & Betterments are reported.

-The A&B Indicator must not be reported if Additions & Betterments are not reported.

A&B Amount — A317

The amount of the individual addition and betterment added to or subtracted from the original cost of the equipment

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for A317

Minimum	Maximum
1	999999

Validation Rule for A317

-When entering an individual addition & betterment; A&B Date Done (A319), A&B Type (A318), A&B Pos/Neg Ind (A316), and A&B Amount (A317) must be reported

A&B Date Done — A319

The date of the individual addition and betterment

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for A319

Minimum	Maximum
1/1/1900	12/31/9999

Validation Rule for A319

-When entering an individual Addition & Betterment, you must enter a value in all 4 fields.

-Addition and Betterment Date Done cannot be earlier than Built Date (BLDT).

-Additions & Betterments Date Done cannot be later than today's date.

A&B Type — A318

The type of individual addition and betterment as defined by Rule 107

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Permissible Values for A318

GNRL General - Capitalized Additions and Betterments

INIT Initial load of historical A&B amount as of Umler 4.6 implementation date

Validation Rule for A318

-For each equipment, only one Individual A&B Type can have a value of INIT.

-When entering an individual Addition & Betterment, you must enter a value in all 4 fields.

Car Management

Pool Number — P001

Unique number used to indicate the grouping of equipment for a particular purpose

Used for Transportation Codes. This element is not eligible for Input. Value does not carry forward for Equipment Group Change / Add Back.

User Routing Instructions — TCUR

The routing instruction reported by the user

Used for Transportation Codes.

Permissible Values for TCUR

2 Trailer Service Rule 2

G Contaminated commodity service

M Mark canceled

O Owner requested return

U Unassigned equipment

NOTES:

- For further explanation reference Appendix E.

Umler Transportation Code — TCOD

The type of assigned service, empty routing or restriction of the equipment

System Generated Field. Used for Transportation Codes. This element is not eligible for Input.

NOTES:

- For further explanation reference Appendix E.

Transportation Cond Code — TCCD

The AAR or FRA interchange restriction code

System Generated Field. Used for Transportation Codes. This element is not eligible for Input.

NOTES:

- For further explanation reference Appendix E.

Mechanical Restriction	TCME
User reported or system generated type of mechanical restriction	

Used for Transportation Codes.

Permissible Values for TCME

S Scrap
X AAR Interchange Restriction

NOTES:

- For further explanation reference Appendix D.1

Mech Restriction Reason	TCMR
The explanation of the Mechanical Restriction (TCME)	

Used for Transportation Codes.

Permissible Values for TCMR

X Restricted Due to Scrap or Early Warning
Z Restricted Due to Umler Conflict (Not Valid for User Input)

NOTES:

- For further explanation reference Appendix D.2.
- The assignment of the Transportation Codes S_, SX, XA, XZ and YA generate the Rate Indicator Code 6 to the CHARM file to zero (0) rate the car hire and mileage rate.

Miscellaneous

Commercial Owner CIF	B049
The Customer Identification File (CIF) number for a commercial owner at a specific location	

Commercial Lessee CIF	B048
The Customer Identification File (CIF) number for a commercial lessee at a specific location	

Umler Effective Date	EFDT
The date the rating activity (pre-registration, modification, etc.) is expected to occur	

This element is not eligible for Query. Does not Carry Forward.

Validation Rule for EFDT

-Effective Date cannot be set to more than 13 months in the future.

NOTES:

- Effective Date will default to the 1st of the following month that equipment is registered

Inspection

Inspection Date Done	DTDN
The date the inspection was completed; used for all inspection types reported on equipment	

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Validation Rule for DTDN

-The inspection date must not be 60 days before the Build Date

Inspection Due Date	INDD
The due date of the next inspection; used for all inspection types reported on equipment	

System Generated Field. This element is not eligible for Input. Value does not carry forward for Add Back.

Inspection Performer	PERF
The SCAC that completed the inspection; used for all inspection types reported on equipment	

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Inspection Reporter	REPT
The SCAC that reported the inspection; used for all inspection types reported on equipment	

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Location/SPLC	SPLC
The SPLC of the inspecting location; used for all inspection types reported on equipment	

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Chassis

General

Status Code *Mandatory* — **USCD**

Identifies the current operational state ●

Does not Carry Forward.

Permissible Values for USCD

A	ACTIVE	I	INACTIVE
P	PRE-REGISTERED		

NOTES:

- For Restencil and Clone process the initial Status of a car should be Pre-Registered.
- All Add-Back processes should initially set the Status to Pre-Registered
- A Pre-registered car will automatically have its Status changed to Active for the initial change when TRAIN detects three (3) movements on the car
- If the Status changes to Active due to movement and the car was created from a Restencil, the Prior Equipment ID (PRID) or source car will have its status changed to Inactive automatically by Umler

Equipment ID — **0001**

The equipment stenciled number

Validation Rule for 0001

-Equipment Number must not be larger than 6 digits (i.e., 999999)

NOTES:

- Equipment ID includes the mark and number stenciled on the equipment. Marks can be up to 4 characters and number up to 6 digits (i.e., ABCD999999).
- Up to 500 cars can be added or updated in a transaction.
- When adding an equipment record, ensure that Prior Equipment ID (PRID) is reported, unless the equipment is new.

Mechanical Designation *Mandatory* — **UMMD**

Equipment description without physical dimensions ●

Used for Transportation Codes.

Permissible Values for UMMD

Z	Chassis/Trailer

Equipment Descriptor *Mandatory* — **B341**

Additional information about the type of equipment used in conjunction with the Mechanical Designation to generate the Equipment Type Code (ETC) for Intermodal Flat, Locomotive, Chassis, Container, and Trailer equipment groups ●

Value does not carry forward for Equipment Group Change.

Permissible Values for B341

ZC	Straight Chassis
ZCC	Combo Chassis
ZCE	Extendible Chassis
ZCG	Gooseneck Chassis
ZCT	Tri-Purpose Chassis

Validation Rule for B341

-Equipment Designator does not agree with the CHSS allowable Mechanical Designations

Equipment Type Code — **UMET**

An alpha numeric code that describes the physical attributes of equipment

System Generated Field. This element is not eligible for Input.

NOTES:

- Please Refer to Appendix I for More information Regarding ETC Generation

Built Date *Mandatory* — **BLDT**

The date the construction of the equipment is complete ●

Data is Confidential. Used for Transportation Codes. Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for BLDT

Minimum	Maximum
1/1/1900	12/31/9999

Validation Rule for BLDT

-For Trailers, Containers and Chassis, the age of the equipment if not rebuilt cannot be in excess of 50 years from today

-Prior and target equipment's Built Date (BLDT) must match for restenciling

NOTES:

- Data is public for railroad marked equipment.
- For connected unit cars report the oldest car in the set.

Rebuilt / ILS Date — **RBDT**

The date the re-construction of the equipment is complete

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for RBDT

Minimum	Maximum
1/1/1900	12/31/9999

Validation Rule for RBDT

-For Trailers, Containers and Chassis, the Built Date cannot be on or before 25 years before the Rebuilt Date

-For Trailers, Containers and Chassis, the Built Date cannot be on or after the Rebuilt Date

NOTES:

- Railroad cars -- applicable only to cars meeting status as provided in both STB Accounting Rules, and the AAR Mechanical Interchange Rule 88, Office Manual.
- Private cars -- applicable to all cars meeting AAR Mechanical Interchange Rule 88, Section C, Office Manual and Sections A and B of the Field Manual.
- For connected unit cars report the oldest car in the set. Do not report Rebuilt Date unless car has been approved by the AAR.

Rebuilt Flag — **RBFL**

Identifies the equipment is nearing its end of life cycle

Data is Confidential. System Generated Field. This element is not eligible for Input. Does not Carry Forward.

Permissible Values for RBFL

N	No	Y	Yes

Owner *Mandatory* — **UMOW**

Primary reporting mark of the railroad or private company owning the car ●

Value does not carry forward for Single Clone / Multi-Clone / Single Restencil / Multi-Restencil.

NOTES:

- Report the primary reporting mark of the railroad or private company owning the car. When car's lease or lien is held by a bank, trust holder, capital lease company, etc. not having an assigned mark, report the primary reporting mark affiliated with the stenciled reporting mark.

Equipment Group *Mandatory* — **0002**

Identifies the various major car types ● ■

Used for Transportation Codes. Affects Rating.

Lessee — **LESE**

The reporting mark of the company leasing the equipment

Value does not carry forward for Single Clone / Multi-Clone / Single Restencil / Multi-Restencil.

Validation Rule for LESE

-Umler Owner (UMOW) and Lessee are not allowed to be equal

NOTES:

- In order to assign privately marked cars to a pool, a railroad reporting mark must be reported.

Maintenance Party	MNPT
The parent reporting mark of the company responsible for the maintenance and repairs of the equipment	

Does not Carry Forward.

Mark Owner Category	B201
The company that owns the stenciled mark on the car	

System Generated Field. This element is not eligible for Input. Value does not carry forward for Single Restencil / Multi-Restencil / Equipment Group Change / Add Back.

Permissible Values for B201

B	US Private
C	Canadian Private
F	Foreign Private
H	Canadian Class II
I	Canadian Class I
J	Mexican Class I
K	Canadian Class III
M	Mexican Private
N	US Private Steamship
O	Canadian Private Steamship
P	Mexican Private Steamship
Q	Foreign Private Steamship
R	US Class II Railroad
U	US Class I Railroad
V	US Class III Railroad
W	Mexican Class II Railroad
Y	Mexican Class III Railroad

NOTES:

- This value is stored in the Umler Database for informational purposes and is retrieved from the Roadmark Registry.

Prior Equipment ID	PRID
The previous reporting mark and number of the equipment	

Value does not carry forward for Single Clone / Multi-Clone.

Validation Rule for PRID

-Prior and target equipment's Built Date (BLDT) must match

-The Prior Equipment ID (0001) must belong to the same or comparable Equipment Group (0002) as the current car initial and number

NOTES:

- Prior ID enables equipment records to share the same historical lineage. Equipment Identification Number (EIN) is a generated id that enables these equipment records to share inspections and transaction history.

Last Update Date	B122
Date of the last Umler element change	

System Generated Field. This element is not eligible for Input.

Equipment Add Date	B082
Date the reporting mark and number was added to the Umler system	

System Generated Field. This element is not eligible for Input.

Status Change Reason	USCR
Identifies the reason for the current operational state	

System Generated Field. This element is not eligible for Input. Does not Carry Forward.

Permissible Values for USCR

I	Initial Load
M	Movement
O	Status Changed Manually
R	Restencil

NOTES:

- If movement is detected on equipment, status is changed to Active.
- If an equipment record is changed to Active, any prior equipment record is placed in Inactive status.

Status Change Date	USCT
Identifies the effective date of the current operational state	

System Generated Field. This element is not eligible for Input. Does not Carry Forward.

Licensing State/Province	A154
Licensing State / Province	

Permissible Values for A154

AB	Canada-Alberta
AG	Mexico-Aguascalientes
AK	US-Alaska
AL	US-Alabama
AR	US-Arkansas
AZ	US-Arizona
BC	Canada-British Columbia
BJ	Mexico-Baja California
BS	Mexico-Baja California Sur
CA	US-California
CH	Mexico-Chiapas
CI	Mexico-Chihuahua
CL	Mexico-Colima
CO	US-Colorado
CP	Mexico-Campeche
CT	US-Connecticut
CU	Mexico-Coahuila De Zargoza
DC	US-District of Columbia
DE	US-Delaware
DF	Mexico-Districto Federal
DG	Mexico-Durango
EM	Mexico-Estado Mexico
FL	US-Florida
GA	US-Georgia
GJ	Mexico-Guanajuato
GR	Mexico-Guerrero
HG	Mexico-Hidalgo
HI	US-Hawaii
IA	US-Iowa
ID	US-Idaho
IL	US-Illinois
IN	US-Indiana
JA	Mexico-Jalisco
KS	US-Kansas
KY	US-Kentucky
LA	US-Louisiana
MA	US-Massachusetts
MB	Canada-Manitoba
MD	US-Maryland
ME	US-Maine
MH	US-Marshall Islands
MI	US-Michigan
MN	US-Minnesota
MO	US-Missouri
MR	Mexico-Morelos
MS	US-Mississippi
MT	US-Montana
MX	Mexico-Other
NA	Mexico-Nayarit
NB	Canada-New Brunswick
NC	US-North Carolina
ND	US-North Dakota

NE	US-Nebraska
NF	Canada-Newfoundland
NH	US-New Hampshire
NJ	US-New Jersey
NL	Mexico-Nuevo Leon
NM	US-New Mexico
NS	Canada-Nova Scotia
NT	Canada-Northwest Territories
NU	Canada-Nunavut
NV	US-Nevada
NW	Northwest Territory
NY	US-New York
OA	Mexico-Oaxaca
OH	US-Ohio
OK	US-Oklahoma
ON	Canada-Ontario
OR	US-Oregon
PA	US-Pennsylvania
PE	Canada-Prince Edward Island
PQ	Canada-Quebec
PR	US-Puerto Rico
PU	Mexico-Puebla
QA	Mexico-Querataro
QR	Mexico-Quintana Roo
RI	US-Rhode Island
SC	US-South Carolina
SD	US-South Dakota
SI	Mexico-Sinaloa
SK	Canada-Saskatchewan
SL	Mexico-San Luis Potosi
SO	Mexico-Sonora
TA	Mexico-Tabasco
TL	Mexico-Tlaxcala
TM	Mexico-Tamaulipas
TN	US-Tennessee
TX	US-Texas
UT	US-Utah
VA	US-Virginia
VI	US-Virgin Islands
VL	Mexico-Veracruz-Llave
VT	US-Vermont
WA	US-Washington
WI	US-Wisconsin
WV	US-West Virginia
WY	US-Wyoming
XX	Exception (Intl. TOFC/COFC or No License)
YC	Mexico-Yucatan
YK	Canada-Yukon
YT	Canada-Yukon
ZT	Mexico-Zacatecas

Equipment Identification — EINN

Unique equipment identifier regardless of stenciled mark

System Generated Field. This element is not eligible for Input.

NOTES:

- Specify the Prior ID (PRID) on equipment records to ensure the historical lineage is preserved. Equipment with the same EIN share history and inspections.

Conflict Status — B050

Identifies the escalation level of equipment in active conflict

System Generated Field. This element is not eligible for Input. Value does not carry forward for Add Back.

Permissible Values for B050

1	Subject to Zero-Rating
2	Subject to Restricted in Interchange
3	Subject to Deletion

NOTES:

- Subject to Zero-Rating, goes into effect 30 days after Conflict Status occurs
- Subject to Restricted in Interchange, goes into effect 90 days after Conflict Status occurs
- Subject to Deletion, goes into effect 365 days after Conflict Status occurs

Date of Original Conflict — B063

The date the equipment was originally placed in the current conflict

System Generated Field. This element is not eligible for Input.

Next Conflict Status — B135

Identifies the next escalation level of an equipment in active conflict

System Generated Field. This element is not eligible for Input. Value does not carry forward for Add Back.

Permissible Values for B135

1	Subject to Zero-Rating
2	Subject to Restricted in Interchange
3	Subject to Deletion

NOTES:

- Subject to Zero-Rating, goes into effect 30 days after Conflict Status occurs
- Subject to Restricted in Interchange, goes into effect 90 days after Conflict Status occurs
- Subject to Deletion, goes into effect 365 days after Conflict Status occurs

Notice Indicator — B137

Identifies equipment in error in Umler Notice Management

System Generated Field. This element is not eligible for Input.

Conflict Status Next Date — B062

The date the conflict status will be escalated

System Generated Field. This element is not eligible for Input. Value does not carry forward for Add Back.

Rate Indicator — A070 ■

Indicates the rate type applicable to the unit

System Generated Field. Used for Transportation Codes. Affects Rating. This element is not eligible for Input. Does not Carry Forward.

Permissible Values for A070

0	Zero-Rated Due to Conflict Errors
1	Units subject to special lease arrangement
6	Zero-Rated - Scrap (S_,SX), AAR Overage (XA), FRA Overage (YA), Umler Conflict - CHR 1/Tarriff 6007 (XZ). Zero-Rated Private Owner Election to Zero Rate [See Private Zero Rate (B150)].

NOTES:

- If unit is zero-rated, correction of conflicts will reinstate the appropriate rate indicator code.

First Movement Date — USAT

The first movement date under the stenciled mark of the equipment

This element is not eligible for Input. Does not Carry Forward.

Equipment Add Company — B083

The reporting mark of the company that added the equipment

System Generated Field. This element is not eligible for Input.

Registration Reason — B174

The code indicating the reason this equipment is added

Does not Carry Forward.

Permissible Values for B174

A	Add-Back	N	New
P	Pending Restencil	R	Restencil

Restencil Program Ind	B177
Identifies the equipment is under a restencil program	

Permissible Values for B177

Y Yes

Delete Reason Code	B064
A code that designates the reason the equipment has been deleted	

Value does not carry forward for Add Back.

Permissible Values for B064

A	Restenciled
D	Destroyed or wrecked
L	Lease terminated, removed from fleet
P	Retired unserviceable beyond economic repair
R	Rebuilt
S	Sold Serviceable
W	Over age retired for dismantling
Y	Error, reporting did not exist
Z	Other

Weight

Gross Rail Load/Weight	A266
The maximum permissible weight on rail of the equipment and the load, reported in pounds	

Range of Values for A266

Minimum	Maximum
4300	105500

Validation Rule for A266

-Gross Rail Load must be equal to the Load Limit (LDLT) plus the Tare Weight (A259)

NOTES:

- Gross Rail Load must be equal to the Load Limit (LDLT) plus the Tare Weight (A259)
- For connected unit cars report the total gross rail load of the entire set

Use Table 1 below to determine Gross Rail Load, if Qualification for Increased Gross Rail Load (B344) does not exist.

TABLE 1 -

Journal Size	Load per Axle	Gross Rail Load for 4-axle Equipment
B - 4 1/2" x 8"	25,750 lbs.	103,000 lbs.
C - 5" x 9"	35,500 lbs.	142,000 lbs.
D - 5 1/2" x 10"	44,250 lbs.	177,000 lbs.
E - 6" x 11"	55,000 lbs.	220,000 lbs.
F - 6 1/2" x 12"	65,750 lbs.	263,000 lbs.
G - 7" x 12"	78,750 lbs.	315,000 lbs.
K - 6 1/2" x 9"	71,500 lbs.	263,000 lbs.
M - 7" x 9"	78,750 lbs.	315,000 lbs.

Use Table 2 below to determine Gross Rail Load for 4-axle equipment if Qualification for Increased Gross Rail Load (B344) exists.

TABLE 2 -

Qualification for Increased Gross Rail Load (B344)	Journal Size	Gross Rail Load
1	K - 6 1/2" x 9"	286,000 lbs.
1	G - 7" x 12"	286,000 lbs.
1	M - 7" x 9"	286,000 lbs.
2	F - 6 1/2" x 12"	286,000 lbs.
2	K - 6 1/2" x 9"	286,000 lbs.
3	F - 6 1/2" x 12"	268,000 lbs.
3	K - 6 1/2" x 9"	268,000 lbs.

A Gross Rail Load less than the listed or calculated values may be entered; however:

7. Star Code (A247) must be R or S, and
8. Load Limit (LDLT) must also be reduced, ensuring Tare Weight (A259) plus Load Limit (LDLT) equals the reported Gross Rail Load.

For equipment having two or more different journal sizes, see following examples:

Example for Drawbar Connected:

- A 3-unit drawbar connected car has 12 axles.
- The end units (Locations A and B) each have 4 axles with E - 6" x 11" journals.
- The intermediate unit (Locations C) has 4 axles with F – 6 1/2" x 12" journals

Using TABLE 1, the Gross Rail Load would be:

8 ea. E-6" x 11" journal axles X 55,000 lbs. per axle = 440,000 lbs.
+ 4 ea. F-6 1/2" x 12" journal axles X 65,750 lbs. per axle = 263,000 lbs.
Gross Rail Load = 703,000 lbs.

Example for IFLT & VFLT:

- A 5-unit articulated intermodal car has 6 trucks (12 axles).
- The end trucks (Locations A and B) each have 2 axles with E - 6" x 11" journals.
- The intermediate trucks (Locations C, D, E, and F) each have 2 axles with G - 7" x 12" journals.

Using TABLE 1, the Gross Rail Load would be:

4 ea. E-6" x 11" journal axles X 55,000 lbs. per axle = 220,000 lbs.
+ 8 ea. G-7" x 12" journal axles X 78,750 lbs. per axle = 630,000 lbs.
Gross Rail Load = 850,000 lbs.

Tare Weight	A259
The equipment weight on rail when empty, sometimes referred to as Light Weight, reported in pounds	

Range of Values for A259

Minimum	Maximum
3500	33000

NOTES:

Do not report an average Tare Weight for car series, except for Pre-Registered cars

- When cars are made active, the actual Tare Weight must be recorded

Load Limit	LDLT
The maximum permissible weight of the commodity that can be loaded into the equipment, reported in pounds	

Range of Values for LDLT

Minimum	Maximum
0	91000

Dimension

Outside Length *Mandatory*	OSLG
The outside length over pulling faces of couplers in normal position ●▲	

Used in ETC Generation. Displayed in feet and inches on the Web. Stored in inches.

Range of Values for OSLG

Minimum	Maximum
15 ft 7 inches	57 ft 0 inches

Validation Rule for OSLG

-For CHSS Equipment Descriptor of ZC the Outside Length must be greater than 40 feet

NOTES:
- For connected unit cars report the maximum coupled length of the set.
- Round fraction to the higher inch, e.g., 05 1/4" = 06"

Outside Extreme Width *Mandatory* **A186**

The outside extreme width of the equipment ●

Displayed in feet and inches on the Web. Stored in inches.

Range of Values for A186

Minimum	Maximum
7 ft 3 inches	8 ft 6 inches

NOTES:
- For connected unit cars report the dimension of the largest unit in the set.
- Round fraction to the higher inch, e.g., 05 1/4" = 06"

Outside Extreme Height *Mandatory* **A185**

Height from top of rail to extreme projecting height ●▲

Used in ETC Generation. Displayed in feet and inches on the Web. Stored in inches.

Range of Values for A185

Minimum	Maximum
2 ft 10 inches	4 ft 9 inches

NOTES:
- For connected unit cars report the dimension of the largest unit in the set.
- Round fraction to the higher inch, e.g., 05 1/4" = 06"

Outside Height Extr Width **A187**

The highest point at which the extreme width of the equipment occurs

Displayed in feet and inches on the Web. Stored in inches.

Range of Values for A187

Minimum	Maximum
2 ft 10 inches	4 ft 9 inches

Validation Rule for A187

-Outside Height Extreme Width must be less than or equal to Outside Extreme Height

NOTES:
- For connected unit cars report the dimension of the largest unit in the set.
- Round fraction to the higher inch, e.g., 05 1/4" = 06"

Undercarriage Width **B217**

Undercarriage Width ▲

Used in ETC Generation.

Permissible Values for B217

102 102 inches 96 96 inches

Validation Rule for B217

-Undercarriage Width must be set if Undercarriage Type is set

Specification

Undercarriage Type **B216**

Undercarriage Type

Permissible Values for B216

F Fix Forward R Fixed Rear S Sliding

Validation Rule for B216

-Undercarriage Type must be set if Undercarriage Width is set

Extendable CHSS Leng Rnge **B307**

Extendable Chassis Length Range ▲

Used in ETC Generation.

Permissible Values for B307

A 40' to 45'
B 40' to 53'
C 45' to 53'
D 48' to 53' (new - ETC Impact Make Effective 072010)
E 53' to 57' (new - ETC Impact Make Effective 072010)

Chassis Loading Combo **B404**

Chassis loading combinations, used in ETC Generation for Z1__ ▲

Used in ETC Generation.

Permissible Values for B404

A 20ft/24ft Chassis Combination
B 20ft/40ft Chassis Combination

King Pin Setting **A149**

King Pin Setting

Permissible Values for A149

18 18 Inches
24 24 inches
28 28 inches
30 30 inches
32 32 inches
36 36 inches (standard)
42 42 inches

Forward Extension **A106**

Forward Extension

Range of Values for A106

Minimum	Maximum
18	60

Brake Type **A034**

Brake System

Permissible Values for A034

A Air E Electric V Vacuum

Axle Count *Mandatory* **A024**

The total number of axles on the equipment ●■

Affects Rating.

Range of Values for A024

Minimum	Maximum
1	999

Validation Rule for A024

-Axle Count for an articulated car must be greater than or equal to ((Connected Unit Count (A020) x 2) + 2)
-Axle Count for a draw bar connected car must be greater than or equal to (Connected Unit Count (A020) x 4)

Tire Size & Wheel Size **A261**

Tire Size & Wheel Size

Range of Values for A261

Minimum	Maximum
7351400	12002500

Remote Monitoring Device **B176**

Indicates the equipment is equipped with a location monitoring device

Permissible Values for B176

Y Yes

Equipment Builder **A035**

Identifies the original manufacturer of the equipment ✹

Permissible Values for A035

2 GLENAYRE (DSL)
3 GLENAYRE
4 PULSE ELEC. INC.
5 WABTEC
6 HARMON
7 U.S. & S

8	NOT USED
9	NORFOLK SOUTHERN RWY
AB	AMF BEAIRD
ABB	Asea Brown Bavari
ACC	American Crane Company
ACCI	Accurate Industries
ACF	American Car & Foundry
ACFX	ACF Industries
ALCC	Alloy Crafts Company
ALCO	American Locomotive Company
ALGE	Alco-GE
ALST	Alstom
ALTN	Altoona
ALWO	Alco-Worthington
ARI	ARI Industries
B	BALDWIN-LIMA-HAMILTON
BERW	Berwick Forge
BETH	Bethlehem Car Works
BL	Boise Locomotive
BLH	Baldwin Lima Hamilton
BLW	Baldwin Locomotive Works
BOMB	Bombardier
BRIL	Brill
BRKS	Brooks Locomotive Works
BS	Barney & Smith
BSP	Bethlehem Steel Corporation
BUDD	Ed G Budd Company
BURR	Burro Crane Works
C	BALDWIN-LOCOMOTIVE CO.
CAN	Canadian Car
CE	CHESAPEAKE & OHIO
CFF	Canadian Car & Foundry
CHIN	Chinese builders (various)
CLC	Canadian Locomotive Company
CLW	Climax Locomotive Works
CN	Canadian National
CNCF	Carros De Ferrocarril, SA
CNR	Canadian National Railway
CONC	Concarrill
CPR	Canadian Pacific
CRMX	Colorado Railcar Manufacturing
CSXR	CSX Remanufacture
D	BOMBARDIER
DARB	Darby
DAV	Davenport Locomotive Company
DETR	Detroit Car Works
DIFC	Difco
DO	DORSEY
DSL	Davies Ship Building
E	CANADIAN GENERAL ELECTRIC
EASX	East Rail Car Division
EMAB	ElectroMotive Diesel - Asea Brown Bavari
EMC	ElectroMotive Corporation
EMD	ElectroMotive Diesel
ETIS	QUANTUM
EVAN	Evans Products
F	CANADIAN LOCOMOTIVE CO.
FCA	Freight Car America
FGRW	FRTGRW
FM	Fairbanks Morse
FMC	FMC Corporation
FRCE	Freight Car Engineering
FREU	Freuhauf Corporation
G	DAVENPORT LOCOMOTIVE CO.
GATX	General American Transportation Corp
GE	General Electric
GEC	GEC Alsthom
GENS	General Steel
GJ	GUANGZHOU JINDO
GLOB	Global Lot
GMB	Greenbrier
GMDD	General Motors Diesel Division
GR	GREAT DANE
GREX	Georgetown Rail Equipment Company
GROV	Grove
GSC	Greenville Steel Car
GSWI	Gunderson Southwest Inc
GULF	Gulf Railcar
GUN4	Gunderson - Trenton Works
GUND	Gunderson Inc
GUNM	Gunderson - Mexico
H	ELECTRO-MOTIVE DIVISION, GENERAL MOTORS CORP.
HA	HARGIS RAILCAR
HAMB	Hamburg Fab Shop
HARS	Harsco
HB	Haskell & Baker
HEIS	Heisler Locomotive Works
HIIX	Hamburg
HP	HPA MONON
HPA	HPA Monon Corporation
HST	Hawker Siddeley
HYUN	Hyundai
I	FAIRBANKS MORSE
IA	INGALLS
IBH	Industrial Brown Hoist
ICC	International Car Company
ICG	Interglobal Capital
IR	Ingersoll Rand
J	GENERAL ELECTRIC
JAC	Johnstown America Corporation
JACK	Jackson Equipment Company
JLW	Juniata Locomotive Works
JNS	JINDO SEOUL
JORD	Jordan Machine Works
JS	Jackson & Sharp
K	GENERAL ELECTRIC AGUASCALIENTES
KASG	Kasgro Railcar
KM	Krauss Maffei
KRCA	Kawasaki Railcar America
L	GENERAL ELECTRIC DE BRAZIL
LAVE	Lavelin
LH	Lima-Hamilton
LIMA	Lima Locomotive Works
LOCO	AMERICAN LOCOMOTIVE CO.
LOX	Lox Equipment Company
M	GENERAL MOTORS-DIESEL DIV. CANADA
MA	MANAC
MC	MARATHON TANK CAR
MCDW	McDowell Wellman
MF	MECHTRON
MH	MURFREESBORO (BUTLER)
MILW	CMSTP & P Railroad
MK	Morrison-Knudson
MLW	Montreal Locomotive Works
MO	MONON
MRCD	Millennium Railcar, Dome Division
MRNE	Marine Industries
N	GENERAL MOTORS-DIESEL DIV.
NACC	North American Car
NG	NORFOLK & WESTERN
NIPP	Nippon-Sharyo
NRE	National Railway Equipment
NSC	National Steel Car
O	J.G. BRILL CO.
OB	Osgood Bradley Car Company
OK	OSHKOSH

ORTN	Ortner
P	KRAUSS-MAFFEI, A.G.
PC	PINES
PCF	Pacific Car & Foundry
PCM	Pullman Car & Manufacturing
PE	PORTEC
PLAS	Plasser America
PLC	Paducah Locomotive Company
PORT	Porter Locomotive Company
PORW	Thrall-Winder
PRAT	Pratt Enterprises
PRO	Procor Limited
PS	Pullman-Standard
PSCC	Pressed Steel Car Company
PSP	Pullman-Standard, Division of Trinity Industries
PT	Plasser & Theurer
Q	LIMA-HAMILTON
R	MORRISON-KNUDSEN
RCC	Raceland Car Corporation
REBD	Reilly Beard
RELC	Relco
RICH	Richmond Locomotive Works
ROAN	Roanoke Shops
ROTA	Rota Car Company
RP	RailPower
RTCX	Richmond Tank Car
RUSS	Russian builders (various)
S	MONTREAL LOCOMOTIVE WORKS
SC	SOUTHEASTERN
SCM	Standard Car Manufacturing
SG	STRICK
SI	SOUTH IRON
SIEM	Siemens
SLC	Saint Louis Car Company
SRSC	Springfield Railcar
SSCC	Standard Steel Car Company
SU	STOUGHTON
T	PLYMOUTH LOCOMOTIVE WORKS
TA	Transit America
TERX	Terex Corporation
THR	Thrall Car Service Parts
THR4	Thrall - Cartersville
THRL	Thrall
TLGA	Talgo America
TM	TRAILMOBILE
TRAN	Tranzrail
TRIN	Trinity
TRIS	Trinity - Springfield MO
TRIX	Trinity Mexico
TT	TEXANA TANK
U	H.J.POTTER
UNAM	United America
UNKN	Unknown
UT	UTILITY
UTLX	Union Tank Car
V	OWNER RAILROAD
VENT	Ventrns
VULC	Vulcan Locomotive Works
W	WHITECOMP LOCOMOTIVE WORKS
WABN	Wabash National
WAG	Wagner Car Company
X	PEORIA LOCOMOTIVE WORKS
Y	REPUBLIC LOCOMOTIVES

Validation Rule for A035

-Equipment built or rebuilt on or after July 1, 2010 cannot have a Equipment Builder of Unknown

-Equipment with a Built Date (BLDT) on or after July 1, 2010 cannot have an Equipment Builder Code of OWNER RAILROAD.

-Equipment Builder can have a value of MULT only if the equipment has multiple units.

Builder Lot Code — B030

A unique identifier for a group of equipment built by one manufacturer under the same contract ✹

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Validation Rule for B030

-Equipment built or rebuilt on or after June 28, 2012 must have a value for Builder Lot Code

Built Country — B031

The country where the equipment was constructed

Data is Confidential.

Permissible Values for B031

CA	Canada	MX	Mexico
US	United States		

Rebuilt Country — B170

The country where the equipment was re-constructed

Permissible Values for B170

CA	Canada	MX	Mexico
US	United States		

Feature

Vertical CHSS Storage — B340

Equipped For Vertical Chassis Storage

Permissible Values for B340

Y	Yes

Cost

Original Cost — A184

The original manufacturer selling price ✹

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for A184

Minimum	Maximum
0	999999

Validation Rule for A184

-Original Cost must be equal to the Ledger Value if there are no Additions & Betterments.

