

Umler TRAIN II

Messaging Specifications

Published by



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Document Control

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Table of Contents

| | |
|--|-----------|
| Document Control | 2 |
| 1 Introduction | 11 |
| 1.1 Important Note..... | 11 |
| 1.2 Document Overview..... | 11 |
| 1.3 Document Audience | 11 |
| 1.4 Related Documents..... | 11 |
| 1.5 Assumptions | 11 |
| 2 Umler TRAIN II Message Structure | 12 |
| 2.1 Inbound Message Types | 12 |
| 2.2 Outbound Message Types..... | 12 |
| 2.3 Message Flows..... | 14 |
| 2.3.1 Message flow in response to an inbound UMLRC00 TRAIN II message | 14 |
| 2.3.2 Message flow in response to input other than UMLRC00 TRAIN II message..... | 14 |
| 2.3.3 Message flow in response to refresh request..... | 15 |
| 2.4 Transaction Types..... | 16 |
| 2.4.1 UMLRC50..... | 16 |
| 2.4.2 UMLRC00/UMLRE70..... | 16 |
| 2.4.3 UMLRC60/UMLRC61 | 16 |
| 2.5 Message Layouts | 16 |
| 2.5.1 UMLRC00..... | 17 |
| 2.5.2 UMLRC50..... | 17 |
| 2.5.3 UMLRC60/UMLRR60 | 17 |
| 2.5.4 UMLRC61/UMLRR61 | 17 |
| 2.5.5 UMLRC71..... | 18 |
| 2.5.6 UMLRE70..... | 18 |
| 3 TRAIN II Considerations | 19 |
| 3.1 Subscription..... | 19 |
| 3.2 Customize UMLRC60/UMLRC61..... | 19 |
| 3.2.1 Select Receipt of Transactions | 19 |
| 3.2.2 Select Receipt by Ownership/Control | 19 |
| 3.3 Message Envelope Checking for UMLRC00..... | 19 |
| 3.3.1 Envelope Error Conditions..... | 20 |
| 3.3.2 Envelope Warning Conditions | 21 |
| 3.4 Business Rule Response Codes | 21 |
| 3.5 Message Structure Rules..... | 21 |
| 3.6 Control Number Considerations | 22 |
| 4 Assumptions TRAIN II Messaging Sections | 23 |
| 5 Unit of Work | 24 |
| 5.1 Inbound TRAIN II Message Processing Overview | 24 |
| 5.2 Unit of work when Umler processes to completion without a system failure | 25 |
| 5.3 Unit of work when Umler fails in the middle of processing a TRAIN II message | 25 |
| 5.4 Unit of Work Examples | 25 |
| 5.4.1 Equipment Add..... | 25 |

Umler TRAIN II Messaging Specifications

| | | |
|-----------|--|-----------|
| 5.4.2 | Unit of Work For All Other Transaction Types | 27 |
| 6 | <u>TRAIN II Sending of Duplicate Element Values</u> | 28 |
| 7 | <u>TRAIN II Detail Record Formats</u> | 29 |
| 7.1 | Detail Record Formats | 29 |
| 7.1.1 | Elemental Reporting for Equipment Add and Change Transactions..... | 29 |
| 7.1.2 | Component Level Add Reporting | 33 |
| 7.1.3 | Component Level Delete Reporting..... | 37 |
| 7.1.4 | Component Elemental Reporting | 40 |
| 8 | <u>Equipment Add ('ECA')</u> | 44 |
| 9 | <u>Equipment Change ('ECC')</u> | 54 |
| 9.1 | Elemental Reporting | 55 |
| 9.2 | Component Level Reporting – Add and Deletion of Component Levels..... | 57 |
| 9.3 | Component Elemental Reporting..... | 61 |
| 10 | <u>Equipment Delete ('ECD')</u> | 62 |
| 11 | <u>Equipment Add Back</u> | 65 |
| 11.1 | Equipment Add Back 'EAB' – Send Only Equipment ID and Built Date | 65 |
| 11.2 | Equipment Add Back 'EAD' – Send All Elements Similar to ECA | 73 |
| 12 | <u>Pool Header Add</u> | 82 |
| 12.1 | Transaction Types..... | 82 |
| 12.2 | Element IDs | 82 |
| 12.3 | Detail Record Format | 83 |
| 12.4 | Message Examples..... | 84 |
| 12.4.1 | Add a Pool Header | 84 |
| 13 | <u>Pool Header Change</u> | 86 |
| 13.1 | Transaction Types..... | 86 |
| 13.2 | Element IDs | 86 |
| 13.3 | Detail Record Format | 87 |
| 13.4 | Message Examples..... | 88 |
| 13.4.1 | Change a Pool Header..... | 88 |
| 14 | <u>Pool Header Delete</u> | 89 |
| 14.1 | Transaction Types..... | 89 |
| 14.2 | Element IDs | 89 |
| 14.3 | Detail Record Format | 89 |
| 14.4 | Message Examples..... | 89 |
| 14.4.1 | Delete a Pool Header..... | 89 |
| 15 | <u>Car Grade Inspection</u> | 91 |
| 15.1 | Transaction Types..... | 91 |
| 15.2 | Element IDs | 91 |

Umler TRAIN II Messaging Specifications

| | | |
|-----------|--|------------|
| 15.3 | Detail Record Format | 91 |
| 15.4 | Message Examples..... | 92 |
| 15.4.1 | UMLRC00 | 92 |
| 15.4.2 | UMLRC60 | 92 |
| 15.4.3 | UMLRC61 | 92 |
| 16 | Report Air Brake Test Inspection | 93 |
| 16.1 | Inbound Transaction Types | 93 |
| 16.2 | Outbound Transaction Types..... | 93 |
| 16.3 | Input Element IDs..... | 93 |
| 16.4 | Output Element IDs | 94 |
| 16.5 | Detail Record Format | 94 |
| 16.6 | Message Examples For Reporting of Air Brake Test Inspection..... | 95 |
| 16.6.1 | UMLRC00 | 95 |
| 16.6.2 | UMLRC60 | 95 |
| 16.6.3 | UMLRC61 | 96 |
| 16.7 | Message Examples For Nullification of Air Brake Test Inspection | 97 |
| 16.7.1 | UMLRC00 – Nullification for equipment with prior Air Brake Test history | 97 |
| 16.7.2 | UMLRC60 | 98 |
| 16.7.3 | UMLRC61 | 99 |
| 16.7.4 | UMLRC00 – Nullification for equipment without prior Air Brake Test history | 100 |
| 16.7.5 | UMLRC60 | 101 |
| 16.7.6 | UMLRC61 | 102 |
| 17 | Report Door Lube Inspection | 103 |
| 17.1 | Inbound Transaction Types | 103 |
| 17.2 | Outbound Transaction Types..... | 103 |
| 17.3 | Input Element IDs..... | 103 |
| 17.4 | Output Element IDs | 104 |
| 17.5 | Detail Record Format | 104 |
| 17.6 | Message Examples For Reporting of Door Lube Inspections | 105 |
| 17.6.1 | UMLRC00 | 105 |
| 17.6.2 | UMLRC60 | 105 |
| 17.6.3 | UMLRC61 | 106 |
| 17.7 | Message Examples For Nullification of Door Lube Inspection | 107 |
| 17.7.1 | UMLRC00 | 107 |
| 17.7.2 | UMLRC60 | 108 |
| 17.7.3 | UMLRC61 | 109 |
| 18 | Autorack Repair (Activity Type 992) | 110 |
| 18.1 | Inbound Transaction Types | 110 |
| 18.2 | Outbound Transaction Types..... | 110 |
| 18.3 | Input Element IDs..... | 110 |
| 18.4 | Output Element IDs | 111 |
| 18.5 | Detail Record Format | 111 |
| 18.6 | Message Examples For Reporting Autorack Repair..... | 112 |
| 18.6.1 | UMLRC00 | 112 |
| 18.6.2 | UMLRC60 | 112 |
| 18.6.3 | UMLRC61 | 112 |
| 18.7 | Message Examples For Nullification of Autorack Repair | 113 |

Umler TRAIN II Messaging Specifications

| | | |
|--------|---------------|-----|
| 18.7.1 | UMLRC00 | 113 |
| 18.7.2 | UMLRC60 | 113 |
| 18.7.3 | UMLRC61 | 114 |

19 Autorack Certification (Activity Type 970) 115

| | | |
|--------|--|-----|
| 19.1 | Inbound Transaction Types | 115 |
| 19.2 | Outbound Transaction Types..... | 115 |
| 19.3 | Input Element IDs..... | 115 |
| 19.4 | Output Element IDs | 116 |
| 19.5 | Detail Record Format | 116 |
| 19.6 | Message Examples For Autorack Certification | 117 |
| 19.6.1 | UMLRC00 | 117 |
| 19.6.2 | UMLRC60 | 117 |
| 19.6.3 | UMLRC61 | 118 |
| 19.7 | Message Examples For Nullification of Autorack Certification | 119 |
| 19.7.1 | UMLRC00 | 119 |
| 19.7.2 | UMLRC60 | 120 |
| 19.7.3 | UMLRC61 | 121 |

20 Autorack Inspection (Activity Type 970A) 122

| | | |
|--------|--|-----|
| 20.1 | Inbound Transaction Types | 122 |
| 20.2 | Outbound Transaction Types..... | 122 |
| 20.3 | Input Element IDs..... | 123 |
| 20.4 | Output Element IDs | 124 |
| 20.5 | Detail Record Format | 124 |
| 20.6 | Message Examples For Autorack Inspection..... | 125 |
| 20.6.1 | UMLRC00 | 125 |
| 20.6.2 | UMLRC60 | 126 |
| 20.6.3 | UMLRC61 | 126 |
| 20.7 | Message Examples For Nullification of Autorack Inspection..... | 127 |
| 20.7.1 | UMLRC00 | 127 |
| 20.7.2 | UMLRC60 | 128 |
| 20.7.3 | UMLRC61 | 129 |

21 Report Vehicular Flat Certification 130

| | | |
|--------|--|-----|
| 21.1 | Inbound Transaction Types | 130 |
| 21.2 | Outbound Transaction Types..... | 130 |
| 21.3 | Input Element IDs..... | 130 |
| 21.4 | Output Element IDs | 131 |
| 21.5 | Detail Record Format | 131 |
| 21.6 | Message Examples to Report Vehicular Flat Certification..... | 132 |
| 21.6.1 | UMLRC00 | 132 |
| 21.6.2 | UMLRC60 | 132 |
| 21.6.3 | UMLRC61 | 132 |
| 21.7 | Message Examples For Nullification of Vehicular Flat Certification | 133 |
| 21.7.1 | UMLRC00 | 133 |
| 21.7.2 | UMLRC60 | 134 |
| 21.7.3 | UMLRC61 | 134 |

22 Report FRA Locomotive Inspections 135

Umler TRAIN II Messaging Specifications

| | | |
|--------|--|-----|
| 22.1 | Inbound Transaction Types | 135 |
| 22.2 | Outbound Transaction Types..... | 135 |
| 22.3 | Input Element IDs..... | 135 |
| 22.4 | Output Element IDs | 136 |
| 22.5 | Detail Record Format | 136 |
| 22.6 | Message Examples – FRA Locomotive Inspection | 136 |
| 22.6.1 | UMLRC00 | 137 |
| 22.6.2 | UMLRC60 | 137 |
| 22.6.3 | UMLRC61 | 138 |
| 22.7 | Message Examples For Nullification of FRA Locomotive Inspections | 138 |
| 22.7.1 | UMLRC00 | 140 |
| 22.7.2 | UMLRC60 | 140 |
| 22.7.3 | UMLRC61 | 141 |

23 Report Reflectorization Event 142

| | | |
|--------|--|-----|
| 23.1 | Inbound Transaction Types | 142 |
| 23.2 | Outbound Transaction Types..... | 142 |
| 23.3 | Input Element IDs..... | 142 |
| 23.4 | Output Element IDs | 143 |
| 23.5 | Detail Record Format | 143 |
| 23.6 | Message Examples For Reporting of Reflectorization Event..... | 144 |
| 23.6.1 | UMLRC00 | 144 |
| 23.6.2 | UMLRC60 | 144 |
| 23.6.3 | UMLRC61 | 145 |
| 23.7 | Message Examples For Nullification of Reflectorization Event | 146 |
| 23.7.1 | UMLRC00 – Nullification for equipment with prior reflectorization event history | 146 |
| 23.7.2 | UMLRC60 | 147 |
| 23.7.3 | UMLRC61 | 147 |
| 23.7.4 | UMLRC00 – Nullification for equipment without prior reflectorization event history | 148 |
| 23.7.5 | UMLRC60 | 148 |
| 23.7.6 | UMLRC61 | 148 |

24 Create a Company Specific Group Header 149

| | | |
|--------|---------------------------------|-----|
| 24.1 | Inbound Transaction Types | 149 |
| 24.2 | Outbound Transaction Types..... | 149 |
| 24.3 | Input Element IDs..... | 150 |
| 24.4 | Output Element IDs | 151 |
| 24.5 | Message Examples..... | 152 |
| 24.5.1 | UMLRC00 | 152 |
| 24.5.2 | UMLRC60 | 152 |
| 24.5.3 | UMLRC61 | 152 |

25 Update a Company Specific Group Header 153

| | | |
|--------|---------------------------------|-----|
| 25.1 | Inbound Transaction Types | 153 |
| 25.2 | Outbound Transaction Types..... | 153 |
| 25.3 | Input Element IDs..... | 154 |
| 25.4 | Output Element IDs | 155 |
| 25.5 | Message Examples..... | 156 |
| 25.5.1 | UMLRC00 | 156 |
| 25.5.2 | UMLRC60 | 156 |

Umler TRAIN II Messaging Specifications

| | | |
|-----------|---|------------|
| 25.5.3 | UMLRC61 | 156 |
| 26 | Delete a Company Specific Group Header | 157 |
| 26.1 | Inbound Transaction Types | 157 |
| 26.2 | Outbound Transaction Types..... | 157 |
| 26.3 | Input Element IDs..... | 157 |
| 26.4 | Output Element IDs | 157 |
| 26.5 | Message Examples..... | 158 |
| 26.5.1 | UMLRC00 | 158 |
| 26.5.2 | UMLRC60 | 158 |
| 26.5.3 | UMLRC61 | 158 |
| 27 | Add Equipment to a Company Specific Equipment Group | 159 |
| 27.1 | Inbound Transaction Types | 159 |
| 27.2 | Outbound Transaction Types..... | 159 |
| 27.3 | Input Element IDs..... | 159 |
| 27.4 | Output Element IDs | 160 |
| 27.5 | Message Examples..... | 160 |
| 27.5.1 | UMLRC00 | 160 |
| 27.5.2 | UMLRC60 | 160 |
| 27.5.3 | UMLRC61 | 160 |
| 28 | Remove Equipment from a Company Specific Equipment Group | 161 |
| 28.1 | Inbound Transaction Types | 161 |
| 28.2 | Outbound Transaction Types..... | 161 |
| 28.3 | Input Element IDs..... | 161 |
| 28.4 | Output Element IDs | 161 |
| 28.5 | Message Examples..... | 161 |
| 28.5.1 | UMLRC00 | 162 |
| 28.5.2 | UMLRC60 | 162 |
| 28.5.3 | UMLRC61 | 162 |
| 29 | UMLRC50 Functional Acknowledgement Message | 163 |
| 29.1 | UMLRC50 - Warning Response..... | 163 |
| 29.2 | UMLRC50 - Error Response..... | 163 |
| 30 | UMLRC71 Transaction Status Message | 164 |
| 30.1 | Layout of UMLRC71 Detail Record | 164 |
| 30.2 | Example of UMLRC71 Message..... | 164 |
| 31 | UMLRE70 Error Response Message | 165 |
| 31.1 | Layout of UMLRE70 Data Group Header Segment..... | 165 |
| 31.2 | Layouts of UMLRE70 Detail Record..... | 166 |
| 31.3 | Examples of UMLRE70 Messages..... | 167 |
| 31.3.1 | Add a Pool Header Error Response | 167 |
| 31.3.2 | Change a Pool Header Error Response | 167 |
| 31.3.3 | Delete a Pool Header Error Response | 167 |
| 31.3.4 | Pool Assignment Error Response..... | 168 |
| 31.3.5 | Lessee Change Error Response..... | 168 |

Umler TRAIN II Messaging Specifications

| | | |
|-----------|--|------------|
| 31.3.6 | Equipment Management Code Error Response | 168 |
| 31.3.7 | Car Grade Inspection Error Response | 168 |
| 31.3.8 | Air Brake Test Inspection Error Response..... | 169 |
| 31.3.9 | Door Lube Inspection Error Response | 169 |
| 31.3.10 | Autorack Repair Error Response | 170 |
| 31.3.11 | Autorack Certification Error Response..... | 170 |
| 31.3.12 | Autorack Inspection Error Response | 171 |
| 31.3.13 | Vehicular Flat Certification Error Response..... | 171 |
| 31.3.14 | FRA Locomotive Inspection Error Response | 172 |
| 31.3.15 | Reflectorization Event Error Response..... | 172 |
| 32 | <u>Size of TRAIN II Message Expanded</u> | 173 |
| 33 | <u>Customized Message Profiles for UMLRC60/61</u> | 174 |
| 33.1 | Receive All Umler Data..... | 174 |
| 33.2 | Receive My Company’s Data (Corporate Umbrella) | 174 |
| 33.3 | Receive Data For “Company of Interest” | 174 |
| 33.4 | Receive Specific Transactions | 174 |
| 34 | <u>Generic Event Transaction Type</u> | 176 |
| 34.1 | Generic Event | 176 |
| 34.1.1 | Generic Event Transaction | 176 |
| 34.1.2 | Security Access Rights..... | 177 |
| 34.1.3 | Web Maintenance Screens | 177 |
| 34.1.4 | Web Query Screens..... | 177 |
| 34.1.5 | Generic Event Nullification | 177 |
| 34.1.6 | Security Access Rights..... | 179 |
| 35 | <u>TRAIN II Processing For Restencil</u> | 180 |
| 35.1 | Inbound TRAIN II Restencil of Equipment | 180 |
| 35.2 | Restencil Using Umler Website and Resulting TRAIN II Messages | 180 |
| 36 | <u>TRAIN II Processing For Equipment Group Change</u> | 181 |
| 36.1 | Inbound TRAIN II For Equipment Group Change..... | 181 |
| 36.2 | Equipment Group Change Using Umler Website and Resulting TRAIN II Messages | 181 |
| 37 | <u>Refresh Request</u> | 182 |
| 37.1 | UMLRC00 Inbound Refresh Request Message..... | 182 |
| 37.1.1 | UMLRR00 Processing | 182 |
| 37.2 | Equipment Characteristics Refresh..... | 183 |
| 37.2.1 | Message Examples For Equipment Characteristics Refresh..... | 183 |
| 37.2.2 | Message Examples For Equipment Existing in Umler | 185 |
| 37.2.3 | Message Examples For Equipment Not Existing in Umler | 189 |
| 37.3 | Pool Data Refresh | 190 |
| 37.3.1 | Pool Header Only..... | 190 |
| 37.3.2 | Pool Assignment Only | 193 |
| 37.3.3 | Both (Pool Header and Pool Assignments)..... | 194 |
| 37.4 | Date/Time Range Refresh..... | 198 |

Umler TRAIN II Messaging Specifications

| | | |
|--|--|------------|
| 37.4.1 | Message Examples for Date/Timestamp for all pool headers added, changed, or deleted during the specified date/time range, the system will send messages as follows | 199 |
| 37.4.2 | Message Examples for Date/Timestamp refresh for all equipment units added, changed, deleted, or for which inspections were reported | 202 |
| 37.4.3 | Message Examples for Equipment Not Existing in Umler | 205 |
| Appendix A - Message Header – Inbound/Outbound | | 206 |
| Appendix B - Control Group Header – Inbound | | 207 |
| Appendix C - Control Group Header – Outbound | | 208 |
| Appendix D - Data Group Header – Inbound | | 210 |
| Appendix E - Data Group Header – Outbound UMLRC60/UMLRR60 | | 212 |
| Appendix F - Data Group Header – Outbound UMLRC61/UMLRR61 | | 214 |
| Appendix G– UMLRC00 Inbound Detail | | 215 |
| Appendix H – UMLRC60/UMLRR60 Outbound Detail | | 216 |
| Appendix I – UMLRC61/UMLRR61 Outbound Detail | | 218 |
| Appendix J – UMLRC50 Outbound Detail | | 220 |
| Appendix K – UMLRC71 Outbound Detail | | 221 |
| Appendix L – Data Group Summary Record – Inbound/Outbound | | 222 |
| Appendix M – Control Group Summary Record – Inbound/Outbound | | 223 |
| Appendix N – Message Trailer – Inbound/Outbound | | 224 |
| Appendix O - Data Group Header – Outbound UMLRE70 | | 225 |
| Appendix P – UMLRE70 Outbound Error Message Detail | | 226 |
| Appendix Q – Detail Record Format For Equipment | | 228 |
| Appendix R – Umler Element Identifiers (Element ID) For Phase 1/2 | | 230 |
| Appendix S – Umler Transaction Types and Element Identifiers (Element ID) For Phase 1/2 | | 231 |
| Appendix T – Umler Error/Warning Response Codes For Phase 1/2 | | 232 |
| Appendix U – UMLRC50 Outbound Error Message Detail | | 233 |

1 Introduction

1.1 Important Note

Due to the dynamic nature of the system and because elements were not defined at the time this document was created the element id's, component id, component location, and response codes contained in the examples within this document are for illustrative purposes and do NOT reflect what is actually defined in the Umler system. The Umler reference files defines all the valid data needed for TRAIN II messaging. This document strives to describe the structure of the TRAIN II message.

1.2 Document Overview

This document provides an overview of Umler TRAIN II messages for the Umler project.

1.3 Document Audience

This document is intended for members of the Umler team and other interested parties in the Rail Industry.

1.4 Related Documents

1. Umler Redesign Project Request
2. EMIS RDD (concentrating on EMIS Phase 1)
3. EMIS Phase 1 FSD
4. EMIS Phase 1 Use Case Navigation Supplemental Information
5. EMIS Phase 1 Change Requests
6. EMIS Phase 2 RDD
7. EMIS Phase 2 FSD
8. EMIS Phase 2 Business Rules and Detailed Processing Document
9. EMIS Phase 3 RDD
10. EMIS Phase 3 FSD.

1.5 Assumptions

- This document makes several references to inbound messages. For the purpose of this document inbound messages means messages that external TRAIN II customer send to Railinc.
- This document makes several references to outbound messages. For the purpose of this document outbound messages means messages sent from Railinc to TRAIN II recipients.

2 Umler TRAIN II Message Structure

Umler messages use the standard TRAIN II syntax rules for construction and consist of a standard message header and trailer (or ISA equivalent), control group, data group, and detail records.

2.1 Inbound Message Types

| Message Type | Transaction Description | Conditions that Transaction is Sent |
|--------------|--|--|
| UMLRC00 | Inbound Umler message to update Umler data elements. | To report updates to information stored in the Umler system. |
| UMLRR00 | Inbound Umler message to request refresh of pool header or equipment data. | To request a refresh of pool header or equipment data. |

2.2 Outbound Message Types

| Message Type | Message Name | Message Type Description | Conditions that Transaction is Sent |
|--------------|--|---|---|
| UMLRC50 | Envelop structure validation response. | Outbound acknowledgement response to an Inbound UMLRC00 TRAIN II message. This message will only be sent to communicate any envelope errors/warnings encountered by the Inbound UMLRC00 message. | Required message that will only be sent to communicate any envelope errors/warnings encountered by the Inbound UMLRC00 message. |
| UMLRC60 | Valid updates. | Outbound message sent when any updates are made to Umler data elements. | Optional message(s) produced for any transaction that is processed in Umler that causes updates to any Umler data elements. |
| UMLRC61 | Valid updates with last update timestamp for each element. | Outbound message sent when any updates are made to Umler data elements that contain a 26-character DB2 timestamp for each element sent on the outbound message. The timestamp will represent the timestamp that the element was posted to the Umler repository. The format of the 26-character DB2 timestamp is 2003-02-27-13.35.08.999036. | Optional message(s) produced for any transaction that is processed in Umler that causes updates to any Umler data elements. |
| UMLRC71 | Message status response. | Outbound response to an UMLRC00 that contains a summary of transactions that were sent on the UMLRC00. | Optional message(s) produced for every transaction sent in an UMLRC00 depending on the customer's subscription preferences. |
| UMLRE70 | Error response. | Outbound error response to an UMLRC00 that contains any business rule (edit) errors related to the UMLRC00. | Optional message(s) produced if any information sent on an UMLRC00 results in business rule (edit) issues depending on |

Umler TRAIN II Messaging Specifications

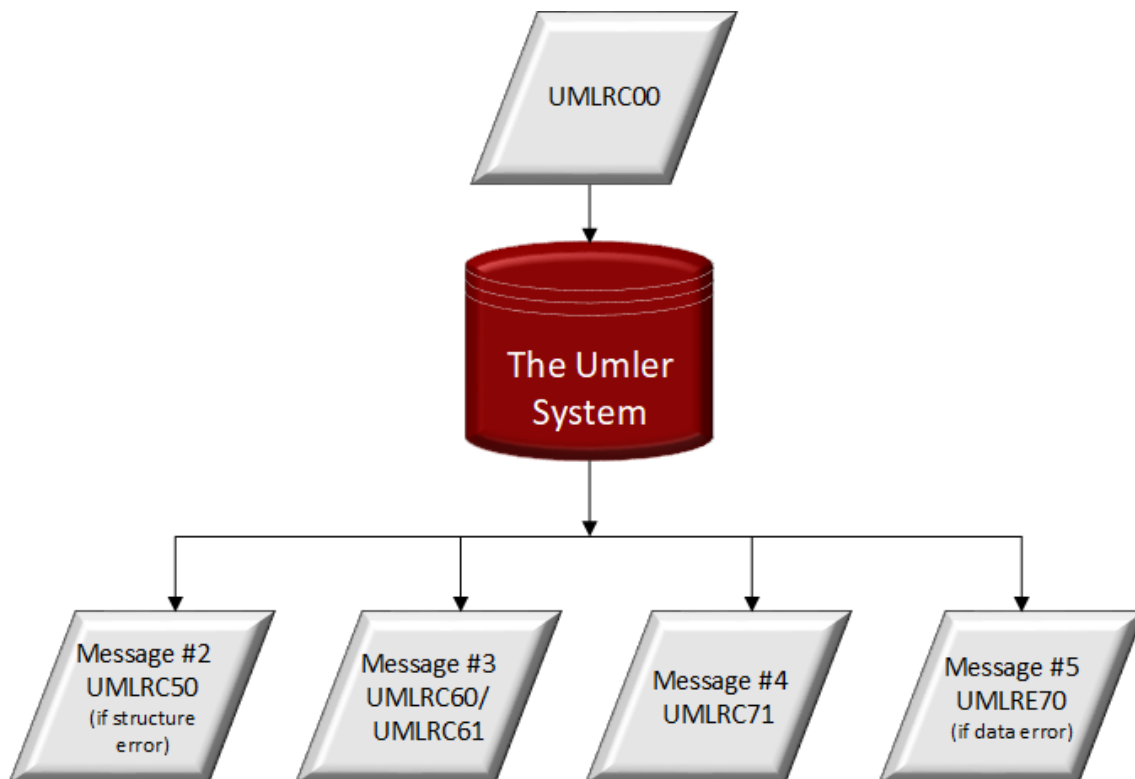
| | | | |
|---------|--|--|---|
| | | | the customer's subscription preferences. |
| UMLRR60 | Refresh update. | Outbound message generated from a refresh request from the web interface or UMLRR00 inbound TRAIN II refresh request. | Produced for any refresh request submitted on the Umler web interface or UMLRR00 inbound TRAIN II refresh request if the criteria entered match any Umler data. |
| UMLRR61 | Refresh update with last update timestamp. | Outbound message generated from a refresh request from the web interface or UMLRR00 inbound TRAIN II refresh request that contains a 26-character DB2 timestamp for each element sent on the outbound message. The timestamp will represent the timestamp that the element was posted to the Umler repository. The format of the 26-character DB2 timestamp is 2003-02-27-13.35.08.999036. | Produced for any refresh request submitted on the Umler web interface or UMLRR00 inbound TRAIN II refresh request if the criteria entered match any Umler data. |

2.3 Message Flows

2.3.1 Message flow in response to an inbound UMLRC00 TRAIN II message

When transactions are submitted into Umler by inbound Umler TRAIN II messages, Umler produces an array of outbound TRAIN II messages depending on the customer’s subscription choices. Please refer to section 2.2 Outbound Message types for descriptions of these messages.

The following diagram displays the flow of messages and the order of outbound messages produced in response to an UMLRC00 TRAIN II message.



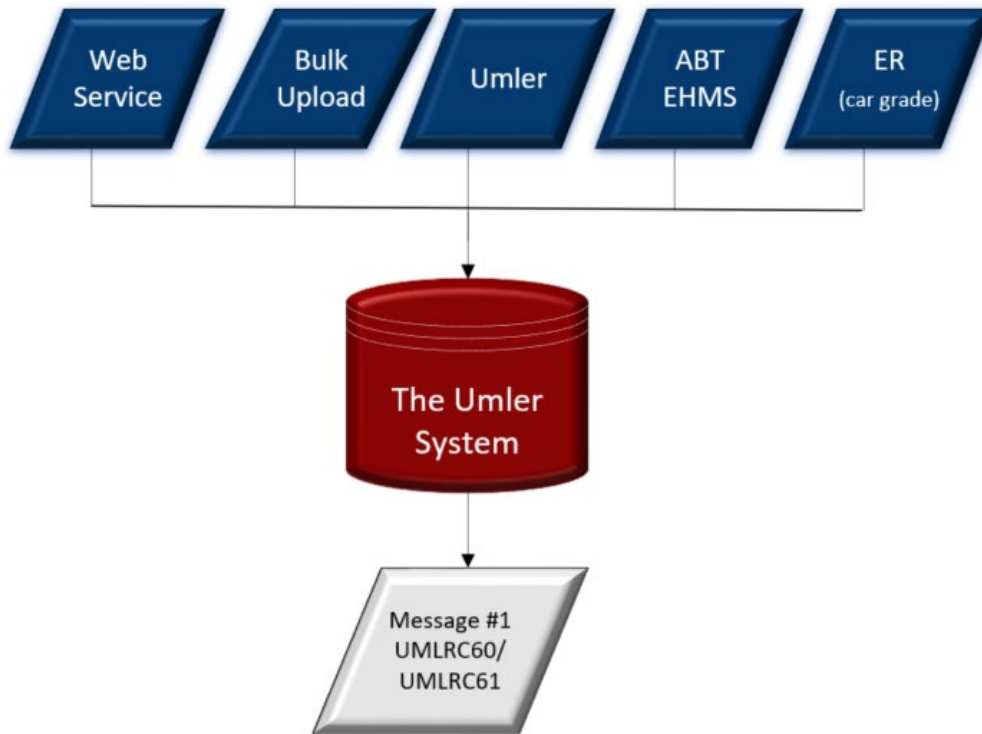
2.3.2 Message flow in response to input other than UMLRC00 TRAIN II message

When transactions are submitted into Umler for a source other than inbound Umler TRAIN II messages, the only outbound TRAIN II messages produced from the Umler application are UMLRC60/UMLRC61 messages.

The following diagram displays the flow of messages and the order of outbound messages produced in response to any transaction input into the Umler system other than Inbound UMLRC00 TRAIN II messages.

This includes but is not limited to transactions submitted via the web, web services, bulk upload, Umler updates that affect elements in Umler, Air Brake Tests reported in EHMS, and car grade events reported in the Event Repository.

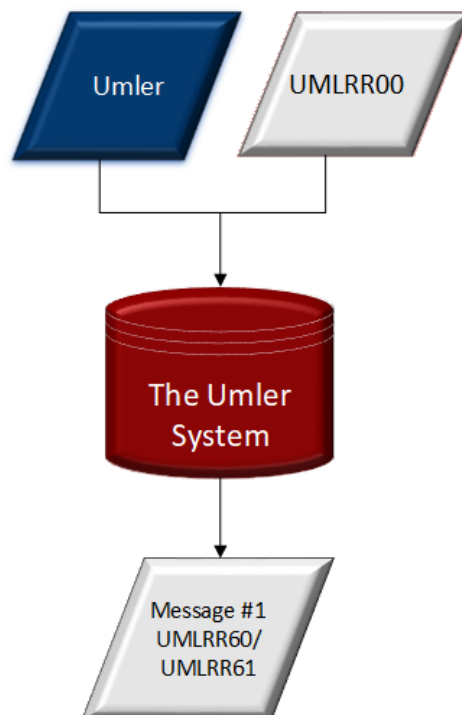
Umler TRAIN II Messaging Specifications



2.3.3 Message flow in response to refresh request

When a refresh request is submitted from the Umler website or an UMLRR00 inbound refresh request message UMLRR60/UMLRR61 TRAIN II messages are produced from the Umler application.

The following diagram displays the flow of messages and the order of outbound messages produced in response to any transaction submitted from the Umler website.



2.4 Transaction Types

2.4.1 UMLRC50

There are no transaction types applicable for the UMLRC50 message.

2.4.2 UMLRC00/UMLRE70

For a complete list of transaction types, download the most current [Umler Reference Files](#) and open the EVENT_TYPES.CSV. Given the dynamic nature of Umler, the information has been removed from this document.

2.4.3 UMLRC60/UMLRC61

For a complete list of transaction types, download the most current [Umler Reference Files](#) and open the EVENT_TYPES.CSV. Given the dynamic nature of Umler, the information has been removed from this document.

2.5 Message Layouts

There are many segments within a message type. The following table gives a brief description of each segment type in an Umler message. More details can be found in the Appendices.

| Message Segment | Segment Description |
|-----------------------|---|
| Message Header | Contains information about the origination and destination of the message as well as the date and time the message was sent. |
| Control Group Header | Contains a control number to ensure proper sequencing of messages. Also contains the date sent and the userID for Umler security. |
| Data Group Header | Contains the transaction type. |
| Detail Record | Contains the equipment ID or pool ID and the corresponding element IDs and element values that are to be processed by Umler based on the transaction type present on the data group header. |
| Data Group Summary | Signifies the end of the data group. |
| Control Group Summary | Signifies the end of the control group. |
| Trailer | Signifies the end of the message. |

The types of segments within a message type can differ depending on the message type. The format of a segment can also differ depending on the message type. For example, the detail record for the UMLRC60 differs from the detail record for the UMLRC61 because the UMLRC61 contains a DB2 timestamp for every element on the detail record.

The following sections describe segments required for each message type with a reference to an Appendix U that describes each segment in detail.

Umler TRAIN II Messaging Specifications

2.5.1 UMLRC00

There can be one to many Data Groups between the Control Group Header and Control Group Summary. There can be zero to many Detail Records between the Data Group Header and the Data Group Summary.

- Message Header (See Appendix A for layout)
- Control Group Header (See Appendix B for layout)
- Data Group Header (See Appendix D for layout)
- Detail Record(s) (See Appendix G for layout)
- Data Group Summary (See Appendix L for layout)
- Control Group Summary (See Appendix M for layout)
- Trailer Record (See Appendix N for layout)

2.5.2 UMLRC50

There can be only one of each type of record in the functional acknowledgement. There will not be a Data Group Header/Summary on functional acknowledgements.

- Message Header (See Appendix A for layout)
- Control Group Header (See Appendix C for layout)
- Detail Record(s) (See Appendix J for layout)
- Control Group Summary (See Appendix M for layout)
- Trailer Record (See Appendix N for layout)

2.5.3 UMLRC60/UMLRR60

There can be one to many Data Groups between the Control Group Header and Control Group Summary. There can be zero to many Detail Records between the Data Group Header and the Data Group Summary.

- Message Header (See Appendix A for layout)
- Control Group Header (See Appendix C for layout)
- Data Group Header (See Appendix E for layout)
- Detail Record(s) (See Appendix H for layout)
- Data Group Summary (See Appendix L for layout)
- Control Group Summary (See Appendix M for layout)
- Trailer Record (See Appendix N for layout)

2.5.4 UMLRC61/UMLRR61

There can be one to many Data Groups between the Control Group Header and Control Group Summary. There can be zero to many Detail Records between the Data Group Header and the Data Group Summary.

- Message Header (See Appendix A for layout)
- Control Group Header (See Appendix C for layout)

Umler TRAIN II Messaging Specifications

- Data Group Header (See Appendix F for layout)
- Detail Record(s) (See Appendix I for layout)
- Data Group Summary (See Appendix L for layout)
- Control Group Summary (See Appendix M for layout)
- Trailer Record (See Appendix N for layout)

2.5.5 UMLRC71

There can be only one of each type of record in the functional acknowledgement. There will not be a Data Group Header/Summary on functional acknowledgements.

- Message Header (See Appendix A for layout)
- Control Group Header (See Appendix C for layout)
- Detail Record(s) (See Appendix K for layout)
- Control Group Summary (See Appendix M for layout)
- Trailer Record (See Appendix N for layout)

2.5.6 UMLRE70

There can be one to many Data Groups between the Control Group Header and Control Group Summary. There can be zero to many Detail Records between the Data Group Header and the Data Group Summary.

- Message Header (See Appendix A for layout)
- Control Group Header (See Appendix C for layout)
- Data Group Header (See Appendix O for layout)
- Detail Record(s) (See Appendix P for layout)
- Data Group Summary (See Appendix L for layout)
- Control Group Summary (See Appendix M for layout)
- Trailer Record (See Appendix N for layout)

3 TRAIN II Considerations

3.1 Subscription

Each company that will send or receive Umler TRAIN II messages must register with the Railinc Umler Business Services group. Information will be needed such as:

- Sending/receiving network id
- Umler outbound message type the company wants to receive (UMLRC60 or UMLRC61)
- Customized receipt preferences
- Communication issues
- Schedule a communication test to determine that send/receive are working correctly.

Each company that will receive Outbound Umler TRAIN II messages will be required to choose between UMLRC60 or UMLRC61 output mechanisms. UMLRC61 messages contain a 26-byte DB2 timestamp by each changed element. UMLRC60 does not contain this 26-byte DB2 timestamp.

3.2 Customize UMLRC60/UMLRC61

3.2.1 Select Receipt of Transactions

Umler TRAIN II message subscribers will be able to specify if they want all Umler transactions or only specific transactions to be sent. Companies can choose to receive all transaction types or choose one or many from the following transactions:

- Header add
- Header change
- Header delete
- Pool Assignment
- Lessee change
- Equipment Management Code change
- Car Grade
- Inspections

3.2.2 Select Receipt by Ownership/Control

Umler TRAIN II message subscribers will be able to specify receipt of Umler TRAIN II messages by the following criteria:

- All messages
- Equipment owned/leased by my company

3.3 Message Envelope Checking for UMLRC00

Every inbound UMLRC00 TRAIN II message will undergo a series of envelope checks prior to processing in the Umler system. Error conditions result in the entire UMLRC00 message being rejected. Warning

Umler TRAIN II Messaging Specifications

conditions produce a warning response, but the message is still processed. See Appendix U for a complete list of codes that are returned on an UMLRC50.

3.3.1 Envelope Error Conditions

The following are envelope error rules for UMLRC00 messages. If messages fail any of these rules, then an error code is sent on the UMLRC50 response message. The message will not be processed by the Umler system.

- There must be one and only one message header segment (#) and it must be present at the beginning of the message.
- There must be one and only one trailer segment (\$) and it must follow a control group summary segment (=CS).
- There must be one and only one control group header segment (*CH) per message and it must follow the message header segment (#).
- There must be one and only one control group summary segment (=CS) per message and it must follow a data group summary segment (=DS) and precede the trailer segment (\$).
- The control group sequence number on the control group header segment (*CH) must be the same as the control group sequence number on the control group summary segment (=CS).
- The control group sequence number on the control group header segment (*CH) must be greater than the previous control group sequence number that was sent.
- The control group sequence number on the control group header segment (*CH) should be one greater than the previous control group sequence number that was sent. However, Umler will allow the control group sequence number on the control group header segment (*CH) to be up to 10 greater than the previous control group sequence number that was sent. The message will be rejected if the control group sequence number on the control group header segment (*CH) is greater than 10 than the previous control group sequence number that was sent.
- If zeros are sent for the control group sequence number, the message will be accepted and the inbound control group sequence number at Railinc will be reset to zeros. So, the next control group sequence number Railinc will expect is one.
- Each data group header segment (*DH) must have a corresponding data group summary segment (=DS). The data group sequence number must be the same on both the data group header segment (*DH) and the corresponding data group summary segment (=DS).
- The detail count on the data group summary segment (=DS) must match the number of detail records within the data group.
- The data group count on the control group summary segment (=CS) must match the number of data groups within the control group.

Umler TRAIN II Messaging Specifications

3.3.2 Envelope Warning Conditions

If the control group sequence number on the control group header segment (*CH) is more than one greater than the previous control group sequence number that was sent but less than or equal to 10 greater than the previous control group sequence number that was sent, then the message will be processed, and a warning message sent on the UMLRC50 response message.

3.4 Business Rule Response Codes

UMLRE70 messages can return a response code within the message that signifies business rule/process error or warning encountered. Please refer to Appendix T – Umler Error/Warning Response Codes a listing of these response codes.

3.5 Message Structure Rules

- On the Inbound UMLRC00 Message the ACTION-TYPE should be populated with spaces for Phase I and II. A value other than spaces sent in the ACTION-TYPE will be ignored.
- The maximum message length for inbound and outbound Umler TRAIN II messages is 4 meg. Inbound UMLRC00 messages that exceed 4 meg characters will be rejected at Railinc prior to processing in the Umler system. Outbound Umler TRAIN II messages will be wrapped so that they do not exceed 4 meg .
- Umler TRAIN II messages use a unit identifier within the detail record or data group header to identify what unit is being sent for processing. For all equipment related transactions the unit identifier of '0001' is used to signify the equipment ID that is being updated. For all pool header related transactions, the unit identifier of 'P001' is used to signify the pool ID that is being updated.
- The UMLRC61 pool header delete and delete company specific equipment group must have the 26-character DB2 timestamp on the Data Group Header because the Data Group Header does not contain any detail records. For UMLRC61 messages, the 26-character DB2 timestamp will only appear on message types that can have zero detail records for the Data Group. All other transaction types that cannot have this scenario will not have 26 spaces for every Data Group sent out. It will be up to the UMLRC61 recipient to determine what transaction types will have the 26-character DB2 timestamp on the data group header. For Umler Phase I and II the transaction type where this can occur is Pool Header delete.
- All elements in the Umler system will be assigned an ELEMENT ID. The ELEMENT ID will be used on Umler TRAIN II messages to identify elements that are to be processed. Element IDs can be used on different transactions so in some cases element IDs must be paired with the transaction type to determine their true meaning. An example of this is the 'PERF' element ID which is the performer of inspections. This element ID is used on many different transactions. Each section of this document outlines valid element IDs that is applicable to certain transaction types. A master list of all elements can be found in Appendix R. A listing of elements that are applicable for each transaction can be found in Appendix S.
- Due to the dynamic nature of the Umler system, TRAIN II recipients must be able to handle new transactions (inspections), elements and changes to the definition of existing elements. In the future the

Umler TRAIN II Messaging Specifications

reporter, performer, and other four position fields that use a MARK may be expanded to thirteen positions to allow a CIF number.

- In Phase II message recipients will be able to customize the data that will be sent on UMLRC60/UMLRC61 messages. Because of this complex requirement, messages will not be bundled starting with Phase II. Each transaction will result in one UMLRC60/UMLRC61 message.
- Umler does not support the submission of equipment or pool ranges. Each update must have a single equipment or pool number.

3.6 Control Number Considerations

Umler provides the capability to track all Umler messages produced from an inbound UMLRC00 message. This allows message customers an easy way to perform auditing of messages and to perform analysis of data. The inbound USERID, inbound control group sequence number, inbound date prepared, and inbound time prepared found on the inbound UMLRC00 message will be populated on any outbound messages that the UMLRC00 causes to be produced (UMLRC60, UMLRC61, UMLRC50, UMLRC71, and UMLRE70) in the outbound control group header segment (*CH).

In this tracking functionality the USERID field is protected so that it is only populated with the true USERID on messages being sent back to the company that sent the UMLRC00. For other message recipients the inbound USERID will be populated with the inbound company MARK.

For transactions that were originated from sources other than TRAIN II, the inbound control group sequence number will equal zeros.

4 Assumptions TRAIN II Messaging Sections

- The element IDS contained in message examples are used for illustrative purposes and may not be the actual element ID used in production implementation. Actual element IDS will be identified in industry reference files that are included in a separate document titled Industry Reference Files.
- The component/location names and hierarchy used in the examples are for illustrative purposes and may not be the actual names or hierarchy defined. The industry reference files will contain the actual component/location names and hierarchy.
- The response codes (error codes) contained in UMLRE70 message examples are used for illustrative purposes and may not be the actual response codes used in production implementation. The industry reference files will contain the actual response codes.
- Reporting of certain elements that are measurements (inches, feet, weights, etc.) should be sent on TRAIN II messages as the measurement format that will be defined in the TRAIN II reference files.
- Separate message examples will be provided on an FTP site to allow customers to use for development and testing purposes.
- When bundled transaction messages come in TRAIN II, the messages are processed in separate database transactions and any relation between the messages is not taken into account. The message doesn't have access to each other's detail unless all are persisted into the database. The drop-dead date is calculated as the minimum of all the due dates from FRQ, FRA, and FRY inspection. If all three transactions come in one message, the drop-dead date is set as the inspection date done of the last inspection persisted in the database. For correct calculations of the drop-dead date these transactions should be sent in a separate message.

5 Unit of Work

There are two notions of unit of work that needs to be described for TRAIN II.

- Unit of work when the system processes to completion without a system failure.
- Unit of work when processing of TRAIN II message encounters a system failure (exception/abend).

First there will be a description of how the inbound TRAIN II processor works. Then a description of the unit of work for each scenario above will be described.

5.1 Inbound TRAIN II Message Processing Overview

When an inbound UMLRC00 message is received it is processed by an inbound TRAIN II processor. This processor will iterate over each data group. For each data group encountered a call will be made to process the transaction by Umler. Each data group is iterated over in the message. Once all data group headers have been processed a COMMIT to the database is performed.

If during processing of an UMLRC00 message the Umler system encounters a system failure (exception/abend situation) occurs the entire UMLRC00 message is reprocessed several times. If after several attempts the system failure continues the ENTIRE UMLRC00 inbound message is put back on the queue and the queue is disabled. Once the system failure is resolved the inbound queue is enabled and the message is reprocessed in its entirety. The Umler system has functioned like this since the implementation of Phase 1 and will continue to do so. If commits were performed between individual data groups and a system failure occurred, then the following issues would cause severe complications in the reprocessing of the message when the system became available.

1. When a commit is performed all database activity is committed. So, the TRAIN II control number would be updated for the message being processed. If the message is put back into the inbound queue because of system failure, when the message is reprocessed the message would be rejected because the control number would be out of sync (one less than Umler expects).
2. If half of the data group headers were processed and committed and then a system failure encountered the message would be put back onto the queue. When the inbound message was reprocessed there is no special logic to determine where in the message to start processing again. It would be undesirable to reprocess the data group headers again and hope there is no consequence to the same data being submitted twice.

5.2 Unit of work when Umler processes to completion without a system failure

As data groups are processed all system activity occurs including updating database tables, etc. Even though no commit is performed between data groups transactions in subsequent data group headers still are processing as if the database updates occur. For example, in the case of an equipment add with an ABT contained in the same UMLRC00 inbound message, the equipment add processes successfully and is inserted into Umler. The next data group header is processed with the ABT and the transaction will also succeed. The transaction is aware of the insert of equipment in the ECA in the prior data group even though no commit was done.

5.3 Unit of work when Umler fails in the middle of processing a TRAIN II message

As described in the Inbound TRAIN II Message Overview section above, there is no commit done in between data groups. The commit is performed after the entire content of the TRAIN II message is processed. If a system level error or exception/abend situation occurs in the middle of processing the entire TRAIN II message is rolled back, the message is retried several times, if after retry the system failure continues the message is put back into the inbound queue, and the queue is disabled until the system failure is resolved. At that time the entire message is processed again. This is done to preserve control number sequencing and to avoid implementing complex and risky restart logic with TRAIN II.

5.4 Unit of Work Examples

5.4.1 Equipment Add

The example below does not contain all elements for equipment add. This example is being used to illustrate unit of work so all elements for equipment add is NOT displayed.

5.4.1.1 Unit of work for equipment add with ABT that does not encounter system failure during processing

| Inbound UMLRC00 TRAIN II message to illustrate unit of work for equipment add with ABT: | |
|---|---|
| Message Header | #ABCD bbbb 0001UMLRC000607301425RRDC bbbb / |
| Control Group Header | *CH12345620060730160000USERID bb |
| Data Group Header | *DH0001 ECA |
| Element Detail | +0001 b ABCD0000001437MOWN b ABCD |
| Element Detail | +0001 b ABCD0000001437LESE b ABCD |
| Element Detail | +0001 b ABCD0000001437BLDT b 20000101 |
| Data Group Summary | =DS0001SUM0003 |
| Data Group Header | *DH0002 ABT |
| Element Detail | +0001 b ABCD0000001437PERF b ABCD |
| Element Detail | +0001 b ABCD0000001437REPT b ABCT |
| Element Detail | +0001 b ABCD0000001437DTDN b 20080101 |
| Element Detail | +0001 b ABCD0000001437SPLC b 111111000 |
| Data Group Summary | =DS0002SUM0004 |
| Control Group Summary | =CS1234560002 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

Umler TRAIN II Messaging Specifications

In above example:

- If ECA is successful and ABT is successful, then both are applied to Umler database (equipment data tables and transaction log).
- If ECA is successful and ABT fails, then ECA is applied to Umler database (equipment data tables and transaction log) and the ABT is applied to notice management.
- If ECA fails, then the ABT will not find an equipment ID so the result will be both will be applied to notice management.

5.4.1.2 Unit of work for equipment add with ABT that encounters a system failure during processing

This example is being used to illustrate unit of work so all elements for equipment add is NOT displayed.

It is assumed a system failure occurred sometime during processing of the message. The message would have been rolled back to the inbound queue until the system failure is resolved.

| Inbound UMLRC00 TRAIN II message to illustrate unit of work for equipment add with ABT: | |
|---|---|
| Message Header | #ABCD bbbb 0001UMLRC000607301425RRDC bbbb / |
| Control Group Header | *CH12345620060730160000USERID bb |
| Data Group Header | *DH0001 ECA |
| Element Detail | +0001 b ABCD0000001437MOWN b ABCD |
| Element Detail | +0001 b ABCD0000001437LESE b ABCD |
| Element Detail | +0001 b ABCD0000001437BLDT b 20000101 |
| Data Group Summary | =DS0001SUM0003 |
| Data Group Header | *DH0002 ABT |
| Element Detail | +0001 b ABCD0000001437PERF b ABCD |
| Element Detail | +0001 b ABCD0000001437REPT b ABCT |
| Element Detail | +0001 b ABCD0000001437DTDN b 20080101 |
| Element Detail | +0001 b ABCD0000001437SPLC b 111111000 |
| Data Group Summary | =DS0002SUM0004 |
| Control Group Summary | =CS1234560002 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

In above example:

No updates are made to Umler database (equipment data tables, transaction log, notice management, etc.). The message is put back onto the inbound queue and the queue is disabled until the system failure is resolved.

5.4.2 Unit of Work For All Other Transaction Types

5.4.2.1 Unit of work for transaction types other than ECA on Inbound TRAIN II messages that does not encounter system failure during processing

Transactions other than ECA will be applied depending on the results of each data group header to the Umler database (equipment data tables and transaction log) or notice management. The commit is done after all data groups have been processed.

5.4.2.2 Unit of work for transaction types other than ECA on Inbound TRAIN II messages that encounters a system failure during processing

If a system failure occurs during processing then no updates are made to Umler database (equipment data tables, transaction log, notice management, etc.).

The commit for TRAIN II is done after ALL data groups have been processed. Since this section deals with messages that encounter a system failure the message will be put back onto the inbound queue and the queue disabled. Once the system failure is resolved the queue will be enabled and the message processed in its entirety.

6 TRAIN II Sending of Duplicate Element Values

It is recommended not to send element values on inbound messages that are the same as the data on file at Railinc. If duplicate values are sent, the data group header contents will be handled as follows:

- If any element value changes for an element within data group header then process changed element(s), send on outbound message and post only changed element(s) on the transaction log.
- If no element value changes within a data group header then return an UMLRE70 error message.

Recommended best practices:

- Only send elements that are changing.
- Where changes occur to related elements all changes need to be contained within a single data group header for cross-editing validation.
A, B, C are related
A, B change
Send in A, B on the same data group header

Alternatively, all related elements can be sent within the same data group header regardless if they changed or not. Elements that did not change will be processed. This is NOT the recommended best practice.

A, B, C are related
A, B change
Send in A, B, C on the same data group header

For required groupings of data, if all elements of the group are not sent within the same data group header then the missing elements will utilize the values currently on file in Umler during processing of the transaction.

For example:

- Required grouping = A, B, C, D
- Sent on transaction= A, B
- During transaction processing, the values for A and B will be derived from the transaction. Values for C and D will be derived from what currently resides on Umler file.

| Element | Sent on inbound transaction? | Value on file prior to transaction | Value on transaction | Value used during transaction processing |
|---------|------------------------------|------------------------------------|-------------------------|--|
| A | Yes | 1 | 8 | 8 |
| B | Yes | 2 | 9 | 9 |
| C | No | 3 | Not sent on transaction | 3 |
| D | No | 4 | Not sent on transaction | 4 |

7 TRAIN II Detail Record Formats

There are four different detail record formats (shown below) for equipment add transactions ('ECA') and equipment change transactions ('ECC').

- Base element reporting
- Component level add (add a component/location level)
- Component level delete (delete a component level)
- Component elemental reporting (allows reporting of elements defined for a component)

7.1 Detail Record Formats

An existing character on the detail layout will be used to signify the format of the detail record sent and identify which detail layouts is being reported. This field will be referred to as the detail record format.

The valid values for the detail record format field are:

| Value | Description |
|-------|---|
| blank | Elemental reporting for base (non-component) elements |
| A | Component level add reporting |
| D | Component level delete reporting |
| E | Component element reporting |

7.1.1 Elemental Reporting for Equipment Add and Change Transactions

Elemental reporting is what was supported in Phase 1/2 and release 3.1 of the Umler project report the values of specific elements. The format of the element record for delete transactions (ECD) differs from equipment add and change transactions. Please refer to Section 44 – equipment delete for the formats of equipment delete element records.

For release 3.2, all elements associated with the BASE component (ultimate parent) will be reported on the elemental reporting detail segment. It is incumbent on each customer to add logic that determines if elements should be reported using elemental reporting detail segment or the component elemental update detail segment (described in subsequent sections).

The following illustrates the format of an inbound UMLRC00 elemental reporting detail record on equipment add/change transactions.

+0001bABCD0000000001yyyybvvvvvvvvv

Minimum length of UMLRC00 elemental reporting detail segment = 25
Maximum length of UMLRC00 elemental reporting detail segment = 265

Umler TRAIN II Messaging Specifications

| Value | Description |
|----------------|--|
| + | The delimiter to start a detail record |
| 0001 | The ELEMENT ID for the equipment ID being updated |
| b | Detail record format. Valid values: blank = Elemental reporting A = Component level add reporting D = Component level delete reporting E = Component element reporting |
| ABCD0000000001 | The equipment initial and number |
| yyyy | The ELEMENT ID for the field being changed |
| b | Element Status. Only valid on equipment change (ECC) transactions. Valid values: Blank=Add or change element value R=Remove element ID and value |
| vvvvvvvvv | The variable length ELEMENT VALUE that corresponds to the ELEMENT ID. Minimum length = 0 Maximum length = 240 |

The following illustrates the format of an outbound UMLRC60 elemental reporting detail record on equipment add/change transactions.

+0001bABCD00000000010002beeeeyyybvvvvvvvvv

Minimum length of UMLRC60 elemental reporting detail segment = 34

Maximum length of UMLRC60 elemental reporting detail segment = 274

| Value | Description |
|----------------|--|
| + | The delimiter to start a detail record |
| 0001 | The ELEMENT ID for the equipment ID being updated |
| b | Detail record format. Valid values: blank = Elemental reporting A = Component level add reporting D = Component level delete reporting E = Component element reporting |
| ABCD0000000001 | The equipment initial and number |
| 0002 | The ELEMENT ID for equipment group |
| b | A value of space |
| eeee | The equipment group. |
| yyyy | The ELEMENT ID for the field being changed |
| b | Element Status. Only valid on equipment change (ECC) transactions. Valid values: Blank=Add or change element value R=Remove element ID and value |
| vvvvvvvvv | The variable length ELEMENT VALUE that corresponds to the ELEMENT ID. Minimum length = 0 Maximum length = 240 |

Umler TRAIN II Messaging Specifications

The following illustrates the format of an outbound UMLRC61 elemental reporting detail record on equipment add/change transactions.

+0001**b**ABCD00000000010002**b**eeeeeeyyyddddd bvvvvvvvvv

Minimum length of UMLRC61 elemental reporting detail segment = 60
 Maximum length of UMLRC61 elemental reporting detail segment = 300

| Value | Description |
|----------------------|--|
| + | The delimiter to start a detail record |
| 0001 | The ELEMENT ID for the equipment ID being updated |
| b | Detail record format. Valid values: blank = Elemental reporting A = Component level add reporting D = Component level delete reporting E = Component element reporting |
| ABCD0000000001 | The equipment initial and number |
| 0002 | The ELEMENT ID for equipment group |
| b | A value of space |
| eeee | The equipment group. |
| yyyy | The ELEMENT ID for the field being changed |
| dddddddddddddddddddd | 26 character DB2 timestamp field. |
| b | Element Status. Only valid on equipment change (ECC) transactions. Valid values: Blank=Add or change element value R=Remove element ID and value |
| vvvvvvvvv | The variable length ELEMENT VALUE that corresponds to the ELEMENT ID. Minimum length = 0 Maximum length = 240 |

Umler TRAIN II Messaging Specifications

The following illustrates the format of an outbound UMLRE70 elemental reporting detail record on equipment add/change transactions.

+0001**b**xxxxxxxxxxxxxxxx0002**b**eeeeeeyyyEEEEEEEEEE**b**vvvvvvvvv

Minimum length of UMLRE70 elemental reporting detail segment = 44
Maximum length of UMLRE70 elemental reporting detail segment = 288

| Value | Description |
|-------------------------|--|
| + | The delimiter to start a detail record |
| 0001 | The ELEMENT ID for the unit being updated (equipment ID) |
| b | Detail record format. Valid values: blank = Elemental reporting A = Component level add reporting D = Component level delete reporting E = Component element reporting |
| xxxxxxxxxxxxxxxx | The equipment initial and number |
| 0002 | The ELEMENT ID for equipment group |
| b | A value of space |
| eeee | The equipment group. |
| yyyy | The ELEMENT ID for the field being changed |
| EEEEEEEEEE | Response code for element. |
| b | Element Status. Only valid on equipment change (ECC) transactions. Valid values: Blank=Add or change element value R=Remove element ID and value |
| vvvvvvvvv | The variable length ELEMENT VALUE that corresponds to the ELEMENT ID provided in this example as yyyy Minimum length = 0 Maximum length = 240 |

7.1.2 Component Level Add Reporting

Component level add reporting will be used to add a component level within the component hierarchy.

Component levels MUST be added using the component level add detail segment. When reporting components on an equipment add ('ECA') transaction or re-adding components on an equipment change ('ECC') transaction the data group header MUST define the component levels with this component level add detail segment prior to reporting elemental updates to the component level.

The ultimate parent component 'BASE' can't be reported on the TRAIN II message as a TARGET COMPONENT. However, the BASE component will be needed on the component level add detail segment as the PARENT COMPONENT when adding component levels below BASE.

The component level add segment can be reported both on a ECA and ECC.

The following illustrates the format of an inbound UMLRC00 component level add detail record on equipment add/change transactions.

```
+0001AABCD000000001PCOMcccccccc1PLOCLLLLLLLLL1TCOMcccccccc2TLOC
LLLLLLLLL2
```

Minimum length of UMLRC00 elemental reporting detail segment = 76

Maximum length of UMLRC00 elemental reporting detail segment = 76

| Value | Description |
|----------------|--|
| + | The delimiter to start a detail record |
| 0001 | The ELEMENT ID for the equipment ID being updated |
| A | Detail record format. Valid values: blank = Elemental reporting A = Component level add reporting D = Component level delete reporting E = Component element reporting |
| ABCD0000000001 | The equipment initial and number |
| PCOM | Element ID constant for parent component. |
| cccccccc1 | Value of component 1 (high level parent) (10 positions fixed) |
| PLOC | Element ID constant for parent location. |
| LLLLLLLLL1 | Value of location 1 (high level parent) (10 positions fixed) |
| TCOM | Element ID constant for target component. |
| cccccccc2 | Value of component 2 (target component) (10 positions fixed) |
| TLOC | Element ID constant for target location. |
| LLLLLLLLL2 | Value of location 2 (target component) (10 positions fixed) Left justified/pad with spaces to right |

Umler TRAIN II Messaging Specifications

The following illustrates the format of an outbound UMLRC60 component level add detail record on equipment add/change transactions.

```
+0001Axxxxxxxxxxxx0002beeeePCOMcccccccc1PLOCLLLLLLLLL1TCOMcccccccc2TLOC
LLLLLLLLL2
```

Minimum length of UMLRC60 elemental reporting detail segment = 85

Maximum length of UMLRC60 elemental reporting detail segment = 85

| Value | Description |
|--------------|--|
| + | The delimiter to start a detail record |
| 0001 | The ELEMENT ID for the equipment ID being updated |
| A | Detail record format. Valid values: blank = Elemental reporting A = Component level add reporting D = Component level delete reporting E = Component element reporting |
| xxxxxxxxxxxx | The equipment initial and number |
| 0002 | The ELEMENT ID for equipment group |
| b | A value of space |
| eeee | The equipment group. |
| PCOM | Element ID for parent component. |
| cccccccc1 | Value of component 1 (high level parent) |
| PLOC | Element ID for parent location. |
| LLLLLLLLL1 | Value of location 1 (high level parent) |
| TCOM | Element ID for target component. |
| cccccccc2 | Value of component 2 (target component) |
| TLOC | Element ID for target location. |
| LLLLLLLLL2 | Value of location 2 (target component) |

Umler TRAIN II Messaging Specifications

The following illustrates the format of an outbound UMLRC61 component level add detail record on equipment add/change transactions.

+0001**A**xxxxxxxxxxxxxxxx0002**B**eeeePCOMcccccccc1PLOCLLLLLLLLL1TCOMcccccccc2TLOC
 LLLLLLLLLL2dddddddddddddddddddd

Minimum length of UMLRC61 elemental reporting detail segment = 111
 Maximum length of UMLRC61 elemental reporting detail segment = 111

| Value | Description |
|----------------------|--|
| + | The delimiter to start a detail record |
| 0001 | The ELEMENT ID for the equipment ID being updated |
| A | Detail record format. Valid values: blank = Elemental reporting A = Component level add reporting D = Component level delete reporting E = Component element reporting |
| xxxxxxxxxxxxxx | The equipment initial and number |
| 0002 | The ELEMENT ID for equipment group |
| B | A value of space |
| eeee | The equipment group. |
| PCOM | Element ID for parent component. |
| cccccccc1 | Value of component 1 (parent) |
| PLOC | Element ID for parent location. |
| LLLLLLLLL1 | Value of location 1 (parent) |
| TCOM | Element ID for target component. |
| cccccccc2 | Value of component 1 (target) |
| TLOC | Element ID for target location. |
| LLLLLLLLL2 | Value of location 1 (target) |
| dddddddddddddddddddd | 26 character DB2 timestamp field. |

Umler TRAIN II Messaging Specifications

The following illustrates the format of an inbound UMLERE70 component level add detail record on equipment add/change transactions.

```
+0001Axxxxxxxxxxxx0002bxxxxPCOMcccccccc1PLOCLLLLLLLLL1TCOMcccccccc2TLOC
LLLLLLLLL2EEEEEEEEEE
```

Minimum length of UMLRE70 elemental reporting detail segment = 96
 Maximum length of UMLRE70 elemental reporting detail segment = 96

| Value | Description |
|--------------|--|
| + | The delimiter to start a detail record |
| 0001 | The ELEMENT ID for the equipment ID being updated |
| A | Detail record format. Valid values: blank = Elemental reporting A = Component level add reporting D = Component level delete reporting E = Component element reporting |
| xxxxxxxxxxxx | The equipment initial and number |
| 0002 | The ELEMENT ID for equipment group |
| b | A value of space |
| xxxx | The equipment group. |
| PCOM | Element ID for parent component. |
| cccccccc1 | Value of component 1 (high level parent) |
| PLOC | Element ID for parent location. |
| LLLLLLLLL1 | Value of location 1 (high level parent) |
| TCOM | Element ID for target component. |
| cccccccc2 | Value of component 2 (target component) |
| TLOC | Element ID for target location. |
| LLLLLLLLL2 | Value of location 2 (target component) |
| EEEEEEEEEE | Response code for element. |

7.1.3 Component Level Delete Reporting

Component level reporting will be used to delete an entire component level and any elements associated with the component at that level. A separate component level delete must be sent for each component level to be deleted in the component hierarchy. These detail records must be sent in order starting from the child component up to the highest level parent component to be deleted. If a component level delete is sent for a component that has children the transaction will fail. Individual component deletes must be sent to ensure that the hierarchical structure is completely removed so that orphan components do not remain.

For example, a component hierarchy from highest level down is BASE/TRUCK SYSTEM/TRUCK. If a delete of TRUCKSYS component is desired then the data group header should contain a detail record to delete the TRUCK component followed by a detail record to delete the TRUCKSYS component within the same data group header.

A component level delete will:

- Delete all components with that component ID
- Delete all locations defined for the component ID
- Delete all elements defined with that component ID

The following are guidelines for sending component level delete reporting:

- Multiple component level deletes will be allowed within a data group header.
- Component level delete reporting is only valid on equipment change (ECC) transactions. If a component level delete reporting is sent on any other transaction type the entire data group header will not be processed, a notice will be created, and an UMLRE70 message returned with appropriate response code.
- Outbound UMLRC60/61 messages will reflect the successful component level deletion of each component deleted. Deletion of elements that are processed associated with a deleted component will not be sent. It is up to TRAIN II customers to delete all elements associated with a component when they receive a component level delete.
- If applicable a component level delete should include the component level adds of all components and elements within the same data group header. See section 39.1.2 for component level add reporting. Failure to re-add components within the same data group header as the component level delete MAY cause the transaction to fail.
- The ultimate component parent (EG: "BASE") cannot be deleted using this function.

If the component hierarchy reported to Umler in a component level delete is not valid an UMLRE70 message will be sent stating that the hierarchy cannot be deleted because the hierarchical order is not correct. The following options are then available to make updates:

- Use the Umler refresh functionality to request a current view of the equipment and then resubmit updates.
- Umler web functionality to make updates so that the correct view of the equipment is available.

Umler TRAIN II Messaging Specifications

The following illustrates the format of an inbound UMLRC00 component level delete detail record on equipment change transactions.

+0001**D**ABCD0000000001TCOMccccccccc

Minimum length of UMLRC00 elemental reporting detail segment = 34
 Maximum length of UMLRC00 elemental reporting detail segment = 34

| Value | Description |
|----------------|--|
| + | The delimiter to start a detail record |
| 0001 | The ELEMENT ID constant for the equipment ID being updated |
| D | Detail record format. Valid values: blank = Elemental reporting A = Component level add reporting D = Component level delete reporting E = Component element reporting |
| ABCD0000000001 | The equipment initial and number |
| TCOM | Element ID constant for target component ID |
| ccccccccc | COMPONENT ID. |

The following illustrates the format of an outbound UMLRC60 component level delete detail record on equipment change transactions.

+0001**D**ABCD00000000010002**b**eeeeTCOMccccccccc

Minimum length of UMLRC60 elemental reporting detail segment = 43
 Maximum length of UMLRC60 elemental reporting detail segment = 43

| Value | Description |
|----------------|--|
| + | The delimiter to start a detail record |
| 0001 | The ELEMENT ID for the equipment ID being updated |
| D | Detail record format. Valid values: blank = Elemental reporting A = Component level add reporting D = Component level delete reporting E = Component element reporting |
| ABCD0000000001 | The equipment initial and number |
| 0002 | The ELEMENT ID for equipment group. |
| b | A value of space |
| eeee | The equipment group. |
| TCOM | Element ID for target component. |
| ccccccccc | COMPONENT ID. |

Umler TRAIN II Messaging Specifications

The following illustrates the format of an outbound UMLRC61 component level delete detail record on equipment change transactions.

+0001**D**ABCD00000000010002**b**eeeeeeeeeeeeeeeeeeeeTCOMcc

Minimum length of UMLRC61 elemental reporting detail segment = 69
Maximum length of UMLRC61 elemental reporting detail segment = 69

| Value | Description |
|--|--|
| + | The delimiter to start a detail record |
| 0001 | The ELEMENT ID for the equipment ID being updated |
| D | Detail record format. Valid values: blank = Elemental reporting A = Component level add reporting D = Component level delete reporting E = Component element reporting |
| ABCD0000000001 | The equipment initial and number |
| 0002 | The ELEMENT ID for equipment group. |
| b | A value of space |
| eeee | The equipment group. |
| TCOM | Element ID for target component. |
| cccccccc | COMPONENT ID. |
| cc | 26 character DB2 timestamp field. |

The following illustrates the format of an outbound UMLRE70 component level delete detail record on equipment change transactions.

+0001**C**ABCD00000000010002**b**eeeeTCOMccccccccccEEEEEEEEEE

Minimum length of UMLRE70 elemental reporting detail segment = 53
Maximum length of UMLRE70 elemental reporting detail segment = 53

| Value | Description |
|-------------------|--|
| + | The delimiter to start a detail record |
| 0001 | The ELEMENT ID for the equipment ID being updated |
| C | Detail record format. Valid values: blank = Elemental reporting A = Component level add reporting D = Component level delete reporting E = Component element reporting |
| ABCD0000000001 | The equipment initial and number |
| 0002 | The ELEMENT ID for equipment group. |
| b | A value of space |
| eeee | The equipment group. |
| TCOM | Element ID for target component. |
| cccccccc | COMPONENT ID. |
| EEEEEEEEEE | Response code for component ID. |

7.1.4 Component Elemental Reporting

Component elemental reporting will be used to report element changes for a component. This detail segment will be used to update elements assigned to a component level BELOW THE BASE COMPONENT. Elements associated with the BASE component should use the elemental update detail record segment described in a prior section.

The following describes processing when sending component elemental reporting:

- If element ID exists for component hierarchy and no change to element ID/value then no change. The exception to this is if the contents of the entire data group header results in no changes then the entire data group header is rejected.
- If element ID exists for component hierarchy and element value is different than on file then change the element value.
- If element ID does not exist for component hierarchy then add the element ID/value.
- If element ID exists for component hierarchy and should be deleted then report a 'D' value in the element status field.