-Original Cost must be equal to the Ledger Value if Additions & Betterments Indicator is not reported.

-Railroad marked freight cars except MISC, LOCO, TRLR, CONT, CHSS, STWH, EOTD, and PSGR are required to have an Original Cost

-Private marked freight cars except MISC, LOCO, TRLR, CONT, CHSS, STWH, EOTD, and PSGR are required to have an Original Cost if Built Date (BLDT) is on or after January 1, 2015

NOTES:

- Original Cost is never altered. It is the cost of the equipment to the original owner.
- For railroad-marked cars, report in US dollars the original ledger value of the original owner For cars rebuilt, report the cost prescribed in MR Interchange Rule 88 and Circular Letter OT-24
- The original cost is used in the settlement of AAR Interchange Rule 107 Office Manual.
- For connected unit cars report the total original cost for all units in the set.
- Numeric, applicable to all railroad-marked cars Also, applicable to privately marked covered hopper (LO) cars.
- Raise all cents to the next dollar, e.g. $5,501.02 = 0005502

Ledger Value — A150

The sum of original cost and additions & betterments

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for A150

Minimum	Maximum
0	999999

Validation Rule for A150

-Original Cost must be equal to the Ledger Value if there are no Additions & Betterments.

-Ledger Value must equal the Original Cost (A184) plus the additions & betterments, if Total A&B (A003) has been reported. Otherwise Ledger Value should equal Original Cost (A184).

Total A&B — A003

System generated sum of all reported amounts in A&B Amount (A317), in US dollars

Data is Confidential. System Generated Field. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for A003

Minimum	Maximum
0	99999999

NOTES:

- For railroad-marked cars, report the sum of all additions and betterments applied to the car. This value is for record keeping purposes only and will not be used to report Ledger Value.
- For private Cars report the additions and betterments as qualified under AAR interchange Rule 107 for determination of settlement value.
- For privately marked covered hopper (LO) cars, report (if not in original cost) the cost of original into-service freight, capitalized linings, capitalized additions and betterments as authorized by Freight Tariff 6007-series. This field is used to determine Adjusted Value for mileage rate calculations.
  - Additions are costs of all new components applied subsequent to the date the car was built or rebuilt and carried in the capital investment account.
  - Betterments are costs of all improvements of components of existing equipment through the substitution of superior parts for inferior parts subsequent to the date the car was built of rebuilt.
- For connected unit cars report the total Truck Location A for all units in the set

Ind for Pos/Neg Total A&B — A128

A code indicating the positive or negative adjustment to the original cost of the equipment

Data is Confidential. System Generated Field. This element is not eligible for Input. Value does not carry forward for Single Clone / Multi-Clone.

Permissible Values for A128

N Negative P Positive

A&B Pos/Neg Ind — A316

A code indicating the positive or negative adjustment to the individual addition and betterment

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Permissible Values for A316

N Negative P Positive

Validation Rule for A316

-When entering an individual Addition & Betterment, you must enter a value in all 4 fields.

-The A&B Indicator is required when Additions & Betterments are reported.

-The A&B Indicator must not be reported if Additions & Betterments are not reported.

A&B Amount — A317

The amount of the individual addition and betterment added to or subtracted from the original cost of the equipment

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for A317

Minimum	Maximum
1	999999

Validation Rule for A317

-When entering an individual addition & betterment; A&B Date Done (A319), A&B Type (A318), A&B Pos/Neg Ind (A316), and A&B Amount (A317) must be reported

A&B Date Done — A319

The date of the individual addition and betterment

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Range of Values for A319

Minimum	Maximum
1/1/1900	12/31/9999

Validation Rule for A319

-When entering an individual Addition & Betterment, you must enter a value in all 4 fields.

-Addition and Betterment Date Done cannot be earlier than Built Date (BLDT).

-Additions & Betterments Date Done cannot be later than today's date.

A&B Type — A318

The type of individual addition and betterment as defined by Rule 107

Data is Confidential. Value does not carry forward for Single Clone / Multi-Clone.

Permissible Values for A318

GNRL General - Capitalized Additions and Betterments

INIT Initial load of historical A&B amount as of Umler 4.6 implementation date

Validation Rule for A318

-For each equipment, only one Individual A&B Type can have a value of INIT.

-When entering an individual Addition & Betterment, you must enter a value in all 4 fields.

Car Management

Pool Number — P001

Unique number used to indicate the grouping of equipment for a particular purpose

Used for Transportation Codes. This element is not eligible for Input. Value does not carry forward for Equipment Group Change / Add Back.

User Routing Instructions — TCUR

The routing instruction reported by the user

Used for Transportation Codes.

Permissible Values for TCUR

2 Trailer Service Rule 2

G Contaminated commodity service

M Mark canceled

O Owner requested return

U Unassigned equipment

NOTES:

- For further explanation reference Appendix E.

Umler Transportation Code — TCOD

The type of assigned service, empty routing or restriction of the equipment

System Generated Field. Used for Transportation Codes. This element is not eligible for Input.

NOTES:

- For further explanation reference Appendix E.

Transportation Cond Code TCCD

The AAR or FRA interchange restriction code

System Generated Field. Used for Transportation Codes. This element is not eligible for Input.

NOTES:

- For further explanation reference Appendix E.

Mechanical Restriction TCME

User reported or system generated type of mechanical restriction

Used for Transportation Codes.

Permissible Values for TCME

S Scrap
X AAR Interchange Restriction

NOTES:

- For further explanation reference Appendix D.1

Mech Restriction Reason TCMR

The explanation of the Mechanical Restriction (TCME)

Used for Transportation Codes.

Permissible Values for TCMR

X Restricted Due to Scrap or Early Warning
Z Restricted Due to Umler Conflict (Not Valid for User Input)

NOTES:

- For further explanation reference Appendix D.2.
- The assignment of the Transportation Codes S_, SX, XA, XZ and YA generate the Rate Indicator Code 6 to the CHARM file to zero (0) rate the car hire and mileage rate.

Miscellaneous

Commercial Owner CIF B049

The Customer Identification File (CIF) number for a commercial owner at a specific location

Commercial Lessee CIF B048

The Customer Identification File (CIF) number for a commercial lessee at a specific location

Umler Effective Date EFDT

The date the rating activity (pre-registration, modification, etc.) is expected to occur

This element is not eligible for Query. Does not Carry Forward.

Validation Rule for EFDT

-Effective Date cannot be set to more than 13 months in the future.

NOTES:

- Effective Date will default to the 1st of the following month that equipment is registered

Inspection

Inspection Date Done DTDN

The date the inspection was completed; used for all inspection types reported on equipment

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Validation Rule for DTDN

-The inspection date must not be 60 days before the Build Date

Inspection Due Date INDD

The due date of the next inspection; used for all inspection types reported on equipment

System Generated Field. This element is not eligible for Input. Value does not carry forward for Add Back.

Inspection Performer PERF

The SCAC that completed the inspection; used for all inspection types reported on equipment

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Inspection Reporter REPT

The SCAC that reported the inspection; used for all inspection types reported on equipment

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Location/SPLC SPLC

The SPLC of the inspecting location; used for all inspection types reported on equipment

Value does not carry forward for Single Clone / Multi-Clone / Add Back.

Customer Specific Group

General

Equipment ID 0001

The equipment stenciled number

Value does not carry forward for Single Clone / Multi-Clone / Single Restencil / Multi-Restencil / Equipment Group Change / Add Back.

Validation Rule for 0001

-Equipment Number must not be larger than 6 digits (i.e., 999999)

NOTES:

- Equipment ID includes the mark and number stenciled on the equipment. Marks can be up to 4 characters and number up to 6 digits (i.e., ABCD999999).
- Up to 500 cars can be added or updated in a transaction.
- When adding an equipment record, ensure that Prior Equipment ID (PRID) is reported, unless the equipment is new.

CSEG Field Q GRFQ

Company Specific Equipment Group Field Q

This element is not eligible for Input, Output or Query. Value does not carry forward for Single Clone / Multi-Clone / Single Restencil / Multi-Restencil / Equipment Group Change / Add Back.

CSEG Field R GRFR

Company Specific Equipment Group Field R

This element is not eligible for Input, Output or Query. Value does not carry forward for Single Clone / Multi-Clone / Single Restencil / Multi-Restencil / Equipment Group Change / Add Back.

CSEG Field S GRFS

Company Specific Equipment Group Field S

This element is not eligible for Input, Output or Query. Value does not carry forward for Single Clone / Multi-Clone / Single Restencil / Multi-Restencil / Equipment Group Change / Add Back.

CSEG Field T GRFT

Company Specific Equipment Group Field T

This element is not eligible for Input, Output or Query. Value does not carry forward for Single Clone / Multi-Clone / Single Restencil / Multi-Restencil / Equipment Group Change / Add Back.

CSEG Field P GRFP

Company Specific Equipment Group Field P

This element is not eligible for Input, Output or Query. Value does not carry forward for Single Clone / Multi-Clone / Single Restencil / Multi-Restencil / Equipment Group Change / Add Back.

CSEG Field W GRFW

Company Specific Equipment Group Field W

This element is not eligible for Input, Output or Query. Value does not carry forward for Single Clone / Multi-Clone / Single Restencil / Multi-Restencil / Equipment Group Change / Add Back.

CSEG Field V GRFV

Company Specific Equipment Group Field V

This element is not eligible for Input, Output or Query. Value does not carry forward for Single Clone / Multi-Clone / Single Restencil / Multi-Restencil / Equipment Group Change / Add Back.

CSEG Field O GRFO

Company Specific Equipment Group Field O

This element is not eligible for Input, Output or Query. Value does not carry forward for Single Clone / Multi-Clone / Single Restencil / Multi-Restencil / Equipment Group Change / Add Back.

CSEG Field U GRFU

Company Specific Equipment Group Field U

This element is not eligible for Input, Output or Query. Value does not carry forward for Single Clone / Multi-Clone / Single Restencil / Multi-Restencil / Equipment Group Change / Add Back.

CSEG Field X GRFX

Company Specific Equipment Group Field X

This element is not eligible for Input, Output or Query. Value does not carry forward for Single Clone / Multi-Clone / Single Restencil / Multi-Restencil / Equipment Group Change / Add Back.

CSEG Field Z GRFZ

Company Specific Equipment Group Field Z

This element is not eligible for Input, Output or Query. Value does not carry forward for Single Clone / Multi-Clone / Single Restencil / Multi-Restencil / Equipment Group Change / Add Back.

CSEG Group ID GRID

Group ID

This element is not eligible for Input, Output or Query. Value does not carry forward for Single Clone / Multi-Clone / Single Restencil / Multi-Restencil / Equipment Group Change / Add Back.

CSEG Field N GRFN

Company Specific Equipment Group Field N

This element is not eligible for Input, Output or Query. Value does not carry forward for Single Clone / Multi-Clone / Single Restencil / Multi-Restencil / Equipment Group Change / Add Back.

CSEG Field C GRFC

Company Specific Equipment Group Field C

This element is not eligible for Input, Output or Query. Value does not carry forward for Single Clone / Multi-Clone / Single Restencil / Multi-Restencil / Equipment Group Change / Add Back.

CSEG Group Name GRNM

Company Specific Equipment Group Name

This element is not eligible for Input, Output or Query. Value does not carry forward for Single Clone / Multi-Clone / Single Restencil / Multi-Restencil / Equipment Group Change / Add Back.

CSEG Field Y GRFY

Company Specific Equipment Group Field Y

This element is not eligible for Input, Output or Query. Value does not carry forward for Single Clone / Multi-Clone / Single Restencil / Multi-Restencil / Equipment Group Change / Add Back.

CSEG Field B GRFB

Company Specific Equipment Group Field B

This element is not eligible for Input, Output or Query. Value does not carry forward for Single Clone / Multi-Clone / Single Restencil / Multi-Restencil / Equipment Group Change / Add Back.

CSEG Field E GRFE

Company Specific Equipment Group Field E

This element is not eligible for Input, Output or Query. Value does not carry forward for Single Clone / Multi-Clone / Single Restencil / Multi-Restencil / Equipment Group Change / Add Back.

CSEG Field A GRFA

Company Specific Equipment Group Field A

This element is not eligible for Input, Output or Query. Value does not carry forward for Single Clone / Multi-Clone / Single Restencil / Multi-Restencil / Equipment Group Change / Add Back.

CSEG Field M GRFM

Company Specific Equipment Group Field M

This element is not eligible for Input, Output or Query. Value does not carry forward for Single Clone / Multi-Clone / Single Restencil / Multi-Restencil / Equipment Group Change / Add Back.

CSEG Field D GRFD

Company Specific Equipment Group Field D

This element is not eligible for Input, Output or Query. Value does not carry forward for Single Clone / Multi-Clone / Single Restencil / Multi-Restencil / Equipment Group Change / Add Back.

CSEG Field F GRFF

Company Specific Equipment Group Field F

This element is not eligible for Input, Output or Query. Value does not carry forward for Single Clone / Multi-Clone / Single Restencil / Multi-Restencil / Equipment Group Change / Add Back.

CSEG Field G GRFG

Company Specific Equipment Group Field G

This element is not eligible for Input, Output or Query. Value does not carry forward for Single Clone / Multi-Clone / Single Restencil / Multi-Restencil / Equipment Group Change / Add Back.

CSEG Field H GRFH

Company Specific Equipment Group Field H

This element is not eligible for Input, Output or Query. Value does not carry forward for Single Clone / Multi-Clone / Single Restencil / Multi-Restencil / Equipment Group Change / Add Back.

CSEG Field I GRFI

Company Specific Equipment Group Field I

This element is not eligible for Input, Output or Query. Value does not carry forward for Single Clone / Multi-Clone / Single Restencil / Multi-Restencil / Equipment Group Change / Add Back.

CSEG Field J GRFJ

Company Specific Equipment Group Field J

This element is not eligible for Input, Output or Query. Value does not carry forward for Single Clone / Multi-Clone / Single Restencil / Multi-Restencil / Equipment Group Change / Add Back.

CSEG Field K GRFK

Company Specific Equipment Group Field K

This element is not eligible for Input, Output or Query. Value does not carry forward for Single Clone / Multi-Clone / Single Restencil / Multi-Restencil / Equipment Group Change / Add Back.

CSEG Field L GRFL

Company Specific Equipment Group Field L

This element is not eligible for Input, Output or Query. Value does not carry forward for Single Clone / Multi-Clone / Single Restencil / Multi-Restencil / Equipment Group Change / Add Back.

CSEG Group Description GRDS

Company Specific Equipment Group Description

This element is not eligible for Input, Output or Query. Value does not carry forward for Single Clone / Multi-Clone / Single Restencil / Multi-Restencil / Equipment Group Change / Add Back.

Pool Description *Mandatory* P002

Pool Description ●

This element is not eligible for Input, Output or Query. Value does not carry forward for Single Clone / Multi-Clone / Single Restencil / Multi-Restencil / Equipment Group Change / Add Back.

Pool Loading Location *Mandatory* P003

Pool Loading Location ●

This element is not eligible for Input, Output or Query. Value does not carry forward for Single Clone / Multi-Clone / Single Restencil / Multi-Restencil / Equipment Group Change / Add Back.

Pool Loading State/Prov *Mandatory* P004

Pool Loading Location State/Province ●

This element is not eligible for Input, Output or Query. Value does not carry forward for Single Clone / Multi-Clone / Single Restencil / Multi-Restencil / Equipment Group Change / Add Back.

Pool Reporter P005

Pool Reporter

This element is not eligible for Input, Output or Query. Value does not carry forward for Single Clone / Multi-Clone / Single Restencil / Multi-Restencil / Equipment Group Change / Add Back.

Pool Type *Mandatory* P006

Pool Type ●

This element is not eligible for Input, Output or Query. Value does not carry forward for Single Clone / Multi-Clone / Single Restencil / Multi-Restencil / Equipment Group Change / Add Back.

Permissible Values for P006

C	G	J	N	O
P	T			

Extended Pool Description P008

Extended Pool Description

This element is not eligible for Input, Output or Query. Value does not carry forward for Single Clone / Multi-Clone / Single Restencil / Multi-Restencil / Equipment Group Change / Add Back.

Pool Operator 1 P011

Pool Operator 1

This element is not eligible for Input, Output or Query. Value does not carry forward for Single Clone / Multi-Clone / Single Restencil / Multi-Restencil / Equipment Group Change / Add Back.

Pool Operator 2 P012

Pool Operator 2

This element is not eligible for Input, Output or Query. Value does not carry forward for Single Clone / Multi-Clone / Single Restencil / Multi-Restencil / Equipment Group Change / Add Back.

Pool Operator 3	P013
Pool Operator 3	

This element is not eligible for Input, Output or Query. Value does not carry forward for Single Clone / Multi-Clone / Single Restencil / Multi-Restencil / Equipment Group Change / Add Back.

Pool Operator 4	P014
Pool Operator 4	

This element is not eligible for Input, Output or Query. Value does not carry forward for Single Clone / Multi-Clone / Single Restencil / Multi-Restencil / Equipment Group Change / Add Back.

Appendices

Table of Contents

Appendix A: Business Rules

The Pool Assignment/Unassignment and Equipment Management Codes Business Rules reflect the compilation of business rules based on the following criteria.

- Documented business rules
- Knowledge of business practices (undocumented business rules)
- Business knowledge of current application functionality

It is possible that the business rules in the existing application code differ from the business rules stated herein. Rules codified in existing applications cannot be assumed to override those rules stated herein or vice-versa. If discrepancies are identified when reviewing the existing code, each discrepancy must be brought to the attention of the business team for resolution.

The current system provides two one-position codes – the Transportation Code (TC) and the Transportation Condition Code (TCC) – for application to its car management systems.

In order to simplify the codification structure and industry processing, the Transportation Code and the Transportation Condition Code have been defined as five distinct data elements called Equipment Management Codes (EMC) consisting of:

- User Reported Equipment Management Code
- System Generated Equipment Management Code
- Pool Control Equipment Management Code
- Mechanical Restriction Equipment Management Code
- Mechanical Restriction Reason Equipment Management Code

When one of these data elements is individually referenced, they will be identified as:

- User Reported (UR)
- System Generated (SG)
- Pool Control (PC)
- Mechanical Restriction (MR)
- Mechanical Restriction Reason (MRR)

Note: The Mechanical Restriction (MR) and Mechanical Restriction Reason (MRR) are referenced in this document as Mechanical Codes.

The current system codes (TC and TCC) co-exist with the new Equipment Management Codes in Umler. Existing Event Repository and legacy TRAIN II messages will continue to accept submissions of the TC/TCC codes. When these codes are submitted through the legacy systems, the Umler system will generate the appropriate Umler Equipment Management Codes based on the rules outlined herein. For direct users of Umler, the TC/TCC codes are output-only fields that are generated by Equipment Management Codes based on the rules outlined in this document.

This document defines the Umler processing associated with equipment management as it relates to the use of the Equipment Management codes versus the legacy TC/TCC codes. For example, the Event Repository system may generate a TC/TCC which is processed by the Umler system resulting in the generation of the appropriate Equipment Management Codes. Only the resulting EMC codes are discussed. The conversion of TC/TCC to Equipment Management Codes can be found in E.5 Equipment Management Codes /Umler Transportation Codes. Also refer to Section 4. Equipment Management Codes for more details regarding the usage and values associated with these new Umler data elements.

In this document “Owner” pertains to the owner of the Mark that is stenciled on the side of the car, not the data element that is defined as the “Equipment Owner” in Umler. The stenciled mark owner is defined in the IRF Mark File.

A.1 Pool Assignment/Reassignment/Unassignment Requirements

A.1.1 Definition of a Pool

The AAR Industry pools are a collection of equipment grouped for a specific purpose and identified by a unique 7-digit (alphanumeric) pool identifier. Pools may be established for several reasons such as cited below.

- To handle the needs of a specific railroad or a railroad’s customers (these pools are identified by a 3-digit prefix using the railroad’s Accounting/Rule260 Code).
- To handle multiple railroads operating jointly to service one customer or service type (these pools are identified by a 3-digit prefix of 998).
- To handle rail industry needs through National Pools established by the AAR (these pools are identified by a 3-digit prefix of 999) and managed by the stenciled mark owner or a rail industry assigned manager; i.e., Reload National Pools, Box Car National Pools.

A.1.2 Creation of Pool Header

Before equipment is assigned to a pool, a pool header is established. The pool header identifies the pool Identifier, the type of pool (commodity, agent, shipper, contaminated, or national), a descriptive name for the pool, pool location information, and the pool operator(s) if applicable. After a Pool Header is established, equipment may be assigned (added) to the pool. The business rules for the creation and management of a Pool Header can be found in Railinc's Pool Header Business Rules document.

A.1.3 Assignment of Unassigned Equipment to a Pool

Pool assignment is defined as the assignment (addition) of equipment to a pool that was not previously in a pool. In this respect, equipment assignment pertains to the addition of a 7-digit Pool Identifier that is not equal to zeros ('0000000'). Equipment unassignment pertains to the removal of the equipment from a pool by the addition of a 7-digit Pool Identifier with a value of zeros ('0000000'). There are very strict rules associated with pool assignments which are imbedded into the Umler application. These rules must be met in order for equipment to be successfully assigned to a pool.

The Pool Type Code in the Pool Header is one of the key elements used to determine whether equipment can be assigned to the pool. The Pool Type Code is used to identify the Mechanical Designations (or Equipment Types) that can be assigned to a pool based on the Car Service Directives applicable to the Pool Type. The relationship between the Car Directives and Orders, the Pool Type Code and the Mechanical Designations and Equipment Types is defined in B.1 Mechanical Designations Applicable to Car Directives and Orders.

In addition to the rules associated with the relationship between the Pool Type and the Mechanical Designations (Equipment Types), there are rules associated with the Pool Category (railroad pool, joint pool or national pool), the Submitter Authorization (refer to C.2 Pool Assignment and Unassignment Security Rules), Rule 260 Validation, Railroad Control Status, and existing Equipment Management Codes Status.

These rules are summarized in Appendix C: Pool Assignment Rules and are based on the following pool categories.

- Railroad Pools
- Joint Pools
- National Pools
- National Pools Managed by TTX

If the equipment passes the applicable assignment rules, the equipment is assigned to the pool and assigned a Pool Control Code based on the Pool Type of the existing Pool Header. Refer to B.2 Pool Type and Equipment Management Code (EMC) Relationship and E.1 EMC Application for Pool.

Equipment, which is defined as being overage according to Rules 88 and 90, is restricted in interchange service, and therefore will be assigned a Mechanical Restriction Code of 'X' and a Mechanical Restriction Reason Code of 'A' automatically by the system. If this equipment is assigned to a pool, this equipment will also carry the applicable Pool Control Code. Refer to Section A.1.5.4.2 for more details on this processing. Also refer to Appendix F: Overage Processing for XA or YA for Freight Equipment.

Refer to B.2 Pool Type and Equipment Management Code (EMC) Relationship which identifies the Equipment Management Code assigned to equipment based on the Pool Type of the Pool Header and identifies those pool types which may have Umler Mechanical Codes of XA (Mechanical Restriction Code of X and Mechanical Restriction Reason Code of A).

A.1.4 Reassignment of Equipment to Another Pool

The reassignment of equipment is defined as moving equipment from one pool to another pool, or in the Umler system, changing the Pool Identifier data element. The Pool Assignment Rules, defined in Appendix B: and Appendix C:, are used in qualifying the equipment for reassignment to the new pool. In addition, authority to remove (unassign) the equipment from its existing pool, as defined in C.2, is added to the equation.

Below are a few additional rules for reassignment From/To Railroad/Joint pools.

- If the Pool Operator 1 or designated reporter/agent of the From Pool is the Pool Operator 1 or designated reporter/agent of the To Pool, then the equipment can be re-assigned.
- If the Pool Operator 1 or designated reporter/agent of the To Pool is the stenciled mark owner in the From Pool, the equipment can be re-assigned.
- The Railinc Administrator can re-assign equipment.

Re-assignment from a Railroad/Joint/National pool to a National pool can only be done by the stenciled mark owner, the Railinc Administrator, or Railinc assigned administrator for authorized National pools (Refer to C.2 Pool Assignment and Unassignment Security Rules).

For reassignment from a National pool to a Railroad/Joint pool, the stenciled mark owner must be the Pool Operator 1 of the 'To Pool' or the designated reporter/agent of the 'To Pool'.

If the equipment is being reassigned to the same pool by the Pool Operator 1 or the designated reporter/agent, the submitter will receive an error identifying that the equipment is already assigned to the pool. If the Pool Operator identifies that their database is not in agreement with Railinc's database, a refresh request can be submitted which will generate output to the submitter on the current status of the equipment.

A.1.5 Unassignment of Equipment from a Pool

Pool unassignment is defined as the removal of equipment from a pool. Equipment may be unassigned by providing a Pool Identifier of zeros ('0000000').

Equipment assigned to a pool, can be unassigned (removed) from the pool by a pool operator or a designated reporter/agent of the pool operator. For railroad stenciled equipment, equipment can also be unassigned by the stenciled mark owner or a designated reporter/agent of the stenciled mark owner. For railroad or private stenciled equipment with a railroad lessee, the equipment can also be unassigned by the Lessee or a designated reporter/agent of the Lessee. When equipment is unassigned (removed) from a pool, the Pool Identifier is set to zeros ('0000000') and the associated Pool Control Code is set to blank.

For private stenciled equipment, the equipment owner cannot unassign (remove) the equipment from a pool by setting the Pool Identifier to zeros; however, they can remove the equipment from a pool by removing or changing the railroad Lessee. Refer to Section A.1.5.3.2.

The Pool Assignment and Unassignment Authorization Rules for the various pool categories are defined in C.2 Pool Assignment and Unassignment Security Rules.

A.1.5.1 Unassignment of Covered Hoppers from a Pool

When a railroad stenciled Covered Hopper (Mechanical Designation of 'LO' defined under Car Service Directive '435'), or a private Covered Hopper with a railroad Lessee is removed from a pool, the Pool Identifier is zeroed '0000000' and the Umler Pool Control Code is set to 'W'. Refer to E.2 EMC Application for Pool Unassignments.

A.1.5.2 Unassignment from Contaminated Pools

Although equipment may be unassigned (removed) from railroad contaminated pools (Umler Pool Control = G) by the stenciled mark owner or the owner's designated reporter/agent or the Pool Operator or the Pool Operator's designated reporter/agent, the contaminated G status is retained. In this case, the Pool Identifier is set to zeros ('0000000'), the Umler Pool Control Code is set to blank, and the Umler User Reported Code is set to 'G'.

For the stenciled mark owner to remove the Umler User Reported 'G' (non-pool G), a second transaction must be created to remove the G from the Umler User Reported Code. Although this requires double entry for the owner to remove the equipment from a contaminated status, it assures that the equipment will not be used in non-contaminated service without the owner specifically taking the necessary steps to remove the Umler User Reported 'G' Code.

A.1.5.3 Unassignment Due to Change in Equipment Status

Equipment may be removed from a pool due to a change in any of the Umler information which disqualifies the equipment for pool assignment, such as a change in the Umler Equipment Type Code, a change in the Umler Built or Rebuilt Year if it impacts its age, a change in the Umler Lessee, a change to a non-assignable Equipment Management Code, etc. Refer to Sections A.1.5.3.1 thru A.1.5.3.2 and A.1.5.4.1 thru A.1.5.4.6 for the various conditions that could cause a unit to be unassigned automatically by the Umler system due to Umler data elements changes.

A.1.5.3.1 Changes in Mechanical Designation

If the Mechanical Designation (related to Equipment Type Code) changes on the equipment such that the Mechanical Designation no longer qualifies for pool assignment, then the equipment is removed from the pool and the Umler Pool Control Code is set to blank. Refer to B.1 Mechanical Designations Applicable to Car Directives and Orders and E.2 EMC Application for Pool Unassignments.

A.1.5.3.2 Removal of a Railroad Lessee on Private Equipment

On private stenciled equipment, if the railroad Lessee is removed or changed, the equipment no longer qualifies for pool assignment. If the equipment is in a pool, the equipment is removed from the pool and the Pool Control Code is set to blank. This rule does not apply to railroad stenciled equipment if the Lessee is removed or changed. Also, this rule does not apply to private equipment with a private lessee since this equipment cannot be assigned to pools. Refer to Appendix C: Pool Assignment Rules.

A.1.5.4 Assignment of Mechanical Restriction Code to S, X or Y

The assignment of the Mechanical Restriction Codes of S, X, or Y to equipment restricts the use of that equipment in interchange service. If the equipment is in a pool (excluding XA, refer to Section 1.5.4.2 for more details), the equipment is removed from the pool and the Pool Control Code

is set to blank. In addition, since the equipment no longer qualifies to receive Car Hire/Mileage rates, the Rate Indicator is changed to the applicable Rate Indicator and applicable rate fields are zeroed. Refer to Appendix D: Section D.1 Codes S, X, Y and Rate Indicator Changes.

A.1.5.4.1 User Reported Mechanical Restriction Codes of S, X, or Y

If the Mechanical Restriction Code is changed by the stenciled mark owner to a "restricted in interchange" code or identified as Scrap, then the equipment no longer qualifies for pool assignment. If the equipment is in a pool, the equipment is removed from the pool and the Pool Control Code is set to blank. In addition, when equipment is assigned an S, X, or Y Mechanical Restriction Code, the equipment no longer qualifies to receive Car Hire/Mileage rates, so the Rate Indicator is changed to the applicable Rate Indicator and applicable rate fields are zeroed. Refer to Appendix D: Section D.1 Codes S, X, Y and Rate Indicator Changes.

For the list of User Reported Mechanical Codes, refer to Section E.3. For associating Umler Equipment Formats to Equipment Groups, refer to Section B.2.

A.1.5.4.2 Assignment of Mechanical Codes of XA/YA – Overage Processing

The Umler system must determine the age of the equipment, whenever the Built or Rebuilt Date or Extended Life changes. If the system determines that the equipment is over-age according to AAR Interchange Rules 88 and 90, the applicable Mechanical Codes of XA or YA are assigned.

XA Code—If the equipment does not qualify for an extended life or rebuilt status and it is over 40 years of age and less than 50 years of age, a Mechanical Restriction Code of X and a Mechanical Restriction Reason Code of A is assigned. Refer to Appendix F: Overage Processing for XA or YA for Freight Equipment.

If the equipment is assigned to a pool type which allows the equipment to carry an XA, then the equipment may remain in the pool and the applicable Pool Control Code will remain on Umler. However, if the equipment is assigned to a pool type which does not allow it to carry an XA, then the equipment is automatically removed from the pool and the Pool Control Code is set to blank. Refer to Section B.2 Pool Type and Equipment Management Code (EMC) Relationship which identifies the Equipment Management Codes assigned to equipment based on the Pool Type of the Pool Header and identifies those Pool Types which may have the Mechanical Codes of XA (overage).

In addition, when equipment is assigned Umler Codes of XA, the Rate Indicator is changed to the applicable Rate Indicator and applicable rate fields are zeroed. Refer to Section D.1 Codes S, X, Y and Rate Indicator Changes.

YA Code—If the equipment qualifies for an extended life or rebuilt status and it is 50 years of age, a Mechanical Restriction Code of Y and a Mechanical Restriction Reason Code of A is assigned. If the equipment does not qualify for an extended life or rebuilt status and it is over 50 years of age, a Mechanical Restriction Code of Y and a Mechanical Restriction Reason Code of A is assigned. If the equipment is in a pool, the equipment is removed from the pool and the Pool Control is set to blank. Refer to Appendix F: Overage Processing for XA or YA for Freight Equipment.

In addition, when equipment is assigned the Mechanical Codes of YA, the Rate Indicator is changed to the applicable Rate Indicator and applicable rate fields are zeroed. Refer to Appendix D: Section D.1 Codes S, X, Y and Rate Indicator Changes.

Assignment of Mechanical Codes of XD – Prohibited Couplers

If the coupler code on the equipment is identified as prohibited in interchange, the Umler system will assign a Mechanical Restriction Code of X and a Mechanical Restriction Reason Code of D. If the equipment is in a pool, it will automatically be removed from the pool and the Pool Control will be set to blank.

In addition, the Rate Indicator is changed to the applicable Rate Indicator and applicable rate fields are zeroed. Refer to Appendix D: Section D.1 Codes S, X, Y and Rate Indicator Changes.

If the stenciled mark owner changes the coupler codes to non-prohibited codes, the Umler system will automatically remove the Mechanical Codes of XD (Mechanical Restriction Code and the Mechanical Restriction Reason Code will be set to blank). The stenciled mark owner must also correct the Rate Indicator to the applicable Rate Indicator to receive car hire or mileage rates.

Assignment of Mechanical Codes of XJ – Prohibited Bearings

If the Bearing and Brake Shoe on the equipment has plain bearings, which are prohibited in interchange, the Umler system will assign the Mechanical Restriction Code of X and the Mechanical Restriction Reason of J. If the equipment is in a pool, it will automatically be removed from the pool and the Pool Control will be set to blank. In addition, the Rate Indicator is changed to the applicable Rate Indicator and applicable rate fields are zeroed. Refer to Appendix D: Section D.1 Codes S, X, Y and Rate Indicator Changes.