The following illustrates the format of an inbound UMLRC00 component elemental reporting detail record on equipment add/change transactions.

```
+0001EABCD0000000001PCOMcccccccc1PLOCLLLLLLLLL1TCOMcccccccc2TLOC
LLLLLLLLL2yyyybvvvvvvvvv
```

Minimum length of UMLRC00 elemental reporting detail segment = 81
 Maximum length of UMLRC00 elemental reporting detail segment = 321

| Value | Description |
|----------------|--|
| + | The delimiter to start a detail record |
| 0001 | The ELEMENT ID for the equipment ID being updated |
| E | Detail record format. Valid values: blank = Elemental reporting A = Component level add reporting D = Component level delete reporting E = Component element reporting |
| ABCD0000000001 | The equipment initial and number |
| PCOM | Element ID constant for parent component. |
| cccccccc1 | Value of component 1 (high level parent) (10 positions fixed) |
| PLOC | Element ID constant for parent location. |
| LLLLLLLLL1 | Value of location 1 (high level parent) (10 positions fixed) |
| TCOM | Element ID constant for target component. |
| cccccccc2 | Value of component 2 (target component) (10 positions fixed) |
| TLOC | Element ID constant for target location. |
| LLLLLLLLL2 | Value of location 2 (target component) (10 positions fixed) Left justified/pad with spaces to right |
| Yyyy | The ELEMENT ID for the field being changed |
| b | Element Status. Only valid on equipment change (ECC) transactions. Valid values: Blank=Add or change element value R=Remove element ID and value |
| vvvvvvvvv | The variable length ELEMENT VALUE that corresponds to the ELEMENT ID. Minimum length = 0 Maximum length = 240 |

Umler TRAIN II Messaging Specifications

The following illustrates the format of an outbound UMLRC60 component elemental reporting detail record on equipment add/change transactions.

```
+0001Exxxxxxxxxxxx0002beeeePCOMcccccccc1PLOCLLLLLLLLL1TCOMcccccccc2TLOC
LLLLLLLLL2yyyybvvvvvvvv
```

Minimum length of UMLRC60 elemental reporting detail segment = 90

Maximum length of UMLRC60 elemental reporting detail segment = 330

| Value | Description |
|--------------|--|
| + | The delimiter to start a detail record |
| 0001 | The ELEMENT ID for the equipment ID being updated |
| E | Detail record format. Valid values: blank = Elemental reporting A = Component level add reporting D = Component level delete reporting E = Component element reporting |
| xxxxxxxxxxxx | The equipment initial and number |
| 0002 | The ELEMENT ID for equipment group |
| b | A value of space |
| eeee | The equipment group. |
| PCOM | Element ID for parent component. |
| cccccccc1 | Value of component 1 (high level parent) |
| PLOC | Element ID for parent location. |
| LLLLLLLLL1 | Value of location 1 (high level parent) |
| TCOM | Element ID for target component. |
| cccccccc2 | Value of component 2 (target component) |
| TLOC | Element ID for target location. |
| LLLLLLLLL2 | Value of location 2 (target component) |
| yyyy | The ELEMENT ID for the field being changed |
| b | Element Status. Only valid on equipment change (ECC) transactions. Valid values: Blank=Add or change element value R=Remove element ID and value |
| vvvvvvvvv | The variable length ELEMENT VALUE that corresponds to the ELEMENT ID. Minimum length = 0 Maximum length = 240 |

Umler TRAIN II Messaging Specifications

The following illustrates the format of an outbound UMLRC61 component elemental reporting detail record on equipment add/change transactions.

```
+0001Exxxxxxxxxxxxxxx0002beeeePCOMcccccccc1PLOCLLLLLLLLL1TCOMcccccccc2TLOC
LLLLLLLLL2yyyyyddddddddddddddddddddddvvvvvvvvv
```

Minimum length of UMLRC61 elemental reporting detail segment = 116
Maximum length of UMLRC61 elemental reporting detail segment = 356

| Value | Description |
|--------------------------|--|
| + | The delimiter to start a detail record |
| 0001 | The ELEMENT ID for the equipment ID being updated |
| E | Detail record format. Valid values: blank = Elemental reporting A = Component level add reporting D = Component level delete reporting E = Component element reporting |
| xxxxxxxxxxxxxxx | The equipment initial and number |
| 0002 | The ELEMENT ID for equipment group |
| B | A value of space |
| eeee | The equipment group. |
| PCOM | Element ID for parent component. |
| cccccccc1 | Value of component 1 (parent) |
| PLOC | Element ID for parent location. |
| LLLLLLLLL1 | Value of location 1 (parent) |
| TCOM | Element ID for target component. |
| cccccccc2 | Value of component 1 (target) |
| TLOC | Element ID for target location. |
| LLLLLLLLL2 | Value of location 1 (target) |
| yyyyy | The ELEMENT ID for the field being changed |
| dddddddddddddddddddddddd | 26 character DB2 timestamp field. |
| b | Element Status. Only valid on equipment change (ECC) transactions. Valid values: Blank=Add or change element value R=Remove element ID and value |
| vvvvvvvvv | The variable length ELEMENT VALUE that corresponds to the ELEMENT ID. Minimum length = 0 Maximum length = 240 |

Umler TRAIN II Messaging Specifications

The following illustrates the format of an outbound UMLRE70 component elemental reporting detail record on equipment add/change transactions.

```
+0001Exxxxxxxxxxxxx0002beeeePCOMcccccccc1PLOCLLLLLLLLL1TCOMcccccccc2TLOC
LLLLLLLLL2yyyyEEEEEEEEEEbvvvvvvvvv
```

Minimum length of UMLRE70 elemental reporting detail segment = 100
 Maximum length of UMLRE70 elemental reporting detail segment = 340

| Value | Description |
|---------------|--|
| + | The delimiter to start a detail record |
| 0001 | The ELEMENT ID for the equipment ID being updated |
| E | Detail record format. Valid values: blank = Elemental reporting A = Component level add reporting D = Component level delete reporting E = Component element reporting |
| xxxxxxxxxxxxx | The equipment initial and number |
| 0002 | The ELEMENT ID for equipment group |
| b | A value of space |
| eeee | The equipment group. |
| PCOM | Element ID for parent component. |
| cccccccc1 | Value of component 1 (high level parent) |
| PLOC | Element ID for parent location. |
| LLLLLLLLL1 | Value of location 1 (high level parent) |
| TCOM | Element ID for target component. |
| cccccccc2 | Value of component 2 (target component) |
| TLOC | Element ID for target location. |
| LLLLLLLLL2 | Value of location 2 (target component) |
| yyyy | The ELEMENT ID for the field being changed |
| EEEEEEEEEE | Response code for element. |
| b | Element Status. Only valid on equipment change (ECC) transactions. Valid values: Blank=Add or change element value R=Remove element ID and value |
| vvvvvvvvv | The variable length ELEMENT VALUE that corresponds to the ELEMENT ID. Minimum length = 0 Maximum length = 240 |

8 Equipment Add ('ECA')

In Umler Phase 1/2, equipment add transactions are only sent on outbound UMLRC60/61 messages when the Umler cycle processes.

With the implementation of Umler Phase 3 release 3.2 equipment add transaction will be allowed as input into Umler via UMLRC00 messages. Only one equipment add transaction will be allowed on an UMLRC00 message. Any inspections associated with the equipment being added can be included on the same UMLRC00 message as the equipment add transaction.

Guidelines for sending equipment add transactions:

- For equipment add transactions, all data will be submitted within one data group header with a transaction type of 'ECA' (equipment add) defined on the data group header. Inspections may also be reported within the same message but in different data group headers.
- An equipment add transaction can contain element detail records, component level add detail records, and component element detail records.
- Component level delete detail records are not allowed on equipment add transactions.
- For an add transaction you cannot send null for an element. If null is sent the equipment add transaction a notice is created in notice management, and an UMLRE70 TRAIN II message is returned to the sender. If spaces are sent for an element the value of spaces is validated against the elements valid value rules.
- On outbound equipment add transactions (UMLRC60/61) only elements that have a value other than null or spaces will be sent.
- There will be no specific re-stencil function using TRAIN II. To accomplish a re-stencil in TRAIN II the equipment should be sent with an equipment add (ECA) transaction with all needed elements to add equipment. An equipment delete (ECD) transaction CAN be sent in a separate message to delete the prior equipment.
- The following transaction types will be allowed on the equipment add message type:

| Transaction Type | Description |
|--------------------------|---|
| ECA | Equipment add of elements and component data. |
| Inspections (various) | Report inspection data as part of the add transaction |

The following page illustrates an example of an UMLRC00 for an equipment add.

Umler TRAIN II Messaging Specifications

| Inbound UMLRC00 TRAIN II message created when equipment is added to Umler: | | | | | | |
|--|--|-------|--------------|-------|------|----------------|
| Message Header | #RRDC bbbb 0001 UMLRC60 0607301425RRDC bbbb / | | | | | |
| Control Group Header | *CH12345620060730160000USERID bb | | | | | |
| Data Group Header | *DH0001 ECA | | | | | |
| Element Detail | +0001 babcd 0000001437MOWN babcd | | | | | |
| Element Detail | +0001 babcd 0000001437P001 b0000000 | | | | | |
| Element Detail | +0001 babcd 0000001437UMET bl070 | | | | | |
| Element Detail | +0001 babcd 00000014370006 b12664 | | | | | |
| Element Detail | +0001 babcd 0000001437PRID befgh0000015233 | | | | | |
| Element Detail | +0001 babcd 00000014370007 bb | | | | | |
| Element Detail | +0001 babcd 00000014370008 b4505 | | | | | |
| Element Detail | +0001 babcd 00000014370009 b1008 | | | | | |
| Element Detail | +0001 babcd 00000014370012 b907 | | | | | |
| Element Detail | +0001 babcd 00000014370013 b1404 | | | | | |
| Element Detail | +0001 babcd 00000014370014 b0 | | | | | |
| Element Detail | +0001 babcd 00000014370020 b4006 | | | | | |
| Element Detail | +0001 babcd 00000014370021 b905 | | | | | |
| Element Detail | +0001 babcd 00000014370022 b1005 | | | | | |
| Element Detail | +0001 babcd 00000014370024 b4000 | | | | | |
| Element Detail | +0001 babcd 00000014370025 b519 | | | | | |
| Element Detail | +0001 babcd 00000014370026 b113073 | | | | | |
| Element Detail | +0001 babcd 00000014370027 b177 | | | | | |
| Element Detail | +0001 babcd 00000014370032 b0 | | | | | |
| Element Detail | +0001 babcd 00000014370033 bD | | | | | |
| Element Detail | +0001 babcd 00000014370034 b1251 | | | | | |
| Element Detail | +0001 babcd 00000014370037 bU | | | | | |
| Element Detail | +0001 babcd 00000014370042 bS | | | | | |
| Element Detail | +0001 babcd 00000014370043 bN | | | | | |
| Element Detail | +0001 babcd 00000014370045 bU | | | | | |
| Element Detail | +0001 babcd 00000014370048 b0 | | | | | |
| Element Detail | +0001 babcd 00000014370049 b0 | | | | | |
| Component Level Add | +0001 A ABCD0000001437PCOMBASE | PLOC1 | TCOMTRUCKSYS | TLOCB | | |
| Component Level Add | +0001 A ABCD0000001437PCOMBASE | PLOC1 | TCOMTRUCKSYS | TLOCA | | |
| Component Level Add | +0001 A ABCD0000001437PCOMBASE | PLOC1 | TCOMDRAFTSYS | TLOCB | | |
| Component Level Add | +0001 A ABCD0000001437PCOMBASE | PLOC1 | TCOMDRAFTSYS | TLOCA | | |
| Component Level Add | +0001 A ABCD0000001437PCOMTRUCKSYS | PLOCB | TCOMTRUCK | TLOCB | | |
| Component Level Add | +0001 A ABCD0000001437PCOMTRUCKSYS | PLOCA | TCOMTRUCK | TLOCA | | |
| Component Element | +0001 E ABCD0000001437PCOMTRUCKSYS | PLOCB | TCOMTRUCK | TLOCB | A147 | bD |
| Component Element | +0001 E ABCD0000001437PCOMTRUCKSYS | PLOCB | TCOMTRUCK | TLOCB | A294 | b36 |
| Component Element | +0001 E ABCD0000001437PCOMTRUCKSYS | PLOCB | TCOMTRUCK | TLOCB | B026 | bH |
| Component Element | +0001 E ABCD0000001437PCOMTRUCKSYS | PLOCB | TCOMTRUCK | TLOCB | B191 | bR |
| Component Element | +0001 E ABCD0000001437PCOMTRUCKSYS | PLOCB | TCOMTRUCK | TLOCB | B199 | bY |
| Component Element | +0001 E ABCD0000001437PCOMTRUCKSYS | PLOCB | TCOMTRUCK | TLOCB | B252 | b2 |
| Component Element | +0001 E ABCD0000001437PCOMTRUCKSYS | PLOCA | TCOMTRUCK | TLOCA | A147 | Bd |
| Component Element | +0001 E ABCD0000001437PCOMTRUCKSYS | PLOCA | TCOMTRUCK | TLOCA | A294 | b36 |
| Component Element | +0001 E ABCD0000001437PCOMTRUCKSYS | PLOCA | TCOMTRUCK | TLOCA | B026 | bH |
| Component Element | +0001 E ABCD0000001437PCOMTRUCKSYS | PLOCA | TCOMTRUCK | TLOCA | B191 | bR |
| Component Element | +0001 E ABCD0000001437PCOMTRUCKSYS | PLOCA | TCOMTRUCK | TLOCA | B199 | bY |
| Component Element | +0001 E ABCD0000001437PCOMTRUCKSYS | PLOCA | TCOMTRUCK | TLOCA | B252 | b2 |
| Component Element | +0001 E ABCD0000001437PCOMBASE | PLOC1 | TCOMDRAFTSYS | TLOCB | A057 | bSBE45F |
| Component Element | +0001 E ABCD0000001437PCOMBASE | PLOC1 | TCOMDRAFTSYS | TLOCB | B058 | bM |
| Component Element | +0001 E ABCD0000001437PCOMBASE | PLOC1 | TCOMDRAFTSYS | TLOCB | B073 | bS |
| Component Element | +0001 E ABCD0000001437PCOMBASE | PLOC1 | TCOMDRAFTSYS | TLOCB | B061 | b10 |
| Component Element | +0001 E ABCD0000001437PCOMBASE | PLOC1 | TCOMDRAFTSYS | TLOCA | A057 | bSBE45F |
| Component Element | +0001 E ABCD0000001437PCOMBASE | PLOC1 | TCOMDRAFTSYS | TLOCA | B058 | bM |
| Component Element | +0001 E ABCD0000001437PCOMBASE | PLOC1 | TCOMDRAFTSYS | TLOCA | B073 | bS |
| Component Element | +0001 E ABCD0000001437PCOMBASE | PLOC1 | TCOMDRAFTSYS | TLOCA | B061 | b10 |
| Data Group Summary | =DS0001SUM0053 | | | | | |
| Data Group Header | *DH0002 ABT | | | | | |
| Element Detail | +0001 babcd 0000001437REPT babcd | | | | | |

Umler TRAIN II Messaging Specifications

| | |
|-----------------------|------------------------------------|
| Element Detail | +0001bABCD0000001437PERFbABCD |
| Element Detail | +0001bABCD0000001437SPLCb411657000 |
| Element Detail | +0001bABCD0000001437DTDNb20051101 |
| Data Group Summary | =DS0002SUM0004 |
| Data Group Header | *DH0003DLI |
| Element Detail | +0001bABCD0000001437REPTbABCD |
| Element Detail | +0001bABCD0000001437PERFbABCD |
| Element Detail | +0001bABCD0000001437SPLCb411657000 |
| Element Detail | +0001bABCD0000001437DTDNb20051101 |
| Data Group Summary | =DS0003SUM0004 |
| Control Group Summary | =CS1234560003 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

Umler TRAIN II Messaging Specifications

The following example shows the resulting UMLRC60 message sent in response to the UMLRC00 message above if the equipment add passes all validations.

| Outbound UMLRC60 TRAIN II ECA message | | | |
|---------------------------------------|---|---------------------|---|
| Message Header | #RRDCbbb0001UMLRC600607301425RRDCbbb/ | | |
| Control Group Header | *CH12345620060730160000USERIDbbABCD12345620041031121200 | | |
| Data Group Header | *DH0001ECA | | |
| Element Detail | +0001 | ABCD00000014370002b | BOXCMOWNbABCD |
| Element Detail | +0001 | ABCD00000014370002b | BOXCP001b0000000 |
| Element Detail | +0001 | ABCD00000014370002b | BOXCUMETHL070 |
| Element Detail | +0001 | ABCD00000014370002b | BOXC0006b12664 |
| Element Detail | +0001 | ABCD00000014370002b | BOXCPRIDbEFGH0000015233 |
| Element Detail | +0001 | ABCD00000014370002b | BOXC0007bB |
| Element Detail | +0001 | ABCD00000014370002b | BOXC0008b4505 |
| Element Detail | +0001 | ABCD00000014370002b | BOXC0009b1008 |
| Element Detail | +0001 | ABCD00000014370002b | BOXC0012b907 |
| Element Detail | +0001 | ABCD00000014370002b | BOXC0013b1404 |
| Element Detail | +0001 | ABCD00000014370002b | BOXC0014b0 |
| Element Detail | +0001 | ABCD00000014370002b | BOXC0020b4006 |
| Element Detail | +0001 | ABCD00000014370002b | BOXC0021b905 |
| Element Detail | +0001 | ABCD00000014370002b | BOXC0022b1005 |
| Element Detail | +0001 | ABCD00000014370002b | BOXC0024b4000 |
| Element Detail | +0001 | ABCD00000014370002b | BOXC0025b519 |
| Element Detail | +0001 | ABCD00000014370002b | BOXC0026b113073 |
| Element Detail | +0001 | ABCD00000014370002b | BOXC0027b177 |
| Element Detail | +0001 | ABCD00000014370002b | BOXC0032b0 |
| Element Detail | +0001 | ABCD00000014370002b | BOXC0033bD |
| Element Detail | +0001 | ABCD00000014370002b | BOXC0034b1251 |
| Element Detail | +0001 | ABCD00000014370002b | BOXC0037bU |
| Element Detail | +0001 | ABCD00000014370002b | BOXC0042bS |
| Element Detail | +0001 | ABCD00000014370002b | BOXC0043bN |
| Element Detail | +0001 | ABCD00000014370002b | BOXC0045bU |
| Element Detail | +0001 | ABCD00000014370002b | BOXC0048b0 |
| Element Detail | +0001 | ABCD00000014370002b | BOXC0049b0 |
| Component Level Add | +0001 | ABCD00000014370002b | BOXCPCOMBASE PLOC1 TCOMTRUCKSYS TLOCB |
| Component Level Add | +0001 | ABCD00000014370002b | BOXCPCOMBASE PLOC1 TCOMTRUCKSYS TLOCA |
| Component Level Add | +0001 | ABCD00000014370002b | BOXCPCOMBASE PLOC1 TCOMDRAFTSYS TLOCB |
| Component Level Add | +0001 | ABCD00000014370002b | BOXCPCOMBASE PLOC1 TCOMDRAFTSYS TLOCA |
| Component Level Add | +0001 | ABCD00000014370002b | BOXCPCOMTRUCKSYS PLOCB TCOMTRUCK TLOCB |
| Component Level Add | +0001 | ABCD00000014370002b | BOXCPCOMTRUCKSYS PLOCA TCOMTRUCK TLOCA |
| Component Element | +0001 | ABCD00000014370002b | BOXCPCOMTRUCKSYS PLOCB TCOMTRUCK TLOCB A147bD |
| Component Element | +0001 | ABCD00000014370002b | BOXCPCOMTRUCKSYS PLOCB TCOMTRUCK TLOCB A294b36 |
| Component Element | +0001 | ABCD00000014370002b | BOXCPCOMTRUCKSYS PLOCB TCOMTRUCK TLOCB B026bH |
| Component Element | +0001 | ABCD00000014370002b | BOXCPCOMTRUCKSYS PLOCB TCOMTRUCK TLOCB B191bR |
| Component Element | +0001 | ABCD00000014370002b | BOXCPCOMTRUCKSYS PLOCB TCOMTRUCK TLOCB B199bY |
| Component Element | +0001 | ABCD00000014370002b | BOXCPCOMTRUCKSYS PLOCB TCOMTRUCK TLOCB B252b2 |
| Component Element | +0001 | ABCD00000014370002b | BOXCPCOMTRUCKSYS PLOCA TCOMTRUCK TLOCA A147Bd |
| Component Element | +0001 | ABCD00000014370002b | BOXCPCOMTRUCKSYS PLOCA TCOMTRUCK TLOCA A294b36 |
| Component Element | +0001 | ABCD00000014370002b | BOXCPCOMTRUCKSYS PLOCA TCOMTRUCK TLOCA B026bH |

Umler TRAIN II Messaging Specifications

| | |
|-----------------------|---|
| Component Element | +0001EABCD00000014370002bBOXCPCOMTRUCKSYS PLOCA TCOMTRUCK TLOCA B191bR |
| Component Element | +0001EABCD00000014370002bBOXCPCOMTRUCKSYS PLOCA TCOMTRUCK TLOCA B199bY |
| Component Element | +0001EABCD00000014370002bBOXCPCOMTRUCKSYS PLOCA TCOMTRUCK TLOCA B252b2 |
| Component Element | +0001EABCD00000014370002bBOXCPCOMBASE PLOC1 TCOMDRAFTSYS TLOCB AO57bSBE45F |
| Component Element | +0001EABCD00000014370002bBOXCPCOMBASE PLOC1 TCOMDRAFTSYS TLOCB B058bM |
| Component Element | +0001EABCD00000014370002bBOXCPCOMBASE PLOC1 TCOMDRAFTSYS TLOCB B073bS |
| Component Element | +0001EABCD00000014370002bBOXCPCOMBASE PLOC1 TCOMDRAFTSYS TLOCB B061b10 |
| Component Element | +0001EABCD00000014370002bBOXCPCOMBASE PLOC1 TCOMDRAFTSYS TLOCA AO57bSBE45F |
| Component Element | +0001EABCD00000014370002bBOXCPCOMBASE PLOC1 TCOMDRAFTSYS TLOCA B058bM |
| Component Element | +0001EABCD00000014370002bBOXCPCOMBASE PLOC1 TCOMDRAFTSYS TLOCA B073bS |
| Component Element | +0001EABCD00000014370002bBOXCPCOMBASE PLOC1 TCOMDRAFTSYS TLOCA B061b10 |
| Data Group Summary | =DS0001SUM0053 |
| Control Group Summary | =CS1234560001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

| | |
|--|---|
| Outbound UMLRC60 TRAIN II ABT message | |
| Message Header | #RRDCbbb0001UMLRC600607301425RRDCbbb/ |
| Control Group Header | *CH12345620060730160000USERIDbbABCD12345620041031121200 |
| Data Group Header | *DH0001ABT |
| Element Detail | +0001bABCD00000014370002bBOXCREPTbABCD |
| Element Detail | +0001bABCD00000014370002bBOXCPERFbABCD |
| Element Detail | +0001bABCD00000014370002bBOXCSPLCb411657000 |
| Element Detail | +0001bABCD00000014370002bBOXCDTDNb20051101 |
| Data Group Summary | =DS0001SUM0004 |
| Control Group Summary | =CS1234560001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

| | |
|--|---|
| Outbound UMLRC61 TRAIN II DLI message | |
| Message Header | #RRDCbbb0001UMLRC600607301425RRDCbbb/ |
| Control Group Header | *CH12345620060730160000USERIDbbABCD12345620041031121200 |
| Data Group Header | *DH0001DLI |
| Element Detail | +0001bABCD00000014370002bBOXCREPTbABCD |
| Element Detail | +0001bABCD00000014370002bBOXCPERFbABCD |
| Element Detail | +0001bABCD00000014370002bBOXCSPLCb411657000 |
| Element Detail | +0001bABCD00000014370002bBOXCDTDNb20051101 |
| Data Group Summary | =DS0001SUM0004 |
| Control Group Summary | =CS1234560001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

Umler TRAIN II Messaging Specifications

The following example shows the resulting UMLRC61 message sent in response to the UMLRC00 message above if the equipment add passes all validations.

| Outbound UMLRC61 TRAIN II ECA message | | | | | | |
|---------------------------------------|---|----------------------|-------------------------------------|--------------|--------------|---|
| Message Header | #RRDCbbb0001UMLRC610607301425RRDCbbb/ | | | | | |
| Control Group Header | *CH12345620060730160000USERIDbbABCD12345620041031121200 | | | | | |
| Data Group Header | *DH0001ECA | | | | | |
| Element Detail | +0001 | bABCD00000014370002b | BOXCMOWN2006-11-21-08.01.51.000001b | ABCD | | |
| Element Detail | +0001 | bABCD00000014370002b | BOXCP0012006-11-21-08.01.51.000001b | 0000000 | | |
| Element Detail | +0001 | bABCD00000014370002b | BOXCUMET2006-11-21-08.01.51.000001b | L070 | | |
| Element Detail | +0001 | bABCD00000014370002b | BOXC00062006-11-21-08.01.51.000001b | 12664 | | |
| Element Detail | +0001 | bABCD00000014370002b | BOXCPRID2006-11-21-08.01.51.000001b | EF0000015233 | | |
| Element Detail | +0001 | bABCD00000014370002b | BOXC00072006-11-21-08.01.51.000001b | B | | |
| Element Detail | +0001 | bABCD00000014370002b | BOXC00082006-11-21-08.01.51.000001b | 4505 | | |
| Element Detail | +0001 | bABCD00000014370002b | BOXC00092006-11-21-08.01.51.000001b | 1008 | | |
| Element Detail | +0001 | bABCD00000014370002b | BOXC00122006-11-21-08.01.51.000001b | 907 | | |
| Element Detail | +0001 | bABCD00000014370002b | BOXC00132006-11-21-08.01.51.000001b | 1404 | | |
| Element Detail | +0001 | bABCD00000014370002b | BOXC00142006-11-21-08.01.51.000001b | 0 | | |
| Element Detail | +0001 | bABCD00000014370002b | BOXC00202006-11-21-08.01.51.000001b | 4006 | | |
| Element Detail | +0001 | bABCD00000014370002b | BOXC00212006-11-21-08.01.51.000001b | 905 | | |
| Element Detail | +0001 | bABCD00000014370002b | BOXC00222006-11-21-08.01.51.000001b | 1005 | | |
| Element Detail | +0001 | bABCD00000014370002b | BOXC00242006-11-21-08.01.51.000001b | 4000 | | |
| Element Detail | +0001 | bABCD00000014370002b | BOXC00252006-11-21-08.01.51.000001b | 519 | | |
| Element Detail | +0001 | bABCD00000014370002b | BOXC00262006-11-21-08.01.51.000001b | 113073 | | |
| Element Detail | +0001 | bABCD00000014370002b | BOXC00272006-11-21-08.01.51.000001b | 177 | | |
| Element Detail | +0001 | bABCD00000014370002b | BOXC00322006-11-21-08.01.51.000001b | 0 | | |
| Element Detail | +0001 | bABCD00000014370002b | BOXC00332006-11-21-08.01.51.000001b | D | | |
| Element Detail | +0001 | bABCD00000014370002b | BOXC00342006-11-21-08.01.51.000001b | 1251 | | |
| Element Detail | +0001 | bABCD00000014370002b | BOXC00372006-11-21-08.01.51.000001b | U | | |
| Element Detail | +0001 | bABCD00000014370002b | BOXC00422006-11-21-08.01.51.000001b | S | | |
| Element Detail | +0001 | bABCD00000014370002b | BOXC00432006-11-21-08.01.51.000001b | N | | |
| Element Detail | +0001 | bABCD00000014370002b | BOXC00452006-11-21-08.01.51.000001b | U | | |
| Element Detail | +0001 | bABCD00000014370002b | BOXC00482006-11-21-08.01.51.000001b | 0 | | |
| Element Detail | +0001 | bABCD00000014370002b | BOXC00492006-11-21-08.01.51.000001b | 0 | | |
| Component Level Add | +0001 | bABCD00000014370002b | BOXPCOMBASE | PLOC1 | TCOMTRUCKSYS | TLOCB 2006-11-21-08.01.51.000001 |
| Component Level Add | +0001 | bABCD00000014370002b | BOXPCOMBASE | PLOC1 | TCOMTRUCKSYS | TLOCA 2006-11-21-08.01.51.000001 |
| Component Level Add | +0001 | bABCD00000014370002b | BOXPCOMBASE | PLOC1 | TCOMDRAFTSYS | TLOCB 2006-11-21-08.01.51.000001 |
| Component Level Add | +0001 | bABCD00000014370002b | BOXPCOMBASE | PLOC1 | TCOMDRAFTSYS | TLOCA 2006-11-21-08.01.51.000001 |
| Component Level Add | +0001 | bABCD00000014370002b | BOXPCOMTRUCKSYS | PLOCB | TCOMTRUCK | TLOCB 2006-11-21-08.01.51.000001 |
| Component Level Add | +0001 | bABCD00000014370002b | BOXPCOMTRUCKSYS | PLOCA | TCOMTRUCK | TLOCA 2006-11-21-08.01.51.000001 |
| Component Element | +0001 | bABCD00000014370002b | BOXPCOMTRUCKSYS | PLOCB | TCOMTRUCK | TLOCB A1472006-11-21-08.01.51.000001bD |
| Component Element | +0001 | bABCD00000014370002b | BOXPCOMTRUCKSYS | PLOCB | TCOMTRUCK | TLOCB A2942006-11-21-08.01.51.000001b36 |
| Component Element | +0001 | bABCD00000014370002b | BOXPCOMTRUCKSYS | PLOCB | TCOMTRUCK | TLOCB B0262006-11-21-08.01.51.000001bH |
| Component Element | +0001 | bABCD00000014370002b | BOXPCOMTRUCKSYS | PLOCB | TCOMTRUCK | TLOCB B1912006-11-21-08.01.51.000001bR |
| Component Element | +0001 | bABCD00000014370002b | BOXPCOMTRUCKSYS | PLOCB | TCOMTRUCK | TLOCB B1992006-11-21-08.01.51.000001bY |
| Component Element | +0001 | bABCD00000014370002b | BOXPCOMTRUCKSYS | PLOCB | TCOMTRUCK | TLOCB B2522006-11-21-08.01.51.000001b2 |
| Component Element | +0001 | bABCD00000014370002b | BOXPCOMTRUCKSYS | PLOCA | TCOMTRUCK | TLOCA A1472006-11-21-08.01.51.000001bD |

Umler TRAIN II Messaging Specifications

| | |
|-----------------------|---|
| Component Element | +0001EABCD00000014370002bBOXCPCOMTRUCKSYS PLOCA TCOMTRUCK TLOCA A2942006-11-21-08.01.51.000001b36 |
| Component Element | +0001EABCD00000014370002bBOXCPCOMTRUCKSYS PLOCA TCOMTRUCK TLOCA B0262006-11-21-08.01.51.000001bH |
| Component Element | +0001EABCD00000014370002bBOXCPCOMTRUCKSYS PLOCA TCOMTRUCK TLOCA B1912006-11-21-08.01.51.000001bR |
| Component Element | +0001EABCD00000014370002bBOXCPCOMTRUCKSYS PLOCA TCOMTRUCK TLOCA B1992006-11-21-08.01.51.000001bY |
| Component Element | +0001EABCD00000014370002bBOXCPCOMTRUCKSYS PLOCA TCOMTRUCK TLOCA B2522006-11-21-08.01.51.000001b2 |
| Component Element | +0001EABCD00000014370002bBOXCPCOMBASE PLOC1 TCOMDRAFTSYS TLOCB AO572006-11-21-08.01.51.000001bSBE45F |
| Component Element | +0001EABCD00000014370002bBOXCPCOMBASE PLOC1 TCOMDRAFTSYS TLOCB B0582006-11-21-08.01.51.000001bM |
| Component Element | +0001EABCD00000014370002bBOXCPCOMBASE PLOC1 TCOMDRAFTSYS TLOCB B0732006-11-21-08.01.51.000001bS |
| Component Element | +0001EABCD00000014370002bBOXCPCOMBASE PLOC1 TCOMDRAFTSYS TLOCB B0612006-11-21-08.01.51.000001b10 |
| Component Element | +0001EABCD00000014370002bBOXCPCOMBASE PLOC1 TCOMDRAFTSYS TLOCA AO572006-11-21-08.01.51.000001bSBE45F |
| Component Element | +0001EABCD00000014370002bBOXCPCOMBASE PLOC1 TCOMDRAFTSYS TLOCA B0582006-11-21-08.01.51.000001bM |
| Component Element | +0001EABCD00000014370002bBOXCPCOMBASE PLOC1 TCOMDRAFTSYS TLOCA B0732006-11-21-08.01.51.000001bS |
| Component Element | +0001EABCD00000014370002bBOXCPCOMBASE PLOC1 TCOMDRAFTSYS TLOCA B0612006-11-21-08.01.51.000001b10 |
| Data Group Summary | =DS0001SUM0053 |
| Control Group Summary | =CS1234560001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

Umler TRAIN II Messaging Specifications

| Outbound UMLRC61 ABT TRAIN II message | |
|--|---|
| Message Header | #RRDC bbbb 0001 UMLRC61 0607301425RRDC bbbb / |
| Control Group Header | *CH12345620060730160000USERID bb ABCD12345620041031121200 |
| Data Group Header | *DH0001 ABT |
| Element Detail | +0001 ABCD 00000014370002 b BOXCREPT2006-11-21-08.01.51.000001 ABCD |
| Element Detail | +0001 ABCD 00000014370002 b BOXCPERF2006-11-21-08.01.51.000001 ABCD |
| Element Detail | +0001 ABCD 00000014370002 b BOXCSPLC2006-11-21-08.01.51.000001 411657000 |
| Element Detail | +0001 ABCD 00000014370002 b BOXCDTDN2006-11-21-08.01.51.000001 20051101 |
| Data Group Summary | =DS0001SUM0004 |
| Control Group Summary | =CS1234560001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

| Outbound UMLRC61 DLI TRAIN II message | |
|--|---|
| Message Header | #RRDC bbbb 0001 UMLRC61 0607301425RRDC bbbb / |
| Control Group Header | *CH12345620060730160000USERID bb ABCD12345620041031121200 |
| Data Group Header | *DH0001 DLI |
| Element Detail | +0001 ABCD 00000014370002 b BOXCREPT2006-11-21-08.01.51.000001 ABCD |
| Element Detail | +0001 ABCD 00000014370002 b BOXCPERF2006-11-21-08.01.51.000001 ABCD |
| Element Detail | +0001 ABCD 00000014370002 b BOXCSPLC2006-11-21-08.01.51.000001 411657000 |
| Element Detail | +0001 ABCD 00000014370002 b BOXCDTDN2006-11-21-08.01.51.000001 20051101 |
| Data Group Summary | =DS0001SUM0004 |
| Control Group Summary | =CS1234560001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

Umler TRAIN II Messaging Specifications

The following examples shows the resulting UMLRE70 messages sent in response to the UMLRC00 message above that encounters an error.