If the stenciled mark owner changes the Bearing and Brake Shoe Code to a non-prohibited code, the Umler system will remove the Umler Mechanical Codes of XJ (Mechanical Restriction Code and the Mechanical Restriction Reason will be set to blank). The owner must also correct the Rate Indicator to the applicable Rate Indicator Code to receive car hire or mileage rates.

Assignment of Mechanical Codes of XN – Prohibited LO w/o Stability Devices

A Covered Hopper car (LO) with a cubic feet capacity of 4000 through 4800 inclusive and not equipped with stability devices in the Truck Type and Axle Spacing is prohibited in interchange. Therefore, the Umler system assigns the Mechanical Restriction Code of X and the Mechanical Restriction Reason of N. If the equipment is in pool assignment, it will automatically be removed from the pool and the Umler Pool Control will be set to blank. In addition, the Rate Indicator is changed to an applicable Rate Indicator and applicable rate fields are zeroed. Refer to Appendix D: Section D.1 Codes S, X, Y and Rate Indicator Changes.

If the stenciled mark owner changes the Truck and Axle Spacing Code to a non-prohibited code, the Umler system will remove the Mechanical Codes of XN (Mechanical Restriction Code and the Mechanical Restriction Reason will be set to blank). The owner must also correct the Rate Indicator to the applicable Rate Indicator to receive car hire or mileage rates.

Mechanical Restriction Code S, X or Y Priorities

The S, X, and Y Mechanical Codes may be assigned by the Umler System or the stenciled mark owner. The assignment of these codes overrides all other Equipment Management Codes. In addition, there is a priority within these codes from highest to lowest – SX, S/Blank, YA, XA, YZ. Refer to Section D.2 Mechanical Restriction Code Priority (S, X, Y), which identifies the priority when over-riding existing Mechanical Codes.

A.1.6 Pool Type Changes to the Pool Header

If the Pool Operator 1, the designated reporter/agent or the Railinc Administrator changes the Pool Type on the Pool Header for a particular pool, the system will automatically verify that the equipment qualifies for assignment to the new pool type. If any equipment within the pool does not qualify for the new pool type, the Pool Type change will be rejected with a unique error code indicating that not all equipment qualifies for assignment to the new pool type. In addition, all equipment, which does not qualify for the new pool type, will be identified. If the user wants to progress the Pool Type change, the non-qualifying equipment must be manually removed from the pool before the Pool Type change will be accepted.

Once all equipment within the existing pool qualifies for the new pool type, the system will automatically generate an Equipment Management Code change on all equipment in the pool based on the newly assigned Pool Type of the Pool Header.

Refer to Section B.2 Pool Type and Equipment Management Code (EMC) Relationship and Appendix C: Pool Assignment Rules.

A.2 Event Repository (ER) Assigned/Unassigned System Generated Codes D,E,T

The ER system is responsible for the assignment of the System Generated Codes of "D, E, and T" and these transactions are processed by the Umler system for distribution to the industry. The results of assignment and unassignment of the "D, E, and T" codes to existing Equipment Management Codes are defined. Refer to Appendix G: ER System Generated D, E, T.

A.2.1 ER Assigned/Unassigned System Generated Code of 'D'

Special Car Order No. 200, AAR Circular OT-10, prescribes the business rules for the empty movements of cars that have been assigned the Transportation Code "D". The ER system evaluates movement events to determine whether the newly added RR marked car has not been loaded on the owner's line, RR lessee's line or to the RR where car is assigned. Delivery of the car to the owner, lessee or pool assignee generates a transaction to remove the "D".

The AAR, Mechanical Designations eligible for the TC code "D" are prescribed in AAR Circular CSD-145 and CSD-435, AAR Circular OT-10.

For the Privately-marked car, the ER will generate the Transportation code "D" prior to the cars first loaded move. Such a loaded move will remove the "D" code.

A.2.2 ER Assigned/Unassigned System Generated Code of 'E'

Special Car Order No. 90, AAR Circular OT-10, prescribes the business rules for the empty movements of (E -Excepted) pools for assigned RR marked and Privately-marked (RR leased) cars that did not participate in the last loaded movement are assigned the Transportation Code "E" subject to Note 2 of the Order. The ER system evaluates movement events to determine whether the (E - Excepted) assigned car has been delivered to the owner's line, RR lessee's line or RR assignment line and generates a transaction to remove the "E". The termination of the car's assignment from the (E -Excepted) pool will generate a transaction to delete the "E" code.

The AAR, Mechanical Designations eligible for the TC code "E" is prescribed in AAR Circular CSD-145.

RRs can request specific pool numbers be reported to the E-Code Exception Table to generate the reporting of the Transportation Code "E" to the Umler record by submitting a request to CSC@Railinc.com providing contact information and the following pool information:

Pool No.	Pool Operator	Pool Type	Description	Effective Date	Expiration
5550001	NS	C	Ford	01/01/2013	12/31/9999

A.2.3 ER Assigned/Unassigned System Generated Code of 'T'

Special Car Order No. 90, AAR Circular OT-10, prescribes the business rules for the empty movements of non-pool assigned RR marked and Privately-marked (RR leased) cars that have been assigned the Transportation Code "T". The ER system evaluates movement events to determine whether the non-assigned car did not participate in the last loaded movement on the owning railroad or the leasing railroad. When the car assigned the TC of "T" is delivered to the owner railroad or the leasing railroad, the TC code "T" is deleted from the car.

A.3 ER Assigned/Unassigned User Reported Codes

User Reported Code of 'G' (Ruminant Protein)

When a waybill is reported to the Event Repository (ER) system with a Standard Transportation Commodity Code (STCC) identified as 'proteins derived from ruminants' on a railroad or private Covered Hopper (ETC C _ _ _) unit, the ER system assigns a Car Grade of 'N' and sends an update to the Umler system which assigns an User Reported Code of 'G'. Refer to Appendix H: ER Ruminant Protein Assignment for the business rules associated with the handling of these contaminated equipment.

A.3.1 User Reported Equipment Management Codes

The stenciled mark owner or their designated reporter/agent may assign or remove specific Umler Equipment Management Codes. Refer to Section E.3 User Reported Equipment Management Codes by Equipment Groups, and Section E.4 User Reported Equipment Management Code (EMC) Assignment.

For details on the assignment of user reported Equipment Management Codes of S, X, Y, refer to Section A.1.5.4.1 "User Reported Equipment Management Codes of S, X, or Y".

A.4 Equipment Management Codes

The Equipment Management Codes structure consists of the following data elements:

- System Generated Code
- User Reported Code
- Pool Control Codes
- Mechanical Restriction Codes
- Mechanical Restriction Reason Codes

A brief description of the various Equipment Management Codes is defined below. In addition, Section E.5 Equipment Management Codes /Umler Transportation Codes defines the valid Equipment Management Code combinations and the resulting Umler Transportation Codes. To fully comprehend the Pool and Equipment Management Code process, the Equipment Management Code table must be used in conjunction with the business rules defined in this document.

A.4.1 System Generated Code

The 'D', 'E' and 'T' System Generated Codes are assigned and removed by the ER system based on the rules associated with SCO 90.

In order to distinguish a User reported restricted in interchange condition and an Umler system generated Mechanical Codes of XJ (Mechanical Restriction of X and Mechanical Restriction Reason of J) and XN (Mechanical Restriction of X and Mechanical Restriction Reason of N), an X will be assigned to the System Generated Code when the Umler system assigns the restricted condition.

Valid values for the System Generated Code are:

D Car newly added. For railroad marked freight equipment, this code indicates that the equipment has not been delivered to the owner. For private marked freight equipment, this code indicates that the equipment has not yet had a loaded movement.

E A railroad marked car assigned to a system pool under CSD 145 and 155 that has been reloaded by other then the pool assigned road. Empty to be returned via SCO 90 routing rules.

T Empty to be returned via SCO 90 routing rules.

X Restricted in Interchange is assigned by the Umler system and applicable to XJ and XN codes. Refer to Mechanical Restriction Codes for more details.

A.4.2 User Reported Code

The User Reported Code is usually assigned by the stenciled mark owner. However, under certain conditions, it can be assigned by Railinc's Event Repository (ER) system.

Valid values for the User Reported Code are:

G Contaminated service – empty reverse route

I Return to owner via reverse route or owner's instructions.

M Mark cancelled by AAR.

O Stenciled Mark Owner requested return for lease termination, repair program or assignment.

U Unassigned railroad stenciled equipment – load to or via owner or empty reverse route

2 Trailer/Container must be handled in accordance with Trailer Service Rule 2.

There are two types of 'G' User Reported Codes assigned in this data element:

- A User Reported 'G' Code—The user (stenciled mark owner) may assign a 'G' User Reported Code on Railroad/Private equipment designating the equipment is contaminated. In this case, the equipment is not assigned to a contaminated 'G' pool (see A.4.3 Pool Control Code).
- An Event Repository User Reported 'G' Code—The ER system will assign a User Reported 'G' Code when a ruminant protein is identified as the waybill commodity by Railinc's Event Repository (ER) system on a railroad/private covered hopper. In addition, the ER system will assign a Car Grade of 'N' on this equipment. Note: The User Reported Code was used instead of the System Generated Code because of the conflict with the 'D' Code.

Not all codes reported by the user are assigned under the User Reported Code. A user can assign an S, X, or Y code and these codes are reported under the Mechanical Restriction and /Mechanical Restriction Reason Codes.

A.4.3 Pool Control Codes

The Pool Control Codes are assigned by the Umler pool system. Except for the W, the codes are applicable to equipment in pool service.

Valid values for the Pool Control Code are:

C Shipper pool service – empty reverse route
G Contaminated pool service – empty reverse route
J Agent pool service – empty reverse route
N National pool service – empty return via reverse route or pool operator's instructions
P Commodity pool service – empty reverse route
R Agent pool service – empty reverse route
W Unassigned covered hopper equipment – empty reverse route

There are two types of 'G' Pool Control Codes assigned in this data element:

- Pool Operator Assigned to 'G' Pool – The pool operator may assign the equipment to a contaminated pool type of 'G' and the car management system will assign a 'G' to the Pool Control Code. Pool assignment is only applicable to railroad owned/railroad leased equipment. In addition, the pool operator may assign a railroad owned/railroad leased unit previously defined as a User Reported 'G' to a pool, including unassigned "ruminant" covered hopper equipment.
- Event Repository Assigned to Municipal Garbage Waste (STCC 40 291 14) 'G' Pool - When a municipal garbage waste STCC 40 291 14 is identified as the waybill commodity by Railinc's Event Repository system on a box car, the Event Repository system will assign a Pool Control Code of 'G' and a Car Grade of 'W' on this equipment. Once assigned, the Car Grade 'W' can only be removed by sending a written request to the csc@railinc.com justifying the reason for removing the equipment from this pool.

A.4.4 Mechanical Restriction Codes

The Mechanical Restriction may be assigned by the Umler system or by the stenciled mark owner and identifies equipment that is restricted in interchange service. Normally, there is a mechanical restriction reason associated with the mechanical restriction (refer to Mechanical Restriction Reason below).

Valid values for the Mechanical Restriction Code are:

S Scrap/condemned equipment
X Car restricted by AAR Interchange Rules
Y Car restricted by FRA regulations

A.4.5 Mechanical Restriction Reason Code

The Mechanical Restriction Reason may be assigned by the Umler system or by the stenciled mark owner and is associated with the Mechanical Restriction Code defined above.

Valid values for the Mechanical Restriction Reason Code are:

X If X, valid Mechanical Restriction Reason Codes are A, B, C, D, F, G, J, N, T, U, W, X, Z
Y If Y, valid Mechanical Restriction Reason Codes are A
S If S, valid Mechanical Restriction Reason Codes are space or X

XA and YA can only be assigned by the Umler system. XD, XJ, XN and XZ may be assigned by the stenciled mark owner or the Umler system based on Umler reported prohibited coupler codes, prohibited bearings, prohibited truck type, or errors in critical fields. All other S, X, Y codes are assigned by the equipment owner.

To identify XJ and XN assigned by the Umler system, the System Generated Code is assigned an 'X'.

Refer to Section E.3 User Reported Equipment Management Codes by Equipment Groups for the list of Equipment Management Codes which can be reported by a stenciled mark owner.

A.4.6 Umler TC/TCC Values

The Umler TC/TCC Values is the value assigned using the combination of the Umler System Generated, User Reported, Pool Control, Mechanical Restriction, and Mechanical Restriction Reason data elements to generate the two position Umler Transportation Code/Transportation Condition Code values.

A.5 Processing Not Relevant to EMIS

The following section identifies certain processing that is handled differently in Umler than in EMIS, or in some cases, identifies functionality which is being retired. Existing UMLER TRAIN II messages are not affected by these changes.

A.5.1 Participant List

In the Umler system, when equipment is added to a pool, the equipment's stenciled mark is added as a pool participant to the Pool Header Master. The participant list is used internally by Railinc to identify equipment marks assigned to the pool. During monthly processing, the Umler system removes participants from the list, if there is no longer equipment for the mark in the pool.

The pool participant list is not distributed to the industry. It is used only within Railinc. Since the EMIS system will provide easy access to the full list of equipment defined to a pool, there is no longer a need to maintain a participant list in the Pool Header Master. Therefore, all processing related to maintaining the participant list will be removed from Umler and will not be incorporated into EMIS processing.

A.5.2 'From' Pool Identifier Removal

In Umler, the 'From' Pool Identifier is an input data element contained in the Pool Assignment Transaction. Regardless of the value input in 'From' Pool Identifier, the Umler system automatically overlays the data element with the existing Umler Pool Identifier. Since the 'From' Pool Identifier has no value in Umler or EMIS processing, this field will be eliminated as an input data element in the EMIS inbound messages.

Appendix B: Car Management Processing Tables

B.1 Mechanical Designations Applicable to Car Directives and Orders

CSD Provision	Pool Header Pool Type	Mechanical Designation	Equipment Type Codes	SCO90
CSD 145, 150	C,G,J,N,P,T	XP	A_0_	Yes
		XPI	A_1_	Yes
		XL	A_3_	Yes
		XLI	A_4_	Yes
		XM	B_0_	Yes
		XM	B_1_	Yes
		XM	B_2_	Yes
		XM	B_3_	Yes
		XM	B_4_	Yes
		XM	B_5_	Yes
		XM	B_6_	Yes
		GTS	E_0_	
		GTR	E_1_	
		GBR	E_2_	Yes
		GBS	E_3_	Yes
		GBSR	E_4_	Yes
		GSS	E_6_	Yes
		GWS	E_8_	Yes
		GWSR	E_9_	
		GB	G_1_	Yes
		GB	G_2_	Yes
		GB	G_3_	Yes
		GB	G_4_	Yes
		GS	G_8_	Yes
		HKS	K_0_	
		HMS	K_2_	
		HTR	K_3_	
		HTS	K_4_	
		HKR	K_5_	
		HMSR	K_7_	
		HMA	K_8_	
		FM	F_0_	Yes (4 axles only)
		FMS	F_1_	Yes
		FMS	F_2_	Yes
		FD	F_3_	
		FB	F_4_	Yes
		FBS	F_5_	Yes
		FW	F_6_	
		FL	F_7_	Yes
		FBC	F_8_	Yes
		FDC	F_9_	Yes
		LF	L_0_ (flat)	
		LG	L_1_ (gondola)	Yes
		LP	L_2_ (flat)	
		LU	L_4_ (box)	Yes
		LM	L_6_ (hopper)	
		LC	L_7_ (box)	Yes
		LS	L_9_ (flat)	
		FC[1]	P_ _ _	Yes
		FC[1]	Q_1_	Yes
		FCA	Q_2_	Yes
		FCA	Q_3_	Yes
		FCA	Q_4_	Yes
		FCA	Q_5_	Yes
		FCA	Q_6_	Yes
		FCA	Q_7_	Yes

CSD Provision	Pool Header Pool Type	Mechanical Designation	Equipment Type Codes	SCO90
		FCA	Q_9_ _	Yes
		FC[1]	S_0_	Yes
		FCA	S_2_	Yes
		FCA	S_3_	Yes
		FCA	S_4_	Yes
		FCA	S_5_	Yes
		FCA	S_6_	Yes
		FCA	S_7_	Yes
		FCA	S_8_	Yes
		T	T_ _ _	
		FA	V_ _ _	
		RB	R_0_	Yes
		RBL	R_1_	Yes
		RP	R_6_	Yes
		RPL	R_7_	Yes
		RC	R_9_	
CSD 435	C,G,P, T	LO	C_1_	
CSD 000	Not Assignable[2]	ST	Q_8_	
		Maintenance of Way	M_ _ _	
		D	D_ _ _	
		U	U_ _ _	
		Z	Z_ _ _	
		NF	M970	

Note: Currently, the Car Service Directive Number is defined as a field in Railinc's Equipment Type Code (ETC) Table with the values of 145, 435, or 000 based on the whether the equipment is applicable to a Car Service Directive or not. This field is currently in Railinc's ETC table and is used to determine if the equipment qualifies for pool assignment.

[1] Intermodal flat equipment with FC Mechanical Designations is not permitted in pools with a J (agent pool) Pool Type.

[2] Box, gondola, hopper, flat, intermodal flat and tank equipment groups (excludes Maintenance of Way), assignable to railroad, joint or national pools or equipment not assignable to these pools, since the Critical Error, results in the assignment of Mechanical Codes which are restricted in interchange, will remove railroad, joint, or other national pool assignments. Refer to Appendix C: Pool Assignment Rules. In addition, tank equipment may be assigned if the equipment does not contain double shelf couplers. Refer to Appendix C: Pool Assignment Rules.

B.2 Pool Type and Equipment Management Code (EMC) Relationship

Pool Header Pool Type	Umler Transportation Code	Umler EMC
C	C XA (restricted over 40) XB (Requires ABT inspection)	Pool Control = C Mechanical Restriction = X Mechanical Restriction Reason = A, B
G	G XA (restricted over 40) XB (Requires ABT inspection)	Pool Control = G Mechanical Restriction = X Mechanical Restriction Reason = A, B
N	N	Pool Control = N
T	R XA (restricted over 40) XB (Requires ABT inspection)	Pool Control = R Mechanical Restriction = X Mechanical Restriction Reason = A, B
J	J XA (restricted over 40) XB (Requires ABT inspection)	Pool Control = J Mechanical Restriction = X Mechanical Restriction Reason = A, B
P	P XA (restricted over 40) XB (Requires ABT inspection)	Pool Control = P Mechanical Restriction = X Mechanical Restriction Reason = A, B

The above table identifies the Umler Transportation Code and Umler Equipment Management Codes (EMC) assigned based on the Pool Type. In addition, the table identifies which Pool Types allow equipment to be assigned to it when the equipment is overage. Refer to Section A.1.5.4.2 Assignment of Mechanical Codes of XA/YA – Overage Processing.

Appendix C: Pool Assignment Rules

C.1 Pool Assignment Rules

Pool Category	Pool Header Pool Type	Security Rules	Rule 260 Code	Railroad Controlled	Equipment Type Code (Mechanical Designation)	Existing Equipment Management Codes
Railroad Pool Identifiers are identified with a 3 digit prefix of 001 through 997 inclusive matching the first three positions of the carrier's Rule 260 code.	C,J,P,T	The submitter of the activity must be the Pool Operator 1 defined in the Pool Header or the designated reporter/agent for the Pool Operator 1 or Railinc Administrator.	The Rule 260 Code applicable to Pool Operator 1 must be equal to the first 3 positions of the Pool Identifier.	The equipment must be a stenciled railroad unit or under railroad control (a private unit with a Railroad Lessee)	The Equipment Type Code (Mechanical Designation) of the equipment must be valid for the Pool Type Code defined in the Pool Header (refer to Appendix 'A') ***Exception:*** FC Mechanical Designations are not permitted in J Pool Type as per Car Service Directive 145.	The existing Equipment Management Codes (EMC) must not indicate that the equipment is restricted in interchange (X,Y) or identified as Scrap (S) or identified with a cancelled mark (M). ***Exception:*** XA and XB are the only EMCs that may be included in these pools. ***Note:*** For Pool Types C, J, and P, the corresponding Pool Control is assigned. For Pool Type T, an 'R' Pool Control Code is assigned.

Pool Category	Pool Header Pool Type	Security Rules	Rule 260 Code	Railroad Controlled	Equipment Type Code (Mechanical Designation)	Existing Equipment Management Codes
Railroad Pool Identifiers are identified with a 3 digit prefix of 001 through 997 inclusive matching the first three positions of the carrier's Rule 260 code.	G	The submitter of the activity must be the Pool Operator 1 defined in the Pool Header or the designated reporter/agent for the Pool Operator 1 or Railinc Administrator.	The Rule 260 Code applicable to Pool Operator 1 must be equal to the first 3 positions of the Pool Identifier.	The equipment must be a stenciled railroad unit or under railroad control (a private unit with a Railroad Lessee)	Applicable to equipment types under , B, and C (Refer to Appendix I: Equipment Type Codes (ETC))	The existing Equipment Management Codes (EMC) must not indicate that the equipment is restricted in interchange (X,Y) or identified as Scrap (S) or identified with a cancelled mark (M). ***Exception:*** XA and XB are the only EMCs that may be included in these pools.

Pool Category	Pool Header Pool Type	Security Rules	Rule 260 Code	Railroad Controlled	Equipment Type Code (Mechanical Designation)	Existing Equipment Management Codes
Joint Pool Identifiers are identified with a 3 digit prefix of 998.	C,G,P,T	The submitter of the activity must be Pool Operator 1 defined in the Pool Header, their agent as granted through security or Railinc Administrator.	Not Applicable.	The equipment must be a stenciled railroad unit or under railroad control (a private unit with a Railroad Lessee)	The Equipment Type Code (Mechanical Designation) of the equipment must be valid for the Pool Type Code defined in the Pool Header (refer to Appendix B: Car Management Processing Tables)	The existing Equipment Management Codes (EMC) must not indicate that the equipment is restricted in interchange (X,Y) or identified as Scrap (S) or identified with a cancelled mark (M). ***Exception:*** XA and XB are the only EMCs that may be included in these pools. ***Note:*** For Pool Types C, J, and P, the corresponding Pool Control is assigned. For Pool Type T, an 'R' Pool Control Code is assigned.
National Pool (Header Managed by Railinc Administrator) Numbers 9990001 thru 9990011 and 9990700 thru 9999999.	N	The submitter of the activity must be the railroad owner of the stenciled mark, the railroad lessee of the private equipment, or the Railinc Administrator.	Not Applicable.	The equipment must be a stenciled railroad unit or under railroad control (a private unit with a Railroad Lessee)	The Equipment Type Code of the equipment must be valid for the Pool Type Code defined in the Pool Header (Appendix B: Car Management Processing Tables)	The existing Equipment Management Codes (EMC) must not indicate that the equipment is restricted in interchange (X,Y) or identified as Scrap (S) or identified with a cancelled mark (M). ***Note:*** Overage equipment (XA) is not permitted in National Pool. ***Note:*** XB requiring ABT inspection are permitted in National Pool.

Pool Category	Pool Header Pool Type	Security Rules	Rule 260 Code	Railroad Controlled	Equipment Type Code (Mechanical Designation)	Existing Equipment Management Codes
National Pools Managed by TTX will consist of pool numbers 9990012 thru 9990699 inclusive. These pool numbers are designated for Heavy Duty, Reload, and Box Car Pools. Railinc will assign TTX authority to maintain these pools.	N	If the Pool Operator is TTX (Heavy Duty pools operated under a pooling agreement), then the submitter of the activity must be 'TTX' or Railinc Administrator If the Pool Operator is RLOD (Reload pools operated under a pooling agreement), the submitter of the activity must be TTX, the railroad owner of the stenciled mark, be the railroad lessee of the private equipment, or the Railinc Administrator. If the Pool Operator is RBXC (Box car pools operated under a pooling agreement), the submitter of the activity must be TTX, the railroad owner of the stenciled mark, the railroad lessee of the private equipment, or the Railinc Administrator.	Not Applicable.	The equipment may be a private or railroad The equipment must be a stenciled railroad unit or under railroad control (a private unit with a Railroad Lessee) The equipment must be a stenciled railroad unit or under railroad control (a private unit with a Railroad Lessee)	The Equipment Type Code of the equipment must be valid for the Pool Type Code defined in the Pool Header (refer to Appendix B: Car Management Processing Tables)	The existing Equipment Management Codes (EMC) must not indicate that the equipment is restricted in interchange (X,Y) or identified as Scrap (S) or identified with a cancelled mark (M).* ***Note:*** Overage equipment (XA) is not permitted in National Pool. ***Note:*** XB requiring ABT inspection are permitted in National Pool.
* The asterisk identifies rules that will change if the Equipment Asset Management Working Committee (EAMWC) approves new EMIS codes proposed by the EMIS Core team. Refer to Appendix N.						

C.2 Pool Assignment and Unassignment Security Rules

Pool Category	Submitter of Pool Assignment/Unassignment Activity							
	Pools Operator or Designated Reporter/Agent		RR Stenciled Mark Owner or Umler Lessee or Designated Reporter/Agent for stenciled mark or lessee		Railinc Administrator		Other (System Generated)	
	Assign	Unassign	Assign	Unassign	Assign	Unassign	Assign	Unassign
Railroad Pool (Pool Identifier Prefix 001-997)	Yes	Yes	No	Yes	Yes	Yes	N/A	N/A
Joint Pool (Pool Identifier Prefix 998)	Yes	Yes	No	Yes	Yes	Yes	N/A	N/A
National Managed by Railinc Umler group (9990001-9990011, 9990700-9999999)	N/A	N/A	Yes	Yes	Yes	Yes	N/A	N/A
National Managed by TTX with TTX in Pool Operator 1 (9990012- 9990699)	Yes	Yes	No	Yes	Yes	Yes	N/A	N/A
National Managed by TTX with RLOD in Pool Operator 1 (9990012- 9990699)	Yes	Yes	Yes	Yes	Yes	Yes	N/A	N/A
National Managed by TTX with RBXC in Pool Operator 1 (9990012- 9990699)	Yes	Yes	Yes	Yes	Yes	Yes	N/A	N/A

Appendix D: Umler Mechanical Restriction Codes

D.1 Codes S, X, Y and Rate Indicator Changes

Ownership (Stenciled Mark Owner)	Valid Rate Indicator	Umler Mechanical Restriction S, X, Y with Errors	Umler Mechanical Restriction S, X, Y without Errors	Zero Rates
Private Freight (, B, C, see Appendix J:)	2/4/6	0	6	Zero CHARM* Mileage Rate
Railroad Sub19 (Equipment Group = Box, see Appendix J:)	B	P	P	Zero CHARM* Mileage and Hourly Rates
Railroad Non-Sub19 (, B, and C, see Appendix J:)	M	Q	Q	Zero CHARM* Mileage and Hourly Rates
Trailer/Container/Chassis (see Appendix J:)	1	0	0	Already Zero Rated in CHARM*
Locomotive, EOT, and Maintenance of Way (see Appendix J:)	6	6	6	Already Zero Rated in CHARM*

Additional Processing: Use the following rules to re-instate the Rate Indicator when an S, X, Y Rate Indicator condition is removed.

1. If a Locomotive, End of Train Device or Maintenance of Waywith ETC Prefix M, Steel Wheel Set (ETC Prefix Q8), assign a Rate Indicator of 0 if in error or a 6 if not in error.
2. If a Trailer/Container/Chassis, assign a Rate Indicator of 0 if in error or a 1 if not in error.
3. If a Private Freight unit, assign a Rate Indicator of 0 if in error. If not in error and a TTX unit assign a 4 and if not a TTX unit assign a 2. The stenciled mark owner will be responsible for assigning a Rate Indicator of 6 (zero rate) if applicable.
4. If a Railroad Freight unit with a Rate Indicator of P, retain the Rate Indicator of P if in error or assign a Rate Indicator of B if not in error.
5. If a Railroad Freight unit with a Rate Indicator of Q, retain the Rate Indicator of Q if in error or assign a Rate Indicator of M if not in error.

To relate Umler Formats to the Umler Equipment Group, refer to Section B.2.

*CHARM – The Car Hire Accounting Rate Master is a monthly industry file created by Railinc's CHARM system.

D.2 Mechanical Restriction Code Priority (S, X, Y)

Input EMC Change	Umler Equipment Management Codes											
	S,Blank	S,X	X,A	X,D	X,J	X,N	X,Z	X,B to X,Z	Y,A	Y,Z	M,Blank	Other
	User Assigned	User Assigned	Umler Assigned (Over 40)	Umler Assigned				User Assigned	Umler Assigned (Over 50)	User Assigned	Umler Admin Assigned	All Other TC/TCC
User Assigned S,Blank	S,Blank	S,X	S,Blank	S,Blank	S,Blank	S,Blank	S,Blank	S,Blank	S,Blank	S,Blank	S,Blank	S,Blank
User Assigned S,X	S,X	S,X	S,X	S,X	S,X	S,X	S,X	S,X	S,X	S,X	S,X	S,X
Umler Assigned X,A (Age-Over 40)	S,Blank	S,X	X,A	X,A	X,A	X,A	X,A	X,A	X,A (recalculated age)	X,A	X,A	X,A
Umler Assigned X,D Couplers	S,Blank	S,X	X,A	X,D	X,J	X,N	X,Z	X,D	Y,A	X,D	X,D	X,D
Umler Assigned X,J Plain bearings	S,Blank	S,X	X,A	X,D	X,J	X,N	X,Z	X,J	Y,A	X,J	X,J	X,J
Umler Assigned X,N LO w/o stability devices	S,Blank	S,X	X,A	X,D	X,J	X,N	X,Z	X,N	Y,A	X,N	X,N	X,N
Umler Assigned X,X (expired EW)	S,Blank	S,X	X,A	X,D	X,J	X,N	X,Z	X,B to X,Z	Y,A	Y,Z	X,X	X,X
Umler Assigned X,Z critical error	S,Blank	S,X	X,A	X,D	X,J	X,N	X,Z	X,Z	Y,A	X,Z	X,Z	X,Z
User Assigned X,B to X,Z	S,Blank	S,X	X,A	X,D	X,J	X,N	X,Z	X,B to X,Z	Y,A	Y,Z	X,B to X,Z	X,B to X,Z
Umler Assigned Y,A (Age 50)	S,Blank	S,X	Y,A	Y,A	Y,A	Y,A	Y,A	Y,A	Y,A	Y,A	Y,A	Y,A
User Assigned Y,Z	S,Blank	S,X	X,A	X,D	X,J	X,N	X,Z	Y,Z	Y,A	Y,Z	Y,Z	Y,Z
Umler Admin Assigned M,Blank	S,Blank	S,X	X,A	X,D	X,J	X,N	X,Z	X,B to X,Z	Y,A	Blank, Blank	M,Blank	M,Blank
Umler Admin Blank,Blank	Blank, Blank	Blank, Blank	X,A	X,D	X,J	X,N	X,Z	Blank, Blank	Y,A	Blank, Blank	Blank, Blank	Blank, Blank Except Pools Assigned Codes
User Assigned Blank,Blank	Blank, Blank	S,X	X,A	X,D	X,J	X,N	X,Z	Blank, Blank	Y,A	Blank, Blank	M,Blank	reject
All Other input TC/TCC	S,Blank	S,X	X,A	X.D	X,J	X,N	X,Z	Input TC/TCC	Y,A	Input C/TCC	M,Blank	Input /TCC

The first column of this table titled "Input EMC Change" indicates what is being submitted as a change. The column headings following the double lines indicate the various Equipment Management Codes that could exist prior to the processing of the EMC change. The value in the cell at the intersection of the two is the resulting EMC value after processing is completed.

Note that the resulting (processed) EMC may differ from that submitted due to the relative priority of the Codes. The S and Y Transportation Codes have a higher priority then all other EMC codes and can only be removed by the reporting (i.e. input) of an EMC values of all blanks with the exception of S,X which can only be removed by the Railinc Administrator.

For UMLER assigned X and YA Equipment management Codes, which are assigned based on equipment data elements, the codes can only be removed by changing the applicable data element(s).

Appendix E: Equipment Management Code (EMC)

E.1 EMC Application for Pool

Seq #	Pool Assignment Trans. Code	Before Assignment		After Assignment	
		Umler TC/TCC	Umler EMC	Umler TC/TCC	Umler EMC
1	C	Blank,Blank	All Blank	C,Blank	Pool Control = C
2	G	Blank,Blank	All Blank	G,Blank	Pool Control = G
3	J	Blank,Blank	All Blank	J,Blank	Pool Control = J
4	N	Blank,Blank	All Blank	N,Blank	Pool Control = N
5	P	Blank,Blank	All Blank	P,Blank	Pool Control = P
6	R	Blank,Blank	All Blank	R,Blank	Pool Control = R
7	C	D,Blank	System Generated = D	D,C	System Generated = D Pool Control = C
8	G	D,Blank	System Generated = D	D,G	System Generated = D Pool Control = G
9	J	D,Blank	System Generated = D	D,J	System Generated = D Pool Control = J
10	N	D,Blank	System Generated = D	D,N	System Generated = D Pool Control = N
11	P	D,Blank	System Generated = D	D,P	System Generated = D Pool Control = P
12	R	D,Blank	System Generated = D	D,R	System Generated = D Pool Control = R
13	C	O,Blank	User Reported = O	C,Blank	User Reported = Blank Pool Control = C
14	G	O,Blank	User Reported = O	G,Blank	User Reported = Blank Pool Control = G
15	J	O,Blank	User Reported = O	J,Blank	User Reported = Blank Pool Control = J
16	N	O,Blank	User Reported = O	N,O	User Reported = O Pool Control = N
17	P	O,Blank	User Reported = O	P,Blank	User Reported = Blank Pool Control = P
18	R	O,Blank	User Reported = O	R,Blank	User Reported = Blank Pool Control = R
19	C	T,Blank	System Generated = T	C,Blank	System Generated = Blank Pool Control = C
20	G	T,Blank	System Generated = T	G,Blank	System Generated = Blank Pool Control = G
21	J	T,Blank	System Generated = T	J,Blank	System Generated = Blank Pool Control = J
22	N	T,Blank	System Generated = T	N,Blank	System Generated = Blank Pool Control = N
23	P	T,Blank	System Generated = T	P,Blank	System Generated = Blank Pool Control = P
24	R	T,Blank	System Generated = T	R,Blank	System Generated = Blank Pool Control = R
25	C	U,Blank	User Reported = U	C,Blank	User Reported = Blank Pool Control = C
26	G	U,Blank	User Reported = U	G,Blank	User Reported = Blank Pool Control = G
27	J	U,Blank	User Reported = U	J,Blank	User Reported = Blank Pool Control = J
28	N	U,Blank	User Reported = U	N,Blank	User Reported = Blank Pool Control = N
29	P	U,Blank	User Reported = U	P,Blank	User Reported = Blank Pool Control = P
30	R	U,Blank	User Reported = U	R,Blank	User Reported = Blank Pool Control = R
31	C	W,Blank	Pool Control = W	C,Blank	Pool Control = C
32	G	W,Blank	Pool Control = W	G,Blank	Pool Control = G
33	N	W,Blank	Pool Control = W	N,Blank	Pool Control = N
34	P	W,Blank	Pool Control = W	P,Blank	Pool Control = P
35	R	W,Blank	Pool Control = W	R,Blank	Pool Control = R
36	C	D,W	System Generated = D Pool Control = W	D,C	System Generated = D Pool Control = C
37	G	D,W	System Generated = D Pool Control = W	D,G	System Generated = D Pool Control = G
38	N	D,W	System Generated = D Pool Control = W	D,N	System Generated = D Pool Control = N
39	P	D,W	System Generated = D Pool Control = W	D,P	System Generated = D Pool Control = P
40	R	D,W	System Generated = D Pool Control = W	D,R	System Generated = D Pool Control = R

Seq #	Pool Assignment Trans. Code	Before Assignment		After Assignment	
		Umler TC/TCC	Umler EMC	Umler TC/TCC	Umler EMC
41	C	T,U	System Generated = T User Reported = U	C,Blank	System Generated = Blank User Reported = Blank Pool Control = C
42	G	T,U	System Generated = T User Reported = U	G,Blank	System Generated = Blank User Reported = Blank Pool Control = G
43	J	T,U	System Generated = T User Reported = U	J,Blank	System Generated = Blank User Reported = Blank Pool Control = J
44	N	T,U	System Generated = T User Reported = U	N,Blank	System Generated = Blank User Reported = Blank Pool Control = N
45	P	T,U	System Generated = T User Reported = U	P,Blank	System Generated = Blank User Reported = Blank Pool Control = P
46	R	T,U	System Generated = T User Reported = U	R,Blank	System Generated = Blank User Reported = Blank Pool Control = R
47	C	T,O	System Generated = T User Reported = O	C,Blank	System Generated = Blank User Reported = Blank Pool Control = C
48	G	T,O	System Generated = T User Reported = O	G,Blank	System Generated = Blank User Reported = Blank Pool Control = G
49	J	T,O	System Generated = T User Reported = O	J,Blank	System Generated = Blank User Reported = Blank Pool Control = J
50	N	T,O	System Generated = T User Reported = O	N,O	System Generated = Blank User Reported = O Pool Control = N
51	P	T,O	System Generated = T User Reported = O	P,Blank	System Generated = Blank User Reported = Blank Pool Control = P
52	R	T,O	System Generated = T User Reported = O	R,Blank	System Generated = Blank User Reported = Blank Pool Control = R
53	C	C,Blank J,Blank N,Blank P,Blank R,Blank	Pool Control = C Pool Control = J Pool Control = N Pool Control = P Pool Control = R	C,Blank	Pool Control = C
54	G	G,Blank C,Blank J,Blank N,Blank P,Blank R,Blank	G,Blank Pool Control = C Pool Control = J Pool Control = N Pool Control = P Pool Control = R	G,Blank	Pool Control = G
55	J	C,Blank J,Blank N,Blank P,Blank R,Blank	Pool Control = C Pool Control = J Pool Control = N Pool Control = P Pool Control = R	J,Blank	Pool Control = J
56	N	C,Blank J,Blank N,Blank P,Blank R,Blank	Pool Control = C Pool Control = J Pool Control = N Pool Control = P Pool Control = R	N,Blank	Pool Control = N
57	P	C,Blank J,Blank N,Blank P,Blank R,Blank	Pool Control = C Pool Control = J Pool Control = N Pool Control = P Pool Control = R	P,Blank	Pool Control = P
58	R	C,Blank J,Blank N,Blank P,Blank R,Blank	Pool Control = C Pool Control = J Pool Control = N Pool Control = P Pool Control = R	R,Blank	Pool Control = R
59	C,J,N,P,R	G,Blank	Pool Control = G or User Reported = G	Reject	Must remove 'G' to assign equipment to a non-G pool.

Seq #	Pool Assignment Trans. Code	Before Assignment		After Assignment	
		Umler TC/TCC	Umler EMC	Umler TC/TCC	Umler EMC
60	C	D,C D,J D,N D,P D,R	System Generated = D Pool Control = C System Generated = D Pool Control =J System Generated = D Pool Control = N System Generated = D Pool Control = P System Generated = D Pool Control = R	D,C	System Generated = D Pool Control = C
61	G	D,G D,C D,J D,N D,P D,R	System Generated = D Pool Control = G System Generated = D Pool Control = C System Generated = D Pool Control =J System Generated = D Pool Control = N System Generated = D Pool Control = P System Generated = D Pool Control = R	D,G	System Generated = D Pool Control = G
62	J	D,C D,J D,N D,P D,R	System Generated = D Pool Control = C System Generated = D Pool Control =J System Generated = D Pool Control = N System Generated = D Pool Control = P System Generated = D Pool Control = R	D,J	System Generated = D Pool Control = J
63	N	D,C D,J D,N D,P D,R	System Generated = D Pool Control = C System Generated = D Pool Control =J System Generated = D Pool Control = N System Generated = D Pool Control = P System Generated = D Pool Control = R	D,N	System Generated = D Pool Control = N
64	P	D,C D,J D,N D,P D,R	System Generated = D Pool Control = C System Generated = D Pool Control =J System Generated = D Pool Control = N System Generated = D Pool Control = P System Generated = D Pool Control = R	D,P	System Generated = D Pool Control = P
65	R	D,C D,J D,N D,P D,R	System Generated = D Pool Control = C System Generated = D Pool Control =J System Generated = D Pool Control = N System Generated = D Pool Control = P System Generated = D Pool Control = R	D,R	System Generated = D Pool Control = R
66	C,J,N,P,R	D,G	System Generated = D and Pool Control = G or User Reported = G	Reject	Must remove 'G' to assign equipment to a non-G pool.
67	C	E,C E,J E,P E,R	System Generated = E Pool Control = C System Generated = E Pool Control =J System Generated = E Pool Control = P System Generated = E Pool Control = R	C,Blank	System Generated = Blank Pool Control = C Note: E is removed when equipment reassigned to another pool

Seq #	Pool Assignment Trans. Code	Before Assignment		After Assignment	
		Umler TC/TCC	Umler EMC	Umler TC/TCC	Umler EMC
68	G	E,G E,C E,J E,P E,R	System Generated = E Pool Control = G System Generated = E Pool Control = C System Generated = E Pool Control =J System Generated = E Pool Control = P System Generated = E Pool Control = R	G,Blank	System Generated = Blank Pool Control = G Note: E is removed when equipment reassigned to another pool
69	J	E,C E,J E,P E,R	System Generated = E Pool Control = C System Generated = E Pool Control =J System Generated = E Pool Control = P System Generated = E Pool Control = R	J,Blank	System Generated = Blank Pool Control = J Note: E is removed when equipment reassigned to another pool
70	N	E,C E,J E,P E,R	System Generated = E Pool Control = C System Generated = E Pool Control =J System Generated = E Pool Control = P System Generated = E Pool Control = R	N,Blank	System Generated = Blank Pool Control = N Note: E is removed when equipment reassigned to another pool
71	P	E,C E,J E,P E,R	System Generated = E Pool Control = C System Generated = E Pool Control =J System Generated = E Pool Control = P System Generated = E Pool Control = R	P,Blank	System Generated = Blank Pool Control = P Note: E is removed when equipment reassigned to another pool
72	R	E,C E,J E,P E,R	System Generated = E Pool Control = C System Generated = E Pool Control =J System Generated = E Pool Control = P System Generated = E Pool Control = R	R,Blank	System Generated = Blank Pool Control = R Note: E is removed when equipment reassigned to another pool
73	C,J,N,P,R	E,G	System Generated = E and Pool Control = G or User Reported = G	Reject	Must remove 'G' to assign equipment to a non-G pool.
74	C	X,A	Mech Rest=X Mech Reason=A, B	X,A	Pool Control = C Mech Rest=X Mech Reason=A
75	G	X,A	Mech Rest=X Mech Reason=A, B	X,A	Pool Control = G Mech Rest=X Mech Reason=A
76	J	X,A	Mech Rest=X Mech Reason=A, B	X,A	Pool Control = J Mech Rest=X Mech Reason=A
77	N	X,A	Mech Rest=X Mech Reason=A, B	Reject	
78	P	X,A	Mech Rest=X Mech Reason=A, B	X,A	Pool Control = P Mech Rest=X Mech Reason=A
79	R	X,A	Mech Rest=X Mech Reason=A, B	X,A	Pool Control = R Mech Rest=X Mech Reason=A
80	C	X,A	Pool Control = C,J,N,P,R Mech Rest=X Mech Reason=A, B	X,A	Pool Control = C Mech Rest=X Mech Reason=A
81	G	X,A	Pool Control = C,G,J,N,P,R Mech Rest=X Mech Reason=A, B	X,A	Pool Control = G Mech Rest=X Mech Reason=A
82	J	X,A	Pool Control = C,J,N,P,R Mech Rest=X Mech Reason=A, B	X,A	Pool Control = J Mech Rest=X Mech Reason=A
83	P	X,A	Pool Control = C,J,N,P,R Mech Rest=X Mech Reason=A, B	X,A	Pool Control = P Mech Rest=X Mech Reason=A
84	R	X,A	Pool Control = C,J,N,P,R Mech Rest=X Mech Reason=A, B	X,A	Pool Control = R Mech Rest=X Mech Reason=A

Seq #	Pool Assignment Trans. Code	Before Assignment		After Assignment	
		Umler TC/TCC	Umler EMC	Umler TC/TCC	Umler EMC
85	C,J,N,P,R	X,A	Pool Control = G Mech Rest=X Mech Reason=A, B	Reject	Must remove 'G' to assign equipment to a non-G pool
86	C,J,N,P,R	A,B	User Reported = 2	Reject	Not assignable ETC
87	C,J,N,P,R	M	User Reported = M	Reject	Not assignable TC/TCC
88	C,J,N,P,R	S, Blank	Mech Rest=S Mech Reason=Blank	Reject	Not assignable TC/TCC
89	C,J,N,P,R	S,X	Mech Rest=S Mech Reason=X	Reject	Not assignable TC/TCC
90	C,J,N,P,R	X,J X,N	Mech Rest=X Mech Reason=J System Generated = X Mech Rest=X Mech Reason=N System Generated = X	Reject	Not assignable TC/TCC
91	C,J,N,P,R	X,D X,Z	Mech Rest=X Mech Reason=D Mech Rest=X Mech Reason=Z Note: Umler assigned Mechanical Codes	Reject	Not assignable TC/TCC
92	C,J,N,P,R	X,B X,C X,D X,F X,J X,G X,P X,N X,T X,U X,W X, X X,Z	Mech Rest=X Mech Reason=B (brakes) Mech Rest=X Mech Reason=C (axles) Mech Rest=X Mech Reason=D (coupler) Mech Rest=X Mech Reason=F (yokes) Mech Rest=X Mech Reason=J (plain bearings) Mech Rest=X Mech Reason=G (draft gear) Mech Rest=X Mech Reason=P (side frame) Mech Rest=X Mech Reason=N (trucks) Mech Rest=X Mech Reason=T (bolster) Mech Rest=X Mech Reason=U (AAR or owner reported) Mech Rest=X Mech Reason=W (wheels) Mech Rest=X Mech Reason=X Generated expired EW notice Mech Reason=X Mech Reason=Z Note: User assigned TC/TCC	C,J,N,P,R Reject	System generated Not assignable TC/TCC
93	C,J,N,P,R	Y,A	Mech Rest=Y Mech Reason=A (age) Note: Umler assigned TC/TCC	Reject	Not assignable TC/TCC
Note: The above processing assumes that the equipment has passed all the pool assignment business rules defined in Section C.1.					

E.2 EMC Application for Pool Unassignments

Seq #	Pool Unassignment	Before Assignment		After Assignment	
		Umler TC/TCC	Umler EMC Codes	Umler TC/TCC	Umler EMC Codes
1	Pool Identifier = zeros Pool Control = Blank	C,Blank	Pool Control = C	Blank,,Blank	Pool Control = Blank
2	Same as above	G,Blank	Pool Control = G	G,Blank	User Reported = G Pool Control = Blank
3	Same as above	J,Blank	Pool Control = J	Blank,,Blank	Pool Control = Blank
4	Same as above	N,Blank	Pool Control = N	Blank,,Blank	Pool Control = Blank
5	Same as above	P,Blank	Pool Control = P	Blank,,Blank	Pool Control = Blank
6	Same as above	R,Blank	Pool Control = R	Blank,,Blank	Pool Control = Blank
7	Same as above	D,C	System Gen = D Pool Control = C	D,Blank	System Gen = D Pool Control = Blank
8	Same as above	D,G	System Gen = D Pool Control = G	D,Blank	System Gen = D User Reported = G Pool Control = Blank
9	Same as above	D,J	System Gen = D Pool Control = J	D,Blank	System Gen = D Pool Control = Blank
10	Same as above	D,N	System Gen = D Pool Control = N	D,Blank	System Gen = D Pool Control = Blank
11	Same as above	D,P	System Gen = D Pool Control = P	D,Blank	System Gen = D Pool Control = Blank
12	Same as above	D,R	System Gen = D Pool Control = R	D,Blank	System Gen = D Pool Control = Blank
13	Same as above	E,G	System Gen = E Pool Control = G	G,Blank	System Gen = Blank User Reported = G Pool Control = Blank
14	Same as above	E,C	System Gen = E Pool Control = C	Blank,,Blank	System Gen = Blank Pool Control = Blank
15	Same as above	E,J	System Gen = E Pool Control =J	Blank,,Blank	System Gen = Blank Pool Control = Blank
16	Same as above	E,P	System Gen = E Pool Control = P	Blank,,Blank	System Gen = Blank Pool Control = Blank
17	Same as above	E,R	System Gen = E Pool Control = R	Blank,,Blank	System Gen = Blank Pool Control = Blank
18	Same as above	X,A,B	Pool Control = C Mech Rest=X Mech Reason=A	X,A,B	Pool Control = Blank Mech Rest=X Mech Reason=A
19	Same as above	X,A,B	Pool Control = G Mech Rest=X Mech Reason=A	X,A,B	User Reported = G Pool Control = Blank Mech Rest=X Mech Reason=A
20	Same as above	X,A,B	Pool Control = J Mech Rest=X Mech Reason=A	X,A,B	Pool Control = Blank Mech Rest=X Mech Reason=A
21	Same as above	X,A,B	Pool Control = P Mech Rest=X Mech Reason=A	X,A,B	Pool Control = Blank Mech Rest=X Mech Reason=A
22	Same as above	X,A,B	Pool Control = R Mech Rest=X Mech Reason=A	X,A,B	Pool Control = Blank Mech Rest=X Mech Reason=A

Note: When a railroad Covered Hopper or a private Covered Hopper leased to a railroad (C_1_ ; CSD=435) is removed from a pool, the pool number is set to 0000000 and the Pool Control is set to W.

E.3 User Reported Equipment Management Codes by Equipment Groups

User Input Data	Box Gondola Hopper	Tank	Flat and Intermodal Flat	Maintenance of Way	Trailer Container Chassis	Locomotive	EOT Steelwheels
2[1]	N/A	N/A	N/A	N/A	Yes	N/A	N/A
G	Yes	Yes	Yes	Yes	Yes	N/A	N/A
M[2]	Yes	Yes	Yes	Yes	Yes	Yes	Yes
O	Yes	Yes	Yes	Yes	Yes	Yes	Yes
S	Yes	Yes	Yes	Yes	Yes	Yes	Yes
S,X	Yes	Yes	Yes	Yes	N/A	N/A	N/A
U[3]	Yes	N/A	Yes	N/A	N/A	N/A	N/A
X,B X,C X,D X,F X,G X,J X,N X,P X,T X,W X, X X,Z	Yes	Yes	Yes	Yes	X,Z only	X,Z only	X,Z only
X,U	N/A	Yes	N/A	N/A	N/A	N/A	N/A
Y,Z	Yes	Yes	Yes	Yes	N/A	Yes	N/A

[1] The User Reported Code of '2' is only applicable to trailers and is identified in Umler by the TC/TCC of 'AB'.

[2] The User Reported Code of 'M' can only be reported by the Railinc Administrator.

[3] The User Reported Code of 'U' is only applicable to equipment defined under CSD 150 and 155 in Section B.1 Mechanical Designations Applicable to Car Directives and Orders

To relate Umler Equipment Groups to Umler Formats and Equipment Type Codes, refer to Section B.2.

E.4 User Reported Equipment Management Code (EMC) Assignment

Seq #	User Input Data	Before Assignment		After Assignment	
		TC/TCC	Umler EMC	TC/TCC	Umler EMC
1	O	Blank, Blank	All fields Blank	O,Blank	User Reported=O (all equipment)
2	O	T, Blank	System Generated=T	T,O	System Generated=T User Reported=O
3	O	N,Blank	Pool Control=N	N,O	Pool Control=N User Reported=O
4	U	Blank, Blank	All fields Blank	U,Blank	User Reported=U Only applicable to CSD 150 equipment (Refer to Appendix B:)
5	U	T, Blank	System Generated=T	T,U	System Generated=T User Reported=U Only applicable to CSD 150 (Refer to Appendix B:)
6	2	Blank, Blank	All Fields Blank	A,B	User Reported=2 Applicable to Trailers (ETC Prefix Z) handled under Trailer Service Rule 2
7	G	Blank, Blank	All fields Blank	G,Blank	User Reported=G (refer to Appendix J:)
8	G	W	Pool Control=W	G,W	User Reported=G Pool Control=W (Pool Control of W applicable to unassigned covered hopper cars defined under CSD 435, refer to Appendix B:)
9	G	D	System Generated=D	D,G	User Reported=G System Generated=D
10	G	C,Blank D,C E,C J,Blank D,J E,J N,Blank D,N N,O P,Blank D,P E,P R,Blank D,R E,R	Pool Control=C System Generated=D Pool Control=C System Generated=E Pool Control=C Pool Control=J System Generated=D Pool Control=J System Generated=E Pool Control=J Pool Control=N System Generated=D Pool Control=N Pool Control=N User Reported=O Pool Control=P System Generated=D Pool Control=P System Generated=E Pool Control=P Pool Control=R System Generated=D Pool Control=R System Generated=E Pool Control=R	G,Blank	User Reported=G Control Pool=Blank System Generated=Blank ***Note:*** If the equipment is in a pool, it will be removed from the pool. ***Note 2:*** A User Reported G cannot be applied to equipment identified as being in a G pool.

Seq #	User Input Data	Before Assignment		After Assignment	
		TC/TCC	Umler EMC	TC/TCC	Umler EMC
11*	G	S,blank	Mech Restriction=S	S,blank	User Reported=G Mech Restriction=S Mech Reason=Blank
		S,X	Mech Restriction=S Mech Reason=X	S,X	User Reported=G Mech Restriction=S Mech Reason=X
		X,A	Mech Restriction=X Mech Reason=A	X,A	User Reported=G Mech Restriction=X Mech Reason=A
		X,B[1]	Mech Restriction=X Mech Reason=B[1]	X,B[1]	User Reported=G Mech Restriction=X Mech Reason=B[1]
		Y,A	Mech Restriction=Y Mech Reason=A	Y,A	User Reported=G Mech Restriction=Y Mech Reason=A
12*	G	X,D (prohibited couplers)	System Generated=X Mech Restriction=X Mech Reason=D	X,D	User Reported=G System Generated=X Mech Restriction=X Mech Reason=D
		X,J (prohibited Bearing/Brake Shoe)	System Generated=X Mech Restriction=X Mech Reason=J	X,J	User Reported=G System Generated=X Mech Restriction=X Mech Reason=J
		X,N (LO w/o stability devices)	System Generated=X Mech Restriction=X Mech Reason=N	X,N	User Reported=G System Generated=X Mech Restriction=N Mech Reason=N

Seq #	User Input Data	Before Assignment		After Assignment	
		TC/TCC	Umler EMC	TC/TCC	Umler EMC
13*	M (Railinc Only)	2,Blank G,Blank G,W G,D D,G O,Blank T,O U,Blank T,U C,Blank D,C E,C G,Blank D,G E,G J, Blank D,J E,J N, Blank D,N N,O P, Blank D,P E,P R, Blank D,R E,R	User Reported=2 User Reported=G User Reported=G Pool Control=W User Reported=G System Generated=D Car Grade=N User Reported=G System Generated=D User Reported=O System Generated=T User Reported=O User Reported=U System Generated=T User Reported=U Pool Control=C System Generated=D Pool Control=C System Generated=E Pool Control=C Pool Control=G System Generated=D Pool Control=G System Generated=E Pool Control=G Pool Control=J System Generated=D Pool Control=J System Generated=E Pool Control=J Pool Control=N System Generated=D Pool Control=N Pool Control=N User Reported=O Pool Control=P System Generated=D Pool Control=P System Generated=E Pool Control=P Pool Control=R System Generated=D Pool Control=R System Generated=E Pool Control=R	M, Blank	User Reported=M Pool Control=Blank Mech Restriction=Blank Mech Reason=Blank ***Note:*** If the equipment is in a pool, it will be removed from the pool. ***Note 2:*** The User Reported Codes of M and G can not both be retained since these codes are defined to the same data element. The User Reported M (Mark cancelled) code has a higher priority then the User Reported G (contaminated) code. ***Note 3:*** If the equipment is a ruminant protein contaminated unit, the User Reported M will overlay the G. However, the ruminant protein contaminated unit is identifiable by a Car Grade of N.
14*	M (Railinc Only)	X,A X,B[1] S,Blank S,X Y,A	Mech Restriction=X Mech Reason=A Mech Restriction=X Mech Reason=B[1] Mech Restriction=S Mech Reason=Blank Mech Restriction=S Mech Reason=X Mech Restriction=Y Mech Reason=A	X,A X,B[1] S,Blank S,X Y,A	User Reported=M Mech Restriction=X Mech Reason=A User Reported=M Mech Restriction=X Mech Reason=B[1] User Reported=M Mech Restriction=S Mech Reason=Blank User Reported=M Mech Restriction=S Mech Reason=X User Reported=M Mech Restriction=Y Mech Reason=A

Seq #	User Input Data	Before Assignment		After Assignment	
		TC/TCC	Umler EMC	TC/TCC	Umler EMC
15*	M (Railinc Only)	X,D (prohibited couplers)	System Generated=X Mech Restriction=X Mech Reason=D	X,D	User Reported=M System Generated=X Mech Restriction=X Mech Reason=D
		X,J (prohibited Bearing/Brake Shoe)	System Generated=X Mech Restriction=X Mech Reason=J	X,J	User Reported=M System Generated=X Mech Restriction=X Mech Reason=J
		X,N (LO w/o stability devices)	System Generated=X Mech Restriction=X Mech Reason=N	X,N	User Reported=M System Generated=X Mech Restriction=X Mech Reason=N
16	X,B[1]	Blank,Blank O,Blank T,O U,Blank T,U C,Blank D,C E,C J,Blank D,J E,J N,Blank D,N N,O P,Blank D,P E,P R,Blank D,R E,R	All fields blank User Reported=O System Generated=T User Reported=O User Reported=U System Generated=T User Reported=U Pool Control=C System Generated=D Pool Control=C System Generated=E Pool Control=C Pool Control=J System Generated=D Pool Control=J System Generated=E Pool Control=J Pool Control=N System Generated=D Pool Control=N Pool Control=N User Reported=O Pool Control=P System Generated=D Pool Control=P System Generated=E Pool Control=P Pool Control=R System Generated=D Pool Control=R System Generated=E Pool Control=R	X,B[1]	Mech Restriction=X System Generated=Blank User Reported=Blank Pool Control=Blank
17*	X,B[1]	G,Blank G,W G,D D,G G,Blank D,G E,G	User Reported=G User Reported=G Pool Control=W User Reported=G System Generated=D Car Grade=N User Reported=G System Generated=D Pool Control=G System Generated=D Pool Control=G System Generated=E Pool Control=G	X,B[1]	Mech Restriction=X Mech Reason=B[1] System Generated=Blank User Reported=G Pool Control=Blank ***Note:*** If the equipment is a ruminant protein contaminated unit, it is identifiable by a Car Grade of N.
18	X,Z	2,Blank	User Reported=2	X,Z	Mech Restriction=X Mech Reason=Z User Reported=2

Seq #	User Input Data	Before Assignment		After Assignment	
		TC/TCC	Umler EMC	TC/TCC	Umler EMC
19	Y,Z	Same as Seq. # 16 above	Same as Seq. # 16 above	Y,Z	Mech Restriction=Y Mech Reason=Z System Generated=Blank User Reported=Blank Pool Control=Blank
20*	Y,Z	Same as Seq. # 17 above	Same as Seq. # 17 above	Y,Z	Mech Restriction=Y Mech Reason=Z System Generated=Blank User Reported=G Pool Control=Blank
21	S,Blank	Same as Seq. # 16 above	Same as Seq. # 16 above	S,Blank	Mech Restriction=S Mech Reason=Blank System Generated=Blank User Reported=Blank Pool Control=Blank
22*	S,Blank	Same as Seq. # 17 above	Same as Seq. # 17 above	S,Blank	Mech Restriction=S Mech Reason=Blank System Generated=Blank User Reported=G Pool Control=Blank
23	S,X	Same as Seq. # 16 above	Same as Seq. # 16 above	S,X	Mech Restriction=S Mech Reason=X System Generated=Blank User Reported=Blank Pool Control=Blank
24*	S,X	Same as Seq. # 17 above	Same as Seq. # 17 above	S,X	Mech Restriction=S Mech Reason=X System Generated=Blank User Reported=G Pool Control=Blank
25*	X,B[1]	M,Blank	User Reported=M	X,B[1]	Mech Restriction=X Mech Reason=B[1] System Generated=Blank User Reported=M Pool Control=Blank
26*	Y,Z	M,Blank	User Reported=M	Y,Z	Mech Restriction=Y Mech Reason=Z System Generated=Blank User Reported=M Pool Control=Blank
27*	S,Blank	M,Blank	User Reported=M	S,Blank	Mech Restriction=S Mech Reason=Blank System Generated=Blank User Reported=M Pool Control=Blank
28	S,X	M,Blank	User Reported=M	S,X	Mech Restriction=S Mech Reason=X System Generated=Blank User Reported=M Pool Control=Blank

Seq #	User Input Data	Before Assignment		After Assignment	
		TC/TCC	Umler EMC	TC/TCC	Umler EMC
29*	X,B[1]	X,B[1]	Mech Restriction=X Mech Reason=B[1]	X,B[1]	Mech Restriction=X Mech Reason=B[1]
		X,B[1]	Mech Restriction=X Mech Reason=B[1] User Reported=G	X,B[1]	Mech Restriction=X Mech Reason=B[1] User Reported=G
		X,B[1]	Mech Restriction=X Mech Reason=B[1] User Reported=M	X,B[1]	Mech Restriction=X Mech Reason=B[1] User Reported=M ***Note:*** User may overlay existing User Reported Mechanical Codes. User cannot overlay Umler system assigned Mechanical Codes, i.e. XA, XD, XJ, etc. Refer to Section D.2.
30*	S,Blank	X,B[1]	Mech Restriction=X Mech Reason=B[1]	S,Blank	Mech Restriction=S Mech Reason=Blank
		X,B[1]	Mech Restriction=X Mech Reason=B[1] User Reported=G	S,Blank	Mech Restriction=S Mech Reason=Blank User Reported=G
		X,B[1]	Mech Restriction=X Mech Reason=B[1] User Reported=M	S,Blank	Mech Restriction=S Mech Reason=Blank User Reported=M ***Note:*** User Reported S,Blank may overlay Umler system assigned Mechanical Codes, i.e. XA, XD, XJ, etc. Refer to Section D.2.
31*	S,X	X,B[1]	Mech Restriction=X Mech Reason=B[1]	S,X	Mech Restriction=S Mech Reason=X
		X,B[1]	Mech Restriction=X Mech Reason=B[1] User Reported=G	S,X	Mech Restriction=S Mech Reason=X User Reported=G
		X,B[1]	Mech Restriction=X Mech Reason=B[1] User Reported=M	S,X	Mech Restriction=S Mech Reason=X User Reported=M
		S,Blank	Mech Restriction=S Mech Reason=Blank		***Note:*** User Reported S,X may overlay Umler system assigned Mechanical Codes, i.e. XA, XD, XJ, etc. Refer to Section D.2.
		S,Blank	Mech Restriction=S Mech Reason=Blank User Reported=G		
		S,Blank	Mech Restriction=S Mech Reason=Blank User Reported=M		
32	Blank (remove User Reported 2, G, O or U)	2,Blank G,Blank O,Blank U,Blank	User Reported=2 User Reported=G User Reported=O User Reported=U	Blank,Blank	User Reported=Blank
33	Blank (remove User Reported G)	D,G	User Reported=G System Generated=D	D,Blank	User Reported=Blank System Generated=D
34	Blank (remove User Reported G)	G,W	User Reported=G Pool Control=W	W,Blank	User Reported=Blank Pool Control=W

Seq #	User Input Data	Before Assignment		After Assignment	
		TC/TCC	Umler EMC	TC/TCC	Umler EMC
35	Blank (remove User Reported O or U)	T,O T,U	System Generated=T User Reported=U System Generated=T User Reported=O	T,Blank	System Generated=T User Reported=Blank
36	Blank (remove User Reported O)	N,O	Pool Control=N User Reported=O	N,Blank	Pool Control=N User Reported=Blank
37	Blank,Blank (remove Mechanical Codes)	X,B[1] S,Blank	Mech Restriction=X Mech Reason=B[1] Mech Restriction=S Mech Reason=Blank	Blank, Blank	Mech Restriction=Blank Mech Reason=Blank
38*	Blank,Blank (remove Mechanical Codes)	X,B[1] (with User Reported M) S,Blank	User Reported=M Mech Restriction=X Mech Reason=B[1] User Reported=M Mech Restriction=S Mech Reason=Blank	M,Blank	User Reported=M Mech Restriction=Blank Mech Reason=Blank
39*	Blank,Blank (remove Mechanical Codes)	X,B[1] (with User Reported G) S,Blank	User Reported=G Mech Restriction=X Mech Reason=B[1] User Reported=G Mech Restriction=S Mech Reason=Blank	G,Blank	User Reported=G Mech Restriction=Blank Mech Reason=Blank
40*	Blank,Blank (remove User Reported G)	X,B[1] S,Blank	User Reported=G Mech Restriction=X Mech Reason=B[1] User Reported=G Mech Restriction=S Mech Reason=Blank	X,B[1] S,Blank	User Reported=Blank Mech Restriction=X Mech Reason=B[1] User Reported=Blank Mech Restriction=S Mech Reason=Blank ***Note:*** If defined as a ruminant protein unit with a Car Grade N, reject the activity.
41*	Blank (remove User Reported G)	X,D (prohibited couplers) X,J (prohibited Bearing/Brake Shoe) X,N (LO w/o stability devices) X,D (tanks w/o double shelf couplers) X,Z (critical error)	User Reported=G System Generated=X Mech Restriction=X Mech Reason=D User Reported=G System Generated=X Mech Restriction=X Mech Reason=J User Reported=G System Generated=X Mech Restriction=N Mech Reason=N User Reported=G Pool Control=N Mech Restriction=X Mech Reason=D User Reported=G Pool Control=N Mech Restriction=X Mech Reason=Z	X,D X,J X,N X,D X,Z	User Reported=Blank System Generated=X Mech Restriction=X Mech Reason=D User Reported=Blank System Generated=X Mech Restriction=X Mech Reason=J User Reported=Blank System Generated=X Mech Restriction=X Mech Reason=N User Reported=Blank Pool Control=N Mech Restriction=X Mech Reason=D User Reported=Blank Pool Control=N Mech Restriction=X Mech Reason=Z

Seq #	User Input Data	Before Assignment		After Assignment	
		TC/TCC	Umler EMC	TC/TCC	Umler EMC
42*	Blank,Blank (remove User Reported M – Railinc Only)	X,B[1]	User Reported=M Mech Restriction=X Mech Reason=B[1]	X,B[1]	User Reported=Blank Mech Restriction=X Mech Reason=B[1]
		S,Blank	User Reported=M Mech Restriction=S Mech Reason=Blank	S,Blank	User Reported=Blank Mech Restriction=S Mech Reason=Blank ***Note:*** If defined as a ruminant protein unit with a Car Grade N, assign a User Reported Code of G.
43*	Blank (remove User Reported M – Railinc Only)	M,Blank	User Reported=M	Blank,Blank	User Reported=Blank
		X,D (prohibited couplers)	User Reported=M System Generated=X Mech Restriction=X Mech Reason=D	X,D	User Reported=Blank System Generated=X Mech Restriction=X Mech Reason=D
		X,J (prohibited Bearing/Brake Shoe)	User Reported=M System Generated=X Mech Restriction=X Mech Reason=J	X,J	User Reported=Blank System Generated=X Mech Restriction=X Mech Reason=J
		X,N (LO w/o stability devices)	User Reported=M System Generated=X Mech Restriction=N Mech Reason=N	X,N	User Reported=Blank Pool Control=N Mech Restriction=X Mech Reason=N
		X,D (tanks w/o double shelf couplers)	User Reported=M Pool Control=N Mech Restriction=X Mech Reason=D	X,D	User Reported=Blank Pool Control=N Mech Restriction=X Mech Reason=D
		X,Z (critical error)	User Reported=M Pool Control=N Mech Restriction=X Mech Reason=Z	X,Z	User Reported=Blank Pool Control=N Mech Restriction=X Mech Reason=Z

[1] Processing for XB would be the same for the User Reported codes of XC, XD, XF, XG, XJ, XN, XP, XT, XU, XW, or XZ. Refer to Section E.3 for a list of valid User Reported Equipment Management Codes for the various Umler Equipment Groups.