| Outbound UMLRE70 TRAIN II ECA response message | | | | | | |
|--|---|----------------------|---------------------|--------------|--------------|-------|
| Message Header | #RRDCbbb0001UMLRE700607301425RRDCbbb/ | | | | | |
| Control Group Header | *CH12345620060730160000USERIDbbABCD12345620041031121200 | | | | | |
| Data Group Header | *DH0001ECAECA0000001 | | | | | |
| Element Detail | +0001 | bABCD00000014370002b | BOXCMOWN0000000800b | ABCD | | |
| Element Detail | +0001 | bABCD00000014370002b | BOXCP0010000000000b | 00000000 | | |
| Element Detail | +0001 | bABCD00000014370002b | BOXCUMET0000000000b | L070 | | |
| Element Detail | +0001 | bABCD00000014370002b | BOXC00060000000000b | 12664 | | |
| Element Detail | +0001 | bABCD00000014370002b | BOXCPRID0000000000b | EF0000015233 | | |
| Element Detail | +0001 | bABCD00000014370002b | BOXC00070000000000b | B | | |
| Element Detail | +0001 | bABCD00000014370002b | BOXC00080000000000b | 4505 | | |
| Element Detail | +0001 | bABCD00000014370002b | BOXC00090000000000b | 1008 | | |
| Element Detail | +0001 | bABCD00000014370002b | BOXC00120000000000b | 907 | | |
| Element Detail | +0001 | bABCD00000014370002b | BOXC00130000000000b | 1404 | | |
| Element Detail | +0001 | bABCD00000014370002b | BOXC00140000000000b | 0 | | |
| Element Detail | +0001 | bABCD00000014370002b | BOXC00200000000000b | 4006 | | |
| Element Detail | +0001 | bABCD00000014370002b | BOXC00210000000000b | 905 | | |
| Element Detail | +0001 | bABCD00000014370002b | BOXC00220000000000b | 1005 | | |
| Element Detail | +0001 | bABCD00000014370002b | BOXC00240000000000b | 4000 | | |
| Element Detail | +0001 | bABCD00000014370002b | BOXC00250000000000b | 519 | | |
| Element Detail | +0001 | bABCD00000014370002b | BOXC00260000000000b | 113073 | | |
| Element Detail | +0001 | bABCD00000014370002b | BOXC00270000000000b | 177 | | |
| Element Detail | +0001 | bABCD00000014370002b | BOXC00320000000000b | 0 | | |
| Element Detail | +0001 | bABCD00000014370002b | BOXC00330000000000b | D | | |
| Element Detail | +0001 | bABCD00000014370002b | BOXC00340000000000b | 1251 | | |
| Element Detail | +0001 | bABCD00000014370002b | BOXC00370000000000b | U | | |
| Element Detail | +0001 | bABCD00000014370002b | BOXC00420000000000b | S | | |
| Element Detail | +0001 | bABCD00000014370002b | BOXC00430000000000b | N | | |
| Element Detail | +0001 | bABCD00000014370002b | BOXC00450000000000b | U | | |
| Element Detail | +0001 | bABCD00000014370002b | BOXC00480000000000b | 0 | | |
| Element Detail | +0001 | bABCD00000014370002b | BOXC00490000000000b | 0 | | |
| Component Level Add | +0001 | bABCD00000014370002b | BOXPCOMBASE | PLOC1 | TCOMTRUCKSYS | TLOCB |
| | | | 0000000000 | | | |
| Component Level Add | +0001 | bABCD00000014370002b | BOXPCOMBASE | PLOC1 | TCOMTRUCKSYS | TLOCA |
| | | | 0000000000 | | | |
| Component Level Add | +0001 | bABCD00000014370002b | BOXPCOMBASE | PLOC1 | TCOMDRAFTSYS | TLOCB |
| | | | 0000000000 | | | |
| Component Level Add | +0001 | bABCD00000014370002b | BOXPCOMBASE | PLOC1 | TCOMDRAFTSYS | TLOCA |
| | | | 0000000000 | | | |
| Component Level Add | +0001 | bABCD00000014370002b | BOXPCOMTRUCKSYS | PLOCB | TCOMTRUCK | TLOCB |
| | | | 0000000000 | | | |
| Component Level Add | +0001 | bABCD00000014370002b | BOXPCOMTRUCKSYS | PLOCA | TCOMTRUCK | TLOCA |
| | | | 0000000000 | | | |
| Component Element | +0001 | bABCD00000014370002b | BOXPCOMTRUCKSYS | PLOCB | TCOMTRUCK | TLOCB |
| | | | A1470000000000b | D | | |
| Component Element | +0001 | bABCD00000014370002b | BOXPCOMTRUCKSYS | PLOCB | TCOMTRUCK | TLOCB |
| | | | A2940000000000b | 36 | | |
| Component Element | +0001 | bABCD00000014370002b | BOXPCOMTRUCKSYS | PLOCB | TCOMTRUCK | TLOCB |
| | | | B0260000000000b | H | | |
| Component Element | +0001 | bABCD00000014370002b | BOXPCOMTRUCKSYS | PLOCB | TCOMTRUCK | TLOCB |
| | | | B1910000000000b | R | | |
| Component Element | +0001 | bABCD00000014370002b | BOXPCOMTRUCKSYS | PLOCB | TCOMTRUCK | TLOCB |
| | | | B1990000000000b | Y | | |
| Component Element | +0001 | bABCD00000014370002b | BOXPCOMTRUCKSYS | PLOCB | TCOMTRUCK | TLOCB |
| | | | B2520000000000b | 2 | | |
| Component Element | +0001 | bABCD00000014370002b | BOXPCOMTRUCKSYS | PLOCA | TCOMTRUCK | TLOCA |
| | | | A1470000000000b | d | | |

Umler TRAIN II Messaging Specifications

| | |
|-----------------------|---|
| Component Element | +0001EABCD00000014370002bBOXCPCOMTRUCKSYS PLOCA TCOMTRUCK TLOCA A2940000000000b36 |
| Component Element | +0001EABCD00000014370002bBOXCPCOMTRUCKSYS PLOCA TCOMTRUCK TLOCA B0260000000000bH |
| Component Element | +0001EABCD00000014370002bBOXCPCOMTRUCKSYS PLOCA TCOMTRUCK TLOCA B1910000000000bR |
| Component Element | +0001EABCD00000014370002bBOXCPCOMTRUCKSYS PLOCA TCOMTRUCK TLOCA B1990000000000bY |
| Component Element | +0001EABCD00000014370002bBOXCPCOMTRUCKSYS PLOCA TCOMTRUCK TLOCA B2520000000000b2 |
| Component Element | +0001EABCD00000014370002bBOXCPCOMBASE PLOC1 TCOMDRAFTSYS TLOCB AO570000000000bSBE45F |
| Component Element | +0001EABCD00000014370002bBOXCPCOMBASE PLOC1 TCOMDRAFTSYS TLOCB B0580000000000bM |
| Component Element | +0001EABCD00000014370002bBOXCPCOMBASE PLOC1 TCOMDRAFTSYS TLOCB B0730000000000bS |
| Component Element | +0001EABCD00000014370002bBOXCPCOMBASE PLOC1 TCOMDRAFTSYS TLOCB B0610000000000b10 |
| Component Element | +0001EABCD00000014370002bBOXCPCOMBASE PLOC1 TCOMDRAFTSYS TLOCA AO570000000000bSBE45F |
| Component Element | +0001EABCD00000014370002bBOXCPCOMBASE PLOC1 TCOMDRAFTSYS TLOCA B0580000000000bM |
| Component Element | +0001EABCD00000014370002bBOXCPCOMBASE PLOC1 TCOMDRAFTSYS TLOCA B0730000000000bS |
| Component Element | +0001EABCD00000014370002bBOXCPCOMBASE PLOC1 TCOMDRAFTSYS TLOCA B0610000000000b10 |
| Data Group Summary | =DS0001SUM0053 |
| Control Group Summary | =CS1234560002 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

| | |
|--|---|
| Outbound UMLRE70 TRAIN II ABT message created when equipment is added to Umler: | |
| Message Header | #RRDCbbb0001UMLRE700607301425RRDCbbb/ |
| Control Group Header | *CH12345620060730160000USERIDbbABCD12345620041031121200 |
| Data Group Header | *DH0001ABTABT0000001 |
| Element Detail | +0001EABCD00000014370002bBOXCREPT0000000000bABCD |
| Element Detail | +0001EABCD00000014370002bBOXCPERF0000000000bABCD |
| Element Detail | +0001EABCD00000014370002bBOXCSPLC0000000000b411657000 |
| Element Detail | +0001EABCD00000014370002bBOXCDTDN0000000000b20051101 |
| Data Group Summary | =DS0001SUM0004 |
| Control Group Summary | =CS1234560001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

| | |
|--|---|
| Outbound UMLRE70 TRAIN II DLI response message: | |
| Message Header | #RRDCbbb0001UMLRE700607301425RRDCbbb/ |
| Control Group Header | *CH12345620060730160000USERIDbbABCD12345620041031121200 |
| Data Group Header | *DH0001DLIDLI0000001 |
| Element Detail | +0001EABCD00000014370002bBOXCREPT0000000000bABCD |
| Element Detail | +0001EABCD00000014370002bBOXCPERF0000000000bABCD |
| Element Detail | +0001EABCD00000014370002bBOXCSPLC0000000000b411657000 |
| Element Detail | +0001EABCD00000014370002bBOXCDTDN0000000000b20051101 |
| Data Group Summary | =DS0001SUM0004 |
| Control Group Summary | =CS1234560001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

9 Equipment Change ('ECC')

For equipment change transactions:

- Only one equipment ID allowed per data group header.
- Multiple component level deletes per data group header will be allowed.
- Only one combination of parent component/location, target component/location, element ID per data group header.
- Bundling of unique elements, component level deletes, and component elements will be supported in an ECC transaction.
- If any error is identified during processing the entire data group header will fail.
- The entire ECC transaction contained in a data group header will be logged as one transaction log entry. This will constitute a unit of work and can only receive one notice or transaction log entry.

The recommended practice is that unrelated elemental or element groupings are sent on separate data group headers.

The equipment characteristic change transaction will be modified to allow reporting of component data into the Umler system. There will be a change to allow four different detail segment formats on the ECC transaction instead of the one that is supported in Phase 1/2.

- Elemental reporting (same as existing Phase 1/2 detail segment layout)
- Component level add (add a component/location level)
- Component level delete (delete a component level)
- Component elemental reporting (allows reporting of elements defined for a component)

Please refer to above sections for the layouts of these segments.

The following steps describe how the data group header on and ECC transaction will be processed at Railinc.

1. Validate contents of detail record segments. Parse all detail record segments within data group header.
 - Reject data group header if any of the following duplicate rules are encountered. An UMLRE70 TRAIN II message will be returned documenting the error that occurred. A notice will also be created to assist in correcting the problem.
 - More than one element occurrence
 - More than one combination of parent component/location, target component/location, and element ID.
 - Check if relational situations exist
 - If relational situations exist in data group header then validate that relational data is present and correct. If not, then the data group header is rejected. An UMLRE70 TRAIN II message will be returned documenting the error that occurred. A notice will also be created to assist in correcting the problem.
2. If all validations succeed in step 1 then process the detail segments in the data group in sequential order. The commit of the records will not occur until the data for the entire data group header completes.

Umler TRAIN II Messaging Specifications

9.1 Elemental Reporting

The following is an example of an UMLRC00 to report elemental reporting.

Elemental reporting will be used to report all elements that are part of the base component. For elements associated with components below base use the component elemental reporting segment.

So elemental reporting will be used for:

- ECA and ECC transactions for elements associated with the BASE component
- For all inspection transactions (see Phase 1/2 sections for examples)
- For all pool header transactions (see Phase 1/2 sections for examples)
- For all CSEG transactions (see Phase 1/2 sections for examples)

| Inbound UMLRC00 TRAIN II message with ECC transaction to illustrate elemental reporting: | |
|--|--|
| Message Header | #RRDC bbbb 0001 UMLRC60 0607301425RRDC bbbb / |
| Control Group Header | *CH12345620060730160000USERID bb |
| Data Group Header | *DH0001 ECA |
| Element Detail | +0001 bb ABCD00000014370007 bb |
| Element Detail | +0001 bb ABCD00000014370008 bb 4505 |
| Element Detail | +0001 bb ABCD00000014370009 bb 1008 |
| Data Group Summary | =DS0001SUM0003 |
| Control Group Summary | =CS1234560001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

| Outbound UMLRC60 TRAIN II message with ECC transaction to illustrate elemental reporting: | |
|---|--|
| Message Header | #RRDC bbbb 0001 UMLRC60 0607301425RRDC bbbb / |
| Control Group Header | *CH12345620060730160000USERID bb |
| Data Group Header | *DH0001 ECA |
| Element Detail | +0001 bb ABCD00000014370002 bb BOXC0007 bb |
| Element Detail | +0001 bb ABCD00000014370002 bb BOXC0008 bb 4505 |
| Element Detail | +0001 bb ABCD00000014370002 bb BOXC0009 bb 1008 |
| Data Group Summary | =DS0001SUM0003 |
| Control Group Summary | =CS1234560001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

| Outbound UMLRC61 TRAIN II message with ECC transaction to illustrate elemental reporting: | |
|---|--|
| Message Header | #RRDC bbbb 0001 UMLRC60 0607301425RRDC bbbb / |
| Control Group Header | *CH12345620060730160000USERID bb |
| Data Group Header | *DH0001 ECA |
| Element Detail | +0001 bb ABCD00000014370002 bb BOXC00072006-11-21-08.01.51.000001 bb |
| Element Detail | +0001 bb ABCD00000014370002 bb BOXC00082006-11-21-08.01.51.000001 bb 4505 |
| Element Detail | +0001 bb ABCD00000014370002 bb BOXC00092006-11-21-08.01.51.000001 bb 1008 |
| Data Group Summary | =DS0001SUM0003 |
| Control Group Summary | =CS1234560001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

| Outbound UMLRE70 TRAIN II message with ECC transaction to illustrate elemental reporting: | |
|---|---|
| Message Header | #RRDC bbbb 0001 UMLRC60 0607301425RRDC bbbb / |
| Control Group Header | *CH12345620060730160000USERID bb |
| Data Group Header | *DH0001 ECA |
| Element Detail | +0001 bb ABCD00000014370002 bb BOXC00070000000000 bb |

Umler TRAIN II Messaging Specifications

| | |
|-----------------------|---|
| Element Detail | +0001 b ABCD00000014370002 b BOXC00080000000000 b 4505 |
| Element Detail | +0001 b ABCD00000014370002 b BOXC00090000000010 b 1008 |
| Data Group Summary | =DS0001SUM0003 |
| Control Group Summary | =CS1234560001 |
| Trailer | \$0001EOM! Where ! = hex `9C' |

9.2 Component Level Reporting – Add and Deletion of Component Levels

The following is an example of an UMLRC00 to illustrate the deletion of a component.

This example assumes the hierarchy is BASE/TRUCKSYS/TRUCK.

The example shows the truck system (TRUCKSYS) being deleted. However, to do that in TRAIN II the child component of TRUCK must be deleted first. Both TRUCKSYS and TRUCK components must also be readded back using the component level add detail segment. Finally, the elements associated with the components must be reported.

| Inbound UMLRC00 TRAIN II message for component level change: | | | | | | |
|--|---|----------------------------|-------|--------------|-------|-----------------|
| Message Header | #ABCD bbbb 0001UMLRC000607301425RRDC bbbb / | | | | | |
| Control Group Header | *CH12345620060730160000USERID bb | | | | | |
| Data Group Header | *DH0001 ECC | | | | | |
| Component level delete | +0001DABCD0000001437TCOMTRUCK | | | | | |
| Component level delete | +0001DABCD0000001437TCOMTRUCKSYS | | | | | |
| Component level add | +0001A | ABCD0000001437PCOMBASE | PLOC1 | TCOMTRUCKSYS | TLOCB | |
| Component level add | +0001A | ABCD0000001437PCOMBASE | PLOC1 | TCOMTRUCKSYS | TLOCA | |
| Component level add | +0001A | ABCD0000001437PCOMTRUCKSYS | PLOCB | TCOMTRUCK | TLOCB | |
| Component level add | +0001A | ABCD0000001437PCOMTRUCKSYS | PLOCA | TCOMTRUCK | TLOCA | |
| Component Element | +0001E | ABCD0000001437PCOMTRUCKSYS | PLOCB | TCOMTRUCK | TLOCB | A147 bD |
| Component Element | +0001E | ABCD0000001437PCOMTRUCKSYS | PLOCB | TCOMTRUCK | TLOCB | A294 b36 |
| Component Element | +0001E | ABCD0000001437PCOMTRUCKSYS | PLOCB | TCOMTRUCK | TLOCB | B026 bH |
| Component Element | +0001E | ABCD0000001437PCOMTRUCKSYS | PLOCB | TCOMTRUCK | TLOCB | B191 bR |
| Component Element | +0001E | ABCD0000001437PCOMTRUCKSYS | PLOCB | TCOMTRUCK | TLOCB | B199 bY |
| Component Element | +0001E | ABCD0000001437PCOMTRUCKSYS | PLOCB | TCOMTRUCK | TLOCB | B252 b2 |
| Component Element | +0001E | ABCD0000001437PCOMTRUCKSYS | PLOCA | TCOMTRUCK | TLOCA | A147 bD |
| Component Element | +0001E | ABCD0000001437PCOMTRUCKSYS | PLOCA | TCOMTRUCK | TLOCA | A294 b36 |
| Component Element | +0001E | ABCD0000001437PCOMTRUCKSYS | PLOCA | TCOMTRUCK | TLOCA | B026 bH |
| Component Element | +0001E | ABCD0000001437PCOMTRUCKSYS | PLOCA | TCOMTRUCK | TLOCA | B191 bR |
| Component Element | +0001E | ABCD0000001437PCOMTRUCKSYS | PLOCA | TCOMTRUCK | TLOCA | B199 bY |
| Component Element | +0001E | ABCD0000001437PCOMTRUCKSYS | PLOCA | TCOMTRUCK | TLOCA | B252 b2 |
| Data Group Summary | =DS0001SUM0018 | | | | | |
| Control Group Summary | =CS1234560001 | | | | | |
| Trailer | \$0001EOM! Where ! = hex '9C' | | | | | |

Umler TRAIN II Messaging Specifications

| Outbound UMLRC60 TRAIN II message for component level change: | | | | | |
|---|---|-------|--------------|-------|------------------|
| Message Header | #ABCD bbb 0001UMLRC00607301425RRDC bbb / | | | | |
| Control Group Header | *CH12345620060730160000USERID bb | | | | |
| Data Group Header | *DH0001 ECC | | | | |
| Component level delete | +0001DABCD00000014370002 b BOXCTCOMTRUCK | | | | |
| Component level delete | +0001DABCD00000014370002 b BOXCTCOMTRUCKSYS | | | | |
| Component level add | +0001 A ABCD00000014370002 b BOXCPCOMBASE | PLOC1 | TCOMTRUCKSYS | TLOCB | |
| Component level add | +0001 A ABCD00000014370002 b BOXCPCOMBASE | PLOC1 | TCOMTRUCKSYS | TLOCA | |
| Component level add | +0001 A ABCD00000014370002 b BOXCPCOMTRUCKSYS | PLOCB | TCOMTRUCK | TLOCB | |
| Component level add | +0001 A ABCD00000014370002 b BOXCPCOMTRUCKSYS | PLOCA | TCOMTRUCK | TLOCA | |
| Component Element | +0001 E ABCD00000014370002 b BOXCPCOMTRUCKSYS | PLOCB | TCOMTRUCK | TLOCB | A147 b D |
| Component Element | +0001 E ABCD00000014370002 b BOXCPCOMTRUCKSYS | PLOCB | TCOMTRUCK | TLOCB | A294 b 36 |
| Component Element | +0001 E ABCD00000014370002 b BOXCPCOMTRUCKSYS | PLOCB | TCOMTRUCK | TLOCB | B026 b H |
| Component Element | +0001 E ABCD00000014370002 b BOXCPCOMTRUCKSYS | PLOCB | TCOMTRUCK | TLOCB | B191 b R |
| Component Element | +0001 E ABCD00000014370002 b BOXCPCOMTRUCKSYS | PLOCB | TCOMTRUCK | TLOCB | B199 b Y |
| Component Element | +0001 E ABCD00000014370002 b BOXCPCOMTRUCKSYS | PLOCB | TCOMTRUCK | TLOCB | B252 b 2 |
| Component Element | +0001 E ABCD00000014370002 b BOXCPCOMTRUCKSYS | PLOCA | TCOMTRUCK | TLOCA | A147 B d |
| Component Element | +0001 E ABCD00000014370002 b BOXCPCOMTRUCKSYS | PLOCA | TCOMTRUCK | TLOCA | A294 b 36 |
| Component Element | +0001 E ABCD00000014370002 b BOXCPCOMTRUCKSYS | PLOCA | TCOMTRUCK | TLOCA | B026 b H |
| Component Element | +0001 E ABCD00000014370002 b BOXCPCOMTRUCKSYS | PLOCA | TCOMTRUCK | TLOCA | B191 b R |
| Component Element | +0001 E ABCD00000014370002 b BOXCPCOMTRUCKSYS | PLOCA | TCOMTRUCK | TLOCA | B199 b Y |
| Component Element | +0001 E ABCD00000014370002 b BOXCPCOMTRUCKSYS | PLOCA | TCOMTRUCK | TLOCA | B252 b 2 |
| Data Group Summary | =DS0001SUM0018 | | | | |
| Control Group Summary | =CS1234560001 | | | | |
| Trailer | \$0001EOM! Where ! = hex '9C' | | | | |

Umler TRAIN II Messaging Specifications

| Outbound UMLRC61 TRAIN II message for component level change: | | | | | | |
|---|---|-------|----------------------------|-------|-------|--|
| Message Header | #ABCD bbbb 0001UMLRC00607301425RRDC bbbb / | | | | | |
| Control Group Header | *CH12345620060730160000USERID bb | | | | | |
| Data Group Header | *DH0001 ECC | | | | | |
| Component level delete | +0001DABCD00000014370002 b BOXCTCOMTRUCK | | 2006-11-21-08.01.51.000001 | | | |
| Component level delete | +0001DABCD00000014370002 b BOXCTCOMTRUCKSYS | | 2006-11-21-08.01.51.000001 | | | |
| Component level add | +0001 A ABCD00000014370002 b BOXCPCOMBASE | PLOC1 | TCOMTRUCKSYS | TLOCB | 2006- | |
| | 11-21-08.01.51.000001 | | | | | |
| Component level add | +0001 A ABCD00000014370002 b BOXCPCOMBASE | PLOC1 | TCOMTRUCKSYS | TLOCA | 2006- | |
| | 11-21-08.01.51.000001 | | | | | |
| Component level add | +0001 A ABCD00000014370002 b BOXCPCOMTRUCKSYS | PLOCB | TCOMTRUCK | TLOCB | 2006- | |
| | 11-21-08.01.51.000001 | | | | | |
| Component level add | +0001 A ABCD00000014370002 b BOXCPCOMTRUCKSYS | PLOCA | TCOMTRUCK | TLOCA | 2006- | |
| | 11-21-08.01.51.000001 | | | | | |
| Component Element | +0001 A ABCD00000014370002 b BOXCPCOMTRUCKSYS | PLOCB | TCOMTRUCK | TLOCB | | |
| | A1472006-11-21-08.01.51.000001 b D | | | | | |
| Component Element | +0001 A ABCD00000014370002 b BOXCPCOMTRUCKSYS | PLOCB | TCOMTRUCK | TLOCB | | |
| | A2942006-11-21-08.01.51.000001 b 36 | | | | | |
| Component Element | +0001 A ABCD00000014370002 b BOXCPCOMTRUCKSYS | PLOCB | TCOMTRUCK | TLOCB | | |
| | B0262006-11-21-08.01.51.000001 b H | | | | | |
| Component Element | +0001 A ABCD00000014370002 b BOXCPCOMTRUCKSYS | PLOCB | TCOMTRUCK | TLOCB | | |
| | B1912006-11-21-08.01.51.000001 b R | | | | | |
| Component Element | +0001 A ABCD00000014370002 b BOXCPCOMTRUCKSYS | PLOCB | TCOMTRUCK | TLOCB | | |
| | B1992006-11-21-08.01.51.000001 b Y | | | | | |
| Component Element | +0001 A ABCD00000014370002 b BOXCPCOMTRUCKSYS | PLOCB | TCOMTRUCK | TLOCB | | |
| | B2522006-11-21-08.01.51.000001 b 2 | | | | | |
| Component Element | +0001 A ABCD00000014370002 b BOXCPCOMTRUCKSYS | PLOCA | TCOMTRUCK | TLOCA | | |
| | A1472006-11-21-08.01.51.000001 b d | | | | | |
| Component Element | +0001 A ABCD00000014370002 b BOXCPCOMTRUCKSYS | PLOCA | TCOMTRUCK | TLOCA | | |
| | A2942006-11-21-08.01.51.000001 b 36 | | | | | |
| Component Element | +0001 A ABCD00000014370002 b BOXCPCOMTRUCKSYS | PLOCA | TCOMTRUCK | TLOCA | | |
| | B0262006-11-21-08.01.51.000001 b H | | | | | |
| Component Element | +0001 A ABCD00000014370002 b BOXCPCOMTRUCKSYS | PLOCA | TCOMTRUCK | TLOCA | | |
| | B1912006-11-21-08.01.51.000001 b R | | | | | |
| Component Element | +0001 A ABCD00000014370002 b BOXCPCOMTRUCKSYS | PLOCA | TCOMTRUCK | TLOCA | | |
| | B1992006-11-21-08.01.51.000001 b Y | | | | | |
| Component Element | +0001 A ABCD00000014370002 b BOXCPCOMTRUCKSYS | PLOCA | TCOMTRUCK | TLOCA | | |
| | B2522006-11-21-08.01.51.000001 b 2 | | | | | |
| Data Group Summary | =DS0001SUM0018 | | | | | |
| Control Group Summary | =CS1234560001 | | | | | |
| Trailer | \$0001EOM! Where ! = hex '9C' | | | | | |

Umler TRAIN II Messaging Specifications

| Outbound UMLRE70 TRAIN II message for component level change: | | | | | |
|---|--------------------------|--------------------|-------------|----------------|-------|
| Message Header | #ABCD | bbbb | 0001UMLRC00 | 0607301425RRDC | bbbb/ |
| Control Group Header | *CH12345620060730160000 | USERID | bb | | |
| Data Group Header | *DH0001 | ECC | | | |
| Component level delete | +0001DABCD00000014370002 | bBOXCTCOMTRUCK | | 0000000000 | |
| Component level delete | +0001DABCD00000014370002 | bBOXCTCOMTRUCKSYS | | 0000000000 | |
| Component level add | +0001AABCD00000014370002 | bBOXCPOMBASE | PLOC1 | TCOMTRUCKSYS | TLOCB |
| | 0000000000 | | | | |
| Component level add | +0001AABCD00000014370002 | bBOXCPOMBASE | PLOC1 | TCOMTRUCKSYS | TLOCA |
| | 0000000000 | | | | |
| Component level add | +0001AABCD00000014370002 | bBOXCPOMTRUCKSYS | PLOCB | TCOMTRUCK | TLOCB |
| | 0000000000 | | | | |
| Component level add | +0001AABCD00000014370002 | bBOXCPOMTRUCKSYS | PLOCA | TCOMTRUCK | TLOCA |
| | 0000000000 | | | | |
| Component Element | +0001EABCD00000014370002 | bBOXCPOMTRUCKSYS | PLOCB | TCOMTRUCK | TLOCB |
| | A1470000000000 | bD | | | |
| Component Element | +0001EABCD00000014370002 | bBOXCPOMTRUCKSYS | PLOCB | TCOMTRUCK | TLOCB |
| | A2940000000000 | b36 | | | |
| Component Element | +0001EABCD00000014370002 | bBOXCPOMTRUCKSYS | PLOCB | TCOMTRUCK | TLOCB |
| | B0260000000000 | bH | | | |
| Component Element | +0001EABCD00000014370002 | bBOXCPOMTRUCKSYS | PLOCB | TCOMTRUCK | TLOCB |
| | B1910000000000 | bR | | | |
| Component Element | +0001EABCD00000014370002 | bBOXCPOMTRUCKSYS | PLOCB | TCOMTRUCK | TLOCB |
| | B1990000000000 | bY | | | |
| Component Element | +0001EABCD00000014370002 | bBOXCPOMTRUCKSYS | PLOCB | TCOMTRUCK | TLOCB |
| | B2520000000000 | b2 | | | |
| Component Element | +0001EABCD00000014370002 | bBOXCPOMTRUCKSYS | PLOCA | TCOMTRUCK | TLOCA |
| | A1470000000000 | Bd0000000000 | | | |
| Component Element | +0001EABCD00000014370002 | bBOXCPOMTRUCKSYS | PLOCA | TCOMTRUCK | TLOCA |
| | A2940000000000 | b36 | | | |
| Component Element | +0001EABCD00000014370002 | bBOXCPOMTRUCKSYS | PLOCA | TCOMTRUCK | TLOCA |
| | B0260000000000 | bH | | | |
| Component Element | +0001EABCD00000014370002 | bBOXCPOMTRUCKSYS | PLOCA | TCOMTRUCK | TLOCA |
| | B1910000000000 | bR | | | |
| Component Element | +0001EABCD00000014370002 | bBOXCPOMTRUCKSYS | PLOCA | TCOMTRUCK | TLOCA |
| | B1990000000000 | bY | | | |
| Component Element | +0001EABCD00000014370002 | bBOXCPOMTRUCKSYS | PLOCA | TCOMTRUCK | TLOCA |
| | B2520000000010 | b2 | | | |
| Data Group Summary | =DS0001SUM0018 | | | | |
| Control Group Summary | =CS1234560001 | | | | |
| Trailer | \$0001EOM! | Where ! = hex '9C' | | | |

Umler TRAIN II Messaging Specifications

9.3 Component Elemental Reporting

The following is an example to illustrate component elemental reporting.

Component elemental reporting detail segment is used to report all elements associated with a component below BASE.

| Inbound UMLRC00 TRAIN II message to illustrate component element reporting: | |
|---|--|
| Message Header | #ABCD bbbb 0001UMLRC000607301425RRDC bbbb / |
| Control Group Header | *CH12345620060730160000USERID bb |
| Data Group Header | *DH0001 ECC |
| Component Element | +0001 E ABCD0000001437PCOMTRUCKSYS PLOCB TCOMTRUCK TLOCB A147 bD |
| Data Group Summary | =DS0001SUM0001 |
| Control Group Summary | =CS1234560001 |
| Trailer | \$0001EOM! Where != hex '9C' |

| Outbound UMLRC60 TRAIN II message to illustrate component element reporting: | |
|--|--|
| Message Header | #ABCD bbbb 0001UMLRC600607301425RRDC bbbb / |
| Control Group Header | *CH12345620060730160000USERID bb ABCD12345620041031121200 |
| Data Group Header | *DH0001 ECC |
| Component Element | +0001 E ABCD00000014370002 b BOXPCOMTRUCKSYS PLOCB TCOMTRUCK TLOCB A147 bD |
| Data Group Summary | =DS0001SUM0001 |
| Control Group Summary | =CS1234560001 |
| Trailer | \$0001EOM! Where != hex '9C' |

| Outbound UMLRC61 TRAIN II message to illustrate component element reporting: | |
|--|--|
| Message Header | #ABCD bbbb 0001UMLRC610607301425RRDC bbbb / |
| Control Group Header | *CH12345620060730160000USERID bb ABCD12345620041031121200 |
| Data Group Header | *DH0001 ECC |
| Component Element | +0001 E ABCD00000014370002 b BOXPCOMTRUCKSYS PLOCB TCOMTRUCK TLOCB A1472006-11-21-08.01.51.000001 bD |
| Data Group Summary | =DS0001SUM0001 |
| Control Group Summary | =CS1234560001 |
| Trailer | \$0001EOM! Where != hex '9C' |

| Inbound UMLRE70 TRAIN II message to illustrate component element reporting that encounters error: | |
|---|--|
| Message Header | #ABCD bbbb 0001UMLRC600607301425RRDC bbbb / |
| Control Group Header | *CH12345620060730160000USERID bb ABCD12345620041031121200 |
| Data Group Header | *DH0001 ECC |
| Component Element | +0001 E ABCD00000014370002 b BOXPCOMTRUCKSYS PLOCB TCOMTRUCK TLOCB A1470000000600 bD |
| Data Group Summary | =DS0001SUM0004 |
| Control Group Summary | =CS1234560001 |
| Trailer | \$0001EOM! Where != hex '9C' |

10 Equipment Delete ('ECD')

On both inbound and outbound messages, the equipment delete transaction (ECD) will only contain the equipment ID being deleted. An optional element called delete reason will be allowed.

Format for the UMLRC00 detail record:

+0001**b**ABCD0000000001eeee**b**yyyy

where:

| Value | Description | Mandatory/Optional |
|----------------|---|--------------------|
| + | The delimiter to start a detail record | Mandatory |
| 0001 | The ELEMENT ID for the equipment ID being updated | Mandatory |
| b | Blank | Mandatory |
| ABCD0000000001 | The equipment initial and number | Mandatory |
| eeee | B064 (Delete reason) | Optional |
| b | blank | Optional |
| yyyy | Element value for delete reason | Optional |

Delete reason: Need valid list of values and capture those in business rule tables.

Umler TRAIN II Messaging Specifications

The following examples illustrate equipment delete with a delete reason:

| Inbound UMLRC00 TRAIN II message to delete equipment (with delete reason) | |
|--|---|
| Message Header | #ABCD bbb 0001 UMLRC00 607301425RRDC bbb / |
| Control Group Header | *CH12345620060730160000USERID bb |
| Data Group Header | *DH0001 ECD |
| Element Detail | +0001 b ABCD0000001437B064 b TEXT |
| Data Group Summary | =DS0001SUM0001 |
| Control Group Summary | =CS1234560001 |
| Trailer | \$0001EOM! Where != hex '9C' |

| Outbound UMLRC60 TRAIN II message to delete equipment (with delete reason) | |
|---|---|
| Message Header | #ABCD bbb 0001 UMLRC60 607301425RRDC bbb / |
| Control Group Header | *CH12345620060730160000USERID bb ABCD12345620041031121200 |
| Data Group Header | *DH0001 ECD |
| Element Detail | +0001 b ABCD00000014370002 b BOXCB064 b TEXT |
| Data Group Summary | =DS0001SUM0001 |
| Control Group Summary | =CS1234560001 |
| Trailer | \$0001EOM! Where != hex '9C' |

| Outbound UMLRC61 TRAIN II message to delete equipment (with delete reason) | |
|---|---|
| Message Header | #ABCD bbb 0001 UMLRC61 607301425RRDC bbb / |
| Control Group Header | *CH12345620060730160000USERID bb ABCD12345620041031121200 |
| Data Group Header | *DH0001 ECD |
| Element Detail | +0001 b ABCD00000014370002 b BOXCB0642006-11-21-08.01.51.000001 b TEXT |
| Data Group Summary | =DS0001SUM0001 |
| Control Group Summary | =CS1234560001 |
| Trailer | \$0001EOM! Where != hex '9C' |

| Outbound UMLRE70 TRAIN II message to delete equipment (with delete reason) | |
|---|---|
| Message Header | #ABCD bbb 0001 UMLRE70 607301425RRDC bbb / |
| Control Group Header | *CH12345620060730160000USERID bb ABCD12345620041031121200 |
| Data Group Header | *DH0001 ECDECD0000001 |
| Element Detail | +0001 b ABCD00000014370002 b BOXCB0640000000100 b TEXT |
| Data Group Summary | =DS0001SUM0001 |
| Control Group Summary | =CS1234560001 |
| Trailer | \$0001EOM! Where != hex '9C' |

Umler TRAIN II Messaging Specifications

The following examples illustrate equipment delete without a delete reason:

| Inbound UMLRC00 TRAIN II message to delete equipment (without delete reason) | |
|---|--|
| Message Header | #ABCD bbbb 0001 UMLRC00 0607301425RRDC bbbb / |
| Control Group Header | *CH12345620060730160000USERID bb |
| Data Group Header | *DH0001 ECD |
| Element Detail | +0001 b ABCD0000001437 |
| Data Group Summary | =DS0001SUM0001 |
| Control Group Summary | =CS1234560001 |
| Trailer | \$0001EOM! Where != hex '9C' |

| Outbound UMLRC60 TRAIN II message to delete equipment (without delete reason) | |
|--|--|
| Message Header | #ABCD bbbb 0001 UMLRC60 0607301425RRDC bbbb / |
| Control Group Header | *CH12345620060730160000USERID bb ABCD12345620041031121200 |
| Data Group Header | *DH0001 ECD |
| Element Detail | +0001 b ABCD00000014370002 b BOXC |
| Data Group Summary | =DS0001SUM0001 |
| Control Group Summary | =CS1234560001 |
| Trailer | \$0001EOM! Where != hex '9C' |

| Outbound UMLRC61 TRAIN II message to delete equipment (without delete reason) | |
|--|---|
| Message Header | #ABCD bbbb 0001 UMLRC61 0607301425RRDC bbbb / |
| Control Group Header | *CH12345620060730160000USERID bb ABCD12345620041031121200 |
| Data Group Header | *DH0001 ECD |
| Element Detail | +0001 b ABCD00000014370002 b BOXC2006-11-21-08.01.51.000001 |
| Data Group Summary | =DS0001SUM0001 |
| Control Group Summary | =CS1234560001 |
| Trailer | \$0001EOM! Where != hex '9C' |

| Outbound UMLRE70 TRAIN II message to delete equipment (without delete reason) | |
|--|--|
| Message Header | #ABCD bbbb 0001 UMLRE70 0607301425RRDC bbbb / |
| Control Group Header | *CH12345620060730160000USERID bb ABCD12345620041031121200 |
| Data Group Header | *DH0001 ECD ECD0000001 |
| Element Detail | +0001 b ABCD00000014370002 b BOXC0000000100 |
| Data Group Summary | =DS0001SUM0001 |
| Control Group Summary | =CS1234560001 |
| Trailer | \$0001EOM! Where != hex '9C' |

11 Equipment Add Back

There are two different transaction types to send equipment add back via TRAIN II UMLRC00 message.

| Transaction Type | Description |
|------------------|---|
| EAB | Add back equipment using only equipment ID and built date that has been previously deleted in Umler. The equipment ID and built date will be used to determine the most recent entry in Umler history to use to add back the transaction with all data in equipment history. The data in equip history contains all elements and values that were present when the equipment was deleted. |
| EAD | Add back sending all needed elements. Similar to equipment add but use EAD instead to get the same EIN. |

The following sections provide examples of the two transaction types.