Errors Messages:

- If the user reports a code that is not applicable to the equipment based on the equipment type, i.e., XU is applicable to all equipment types, etc, provide a message indicating that the equipment type is not valid for the reported EMC. Refer to Appendix K:.
- If the user reports the same Umler code which already existing in Umler, then provide a message indicating that the equipment is already assigned with the applicable Umler EMC Code.
- If the user reports a User Reported G and the equipment has a Pool Control of G, provide a message indicating that the equipment is assigned to a G pool. The submitter must use a Pool Unassignment (Pool Identifier set to '0000000') to remove equipment from a G pool. When it is removed from a G pool, the system will automatically assign a User Reported G. Do not generate this message if the activity was generated by the ER system.
- If the user reports an Umler User Reported code that is not defined above, provide a message indicating that the code is not valid based on the existing Umler Equipment Management Codes.

* A Sequence Number (Seq #) followed by an asterisk (*) identify new EMIS codes proposed by the EMIS Core team pending approval by the Equipment Asset Management Working Committee (EAMWC). These codes allow for more information to be provided on the status of the equipment then currently available through the Umler system. Section E.5 describes the EMIS Equipment Management Codes. Sequence Numbers followed by an asterisk (*) identify the new EMIS Core proposed codes.

Note 1: The assignment of the TCs S__, SX, XA, XZ and YA generate the Rate Indicator Code 6 to the CHARM file to zero (0) rate the car hire and mileage rate.

Note 2: Cars assigned the TCs XA and XB can be assigned to pools. See Seq. #'s 33 – 44 in Section E.5.

E.5 Equipment Management Codes /Umler Transportation Codes

Sequence Number	Umler Equipment Management Codes					Umler TC/TCC	Description
	System Generated	User Reported	Pool Control	Mechanical Restriction	Mechanical Restriction Reason		
1						_,_	No Equipment Management Codes (EMC)
2		M				M_	Railinc assigned M. The reporting mark has been canceled by the AAR. Railroad company no longer exists. Empty car to be handed via reverse route.
3		O				O_	Stenciled Mark Owner assigned O. Stenciled Mark Owner has requested return of equipment for lease termination or repairs. Car may not be loaded by any carrier. Empty car to be handled under provisions of CSD 175.
4		U				U_	Stenciled Mark Owner assigned U - After unloading, handling covered under CSD 150
5	T					T_	Railinc ER generated T
6	T	U				TU	Railinc ER generate T with a user reported U
7	T	O				TO	Railinc ER generated T with a user reported O
8		G				G_	Stenciled Mark Owner assigned G - Car is in contaminated service.
9		G	W			GW	Railinc ER generated G when ruminant protein commodity is identified in the TRAIN II Waybill on a railroad or private covered hopper (ETC C_ _ _).
10			W			W_	Railinc Umler generated W for an unassigned Covered Hopper under CSD 435.
11			C			C_	Railinc Umler generated C - Railroad car assigned to a specific shipper at a specific location (CSD 145 or 435). Car cannot be loaded. Empty car to be handled via reverse route. Pool Type is 'C'.
12			G			G_	Car is in contaminated commodity service. Stenciled Mark Owner assigned to a railroad contaminated pool or Railinc ER generated G when municipal garbage waste commodity (STCC 4029114) is identified in the TRAIN II Waybill on a box car (ETC A, B, or R).
13			J			J_	Railinc Umler generated J - Car is assigned to an Agent Pool (CSD 145 or 435). Loaded car may be loaded by any carrier without regard to route or destination. Empty car to be handled via reverse route. Pool Type is 'J'.
14			N			N_	Railinc Umler generated N - Car is in a National Pool (CSD 145). When the National pool has a pool operator defined (applicable to Heavy capacity flat car, box car and Reload pools), the equipment may only be loaded with the pool operator's permission. Empty cars to be handled per pool operator's instructions or via reverse route.
15		O	N			NO	Car is in a National Pool (CSD 145) (refer to sequence number 14) and stenciled mark owner has assigned an O to request the return of equipment under CSD 175.
16			P			P_	Railinc Umler generated P - Car is assigned to a Commodity Pool (CSD 145 or 435). Empty car cannot be loaded. When empty, car should move via reverse route. Pool Type is 'P'.
17			R			R_	Railinc Umler generated R - Car is assigned to an Agent Pool (CSD 145 or 435). Empty car cannot be loaded. When empty, car should move via reverse route. Pool Type is 'T'.
18	D					D_	Railinc ER generated D to identify a newly added freight car. For railroad marked freight equipment, indicates that the equipment has not been delivered to the owner. For private marked freight equipment, indicates that the equipment has not had a loaded Event reported to the ER.
19	D		C			DC	Railinc ER generated D (refer to sequence number 18) - system car assigned to a C Pool (refer to sequence number 11)
20	D		G			DG	Railinc ER generated D (refer to sequence number 18) - system car assigned to a G pool (refer to sequence number 12)

Sequence Number	Umler Equipment Management Codes					Umler TC/TCC	Description
	System Generated	User Reported	Pool Control	Mechanical Restriction	Mechanical Restriction Reason		
21	D	G				GD	Railinc ER generated D (refer to sequence number 18) – and Railinc ER generated G on railroad or private covered hopper loaded with ruminant protein (refer to sequence number 9)
22	D	G				DG	Railinc ER generated D (refer to sequence number 18) - system car assigned a 'G' by the stenciled mark owner (refer to sequence number 8)
23	D		J			DJ	Railinc ER generated D (refer to sequence number 18) - system car assigned to J pool (refer to sequence number 13)
24	D		N			DN	Railinc ER generated D (refer to sequence number 18) - system car assigned to an N pool (refer to sequence number 14)
25	D		P			DP	Railinc ER generated D (refer to sequence number 18) - system car assigned to P pool (refer to sequence number 16)
26	D		R			DR	Railinc ER generated D (refer to sequence number 18) - system car assigned to T pool (refer to sequence number 17)
27	D		W			DW	Railinc ER generated D (refer to sequence number 18) on unassigned Covered Hopper (refer to sequence number 10 ETC 'C_ _ _')
28	E		C			EC	Railinc ER generated E (Assigned cars in system pool loaded by other than pool operator. Empty to be returned via SCO90 routing sequence numbers) - system car assigned to C pool (refer to sequence number 11)
29	E		G			EG	Railinc ER generated E (refer to sequence number 28) - system car assigned to a G pool (refer to sequence number 12)
30	E		J			EJ	Railinc ER generated E (refer to sequence number 28) - system car assigned to J pool (refer to sequence number 13)
31	E		P			EP	Railinc ER generated E (refer to sequence number 28) - system car assigned to P pool (refer to sequence number 16)
32	E		R			ER	Railinc ER generated E - system car assigned to T pool (refer to sequence number 17)
33				X	A	XA	Railinc Umler generated XA – Based on service life of the equipment. Prohibited in interchange service by AAR Interchange Rules
34			C	X	A	XA	Railinc Umler generated XA – Assigned to C pool (refer to sequence number 11) but restricted in interchange
35			G	X	A	XA	Railinc Umler generated XA – Assigned to G pool (refer to sequence number 12) but restricted in interchange
36			J	X	A	XA	Railinc Umler generated XA – Assigned to J pool (refer to sequence number 13) but restricted in interchange
37			P	X	A	XA	Railinc Umler generated XA – Assigned to P pool (refer to sequence number 16) but restricted in interchange
38			R	X	A	XA	Railinc Umler generated XA –- Assigned to T pool (refer to sequence number 17) but restricted in interchange
39				X	B	XB	Stenciled Mark Owner assigned XB – Restricted in Interchange due to Brakes
40			C	X	B	XB	Railinc Umler generated XB – Assigned to C pool (refer to sequence number 11) but restricted in interchange
41			G	X	B	XB	Railinc Umler generated XB – Assigned to G pool (refer to sequence number 12) but restricted in interchange
42			J	X	B	XB	Railinc Umler generated XB – Assigned to J pool (refer to sequence number 13) but restricted in interchange
43			P	X	B	XB	Railinc Umler generated XB – Assigned to P pool (refer to sequence number 16) but restricted in interchange

Sequence Number	Umler Equipment Management Codes					Umler TC/TCC	Description
	System Generated	User Reported	Pool Control	Mechanical Restriction	Mechanical Restriction Reason		
44			R	X	B	XB	Railinc Umler generated XB –- Assigned to T pool (refer to sequence number 17) but restricted in interchange
45				X	C	XC	Stenciled Mark Owner assigned XC – Restricted in Interchange due to Axles
46	X			X	D	XD	Railinc Umler generated XD – Restricted in interchange due to having prohibited coupler
47			N	X	D	XD	Railinc Umler generated XD – Restricted in interchange because tank does not have double shelf couplers defined in the Draft Gear/Coupler field in Umler. Must change the Draft Gear/Coupler in Umler to remove the XD.
48				X	D	XD	Stenciled Mark Owner assigned XD – Restricted in interchange due to Couplers
49				X	F	XF	Stenciled Mark Owner assigned XF– Restricted in interchange due to Coupler Yokes
50				X	G	XG	Stenciled Mark Owner assigned XG – Restricted in interchange due to Draft Gears
51	X			X	J	XJ	Railinc Umler generated XJ – Restricted in interchange due to the equipment having Plain Bearings in the Bearing and Brake Shoe field in Umler. Must change the Bearing /Brake Shoe to removed XJ.
52				X	J	XJ	Stenciled Mark Owner assigned XJ – Restricted in interchange due to Bearings
53	X			X	N	XN	Railinc Umler generated XN – Restricted in interchange due to the Covered Hopper (LO) equipment having- a cubic feet capacity 4000 to 4800 inclusive and not equipment with stability devices in the Truck Type and Axle Spacing field in Umler. Must change the Truck Type and Axle Spacing to removed XN.
54				X	N	XN	Stenciled Mark Owner assigned XN – Restricted in interchange due to Truck
55				X	P	XP	Stenciled Mark Owner assigned XP– Restricted in interchange due to Truck Side Frames
56				X	T	XT	Stenciled Mark Owner assigned XT– Restricted in interchange due to Truck Bolsters
57				X	U	XU	Stenciled Mark Owner assigned XU – Equipment restricted in Interchange by AAR or owner
58				X	W	XW	Stenciled Mark Owner assigned XW – Restricted in Interchange due to Wheels
59				X	X	XX	Railinc Umler generated XX – Expired EW Notice
60			N	X	Z	XZ	System generated XZ – Restricted in interchange due to data element conflicts
61				X	Z	XZ	Stenciled Mark Owner assigned XZ – Restricted in Interchange due to other restrictions defined by owner
62				S		S_	Stenciled Mark Owner assigned S,Blank to identify a condemned car or car destined for scrap or dismantling. Car should only be moving empty by agreement of handling carriers.
63				S	X	SX	Stenciled Mark Owner assigned SX to identify a car sold for scrap under AAR Interchange, Rule 88, can never re-enter (rail) service. If reported in error, can only be removed by the Railinc Administrator.
64				Y	A	YA	Railinc Umler Generated YA – Based on the age of the equipment 50 years. Restricted in interchange service by FRA regulations.
65		2				AB	Stenciled Mark Owner assigned AB – Only applicable to Trailers and Containers. Trailer/Container cannot be designated a general service unit by owner. Must be handled in accordance with Trailer Service Rule 2.
66		G		X	A	XA	Railinc Umler generated XA – Restricted in Interchange due to Age and User Reported G (refer to sequence number 8 and 33).
67		G		X	B	XB	Stenciled Mark Owner assigned or generated by Umler for no ABT inspection reported XB – Restricted in Interchange due to Brakes and User Reported G (refer to sequence number 8 and 39).
68		G		X	C	XC	Stenciled Mark Owner assigned XC – Restricted in Interchange due to Axles and User Reported G (refer to sequence number 8 and 45).

Sequence Number	Umler Equipment Management Codes					Umler TC/TCC	Description
	System Generated	User Reported	Pool Control	Mechanical Restriction	Mechanical Restriction Reason		
69	X	G		X	D	XD	Railinc Umler generated XD – Restricted in interchange due to having prohibited coupler and User Reported G (refer to sequence number 8 and 46).
70		G	N	X	D	XD	Railinc Umler generated XD – Restricted in interchange because tank does not have double shelf couplers defined in the Draft Gear/Coupler field in Umler and User Reported G (refer to sequence number 8 and 47).
71		G		X	D	XD	Stenciled Mark Owner assigned XD – Restricted in Interchange due to Couplers and User Reported G (refer to sequence number 8 and 48).
72		G		X	F	XF	Stenciled Mark Owner assigned XF – Restricted in Interchange due to Coupler Yokes and User Reported G (refer to sequence number 8 and 49).
73		G		X	G	XG	Stenciled Mark Owner assigned XG – Restricted in Interchange due to Draft Gears and User Reported G (refer to sequence number 8 and 50).
74	X	G		X	J	XJ	Railinc Umler generated XJ – Restricted in interchange due to the equipment having Plain Bearings in the Bearing and Brake Shoe field in Umler and User Reported G (refer to sequence number 8 and 51).
75		G		X	J	XJ	Stenciled Mark Owner assigned XJ – Restricted in Interchange due to Bearings and User Reported G (refer to sequence number 8 and 52).
76	X	G		X	N	XN	Railinc Umler generated XN – Restricted in interchange due to the Covered Hopper (LO) equipment having- a cubic feet capacity 4000 to 4800 inclusive and not equipment with stability devices in the Truck Type and Axle Spacing field in Umler and User Reported G (refer to sequence number 8 and 53).
77		G		X	N	XN	Stenciled Mark Owner assigned XN – Restricted in Interchange due to Trucks and User Reported G (refer to sequence number 8 and 54).
78		G		X	P	XP	Stenciled Mark Owner assigned XP – Restricted in Interchange due to Truck Side Frames and User Reported G (refer to sequence number 8 and 55).
79		G		X	T	XT	Stenciled Mark Owner assigned XT – Restricted in Interchange due to Trucks Bolsters and User Reported G (refer to sequence number 8 and 56).
80		G		X	U	XU	Stenciled Mark Owner assigned XU – Equipment restricted in Interchange reported by AAR or owner and User Reported G (refer to sequence number 8 and 57).
81		G		X	W	XW	Stenciled Mark Owner assigned XW – Restricted in Interchange due to Wheels and User Reported G (refer to sequence number 8 and 58).
82		G		X	X	XX	Railinc Umler Generated XX – Restricted in Interchange due to expiration of an EW Notice (refer to sequence number 59).
83		G	N	X	Z	XZ	Railinc Umler generated XZ – Restricted in interchange due to critical fields in Umler being in error and User Reported G (refer to sequence number 8 and 60).
84		G		S		S_	Stenciled Mark Owner assigned S,Blank to identify a condemned car or car destined for scrap or dismantling and User Reported G (refer to sequence number 8 and 62).
85		G		S	X	SX	Stenciled Mark Owner assigned SX to identify a car sold for scrap under AAR Interchange, Rule 88, can never re-enter (rail) service and User Reported G (refer to sequence number 8 and 63).
86		G		Y	A	YA	Railinc Umler Generated YA – Based on the age of the equipment exceeding 50 years. Restricted in interchange service by FRA regulations and User Reported G (refer to sequence number 8 and 64).
87		M		X	A	XA	Railinc Umler generated XA – Restricted in Interchange due to Age and Railinc Reported M (refer to sequence number 2 and 34).
88		M		X	B	XB	Stenciled Mark Owner assigned XB – Restricted in Interchange due to Brakes and Railinc Reported M (refer to sequence number 2 and 39).

Sequence Number	Umler Equipment Management Codes					Umler TC/TCC	Description
	System Generated	User Reported	Pool Control	Mechanical Restriction	Mechanical Restriction Reason		
89		M		X	C	XC	Stenciled Mark Owner assigned XC – Restricted in Interchange due to Axles and Railinc Reported M (refer to sequence number 2 and 45).
90	X	M		X	D	XD	Stenciled Mark Owner assigned XD – Restricted in Interchange due to Couplers and User Reported M (refer to sequence number 2 and 46).
91		M	N	X	D	XD	Stenciled Mark Owner assigned XD – Restricted in Interchange due to Couplers and Railinc Reported M (refer to sequence number 2 and 47).
92		M		X	D	XD	Stenciled Mark Owner assigned XD – Restricted in Interchange due to Couplers and Railinc Reported M (refer to sequence number 2 and 48).
93		M		X	F	XF	Stenciled Mark Owner assigned XF – Restricted in Interchange due to Coupler Yokes and Railinc Reported M (refer to sequence number 2 and 49).
94		M		X	G	XG	Stenciled Mark Owner assigned XG – Restricted in Interchange due to Draft Gears and Railinc Reported M (refer to sequence number 2 and 50).
95	X	M		X	J	XJ	Stenciled Mark Owner assigned XJ – Restricted in Interchange due to Bearings and Railinc Reported M (refer to sequence number 2 and 51).
96		M		X	J	XJ	Stenciled Mark Owner assigned XJ – Restricted in Interchange due to Bearings and Railinc Reported M (refer to sequence number 2 and 52).
97	X	M		X	N	XN	Railinc Umler generated XN – Restricted in interchange due to the Covered Hopper (LO) equipment having- a cubic feet capacity 4000 to 4800 inclusive and not equipment with stability devices in the Truck Type and Axle Spacing field in Umler and Railinc Reported M (refer to sequence number 2 and 53).
98		M		X	N	XN	Stenciled Mark Owner assigned XN – Restricted in Interchange due to Trucks and Railinc Reported M (refer to sequence number 2 and 54).
99		M		X	P	XP	Stenciled Mark Owner assigned XP – Restricted in Interchange due to Truck Side Frames and Railinc Reported M (refer to sequence number 2 and 55).
100		M		X	T	XT	Stenciled Mark Owner assigned XT – Restricted in Interchange due to Trucks Bolsters and Railinc Reported M (refer to sequence number 2 and 56).
101		M		X	U	XU	Stenciled Mark Owner assigned XU – Tank equipment restricted in Interchange and Railinc Reported M (refer to sequence number 2 and 57).
102		M		X	W	XW	Stenciled Mark Owner assigned XW – Restricted in Interchange due to Wheels and Railinc Reported M (refer to sequence number 2 and 58).
103	X			X	X	XX	Railinc Umler generated XX – Restricted in Interchange due to Early Warning expiration.
104		M	N	X	Z	XZ	Railinc Umler generated XZ – Restricted I interchange due to critical fields in Umler being in error and User Reported G (refer to sequence number 8 and 59).
105		M		X	Z	XZ	Stenciled Mark Owner assigned XZ – Restricted in Interchange due to other restrictions defined by the owner and Railinc Reported M (refer to sequence number 2 and 61).
106		M		S		S_	Stenciled Mark Owner assigned S,Blank to identify a condemned car or car destined for scrap or dismantling and Railinc Reported M (refer to sequence number 2 and 62).
107		M		S	X	SX	Stenciled Mark Owner assigned SX to identify a car sold for scrap under AAR Interchange, Rule 88, can never re-enter (rail) service and Railinc Reported M (refer to sequence number 2 and 63).
108		M		Y	A	YA	Railinc Umler Generated YA – Based on the age of the equipment 50 years. Restricted in interchange service by FRA regulations and AAR Interchange Rule 88 and Railinc Reported M (refer to sequence number 2 and 64).

Appendix F: Overage Processing for XA or YA for Freight Equipment

Overage Processing for Freight Equipment – Assignment of XA/YA					
Built Date < 01/64		**Built Date > 12/63 and < 07/74**		**Built Date > 06/74**	
Extended Life = N	**Extended Life = C and a Special Train Service Codes of WD**	**Extended Life = C**	**Extended Life = U**	**Extended Life = E**	**Extended Life = V**
Permitted To 40	Permitted To 50	Permitted To 50	Permitted To 40	Permitted To 50	Permitted To 65

Extended Life = V, 65 years of age

If the freight equipment is certified for an extended life of 65 (Extended Life = V), then use the built month in calculating the age.

65 Age Calculation = Current Processing Month and Year – Umler Built Month and Year

If the calculated age is 65 years or older, then assign 'Y' to the Mechanical Restriction and assign 'A' to the Mechanical Restriction Reason. YA will override all Equipment Management Codes except scrap codes (S, blank or S, X).

Rebuilt or Extended Life = C or E, 50 years of age

If the equipment is rebuilt or is built after 06/74, then use the month in calculating the age.

If the equipment is built prior to 07/74 and is certified for an extended life (Extended Life = C), then use the month in calculating the age.

50 Age Calculation = Current Processing Month and Year – Umler Built Month and Year

If the calculated age is over 50, then assign 'Y' to the Mechanical Restriction and assign 'A' to the Mechanical Restriction Reason. YA will override all Equipment Management Codes except scrap codes (S ,blank or S,X).

Extended Life = N or U

Over 50 years of age

If the equipment is not rebuilt and is built prior to 07/74 and is not certified for an extended life (Extended Life = U or N), then do not use the month in calculating the age.

50 Age Calculation = Current Processing Year – Umler Built Year

If the calculated age is over 50, then assign 'Y' to the Mechanical Restriction and assign 'A' to the Mechanical Restriction Reason. YA will override all Equipment Management Codes except TC/TCC codes S, blank or S, X.

Over 40 years of age

If equipment is not over 50 and is not rebuilt and is not certified for an extended life (Extended Life = N or U), then determine if the equipment is over 40.

40 Age Calculation = Current Processing Year – Umler Built Year

If the calculated age is greater than 40 and less than 50, then assign an Umler Mechanical Codes of XA. XA will override all Equipment Management Codes except TC/TCC codes S, blank or S, X.

Additional Processing

1. Overage Processing is applicable to freight equipment including Maintenance of Way.
2. When an XA or YA is assigned, the equipment is assigned the applicable Rate Indicator 6 and zero in the rates, refer to Appendix D.1.
3. When the Built Date or Rebuilt Date or the Extended Life fields change in Umler, the XA/YA processing should be done to determine if the XA/YA condition still applies, i.e., the XA goes to a YA, a YA goes to an XA or the unit is no longer considered over-aged. If the unit is no longer overage, then the Rate Indicator will be corrected to the applicable Rate Indicator.
   - If a railroad box car subject to Sub 19 is in conflict with a Rate Indicator P, then assign a Rate Indicator of B when corrected.
   - If a railroad equipment unit is in conflict with a Rate Indicator Q, then assign a Rate Indicator of M when corrected.
   - If a private freight unit is in conflict with a Rate Indicator 0, then assign a Rate Indicator of 2.
   - If the equipment is a Maintenance of Way, then assign a Rate Indicator of 6.

Appendix G: ER System Generated D, E, T

G.1 D, E, T Assignment

ER Code	Before Assignment		After Assignment	
	Umler TC/TCC	Umler EMC	Umler TC/TCC	Umler EMC
The Code 'D' is applicable to railroad and private equipment and applicable to Formats A, B, and C (see Appendix J:) equipment. Only the ER system can assign a 'D' Code and the ER system and or the Railinc Administrator can remove a 'D' Code. Note: Processing will need to use the Car Grade of 'N' to distinguish user assigned G and ER assigned G for ruminant protein.				
D	Blank,Blank	All fields spaces	D, Blank	System Generated = D
D	C,Blank	Pool Control = C	D, C	System Generated = D Pool Control = C
D	J,Blank	Pool Control = J	D,J	System Generated = D Pool Control = J
D	N,Blank	Pool Control = N	D,N	System Generated = D Pool Control = N
D	P,Blank	Pool Control = P	D, P	System Generated = D Pool Control = P
D	R,Blank	Pool Control = R	D, R	System Generated = D Pool Control = R
D	W,Blank	Pool Control = W	D,W	System Generated = D Pool Control = W
D	G,Blank	Pool Control = G	D,G	System Generated = D Pool Control = G
D	G,Blank	User Reported = G System Generated = D	D,G	System Generated = D User Reported = G
D	G,W	User Reported = G Pool Control = W Car Grade = N (ruminant)	G,D	System Generated = D User Reported = G
D	Not one of the above TC/TCC (I, O, U, 2) - reject			
The Code 'E' is only applicable to railroad equipment and to equipment defined under SCO90 (Refer to Appendix B:). In addition, the equipment must be assigned to a Pool. Only the ER system or the Railinc Administrator can assign and remove an 'E' Code.				
E	C,Blank D,C	Pool Control = C System Generated = D Pool Control = C	E,C	System Generated = E Pool Control = C
E	G,Blank D,G	Pool Control = G System Generated = D Pool Control = G	E,G	System Generated = E Pool Control = G
E	J,Blank D,J	Pool Assign = J System Generated = D Pool Control = J	E,J	System Generated = E Pool Control = J
E	P,Blank D,P	Pool Control = P System Generated = D Pool Control = P	E,P	System Generated = E Pool Control = P
E	R,Blank D,R	Pool Control = R System Generated = D Pool Control = R	E,R	System Generated = E Pool Control = R
E	Not one of the above TC/TCC - reject			
The Code 'T' is only applicable to railroad equipment and to equipment defined under SCO90 (Refer to Appendix B:). In addition, the equipment cannot be assigned to a Pool. Only the ER system or the Railinc Administrator can assign and remove a 'T' Code.				
T	Blank,Blank	All fields spaces	T,Blank	System Generated = T
T	U,Blank	User Reported = U	T,U	System Generated = T User Reported = U
T	O,Blank	User Reported = O	T,O	System Generated = T User Reported = O
T	Not one of the above TC/TCC - reject			

G.2 D, E, T Unassignment

ER Code	Before Unassignment		After Unassignment	
	Umler TC/TCC	Umler EMC	Umler TC/TCC	Umler EMC
The Code 'D' is removed by the ER system (or Railinc Administrator).				
Remove D	D, Blank	System Generated = D	Blank, Blank	All fields Blank
Remove D	D, C	System Gent = D Pool Control = C	C, Blank	Pool Control = C
Remove D	D,J	System Generated = D Pool Control = J	J, Blank	Pool Control = J
Remove D	D,N	System Generated = D Pool Control = N	N, Blank	Pool Control = N
Remove D	D, P	System Generated = D Pool Control = P	P, Blank	Pool Control = P
Remove D	D, R	System Generated = D Pool Control = R	R, Blank	Pool Control = R
Remove D	D,W	System Generated = D Pool Control = W	W, Blank	Pool Control = W
Remove D	D,G	System Gent = D Pool Control = G	G, Blank	Pool Control = G
Remove D	D,G	System Generated = D User Reported = G	G, Blank	User Reported = G
Remove D	G,D	System Generated = D User Reported = G Car Grade = N (ruminant)	G, W	User Reported = G Pool Control = W
Remove D	Not one of the above TC/TCC - reject			
The Code 'E' is removed by the ER system or by the Umler system if the equipment is unassigned from a pool.				
Remove E	E,C	System Generated = E Pool Control = C	C,Blank	Pool Control = C
Remove E	E,G	System Generated = E Pool Control = G	G,Blank	Pool Control = G
Remove E	E,J	System Generated = E Pool Control = J	J,Blank	Pool Control = J
Remove E	E,P	System Generated = E Pool Control = P	P,Blank	Pool Control = P
Remove E	E,R	System Generated = E Pool Control = R	R,Blank	Pool Control = R
Remove E	Not one of the above TC/TCC – reject			
The Code 'T' is removed by the ER system or by the Umler system if the equipment is assigned to a pool. The Railinc Administrator can remove a 'T'.				
Remove T	T, Blank	System Generated = T	Blank,Blank	All fields Blank
Remove T	T, U	System Generated = T User Reported = U	U,Blank	User Reported = U
Remove T	T, O	System Generated = T User Reported = O	O,Blank	User Reported = O
Remove T	Not one of the above TC/TCC - reject			

Appendix H: ER Ruminant Protein Assignment

Umler User Reported G Code	Before Assignment		After Assignment	
	Umler TC/TCC	Umler EMC	Umler TC/TCC	Umler EMC
Ruminant Protein – User Reported G Code Assignment When the Event Repository (ER) system identifies a railroad or private Covered Hopper (C_1_), which has been loaded with a ruminant protein, the ER system bridges activity to the Umler system. The Umler system will generate an Umler User Reported G Code to the industry. In addition, the ER system will create an ER Car Grade (Car Grade N by waybill) to the industry (TRAIN82/83) and bridge a Car Grade transaction to the Umler system for distribution to the industry. The assignment of the Car Grade N can only be developed by an ER waybill reporting. It cannot be done through the Umler system. When the ER system identifies a "ruminant protein" loaded in a covered hopper for the first time, the Umler system does the following: • If the equipment is not in a pool, the system will set the Umler User Reported to a G. • If the equipment is in a pool, including a 'G' pool, the system will remove the equipment from the pool and set the Umler User Reported Code to G and set the Pool Control to W. When the ER system identifies a "ruminant protein" loaded again in a covered hopper, the Umler system does the following: • If the equipment is not assigned or assigned in a G pool, the system retains the current status of the equipment. Neither the pool assignment nor the Pool Control Code of G will be updated. After the initial assignment of the User Reported G Code, a railroad can assign the equipment to one of its G pools but it cannot assign it to any other Pool Type. When the equipment is assigned to the G pool, then the User Reported Code is set to blank and the Pool Control Code is set to G. When the ER system identifies a "ruminant protein" loaded in a covered hopper and the equipment has an Equipment Management Code of M, S, X, or Y, the existing codes cannot be overlaid. However, the Car Grade N will be created and distributed to the industry. Once the "ruminant protein" User Reported G Code is assigned, it can only be overlaid by a Transportation Code of M, S, X, or Y. Refer to **Ruminant Protein –Equipment Management Code M, S, X, Y Assignment** below. Once the Car Grade N is reported, another Car Grade Inspection cannot be reported in the ER or Umler system that would supercede the Car Grade N. The combination of User Reported G Code or the Pool Control G Code or the Equipment Management Codes of M, S, X, or Y and the Car Grade N are needed to identify a "ruminant protein" car. These codes (N and G) are permanently assigned and will remain with the car until retired or dismantled. When the car grade N is assigned to a car as a result of the reporting of a waybill with an incorrect STCC, the erring railroad must provide documentation to correct the error. Such documentation is to be reported to Railinc's Customer Success Center in order to have a Railinc administrator remove the car grade N and Transportation Code G (see Appendix A of Car Service Rule 14, #3). The assignment of the ruminant protein 'G' is defined below.				
G (Ruminant Protein) Private car not leased to a Railroad	Blank, Blank G,Blank O,Blank	All fields blank User Reported=G User Reported=O	G,Blank	User Reported=G Car Grade=N
G (Ruminant Protein) Railroad car or Private car leased to a Railroad	W, Blank G, Blank O, Blank	Pool Control=W User Reported=G User Reported=O	G,W	User Reported=G Pool Control=W Car Grade=N
G (Ruminant Protein - Railroad or Private)	D,G	System Generated=D User Reported=G	G,D	User Reported=G System Generated=D Car Grade=N
G (Ruminant Protein - Railroad or Private)	D,G	System Generated=D Pool Control=G	G,D	User Reported=G System Generated=D Car Grade=N ***Note:*** Equipment is removed from the pool.
G (Ruminant Protein) Railroad car or Private car leased to a Railroad – not in a pool	D,W	System Generated=D Pool Control=W System Generated=D User Reported=G	G,D	User Reported=G System Generated=D Car Grade=N

Umler User Reported G Code	Before Assignment		After Assignment	
	Umler TC/TCC	Umler EMC	Umler TC/TCC	Umler EMC
G (Ruminant Protein) Railroad car or Private car leased to a Railroad – in a pool	D,C D,J D,N D,P D,R	System Generated=D Pool Control=C System Generated=D Pool Control=J System Generated=D Pool Control=N System Generated=D Pool Control=P System Generated=D Pool Control=R	G,D	User Reported=G System Generated=D Car Grade=N Note: Equipment is removed from the pool.
G (Ruminant Protein) Railroad car or Private car leased to a Railroad	C,Blank G,Blank J,Blank N,Blank N,O P,Blank R,Blank	Pool Control=C Pool Control=G Pool Control=J Pool Control=N Pool Control=N User Reported=O Pool Control=P Pool Control=R	G,W	User Reported=G Pool Control=W Car Grade=N Note: Equipment is removed from the pool
G (Ruminant Protein)	M,Blank S,Blank S,X X,etc. Y,A	User Reported=M Mech Rest=S Mech Reason=Blank Mech Rest=S Mech Reason=X Mech Rest=X Mech Reason=etc Mech Rest=Y Mech Reason=A	M,Blank S,Blank S,X X,etc. Y,A	User Reported=M Mech Rest=S Mech Reason=Blank Mech Rest=S Mech Reason=X Mech Rest=X Mech Reason=etc Mech Rest=Y Mech Reason=A Car Grade N
G (Ruminant Protein)	Not one of the above Transportation Codes - not applicable reject			
Ruminant Protein –Equipment Management Code M, S, X, Y Assignment The Equipment Management Codes of M, S, X, or Y may be assigned to “ruminant protein” Covered Hoppers in addition to other types of equipment. These codes may be assigned by the stenciled mark owner, the Umler system (due to the equipment’s age or other events) or the Railinc Administrator. These codes will override the “ruminant protein’ User Reported G Code or the Pool Control G Code. However, the Car Grade N will still identify the equipment as a “ruminant protein” car. If the M, S or X or Y is removed from the equipment, then the User Reported Code will be set to ‘G’ and the applicable prior Equipment Management Codes will be set to blank. For railroad equipment or private equipment leased to a railroad (railroad controlled), the Umler Pool Control will be set to W.				
Blank, Blank Railroad Controlled	M,Blank S,Blank S,X X,etc. Y,A	User Reported=M Mech Rest=S Mech Reason=Blank Mech Rest=S Mech Reason=X Mech Rest=X Mech Reason=etc Mech Rest=Y Mech Reason=A Car Grade N	G,W	User Reported = G Pool Control = W Mech Rest=Blank Mech Reason=Blank Car Grade = N

Umler User Reported G Code	Before Assignment		After Assignment	
	Umler TC/TCC	Umler EMC	Umler TC/TCC	Umler EMC
Blank, Blank Private without a railroad lessee	M,Blank S,Blank S,X X,etc. Y,A	User Reported=M Mech Rest=S Mech Reason=Blank Mech Rest=S Mech Reason=X Mech Rest=X Mech Reason=etc Mech Rest=Y Mech Reason=A Car Grade N	G, Blank	User Reported=G Mech Rest=Blank Mech Reason=Blank Car Grade N

Appendix I: Equipment Type Codes (ETC)

Equipped Box Cars ETC A_ _ _

FIRST NUMERIC:
0–Not Used
1–Less than 49' inside length
2–Less than 49' inside length, cushion draft gear/underframe
3–49' and less than 59' inside length
4–49' and less than 59' inside length, cushion draft gear/underframe
5–59' and less than 79' inside length
6–59' and less than 79' inside length, cushion draft gear/underframe
7–79' and over, inside length
8–79' and over, inside length, cushion draft gear/underframe
9–Not Used

SECOND NUMERIC:
0–XP
1–XPI
2– Not Used
3–XL
4–XLI

THIRD NUMERIC:
0–Other type door/opening
1–Sliding door, opening, Side Door Width less than 9'
2–Sliding door, opening, 9' less than 11'
3–Sliding door, opening, 11' and over
4–Plug door, opening, less than 9'
5–Plug door, opening, 9' less than 11'
6–Plug door, opening, 11' and over
7–Combination (Sliding-Plug) doors
8, 9–Not Used

XL–Loader Equipped. Box car similar in design to "XM", with steel perforated side walls or equipped with interior side rails for securement of certain types of lading and/or permanently attached movable bulkheads.
XP–Boxcar similar in design to "XM", but which is specially equipped, designed, and/or structurally suitable for a specific commodity loading; except, boxcars. "XM" dedicated to the transportation of commodities in paragraph A, Rule 97, AAR Interchange Rules, must be designated "XP".