11.1 Equipment Add Back 'EAB' – Send Only Equipment ID and Built Date

The following examples illustrate equipment add back:

| Inbound UMLRC00 TRAIN II message to add back equipment using EAB | |
|--|---|
| Message Header | #ABCD bbbb 0001UMLRC000607301425RRDC bbbb / |
| Control Group Header | *CH12345620060730160000USERID bb |
| Data Group Header | *DH0001 EAB |
| Element Detail | +0001 b ABCD0000001437BLDT b 19700915 |
| Data Group Summary | =DS0001SUM0001 |
| Control Group Summary | =CS1234560001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

Umler TRAIN II Messaging Specifications

The following example shows the resulting UMLRC60 message sent in response to the UMLRC00 message above if the equipment add back passes all validations.

| Outbound UMLRC60 TRAIN II ECA message sent in response to a successful EAB | | | | |
|--|---|-------|--------------|-------|
| Message Header | #RRDCbbb0001UMLRC600607301425RRDCbbb/ | | | |
| Control Group Header | *CH12345620060730160000USERIDbbABCD12345620041031121200 | | | |
| Data Group Header | *DH0001ECA | | | |
| Element Detail | +0001bABCD00000014370002bBOXCMOWNbABCD | | | |
| Element Detail | +0001bABCD00000014370002bBOXCP001b0000000 | | | |
| Element Detail | +0001bABCD00000014370002bBOXCUMETHL070 | | | |
| Element Detail | +0001bABCD00000014370002bBOXC0006b12664 | | | |
| Element Detail | +0001bABCD00000014370002bBOXCPRIDbEFGH0000015233 | | | |
| Element Detail | +0001bABCD00000014370002bBOXC0007bB | | | |
| Element Detail | +0001bABCD00000014370002bBOXC0008b4505 | | | |
| Element Detail | +0001bABCD00000014370002bBOXC0009b1008 | | | |
| Element Detail | +0001bABCD00000014370002bBOXC0012b907 | | | |
| Element Detail | +0001bABCD00000014370002bBOXC0013b1404 | | | |
| Element Detail | +0001bABCD00000014370002bBOXC0014b0 | | | |
| Element Detail | +0001bABCD00000014370002bBOXC0020b4006 | | | |
| Element Detail | +0001bABCD00000014370002bBOXC0021b905 | | | |
| Element Detail | +0001bABCD00000014370002bBOXC0022b1005 | | | |
| Element Detail | +0001bABCD00000014370002bBOXC0024b4000 | | | |
| Element Detail | +0001bABCD00000014370002bBOXC0025b519 | | | |
| Element Detail | +0001bABCD00000014370002bBOXC0026b113073 | | | |
| Element Detail | +0001bABCD00000014370002bBOXC0027b177 | | | |
| Element Detail | +0001bABCD00000014370002bBOXC0032b0 | | | |
| Element Detail | +0001bABCD00000014370002bBOXC0033bD | | | |
| Element Detail | +0001bABCD00000014370002bBOXC0034b1251 | | | |
| Element Detail | +0001bABCD00000014370002bBOXC0037bU | | | |
| Element Detail | +0001bABCD00000014370002bBOXC0042bS | | | |
| Element Detail | +0001bABCD00000014370002bBOXC0043bN | | | |
| Element Detail | +0001bABCD00000014370002bBOXC0045bU | | | |
| Element Detail | +0001bABCD00000014370002bBOXC0048b0 | | | |
| Element Detail | +0001bABCD00000014370002bBOXC0049b0 | | | |
| Component Level Add | +0001aABCD00000014370002bBOXCPCOMBASE | PLOC1 | TCOMTRUCKSYS | TLOCB |
| Component Level Add | +0001aABCD00000014370002bBOXCPCOMBASE | PLOC1 | TCOMTRUCKSYS | TLOCA |
| Component Level Add | +0001aABCD00000014370002bBOXCPCOMBASE | PLOC1 | TCOMDRAFTSYS | TLOCB |
| Component Level Add | +0001aABCD00000014370002bBOXCPCOMBASE | PLOC1 | TCOMDRAFTSYS | TLOCA |
| Component Level Add | +0001aABCD00000014370002bBOXCPCOMTRUCKSYS | PLOCB | TCOMTRUCK | TLOCB |
| Component Level Add | +0001aABCD00000014370002bBOXCPCOMTRUCKSYS | PLOCA | TCOMTRUCK | TLOCA |
| Component Element | +0001EABCD00000014370002bBOXCPCOMTRUCKSYS | PLOCB | TCOMTRUCK | TLOCB |
| | A147bD | | | |
| Component Element | +0001EABCD00000014370002bBOXCPCOMTRUCKSYS | PLOCB | TCOMTRUCK | TLOCB |
| | A294b36 | | | |
| Component Element | +0001EABCD00000014370002bBOXCPCOMTRUCKSYS | PLOCB | TCOMTRUCK | TLOCB |
| | B026bH | | | |
| Component Element | +0001EABCD00000014370002bBOXCPCOMTRUCKSYS | PLOCB | TCOMTRUCK | TLOCB |
| | B191bR | | | |
| Component Element | +0001EABCD00000014370002bBOXCPCOMTRUCKSYS | PLOCB | TCOMTRUCK | TLOCB |
| | B199bY | | | |
| Component Element | +0001EABCD00000014370002bBOXCPCOMTRUCKSYS | PLOCB | TCOMTRUCK | TLOCB |
| | B252b2 | | | |
| Component Element | +0001EABCD00000014370002bBOXCPCOMTRUCKSYS | PLOCA | TCOMTRUCK | TLOCA |
| | A147Bd | | | |
| Component Element | +0001EABCD00000014370002bBOXCPCOMTRUCKSYS | PLOCA | TCOMTRUCK | TLOCA |
| | A294b36 | | | |
| Component Element | +0001EABCD00000014370002bBOXCPCOMTRUCKSYS | PLOCA | TCOMTRUCK | TLOCA |
| | B026bH | | | |

Umler TRAIN II Messaging Specifications

| | |
|-----------------------|---|
| Component Element | +0001EABCD00000014370002bBOXCPCOMTRUCKSYS PLOCA TCOMTRUCK TLOCA B191bR |
| Component Element | +0001EABCD00000014370002bBOXCPCOMTRUCKSYS PLOCA TCOMTRUCK TLOCA B199bY |
| Component Element | +0001EABCD00000014370002bBOXCPCOMTRUCKSYS PLOCA TCOMTRUCK TLOCA B252b2 |
| Component Element | +0001EABCD00000014370002bBOXCPCOMBASE PLOC1 TCOMDRAFTSYS TLOCB AO57bSBE45F |
| Component Element | +0001EABCD00000014370002bBOXCPCOMBASE PLOC1 TCOMDRAFTSYS TLOCB B058bM |
| Component Element | +0001EABCD00000014370002bBOXCPCOMBASE PLOC1 TCOMDRAFTSYS TLOCB B073bS |
| Component Element | +0001EABCD00000014370002bBOXCPCOMBASE PLOC1 TCOMDRAFTSYS TLOCB B061b10 |
| Component Element | +0001EABCD00000014370002bBOXCPCOMBASE PLOC1 TCOMDRAFTSYS TLOCA AO57bSBE45F |
| Component Element | +0001EABCD00000014370002bBOXCPCOMBASE PLOC1 TCOMDRAFTSYS TLOCA B058bM |
| Component Element | +0001EABCD00000014370002bBOXCPCOMBASE PLOC1 TCOMDRAFTSYS TLOCA B073bS |
| Component Element | +0001EABCD00000014370002bBOXCPCOMBASE PLOC1 TCOMDRAFTSYS TLOCA B061b10 |
| Data Group Summary | =DS0001SUM0053 |
| Control Group Summary | =CS1234560001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

Any inspections reported against the car will be carried forward and sent on TRAIN II messages.

| | |
|--|---|
| Outbound UMLRC60 TRAIN II ABT message | |
| Message Header | #RRDCbbb0001UMLRC600607301425RRDCbbb/ |
| Control Group Header | *CH12345620060730160000USERIDbbABCD12345620041031121200 |
| Data Group Header | *DH0001ABT |
| Element Detail | +0001bABCD00000014370002bBOXCREPTbABCD |
| Element Detail | +0001bABCD00000014370002bBOXCPERFbABCD |
| Element Detail | +0001bABCD00000014370002bBOXCSPLCb411657000 |
| Element Detail | +0001bABCD00000014370002bBOXCDTDNb20051101 |
| Data Group Summary | =DS0001SUM0004 |
| Control Group Summary | =CS1234560001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

| | |
|--|---|
| Outbound UMLRC61 TRAIN II DLI message | |
| Message Header | #RRDCbbb0001UMLRC600607301425RRDCbbb/ |
| Control Group Header | *CH12345620060730160000USERIDbbABCD12345620041031121200 |
| Data Group Header | *DH0001DLI |
| Element Detail | +0001bABCD00000014370002bBOXCREPTbABCD |
| Element Detail | +0001bABCD00000014370002bBOXCPERFbABCD |
| Element Detail | +0001bABCD00000014370002bBOXCSPLCb411657000 |
| Element Detail | +0001bABCD00000014370002bBOXCDTDNb20051101 |
| Data Group Summary | =DS0001SUM0004 |
| Control Group Summary | =CS1234560001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

Umler TRAIN II Messaging Specifications

The following example shows the resulting UMLRC61 message sent in response to the UMLRC00 message above if the equipment add back passes all validations.

| Outbound UMLRC61 TRAIN II ECA message sent in response to a successful EAB | | | | | | |
|--|---|----------------------|------|----------------------------------|--------------|---|
| Message Header | #RRDCbbb0001UMLRC610607301425RRDCbbb/ | | | | | |
| Control Group Header | *CH12345620060730160000USERIDbbABCD12345620041031121200 | | | | | |
| Data Group Header | *DH0001ECA | | | | | |
| Element Detail | +0001 | bABCD00000014370002b | BOXC | MOWN2006-11-21-08.01.51.000001b | ABCD | |
| Element Detail | +0001 | bABCD00000014370002b | BOXC | CP0012006-11-21-08.01.51.000001b | 0000000 | |
| Element Detail | +0001 | bABCD00000014370002b | BOXC | CUMET2006-11-21-08.01.51.000001b | L070 | |
| Element Detail | +0001 | bABCD00000014370002b | BOXC | C00062006-11-21-08.01.51.000001b | 12664 | |
| Element Detail | +0001 | bABCD00000014370002b | BOXC | PRID2006-11-21-08.01.51.000001b | EF0000015233 | |
| Element Detail | +0001 | bABCD00000014370002b | BOXC | C00072006-11-21-08.01.51.000001b | B | |
| Element Detail | +0001 | bABCD00000014370002b | BOXC | C00082006-11-21-08.01.51.000001b | 4505 | |
| Element Detail | +0001 | bABCD00000014370002b | BOXC | C00092006-11-21-08.01.51.000001b | 1008 | |
| Element Detail | +0001 | bABCD00000014370002b | BOXC | C00122006-11-21-08.01.51.000001b | 907 | |
| Element Detail | +0001 | bABCD00000014370002b | BOXC | C00132006-11-21-08.01.51.000001b | 1404 | |
| Element Detail | +0001 | bABCD00000014370002b | BOXC | C00142006-11-21-08.01.51.000001b | 0 | |
| Element Detail | +0001 | bABCD00000014370002b | BOXC | C00202006-11-21-08.01.51.000001b | 4006 | |
| Element Detail | +0001 | bABCD00000014370002b | BOXC | C00212006-11-21-08.01.51.000001b | 905 | |
| Element Detail | +0001 | bABCD00000014370002b | BOXC | C00222006-11-21-08.01.51.000001b | 1005 | |
| Element Detail | +0001 | bABCD00000014370002b | BOXC | C00242006-11-21-08.01.51.000001b | 4000 | |
| Element Detail | +0001 | bABCD00000014370002b | BOXC | C00252006-11-21-08.01.51.000001b | 519 | |
| Element Detail | +0001 | bABCD00000014370002b | BOXC | C00262006-11-21-08.01.51.000001b | 113073 | |
| Element Detail | +0001 | bABCD00000014370002b | BOXC | C00272006-11-21-08.01.51.000001b | 177 | |
| Element Detail | +0001 | bABCD00000014370002b | BOXC | C00322006-11-21-08.01.51.000001b | 0 | |
| Element Detail | +0001 | bABCD00000014370002b | BOXC | C00332006-11-21-08.01.51.000001b | D | |
| Element Detail | +0001 | bABCD00000014370002b | BOXC | C00342006-11-21-08.01.51.000001b | 1251 | |
| Element Detail | +0001 | bABCD00000014370002b | BOXC | C00372006-11-21-08.01.51.000001b | U | |
| Element Detail | +0001 | bABCD00000014370002b | BOXC | C00422006-11-21-08.01.51.000001b | S | |
| Element Detail | +0001 | bABCD00000014370002b | BOXC | C00432006-11-21-08.01.51.000001b | N | |
| Element Detail | +0001 | bABCD00000014370002b | BOXC | C00452006-11-21-08.01.51.000001b | U | |
| Element Detail | +0001 | bABCD00000014370002b | BOXC | C00482006-11-21-08.01.51.000001b | 0 | |
| Element Detail | +0001 | bABCD00000014370002b | BOXC | C00492006-11-21-08.01.51.000001b | 0 | |
| Component Level Add | +0001 | bABCD00000014370002b | BOXC | PCOMBASE | PLOC1 | TCOMTRUCKSYS TLOCB 2006-11-21-08.01.51.000001 |
| Component Level Add | +0001 | bABCD00000014370002b | BOXC | PCOMBASE | PLOC1 | TCOMTRUCKSYS TLOCA 2006-11-21-08.01.51.000001 |
| Component Level Add | +0001 | bABCD00000014370002b | BOXC | PCOMBASE | PLOC1 | TCOMDRAFTSYS TLOCB 2006-11-21-08.01.51.000001 |
| Component Level Add | +0001 | bABCD00000014370002b | BOXC | PCOMBASE | PLOC1 | TCOMDRAFTSYS TLOCA 2006-11-21-08.01.51.000001 |
| Component Level Add | +0001 | bABCD00000014370002b | BOXC | PCOMTRUCKSYS | PLOCB | TCOMTRUCK TLOCB 2006-11-21-08.01.51.000001 |
| Component Level Add | +0001 | bABCD00000014370002b | BOXC | PCOMTRUCKSYS | PLOCA | TCOMTRUCK TLOCA 2006-11-21-08.01.51.000001 |
| Component Element | +0001 | bABCD00000014370002b | BOXC | PCOMTRUCKSYS | PLOCB | TCOMTRUCK TLOCB A1472006-11-21-08.01.51.000001bD |
| Component Element | +0001 | bABCD00000014370002b | BOXC | PCOMTRUCKSYS | PLOCB | TCOMTRUCK TLOCB A2942006-11-21-08.01.51.000001b36 |
| Component Element | +0001 | bABCD00000014370002b | BOXC | PCOMTRUCKSYS | PLOCB | TCOMTRUCK TLOCB B0262006-11-21-08.01.51.000001bH |
| Component Element | +0001 | bABCD00000014370002b | BOXC | PCOMTRUCKSYS | PLOCB | TCOMTRUCK TLOCB B1912006-11-21-08.01.51.000001bR |
| Component Element | +0001 | bABCD00000014370002b | BOXC | PCOMTRUCKSYS | PLOCB | TCOMTRUCK TLOCB B1992006-11-21-08.01.51.000001bY |
| Component Element | +0001 | bABCD00000014370002b | BOXC | PCOMTRUCKSYS | PLOCB | TCOMTRUCK TLOCB B2522006-11-21-08.01.51.000001b2 |
| Component Element | +0001 | bABCD00000014370002b | BOXC | PCOMTRUCKSYS | PLOCA | TCOMTRUCK TLOCA A1472006-11-21-08.01.51.000001bD |

Umler TRAIN II Messaging Specifications

| | |
|-----------------------|---|
| Component Element | +0001EABCD00000014370002bBOXCPCOMTRUCKSYS PLOCA TCOMTRUCK TLOCA A2942006-11-21-08.01.51.000001b36 |
| Component Element | +0001EABCD00000014370002bBOXCPCOMTRUCKSYS PLOCA TCOMTRUCK TLOCA B0262006-11-21-08.01.51.000001bH |
| Component Element | +0001EABCD00000014370002bBOXCPCOMTRUCKSYS PLOCA TCOMTRUCK TLOCA B1912006-11-21-08.01.51.000001bR |
| Component Element | +0001EABCD00000014370002bBOXCPCOMTRUCKSYS PLOCA TCOMTRUCK TLOCA B1992006-11-21-08.01.51.000001bY |
| Component Element | +0001EABCD00000014370002bBOXCPCOMTRUCKSYS PLOCA TCOMTRUCK TLOCA B2522006-11-21-08.01.51.000001b2 |
| Component Element | +0001EABCD00000014370002bBOXCPCOMBASE PLOC1 TCOMDRAFTSYS TLOCB AO572006-11-21-08.01.51.000001bSBE45F |
| Component Element | +0001EABCD00000014370002bBOXCPCOMBASE PLOC1 TCOMDRAFTSYS TLOCB B0582006-11-21-08.01.51.000001bM |
| Component Element | +0001EABCD00000014370002bBOXCPCOMBASE PLOC1 TCOMDRAFTSYS TLOCB B0732006-11-21-08.01.51.000001bS |
| Component Element | +0001EABCD00000014370002bBOXCPCOMBASE PLOC1 TCOMDRAFTSYS TLOCB B0612006-11-21-08.01.51.000001b10 |
| Component Element | +0001EABCD00000014370002bBOXCPCOMBASE PLOC1 TCOMDRAFTSYS TLOCA AO572006-11-21-08.01.51.000001bSBE45F |
| Component Element | +0001EABCD00000014370002bBOXCPCOMBASE PLOC1 TCOMDRAFTSYS TLOCA B0582006-11-21-08.01.51.000001bM |
| Component Element | +0001EABCD00000014370002bBOXCPCOMBASE PLOC1 TCOMDRAFTSYS TLOCA B0732006-11-21-08.01.51.000001bS |
| Component Element | +0001EABCD00000014370002bBOXCPCOMBASE PLOC1 TCOMDRAFTSYS TLOCA B0612006-11-21-08.01.51.000001b10 |
| Data Group Summary | =DS0001SUM0053 |
| Control Group Summary | =CS1234560001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

Umler TRAIN II Messaging Specifications

Any inspections reported against the car will be carried forward and sent on TRAIN II messages.

| Outbound UMLRC61 ABT TRAIN II message | |
|---------------------------------------|---|
| Message Header | #RRDCbbb0001UMLRC610607301425RRDCbbb/ |
| Control Group Header | *CH12345620060730160000USERIDbbABCD12345620041031121200 |
| Data Group Header | *DH0001ABT |
| Element Detail | +0001bABCD00000014370002bBOXCREPT2006-11-21-08.01.51.000001bABCD |
| Element Detail | +0001bABCD00000014370002bBOXCPERF2006-11-21-08.01.51.000001bABCD |
| Element Detail | +0001bABCD00000014370002bBOXCSPLC2006-11-21-08.01.51.000001b411657000 |
| Element Detail | +0001bABCD00000014370002bBOXCDTDN2006-11-21-08.01.51.000001b20051101 |
| Data Group Summary | =DS0001SUM0004 |
| Control Group Summary | =CS1234560001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

| Outbound UMLRC61 DLI TRAIN II message | |
|---------------------------------------|---|
| Message Header | #RRDCbbb0001UMLRC610607301425RRDCbbb/ |
| Control Group Header | *CH12345620060730160000USERIDbbABCD12345620041031121200 |
| Data Group Header | *DH0001DLI |
| Element Detail | +0001bABCD00000014370002bBOXCREPT2006-11-21-08.01.51.000001bABCD |
| Element Detail | +0001bABCD00000014370002bBOXCPERF2006-11-21-08.01.51.000001bABCD |
| Element Detail | +0001bABCD00000014370002bBOXCSPLC2006-11-21-08.01.51.000001b411657000 |
| Element Detail | +0001bABCD00000014370002bBOXCDTDN2006-11-21-08.01.51.000001b20051101 |
| Data Group Summary | =DS0001SUM0004 |
| Control Group Summary | =CS1234560001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

Umler TRAIN II Messaging Specifications

The following examples shows the resulting UMLRE70 messages sent in response to the UMLRC00 message above that encounters an error. Note that even though only the built date was sent in all elements in equipment history will be returned. The receiver of this message can correct the data and send back as an EAD – full equipment add back.

| Outbound UMLRE70 TRAIN II EAB response message | | | | |
|--|-------------------------|-------------------------------|----------------------------|--|
| Message Header | #RRDC | bbbb0001UMLRE700607301425RRDC | bbbb/ | |
| Control Group Header | *CH12345620060730160000 | USERID | bbABCD12345620041031121200 | |
| Data Group Header | *DH0001 | EABEAB0000001 | | |
| Element Detail | +0001 | ABCD00000014370002 | bBOXCMOWN0000000800 | bABCD |
| Element Detail | +0001 | ABCD00000014370002 | bBOXCP0010000000000 | b0000000 |
| Element Detail | +0001 | ABCD00000014370002 | bBOXCUMET0000000000 | bL070 |
| Element Detail | +0001 | ABCD00000014370002 | bBOXC00060000000000 | b12664 |
| Element Detail | +0001 | ABCD00000014370002 | bBOXCPRID0000000000 | bEFGH0000015233 |
| Element Detail | +0001 | ABCD00000014370002 | bBOXC00070000000000 | bB |
| Element Detail | +0001 | ABCD00000014370002 | bBOXC00080000000000 | b4505 |
| Element Detail | +0001 | ABCD00000014370002 | bBOXC00090000000000 | b1008 |
| Element Detail | +0001 | ABCD00000014370002 | bBOXC00120000000000 | b907 |
| Element Detail | +0001 | ABCD00000014370002 | bBOXC00130000000000 | b1404 |
| Element Detail | +0001 | ABCD00000014370002 | bBOXC00140000000000 | b0 |
| Element Detail | +0001 | ABCD00000014370002 | bBOXC00200000000000 | b4006 |
| Element Detail | +0001 | ABCD00000014370002 | bBOXC00210000000000 | b905 |
| Element Detail | +0001 | ABCD00000014370002 | bBOXC00220000000000 | b1005 |
| Element Detail | +0001 | ABCD00000014370002 | bBOXC00240000000000 | b4000 |
| Element Detail | +0001 | ABCD00000014370002 | bBOXC00250000000000 | b519 |
| Element Detail | +0001 | ABCD00000014370002 | bBOXC00260000000000 | b113073 |
| Element Detail | +0001 | ABCD00000014370002 | bBOXC00270000000000 | b177 |
| Element Detail | +0001 | ABCD00000014370002 | bBOXC00320000000000 | b0 |
| Element Detail | +0001 | ABCD00000014370002 | bBOXC00330000000000 | bD |
| Element Detail | +0001 | ABCD00000014370002 | bBOXC00340000000000 | b1251 |
| Element Detail | +0001 | ABCD00000014370002 | bBOXC00370000000000 | bU |
| Element Detail | +0001 | ABCD00000014370002 | bBOXC00420000000000 | bS |
| Element Detail | +0001 | ABCD00000014370002 | bBOXC00430000000000 | bN |
| Element Detail | +0001 | ABCD00000014370002 | bBOXC00450000000000 | bU |
| Element Detail | +0001 | ABCD00000014370002 | bBOXC00480000000000 | b0 |
| Element Detail | +0001 | ABCD00000014370002 | bBOXC00490000000000 | b0 |
| Component Level Add | +0001 | ABCD00000014370002 | bBOXPCOMBASE | PLOC1 TCOMTRUCKSYS TLOCB 0000000000 |
| Component Level Add | +0001 | ABCD00000014370002 | bBOXPCOMBASE | PLOC1 TCOMTRUCKSYS TLOCA 0000000000 |
| Component Level Add | +0001 | ABCD00000014370002 | bBOXPCOMBASE | PLOC1 TCOMDRAFTSYS TLOCB 0000000000 |
| Component Level Add | +0001 | ABCD00000014370002 | bBOXPCOMBASE | PLOC1 TCOMDRAFTSYS TLOCA 0000000000 |
| Component Level Add | +0001 | ABCD00000014370002 | bBOXPCOMTRUCKSYS | PLOCB TCOMTRUCK TLOCB 0000000000 |
| Component Level Add | +0001 | ABCD00000014370002 | bBOXPCOMTRUCKSYS | PLOCA TCOMTRUCK TLOCA 0000000000 |
| Component Element | +0001 | ABCD00000014370002 | bBOXPCOMTRUCKSYS | PLOCB TCOMTRUCK TLOCB A1470000000000bD |
| Component Element | +0001 | ABCD00000014370002 | bBOXPCOMTRUCKSYS | PLOCB TCOMTRUCK TLOCB A2940000000000b36 |
| Component Element | +0001 | ABCD00000014370002 | bBOXPCOMTRUCKSYS | PLOCB TCOMTRUCK TLOCB B0260000000000bH |
| Component Element | +0001 | ABCD00000014370002 | bBOXPCOMTRUCKSYS | PLOCB TCOMTRUCK TLOCB B1910000000000bR |
| Component Element | +0001 | ABCD00000014370002 | bBOXPCOMTRUCKSYS | PLOCB TCOMTRUCK TLOCB B1990000000000bY |
| Component Element | +0001 | ABCD00000014370002 | bBOXPCOMTRUCKSYS | PLOCB TCOMTRUCK TLOCB B2520000000000b2 |

Umler TRAIN II Messaging Specifications

| | |
|-----------------------|---|
| Component Element | +0001EABCD00000014370002bBOXCPCOMTRUCKSYS PLOCA TCOMTRUCK TLOCA A1470000000000bBd |
| Component Element | +0001EABCD00000014370002bBOXCPCOMTRUCKSYS PLOCA TCOMTRUCK TLOCA A2940000000000bB36 |
| Component Element | +0001EABCD00000014370002bBOXCPCOMTRUCKSYS PLOCA TCOMTRUCK TLOCA B0260000000000bBH |
| Component Element | +0001EABCD00000014370002bBOXCPCOMTRUCKSYS PLOCA TCOMTRUCK TLOCA B1910000000000bBR |
| Component Element | +0001EABCD00000014370002bBOXCPCOMTRUCKSYS PLOCA TCOMTRUCK TLOCA B1990000000000bBY |
| Component Element | +0001EABCD00000014370002bBOXCPCOMTRUCKSYS PLOCA TCOMTRUCK TLOCA B2520000000000bB2 |
| Component Element | +0001EABCD00000014370002bBOXCPCOMBASE PLOC1 TCOMDRAFTSYS TLOCB AO570000000000bSBE45F |
| Component Element | +0001EABCD00000014370002bBOXCPCOMBASE PLOC1 TCOMDRAFTSYS TLOCB B0580000000000bBM |
| Component Element | +0001EABCD00000014370002bBOXCPCOMBASE PLOC1 TCOMDRAFTSYS TLOCB B0730000000000bBS |
| Component Element | +0001EABCD00000014370002bBOXCPCOMBASE PLOC1 TCOMDRAFTSYS TLOCB B0610000000000bB10 |
| Component Element | +0001EABCD00000014370002bBOXCPCOMBASE PLOC1 TCOMDRAFTSYS TLOCA AO570000000000bSBE45F |
| Component Element | +0001EABCD00000014370002bBOXCPCOMBASE PLOC1 TCOMDRAFTSYS TLOCA B0580000000000bBM |
| Component Element | +0001EABCD00000014370002bBOXCPCOMBASE PLOC1 TCOMDRAFTSYS TLOCA B0730000000000bBS |
| Component Element | +0001EABCD00000014370002bBOXCPCOMBASE PLOC1 TCOMDRAFTSYS TLOCA B0610000000000bB10 |
| Data Group Summary | =DS0001SUM0053 |
| Control Group Summary | =CS1234560002 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

Umler TRAIN II Messaging Specifications

11.2 Equipment Add Back 'EAD' – Send All Elements Similar to ECA

The following examples illustrate equipment add back 'EAD':

| Inbound UMLRC00 TRAIN II message created when equipment is added back to Umler: | | | | | | |
|---|---|-------|--------------|-------|-------------|--|
| Message Header | #RRDCbbb0001UMLRC00607301425RRDCbbb/ | | | | | |
| Control Group Header | *CH12345620060730160000USERIDbb | | | | | |
| Data Group Header | *DH0001EAD | | | | | |
| Element Detail | +0001bABCD0000001437MOWNbABCD | | | | | |
| Element Detail | +0001bABCD0000001437P001b0000000 | | | | | |
| Element Detail | +0001bABCD0000001437UMETbL070 | | | | | |
| Element Detail | +0001bABCD00000014370006b12664 | | | | | |
| Element Detail | +0001bABCD0000001437PRIDbEFGH0000015233 | | | | | |
| Element Detail | +0001bABCD00000014370007bB | | | | | |
| Element Detail | +0001bABCD00000014370008b4505 | | | | | |
| Element Detail | +0001bABCD00000014370009b1008 | | | | | |
| Element Detail | +0001bABCD00000014370012b907 | | | | | |
| Element Detail | +0001bABCD00000014370013b1404 | | | | | |
| Element Detail | +0001bABCD00000014370014b0 | | | | | |
| Element Detail | +0001bABCD00000014370020b4006 | | | | | |
| Element Detail | +0001bABCD00000014370021b905 | | | | | |
| Element Detail | +0001bABCD00000014370022b1005 | | | | | |
| Element Detail | +0001bABCD00000014370024b4000 | | | | | |
| Element Detail | +0001bABCD00000014370025b519 | | | | | |
| Element Detail | +0001bABCD00000014370026b113073 | | | | | |
| Element Detail | +0001bABCD00000014370027b177 | | | | | |
| Element Detail | +0001bABCD00000014370032b0 | | | | | |
| Element Detail | +0001bABCD00000014370033bD | | | | | |
| Element Detail | +0001bABCD00000014370034b1251 | | | | | |
| Element Detail | +0001bABCD00000014370037bU | | | | | |
| Element Detail | +0001bABCD00000014370042bS | | | | | |
| Element Detail | +0001bABCD00000014370043bN | | | | | |
| Element Detail | +0001bABCD00000014370045bU | | | | | |
| Element Detail | +0001bABCD00000014370048b0 | | | | | |
| Element Detail | +0001bABCD00000014370049b0 | | | | | |
| Component Level Add | +0001AABCD0000001437PCOMBASE | PLOC1 | TCOMTRUCKSYS | TLOCB | | |
| Component Level Add | +0001AABCD0000001437PCOMBASE | PLOC1 | TCOMTRUCKSYS | TLOCA | | |
| Component Level Add | +0001AABCD0000001437PCOMBASE | PLOC1 | TCOMDRAFTSYS | TLOCB | | |
| Component Level Add | +0001AABCD0000001437PCOMBASE | PLOC1 | TCOMDRAFTSYS | TLOCA | | |
| Component Level Add | +0001AABCD0000001437PCOMTRUCKSYS | PLOCB | TCOMTRUCK | TLOCB | | |
| Component Level Add | +0001AABCD0000001437PCOMTRUCKSYS | PLOCA | TCOMTRUCK | TLOCA | | |
| Component Element | +0001EABCD0000001437PCOMTRUCKSYS | PLOCB | TCOMTRUCK | TLOCB | A147bD | |
| Component Element | +0001EABCD0000001437PCOMTRUCKSYS | PLOCB | TCOMTRUCK | TLOCB | A294b36 | |
| Component Element | +0001EABCD0000001437PCOMTRUCKSYS | PLOCB | TCOMTRUCK | TLOCB | B026bH | |
| Component Element | +0001EABCD0000001437PCOMTRUCKSYS | PLOCB | TCOMTRUCK | TLOCB | B191bR | |
| Component Element | +0001EABCD0000001437PCOMTRUCKSYS | PLOCB | TCOMTRUCK | TLOCB | B199bY | |
| Component Element | +0001EABCD0000001437PCOMTRUCKSYS | PLOCB | TCOMTRUCK | TLOCB | B252b2 | |
| Component Element | +0001EABCD0000001437PCOMTRUCKSYS | PLOCA | TCOMTRUCK | TLOCA | A147bD | |
| Component Element | +0001EABCD0000001437PCOMTRUCKSYS | PLOCA | TCOMTRUCK | TLOCA | A294b36 | |
| Component Element | +0001EABCD0000001437PCOMTRUCKSYS | PLOCA | TCOMTRUCK | TLOCA | B026bH | |
| Component Element | +0001EABCD0000001437PCOMTRUCKSYS | PLOCA | TCOMTRUCK | TLOCA | B191bR | |
| Component Element | +0001EABCD0000001437PCOMTRUCKSYS | PLOCA | TCOMTRUCK | TLOCA | B199bY | |
| Component Element | +0001EABCD0000001437PCOMTRUCKSYS | PLOCA | TCOMTRUCK | TLOCA | B252b2 | |
| Component Element | +0001EABCD0000001437PCOMBASE | PLOC1 | TCOMDRAFTSYS | TLOCB | A057bSBE45F | |
| Component Element | +0001EABCD0000001437PCOMBASE | PLOC1 | TCOMDRAFTSYS | TLOCB | B058bM | |
| Component Element | +0001EABCD0000001437PCOMBASE | PLOC1 | TCOMDRAFTSYS | TLOCB | B073bS | |
| Component Element | +0001EABCD0000001437PCOMBASE | PLOC1 | TCOMDRAFTSYS | TLOCB | B061b10 | |
| Component Element | +0001EABCD0000001437PCOMBASE | PLOC1 | TCOMDRAFTSYS | TLOCA | A057bSBE45F | |
| Component Element | +0001EABCD0000001437PCOMBASE | PLOC1 | TCOMDRAFTSYS | TLOCA | B058bM | |

Umler TRAIN II Messaging Specifications

| | | | | | |
|-----------------------|------------------------------------|-------|--------------|-------|---------|
| Component Element | +0001EABCD0000001437PCOMBASE | PLOC1 | TCOMDRAFTSYS | TLOCA | B073bS |
| Component Element | +0001EABCD0000001437PCOMBASE | PLOC1 | TCOMDRAFTSYS | TLOCA | B061b10 |
| Data Group Summary | =DS0001SUM0053 | | | | |
| Data Group Header | *DH0002 ABT | | | | |
| Element Detail | +0001bABCD0000001437REPTbABCD | | | | |
| Element Detail | +0001bABCD0000001437PERFbABCD | | | | |
| Element Detail | +0001bABCD0000001437SPLCb411657000 | | | | |
| Element Detail | +0001bABCD0000001437DTDNb20051101 | | | | |
| Data Group Summary | =DS0002SUM0004 | | | | |
| Data Group Header | *DH0003 DLI | | | | |
| Element Detail | +0001bABCD0000001437REPTbABCD | | | | |
| Element Detail | +0001bABCD0000001437PERFbABCD | | | | |
| Element Detail | +0001bABCD0000001437SPLCb411657000 | | | | |
| Element Detail | +0001bABCD0000001437DTDNb20051101 | | | | |
| Data Group Summary | =DS0003SUM0004 | | | | |
| Control Group Summary | =CS1234560003 | | | | |
| Trailer | \$0001EOM! Where ! = hex '9C' | | | | |