NOTE 1: When cars qualified as XP or XL are insulated, the suffix “I” must be affixed to the applicable designation and reported to the Umler file.

Unequipped Box Cars ETC B_ _ _

FIRST NUMERIC:
0–Not Used
1–Less than 49' inside length
2–Less than 49' inside length, cushion draft gear/underframe
3–49' and less than 59' inside length
4–49' and less than 59' inside length, cushion draft gear/underframe
5–59' and less than 79' inside length
6–59' and less than 79' inside length, cushion draft gear/underframe
7–79' and over, inside length
8–79' and over, inside length, cushion draft gear/underframe
9–Not Used

SECOND NUMERIC:
0–XM–Sliding doors, inside width less than 9'06"
1–XM–Sliding door, inside width 9'06" & over
2–XM–Plug doors, inside width, less than 9'06"
3–XM–Plug doors, inside width 9'06" & over
4–XM–Combination (sliding-plug) doors, inside width less than 9'06"
5–XM–Combination (sliding-plug) doors, inside width 9'06" & over
6–XM–Other door, any width
7– Not Used
8–XMI–Inside width 9'06" and over
9–Not Used

THIRD NUMERIC:
0–Other type door/opening
1–Side Door Width less than 8' opening
2–Doors 8' less than 9' opening
3–Doors 9' less than 10' opening
4–Doors 10' less than 11' opening
5–Doors 11' less than 13' opening
6–Doors 13' less than 15' opening
7–Doors 15' & over opening
8, 9–Not Used

XM–Box car for general service equipped with side or side and end doors.

Covered Hopper Cars ETC C_ _ _

FIRST NUMERIC:
0–Not Used
1–Gravity Unloading–non-pressurized gravity unloading.
2–Pneumatic Unloading–non-pressurized, for unloading by means of vacuum or suction equipment with receiver's facilities without capability of gravity discharge into a hopper.
3–Gravity-Pneumatic Unloading–non-pressurized car with capabilities either for unloading by means of vacuum or suction in conjunction with receiver's facilities or operation as a straight gravity mode.
4–Fluidized-Gravity Unloading–Air fluidization to expedite unloading; nonpressurized except in fluidization chambers, with gravity outlet.
5–Fluidized = Pneumatic Unloading–Air Fluidization to expedite unloading; non-pressurized except in fluidization chambers, with means for unloading by means of vacuum or suction in conjunction with receiver's facilities.
6–Pressure Differential–Car body pressurized to 5 psi. or greater, with or without supplementary fluidization; discharge through pneumatic pipes.
7–Other Unloading Systems–Any discharge system not defined by 1 through 6 above.
8, 9–Not Used

SECOND NUMERIC:
0–Not Used
1–LO (Covered Hopper)
2 through 9–Not Used

THIRD NUMERIC:
0–Not Used
1–Less than 3,000 cu. ft. capacity
2–3,000 but less than 4,000 cu. ft. capacity
3–4,000 but less than 5,000 cu. ft. capacity
4–5,000 cu. ft. capacity and over
5 through 9–Not Used

LO–A permanently enclosed car, other than a box car, regardless of exterior or interior shape, for handling bulk commodities, with or without insulation and provided with openings for loading through top or sides with weather-tight covers or doors. Car may be provided with one or more bottom openings for unloading, with tight fitting covers, doors, valves, or tight fitting slide or gate to prevent leakage of lading. Car may be provided with facilities for discharge of lading through openings in top or sides and may have one or more compartments. Mechanical or other means may be provided within car to expedite loading or unloading.

Locomotives ETC D_ _ _

FIRST NUMERIC:
0–Not Used
1–Freight Locomotive
2–Passenger Locomotive
3–Switching Locomotive
4–Non-Cab Freight Locomotive
5–Non-Cab Passenger Locomotive
6–Auxiliary Unit (Includes slugs, boosters, etc., which draw their power from the"mother" unit.
7–Electric
8, 9–Not Used

SECOND NUMERIC:
0–Not Used
1–AAR Truck type 'B-B'...4 powered axles
2–AAR Truck type 'C-C'...6 powered axles
3–AAR Truck type 'D-D'...8 powered axles
4–AAR Truck type 'A1A-A1A'...4 powered axles
5–AAR Truck type 'B-C'...5 powered axles
6–More than 8 powered axles
7–Less than 9 powered axles with a different configuration than 1 through 5
8, 9–Not Used

THIRD NUMERIC:
0–Less than 1000 hp
1–1000 to 1499 hp
2–1500 to 1999 hp
3–2000 to 2499 hp
4–2500 to 2999 hp
5–3000 to 3499 hp
6–3500 to 3999 hp
7–4000 to 4499 hp
8–4500 to 4999 hp
9–5000 and over

Equipped Gondolas ETC E_ _ _

FIRST NUMERIC:
0–Not Used
1–Less than 48' inside length
2–Less than 48' inside length with cushion draft gear/underframe
3–48' and less than 52' inside length
4–48' and less than 52' inside length with cushion draft gear/underframe
5–52' and less than 61' inside length
6–52' and less than 61' inside length with cushion draft gear/underframe
7–61' and over inside length
8–61' and over inside length with cushion draft gear/underframe
9–Not Used

SECOND NUMERIC:
* 0–GTS
1–GTR
2–GBR
3–GBS
4–GBSR
5–Not used
6–GSS
7–Not Used
8–GWS
9–GWSR

THIRD NUMERIC:
* 0–All cars
1–Coil steel/aluminum equipped car
2–Coil steel car with transverse trough
3–Not Used
* 4–Less than 3000 cu. ft.
* 5–3000 to less than 4000 cu. ft.
* 6–4000 to less than 5000 cu. ft.
* 7–5000 cu. ft. and over
8, 9–Not Used

NOTE 1: * -GTS if NOT light density service, report third numeric 0; report fitting code "LD" and third numeric 4, 5, 6 or 7 for cars restricted to light density service.
NOTE 2: When gondola cars equipped with any or all of the modifications as provided for in the following NOTES 3 and 4, the suffixes as provided for shall be added to the primary classification in order of the notes as listed.
NOTE 3: Where cars are specially built, modified or equipped for handling particular commodities, the letter "S" must be affixed to the applicable designating letters. Such special equipment must be reported in the fitting code field in the Umler file.
NOTE 4: If any of these gondola cars are equipped with a roof for protection of contents, the letter "R" must be affixed to the regular symbol to designate its special class of service.
NOTE 5: For primary classifications, see Equipment Type Code G (plain gondola).

Flat Cars ETC F_ _ _

FIRST NUMERIC:
0–Not Used
1–Less than 155,000 pounds load limit
2–155,000 to 184,999 pounds load limit
3–185,000 to 199,999 pounds load limit
4–200,000 pounds load limit and over
5–9–Not Used

SECOND NUMERIC:
*0–FM
1–FMS, standard draft gear/solid drawbar
2–FMS, equipped with cushioned draft gear/underframe
3–FD
4–FB
5–FBS
6–FW
7–FL
8–FBC
9–FDC

THIRD NUMERIC:
0–Not Used
1–Less than 53' inside length
2–53' and less than 60' inside length
3–60' and less than 75' inside length
4–75' and less than 85' inside length
5–85' and less than 89' inside length
6–89' and over inside length
7 through 9–Not Used

FB–Bulkhead flat cars equipped with fixed or permanently attached movable bulkheads or ends a minimum of three feet in height and flat floor for general commodity loading.
FBC–Flat car constructed with a center beam above the car deck from bulkhead to bulkhead.
FD–Depressed center flat car of special construction having the portion of floor extending between trucks depressed to provide necessary overhead clearance for lading.
FDC–Flat car, constructed with a center beam above the deck from bulkhead to bulkhead and having the portion of the floor extending between trucks depressed to provide additional volume capacity.
FL–Flat car with or without straight deck consisting of two trucks fitted with cross supports over truck bolsters; the trucks are connected with a skeleton or flexible frame or solid underframe fitted with supports for transporting lading loaded lengthwise, e.g., logs, pipes, slab steel.
FM–Flat car with straight deck or platform with flooring over sills and without sides, end risers or bulkheads.
FW–Flat car with an opening in the deck to allow lading to be lowered to accommodate clearance restrictions.
NOTE: Where cars are specially modified or equipped for handling particular commodities, the letter "S" must be affixed to the applicable designating letters. Such special equipment must be reported in the fitting code field in the Umler file. This would not apply to cars with "FA", "FD", "FL", or "FW" designation.

Unequipped Gondola ETC G_ _ _

FIRST NUMERIC:
0–Not Used
1–Less than 48' inside length
2–48' and less than 52' inside length, less than 9' inside width
3–48' and less than 52' inside length, 9' and over inside width
4–52' and less than 61' inside length, less than 9' inside width
5–52' and less than 61' inside length, 9' and over inside width
6–61' and over inside length, less than 9' inside width
7–61' and over inside length, 9' and over inside width
8, 9–Not Used

SECOND NUMERIC:
0–Not Used
1–GB steel floor, solid ends
2–GB steel floor, drop ends
3–GB wood floor, solid ends
4–GB wood floor, drop ends
5–Not Used
6–Not Used
7–Not Used
8–GS
9–Not Used

THIRD NUMERIC – Inside Height – Load Limit:
0 – 12" to 167" – 154,999 and less
1 – 12" to 46" – 155,000 to 184,999
2 – 47" to 167" – 155,000 to 184,999
3 – 12" to 46" – 185,000 to 204,999
4 – 47" to 52" – 185,000 to 204,999
5 – 53" to 58" – 185,000 to 204,999
6 – 59" to 64" – 185,000 to 204,999
7 – 65" to 167" – 185,000 to 204,999
8 – 12" to 59" – 205,000 and greater
9 – 60" to 167" – 205,000 and greater

GB–Open top car, having fixed sides, fixed or drop ends and solid bottom or swinging side doors to enable dumping.
GS–Open top car, having fixed sides and ends and drop bottom, consisting of doors hinged at center sills or side sills to dump outside and/or inside of rails.
GW–Open top well-hole car for transportation of special commodities. A solid bottom car with fixed sides and ends, having one or more openings or depressions provided in floor, permitting the lading to be lowered in order to obtain overhead clearance.

Unequipped Hopper Cars ETC H_ _ _

FIRST NUMERIC:
0–Not Used
1–Less than 155,000 pounds load limit
2–155,000 to 184,999 pounds load limit
3–185,000 pounds load limit and over
4 through 9–Not Used

SECOND NUMERIC:
0, 1–Not Used
2–Not Used
3–HK
4–HM
5–HT
6–HTA
7 through 9–Not Used

THIRD NUMERIC:
0–Non-rotary couplers
1–Rotary coupler on one end
2–Rotary couplers on both ends
3 through 9–Not Used

HK–Open top self-clearing car, having fixed sides and ends and bottomconsisting of two or more divided hoppers dumping outside and/or inside of rails. (Includes former "HFA")
HM–Open top self-clearing car, having fixed sides and ends and bottom consisting of two divided hoppers with doors hinged crosswise of car and dumping between rails.
HT–Open top self-clearing car, having fixed sides and ends and bottom consisting of three or more divided hoppers with doors hinged crosswise of car and dumping between rails.
HTA–Open top self-clearing car, having fixed sides and ends and bottom consisting of three or more divided hoppers with doors hinged lengthwise of car and dumping between rails.

Gondola Cars (GT) ETC J_ _ _

FIRST NUMERIC:
0–Not Used
1–Less than 155,000 pounds load limit
2–155,000 to 184,999 pounds load limit
3–185,000 pounds load limit and over
4 through 9–Not Used

SECOND NUMERIC:
0–GT Flat Bottom
1–GT Depressed Bottom
2 through 9–Not Used

THIRD NUMERIC:
0–Less than 36' inside length (Ore Jenny)
1–36' inside length and less than 48'
2–48' inside length and less than 52'
3–52' inside length and less than 61'
4–61' inside length and over
5 through 9–Not Used

GT–Open top car, having high fixed sides and fixed or hinged ends and solid bottom, suitable for unloading on dumping machines only.

Equipped Hoppers ETC K_ _ _

FIRST NUMERIC:
0–Not Used
1–Less than 155,000 pounds load limit
2–155,000 to 184,999 pounds load limit
3–185,000 pounds load limit and over
4 through 9–Not Used

SECOND NUMERIC:
0–HKS
1–Not Used
2–HMS
3–HTR
* 4–HTS
5–HKR
6–Not Used
7–HMSR
8–HMA
9–Not Used

THIRD NUMERIC:
0–Non-rotary couplers
1–Rotary coupler on one end
2–Rotary couplers on both ends
3–Not Used
* 4–Less than 3000 cu. ft.
* 5–3000 to less than 4000 cu. ft.
* 6–4000 to less than 5000 cu. ft.
* 7–5000 cu. ft. and over
8, 9–Not used

NOTE: * HTS if NOT light density service, report third numeric 0, 1, 2, or 3; report "Y" Light Density (B124) and third numeric 4, 5, 6, or 7 for cars restricted to light density service.
HMA–Open top self-clearing car, having fixed sides and ends and bottom consisting of two divided hoppers with doors hinged lengthwise of car and dumping between rails.
NOTE 1: Where cars are specially built, modified or equipped for handling particular commodities, the letter "S" must be affixed to the applicable designating letters. Such special equipment must be reported in the fitting code field in the Umler file.
NOTE 2: If any of these hopper cars are equipped with a roof for protection of contents, the letter "R" must be affixed to the regular symbol to designate its special class of service.
NOTE 3: For primary classifications, see Equipment Type Code H (unequipped hopper cars).

Special Type Cars ETC L_ _ _

FIRST NUMERIC:
0–All cars, except L999, see NOTE
1 through 9–Not Used

SECOND NUMERIC:
0–LF (Flat)
1–LG (Gondola)
2–LP (Flat)
3–Not Used
4–LU (Box)
5–Not Used
6–LM (Hopper)
7–LC (Box)
8–Not Used
9–LS (Flat)

THIRD NUMERIC:
0–Cubic Capacity and Length not applicable (LS only)
1–Less than 3,000 cu. ft. capacity–LM
2–3,000 but less than 4,000 cu. ft. capacity–LM
3–4,000 but less than 5,000 cu. ft. capacity–LM
4–5,000 cu. ft. capacity and over–LM
5–Not Used
6–Less than 49'8" inside length–LC, LF, LG, LP, LU
7–49'8" and less than 59'8" inside length–LC, LF, LG, LP, LU
8–59'8" and over inside length–LC, LF, LG, LP, LU
9–Not Used

LC–Box car with side doors and roof hatches. May be equipped with end doors.
LF–Flat car equipped to handle one or more demountable containers for the transportation of commodities not qualified for TOFC/COFC service.
NOTE: Not applicable to flat cars designed to handle containers in TOFC/COFC service or containers handling setup vehicles.
LG–Gondola car equipped to handle one or more demountable containers for the transportation of commodities not under refrigeration.
LM–A car equipped with one or more permanently enclosed tanks or containers, provided with one or more openings for loading and equipped for pneumatic or gravity unloading. Car is suitable for handling certain dry powered or granular commodities, and also low viscosity, non-dangerous liquid commodities.
LP–Open-Top car having solid bottom and fixed ends equipped with sloping floor or longitudinal floor risers or side-stakes for the handling of pulpwood and not suitable for general commodity loading.
LS–A car of special construction having two separable interlocking units which form a car body. Units may be separated and load interposed between and locked in place to form a complete transportation unit.
LU–An enclosed with roof, having a special metal beam of heavy design at top of each side to support a series of retractable overhead side doors and their appurtenances, or other types of doors, running substantially the length of car, which beams also support the roof details. Car may be equipped with special loading devices or racks for handling various commodities.

ETC N_ _ _ (Not used)

M-O-W, Scale ETC M_ _ _

PASSENGER, CABOOSE, END OF TRAIN INFORMATION SYSTEMS, MAINTENANCE OF WAY, AND SCALE.

FIRST AND SECOND NUMERIC:
10–MW
11–MWB
12–MWD
14–MWE
15–MWF
16–MWDC
19–MWM
20–MWP
21–MWS
23–Not Used
25–MWW
26–MWX
27–MWSP
28–MWG
29–MWRC
30–MWGN
31–MWK
32–MWH
33–MWIF
34–MWVF
35–MS (SCALE)
36–MWTK
50–PA
51–PB
52–PD
53–PS
54–PAB
55–PSD
60–MT-training units and/or articulated combinations
80–Fuel Tender, Diesel (Tank)
81–Fuel Tender, Natural Gas (Tank)
82–Fuel Tender, Diesel (Non-tank)
83–Fuel Tender, Natural Gas (Non-tank)
93–NE Caboose
97–NF (SBT) Two way sensor Brake Unit/End-of-Train - Format G. A device mounted on the trailing coupler on the rear car of the train coupled to the brake pipe. The SBT senses brake-pipe pressure, and may sense motion and direction. This information is relayed by radio to the head end of the train to a RDU, CDU, or a CLU/IDU combination. In addition, the SBT acts as a marker to indicate the rear of the train and IS equipped with an emergency braking feature to be used in the event of a loss of the normal braking capability from the head end of the train.

THIRD NUMERIC:
0–All units
1 through 9–Not Used

Grass Cutter–A car equipped with machinery for propelling itself, or otherwise and cutting grass along the track as it proceeds.
MS–Scale Car-Cars used to test railroad track sales.
MT–Training unit equipped with training aids or modified to demonstrate components of the unit.
MWB–Ballast Cars. A car used to carry ballast for laying new right of way and repairs. The car used generally for this work is of the gondola type, with side or center dump.
MWDC–Ditching Car. A car equipped for excavating ditches along the sides of tracks as it proceeds, self-propelled or not.
MWD–Dump Cars. Type of contractor's car used for building up fills; the body of the car dumps being raised by means of counterweight (air or hand power) for dumping.
MWE–Ballast Spreader and Trimmer. A car with blades or wings for spreading or trimming ballast.
MWF–Flat Car. Used for transporting rails, ties or ballast and for storage of wrecking trucks or gathering scraps along right of way. These cars are at times equipped with low sides, about 10 or 12 inches high.
MWGN-Gondola used specifically in Maintenance-of-Way service.
MWG–Section Gang or Track Inspection Car. Flat car with or without seats or tool boxes, and equipped with single or double cylinder gasoline engine serving as motive power.
MWH-Hopper (open top or covered) used specifically in Maintenance-of-Way service.
MWIF-IFlat used specifically in Maintenance-of-Way service.
MWK–Snow-removing Car. A car equipped with any special device for removing snow from between or alongside of rails.
MW–Miscellaneous (Otherwise not classified).
MWM–Store-Supply Car. A box car used for handling material or storing tools, blocking or other material for railway use.
MWP–Pile Driver. A car equipped with machinery for pile driving.
MWRC–Unit equipped to receive and transmit radio signals via multiple-unit connections to coupled locomotive for remote control operation.
MWSP–Shoving platform consists of a car equipped with hand safety rails and a shelter where a train crew can guide a train in a reverse or shoving operation.
MWS–Steam Shovel. A car equipped with powered boom, the end of which is a shovel or scoop. Because it is equipped with safety appliances, it may be propelled by its own power or by means of a locomotive and be run as a car in freight trains. The cubic capacity of the shovels (in yards) can be indicated following the classification letters (for example, MWS 6 yards).
MWTK–Similar in design to "T", but used specifically in Maintenance-of-Way service.
MWVF-VFlat used specifically in Maintenance-of-Way service.
MWW–Wrecking Derrick. A derrick used for wrecking purposes equipped with an engine housed on a separate platform to raise and lower booms and hoists.
The separate platform and the attached boom are pivoted in the center of the car. A derrick is usually fitted with outrigger beams to stabilize the car for heavy lifting. Derricks are usually propelled by means of a locomotive, but can be equipped with self-propulsion equipment for traveling short distances. Lifting capacity (in tons) is clearly marked.
MWX–Boarding Outfit Car. A car used for boarding, sleeping or cooking purposes in construction and similar work.
NE–All cabooses.
NF–A device mounted on the trailing coupler on the rear car of the train coupled to the brake pipe. The SBT senses brake pipe pressure, and may sense motion and direction. This information is relayed by radio to the head end of the train to a RDU, CDU or a CLU/IDU combination. In addition, the SBT acts as a marker to indicate the rear of the train and is equipped with an emergency braking feature to be used in the event of a loss of the normal braking capability from the head end of the train.
PAB–Car equipped to handle passengers and equipped to handle baggage, express mail, merchandise or similar products.
PA–Car equipped to handle passengers.
PB–A car constructed for passenger train service and equipped to handle baggage, express, mail, merchandise or similar products.
PD–Car equipped for food or beverage service.
PS–Company service car, including office cars, instruction cars, display cars, etc.
PSD–Company service car (including office, instruction, display, etc. equipped for food and/or beverage service.
Rail Bender–A car equipped with machinery for bending track rails and similar material.
Rail Saw–A car equipped with machinery for sawing track rails and similar material.
Track Layer–A car equipped with machinery for propelling itself, or otherwise, and laying the track ahead of it as it proceeds.
Weed Exterminator–A car equipped with machinery for propelling itself, or otherwise, and burning or spraying weeds along the track as it proceeds.

Conventional Intermodal Cars ETC P_ _ _

Mechanical Designation "FC"
If Tare Weight is 33M Pounds or Greater (See NOTES 1 through 5 below)

FIRST NUMERIC (See NOTES 1 and 2):
0–Not Used
1–Single Length—Low Level–8' Tandem
2–Single Length—Low Level–8 1/2' Tandem
3–Single Length—Standard Level–8' Tandem
4–Single Length—Standard Level–8 1/2' Tandem
5–Double Length—Low Level–8' Tandem
6–Double Length—Low Level–8 1/2' Tandem
7–Double Length—Standard Level–8' Tandem
8–Double Length—Standard Level–8 1/2' Tandem
9–Double Length Car with Deck Height 3'2" ATR–8' Tandem

SECOND NUMERIC:
0–Not Used
1–Circus and Lift On/Lift Off–TOFC Only
2–Circus, equipped for portable bridge plates, and Lift On/Lift Off–TOFC Only
3–Lift On/Lift Off Only–TOFC Only
4–Circus and Lift On/Lift Off–All Purpose (TOFC and COFC)
5–Circus, equipped for portable bridge plates, and Lift On/Lift Off–All Purpose (With Stub Bridge Plates)
6–Circus, equipped for portable bridge plates, and Lift On/Lift Off–All Purpose (No Stub Bridge Plates)
7–Lift On/Lift Off Only—All Purpose
8–Lift On/Lift Off Only–COFC Only
9–Not Used

THIRD NUMERIC (See NOTE 3):
If First Numeric is 1 through 4 and Second Numeric is 1, 2, or 3, then, 0–Cars otherwise not classified–contact car owner
1–Trailer up to 40' long
2–Trailer up to 45' long
3–Trailer up to 48' long
4–Trailer up to 50' long
5–Trailer up to 53' long
6–Trailer up to 57' long
7 through 9–Not Used

If First Numeric is 1 through 4 and Second Numeric is 4 through 7, then, Third Numeric (TOFC/COFC) is:
0–All cars
1 through 9–Not Used

If First Numeric is 1 through 4 and Second Numeric is 8, then, (See NOTE 5)
0–Cars not otherwise classified–contact car owner
1–1-40' and 1-20' container or 3-20' containers
2–1-40' or 1-40' 03" container
3 through 9–Not Used

If First Numeric is 5 through 9 and Second Numeric is 1, 2, or 3, then,
0–Cars not otherwise classified, contact owner
1–2-40' trailers with or without nose mounted reefers (If 1st Numeric equals 9, car will not handle nose mounted reefers).
2–1-40' trailer without and 1-45' trailer with nose mounted reefer, or 2-40' trailers with nose mounted reefer.
3–2-45' trailers (see NOTE 4)
4–Any two trailers with aggregate length up to 90'.
5–1-40' trailer without and 1-45' trailer with nose mounted reefer, or 3-28' "Pups" or 2-40' trailers with nose mounted reefer.
6–Any two trailers with aggregate length up to 90' or 3-28' Pups.
7 through 9–Not Used

If First Numeric is 5 through 9 and Second Numeric is 4 through 7 (All Purpose) then,
0–Cars not otherwise classified–contact car owner
1–Trailers and/or containers as follows – 1-40' trailer without and 1-45' trailer with nose mounted reefer, or 2-40' trailers with nose mounted reefer, or various combinations of 20' and 40' containers and/or trailers, or 1-45' container with one other container up to 35' long.
2–Trailers and/or containers as follows – 2-45' trailers without nose mounted reefers or various combinations of 20' and 40' containers and/or trailers, or 1-45' container with one other container up to 35' long. (See NOTE 4)
3 through 9–Not Used

If First Numeric is 5 through 9 and Second Numeric is 8 (COFC Only) then, (See NOTE 5)
0–Cars not otherwise classified–contact car owner
1–1-40' and 1-20' or 3-20' containers.
2–1-40' or 1-40' 3" container.
3–2-40' or 4-20' containers and various combinations or 1-45' container with one other container up to 35' long.
4 through 9–Not Used

NOTE 1: "Single Length" car will handle one unit at least 40' long. (Car will generally be 50'-75' long). "Double Length" car will handle two units at least 40' long. (Car will generally be 85'-89'4" long).
NOTE 2: "Low Level" is 2'9" or less ATR. "Standard Level" is 3'4" inches ATR or over.
NOTE 3: Although other king pin settings may be acceptable, trailer handling capabilities assume trailer king pin settings of 36".
NOTE 4: These cars will also handle 40' or 45' trailers with nose mounted reefer units at the "A" position (middle) hitch provided the "B" position (leading) hitch is carrying a 40' or shorter trailer. In no case will the "B" position hitch handle a trailer with nose mounted reefer regardless of the length of the trailer.
NOTE 5: These cars will not handle containers more than 8'0" wide. FC–Flat cars, specifically equipped to carry trailers, containers, and chassis in TOFC/COFC service.

Lighter Weight Intermodal ETC Q_ _ _

LOW PROFILE INTERMODAL CARS
Mechanical Designation "FC" – If Less than 33M Pounds or "FCA" Articulated and Multi-Platform Cars or Steel Wheel Railsets for Car-less Technology (See NOTES 1 through 6 below)

FIRST NUMERIC:
0–Not Used
1–Trailers Only
2–Containers Only–8' wide–Single tier
3–Containers Only–8 1/2' wide–Single tier
4–Containers Only–8' or 8 1/2' wide–Single tier
5–Trailers or 8' wide containers
6–Trailers or 8 1/2' wide containers
7–Trailers or 8' or 8 1/2' wide containers
8–Steel wheel railsets for car-less technology (See NOTE 4)
9–Integrated multi-platform unit, trailers-containers various dimensions

SECOND NUMERIC (See NOTE 4):
1–1 Platform – FC
2–2 Platforms – FCA
3–3 Platforms – FCA
4–4 Platforms – FCA
5–5 Platforms – FCA
6–6 Platforms – FCA
7–7 Platforms – FCA
8–8 Platforms – FCA
9–9 Platforms – FCA
0–10 or more Platforms – FCA

THIRD NUMERIC–If First Numeric is 1 (See NOTES 5 and 6):
0–Cars not otherwise classified–contact car owner
1–One 40'-45' trailer per platform
2–One 40'-48' trailer per platform
3–One 40'-53' trailer per platform
4–One 40'-57' trailer per platform
5–One 40'-45' trailer per platform with nose mounted reefer units on trailers on A and B platforms Only.
6–One 28'-48' trailer per platform
7–Four trailers up to 45' long, without nose-mounted reefer units per car; or three trailers, up to 56' long per car, where the center trailer must be 48' long or longer and Only the center trailer may be equipped with nose-mounted reefer unit and/or 42" king pin settings (deck height is 3'6" ATR).
8–Three trailers up to 56' long per car, with up to 42" king pin settings and/or nose-mounted reefer units per car. The center trailer must be 48' long or longer (deck height is 3'6" ATR).
9–Not Used

THIRD NUMERIC–If First Numeric is 2, 3 or 4:
0–Cars not otherwise classified–contact car owner
1–Two 20' or one 40', 45' or 48' by 96" by 96" or 102" container(s) on A, B, and D platforms and one 40', 45' or 48' by 96" or 102" container on C and E platforms.
2–Two 20' or one 40', 45' or 48' by 96" or 102" container(s) on all platforms.
3 through 9–Not Used

THIRD NUMERIC–If First Numeric is 5, 6 or 7:
0–Cars not otherwise classified–contact car owner
1–One 28' through 48' trailer on all platforms or one 40' through 48' by 96" or 102" container on all platforms, or two 20' by 96" or 102" containers on A and B platforms Only.
2–One 28' through 53' trailer on all platforms or one 40' through 53' by 96" or 102" container on all platforms, or two 20' by 96" or 102" containers on A and B platforms Only.
3-1-28', 1-40', 1-45', 1-48', 1-53' Trailer or 1-40', 1-45', 1-48', 1-53' Container on each segment.
4- Two 28’ trailers, or One 40’ or One 45’ or One 48’ or One 53’ or One 57’ trailer on all platforms, or One 40’ or One 45’ or One 48’ or One 53’ 96” or 102” container on all platforms
5 through 9–Not Used.

THIRD NUMERIC–If First Numeric is 8:
0–Bogey equipped with rail coupler
1–Bogey single air line with rail coupler
2–Bogey double air line with rail coupler
3–Intermediate Connector without rail coupler
4 through 9–Not Used

NOTE 1: All "Q" class cars have a deck height of 2'8" ATR or less, unless otherwise indicated.
NOTE 2: All "Q" class cars are suitable Only for Lift-On/Lift-Off terminal handling (no bridge plates and non-retractable hitches).
NOTE 3: All "Q" class cars will handle trailers with tandem wheels up to 102" wide.
NOTE 4: Multiples of two or more platforms are either fully articulated or are semi-permanently coupled together and cannot be separated except at a repair track. A "platform" is capable of carrying a trailer or container at least 40' long or two 20' containers. If 1st numeric is 8 (Steel wheel sets for carless technology) 2nd numeric must be a 1.
NOTE 5: Although other king pin settings may be acceptable, trailer handling capabilities are based on a trailer king pin setting of 36".
NOTE 6: All "Q" class cars with TOFC capability will handle trailers of the length indicated, plus nose mounted refrigeration units, unless otherwise indicated.
FCA–Flat car, articulated or drawbar connected multi-unit, specially equipped for transporting containers, chassis, and trailers in TOFC/COFC service.

Refrigerator Cars ETC R_ _ _

FIRST NUMERIC:
0–Not Used
1–Less than 49' inside length
2–Less than 49' inside length with cushion draft gear/underframe
3–49' and less than 59' inside length
4–49' and less than 59' inside length with cushion draft gear/underframe
5–59' and less than 79' inside length
6–59' and less than 79' inside length with cushion draft gear/underframe
7–79' and over, inside length
8–79' and over inside length with cushion draft gear/underframe
9–Not Used

SECOND NUMERIC:
0–RB
1–RBL
2 through 5–Not Used
6–RP
7–RPL
8–Not Used
9–RC

THIRD NUMERIC:
0–All other cars
1–Body fiberglass, reinforced composite
2 through 9–Not Used

RB–Bunkerless refrigerator car with or without ventilating devices and with or without device for attaching portable heaters. Constructed with insulation in side ends, floor and roof to meet maximum UA factor requirement of 250 BTU/F/Hour for 50 foot cars and 300 BTU/F/Hour for 60 foot cars. Effective for cars ordered new after March 1, 1984.
NOTE: Cars built or rebuilt prior to March 1, 1984, must have been constructed with a minimum of 3 in. of insulation in the sides and ends and 3-1/2 in. in floor and roof based on the insulation requirements given in the AAR Manual of Standards and Recommended Practices, Section C, Recommended Practice RP-253 or a thickness reduced in proportion to the thermal conductivity of the insulation.
RBL–Car similar in construction to an "RB" type car, but equipped in addition with adjustable loading or stowing device.
NOTE: Cars equipped with interior side rails only, built new, rebuilt or reclassified on and after January 1, 1966, in order to qualify for the "RBL" designation, shall have a minimum of four (4) usable side rails on each wall of car, each extending from doorway to approximately four (4) feet from end of car.
RC–Refrigerator Car similar to an "RB" car using a cryogen to produce temperatures to transport frozen commodities.
RP–Mechanical Refrigerator car equipped with or without means of ventilation and provided with apparatus for furnishing protection against heat and/or cold.
RPL–Mechanical Refrigerator. Similar to "RP" but equipped in addition with adjustable loading or stowing device.

Stack Cars ETC S_ _ _

Well Cars–COFC/TOFC Capable of Carrying Double Stacked Containers

FIRST NUMERIC:
0–Cars not otherwise classified–contact car owner
1–All 40' Wells
2–All 45' Wells
3–All 48' Wells
4–40' end and 45' Intermediate Wells
5–40' end and 48' Intermediate Wells
6–All 53' Wells
7–All 56' Wells
8, 9–Not Used

SECOND NUMERIC:
0–Cars not otherwise classified–contact car owner
1–Single Well – IBC Type –FC
2–Two Wells – IBC Type –FCA
3–Three Wells – IBC Type –FCA
4–Four Wells – IBC Type –FCA
5–Five Wells – IBC Type –Light Capacity (100 Ton Trucks) – FCA
6–Five Wells – IBC Type –Heavy Capacity (125 Ton Trucks) – FCA
7–Five Wells – Bulkhead Type – Light Capacity (100 Ton Trucks) – FCA
8–Five Wells – Bulkhead Type – Heavy Capacity (125 Ton Trucks) – FCA
9–Not Used

THIRD NUMERIC–If Second Numeric is 1, 2, 3, or 4:
0–Car classifiable in ETC, see element Single Length Loading Configuration (B288) for loading configuration
1–1-40', 45', or 48' container in well and 1-40, 45', 48', or 53' container stacked on top of well.
2–2-20', 1-40', 45', or 48' container in well and 1-40', 45', 48', or 53' container stacked on top of well.
3–2-20', 1-40', 45', or 48' container in well and 1-40', 48', or 53' container stacked on top of well or 2-28' trailers or 1-40' through 53' trailer in well. Trailers can be either 96" or 102" wide and can be equipped with nose-mounted refrigerator units.
4–2-20’ or 28’ containers or 1-40’, 45’, 48’, or 53’ container in well and 2-28’ containers, 1-40’, 45’, 48’ or 53’ container stacked on top of well
5–2-20', 1-40', 45', 48' or 53' container in well and 1-40', 45', 48', or 53' (see NOTE 5) container stacked on top of well.
6-Container only, Bottom : 2-20’ or 1-40’ ; Top : 1-40’, 45’, 48’, or 53’
7-Container only, Bottom : 2-20’ or 1-40’ ; Top : 1-40’, 45’, 48’, or 53’; 53’ container can be loaded on the A and B unit , if the C unit has a 40’ or 45’ container loaded on it.
8-Container and Trailer capability, Bottom : 2-20’ or 1-40’ container or 1-28’ trailer ; Top : 1-40’, 45’, or 48’ container ; 53’ container can be loaded in the A and B units if the C unit has a 40’ container.
9-Container capability, Bottom : 2-20’, 1-40’, 45’, 48’, or 53’ container ; Top : 1-40’, 45’, 48’, or 53’ container. Trailer : 2-28’, 1-40’, 1-45’, 1-48’, 1-53’, or 1-57’.

THIRD NUMERIC–If Second Numeric is 5 or 6:
0–Car classifiable in ETC, see element Single Length Loading Configuration (B288) for loading configuration
1–2-20' or 1-40' container(s) in end wells and 1-40' container only in intermediate wells with 1-40', 45' or 48' container stacked on top of all wells.
2–2-20' or 1-40' container(s) in all wells and 1-40', 45', or 48' container stacked on top of all wells.
3–1-40' or 45' container in all wells and 1-40', 45', 48', or 53' container stacked on top of all wells.
4–1-40', 45' or 48' container in all wells and 1-40', 45', 48', or 53' container stacked on top of all wells.
5–2-20' or 1-40' container(s) in end wells and 1-40' or 45' container in intermediate wells with 1-40', 45', or 48' container stacked on top of all wells and 53' containers stacked only on top of intermediate wells.
6–2-20' or 1-40' container(s) in end wells and 1-40', 45', or 48' container in intermediate wells with 1-40', 45' or 48' container stacked on top of all wells and 53' containers stacked only on top of intermediate wells.
7–2-20', 2-24', 1-40', 1-45', or 1-48' container(s) in all wells with 1-40', 1- 45', 1-48', or 1-53' container stacked on top of all wells.
8–2-20', 24', 1-40', 1-45', or 1-48' container(s) in the end wells and 1-40', 1-45', or 1-48' container in the intermediate wells with 1-40', 1-45', 1-48', or 1-53' stacked on top of all wells.
9–Container only, Bottom: 2-20’ or 1-40’ ; Top :1-40’, 45’, or 48’ ; a 53’ container can be loaded on the A, B and D units if the C and E unit as a 40’ container.

THIRD NUMERIC–If Second Numeric is 7 or 8:
0–Car classifiable in ETC, see element Single Length Loading Configuration (B288) for loading configuration
1–2-20' or 1-40' container(s) in end wells and 40' containers only in intermediate wells with 40' or 48' containers stacked on top of all wells.
2–2-20' or 1-40' container(s) in end wells and 40' containers only in intermediate wells with 40', 45', or 48' containers stacked on top of all wells.
3–2-20' or 1-40' container(s) in end wells and 40' containers only in intermediate wells with 40' containers stacked on end wells and 40' or 45' containers stacked on intermediate wells.
4–2-20' or 1-40' container(s) in all wells with 40' or 48' containers stacked on top of all wells.
5–2-20' or 1-40' container(s) in all wells with 40', 45', or 48' containers stacked on top of all wells.
6–1-40' container only in end wells and 2-20' or 1-40' container(s) in intermediate wells with 40' or 48' containers stacked on top of all wells.
7–1-40' container only in end wells and 2-20' or 1-40' container(s) in intermediate wells with 40', 45', or 48' containers stacked on top of all wells.
8–1-40' container in all wells with 1-40' or 1-45' container stacked on top of all wells.
9–2-20' or 1-40' container(s) in all wells with 1-40' or 1-45' container stacked on top of all wells.

Tank Cars ETC T_ _ _

FIRST AND SECOND NUMERIC:
Major Class Description (See Appendix N:)

THIRD NUMERIC:
0–Capacity not applicable
1–7,000 gal. and less capacity
2–8,000 through 9,000 gallons capacity
3–10,000 through 11,000 gallons capacity
4–12,000 through 18,000 gallons capacity
5–19,000 through 21,000 gallons capacity
6–22,000 through 24,000 gallons capacity
7–25,000 through 27,000 gallons capacity
8–28,000 through 31,000 gallons capacity
9–32,000 gallons capacity and over
For the purpose of determining capacity for coding, the following is used:
6,500 to 7,499 gallons—show as 7,000 gallons capacity
7,500 to 8,499 gallons—show as 8,000 gallons capacity
8,500 to 9,499 gallons—show as 9,000 gallons capacity, etc.
T–Tank Car. Tank car means any car which is used only for the transportation of liquids, liquefied gases, compressed gases, or solids that are liquefied prior to unloading. Car may be without underframe if container serving as superstructure is designed to serve as underframe. If car has underframe, it must be designed only for the carriage of one or more enclosed containers (with or without compartments) that form the superstructure and are integral parts of the car. All such containers must be securely attached to the underframe when offered for transportation but may have demountable features. Before any car can be considered a tank car hereunder, the design of all such containers thereon must have been approved 1) by the AAR Committee on Tank Cars as having met all applicable AAR specifications and requirements and 2) by said Committee or, in appropriate cases, the Department of Transportation, as having met all applicable specifications and requirements of Subpart I of the Regulations for Transportation of Explosives and Other Dangerous Articles.
NOTE: For a listing of all tank car specification, refer to the AAR Manual of Standards and Recommended Practices, Section C, Specification M-1002, Specification for Tank Cars and/or Field Manual of AAR Interchange Rules.

Containers ETC U_ _ _

FIRST NUMERIC:
0–Bulk Hopper
1–Not Used
2–General Service (Non-equipped Dry Vans)

3–Flat Racks
4–Open Tops
5–Mechanical Refrigerator
6–Tank
7–Insulated
8–Not Used
9–Special Equipped Straight Floor Closed

SECOND NUMERIC:
0–40 ft. and less than 42 ft., outside length
1–Less than 20 ft., outside length
2–20 ft. and less than 27 ft., outside length
3–27 ft. and less than 35 ft., outside length
4–35 ft. and less than 40 ft., outside length
5–45 ft. and less than 48 ft., outside length
6–42 ft. and less than 45 ft., outside length
7–48 ft. and less than 53 ft., outside length
8–53 ft. and less than 57 ft., outside length
9–57 ft. and over, outside length

THIRD NUMERIC:
0–Container not otherwise classified, contact owner
1–O.S. Width 8' and under, Outside Height 8'6" and under
2–O.S. Width 8' and under, Outside Height over 8'6" and to 9' inclusive
3–O.S. Width 8' and under, Outside Height over 9' and to 9'6" inclusive
4–O.S. Width 8' and under, Outside Height over 9'6"
5–O.S. Width over 8', Outside Height 8'6" and under
6–O.S. Width over 8', Outside Height over 8'6" and to 9' inclusive
7–O.S. Width over 8', Outside Height over 9' and to 9'6" inclusive
8–O.S. Width over 8', Outside Height over 9'6"
9–Not Used

Vehicular Flat Cars ETC V_ _ _

(FA ONLY)
FIRST NUMERIC:
0–Uni-level rack, single unit, fully enclosed with doors and roof
1–Tri-level rack, multiple unit, fully enclosed with doors and roof
2–Tri-level rack, articulated, fully enclosed with doors and roof
3–Tri-level rack, single unit, non-fully enclosed (includes non-side-shielded, roof but no doors, doors but no roof)
4–Tri-level rack, single unit, fully enclosed with doors and roof
5–Not used
6–Bi-level rack, multiple unit, fully enclosed with doors and roof
7–Bi-level rack, articulated, fully enclosed with doors and roof
8–Bi-level rack, single unit, non-fully enclosed (includes non-side-shielded, side-shielded, roof but no doors, doors but no roof)
9–Bi-level rack, single unit, fully enclosed with doors and roof
NOTE: Articulated = Articulated Connector at Intermediate Connection. Multiple Unit = Solid Drawbar at Intermediate Connection.

SECOND NUMERIC:
0–Low level, extreme height less than 18'10"
1–Low level, extreme height 18'10" and less than 19'01"
2–Low level, extreme length 19'01" and less than 20'02"
3–Mid level, extreme height less than 18'10"
4–Mid level, extreme height 18'10" and less than 19'01"
5–Mid level, extreme height 19'01" and less than 20'02"
6–High level, extreme height less than 18'10"
7–High level, extreme height 18'10" and less than 19'01"
8–High level, extreme height 19'01" and less than 20'02"
9–Any level, extreme height 20'02" and greater
NOTE: Platform heights ATR are defined: Low level = less than 34"; Mid level = 34" and less than 40"; High level is 40" and greater.

THIRD NUMERIC:
0–No doors
1–Full height, Radial
2–Full height, RAVE, Trinity
3–Full height, RAVE, Portec
4–Full height, Tri-Arc
5–Full height, Tri-Fold
6–Full height, Pick
7–Full height, All other (including Bi-Fold, Three Piece, Wire Mesh, etc.)
8–Full height, Seal Safe Radial
9–Partial height, all (including Bi-Fold, Radial, Tri-Fold, Wire Mesh, etc.)
FA–Flat car specifically equipped with a superstructure or the superstructure is an integral component of the car used for transporting set-up vehicles.

Trailers ETC Z_ _ _

FIRST NUMERIC
0–Bulk Hopper or Tank
1–Chassis (Refer to Second and Third Numeric under Chassis)
2–General Service (Non-equipped Dry Vans)
3–Flat Beds (includes removable sides, platforms and expandables)
4–Open Tops
5–Mechanical Refrigerators
** 6–Rail Compatible Unit
7–Insulated
8– Drop Frames (includes Wedge Frames)
9–Special Equipped Straight Floor Closed
Note: Z0_ _ must have Fitting Code "CN" for Tank.

SECOND NUMERIC: (Not For Z1_ _ or Z6_ _)
0–40 ft. and less than 42 ft., outside length
1–Less than 20 ft., outside length
2–20 ft. and less than 27 ft., outside length
3–27 ft. and less than 35 ft., outside length
4–35 ft. and less than 40 ft., outside length
5–45 ft. and less than 48 ft., outside length
6–42 ft. and less than 45 ft., outside length
7–48 ft. and less than 53 ft., outside length
8–53 ft. and less than 57 ft., outside length
9–57 ft. and over, outside length

** SECOND NUMERIC (Z6_ _Only)
0–Not Used
1–Less than 48' Mark IV Type Van
2–48' and less than 53' Mark IV Type Van
3–53' and over Mark IV Type Van
4–Less than 48' Mark V Type Van
5–48' and less than 53' Mark V Type Van
6–53' and greater Mark V Type Van
* 7–Chassis less than 48', outside length
* 8–Chassis 48' and less than 53', outside length
* 9–Chassis 53' and over, outside length
NOTE: Use Chassis third numeric.

THIRD NUMERIC: (Not for Z1_ _and Z6_ _)
0–Trailer not otherwise classified, contact owner
1–O.S. Extreme Width 8' and under–Outside Height 12'6" and under
2–O.S. Extreme Width 8' and under–Outside Height over 12'6" and under 13'
3–O.S. Extreme Width 8' and under–Outside Height 13' and under 13'6"
4–O.S. Extreme Width 8' and under–Outside Height 13'6" and over
5–O.S. Extreme Width over 8'–Outside Height 13' and under–96" Wide Tandem
6–O.S. Extreme Width over 8'–Outside Height over 13'–96" Wide Tandem
7–O.S. Extreme Width over 8'–Outside Height 13' and under–over 96" Wide Tandem
8–O.S. Extreme Width over 8'–Outside Height over 13'–over 96" Wide Tandem

SECOND NUMERIC (Z1_ _):
0–45 ft. to 53 ft. Extendible, outside length
1–40 ft. to 45 ft. Extendible, outside length
2–20 ft. Straight and 20/24 ft. Combo, outside length
3–48 ft. and over Straight, outside length
4–40 ft. to 53 ft. Extendible, outside length
5–45 ft. and less than 48 ft. Straight, outside length
6–40 ft. and less than 45 ft. Straight, outside length
7–40 ft. to 48 ft. Gooseneck, outside length
8–40 ft. Combo (20/40), outside length
9–40 ft. Tri-Purpose, outside length

THIRD NUMERIC (Z1_ _ and Z6__ Only):
0–Chassis not otherwise classified, contact owner
1–O.S. Height 4'6" and under at locking plane, Tandem Width 96" or less
2–O.S. Height 4'6" and under at locking plane, Tandem Width over 96" to 102" inclusive
3–O.S. Height 4'6" and under at locking plane, Tandem Width over 102"
4–O.S. Height over 4'6" at locking plane, Tandem Width 96" or under
5–O.S. Height over 4'6" at locking plane, Tandem Width over 96" to 102" inclusive
6–O.S. Height over 4'6" locking plane, Tandem Width over 102"
7 through 9–Not Used

Appendix J: Plate Codes (CLEARANCES)

Widths at one inch increments in height.
Top portion of equipment diagrams plates B and C.

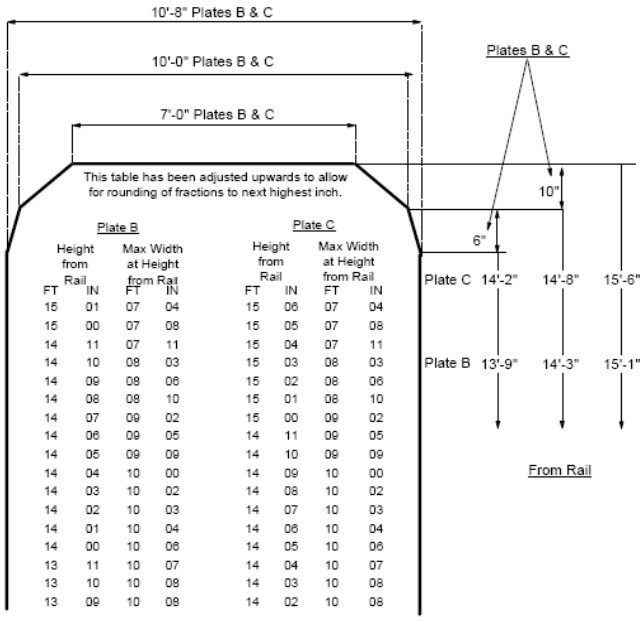


Plate B

Height from Rail FT	IN	Max Width at Height from Rail FT	IN
15	01	07	04
15	00	07	08
14	11	07	11
14	10	08	03
14	09	08	06
14	08	08	10
14	07	09	02
14	06	09	05
14	05	09	09
14	04	10	00
14	03	10	02
14	02	10	03
14	01	10	04
14	00	10	06
13	11	10	07
13	10	10	08
13	09	10	08

Plate C

Height from Rail FT	IN	Max Width at Height from Rail FT	IN
15	06	07	04
15	05	07	08
15	04	07	11
15	03	08	03
15	02	08	06
15	01	08	10
15	00	09	02
14	11	09	05
14	10	09	09
14	09	10	00
14	08	10	02
14	07	10	03
14	06	10	04
14	05	10	06
14	04	10	07
14	03	10	08
14	02	10	08

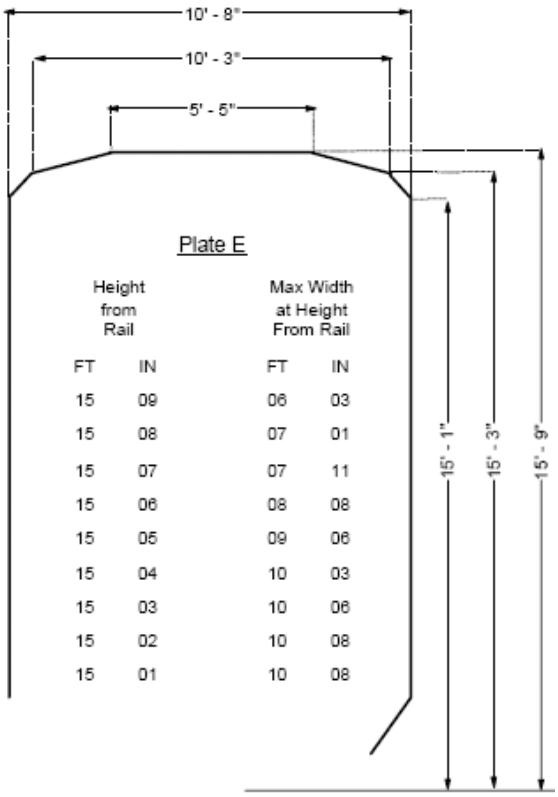


Plate E

Height from Rail FT	IN	Max Width at Height From Rail FT	IN
15	09	06	03
15	08	07	01
15	07	07	11
15	06	08	08
15	05	09	06
15	04	10	03
15	03	10	06
15	02	10	08
15	01	10	08

Widths at one inch increments in height.
Top portion of equipment diagrams plates E and F
FOR Umler EDITING CHECKS ONLY

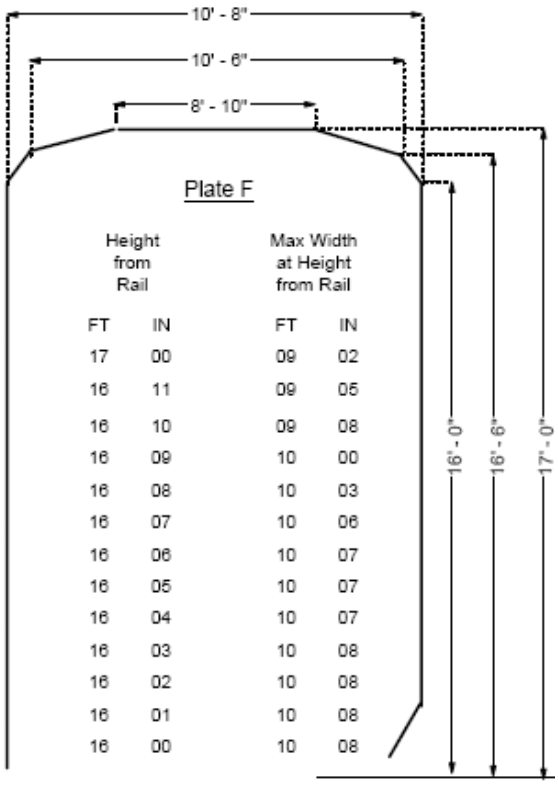


Plate F

Height from Rail FT	IN	Max Width at Height from Rail FT	IN
17	00	09	02
16	11	09	05
16	10	09	08
16	09	10	00
16	08	10	03
16	07	10	06
16	06	10	07
16	05	10	07
16	04	10	07
16	03	10	08
16	02	10	08
16	01	10	08
16	00	10	08

FOR Umler EDITING CHECKS ONLY
HOW TO USE the plate graphics:

The plate graphic's purpose is to determine if the outside height and width data furnished in your Umler record is within the Plate Clearance code reported. (e.g., clearance–B, Height From Rail to Extreme Width–1500, Extreme Width–0704; you would then find the height reported (1500) under Plate B in the above table.

Directly to the right of 1500 is the maximum width at that height, in this case 0708. Therefore, the Extreme Width reported of 0704 is within Plate B.)

In the event that the data reported for the Extreme Width in the above example was 0711, Extreme Width would be flagged in the error listing as follows: 0711.

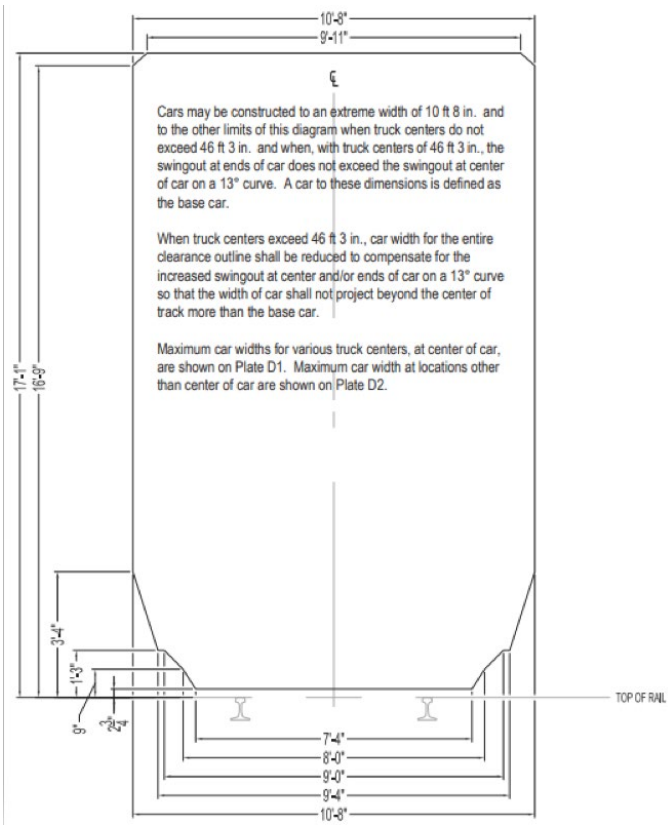
Relational errors (See Exhibit I1, Section IX), as in the above example, indicate one of the following could be wrong:

a. 0711 Extreme Width is not correct. It was actually 0708 or less.
b. 1500 height above rail to extreme width is not correct. It was actually 1411 or less.
c. Clearance code B is incorrect, and the 2 dimensions are correct. The car is actually a Code C.

It will be the responsibility of the reporting party to resolve such errors with their mechanical department and submit the correct data.

Dimensions in excess of Plate E or F, Report Clearance Code G
Related Plate Code Data Elements;

- A046 - Plate Code
- A187 – Outside Height Extreme Width
- A186 – Outside Extreme Width
- A185 – Outside Extreme Height


10'-8"
9'-11"
℄
Cars may be constructed to an extreme width of 10 ft 8 in. and to the other limits of this diagram when truck centers do not exceed 46 ft 3 in. and when, with truck centers of 46 ft 3 in., the swingout at ends of car does not exceed the swingout at center of car on a 13° curve. A car to these dimensions is defined as the base car.
When truck centers exceed 46 ft 3 in., car width for the entire clearance outline shall be reduced to compensate for the increased swingout at center and/or ends of car on a 13° curve so that the width of car shall not project beyond the center of track more than the base car.
Maximum car widths for various truck centers, at center of car, are shown on Plate D1. Maximum car width at locations other than center of car are shown on Plate D2.
17'-1"
16'-5"
3'-4"
1'-3"
9"
2'-5 1/4"
TOP OF RAIL
7'-4"
8'-0"
9'-0"
9'-4"
10'-8"

Appendix K: Components

In the Umler System, most data elements like Built Date only occur one time in the equipment record. There are some data elements that occur multiple times.

Component Groups in the Umler System identify data elements that repeat in an equipment record. For example, there are two couplers on most equipment records. Coupler information is recorded for each Draft System Component in the equipment record. Draft Systems are identified by a location ID. Location IDs follow the CRB convention for locations on equipment. Locations are identified starting from the Brake-End of Equipment or the Front using either letters or numbers.

Numeric Location Ids: 1,2,3,4,5,….
CRB conventions starting from the Brake End: B, C, D, E, F, …, A (Brake-End to the A-End)
Locomotive convention starting from the Front: F, A, B, C, D, …, R (Front to Rear)

Component Groups

Draft Gear System – contains information related to Draft Gear and Couplers

Elements: Alignment Control Equipped, Coupler Code, Coupler Style
Location IDs: [**B,A**]

Truck System –Truck Systems are a component containing sub-components Axle Spacing and Trucks. Truck Systems locations are lettered starting with B (Brake End) and ending with A. Equipment with 4 Truck Systems would have locations [**B,C,D,…,A**]. (Except for locomotives which have locations starting with F (Front End) and ending with R (Rear End). Locomotives with 4 truck systems would have locations [**F,A,B,…,R**].

Axle Spacing – Axle Spacing Distance information for axles on the equipment. Axle Spacing Locations are numbered (1,2,3…) starting from the brake end.
Elements: Axle Spacing Distance
Location IDs: [**1,2,3,4,…**]

Truck – information related to equipment trucks.
Elements: Journal Size, Locomotive Truck Type, Stability Device Equipped, Truck Axle Count, Wheel Diameter
Location IDs: [**B,C,D,…,A**] ([**F,A,B,…,R**] for Locos)

Hitch – Intermodal Trailer connections locations. These locations are identified numerically from the B-End to the A-End of the equipment.

Elements: Intermodal Flat King Pin Opening Orientation, Intermodal Flat King Pin Setting Inches, Trailer Hitch System Capacity
Location IDs: [**1,2,3,4,…**]

Intermediate Connection – locations where trailers can be loaded across two intermodal flatcars are identified numerically from the B-End to the A-End.

Elements: Bridging Allowable Load Length, Intermediate Truck Car Builder Load Limit
Location IDs: [**1,2,3,4,…**]

Unit Segment – connected units (articulated or drawbar) have information regarding each platform. In addition to the data on the platforms, there is also information regarding the Loading capabilities of the platforms/units. Each Unit Segment is identified by location beginning at the B-End and ending at the A-End. 3-unit cars [B,C,A]. 5-Unit cars [B,C,D,E,A]. In addition to elements associated to each unit segment, there are also two sub-components; 1) Inter-Container Securement, and 2) Loading Capabilities.

Elements: Air Receptacle Equipped, Car Load Limit, COFC/TOFC/All Purpose/Environment Containers, Electrical Receptacle Equipped, Fuel Receptacle Equipped, Intermodal Flat Loading Method Circus, Intermodal Flat Loading Method LOLO, Intermodal Flat Loading Method Side, Loading Plane Height (Containers) Above Rail, Loading Plane Height (Trailer) Above Rail, Lock/Cone Profile, Lower Position Clearance, Lower Position Clearance Outline, Number of Handbrakes, Number of Hitches per unit, Permanent / Temp Receptacle, Side Wall Height, Side Wall Height from Cone, TOFC Width, Between Exterior Rub Rails, TOFC Width Between Interior Rub Rails, Unit Builders Load Limit, Unit Container Loading Capacity, Unit Cubic Feet Capacity, Unit Equipment Group, Unit Inside Length, Unit Load Limit, Unit Load Limit (COFC), Unit Load Limit (TOFC), Unit Load Limit Star Code, Unit Tare Weight, Unit Trailer Loading Capacity, Upper Position Clearance
Location IDs: [**B,C,D,…,A**]

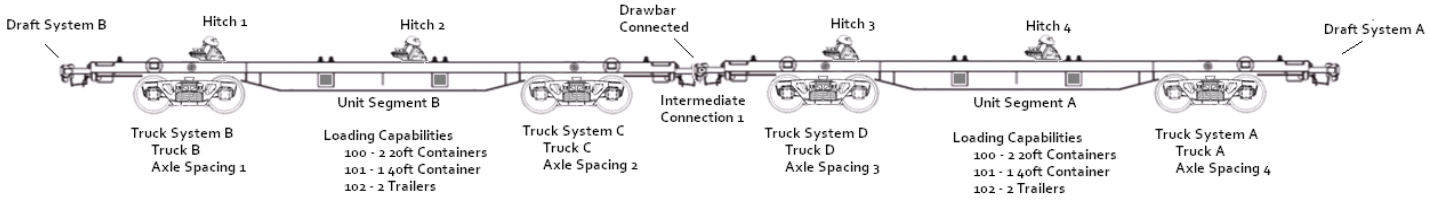
Inter Container – locations that describe specific securement capabilities of containers

Elements: Inter-Container Securement
Location IDs: [**1,2,3,4,…**]

Loading Capabilities – each unit segment can be described as having many loading capabilities. Each loading capability is identified in a location. Multiple capabilities can be defined for a unit such as container combinations and trailer combinations.