Umler TRAIN II Messaging Specifications

The following example shows the resulting UMLRC60 message sent in response to the UMLRC00 message above if the equipment add back passes all validations.

| Outbound UMLRC60 TRAIN II ECA message sent in response to a successful EAD | | | |
|--|---|---------------------|--|
| Message Header | #RRDCbbb0001UMLRC600607301425RRDCbbb/ | | |
| Control Group Header | *CH12345620060730160000USERIDbbABCD12345620041031121200 | | |
| Data Group Header | *DH0001ECA | | |
| Element Detail | +0001 | ABCD00000014370002b | BOXCMOWNbABCD |
| Element Detail | +0001 | ABCD00000014370002b | BOXCP001b0000000 |
| Element Detail | +0001 | ABCD00000014370002b | BOXCUMETHL070 |
| Element Detail | +0001 | ABCD00000014370002b | BOXC0006b12664 |
| Element Detail | +0001 | ABCD00000014370002b | BOXCPRIDbEFGH0000015233 |
| Element Detail | +0001 | ABCD00000014370002b | BOXC0007bB |
| Element Detail | +0001 | ABCD00000014370002b | BOXC0008b4505 |
| Element Detail | +0001 | ABCD00000014370002b | BOXC0009b1008 |
| Element Detail | +0001 | ABCD00000014370002b | BOXC0012b907 |
| Element Detail | +0001 | ABCD00000014370002b | BOXC0013b1404 |
| Element Detail | +0001 | ABCD00000014370002b | BOXC0014b0 |
| Element Detail | +0001 | ABCD00000014370002b | BOXC0020b4006 |
| Element Detail | +0001 | ABCD00000014370002b | BOXC0021b905 |
| Element Detail | +0001 | ABCD00000014370002b | BOXC0022b1005 |
| Element Detail | +0001 | ABCD00000014370002b | BOXC0024b4000 |
| Element Detail | +0001 | ABCD00000014370002b | BOXC0025b519 |
| Element Detail | +0001 | ABCD00000014370002b | BOXC0026b113073 |
| Element Detail | +0001 | ABCD00000014370002b | BOXC0027b177 |
| Element Detail | +0001 | ABCD00000014370002b | BOXC0032b0 |
| Element Detail | +0001 | ABCD00000014370002b | BOXC0033bD |
| Element Detail | +0001 | ABCD00000014370002b | BOXC0034b1251 |
| Element Detail | +0001 | ABCD00000014370002b | BOXC0037bU |
| Element Detail | +0001 | ABCD00000014370002b | BOXC0042bS |
| Element Detail | +0001 | ABCD00000014370002b | BOXC0043bN |
| Element Detail | +0001 | ABCD00000014370002b | BOXC0045bU |
| Element Detail | +0001 | ABCD00000014370002b | BOXC0048b0 |
| Element Detail | +0001 | ABCD00000014370002b | BOXC0049b0 |
| Component Level Add | +0001 | ABCD00000014370002b | BOXPCOMBASE PLOC1 TCOMTRUCKSYS TLOCB |
| Component Level Add | +0001 | ABCD00000014370002b | BOXPCOMBASE PLOC1 TCOMTRUCKSYS TLOCA |
| Component Level Add | +0001 | ABCD00000014370002b | BOXPCOMBASE PLOC1 TCOMDRAFTSYS TLOCB |
| Component Level Add | +0001 | ABCD00000014370002b | BOXPCOMBASE PLOC1 TCOMDRAFTSYS TLOCA |
| Component Level Add | +0001 | ABCD00000014370002b | BOXPCOMTRUCKSYS PLOCB TCOMTRUCK TLOCB |
| Component Level Add | +0001 | ABCD00000014370002b | BOXPCOMTRUCKSYS PLOCA TCOMTRUCK TLOCA |
| Component Element | +0001 | ABCD00000014370002b | BOXPCOMTRUCKSYS PLOCB TCOMTRUCK TLOCB A147bD |
| Component Element | +0001 | ABCD00000014370002b | BOXPCOMTRUCKSYS PLOCB TCOMTRUCK TLOCB A294b36 |
| Component Element | +0001 | ABCD00000014370002b | BOXPCOMTRUCKSYS PLOCB TCOMTRUCK TLOCB B026bH |
| Component Element | +0001 | ABCD00000014370002b | BOXPCOMTRUCKSYS PLOCB TCOMTRUCK TLOCB B191bR |
| Component Element | +0001 | ABCD00000014370002b | BOXPCOMTRUCKSYS PLOCB TCOMTRUCK TLOCB B199bY |
| Component Element | +0001 | ABCD00000014370002b | BOXPCOMTRUCKSYS PLOCB TCOMTRUCK TLOCB B252b2 |
| Component Element | +0001 | ABCD00000014370002b | BOXPCOMTRUCKSYS PLOCA TCOMTRUCK TLOCA A147Bd |
| Component Element | +0001 | ABCD00000014370002b | BOXPCOMTRUCKSYS PLOCA TCOMTRUCK TLOCA A294b36 |
| Component Element | +0001 | ABCD00000014370002b | BOXPCOMTRUCKSYS PLOCA TCOMTRUCK TLOCA B026bH |

Umler TRAIN II Messaging Specifications

| | |
|-----------------------|---|
| Component Element | +0001EABCD00000014370002bBOXCPCOMTRUCKSYS PLOCA TCOMTRUCK TLOCA B191bR |
| Component Element | +0001EABCD00000014370002bBOXCPCOMTRUCKSYS PLOCA TCOMTRUCK TLOCA B199bY |
| Component Element | +0001EABCD00000014370002bBOXCPCOMTRUCKSYS PLOCA TCOMTRUCK TLOCA B252b2 |
| Component Element | +0001EABCD00000014370002bBOXCPCOMBASE PLOC1 TCOMDRAFTSYS TLOCB AO57bSBE45F |
| Component Element | +0001EABCD00000014370002bBOXCPCOMBASE PLOC1 TCOMDRAFTSYS TLOCB B058bM |
| Component Element | +0001EABCD00000014370002bBOXCPCOMBASE PLOC1 TCOMDRAFTSYS TLOCB B073bS |
| Component Element | +0001EABCD00000014370002bBOXCPCOMBASE PLOC1 TCOMDRAFTSYS TLOCB B061b10 |
| Component Element | +0001EABCD00000014370002bBOXCPCOMBASE PLOC1 TCOMDRAFTSYS TLOCA AO57bSBE45F |
| Component Element | +0001EABCD00000014370002bBOXCPCOMBASE PLOC1 TCOMDRAFTSYS TLOCA B058bM |
| Component Element | +0001EABCD00000014370002bBOXCPCOMBASE PLOC1 TCOMDRAFTSYS TLOCA B073bS |
| Component Element | +0001EABCD00000014370002bBOXCPCOMBASE PLOC1 TCOMDRAFTSYS TLOCA B061b10 |
| Data Group Summary | =DS0001SUM0053 |
| Control Group Summary | =CS1234560001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

Any inspections reported against the car will be carried forward and sent on TRAIN II messages.

| | |
|--|---|
| Outbound UMLRC60 TRAIN II ABT message | |
| Message Header | #RRDCbbb0001UMLRC600607301425RRDCbbb/ |
| Control Group Header | *CH12345620060730160000USERIDbbABCD12345620041031121200 |
| Data Group Header | *DH0001ABT |
| Element Detail | +0001bABCD00000014370002bBOXCREPTbABCD |
| Element Detail | +0001bABCD00000014370002bBOXCPERFbABCD |
| Element Detail | +0001bABCD00000014370002bBOXCSPLCb411657000 |
| Element Detail | +0001bABCD00000014370002bBOXCDTDNb20051101 |
| Data Group Summary | =DS0001SUM0004 |
| Control Group Summary | =CS1234560001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

Umler TRAIN II Messaging Specifications

| Outbound UMLRC61 TRAIN II DLI message | |
|---------------------------------------|---|
| Message Header | #RRDC bbbb 0001UMLRC600607301425RRDC bbbb / |
| Control Group Header | *CH12345620060730160000USERID bb ABCD12345620041031121200 |
| Data Group Header | *DH0001DLI |
| Element Detail | +0001 b ABCD00000014370002 b BOXCREP T ABCD |
| Element Detail | +0001 b ABCD00000014370002 b BOXCPER F ABCD |
| Element Detail | +0001 b ABCD00000014370002 b BOXCSPL C 411657000 |
| Element Detail | +0001 b ABCD00000014370002 b BOXCDT N 20051101 |
| Data Group Summary | =DS0001SUM0004 |
| Control Group Summary | =CS1234560001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

The following example shows the resulting UMLRC61 message sent in response to the UMLRC00 message above if the equipment add back passes all validations.

| Outbound UMLRC61 TRAIN II ECA message sent in response to a successful EAD message | |
|--|---|
| Message Header | #RRDC bbbb 0001UMLRC610607301425RRDC bbbb / |
| Control Group Header | *CH12345620060730160000USERID bb ABCD12345620041031121200 |
| Data Group Header | *DH0001 ECA |
| Element Detail | +0001 b ABCD00000014370002 b BOXCMOWN2006-11-21-08.01.51.000001 b ABCD |
| Element Detail | +0001 b ABCD00000014370002 b BOXCP0012006-11-21-08.01.51.000001 b 00000000 |
| Element Detail | +0001 b ABCD00000014370002 b BOXCUMET2006-11-21-08.01.51.000001 b L070 |
| Element Detail | +0001 b ABCD00000014370002 b BOXC00062006-11-21-08.01.51.000001 b 12664 |
| Element Detail | +0001 b ABCD00000014370002 b BOXCPRID2006-11-21-08.01.51.000001 b EFGH0000015233 |
| Element Detail | +0001 b ABCD00000014370002 b BOXC00072006-11-21-08.01.51.000001 b B |
| Element Detail | +0001 b ABCD00000014370002 b BOXC00082006-11-21-08.01.51.000001 b 4505 |
| Element Detail | +0001 b ABCD00000014370002 b BOXC00092006-11-21-08.01.51.000001 b 1008 |
| Element Detail | +0001 b ABCD00000014370002 b BOXC00122006-11-21-08.01.51.000001 b 907 |
| Element Detail | +0001 b ABCD00000014370002 b BOXC00132006-11-21-08.01.51.000001 b 1404 |
| Element Detail | +0001 b ABCD00000014370002 b BOXC00142006-11-21-08.01.51.000001 b 0 |
| Element Detail | +0001 b ABCD00000014370002 b BOXC00202006-11-21-08.01.51.000001 b 4006 |
| Element Detail | +0001 b ABCD00000014370002 b BOXC00212006-11-21-08.01.51.000001 b 905 |
| Element Detail | +0001 b ABCD00000014370002 b BOXC00222006-11-21-08.01.51.000001 b 1005 |
| Element Detail | +0001 b ABCD00000014370002 b BOXC00242006-11-21-08.01.51.000001 b 4000 |
| Element Detail | +0001 b ABCD00000014370002 b BOXC00252006-11-21-08.01.51.000001 b 519 |
| Element Detail | +0001 b ABCD00000014370002 b BOXC00262006-11-21-08.01.51.000001 b 113073 |
| Element Detail | +0001 b ABCD00000014370002 b BOXC00272006-11-21-08.01.51.000001 b 177 |
| Element Detail | +0001 b ABCD00000014370002 b BOXC00322006-11-21-08.01.51.000001 b 0 |
| Element Detail | +0001 b ABCD00000014370002 b BOXC00332006-11-21-08.01.51.000001 b D |
| Element Detail | +0001 b ABCD00000014370002 b BOXC00342006-11-21-08.01.51.000001 b 1251 |
| Element Detail | +0001 b ABCD00000014370002 b BOXC00372006-11-21-08.01.51.000001 b U |
| Element Detail | +0001 b ABCD00000014370002 b BOXC00422006-11-21-08.01.51.000001 b S |
| Element Detail | +0001 b ABCD00000014370002 b BOXC00432006-11-21-08.01.51.000001 b N |
| Element Detail | +0001 b ABCD00000014370002 b BOXC00452006-11-21-08.01.51.000001 b U |
| Element Detail | +0001 b ABCD00000014370002 b BOXC00482006-11-21-08.01.51.000001 b 0 |
| Element Detail | +0001 b ABCD00000014370002 b BOXC00492006-11-21-08.01.51.000001 b 0 |
| Component Level Add | +0001 a ABCD00000014370002 b BOXPCOMBASE PLOC1 TCOMTRUCKSYS TLOCB 2006-11-21-08.01.51.000001 |
| Component Level Add | +0001 a ABCD00000014370002 b BOXPCOMBASE PLOC1 TCOMTRUCKSYS TLOCA 2006-11-21-08.01.51.000001 |
| Component Level Add | +0001 a ABCD00000014370002 b BOXPCOMBASE PLOC1 TCOMDRAFTSYS TLOCB 2006-11-21-08.01.51.000001 |
| Component Level Add | +0001 a ABCD00000014370002 b BOXPCOMBASE PLOC1 TCOMDRAFTSYS TLOCA 2006-11-21-08.01.51.000001 |
| Component Level Add | +0001 a ABCD00000014370002 b BOXPCOMTRUCKSYS PLOCB TCOMTRUCK TLOCB 2006-11-21-08.01.51.000001 |

Umler TRAIN II Messaging Specifications

| | |
|-----------------------|---|
| Component Level Add | +0001EABCD00000014370002bBOXCPCOMTRUCKSYS PLOCA TCOMTRUCK TLOCA 2006-11-21-08.01.51.000001 |
| Component Element | +0001EABCD00000014370002bBOXCPCOMTRUCKSYS PLOCB TCOMTRUCK TLOCB A1472006-11-21-08.01.51.000001bD |
| Component Element | +0001EABCD00000014370002bBOXCPCOMTRUCKSYS PLOCB TCOMTRUCK TLOCB A2942006-11-21-08.01.51.000001b36 |
| Component Element | +0001EABCD00000014370002bBOXCPCOMTRUCKSYS PLOCB TCOMTRUCK TLOCB B0262006-11-21-08.01.51.000001bH |
| Component Element | +0001EABCD00000014370002bBOXCPCOMTRUCKSYS PLOCB TCOMTRUCK TLOCB B1912006-11-21-08.01.51.000001bR |
| Component Element | +0001EABCD00000014370002bBOXCPCOMTRUCKSYS PLOCB TCOMTRUCK TLOCB B1992006-11-21-08.01.51.000001bY |
| Component Element | +0001EABCD00000014370002bBOXCPCOMTRUCKSYS PLOCB TCOMTRUCK TLOCB B2522006-11-21-08.01.51.000001b2 |
| Component Element | +0001EABCD00000014370002bBOXCPCOMTRUCKSYS PLOCA TCOMTRUCK TLOCA A1472006-11-21-08.01.51.000001Bd |
| Component Element | +0001EABCD00000014370002bBOXCPCOMTRUCKSYS PLOCA TCOMTRUCK TLOCA A2942006-11-21-08.01.51.000001b36 |
| Component Element | +0001EABCD00000014370002bBOXCPCOMTRUCKSYS PLOCA TCOMTRUCK TLOCA B0262006-11-21-08.01.51.000001bH |
| Component Element | +0001EABCD00000014370002bBOXCPCOMTRUCKSYS PLOCA TCOMTRUCK TLOCA B1912006-11-21-08.01.51.000001bR |
| Component Element | +0001EABCD00000014370002bBOXCPCOMTRUCKSYS PLOCA TCOMTRUCK TLOCA B1992006-11-21-08.01.51.000001bY |
| Component Element | +0001EABCD00000014370002bBOXCPCOMTRUCKSYS PLOCA TCOMTRUCK TLOCA B2522006-11-21-08.01.51.000001b2 |
| Component Element | +0001EABCD00000014370002bBOXCPCOMBASE PLOC1 TCOMDRAFTSYS TLOCB AO572006-11-21-08.01.51.000001bSBE45F |
| Component Element | +0001EABCD00000014370002bBOXCPCOMBASE PLOC1 TCOMDRAFTSYS TLOCB B0582006-11-21-08.01.51.000001bM |
| Component Element | +0001EABCD00000014370002bBOXCPCOMBASE PLOC1 TCOMDRAFTSYS TLOCB B0732006-11-21-08.01.51.000001bS |
| Component Element | +0001EABCD00000014370002bBOXCPCOMBASE PLOC1 TCOMDRAFTSYS TLOCB B0612006-11-21-08.01.51.000001b10 |
| Component Element | +0001EABCD00000014370002bBOXCPCOMBASE PLOC1 TCOMDRAFTSYS TLOCA AO572006-11-21-08.01.51.000001bSBE45F |
| Component Element | +0001EABCD00000014370002bBOXCPCOMBASE PLOC1 TCOMDRAFTSYS TLOCA B0582006-11-21-08.01.51.000001bM |
| Component Element | +0001EABCD00000014370002bBOXCPCOMBASE PLOC1 TCOMDRAFTSYS TLOCA B0732006-11-21-08.01.51.000001bS |
| Component Element | +0001EABCD00000014370002bBOXCPCOMBASE PLOC1 TCOMDRAFTSYS TLOCA B0612006-11-21-08.01.51.000001b10 |
| Data Group Summary | =DS0001SUM0053 |
| Control Group Summary | =CS1234560001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

Umler TRAIN II Messaging Specifications

Any inspections reported against the car will be carried forward and sent on TRAIN II messages.

| Outbound UMLRC61 ABT TRAIN II message | |
|---------------------------------------|---|
| Message Header | #RRDCbbb0001UMLRC610607301425RRDCbbb/ |
| Control Group Header | *CH12345620060730160000USERIDbbABCD12345620041031121200 |
| Data Group Header | *DH0001ABT |
| Element Detail | +0001bABCD00000014370002bBOXCREPT2006-11-21-08.01.51.000001bABCD |
| Element Detail | +0001bABCD00000014370002bBOXCPERF2006-11-21-08.01.51.000001bABCD |
| Element Detail | +0001bABCD00000014370002bBOXCSPLC2006-11-21-08.01.51.000001b411657000 |
| Element Detail | +0001bABCD00000014370002bBOXCDTDN2006-11-21-08.01.51.000001b20051101 |
| Data Group Summary | =DS0001SUM0004 |
| Control Group Summary | =CS1234560001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

| Outbound UMLRC61 DLI TRAIN II message | |
|---------------------------------------|---|
| Message Header | #RRDCbbb0001UMLRC610607301425RRDCbbb/ |
| Control Group Header | *CH12345620060730160000USERIDbbABCD12345620041031121200 |
| Data Group Header | *DH0001DLI |
| Element Detail | +0001bABCD00000014370002bBOXCREPT2006-11-21-08.01.51.000001bABCD |
| Element Detail | +0001bABCD00000014370002bBOXCPERF2006-11-21-08.01.51.000001bABCD |
| Element Detail | +0001bABCD00000014370002bBOXCSPLC2006-11-21-08.01.51.000001b411657000 |
| Element Detail | +0001bABCD00000014370002bBOXCDTDN2006-11-21-08.01.51.000001b20051101 |
| Data Group Summary | =DS0001SUM0004 |
| Control Group Summary | =CS1234560001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

Umler TRAIN II Messaging Specifications

The following examples shows the resulting UMLRE70 messages sent in response to the UMLRC00 message above that encounters an error.

| Outbound UMLRE70 TRAIN II EAD response message | | | | |
|--|---|----------------------|---------------------|--------------------------|
| Message Header | #RRDCbbb0001UMLRE700607301425RRDCbbb/ | | | |
| Control Group Header | *CH12345620060730160000USERIDbbABCD12345620041031121200 | | | |
| Data Group Header | *DH0001EAD0000001 | | | |
| Element Detail | +0001 | bABCD00000014370002b | BOXCMOWN0000000800b | ABCD |
| Element Detail | +0001 | bABCD00000014370002b | BOXCP0010000000000b | 00000000 |
| Element Detail | +0001 | bABCD00000014370002b | BOXCUMET0000000000b | L070 |
| Element Detail | +0001 | bABCD00000014370002b | BOXC00060000000000b | 12664 |
| Element Detail | +0001 | bABCD00000014370002b | BOXCPRID0000000000b | EF0000015233 |
| Element Detail | +0001 | bABCD00000014370002b | BOXC00070000000000b | B |
| Element Detail | +0001 | bABCD00000014370002b | BOXC00080000000000b | 4505 |
| Element Detail | +0001 | bABCD00000014370002b | BOXC00090000000000b | 1008 |
| Element Detail | +0001 | bABCD00000014370002b | BOXC00120000000000b | 907 |
| Element Detail | +0001 | bABCD00000014370002b | BOXC00130000000000b | 1404 |
| Element Detail | +0001 | bABCD00000014370002b | BOXC00140000000000b | 0 |
| Element Detail | +0001 | bABCD00000014370002b | BOXC00200000000000b | 4006 |
| Element Detail | +0001 | bABCD00000014370002b | BOXC00210000000000b | 905 |
| Element Detail | +0001 | bABCD00000014370002b | BOXC00220000000000b | 1005 |
| Element Detail | +0001 | bABCD00000014370002b | BOXC00240000000000b | 4000 |
| Element Detail | +0001 | bABCD00000014370002b | BOXC00250000000000b | 519 |
| Element Detail | +0001 | bABCD00000014370002b | BOXC00260000000000b | 113073 |
| Element Detail | +0001 | bABCD00000014370002b | BOXC00270000000000b | 177 |
| Element Detail | +0001 | bABCD00000014370002b | BOXC00320000000000b | 0 |
| Element Detail | +0001 | bABCD00000014370002b | BOXC00330000000000b | D |
| Element Detail | +0001 | bABCD00000014370002b | BOXC00340000000000b | 1251 |
| Element Detail | +0001 | bABCD00000014370002b | BOXC00370000000000b | U |
| Element Detail | +0001 | bABCD00000014370002b | BOXC00420000000000b | S |
| Element Detail | +0001 | bABCD00000014370002b | BOXC00430000000000b | N |
| Element Detail | +0001 | bABCD00000014370002b | BOXC00450000000000b | U |
| Element Detail | +0001 | bABCD00000014370002b | BOXC00480000000000b | 0 |
| Element Detail | +0001 | bABCD00000014370002b | BOXC00490000000000b | 0 |
| Component Level Add | +0001 | bABCD00000014370002b | BOXPCOMBASE | PLOC1 TCOMTRUCKSYS TLOCB |
| Component Level Add | +0001 | bABCD00000014370002b | BOXPCOMBASE | PLOC1 TCOMTRUCKSYS TLOCA |
| Component Level Add | +0001 | bABCD00000014370002b | BOXPCOMBASE | PLOC1 TCOMDRAFTSYS TLOCB |
| Component Level Add | +0001 | bABCD00000014370002b | BOXPCOMBASE | PLOC1 TCOMDRAFTSYS TLOCA |
| Component Level Add | +0001 | bABCD00000014370002b | BOXPCOMTRUCKSYS | PLOCB TCOMTRUCK TLOCB |
| Component Level Add | +0001 | bABCD00000014370002b | BOXPCOMTRUCKSYS | PLOCA TCOMTRUCK TLOCA |
| Component Element | +0001 | bABCD00000014370002b | BOXPCOMTRUCKSYS | PLOCB TCOMTRUCK TLOCB |
| Component Element | +0001 | bABCD00000014370002b | BOXPCOMTRUCKSYS | PLOCB TCOMTRUCK TLOCB |
| Component Element | +0001 | bABCD00000014370002b | BOXPCOMTRUCKSYS | PLOCB TCOMTRUCK TLOCB |
| Component Element | +0001 | bABCD00000014370002b | BOXPCOMTRUCKSYS | PLOCB TCOMTRUCK TLOCB |
| Component Element | +0001 | bABCD00000014370002b | BOXPCOMTRUCKSYS | PLOCB TCOMTRUCK TLOCB |
| Component Element | +0001 | bABCD00000014370002b | BOXPCOMTRUCKSYS | PLOCB TCOMTRUCK TLOCB |
| Component Element | +0001 | bABCD00000014370002b | BOXPCOMTRUCKSYS | PLOCA TCOMTRUCK TLOCA |

Umler TRAIN II Messaging Specifications

| | |
|-----------------------|---|
| Component Element | +0001EABCD00000014370002bBOXCPCOMTRUCKSYS PLOCA TCOMTRUCK TLOCA A2940000000000b36 |
| Component Element | +0001EABCD00000014370002bBOXCPCOMTRUCKSYS PLOCA TCOMTRUCK TLOCA B0260000000000bH |
| Component Element | +0001EABCD00000014370002bBOXCPCOMTRUCKSYS PLOCA TCOMTRUCK TLOCA B1910000000000bR |
| Component Element | +0001EABCD00000014370002bBOXCPCOMTRUCKSYS PLOCA TCOMTRUCK TLOCA B1990000000000bY |
| Component Element | +0001EABCD00000014370002bBOXCPCOMTRUCKSYS PLOCA TCOMTRUCK TLOCA B2520000000000b2 |
| Component Element | +0001EABCD00000014370002bBOXCPCOMBASE PLOC1 TCOMDRAFTSYS TLOCB AO570000000000bSBE45F |
| Component Element | +0001EABCD00000014370002bBOXCPCOMBASE PLOC1 TCOMDRAFTSYS TLOCB B0580000000000bM |
| Component Element | +0001EABCD00000014370002bBOXCPCOMBASE PLOC1 TCOMDRAFTSYS TLOCB B0730000000000bS |
| Component Element | +0001EABCD00000014370002bBOXCPCOMBASE PLOC1 TCOMDRAFTSYS TLOCB B0610000000000b10 |
| Component Element | +0001EABCD00000014370002bBOXCPCOMBASE PLOC1 TCOMDRAFTSYS TLOCA AO570000000000bSBE45F |
| Component Element | +0001EABCD00000014370002bBOXCPCOMBASE PLOC1 TCOMDRAFTSYS TLOCA B0580000000000bM |
| Component Element | +0001EABCD00000014370002bBOXCPCOMBASE PLOC1 TCOMDRAFTSYS TLOCA B0730000000000bS |
| Component Element | +0001EABCD00000014370002bBOXCPCOMBASE PLOC1 TCOMDRAFTSYS TLOCA B0610000000000b10 |
| Data Group Summary | =DS0001SUM0053 |
| Control Group Summary | =CS1234560001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

12 Pool Header Add

12.1 Transaction Types

The following are valid values for the TRANSACTION TYPE field on the Data Group Header Record for Pool Header Add inbound and outbound messages.

| Transaction Type | Description |
|------------------|-----------------|
| HA | Pool Header Add |

12.2 Element IDs

The following are the valid values for element ID for pool header add transactions.

| Element ID | Description | Format | Length | Mandatory/ Optional |
|------------|-----------------------------|-----------|--------|------------------------|
| P002 | Pool Description | character | 20 | mandatory |
| P003 | Pool Loading Location | character | 19 | mandatory |
| P004 | Pool Loading State/Province | character | 2 | mandatory |
| P005 | Pool Reporter | character | 4 | optional |
| P006 | Pool Type Code | character | 1 | mandatory |
| P007 | Pool Maintenance Code | character | 1 | mandatory |
| P008 | Extended Pool Description | character | 80 | optional |
| P009 | Held Short Location | character | 19 | optional |
| P010 | Held Short State/Province | character | 2 | optional |
| P011 | Pool Operator1 | character | 1 | mandatory |
| P012 | Pool Operator2 | character | 1 | optional |
| P013 | Pool Operator3 | character | 1 | optional |
| P014 | Pool Operator4 | character | 1 | optional |

12.4 Message Examples

In the examples below, the shaded area **b** represents a value of space.

12.4.1 Add a Pool Header

12.4.1.1 UMLRC00

| Inbound UMLRC00 TRAIN II message to add a new Pool Header: | |
|--|--|
| Message Header | #ABCD bbbb 0001 UMLRC00 0207301605RRDC bbbb / |
| Control Group Header | *CH12345620020730160000USERID bb |
| Data Group Header | *DH0001 HAb |
| Detail Record | + P001b 1234567P002 b STONE CONTAINER |
| Detail Record | + P001b 1234567P003 b TANEYTOWN |
| Detail Record | + P001b 1234567P004 b MD |
| Detail Record | + P001b 1234567P006 b C |
| Detail Record | + P001b 1234567P007 b 1 |
| Detail Record | + P001b 1234567P011 b ABCD |
| Data Group Summary | =DS0001SUM0006 |
| Control Group Summary | =CS1234560001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

12.4.1.2 UMLRC60

| Outbound UMLRC60 TRAIN II message to add a new Pool Header: | |
|---|--|
| Message Header | #RRDC bbbb 0001 UMLRC60 0207301605ABCD bbbb / |
| Control Group Header | *CH65432120020730160100USERID bb ABCD12345620020730160000 |
| Data Group Header | *DH0001 HAb |
| Detail Record | + P001b 1234567P002 b STONE CONTAINER |
| Detail Record | + P001b 1234567P003 b TANEYTOWN |
| Detail Record | + P001b 1234567P004 b MD |
| Detail Record | + P001b 1234567P006 b C |
| Detail Record | + P001b 1234567P007 b 1 |
| Detail Record | + P001b 1234567P011 b ABCD |
| Data Group Summary | =DS0001SUM0006 |
| Control Group Summary | =CS6543210001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

Umler TRAIN II Messaging Specifications

12.4.1.3 UMLRC61

| Outbound UMLRC61 TRAIN II message to add a new Pool Header: | |
|---|---|
| Message Header | #RRDCbbb0001UMLRC610207301605ABCDbbb/ |
| Control Group Header | *CH65432120020730160100USERIDbbABCD12345620020730160000 |
| Data Group Header | *DH0001HAb |
| Detail Record | +P001b1234567P0022003-02-21-08.01.01.000005bSTONE CONTAINER |
| Detail Record | +P001b1234567P0032003-02-21-08.01.01.000005bTANEYTOWN |
| Detail Record | +P001b1234567P0042003-02-21-08.01.01.000005bMD |
| Detail Record | +P001b1234567P0062003-02-21-08.01.01.000005bC |
| Detail Record | +P001b1234567P0072003-02-21-08.01.01.000005b1 |
| Detail Record | +P001b1234567P0112003-02-21-08.01.01.000005bABCD |
| Data Group Summary | =DS0001SUM0013 |
| Control Group Summary | =CS6543210001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

13 Pool Header Change

13.1 Transaction Types

The following are valid values for the TRANSACTION TYPE field on the Data Group Header Record for Pool Header Change inbound and outbound messages.

| Transaction Type | Description |
|------------------|--------------------|
| HC | Pool Header Change |

13.2 Element IDs

The following are the valid values for element ID for pool header change transactions. At least one element must be sent for a pool header change transaction. Only data that is changed is processed.

| Element ID | Description | Format | Length | Mandatory/Optional |
|------------|-----------------------------|-----------|--------|--------------------|
| P002 | Pool Description | character | 20 | optional |
| P003 | Pool Loading Location | character | 19 | optional |
| P004 | Pool Loading State/Province | character | 2 | optional |
| P005 | Pool Reporter | character | 4 | optional |
| P006 | Pool Type Code | character | 1 | optional |
| P007 | Pool Maintenance Code | character | 1 | optional |
| P008 | Extended Pool Description | character | 80 | optional |
| P009 | Held Short Location | character | 19 | optional |
| P010 | Held Short State/Province | character | 2 | optional |
| P011 | Pool Operator1 | character | 1 | optional |
| P012 | Pool Operator2 | character | 1 | optional |
| P013 | Pool Operator3 | character | 1 | optional |
| P014 | Pool Operator4 | character | 1 | optional |

13.3 Detail Record Format

The detail records following a data group header within a pool header change transaction will always be formatted the same.

The following is an example of a how an UMLRC00/UMLRC60 detail record will be formatted following a data group header on a pool header change transaction.

+P001bxxxxxxxxxyyybvvvvvvvv

where:

| Value | Description |
|----------|--|
| + | The delimiter to start a detail record |
| P001 | The ELEMENT ID for the pool being updated |
| b | A value of space |
| xxxxxxx | The Pool ID |
| yyyy | The ELEMENT ID for the field being changed |
| b | A value of space |
| vvvvvvvv | The variable length ELEMENT VALUE that corresponds to the ELEMENT ID provided in this example as yyyy. Minimum length = 0 Maximum length = 240 |

The following is an example of a how an UMLRC61 detail record will be formatted following a data group header on a pool header change transaction.

+P001bxxxxxxxxxyyydddddvvvvvvvv

where:

| Value | Description |
|-----------|--|
| + | The delimiter to start a detail record |
| P001 | The ELEMENT ID for the pool being updated |
| b | A value of space |
| xxxxxxx | The Pool ID |
| yyyy | The ELEMENT ID for the field being changed |
| ddddddddd | 26 character DB2 timestamp field. |
| b | A value of space |
| vvvvvvvv | The variable length ELEMENT VALUE that corresponds to the ELEMENT ID provided in this example as yyyy. Minimum length = 0 Maximum length = 240 |

13.4 Message Examples

In the examples below, the shaded area **b** represents a value of space.

13.4.1 Change a Pool Header

13.4.1.1 UMLRC00

| Inbound UMLRC00 TRAIN II message to change the Pool Header: | |
|---|--|
| Message Header | #ABCD b 0001 UMLRC00 0207301605RRDC b / |
| Control Group Header | *CH12345620020730160000USERID b |
| Data Group Header | *DH0001 HCB |
| Detail Record | + P001b 1234567P002 b LUMBER LOADING |
| Data Group Summary | =DS0001SUM0001 |
| Control Group Summary | =CS1234560001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

13.4.1.2 UMLRC60

| Outbound UMLRC60 TRAIN II message to change a Pool Header: | |
|--|---|
| Message Header | #RRDC b 0001 UMLRC60 0207301605ABCD b / |
| Control Group Header | *CH65432120020730160100USERID b ABCD12345620020730160000 |
| Data Group Header | *DH0001 HCB |
| Detail Record | + P001b 1234567P002 b LUMBER LOADING |
| Data Group Summary | =DS0001SUM0001 |
| Control Group Summary | =CS6543210001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

13.4.1.3 UMLRC61

| Outbound UMLRC61 TRAIN II message to change a Pool Header: | |
|--|--|
| Message Header | #RRDC b 0001 UMLRC61 0207301605ABCD b / |
| Control Group Header | *CH65432120020730160100USERID b ABCD12345620020730160000 |
| Data Group Header | *DH0001 HCB |
| Detail Record | + P001b 1234567P0022003-02-21-08.01.01.000019 b LUMBER LOADING |
| Data Group Summary | =DS0001SUM0001 |
| Control Group Summary | =CS6543210001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

14 Pool Header Delete

14.1 Transaction Types

The following are valid values for the TRANSACTION TYPE field on the Data Group Header Record for Pool Header Delete inbound and outbound messages.

| Transaction Type | Description |
|------------------|--------------------|
| HD | Pool Header Delete |

14.2 Element IDs

There are no elements present on a pool header delete transaction.

14.3 Detail Record Format

There are no detail records on a pool header delete transaction.

14.4 Message Examples

In the examples below, the shaded area **b** represents a value of space.