Elements: LC Allowable Locations for HAZMAT, LC Allowable Lower Load Widths, LC Container Load Limit Restrictions, LC Flat Rack Capable, LC Intermodal Equipment Type, LC Load Height Combinations, LC Load Length Combinations, LC Location, LC Notes
Location IDs (Capability IDs): [**100,101,102,103,…**]

Diagram of Components on a 2-Unit Drawbar Connected Intermodal Flat.



Appendix L: Umler Data Transfer Procedures

Requests for the transfer of a unit data from a specific reporting mark and/or number to a new mark or number will be processed under the following guidelines.

1. Request for transfers must be received by 5:00 p. m. Eastern Time on the 25th day of the month to be processed prior to the first day of the subsequent month in order to be included in the CHARM file.
2. Letters from both parties authorizing the transfer or copy of the bill of sale or copy of an executed Form 88-C must be filed.
3. All requests must be submitted via email to: csc@railinc.com advising: (a) Owner's Mark, (b) Lessee's Mark (if applicable), (c) Rate Indicator, (d) A.E.I. Transponder Code, (e) Name of Contact, Company, address, telephone, and email to be invoiced, (d) "Subject: From Mark: __ __ __ __ To Mark: __ __ __ __ ".
4. The list of cars should be in the following s an attachment to the email. The file must be in Excel (.xls) or Text (.txt). For example the Excel format will be four columns A-D with data elements - prior initial, number and new initial, number.
5. Requests for transfers will be time stamped and if not approved by the second party within ten (10) working days, the request will be considered null and void.
6. Each request for transfer will be assessed $150.00 for the transfer of 1-25 units and $1.50 per car for each additional car. These charges may be subject to change on thirty (30) days notice.
7. The deletion of cars is the responsibility of the owner/agent that authorized the transfer. Caution should be exercised to ensure that the cars being transferred have been stenciled to their new reporting marks.

Note: The email address for transfers is csc@railinc.com.

Appendix M: Umler Exception Control File

M.1 Exception Registration Process

Procedures for registering equipment with weights and/or dimensions outside the normal Umler edits in the Umler Exception Control File.

1. Owner must email csc@railinc.com a request listing the car initials and numbers and the specific dimensions for applicable fields outside the Umler edit parameters. Exception records must be submitted to Railinc at least 5 working days prior to reporting of the of Umler records.
2. Unit does not have to be on the Umler file prior to being reported to the Umler Exception Control File and as many exception fields as necessary may be reported per car.
3. Owners may request a list of their equipment in the Umler Exception Control File.

M.2 Railinc Exception Processing

Railinc will process the record as follows:

1. Railinc will key the data and construct an Umler Exception Control Record.
2. Data on an Umler transaction that does not match the data in the Umler Exception Control File will have the normal edits applied and Umler record will be flagged in error.
3. An Umler transaction for equipment that is outside the edit parameters that matches the Umler Exception Control File will be accepted as a valid record.
4. If a unit with an exception record is deleted from the Umler file, Railinc will automatically delete the Umler Exception Control record.

Note: In addition to weight and dimension information, other data elements may be eligible for reporting to the Exception Control File.

Appendix N: Major Tank Class & Validation Matrices for DOT117, HM-246

Major Classes of Tank Cars AAR and DOT or ICC Container Specifications

01 Major Class (AAR) - ALUMINUM, NON-PRESSURE CARS

01 Major Class (ICC or DOT) - ALUMINUM, NON-PRESSURE CARS
111A100ALW1, 111A100ALW2, 111A60ALW1, 111A60ALW2, 111S100ALW1, 111S100ALW2, 111S60ALW1, 111S60ALW2

02 Major Class (ICC or DOT) - HIGH PURITY ALUMINUM, NON-PRESSURE CARS

04 Major Class (ICC or DOT) - NICKEL CARS

05 Major Class (AAR) - ACID CARS, WELDED OR RIVETED

05 Major Class (ICC or DOT) - ACID CARS, WELDED OR RIVETED
111A100W2, 111A100W5, 111A60W2

06 Major Class (AAR) - STAINLESS STEEL CARS (STAINLESS GRADE 304 or 430)
211A100W6

06 Major Class (ICC or DOT) - STAINLESS STEEL CARS (STAINLESS GRADE 304 or 430)
111A100W6, 111A60W6, 111A60W7

07 Major Class (ICC or DOT) - STAINLESS STEEL CARS (STAINLESS GRADE 304L)
111A100W6, 111A60W6, 111A60W7, 120J200W

08 Major Class (ICC or DOT) - STAINLESS STEEL CARS (STAINLESS GRADE 316)
111A100W6

09 Major Class (ICC or DOT) - STAINLESS STEEL CARS (STAINLESS GRADE 316L)
111A100W6, 111A60W7, 111S100W6

10 Major Class (AAR) - GENERAL SERVICE CARS—CARBON STEEL TANK (WELDED OR RIVETED)(Includes Rubber Lined)
203, 203W, 211A100W1, 211A60W1, 211J100W1

10 Major Class (ICC or DOT) - GENERAL SERVICE CARS—CARBON STEEL TANK (WELDED OR RIVETED)(Includes Rubber Lined)
111A100W1, 111A100W3, 111A100W4, 111A60W1

11 Major Class (AAR) - NON-PRESSURE TANK WITHIN A TANK (CARBON STEEL INNER TANK)
206W

11 Major Class (ICC or DOT) - NON-PRESSURE TANK WITHIN A TANK (CARBON STEEL INNER TANK)
115A60W1

13 Major Class (AAR) - NON-PRESSURE TANK WITHIN A TANK (GRADE 304 or 430 STAINLESS STEEL INNER TANK)
206W

13 Major Class (ICC or DOT) - NON-PRESSURE TANK WITHIN A TANK (GRADE 304 or 430 STAINLESS STEEL INNER TANK)
115A60W6

14 Major Class (AAR) - NON-PRESSURE TANK WITHIN A TANK (GRADE 304L STAINLESS STEEL INNER TANK)
206W

14 Major Class (ICC or DOT) - NON-PRESSURE TANK WITHIN A TANK (GRADE 304L STAINLESS STEEL INNER TANK)
115A60W6

15 Major Class (AAR) - NON-PRESSURE TANK WITHIN A TANK (GRADE 316 STAINLESS STEEL INNER TANK)
206W

15 Major Class (ICC or DOT) - NON-PRESSURE TANK WITHIN A TANK (GRADE 316 STAINLESS STEEL INNER TANK)
115A60W6

16 Major Class (AAR) - NON-PRESSURE TANK WITHIN A TANK (GRADE 316L STAINLESS STEEL INNER TANK)
206W

16 Major Class (ICC or DOT) - NON-PRESSURE TANK WITHIN A TANK (GRADE 316L STAINLESS STEEL INNER TANK)
115A60W6

17 Major Class (DOT) – NON-PRESSURE TANK HM-251
117J100W, 117P100W, 117R100W

18 Major Class (AAR) - STAINLESS CLAD STEEL CARS
203W

18 Major Class (ICC or DOT) - STAINLESS CLAD STEEL CARS
105A300W, 105A500W, 111A100W1, 111A100W2, 111A100W3

19 Major Class (ICC or DOT) - NICKEL CLAD STEEL CARS
111A100W2

20 Major Class (DOT) -
111S100W1, 111S100W2, 111S100W3, 111S100W5

21 Major Class (DOT) -
111J100W2, 111J100W3, 111J100W4

37 Major Class (DOT) - STEEL PRESSURE NON-INSULATED CARS
112S200W, 112T200W

38 Major Class (DOT) - STEEL PRESSURE NON-INSULATED CARS
112J340W

39 Major Class (DOT) - STEEL PRESSURE NON-INSULATED CARS
112S340W

40 Major Class (DOT) - STEEL PRESSURE NON-INSULATED CARS
112T340W

41 Major Class (DOT) - STEEL PRESSURE NON-INSULATED CARS
112J400W

42 Major Class (DOT) - STEEL PRESSURE NON-INSULATED CARS
112S400W

43 Major Class (DOT) - STEEL PRESSURE NON-INSULATED CARS
112T400W

44 Major Class (DOT) - STEEL PRESSURE NON-INSULATED CARS
114J340W

45 Major Class (DOT) - STEEL PRESSURE NON-INSULATED CARS
114S340W

46 Major Class (DOT) - STEEL PRESSURE NON-INSULATED CARS
114T340W

47 Major Class (DOT) - STEEL PRESSURE NON-INSULATED CARS
114J400W

48 Major Class (DOT) - STEEL PRESSURE NON-INSULATED CARS
114S400W

49 Major Class (DOT) - STEEL PRESSURE NON-INSULATED CARS
114T400W

50 Major Class (ICC or DOT) - ALUMINUM, PRESSURE CARS
105A100ALW, 105A200ALW, 109A200ALW

51 Major Class (ICC or DOT) - ALUMINUM, HIGH PRESSURE CARS
109A300ALW

52 Major Class (ICC or DOT) - STEEL PRESSURE INSULATED CARS
105A100W

53 Major Class (ICC or DOT) - STEEL PRESSURE INSULATED CARS
105A200W, 120J200W

54 Major Class (ICC or DOT) - STEEL PRESSURE INSULATED CARS
105A300W, 109A300W, 120A300W

55 Major Class (ICC or DOT) - STEEL PRESSURE INSULATED CARS
105A400W, 120A400W

56 Major Class (ICC or DOT) - STEEL PRESSURE INSULATED CARS
105A500W, 120A500W

57 Major Class (ICC or DOT) - STEEL PRESSURE INSULATED CARS
105A600W

58 Major Class (ICC or DOT) - STEEL PRESSURE CARS (MULTI-UNIT TANKS)

59 Major Class (ICC or DOT) - STEEL PRESSURE NON-INSULATED CARS
112A200W

60 Major Class (DOT) - STEEL PRESSURE NON-INSULATED CARS
112S340W

60 Major Class (ICC or DOT) - STEEL PRESSURE NON-INSULATED CARS
112A340W

61 Major Class (ICC or DOT) - STEEL PRESSURE NON-INSULATED CARS
112A400W, 112S400W

62 Major Class (DOT) - STEEL PRESSURE NON-INSULATED
112S500W

64 Major Class (ICC or DOT) - STEEL PRESSURE NON-INSULATED CARS
114A340W

65 Major Class (ICC or DOT) - STEEL PRESSURE NON-INSULATED CARS
114A400W

67 Major Class (ICC or DOT) - PRESSURE–TANK WITHIN A TANK
113A60W, 113C120W, 113C120W9, 113D120W, 115A60ALW

76 Major Class (AAR) - CRYOGENIC–TANK WITHIN A TANK
113C140W, 113C60W, 113D60W, 204W

76 Major Class (DOT) - CRYOGENIC–TANK WITHIN A TANK
113A90W

77 Major Class (ICC or DOT) - HELIUM CARS
107A

80 Major Class (DOT) - STAINLESS CLAD STEEL CARS
105J300W

81 Major Class (DOT) - STAINLESS CLAD STEEL CARS
105S300W, 105S400W

84 Major Class (DOT) – PRESSURE TANK FOR TIH (HM-246)
105J500I, 105H500W, 112J500I, 112S500I, 112H500W

85 Major Class (DOT) – PRESSURE TANK FOR TIH (HM-246)
105J600I, 105H600W
86 Major Class (DOT) - STEEL PRESSURE INSULATED CARS
105J100W
87 Major Class (DOT) - STEEL PRESSURE INSULATED CARS
105S100W
88 Major Class (DOT) - STEEL PRESSURE INSULATED CARS
105J200W
89 Major Class (DOT) - STEEL PRESSURE INSULATED CARS
105S200W
90 Major Class (DOT) - STEEL PRESSURE INSULATED CARS
105J300W

91 Major Class (DOT) - STEEL PRESSURE INSULATED CARS
105S300W, 105S400W
92 Major Class (DOT) - STEEL PRESSURE INSULATED CARS
105J400W
94 Major Class (DOT) - STEEL PRESSURE INSULATED CARS
105J500W
95 Major Class (DOT) - STEEL PRESSURE INSULATED CARS
105S500W
96 Major Class (DOT) - STEEL PRESSURE INSULATED CARS
105J600W
97 Major Class (DOT) - STEEL PRESSURE INSULATED CARS
105S600W

Minimum requirements for DOT117J100W, DOT117R100W, and DOT117P100W per 49 CFR §179.202

A237	Stenciled Shipping Spec	DOT117J***	DOT117R***[3]	DOT117P***
B207	Tank Major Class	17	17	17
B204	Jacket Material Category	N	N	Approval by FRA[2]
B541	Jacket Thickness >=	0.1196	0.1196	Approval by FRA[2]
A257	Tank Shell Material Spec =	128B	As Built[1]	Approval by FRA[2]
A258	Tank Shell Thickness >=	0.5625	0.4375	Approval by FRA[2]
B208	Tank Shell Material Norm	Y	As Built[1]	Approval by FRA[2]
A254	Tank Head Material Spec =	128B	As Built[1]	Approval by FRA[2]
A255	Tank Head Thickness >=	0.5625	0.4375	Approval by FRA[2]
B203	Tank Head Material Norm	Y	As Built[1]	Approval by FRA[2]
A118	Head Protection Type	F	F	Approval by FRA[2]
B105	Head Protection Thickness >=	0.5	0.5	Approval by FRA[2]
B555	Thermal Protection System	E	E	E
B259	Insulation/Thermal Protection Thickness >=	0.5	0.5	Approval by FRA[2]
B543*	Bottom Outlet Valve Actuation	A, B, C, or D	A, B, C, or D	A, B, C, or D
A264	Top Fittings Protection	E	E or F	E
A230	Safety Relief Device Type	C or V	C or V	C or V

1. Permissible value shall be “as built” based on the approved AAR Certificate of Construction
2. Approved by FRA - Selection of DOT117P requires approval from the FRA per 49 CFR 179.202-12(a)
3. The original built date for a DOT117R must occur before 10/1/2015

Minimum requirements for DOT105J500I, DOT105J600I, DOT112J500I, DOT112S600I, DOT112S500I, DOT105H500W, DOT105H600W, DOT112H500W, and DOT112H600W per 49 CFR §179.101 with additional requirements found in 179.102-3, 173.244, and 173.314.

A237	Stenciled Shipping Spec	DOT105J500I, DOT105H500W	DOT105J600I, DOT105H600W	DOT112J500I	DOT112S600I, DOT112H600W	DOT112S500I	DOT112H500W
B207	Tank Major Class	84	85	84	85	84	84
B204	Jacket Material Category	Must not be U	Must not be U	Must not be U	N or S or U	N or S or U	N or S or U
B541	Jacket Thickness >=	0.1196	0.1196	0.1196	0.1196 (if N or S) or Blank (if U)	0.1196 (if N or S) or Blank (if U)	0.1196 (if N or S) or Blank (if U)
A257	Tank Shell Material Spec =	128B or 302B or 51670 or 5371 or 240304L or 240316L	128B or 302B or 51670 or 5371 or 240304L or 240316L	128B or 302B or 51670 or 5371 or 240304L or 240316L	128B or 302B or 51670 or 5371 or 240304L or 240316L	128B or 302B or 51670 or 5371 or 240304L or 240316L	128B or 302B or 51670 or 5371 or 240304L or 240316L
A258	Tank Shell Thickness >=	0.6875 or 0.5625 (if 128B)	0.6875 or 0.5625 (if 128B)	0.6875 or 0.5625 (if 128B)	0.6875 or 0.5625 (if 128B)	0.6875 or 0.5625 (if 128B)	0.6875 or 0.5625 (if 128B)
B208	Tank Shell Material Norm	Y	Y	Y	Y	Y	Y
A254	Tank Head Material Spec =	128B or 302B or 51670 or 5371 or 240304L or 240316L	128B or 302B or 51670 or 5371 or 240304L or 240316L	128B or 302B or 51670 or 5371 or 240304L or 240316L	128B or 302B or 51670 or 5371 or 240304L or 240316L	128B or 302B or 51670 or 5371 or 240304L or 240316L	128B or 302B or 51670 or 5371 or 240304L or 240316L
A255	Tank Head Thickness >=	0.6875 or 0.5625 (if 128B)	0.6875 or 0.5625 (if 128B)	0.6875 or 0.5625 (if 128B)	0.6875 or 0.5625 (if 128B)	0.6875 or 0.5625 (if 128B)	0.6875 or 0.5625 (if 128B)
B203	Tank Head Material Norm	Y	Y	Y	Y	Y	Y
A118	Head Protection Type	F	F	F	F	F	F
B105	Head Protection Thickness >=	0.5	0.5	0.5	0.5	0.5	0.5
A264	Top Fittings Protection	R or S	R or S	R or S	R or S	R or S	R or S
A230	Safety Relief Device Type	C or V	C or V	C or V	C or V	C or V	C or V

Appendix O: Reporting Rail Car and Superstructure Cost

O.1 Overview of Application of Cost Information

1. The railcar and superstructure cost data reported to Umler is used in several industry applications. The Damaged & Defective Car Tracking (DDCT) system provides damaging carriers with preliminary car values based on the cost data in the Umler file.

2. Private tank car and covered hopper car rates in Freight Tariff RIC 6007 are calculated using the age and cost elements for this equipment.

3. Appurtenance rates (Appendix S, AAR Circular OT-10) for superstructures mounted on flat cars are calculated using the age and cost elements.

It is critical that the original cost, rebuilt cost and additions/betterments costs are correctly reported.

O.2 General guidelines apply to all car and superstructure costs registered in the Umler file

1. The costs must be capitalized (not expensed) costs. AAR auditors will verify that the costs are capitalized costs.

2. All cost data should be in U. S. dollars. The conversion of foreign currency to U. S. dollars is not required for cars built prior to 1978. Additions/betterments applied in 1978 and subsequent must be converted to U.S. dollars.

3. The reporting mark of the car (railroad or private) at time a car is built or addition/betterment is applied will determine whether the rules under Section III or IV applies.

O.3 Railroad Marked Cars

The original cost may include the following:

1. Capitalized cost in U. S. Dollars	Supported by the manufacturer's invoice to the original buyer or in the case of a manufacturer-lessor, the fair market value or the value which was certified, or would have been certified for investment tax credit purposes.
Plus initial into Service Transportation	If capitalized
Plus additions done prior to service	If capitalized
Plus inspection costs	If capitalized

2. Additions are capitalized costs of new components applied after the car was built/rebuilt.

Betterments are capitalized costs of improvements to components of existing equipment that extend the life of the car or increase the utility of the car. Betterments shall include the following.

a. Capitalized cost in U. S. Dollars

b. Minus current replacement costs of the previous component. If that component is registered as an addition in Umler, that addition should be deleted from Umler during the process of reporting the new costs for Umler.

c. Minus labor costs to remove the previous component

d. Minus labor to apply the new component

Examples of Betterment Cost Calculation:

Convert tie-downs on vehicular rack cars from chains and ratchets to a chock system.

$7,500	Invoice from shop applying chocks to a bi-level rack
-$1,600	Estimated value of the old tie-downs at current replacement price and labor costs related to the removal of the previous components and application of the new component
$5,900	Net betterment amount

Replace an epoxy lining in a covered hopper car with a rubber lining.

$14,000	Invoice from shop applying the new lining
-$4,000	Estimated current replacement cost of prior lining
-$300	Labor costs to remove the previous lining
-$500	Labor costs to apply the new lining
$9,200	Net betterment amount

If the prior lining was part of the original cost of the car, report the net betterment of $9,200 in Umler. If the prior lining was registered as an addition in Umler (i.e., $3,500), that addition should be deleted from Umler and a net of $12,700 should be reported in Umler. The combination would result in a $9,200 net change to Umler.

O.4 Private Marked Cars (Covered by Tariff 6007)

The original cost may include the following.

1. Capitalized cost in U. S. Dollars	Supported by the manufacturer's invoice to the original buyer or in the case of a manufacturer-lessor, the fair market value or the value which was certified, or would have been certified for investment tax credit purposes. (See RIC 6007, Items 195 and 621)
a. Plus initial into service transportation	Either capitalized or non-capitalized
b. Plus additions done prior to service	
c. Plus capitalized inspection costs	Allowed only for tank cars built in 1988 and later

2. Additions are capitalized costs of new components applied after the car was built/rebuilt.

3. Betterments are capitalized costs of improvements to components of existing equipment that extend the life of the car or increase the utility of the car. Betterments must include the following.

   a. Capitalized cost in U. S. Dollars

   b. Minus original costs of previous component. If that component is registered as an addition in Umler, that addition should be deleted from Umler during the process of reporting the new costs for Umler.

   c. Minus labor costs to remove the previous component

Example of Betterment Cost Calculation:
Replace an epoxy lining in a tank car with a rubber lining.

$14,000	Invoice from shop applying the new lining
-$3,500	Estimated value of the original lining)
-$300	Labor costs to remove the previous lining
$10,200	Net Betterment Amount

Note: The cost of the new lining must be capitalized and not expensed.

If the prior lining was part of the original cost of the car, just report the net betterment of $10,200 in Umler. If the prior lining was registered as an addition in Umler ($3,500), that addition should be deleted from Umler and a net of $13,700 be reported in Umler. The combination would result in a $10,200 net change to Umler.

O.5 Rebuilt Cars (Railroad Marked or Private Marked Cars) and Superstructures

1. The rebuilt cost should be reported in the Original Cost and Ledger Value fields in Umler.

2. Prior additions and betterments are eliminated.

3. The maximum valuation of a rebuilt private car shall not exceed the lesser of:
   a. 75% of the original cost of a comparable new car
   b. 75% of the calculated replacement cost of the rebuilt car prior to rebuilding, as computed per AAR Interchange Rule 107.

4. AAR Interchange Rule 88 governs the rebuilding of freight cars and superstructures. The value registered in Umler may include the following.

a. Capitalized rebuilding costs	Original costs and additions and betterments must be written down to the depreciated value subject to a 10% floor as outlined in AAR Interchange Rule 107.
b. Plus Reused Parts	Depreciation must be calculated from the month-year built to the month-year rebuilt. Additions and betterments must be depreciated from the month-year the car or superstructures is built - not month-year installed on the car or superstructure.
c. Minus stripping labor costs	Any labor to remove components from a unit, either temporarily, or permanently, should be computed.
d. Minus material credits	Any scrap credits or major components not reused and not reflected in the net invoice price of a rebuilt car/superstructure should be computed. If such components are reused, then the secondhand price, before refurbishment should be used. If the components are scrapped, a scrap value must be calculated. This may be done by calculating the original cost of these components and depreciating them down, using the same calculations in 4.b above. If the original costs of the components are not known, one can take the current cost, and adjust it back to an approximation of the original cost, using Rule 107 cost factors, before depreciating it. See Example No. 1.

O.6 When refrigeration units are rebuilt or replaced, the value registered in Umler may include the following

1. Rebuilt refrigeration units

a. Capitalized rebuilding costs

b. Plus reused parts

c. Minus material credits

d. The prior refrigeration unit costs registered in Umler should be deleted from Umler.

For example:

Capitalized rebuilding costs	$7,500
Plus reused parts	+ 500
Minus material credits	- 300
Net capitalized rebuilding costs	$6,700
Prior unit cost deleted from Umler	-4,000

The cost of the prior refrigeration unit would be deleted from Umler ($4,000), and the new rebuilt net of $6,700 would be reported in Umler, resulting in a net change of $2,700.

2. Replaced refrigeration units

a. Capitalized cost in U. S. Dollars

b. Minus current replacement costs of the previous unit

c. Minus labor costs to remove the previous unit

d. Minus labor to apply the new unit

For example:

Capitalized replacement costs	$10,000
Minus current replacement costs of the previous unit	- 5,000

Minus labor costs to remove the previous unit	-	700
Minus labor to apply the new unit	-	600
Net capitalized replacement costs		$3,700

The cost of the prior refrigeration unit would be deleted from Umler ($4,000), and the new net of $7,700 would be reported in Umler, resulting in a net change of $3,700.

REBUILT SUPERSTRUCTURES (5% PER YEAR)

REPRODUCTION FACTOR

	INIT	CAR #	BLT MON	BLT YR	RB MON	RB YR	ORIG COST	PRIOR A&B'S	LEDGER VALUE	REUSED PARTS**	REUSED PERCENT **	RBLT MATERIAL	RBLT MAT, ADD.	RBLT LABOR	INVOICED	LESS STRIPPING	LESS MATERIAL CRED.	NEW COSTS NET	TOTAL COSTS	REPROD FACT YR BLT	REPROD FACT YR RB
1	ABC	123	1	1984	4	2008	40,000	5,000	45,000	4,500	-21.25%	12,000	INC	16,250	28,250	416	100	27,734	32,234	88	183
1	ABC	124	11	1992	4	2008	40,000	5,000	45,000	10,313	22.92%	12,000	INC	16,250	28,250	416	229	27,605	37,917	100	183
2	ABC	123	1	1984	4	2008	45,000	0	45,000	4,500	-21.25%	12,000	INC	16,250	28,250	416	144	27,690	32,190	88	183
2	ABC	124	11	1992	4	2008	45,000	0	45,000	10,313	22.92%	12,000	INC	16,250	28,250	416		27,834	38,147	100	183

Note 1: RULE 88 DEPRECIATION IS COMPUTED, FROM MONTH AND YEAR BUILT, TO MONTH AND YEAR REBUILT

Change computed to calculated and delete comma.

Note 2: IF SUPERSTRUCTURE WAS RULE 88 REBUILT BEFORE, USE THE PRIOR REBUILT MONTH AND YEAR IN PLACE OF MONTH AND YEAR BUILT

Note 3: ** IF DEPRECIATION PERCENTAGE DROPS BELOW 10%, USE THE 10% FLOOR

KNOWN

CASE ONE ** COMPONENTS NOT REUSED IN REBUILD ORIGINAL COST 1000 PRIOR COSTS KNOW, USE REUSED PARTS PERCENTAGE (OR FLOOR OF 10%)
CURRENT COST 3000 TO CALCULATE MATERIAL CREDIT OR ORIGINAL COMPENT, NOW DEPRECIATED

COMPONENT

CASE TWC ** COMPONENTS NOT REUSED IN REBUILD ORIGINAL COST ? PRIOR COSTS UNKNOWN, USE TODAY'S COST, TO APPROXIMATE THE ORIGINAL COSTS
CURRENT COST 3000 USING RULE 107 REPRODUCTION FACTORS TO ADJUST TODAY'S $3,000

1984 88
1992 100
2008 183

Appendix P: Identical Tare Weight Batch Process

Appendix P is the Umler Committee's (UC) summary of the automated method and detail for flagging cars in Umler with identical Tare Weights as well as ways for stencil mark owners to resolve the conflicts. The following is a summary of UC's solution and is split into three main parts:

1) A new Business Rule was added that flags cars in conflict when Status Code (USCT) is "A", Status Change Date (USCT) is 30 days in the past, and cars have Weighing Status of "A" or "E".

2) Modification to data element Weighing Status (A289) as follows:

- In addition to the 2 already existing permissible values of "A – Actual" and "E – Estimated", an addition of two new permissible values were introduced:
  - **X** = Tare Weight subject to verification (NEW VALUE-SYSTEM GENERATED)
  - **V**= Verified correct tare weight (NEW VALUE)

3) A batch process has been created in Umler to run on the 15th of each month to place into conflict cars that meet all of the following characteristics:

- 10 or more numerically sequential stencil marks with identical Tare Weights
- Status is Active (Keep in mind, if added as Active, Owner is forgoing their 30-day window outside of the batch process)
- Built/Rebuilt Date is on or after April 9, 2015. For all cars built within the last several years, weight paperwork should be readily available from the builder.
- No cars in the series of 10 have a Weighing Status of "V-Verified correct tare weight"
- Status Change Date (USCT) is 30 days in the past (i.e., a car meeting the conditions in the other bullets points will not go into conflict until at least 30 days after Status Change Date)
- Cars put into conflict will have Weighing Status (A289) of "X" (Tare Weight subject to verification) applied to car.

Examples

The following example shows 20 consecutive Boxcars with identical Tare Weights. An initial run of the batch process would put all of them into conflict, as it should:

Equipment ID	Tare Weight	Result of Batch Process
RAIL 5001	89300	Conflict
RAIL 5002	89300	Conflict
RAIL 5003	89300	Conflict
RAIL 5004	89300	Conflict
RAIL 5005	89300	Conflict
RAIL 5006	89300	Conflict
RAIL 5007	89300	Conflict
RAIL 5008	89300	Conflict
RAIL 5009	89300	Conflict
RAIL 5010	89300	Conflict
RAIL 5011	89300	Conflict
RAIL 5012	89300	Conflict
RAIL 5013	89300	Conflict
RAIL 5014	89300	Conflict
RAIL 5015	89300	Conflict
RAIL 5016	89300	Conflict
RAIL 5017	89300	Conflict
RAIL 5018	89300	Conflict
RAIL 5019	89300	Conflict
RAIL 5020	89300	Conflict

If the owner subsequently corrects RAIL 5005 and RAIL 5016, Umler would use the change in Tare Weight as a trigger to remove the conflict from those 2 cars. With that done, the results would then look as follows:

Likewise, if the owner validates the tare weights and updates Weighing Status (A289) to "A-Actual", the Tare Weight was verified", Umler would use the change in Weighing Status (A289) to remove the conflicts from cars that were marked as "A-Actual".

Equipment ID	Tare Weight	Result of Batch Process
RAIL 5001	89300	Conflict
RAIL 5002	89300	Conflict
RAIL 5003	89300	Conflict
RAIL 5004	89300	Conflict
RAIL 5005	89295	(conflict removed)
RAIL 5006	89300	Conflict
RAIL 5007	89300	Conflict
RAIL 5008	89300	Conflict
RAIL 5009	89300	Conflict
RAIL 5010	89300	Conflict
RAIL 5011	89300	Conflict
RAIL 5012	89300	Conflict
RAIL 5013	89300	Conflict
RAIL 5014	89300	Conflict
RAIL 5015	89300	Conflict
RAIL 5016	89305	(conflict removed)
RAIL 5017	89300	Conflict
RAIL 5018	89300	Conflict
RAIL 5019	89300	Conflict
RAIL 5020	89300	Conflict

Changes to Weighing Status (A289) data element

Two new permissible values in the Weighing Status (A289):

A = Actual
E = Estimated
X = Tare Weight subject to verification (NEW VALUE-SYSTEM GENERATED)
V= Tare Weight Verified (NEW VALUE)

In the scenario above with 10 cars entered with identical tare weight, the batch process would flag all 10 cars in conflict and the Weighing Status (A289) field would be **SYSTEM** updated to "X" for weight verification.

Scenario #1:
Owner verifies correct weights for all 10 cars and updates Tare Weight (A259), Load Limit (LDLT), and Weighing Status (A289) to "A-Actual". Conflict is removed from all 10 cars.

Scenario #2:
Owner verifies weights on original release documentation and verifies that all 10 cars have identical tare weight. Owner updates Weighing Status (A289) to "V-Correct Tare Weight Verified" and conflict is removed from car. Cars with Weighing Status of "V" are no longer subject to monthly batch process that looks for identical tare weights.

Scenario #3:
Owner verifies weights on original release documents and finds that 3 cars out of the 10 need to be corrected. For the three cars, user would follow scenario #1 above, and for remaining 7 cars, scenario #2 above applies. If owner does not follow scenario #2 for the remaining 7 cars, they will remain in conflict.

The important thing to remember in the scenarios above is that once a Weighing Status (A289) of "X" is applied to a car, it remains in conflict and not part of the batch process until the stencil mark owner either changes the weight and weighing status to "A", or marks as Tare Weight Verified "V".

This identical tare weight (or weight subject to owner verification) conflict will follow the normal conflict escalation rules already in place.

Carry Forward Rules on Restencil Transactions

A = Actual - **Value carries forward**
E = Estimated - **Value carries forward**
X = Tare Weight Subject to verification - **Value does not carry forward**. Existing business rules prevent a restencil transaction if a conflict exists on a car. "X" code would need to be addressed before restencil could occur.
V = Correct Tare Weight Verified - **Value carries forward**

Carry Forward Rules on Clone Transactions

Existing business rules will still apply in clone transactions. The two new permissible values would not carry forward in a clone transaction.

Weighing Status (A289) codes subject to batch process

A = Actual - **Subject to batch process**
E =Estimated - **Not subject to batch process**
X = Tare Weight subject to verification – **Not subject to batch process**
V = Correct Tare Weight Verified - **Not subject to batch process**