14.4.1 Delete a Pool Header

14.4.1.1 UMLRC00

| Inbound UMLRC00 TRAIN II message to delete a Pool Header: | |
|---|---|
| Message Header | #ABCD bbbb 0001UMLRC000207301605RRDC bbbb / |
| Control Group Header | *CH12345620020730160000USERID bb |
| Data Group Header | *DH0001 HD P001 b 1234567 |
| Data Group Summary | =DS0001SUM0000 |
| Control Group Summary | =CS1234560001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

14.4.1.2 UMLRC60

| Outbound UMLRC60 TRAIN II message to delete a new Pool Header: | |
|--|--|
| Message Header | #RRDC bbbb 0001UMLRC600207301605ABCD bbbb / |
| Control Group Header | *CH65432120020730160100USERID bb ABCD12345620020730160000 |
| Data Group Header | *DH0001 HD P001 b 1234567 |
| Data Group Summary | =DS0001SUM0000 |
| Control Group Summary | =CS6543210001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

Umler TRAIN II Messaging Specifications

14.4.1.3 UMLRC61

| Outbound UMLRC61 TRAIN II message to delete a new Pool Header: | |
|--|--|
| Message Header | #RRDC bbbb 0001 UMLRC61 0207301605ABCD bbbb / |
| Control Group Header | *CH65432120020730160100USERID bb ABCD12345620020730160000 |
| Data Group Header | *DH0001 HD P001 b 12345672003-02-21-08.01.01.000015 |
| Data Group Summary | =DS0001SUM0000 |
| Control Group Summary | =CS6543210001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

15 Car Grade Inspection

15.1 Transaction Types

The following are valid values for the TRANSACTION TYPE field on the Data Group Header Record for Car Grade Inspection messages:

| Transaction Type | Description |
|------------------|----------------------|
| CGI | Car Grade Inspection |

15.2 Element IDs

The following are the valid values for ELEMENT ID for car grade inspections.

| Element ID | Description | Format | Length | Mandatory/Optional |
|------------|-----------------|--------------------|--------|--------------------|
| CG01 | Car Grade | character | 1 | mandatory |
| CG02 | Inspection Date | Date (CCYYMMDD) | 8 | mandatory |
| CG03 | Inspection Time | Time (MMSS) | 4 | mandatory |
| CG04 | Location SPLC | character | 9 | mandatory |
| CG05 | Inspecting SCAC | character | 4 | mandatory |

15.3 Detail Record Format

Refer to Appendix Q – Detail Record Format for Equipment for a description of the detail record format for equipment related transactions.

15.4 Message Examples

In the examples below, the shaded area **b** represents a value of space.

15.4.1 UMLRC00

| Inbound UMLRC00 TRAIN II message to report a car grade inspection for a piece of equipment: | |
|---|--|
| Message Header | #ABCD bbbb 0001 UMLRC00 0207301605RRDC bbbb / |
| Control Group Header | *CH12345620020730160000USERID bb |
| Data Group Header | *DH0001 CGI |
| Detail Record | + 0001 b ABCD0000123456CG01 ba |
| Detail Record | + 0001 b ABCD0000123456CG02 b 20030221 |
| Detail Record | + 0001 b ABCD0000123456CG03 b 1130 |
| Detail Record | + 0001 b ABCD0000123456CG04 b 115341000 |
| Detail Record | + 0001 b ABCD0000123456CG05 b WXYZ |
| Data Group Summary | =DS0001SUM0005 |
| Control Group Summary | =CS1234560001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

15.4.2 UMLRC60

| Outbound UMLRC60 TRAIN II message to report a car grade inspection for a piece of equipment: | |
|--|--|
| Message Header | #RRDC bbbb 0001 UMLRC60 0207301605ABCD bbbb / |
| Control Group Header | *CH65432120020730160100USERID bb ABCD12345620020730160000 |
| Data Group Header | *DH0001 CGI |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCCG01 ba |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCCG02 b 20030221 |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCCG03 b 1130 |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCCG04 b 115341000 |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCCG05 b WXYZ |
| Data Group Summary | =DS0001SUM0005 |
| Control Group Summary | =CS6543210001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

15.4.3 UMLRC61

| Outbound UMLRC61 TRAIN II message to report a car grade inspection for a piece of equipment: | |
|--|--|
| Message Header | #RRDC bbbb 0001 UMLRC61 0207301605ABCD bbbb / |
| Control Group Header | *CH65432120020730160100USERID bb ABCD12345620020730160000 |
| Data Group Header | *DH0001 CGI |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCCG012003-02-21-08.01.01.000004 ba |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCCG022003-02-21-08.01.01.000005 b 20030221 |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCCG032003-02-21-08.01.01.000006 b 1130 |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCCG042003-02-21-08.01.01.000007 b 115341000 |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCCG052003-02-21-08.01.01.000008 b CP |
| Data Group Summary | =DS0001SUM0005 |
| Control Group Summary | =CS6543210001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

16 Report Air Brake Test Inspection

16.1 Inbound Transaction Types

The following are valid values for the TRANSACTION TYPE field on the Data Group Header Record for inbound Air Brake Test Inspections.

| Transaction Type | Description |
|------------------|-------------------------------|
| ABT | Air Brake Test Inspection. |
| ABN | Air Brake Test nullification. |

16.2 Outbound Transaction Types

The following are valid values for the TRANSACTION TYPE field on the Data Group Header Record for outbound Air Brake Test Inspections.

| Transaction Type | Description |
|------------------|--|
| ABT | Air Brake Test inspection. |
| ABP | Prior Air Brake Test Inspection. |
| ECC | Equipment characteristic change to send due date of next Air Brake Test. |
| ABN | Air Brake Test nullification. |

16.3 Input Element IDs

The following are the valid values for element ID for Air Brake Test Inspections on an inbound UMLRC00 message.

| Element ID | Description | Format | Length | Mandatory/ Optional |
|------------|-------------|--------------------|--------|------------------------|
| REPT | Reporter | character | 4 | mandatory |
| PERF | Performer | character | 4 | mandatory |
| SPLC | SPLC | character | 9 | mandatory |
| DTDN | Date Done | date (CCYYMMDD) | 8 | mandatory |

16.4 Output Element IDs

The following are the valid values for element ID for Air Brake Test Inspections on outbound UMLRC60/UMLRC61 messages.

A transaction type of ‘**ABT**’, ‘**ABP**’, or ‘**ABN**’ will send the following elements.

| Element ID | Description | Format | Length |
|------------|-------------|--------------------|--------|
| REPT | Reporter | character | 4 |
| PERF | Performer | character | 4 |
| SPLC | SPLC | character | 9 |
| DTDN | Date Done | date (CCYYMMDD) | 8 |

A transaction type of ‘**ECC**’ will send the new Air Brake Test due dates.

| Element ID | Description | Format | Length |
|------------|------------------------|--------------------|--------|
| DU13 | ABT Due Date 13 months | date (CCYYMMDD) | 8 |
| DU58 | ABT Due Date 5-8 years | date (CCYYMMDD) | 8 |

16.5 Detail Record Format

Refer to Appendix Q – Detail Record Format for Equipment for a description of the detail record format for equipment related transactions.

16.6 Message Examples For Reporting of Air Brake Test Inspection

In the examples below, the shaded area **b** represents a value of space.

16.6.1 UMLRC00

| Inbound UMLRC00 TRAIN II message to report an ABT inspection for a piece of equipment: | |
|--|--|
| Message Header | #ABCD bbbb 0001 UMLRC00 0410311212RRDC bbbb / |
| Control Group Header | *CH12345620041031121200USERID bb |
| Data Group Header | *DH0001 ABT |
| Detail Record | + 0001 b ABCD0000123456REPT b ABCD |
| Detail Record | + 0001 b ABCD0000123456PERF b ABCD |
| Detail Record | + 0001 b ABCD0000123456DTDN b 20041030 |
| Detail Record | + 0001 b ABCD0000123456SPLC b 115341000 |
| Data Group Summary | =DS0001SUM0004 |
| Control Group Summary | =CS1234560001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

16.6.2 UMLRC60

| Outbound UMLRC60 TRAIN II message to report an ABT inspection for a piece of equipment: | |
|---|--|
| Message Header | #RRDC bbbb 0001 UMLRC60 0410311212ABCD bbbb / |
| Control Group Header | *CH65432120041031121200USERID bb ABCD12345620041031121200 |
| Data Group Header | *DH0001 ABT |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCREPT b ABCD |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCPERF b ABCD |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCDTDN b 20041030 |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCSPLC b 115341000 |
| Data Group Summary | =DS0001SUM0004 |
| Data Group Header | *DH0002 ABP |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCREPT b ABCD |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCPERF b ABCD |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCDTDN b 20021030 |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCSPLC b 111111000 |
| Data Group Summary | =DS0002SUM0004 |
| Data Group Header | *DH0003 ECC |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCDU58 b 20071030 |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCDU13 b 20051030 |
| Data Group Summary | =DS0003SUM0002 |
| Control Group Summary | =CS6543210003 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

Umler TRAIN II Messaging Specifications

16.6.3 UMLRC61

| Outbound UMLRC61 TRAIN II message to report an ABT inspection for a piece of equipment: | |
|---|--|
| Message Header | #RRDC bbbb 0001 UMLRC61 0410311212ABCD bbbb / |
| Control Group Header | *CH65432120041031121200USERID bb ABCD12345620041031121200 |
| Data Group Header | *DH0001 ABT |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCREPT2004-10-31-12.12.01.000004 b ABCD |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCPERF2004-10-31-12.12.01.000005 b ABCD |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCDTDN2004-10-31-12.12.01.000006 b 20041030 |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCSPLC2004-10-31-12.12.01.000007 b 115341000 |
| Data Group Summary | =DS0001SUM0004 |
| Data Group Header | *DH0002 ABP |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCREPT2004-10-31-12.12.01.000004 b ABCD |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCPERF2004-10-31-12.12.01.000005 b ABCD |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCDTDN2004-10-31-12.12.01.000006 b 20021030 |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCSPLC2004-10-31-12.12.01.000007 b 115341000 |
| Data Group Summary | =DS0002SUM0004 |
| Data Group Header | *DH0003 ECC |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCDU582004-10-31-12.12.01.000007 b 20071030 |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCDU132004-10-31-12.12.01.000007 b 20051030 |
| Data Group Summary | =DS0003SUM0002 |
| Control Group Summary | =CS6543210003 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

16.7 Message Examples For Nullification of Air Brake Test Inspection

NOTE: The transactions sent for nullification will depend on the inspection history of the equipment. The following shows what transactions are received depending on the equipment's air brake test history.

| # of inspections in history for equipment (besides transaction being nullified) | Transactions received |
|---|--|
| 0 | ABN – Air brake test nullification |
| 1 | ABN – Air brake test nullification ABT – Air brake test |
| 2 or more | ABN – Air brake test nullification ABT – Air brake test ABP – Prior air brake test |

In the examples below, the shaded area **b** represents a value of space.

16.7.1 UMLRC00 – Nullification for equipment with prior Air Brake Test history

| Inbound UMLRC00 TRAIN II message to report a nullification ABT inspection for a piece of equipment: | |
|---|--|
| Message Header | #ABCD bbbb 0001UMLRC000410311212RRDC bbbb / |
| Control Group Header | *CH12345620041031121200USERID bb |
| Data Group Header | *DH0001 ABN |
| Detail Record | + 0001 b ABCD0000123456REPT b ABCD |
| Detail Record | + 0001 b ABCD0000123456PERF b ABCD |
| Detail Record | + 0001 b ABCD0000123456DTDN b 20041030 |
| Detail Record | + 0001 b ABCD0000123456SPLC b 115341000 |
| Data Group Summary | =DS0001SUM0004 |
| Control Group Summary | =CS1234560001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

Umler TRAIN II Messaging Specifications

16.7.2 UMLRC60

| Outbound UMLRC60 TRAIN II message sent in response to a nullification of an ABT inspection | |
|--|--|
| Message Header | #RRDC bbbb 0001 UMLRC60 0410311212ABCD bbbb / |
| Control Group Header | *CH65432120041031121200USERID bb ABCD12345620041031121200 |
| Data Group Header | *DH0001 ABN |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCREPT b ABCD |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCPERF b ABCD |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCDTDN b 20041030 |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCSPLC b 115341000 |
| Data Group Summary | =DS0001SUM0004 |
| Data Group Header | *DH0002 ABT |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCREPT b ABCD |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCPERF b ABCD |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCDTDN b 20021030 |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCSPLC b 115341000 |
| Data Group Summary | =DS0002SUM0004 |
| Data Group Header | *DH0003 ABP |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCREPT b ABCD |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCPERF b ABCD |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCDTDN b 20001030 |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCSPLC b 111111000 |
| Data Group Summary | =DS0003SUM0004 |
| Data Group Header | *DH0004 ECC |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCDU58 b 20071030 |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCDU13 b 20051030 |
| Data Group Summary | =DS0004SUM0002 |
| Control Group Summary | =CS6543210004 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

Umler TRAIN II Messaging Specifications

16.7.3 UMLRC61

| Outbound UMLRC61 TRAIN II message sent in response to a nullification of an ABT inspection | |
|--|--|
| Message Header | #RRDC bbbb 0001 UMLRC61 0410311212ABCD bbbb / |
| Control Group Header | *CH65432120041031121200USERID bb ABCD12345620041031121200 |
| Data Group Header | *DH0001 ABN |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCREPT2004-10-31-12.12.01.000004 b ABCD |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCPERF2004-10-31-12.12.01.000004 b ABCD |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCDTDN2004-10-31-12.12.01.000004 b 20041030 |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCSPLC2004-10-31-12.12.01.000004 b 115341000 |
| Data Group Summary | =DS0001SUM0004 |
| Data Group Header | *DH0002 ABT |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCREPT2004-10-31-12.12.01.000004 b ABCD |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCPERF2004-10-31-12.12.01.000005 b ABCD |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCDTDN2004-10-31-12.12.01.000006 b 20021030 |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCSPLC2004-10-31-12.12.01.000007 b 115341000 |
| Data Group Summary | =DS0002SUM0004 |
| Data Group Header | *DH0003 ABP |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCREPT2004-10-31-12.12.01.000004 b ABCD |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCPERF2004-10-31-12.12.01.000005 b ABCD |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCDTDN2004-10-31-12.12.01.000006 b 20001030 |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCSPLC2004-10-31-12.12.01.000007 b 115341000 |
| Data Group Summary | =DS0003SUM0004 |
| Data Group Header | *DH0004 ECC |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCDU582004-10-31-12.12.01.000007 b 20071030 |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCDU132004-10-31-12.12.01.000007 b 20051030 |
| Data Group Summary | =DS0004SUM0002 |
| Control Group Summary | =CS6543210004 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

Umler TRAIN II Messaging Specifications

16.7.4 UMLRC00 – Nullification for equipment without prior Air Brake Test history

| Inbound UMLRC00 TRAIN II message to report a nullification ABT inspection for a piece of equipment: | |
|---|--|
| Message Header | #ABCD bbbb 0001 UMLRC00 0410311212RRDC bbbb / |
| Control Group Header | *CH12345620041031121200USERID bb |
| Data Group Header | *DH0001 ABN |
| Detail Record | + 0001 b ABCD0000123456REPT b ABCD |
| Detail Record | + 0001 b ABCD0000123456PERF b ABCD |
| Detail Record | + 0001 b ABCD0000123456DTDN b 20041030 |
| Detail Record | + 0001 b ABCD0000123456SPLC b 115341000 |
| Data Group Summary | =DS0001SUM0004 |
| Control Group Summary | =CS1234560001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

Umler TRAIN II Messaging Specifications

16.7.5 UMLRC60

| Outbound UMLRC60 TRAIN II message sent in response to a nullification of an ABT inspection | |
|--|--|
| Message Header | #RRDC bbbb 0001 UMLRC60 0410311212ABCD bbbb / |
| Control Group Header | *CH65432120041031121200USERID bb ABCD12345620041031121200 |
| Data Group Header | *DH0001 ABN |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCREPT b ABCD |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCPERF b ABCD |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCDTD b 20041030 |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCSPLC b 115341000 |
| Data Group Summary | =DS0001SUM0004 |
| Data Group Header | *DH0002 ECC |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCDU58 b 20071030 |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCDU13 b 20051030 |
| Data Group Summary | =DS0002SUM0002 |
| Control Group Summary | =CS6543210002 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

Umler TRAIN II Messaging Specifications

16.7.6 UMLRC61

| Outbound UMLRC61 TRAIN II message sent in response to a nullification of an ABT inspection | |
|--|--|
| Message Header | #RRDC bbbb 0001 UMLRC61 0410311212ABCD bbbb / |
| Control Group Header | *CH65432120041031121200USERID bb ABCD12345620041031121200 |
| Data Group Header | *DH0001 ABN |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCREPT2004-10-31-12.12.01.000004 b ABCD |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCPERF2004-10-31-12.12.01.000004 b ABCD |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCDTDN2004-10-31-12.12.01.000004 b 20041030 |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCSPLC2004-10-31-12.12.01.000004 b 115341000 |
| Data Group Summary | =DS0001SUM0004 |
| Data Group Header | *DH0002 ECC |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCDU582004-10-31-12.12.01.000007 b 20071030 |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCDU132004-10-31-12.12.01.000007 b 20051030 |
| Data Group Summary | =DS0002SUM0002 |
| Control Group Summary | =CS6543210002 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

17 Report Door Lube Inspection

17.1 Inbound Transaction Types

The following are valid values for the TRANSACTION TYPE field on the Data Group Header Record for inbound Door Lube Inspections.

| Transaction Type | Description |
|------------------|-------------------------------------|
| DLI | Door Lube Inspection. |
| DLN | Door Lube Inspection nullification. |

17.2 Outbound Transaction Types

The following are valid values for the TRANSACTION TYPE field on the Data Group Header Record for outbound Door Lube Inspections.

| Transaction Type | Description |
|------------------|--|
| DLI | Door Lube inspection. |
| ECC | Equipment characteristic change to send due date of next door lube inspection. |
| DLN | Door Lube Inspection nullification. |

17.3 Input Element IDs

The following are the valid values for element ID for Door Lube Inspections on an inbound UMLRC00 message.

| Element ID | Description | Format | Length | Mandatory/ Optional |
|------------|-------------|--------------------|--------|------------------------|
| REPT | Reporter | character | 4 | mandatory |
| PERF | Performer | character | 4 | mandatory |
| SPLC | SPLC | character | 9 | mandatory |
| DTDN | Date Done | date (CCYYMMDD) | 8 | mandatory |

Umler TRAIN II Messaging Specifications

17.4 Output Element IDs

The following are the valid values for element ID for Door Lube Inspections on outbound UMLRC60/UMLRC61 messages.

A transaction type of 'DLI' or 'DLN' will send the following elements.

| Element ID | Description | Format | Length |
|------------|-------------|--------------------|--------|
| REPT | Reporter | character | 4 |
| PERF | Performer | character | 4 |
| SPLC | SPLC | character | 9 |
| DTDN | Date Done | date (CCYYMMDD) | 8 |

A transaction type of 'ECC' will send the new door lube due date.

| Element ID | Description | Format | Length |
|------------|--------------------|--------------------|--------|
| DUDL | Door Lube Due Date | date (CCYYMMDD) | 8 |

17.5 Detail Record Format

Refer to Appendix Q – Detail Record Format for Equipment for a description of the detail record format for equipment related transactions.

17.6 Message Examples For Reporting of Door Lube Inspections

In the examples below, the shaded area **b** represents a value of space.

17.6.1 UMLRC00

| Inbound UMLRC00 TRAIN II message to report a Door Lube Inspection for a piece of equipment: | |
|---|--|
| Message Header | #ABCD bbb 0001 UMLRC00 0410311212RRDC bbb / |
| Control Group Header | *CH12345620041031121200USERID bb |
| Data Group Header | *DH0001 DLI |
| Detail Record | + 0001 b ABCD0000123456REPT b ABCD |
| Detail Record | + 0001 b ABCD0000123456PERF b ABCD |
| Detail Record | + 0001 b ABCD0000123456DTDN b 20041030 |
| Detail Record | + 0001 b ABCD0000123456SPLC b 115341000 |
| Data Group Summary | =DS0001SUM0004 |
| Control Group Summary | =CS1234560001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

17.6.2 UMLRC60

| Outbound UMLRC60 TRAIN II message to report a Door Lube Inspection for a piece of equipment: | |
|--|--|
| Message Header | #RRDC bbb 0001 UMLRC60 0410311212ABCD bbb / |
| Control Group Header | *CH65432120041031121200USERID bb ABCD12345620041031121200 |
| Data Group Header | *DH0001 DLI |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCREPT b ABCD |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCPERF b ABCD |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCDTDN b 20041030 |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCSPLC b 115341000 |
| Data Group Summary | =DS0001SUM0004 |
| Data Group Header | *DH0002 ECC |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCDUDL b 20071030 |
| Data Group Summary | =DS0002SUM0001 |
| Control Group Summary | =CS6543210002 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

Umler TRAIN II Messaging Specifications

17.6.3 UMLRC61

| Outbound UMLRC61 TRAIN II message to report a Door Lube Inspection for a piece of equipment: | |
|--|--|
| Message Header | #RRDC bbbb 0001 UMLRC61 0410311212ABCD bbbb / |
| Control Group Header | *CH65432120041031121200USERID bb ABCD12345620041031121200 |
| Data Group Header | *DH0001 DLI |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCREPT2004-10-31-12.12.01.000004 b ABCD |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCPERF2004-10-31-12.12.01.000005 b ABCD |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCDTDN2004-10-31-12.12.01.000006 b 20041030 |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCSPLC2004-10-31-12.12.01.000007 b 115341000 |
| Data Group Summary | =DS0001SUM0004 |
| Data Group Header | *DH0002 ECC |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCDUDL2004-10-31-12.12.01.000007 b 20071030 |
| Data Group Summary | =DS0002SUM0001 |
| Control Group Summary | =CS6543210002 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

17.7 Message Examples For Nullification of Door Lube Inspection

In the examples below, the shaded area **b** represents a value of space.

NOTE: The transactions sent for nullification will depend on the inspection history of the equipment. The following shows what transactions are received depending on the equipment's door lube inspection history.

| # of inspections in history for equipment (besides transaction being nullified) | Transactions received |
|---|--|
| 0 | DLN – Door Lube Inspection nullification |
| 1 or more | DLN – Door lube inspection nullification DLI – Door lube inspection |

17.7.1 UMLRC00

| Inbound UMLRC00 TRAIN II message to report a nullification Door Lube Inspection for a piece of equipment: | |
|---|---|
| Message Header | #ABCD bbbb 0001UMLRC000410311212RRDC bbbb / |
| Control Group Header | *CH12345620041031121200USERID bb |
| Data Group Header | *DH0001 DLN |
| Detail Record | +0001 b ABCD0000123456REPT b ABCD |
| Detail Record | +0001 b ABCD0000123456PERF b ABCD |
| Detail Record | +0001 b ABCD0000123456DTDN b 20041030 |
| Detail Record | +0001 b ABCD0000123456SPLC b 115341000 |
| Data Group Summary | =DS0001SUM0004 |
| Control Group Summary | =CS1234560001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

Umler TRAIN II Messaging Specifications

17.7.2 UMLRC60

| Outbound UMLRC60 TRAIN II message sent in response to a nullification of a door lube inspection | |
|---|---|
| Message Header | #RRDCbbb0001UMLRC600410311212ABCDbbb/ |
| Control Group Header | *CH65432120041031121200USERIDbbABCD12345620041031121200 |
| Data Group Header | *DH0001DLN |
| Detail Record | +0001bABCD00001234560002bBOXCREPTbABCD |
| Detail Record | +0001bABCD00001234560002bBOXCPERFbABCD |
| Detail Record | +0001bABCD00001234560002bBOXCDTDNb20041030 |
| Detail Record | +0001bABCD00001234560002bBOXCSPLCb115341000 |
| Data Group Summary | =DS0001SUM0004 |
| Data Group Header | *DH0002DLI |
| Detail Record | +0001bABCD00001234560002bBOXCREPTbABCD |
| Detail Record | +0001bABCD00001234560002bBOXCPERFbABCD |
| Detail Record | +0001bABCD00001234560002bBOXCDTDNb20021030 |
| Detail Record | +0001bABCD00001234560002bBOXCSPLCb115341000 |
| Data Group Summary | =DS0002SUM0004 |
| Data Group Header | *DH0003ECC |
| Detail Record | +0001bABCD00001234560002bBOXCDUDLb20071030 |
| Data Group Summary | =DS0003SUM0001 |
| Control Group Summary | =CS6543210003 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

Umler TRAIN II Messaging Specifications

17.7.3 UMLRC61

| Outbound UMLRC61 TRAIN II message sent in response to a nullification of a door lube inspection | |
|---|--|
| Message Header | #RRDC bbbb 0001 UMLRC61 0410311212ABCD bbbb / |
| Control Group Header | *CH65432120041031121200USERID bb ABCD12345620041031121200 |
| Data Group Header | *DH0001DLN |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCREPT2004-10-31-12.12.01.000004 b ABCD |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCPERF2004-10-31-12.12.01.000004 b ABCD |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCDTDN2004-10-31-12.12.01.000004 b 20041030 |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCSPLC2004-10-31-12.12.01.000004 b 115341000 |
| Data Group Summary | =DS0001SUM0004 |
| Data Group Header | *DH0002DLI |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCREPT2004-10-31-12.12.01.000004 b ABCD |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCPERF2004-10-31-12.12.01.000004 b ABCD |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCDTDN2004-10-31-12.12.01.000004 b 20021030 |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCSPLC2004-10-31-12.12.01.000004 b 115341000 |
| Data Group Summary | =DS0002SUM0004 |
| Data Group Header | *DH0003 ECC |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCDUDL2004-10-31-12.12.01.000004 b 20071030 |
| Data Group Summary | =DS0003SUM0001 |
| Control Group Summary | =CS6543210003 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

18 Autorack Repair (Activity Type 992)

18.1 Inbound Transaction Types

The following are valid values for the TRANSACTION TYPE field on the Data Group Header Record for inbound autorack repair transactions.

| Transaction Type | Description |
|------------------|--------------------------------|
| ARR | Autorack repair. |
| ARN | Autorack repair nullification. |

18.2 Outbound Transaction Types

The following are valid values for the TRANSACTION TYPE field on the Data Group Header Record for outbound autorack repair transactions.

| Transaction Type | Description |
|------------------|--------------------------------|
| ARR | Autorack repair. |
| ARN | Autorack repair nullification. |

18.3 Input Element IDs

The following are the valid values for element ID for autorack repair transactions on an inbound UMLRC00 message.

| Element ID | Description | Format | Length | Mandatory/ Optional |
|------------|-------------|--------------------|--------|------------------------|
| REPT | Reporter | character | 4 | mandatory |
| PERF | Performer | character | 4 | mandatory |
| SPLC | SPLC | character | 9 | mandatory |
| DTDN | Date Done | date (CCYYMMDD) | 8 | mandatory |

18.4 Output Element IDs

The following are the valid values for element ID for autorack repairs on outbound UMLRC60/UMLRC61 messages.

A transaction type of 'ARR' or 'ARN' will send will send the following elements.

| Element ID | Description | Format | Length |
|------------|-------------|--------------------|--------|
| REPT | Reporter | character | 4 |
| PERF | Performer | character | 4 |
| SPLC | SPLC | character | 9 |
| DTDN | Date Done | date (CCYYMMDD) | 8 |

18.5 Detail Record Format

Refer to [Appendix Q – Detail Record format for equipment](#) for a description of the detail record format for equipment related transactions.

18.6 Message Examples For Reporting Autorack Repair

In the examples below, the shaded area **b** represents a value of space.

18.6.1 UMLRC00

| Inbound UMLRC00 TRAIN II message to report an autorack repair for a piece of equipment: | |
|---|--|
| Message Header | #ABCD bbbb 0001 UMLRC00 0410311212RRDC bbbb / |
| Control Group Header | *CH12345620041031121200USERID bb |
| Data Group Header | *DH0001 ARR |
| Detail Record | + 0001 b ABCD0000123456REPT b ABCD |
| Detail Record | + 0001 b ABCD0000123456PERF b ABCD |
| Detail Record | + 0001 b ABCD0000123456DTDN b 20041030 |
| Detail Record | + 0001 b ABCD0000123456SPLC b 115341000 |
| Data Group Summary | =DS0001SUM0004 |
| Control Group Summary | =CS1234560001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

18.6.2 UMLRC60

| Outbound UMLRC60 TRAIN II message to report an autorack repair for a piece of equipment: | |
|--|--|
| Message Header | #RRDC bbbb 0001 UMLRC60 0410311212ABCD bbbb / |
| Control Group Header | *CH65432120041031121200USERID bb ABCD12345620041031121200 |
| Data Group Header | *DH0001 ARR |
| Detail Record | + 0001 b ABCD00001234560002 b VFLTREPT b ABCD |
| Detail Record | + 0001 b ABCD00001234560002 b VFLTPERF b ABCD |
| Detail Record | + 0001 b ABCD00001234560002 b VFLTDTDN b 20041030 |
| Detail Record | + 0001 b ABCD00001234560002 b VFLTSPLC b 115341000 |
| Data Group Summary | =DS0001SUM0004 |
| Control Group Summary | =CS6543210001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

18.6.3 UMLRC61

| Outbound UMLRC61 TRAIN II message to report an autorack repair for a piece of equipment: | |
|--|--|
| Message Header | #RRDC bbbb 0001 UMLRC61 0410311212ABCD bbbb / |
| Control Group Header | *CH65432120041031121200USERID bb ABCD12345620041031121200 |
| Data Group Header | *DH0001 ARR |
| Detail Record | + 0001 b ABCD00001234560002 b VFLTREPT2004-10-31-12.12.01.000004 b ABCD |
| Detail Record | + 0001 b ABCD00001234560002 b VFLTPERF2004-10-31-12.12.01.000005 b ABCD |
| Detail Record | + 0001 b ABCD00001234560002 b VFLTDTDN2004-10-31-12.12.01.000006 b 20041030 |
| Detail Record | + 0001 b ABCD00001234560002 b VFLTSPLC2004-10-31-12.12.01.000007 b 115341000 |
| Data Group Summary | =DS0001SUM0004 |
| Control Group Summary | =CS6543210001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

18.7 Message Examples For Nullification of Autorack Repair

In the examples below, the shaded area **b** represents a value of space.

NOTE: The only transaction sent for nullification will be the nullification transaction. No prior autorack repair history is sent on the outbound messages.

| # of inspections in history for equipment (besides transaction being nullified) | Transactions received |
|---|-------------------------------------|
| 0 or more | ARN – Autorack repair nullification |

18.7.1 UMLRC00

| Inbound UMLRC00 TRAIN II message to report a nullification autorack repair for a piece of equipment: | |
|--|--|
| Message Header | #ABCD bbbb 0001 UMLRC00 0410311212RRDC bbbb / |
| Control Group Header | *CH12345620041031121200USERID bb |
| Data Group Header | *DH0001 ARN |
| Detail Record | + 0001 b ABCD0000123456REPT b ABCD |
| Detail Record | + 0001 b ABCD0000123456PERF b ABCD |
| Detail Record | + 0001 b ABCD0000123456DTDN b 20041030 |
| Detail Record | + 0001 b ABCD0000123456SPLC b 115341000 |
| Data Group Summary | =DS0001SUM0004 |
| Control Group Summary | =CS1234560001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

18.7.2 UMLRC60

| Outbound UMLRC60 TRAIN II message sent in response to a nullification of an autorack repair | |
|---|--|
| Message Header | #RRDC bbbb 0001 UMLRC60 0410311212ABCD bbbb / |
| Control Group Header | *CH65432120041031121200USERID bb ABCD12345620041031121200 |
| Data Group Header | *DH0001 ARN |
| Detail Record | + 0001 b ABCD00001234560002 b VFLTREPT b ABCD |
| Detail Record | + 0001 b ABCD00001234560002 b VFLTPERF b ABCD |
| Detail Record | + 0001 b ABCD00001234560002 b VFLTDTDN b 20041030 |
| Detail Record | + 0001 b ABCD00001234560002 b VFLTSPLC b 115341000 |
| Data Group Summary | =DS0001SUM0004 |
| Control Group Summary | =CS6543210001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

Umler TRAIN II Messaging Specifications

18.7.3 UMLRC61

| Outbound UMLRC61 TRAIN II message sent in response to a nullification of an autorack repair: | |
|--|--|
| Message Header | #RRDC bbbb 0001 UMLRC61 0410311212ABCD bbbb / |
| Control Group Header | *CH65432120041031121200USERID bb ABCD12345620041031121200 |
| Data Group Header | *DH0001ARN |
| Detail Record | + 0001 b ABCD00001234560002 b VFLTREPT2004-10-31-12.12.01.000004 b ABCD |
| Detail Record | + 0001 b ABCD00001234560002 b VFLTPERF2004-10-31-12.12.01.000004 b ABCD |
| Detail Record | + 0001 b ABCD00001234560002 b VFLTDTDN2004-10-31-12.12.01.000004 b 20041030 |
| Detail Record | + 0001 b ABCD00001234560002 b VFLTSPLC2004-10-31-12.12.01.000004 b 115341000 |
| Data Group Summary | =DS0001SUM0004 |
| Control Group Summary | =CS6543210001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

19 Autorack Certification (Activity Type 970)

19.1 Inbound Transaction Types

The following are valid values for the TRANSACTION TYPE field on the Data Group Header Record for inbound autorack certification transactions.

| Transaction Type | Description |
|------------------|-------------------------|
| ARC | Autorack certification. |

19.2 Outbound Transaction Types

The following are valid values for the TRANSACTION TYPE field on the Data Group Header Record for outbound autorack certification transactions.

| Transaction Type | Description |
|------------------|---|
| ARC | Autorack certification. |
| ECC | Equipment characteristic change to notify new due date. |
| ACN | Autorack certification nullification. The nullification of a certification can only be performed on the Umler website. The ACN transaction is sent as a notification of the web activity. |

19.3 Input Element IDs

The following are the valid values for element ID for autorack certification transactions on an inbound UMLRC00 message.

| Element ID | Description | Format | Length | Mandatory/ Optional |
|------------|-------------|--------------------|--------|------------------------|
| REPT | Reporter | character | 4 | mandatory |
| PERF | Performer | character | 4 | mandatory |
| SPLC | SPLC | character | 9 | mandatory |
| DTDN | Date Done | date (CCYYMMDD) | 8 | mandatory |

Umler TRAIN II Messaging Specifications

19.4 Output Element IDs

The following are the valid values for element ID for autorack certifications on outbound UMLRC60/UMLRC61 messages.

A transaction type of 'ARC' or 'ACN' will send the will send the following elements.

| Element ID | Description | Format | Length |
|------------|-------------|--------------------|--------|
| REPT | Reporter | character | 4 |
| PERF | Performer | character | 4 |
| SPLC | SPLC | character | 9 |
| DTDN | Date Done | date (CCYYMMDD) | 8 |

A transaction type of 'ECC' will send the will send the following element.

| Element ID | Description | Format | Length |
|------------|------------------------------|-----------|--------|
| DUAI | Autorack Inspection Due Date | character | 8 |

19.5 Detail Record Format

Refer to Appendix Q – Detail Record Format for Equipment for a description of the detail record format for equipment related transactions.

19.6 Message Examples For Autorack Certification

In the examples below, the shaded area **b** represents a value of space.

19.6.1 UMLRC00

| Inbound UMLRC00 TRAIN II message to report an autorack certification for a piece of equipment: | |
|--|--|
| Message Header | #ABCD bbbb 0001 UMLRC00 0410311212RRDC bbbb / |
| Control Group Header | *CH12345620041031121200USERID bb |
| Data Group Header | *DH0001 ARC |
| Detail Record | + 0001 b ABCD0000123456REPT b ABCD |
| Detail Record | + 0001 b ABCD0000123456PERF b ABCD |
| Detail Record | + 0001 b ABCD0000123456DTDN b 20041030 |
| Detail Record | + 0001 b ABCD0000123456SPLC b 115341000 |
| Data Group Summary | =DS0001SUM0004 |
| Control Group Summary | =CS1234560001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

19.6.2 UMLRC60

| Outbound UMLRC60 TRAIN II message to report an autorack certification for a piece of equipment: | |
|---|--|
| Message Header | #RRDC bbbb 0001 UMLRC60 0410311212ABCD bbbb / |
| Control Group Header | *CH65432120041031121200USERID bb ABCD12345620041031121200 |
| Data Group Header | *DH0001 ARC |
| Detail Record | + 0001 b ABCD00001234560002 b FLATREPT b ABCD |
| Detail Record | + 0001 b ABCD00001234560002 b FLATPERF b ABCD |
| Detail Record | + 0001 b ABCD00001234560002 b FLATDTDN b 20041030 |
| Detail Record | + 0001 b ABCD00001234560002 b FLATSPLC b 115341000 |
| Data Group Summary | =DS0001SUM0004 |
| Data Group Header | *DH0002ECC |
| Detail Record | + 0001 b ABCD00001234560002 b FLATDUA b 20061030 |
| Data Group Summary | =DS0002SUM0001 |
| Control Group Summary | =CS6543210002 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

Umler TRAIN II Messaging Specifications

19.6.3 UMLRC61

| Outbound UMLRC61 TRAIN II message to report an autorack certification for a piece of equipment: | |
|---|--|
| Message Header | #RRDC bbbb 0001 UMLRC61 0410311212ABCD bbbb / |
| Control Group Header | *CH65432120041031121200USERID bb ABCD12345620041031121200 |
| Data Group Header | *DH0001 ARC |
| Detail Record | + 0001 b ABCD00001234560002 b FLATREPT2004-10-31-12.12.01.000004 b ABCD |
| Detail Record | + 0001 b ABCD00001234560002 b FLATPERF2004-10-31-12.12.01.000005 b ABCD |
| Detail Record | + 0001 b ABCD00001234560002 b FLATDTDN2004-10-31-12.12.01.000006 b 20041030 |
| Detail Record | + 0001 b ABCD00001234560002 b FLATSPLC2004-10-31-12.12.01.000007 b 115341000 |
| Data Group Summary | =DS0001SUM0004 |
| Data Group Header | *DH0002ECC |
| Detail Record | + 0001 b ABCD00001234560002 b FLATDUAI2004-10-31-12.12.01.000007 b 20061030 |
| Data Group Summary | =DS0002SUM0001 |
| Control Group Summary | =CS6543210002 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

19.7 Message Examples For Nullification of Autorack Certification

In the examples below, the shaded area **b** represents a value of space.

NOTE: The transactions sent for nullification will depend on the inspection history of the equipment. The following shows what transactions are received depending on the equipment's autorack certification history.

| # of inspections in history for equipment (besides transaction being nullified) | Transactions received |
|---|--|
| 0 or more | ACN – Autorack certification nullification |

19.7.1 UMLRC00

| Inbound UMLRC00 TRAIN II message to report a nullification autorack certification for a piece of equipment: | |
|---|--|
| Message Header | #ABCD bbbb 0001 UMLRC00 0410311212RRDC bbbb / |
| Control Group Header | *CH12345620041031121200USERID bb |
| Data Group Header | *DH0001 ACN |
| Detail Record | + 0001 b ABCD0000123456REPT b ABCD |
| Detail Record | + 0001 b ABCD0000123456PERF b ABCD |
| Detail Record | + 0001 b ABCD0000123456DTDN b 20041030 |
| Detail Record | + 0001 b ABCD0000123456SPLC b 115341000 |
| Data Group Summary | =DS0001SUM0004 |
| Control Group Summary | =CS1234560001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

Umler TRAIN II Messaging Specifications

19.7.2 UMLRC60

| Outbound UMLRC60 TRAIN II message sent in response to a nullification of an autorack certification: | |
|---|--|
| Message Header | #RRDC bbbb 0001 UMLRC60 0410311212ABCD bbbb / |
| Control Group Header | *CH65432120041031121200USERID bb ABCD12345620041031121200 |
| Data Group Header | *DH0001ACN |
| Detail Record | + 0001 b ABCD00001234560002 b FLATREPT b ABCD |
| Detail Record | + 0001 b ABCD00001234560002 b FLATPERF b ABCD |
| Detail Record | + 0001 b ABCD00001234560002 b FLATDTDN b 20041030 |
| Detail Record | + 0001 b ABCD00001234560002 b FLATSPLC b 115341000 |
| Data Group Summary | =DS0001SUM0004 |
| Data Group Header | *DH0002ECC |
| Detail Record | + 0001 b ABCD00001234560002 b FLATDUA b 20061030 |
| Data Group Summary | =DS0002SUM0001 |
| Control Group Summary | =CS6543210002 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

Umler TRAIN II Messaging Specifications

19.7.3 UMLRC61

| Outbound UMLRC61 TRAIN II message sent in response to a nullification of an autorack certification: | |
|---|--|
| Message Header | #RRDC bbbb 0001 UMLRC61 0410311212ABCD bbbb / |
| Control Group Header | *CH65432120041031121200USERID bb ABCD12345620041031121200 |
| Data Group Header | *DH0001ACN |
| Detail Record | + 0001 b ABCD00001234560002 b FLATREPT2004-10-31-12.12.01.000004 b ABCD |
| Detail Record | + 0001 b ABCD00001234560002 b FLATPERF2004-10-31-12.12.01.000004 b ABCD |
| Detail Record | + 0001 b ABCD00001234560002 b FLATDTDN2004-10-31-12.12.01.000004 b 20041030 |
| Detail Record | + 0001 b ABCD00001234560002 b FLATSPLC2004-10-31-12.12.01.000004 b 115341000 |
| Data Group Summary | =DS0001SUM0004 |
| Data Group Header | *DH0002ECC |
| Detail Record | + 0001 b ABCD00001234560002 b FLATDUAI2004-10-31-12.12.01.000007 b 20061030 |
| Data Group Summary | =DS0002SUM0001 |
| Control Group Summary | =CS6543210002 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

20 Autorack Inspection (Activity Type 970A)

20.1 Inbound Transaction Types

The following are valid values for the TRANSACTION TYPE field on the Data Group Header Record for inbound autorack inspection transactions.

| Transaction Type | Description |
|------------------|------------------------------------|
| ARI | Autorack inspection. |
| AIN | Autorack inspection nullification. |

20.2 Outbound Transaction Types

The following are valid values for the TRANSACTION TYPE field on the Data Group Header Record for outbound autorack inspection transactions.

| Transaction Type | Description |
|------------------|--|
| ARI | Autorack inspection. |
| ECC | Equipment characteristic change to notify new due date and category. |
| AIN | Autorack inspection nullification. |

Umler TRAIN II Messaging Specifications

20.3 Input Element IDs

The following are the valid values for element ID for autorack inspection transactions on an inbound UMLRC00 message.

| Element ID | Description | Format | Length | Mandatory/ Optional |
|-------------------|-----------------------|--------------------|---------------|--------------------------------|
| REPT | Reporter | character | 4 | mandatory |
| PERF | Performer | character | 4 | mandatory |
| SPLC | SPLC | character | 9 | mandatory |
| DTDN | Date Done | date (CCYYMMDD) | 8 | mandatory |
| INID | Inspector ID | character | 4 | mandatory |
| EXRS | Exterior Roof Sheets | character | 1 | mandatory |
| EXSS | Exterior Side Screens | character | 1 | mandatory |
| INSI | Interior Side Posts | character | 1 | mandatory |
| TPDS | Top Deck Surface | character | 1 | mandatory |
| UNOD | Underside of Deck | character | 1 | mandatory |
| EXSP | Exterior Shear Panel | character | 1 | mandatory |
| INSP | Interior Shear Panel | character | 1 | mandatory |
| EXDR | Exterior Door | character | 1 | mandatory |
| INDR | Interior Door | character | 1 | mandatory |

20.4 Output Element IDs

The following are the valid values for element ID for autorack inspection on outbound UMLRC60/UMLRC61 messages.

A transaction type of ‘ARI’ or ‘AIN’ will send the following elements.

| Element ID | Description | Format | Length |
|------------|-------------|--------------------|--------|
| REPT | Reporter | character | 4 |
| PERF | Performer | character | 4 |
| SPLC | SPLC | character | 9 |
| DTDN | Date Done | date (CCYYMMDD) | 8 |

A transaction type of ‘ECC’ will send the new autorack inspection due date.

| Element ID | Description | Format | Length |
|------------|-------------------------------|--------------------|--------|
| DUAI | Autorack Inspection Due Date. | date (CCYYMMDD) | 8 |
| ARCG | Autorack category. | character | 1 |

20.5 Detail Record Format

Refer to Appendix Q – Detail Record Format for Equipment for a description of the detail record format for equipment related transactions.

20.6 Message Examples For Autorack Inspection

In the examples below, the shaded area **b** represents a value of space.

20.6.1 UMLRC00

| Inbound UMLRC00 TRAIN II message to report an autorack inspection for a piece of equipment: | |
|---|--|
| Message Header | #ABCD bbbb 0001 UMLRC00 0410311212RRDC bbbb / |
| Control Group Header | *CH12345620041031121200USERID bb |
| Data Group Header | *DH0001 ARI |
| Detail Record | + 0001 b ABCD0000123456REPT b ABCD |
| Detail Record | + 0001 b ABCD0000123456PERF b ABCD |
| Detail Record | + 0001 b ABCD0000123456DTDN b 20041030 |
| Detail Record | + 0001 b ABCD0000123456SPLC b 115341000 |
| Detail Record | + 0001 b ABCD0000123456INID b ABCD |
| Detail Record | + 0001 b ABCD0000123456EXRS b 1 |
| Detail Record | + 0001 b ABCD0000123456EXSS b 1 |
| Detail Record | + 0001 b ABCD0000123456INSI b 1 |
| Detail Record | + 0001 b ABCD0000123456TPDS b 1 |
| Detail Record | + 0001 b ABCD0000123456UNOD b 1 |
| Detail Record | + 0001 b ABCD0000123456EXSP b 1 |
| Detail Record | + 0001 b ABCD0000123456INSP b 1 |
| Detail Record | + 0001 b ABCD0000123456EXDR b 1 |
| Detail Record | + 0001 b ABCD0000123456INDR b 1 |
| Data Group Summary | =DS0001SUM0014 |
| Control Group Summary | =CS1234560001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

Umler TRAIN II Messaging Specifications

20.6.2 UMLRC60

| Outbound UMLRC60 TRAIN II message to report an autorack inspection for a piece of equipment: | |
|--|--|
| Message Header | #RRDC bbbb 0001 UMLRC60 0410311212ABCD bbbb / |
| Control Group Header | *CH65432120041031121200USERID bb ABCD12345620041031121200 |
| Data Group Header | *DH0001 ARI |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCREPT b ABCD |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCPERF b ABCD |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCDTDN b 20041030 |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCSPLC b 115341000 |
| Data Group Summary | =DS0001SUM0004 |
| Data Group Header | *DH0002 ECC |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCDUAI b 20071030 |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCARCG b 1 |
| Data Group Summary | =DS0002SUM0002 |
| Control Group Summary | =CS6543210002 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

20.6.3 UMLRC61

| Outbound UMLRC61 TRAIN II message to report an autorack inspection for a piece of equipment: | |
|--|--|
| Message Header | #RRDC bbbb 0001 UMLRC61 0410311212ABCD bbbb / |
| Control Group Header | *CH65432120041031121200USERID bb ABCD12345620041031121200 |
| Data Group Header | *DH0001 ARI |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCREPT2004-10-31-12.12.01.000004 b ABCD |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCPERF2004-10-31-12.12.01.000005 b ABCD |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCDTDN2004-10-31-12.12.01.000006 b 20041030 |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCSPLC2004-10-31-12.12.01.000007 b 115341000 |
| Data Group Summary | =DS0001SUM0004 |
| Data Group Header | *DH0002 ECC |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCDUAI2004-10-31-12.12.01.000007 b 20071030 |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCARCG2004-10-31-12.12.01.000007 b 1 |
| Data Group Summary | =DS0002SUM0002 |
| Control Group Summary | =CS6543210002 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

20.7 Message Examples For Nullification of Autorack Inspection

In the examples below, the shaded area **b** represents a value of space.

NOTE: The transactions sent for nullification will depend on the inspection history of the equipment. The following shows what transactions are received depending on the equipment's autorack inspection history.

| # of inspections in history for equipment (besides transaction being nullified) | Transactions received |
|---|---|
| 0 or more | AIN – Autorack inspection nullification |

20.7.1 UMLRC00

| Inbound UMLRC00 TRAIN II message to report a nullification autorack inspection for a piece of equipment: | |
|--|---|
| Message Header | #ABCD b bbb0001UMLRC000410311212RRDC b bbb/ |
| Control Group Header | *CH12345620041031121200USERID b b |
| Data Group Header | *DH0001 AIN |
| Detail Record | +0001 b ABCD0000123456REPT b ABCD |
| Detail Record | +0001 b ABCD0000123456PERF b ABCD |
| Detail Record | +0001 b ABCD0000123456DTDN b 20041030 |
| Detail Record | +0001 b ABCD0000123456SPLC b 115341000 |
| Detail Record | +0001 b ABCD0000123456INID b ABCD |
| Detail Record | +0001 b ABCD0000123456EXRS b 1 |
| Detail Record | +0001 b ABCD0000123456EXSS b 1 |
| Detail Record | +0001 b ABCD0000123456INS b 1 |
| Detail Record | +0001 b ABCD0000123456TPDS b 1 |
| Detail Record | +0001 b ABCD0000123456UNOD b 1 |
| Detail Record | +0001 b ABCD0000123456EXSP b 1 |
| Detail Record | +0001 b ABCD0000123456INSP b 1 |
| Detail Record | +0001 b ABCD0000123456EXDR b 1 |
| Detail Record | +0001 b ABCD0000123456INDR b 1 |
| Data Group Summary | =DS0001SUM0014 |
| Control Group Summary | =CS1234560001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

Umler TRAIN II Messaging Specifications

20.7.2 UMLRC60

| Outbound UMLRC60 TRAIN II message to nullify an autorack inspection for a piece of equipment: | |
|---|--|
| Message Header | #RRDC bbbb 0001 UMLRC60 0410311212ABCD bbbb / |
| Control Group Header | *CH65432120041031121200USERID bb ABCD12345620041031121200 |
| Data Group Header | *DH0001 AIN |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCREPT b EFGH |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCPERF b EFGH |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCDTDN b 20021030 |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCSPLC b 113341000 |
| Data Group Summary | =DS0001SUM0004 |
| Data Group Header | *DH0002 ECC |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCDUAI b 99991231 |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCARCG bb |
| Data Group Summary | =DS0002SUM0002 |
| Control Group Summary | =CS6543210002 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

Umler TRAIN II Messaging Specifications

20.7.3 UMLRC61

| Outbound UMLRC61 TRAIN II message to nullify an autorack inspection for a piece of equipment: | |
|---|--|
| Message Header | #RRDC bbbb 0001 UMLRC61 0410311212ABCD bbbb / |
| Control Group Header | *CH65432120041031121200USERID bb ABCD12345620041031121200 |
| Data Group Header | *DH0001 AIN |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCREPT2004-10-31-12.12.01.000004 b EFGH |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCPERF2004-10-31-12.12.01.000005 b EFGH |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCDTDN2004-10-31-12.12.01.000006 b 20021030 |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCSPLC2004-10-31-12.12.01.000007 b 113341000 |
| Data Group Summary | =DS0001SUM0004 |
| Data Group Header | *DH0002 ECC |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCDUAI2004-10-31-12.12.01.000007 b 20071030 |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCARCG2004-10-31-12.12.01.000007 b 1 |
| Data Group Summary | =DS0002SUM0002 |
| Control Group Summary | =CS6543210002 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

21 Report Vehicular Flat Certification

21.1 Inbound Transaction Types

The following are valid values for the TRANSACTION TYPE field on the Data Group Header Record for inbound Vehicular Flat Certifications.

| Transaction Type | Description |
|------------------|-------------------------------|
| VFC | Vehicular Flat Certification. |

21.2 Outbound Transaction Types

The following are valid values for the TRANSACTION TYPE field on the Data Group Header Record for outbound Vehicular Flat Certifications.

| Transaction Type | Description |
|------------------|--|
| VFC | Vehicular Flat Certification. |
| VFN | Vehicular flat certification nullification. The nullification of a certification can only be performed on the UMLR website. The VFN transaction is sent as a notification of the web activity. |

21.3 Input Element IDs

The following are the valid values for element ID for Vehicular Flat Certifications on an inbound UMLRC00 message.

| Element ID | Description | Format | Length | Mandatory/ Optional |
|------------|-------------|--------------------|--------|------------------------|
| REPT | Reporter | character | 4 | mandatory |
| PERF | Performer | character | 4 | mandatory |
| SPLC | SPLC | character | 9 | mandatory |
| DTDN | Date Done | date (CCYYMMDD) | 8 | mandatory |

Umler TRAIN II Messaging Specifications

21.4 Output Element IDs

The following are the valid values for element ID for Vehicular Flat Certifications on outbound UMLRC60/UMLRC61 messages.

A transaction type of 'VHC' or 'VFN' will send will send the following elements.

| Element ID | Description | Format | Length |
|------------|-------------|--------------------|--------|
| REPT | Reporter | character | 4 |
| PERF | Performer | character | 4 |
| SPLC | SPLC | character | 9 |
| DTDN | Date Done | date (CCYYMMDD) | 8 |

21.5 Detail Record Format

Refer to Appendix Q – Detail Record Format for Equipment for a description of the detail record format for equipment related transactions.

21.6 Message Examples to Report Vehicular Flat Certification

In the examples below, the shaded area **b** represents a value of space.

21.6.1 UMLRC00

| Inbound UMLRC00 TRAIN II message to report a Vehicular Flat Certification for a piece of equipment: | |
|---|---|
| Message Header | #ABCD bbbb 0001UMLRC000410311212RRDC bbbb / |
| Control Group Header | *CH12345620041031121200USERID bb |
| Data Group Header | *DH0001 VFC |
| Detail Record | +0001 b ABCD0000123456REPT b ABCD |
| Detail Record | +0001 b ABCD0000123456PERF b ABCD |
| Detail Record | +0001 b ABCD0000123456DTDN b 20041030 |
| Detail Record | +0001 b ABCD0000123456SPLC b 115341000 |
| Data Group Summary | =DS0001SUM0004 |
| Control Group Summary | =CS1234560001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

21.6.2 UMLRC60

| Outbound UMLRC60 TRAIN II message to report a Vehicular Flat Certification for a piece of equipment: | |
|--|--|
| Message Header | #RRDC bbbb 0001UMLRC600410311212ABCD bbbb / |
| Control Group Header | *CH65432120041031121200USERID bb ABCD12345620041031121200 |
| Data Group Header | *DH0001 VFC |
| Detail Record | +0001 b ABCD00001234560002 b BOXCREPT b ABCD |
| Detail Record | +0001 b ABCD00001234560002 b BOXCPERF b ABCD |
| Detail Record | +0001 b ABCD00001234560002 b BOXCDTDN b 20041030 |
| Detail Record | +0001 b ABCD00001234560002 b BOXCSPLC b 115341000 |
| Data Group Summary | =DS0001SUM0004 |
| Control Group Summary | =CS6543210001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

21.6.3 UMLRC61

| Outbound UMLRC61 TRAIN II message to report a Vehicular Flat Certification for a piece of equipment: | |
|--|--|
| Message Header | #RRDC bbbb 0001UMLRC610410311212ABCD bbbb / |
| Control Group Header | *CH65432120041031121200USERID bb ABCD12345620041031121200 |
| Data Group Header | *DH0001 VFC |
| Detail Record | +0001 b ABCD00001234560002 b BOXCREPT2004-10-31-12.12.01.000004 b ABCD |
| Detail Record | +0001 b ABCD00001234560002 b BOXCPERF2004-10-31-12.12.01.000005 b ABCD |
| Detail Record | +0001 b ABCD00001234560002 b BOXCDTDN2004-10-31-12.12.01.000006 b 20041030 |
| Detail Record | +0001 b ABCD00001234560002 b BOXCSPLC2004-10-31-12.12.01.000007 b 115341000 |
| Data Group Summary | =DS0001SUM0004 |
| Control Group Summary | =CS6543210001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

21.7 Message Examples For Nullification of Vehicular Flat Certification

In the examples below, the shaded area **b** represents a value of space.

NOTE: The transactions sent for nullification will depend on the inspection history of the equipment. The following shows what transactions are received depending on the equipment’s vehicular flat certification history.

| # of inspections in history for equipment (besides transaction being nullified) | Transactions received |
|---|--|
| 0 | VFN– Vehicular flat certification nullification |
| 1 or more | VFN – Vehicular flat certification nullification VFC – Vehicular flat certification |

21.7.1 UMLRC00

| Inbound UMLRC00 TRAIN II message to report a Vehicular Flat Certification for a piece of equipment: | |
|---|--|
| Message Header | #ABCD bbbb 0001 UMLRC00 0410311212RRDC bbbb / |
| Control Group Header | *CH12345620041031121200USERID bb |
| Data Group Header | *DH0001 VFN |
| Detail Record | + 0001 b ABCD0000123456REPT b ABCD |
| Detail Record | + 0001 b ABCD0000123456PERF b ABCD |
| Detail Record | + 0001 b ABCD0000123456DTDN b 20041030 |
| Detail Record | + 0001 b ABCD0000123456SPLC b 115341000 |
| Data Group Summary | =DS0001SUM0004 |
| Control Group Summary | =CS1234560001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

Umler TRAIN II Messaging Specifications

21.7.2 UMLRC60

| Outbound UMLRC60 TRAIN II message sent in response to a nullification of a vehicular flat certification: | |
|--|--|
| Message Header | #RRDC bbbb 0001 UMLRC60 0410311212ABCD bbbb / |
| Control Group Header | *CH65432120041031121200USERID bb ABCD12345620041031121200 |
| Data Group Header | *DH0001VFN |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCREPT b ABCD |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCPERF b ABCD |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCDTDN b 20041030 |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCSPLC b 115341000 |
| Data Group Summary | =DS0001SUM0004 |
| Data Group Header | *DH0002VFC |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCREPT b ABCD |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCPERF b ABCD |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCDTDN b 20021030 |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCSPLC b 115341000 |
| Data Group Summary | =DS0002SUM0004 |
| Control Group Summary | =CS6543210002 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

21.7.3 UMLRC61

| Outbound UMLRC61 TRAIN II message sent in response to a nullification of a vehicular flat certification: | |
|--|--|
| Message Header | #RRDC bbbb 0001 UMLRC61 0410311212ABCD bbbb / |
| Control Group Header | *CH65432120041031121200USERID bb ABCD12345620041031121200 |
| Data Group Header | *DH0001VFN |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCREPT2004-10-31-12.12.01.000004 b ABCD |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCPERF2004-10-31-12.12.01.000004 b ABCD |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCDTDN2004-10-31-12.12.01.000004 b 20041030 |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCSPLC2004-10-31-12.12.01.000004 b 115341000 |
| Data Group Summary | =DS0001SUM0004 |
| Data Group Header | *DH0002VFC |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCREPT2004-10-31-12.12.01.000004 b ABCD |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCPERF2004-10-31-12.12.01.000004 b ABCD |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCDTDN2004-10-31-12.12.01.000004 b 20021030 |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCSPLC2004-10-31-12.12.01.000004 b 115341000 |
| Data Group Summary | =DS0002SUM0004 |
| Control Group Summary | =CS6543210002 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

22 Report FRA Locomotive Inspections

22.1 Inbound Transaction Types

The following are valid values for the TRANSACTION TYPE field on the Data Group Header Record for inbound FRA Locomotive Inspections.

| Transaction Type | Description |
|------------------|---|
| CSI | 60-day cab signals inspection |
| FRA | 3-year/4-year/5-year/8.5 year FRA Locomotive Air Brake Inspection |
| FRQ | 92-day (quarterly) FRA Locomotive Inspection |
| FRY | 368-day (annual) FRA Locomotive Inspection |
| FRB | 736-day (biennial) FRA Locomotive Inspection |
| CSN | Nullification of a 60-day cab signals inspection. |
| FRN | Nullification of a 3-year/4-year/5-year/8.5 year FRA Locomotive Air Brake Inspection. |
| FQN | Nullification of a 92-day (quarterly) FRA Locomotive Inspection. |
| FYN | Nullification of a 368-day (annual) FRA Locomotive Inspection. |
| FBN | Nullification of a 736-day (biennial) FRA Locomotive Inspection. |

22.2 Outbound Transaction Types

The following are valid values for the TRANSACTION TYPE field on the Data Group Header Record for outbound FRA Locomotive Inspections.

| Transaction Type | Description |
|------------------|---|
| FRA | FRA Locomotive Inspections. |
| CSI | 60-day cab signals inspection |
| FRQ | 92-day (quarterly) FRA Locomotive Inspection |
| FRY | 368-day (annual) FRA Locomotive Inspection |
| FRB | 736-day (biennial) FRA Locomotive Inspection |
| ECC | Equipment characteristic change to notify new due date. |
| CSN | Nullification of a 60-day cab signals inspection. |
| FRN | Nullification of a 3-year/4-year/5-year/8.5 year FRA Locomotive Air Brake Inspection. |
| FQN | Nullification of a 92-day (quarterly) FRA Locomotive Inspection. |
| FYN | Nullification of a 368-day (annual) FRA Locomotive Inspection. |
| FBN | Nullification of a 736-day (biennial) FRA Locomotive Inspection. |

22.3 Input Element IDs

The following are the valid values for element ID for FRA Locomotive Inspections on an inbound UMLRC00 message.

Umler TRAIN II Messaging Specifications

| Element ID | Description | Format | Length | Mandatory/Optional |
|------------|---------------------|--------------------|--------|--------------------|
| REPT | Reporter | character | 4 | mandatory |
| PERF | Performer | character | 4 | mandatory |
| SPLC | SPLC | character | 9 | mandatory |
| DTDN | Date Done | date (CCYYMMDD) | 8 | mandatory |
| SCDD | Scheduled due date | date (CCYYMMDD) | 8 | mandatory |
| INDD | Inspection due date | date (CCYYMMDD) | 8 | mandatory |

22.4 Output Element IDs

The following are the valid values for element ID for FRA Locomotive Inspections on outbound UMLRC60/UMLRC61 messages.

FRA transactions can send the following elements. This includes transaction types: 'FRA', 'FRN', 'CSI', 'CSN', 'FRQ', 'FQN', 'FRY', 'FYN', 'FRB', and 'FBN'.

| Element ID | Description | Format | Length |
|------------|---------------------|--------------------|--------|
| REPT | Reporter | character | 4 |
| PERF | Performer | character | 4 |
| SPLC | SPLC | character | 9 |
| DTDN | Date Done | date (CCYYMMDD) | 8 |
| SCDD | Scheduled due date | date (CCYYMMDD) | 8 |
| INDD | Inspection due date | date (CCYYMMDD) | 8 |

A transaction type of 'ECC' will send the new FRA inspection due date in response to annual, quarterly, and ABT locomotive inspections.

| Element ID | Description | Format | Length |
|------------|----------------------------|--------------------|--------|
| DDNE | Current FRA drop dead date | date (CCYYMMDD) | 8 |

22.5 Detail Record Format

Refer to Appendix Q – Detail Record Format for Equipment for a description of the detail record format for equipment related transactions.

22.6 Message Examples – FRA Locomotive Inspection

In the examples below, the shaded area **b** represents a value of space. The examples below are shown for a 'FRA' 3-year/4-year/5-year/8.5 year FRA locomotive inspection. Examples are not shown for 'FRQ', 'FRY',

Umler TRAIN II Messaging Specifications

‘FRB’, and ‘CSI’ transactions because the format will be the same as the ‘FRA’ transaction except for the transaction type.

The ‘ECC’ transaction sending the new FRA drop dead date will only be sent in response to annual, quarterly, and ABT locomotive inspections. All other locomotive inspections do not generate a drop dead due date.

22.6.1 UMLRC00

| Inbound UMLRC00 TRAIN II message to report a FRA Locomotive Inspection for a piece of equipment: | |
|--|--|
| Message Header | #ABCD bbbb 0001 UMLRC00 0410311212RRDC bbbb / |
| Control Group Header | *CH12345620041031121200USERID bb |
| Data Group Header | *DH0001 FRA |
| Detail Record | + 0001 b ABCD0000123456REPT b ABCD |
| Detail Record | + 0001 b ABCD0000123456PERF b ABCD |
| Detail Record | + 0001 b ABCD0000123456DTD b 20041030 |
| Detail Record | + 0001 b ABCD0000123456SPLC b 115341000 |
| Detail Record | + 0001 b ABCD0000123456SCDD b 20061030 |
| Detail Record | + 0001 b ABCD0000123456IND b 20061030 |
| Data Group Summary | =DS0001SUM0006 |
| Control Group Summary | =CS1234560001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

22.6.2 UMLRC60

| Outbound UMLRC60 TRAIN II message to report a FRA Locomotive Inspection for a piece of equipment: | |
|---|--|
| Message Header | #RRDC bbbb 0001 UMLRC60 0410311212ABCD bbbb / |
| Control Group Header | *CH65432120041031121200USERID bb ABCD12345620041031121200 |
| Data Group Header | *DH0001 FRA |
| Detail Record | + 0001 b ABCD00001234560002 b LOCOREPT b ABCD |
| Detail Record | + 0001 b ABCD00001234560002 b LOCOPERF b ABCD |
| Detail Record | + 0001 b ABCD00001234560002 b LOCODTD b 20041030 |
| Detail Record | + 0001 b ABCD00001234560002 b LOCOSPLC b 115341000 |
| Detail Record | + 0001 b ABCD00001234560002 b LOCOSCDD b 20061030 |
| Detail Record | + 0001 b ABCD00001234560002 b LOCOIND b 20061030 |
| Data Group Summary | =DS0001SUM0006 |
| Data Group Header | *DH0002 ECC |
| Detail Record | + 0001 b ABCD00001234560002 b LOCODDNE b 20071030 |
| Data Group Summary | =DS0002SUM0001 |
| Control Group Summary | =CS6543210002 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

Umler TRAIN II Messaging Specifications

22.6.3 UMLRC61

| Outbound UMLRC61 TRAIN II message to report a FRA Locomotive Inspection for a piece of equipment: | |
|---|--|
| Message Header | #RRDC bbbb 0001 UMLRC61 0410311212ABCD bbbb / |
| Control Group Header | *CH65432120041031121200USERID bb ABCD12345620041031121200 |
| Data Group Header | *DH0001 FRA |
| Detail Record | +0001 b ABCD00001234560002 b LOCOREPT2004-10-31-12.12.01.000004 b ABCD |
| Detail Record | +0001 b ABCD00001234560002 b LOCOPERF2004-10-31-12.12.01.000005 b ABCD |
| Detail Record | +0001 b ABCD00001234560002 b LOCODTDN2004-10-31-12.12.01.000006 b 20041030 |
| Detail Record | +0001 b ABCD00001234560002 b LOCOSPLC2004-10-31-12.12.01.000007 b 115341000 |
| Detail Record | +0001 b ABCD00001234560002 b LOCOSCDD2004-10-31-12.12.01.000008 b 20061030 |
| Detail Record | +0001 b ABCD00001234560002 b LOCOINDD2004-10-31-12.12.01.000008 b 20061030 |
| Data Group Summary | =DS0001SUM0006 |
| Data Group Header | *DH0002 ECC |
| Detail Record | +0001 b ABCD00001234560002 b LOCODDNE2004-10-31-12.12.01.000008 b 20071030 |
| Data Group Summary | =DS0002SUM0001 |
| Control Group Summary | =CS6543210002 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

22.7 Message Examples For Nullification of FRA Locomotive Inspections

In the examples below, the shaded area **b** represents a value of space.

NOTE: The transactions sent for nullification will depend on the inspection history of the equipment. The following shows what transactions are received depending on the equipment's FRA locomotive inspection history.

The 'ECC' transaction sending the new FRA drop dead date will only be sent in response to annual, quarterly, and ABT locomotive inspections. All other locomotive inspections do not generate a drop dead due date.

Transaction type = 'FRN'

| # of inspections in history for equipment (besides transaction being nullified) | Transactions received |
|---|--|
| 0 | FRN- Nullification of a 3-year/4-year/5-year/8.5 year FRA Locomotive Air Brake Inspection. |
| 1 or more | FRN - Nullification of a 3-year/4-year/5-year/8.5 year FRA Locomotive Air Brake Inspection. FRA - 3-year/4-year/5-year/8.5 year FRA Locomotive Air Brake Inspection |

Transaction type = 'FQN'

| # of inspections in history for equipment (besides transaction being nullified) | Transactions received |
|---|-----------------------|
| | |

Umler TRAIN II Messaging Specifications

| | |
|-----------|--|
| 0 | FQN– Nullification of a 92-day (quarterly) FRA Locomotive Inspection. |
| 1 or more | FQN – Nullification of a 92-day (quarterly) FRA Locomotive Inspection. FRQ – 92-day (quarterly) FRA Locomotive Inspection |

Transaction type = ‘FYN’

| # of inspections in history for equipment (besides transaction being nullified) | Transactions received |
|---|--|
| 0 | FYN– Nullification of a 368-day (annual) FRA Locomotive Inspection. |
| 1 or more | FYN – Nullification of a 368-day (annual) FRA Locomotive Inspection. FRY – 368-day (annual) FRA Locomotive Inspection |

Transaction type = ‘FBN’

| # of inspections in history for equipment (besides transaction being nullified) | Transactions received |
|---|--|
| 0 | FBN– Nullification of a 736-day (biennial) FRA Locomotive Inspection. |
| 1 or more | FBN – Nullification of a 736-day (biennial) FRA Locomotive Inspection. FRB – 736-day (biennial) FRA Locomotive Inspection |

Transaction type = ‘CSN’

| # of inspections in history for equipment (besides transaction being nullified) | Transactions received |
|---|--|
| 0 | CSN– Nullification of a 60-day cab signals inspection. |
| 1 or more | CSN – Nullification of 60-day cab signals inspection. CSI – 60-day cab signals inspection |

Umler TRAIN II Messaging Specifications

22.7.1 UMLRC00

| Inbound UMLRC00 TRAIN II message to report a nullification FRA Locomotive Inspection for a piece of equipment: | |
|--|--|
| Message Header | #ABCD bbbb 0001 UMLRC00 0410311212RRDC bbbb / |
| Control Group Header | *CH12345620041031121200USERID bb |
| Data Group Header | *DH0001 FRN |
| Detail Record | + 0001 b ABCD0000123456REPT b ABCD |
| Detail Record | + 0001 b ABCD0000123456PERF b ABCD |
| Detail Record | + 0001 b ABCD0000123456DTD b 20041030 |
| Detail Record | + 0001 b ABCD0000123456SPLC b 115341000 |
| Detail Record | + 0001 b ABCD0000123456SCDD b 20051030 |
| Detail Record | + 0001 b ABCD0000123456INDD b 20051030 |
| Data Group Summary | =DS0001SUM0006 |
| Control Group Summary | =CS1234560001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

22.7.2 UMLRC60

| Outbound UMLRC60 TRAIN II message sent in response to a nullification of a FRA inspection: | |
|--|--|
| Message Header | #RRDC bbbb 0001 UMLRC60 0410311212ABCD bbbb / |
| Control Group Header | *CH65432120041031121200USERID bb ABCD12345620041031121200 |
| Data Group Header | *DH0001FRN |
| Detail Record | + 0001 b ABCD00001234560002 b LOCOREPT b ABCD |
| Detail Record | + 0001 b ABCD00001234560002 b LOCOPERF b ABCD |
| Detail Record | + 0001 b ABCD00001234560002 b LOCODTD b 20041030 |
| Detail Record | + 0001 b ABCD00001234560002 b LOCOSPLC b 115341000 |
| Detail Record | + 0001 b ABCD00001234560002 b LOCOSCDD b 20051030 |
| Detail Record | + 0001 b ABCD00001234560002 b LOCOINDD b 20051030 |
| Data Group Summary | =DS0001SUM0006 |
| Data Group Header | *DH0002FRA |
| Detail Record | + 0001 b ABCD00001234560002 b LOCOREPT b ABCD |
| Detail Record | + 0001 b ABCD00001234560002 b LOCOPERF b ABCD |
| Detail Record | + 0001 b ABCD00001234560002 b LOCODTD b 20021030 |
| Detail Record | + 0001 b ABCD00001234560002 b LOCOSPLC b 115341000 |
| Detail Record | + 0001 b ABCD00001234560002 b LOCOSCDD b 20061030 |
| Detail Record | + 0001 b ABCD00001234560002 b LOCOINDD b 20061030 |
| Data Group Summary | =DS0002SUM0006 |
| Data Group Header | *DH0003 ECC |
| Detail Record | + 0001 b ABCD00001234560002 b LOCODDNE b 20071030 |
| Data Group Summary | =DS0003SUM0001 |
| Control Group Summary | =CS6543210003 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

Umler TRAIN II Messaging Specifications

22.7.3 UMLRC61

| Outbound UMLRC61 TRAIN II message sent in response to a nullification of a FRA inspection: | |
|--|--|
| Message Header | #RRDC bbbb 0001 UMLRC61 0410311212ABCD bbbb / |
| Control Group Header | *CH65432120041031121200USERID bb ABCD12345620041031121200 |
| Data Group Header | *DH0001FRN |
| Detail Record | + 0001 b ABCD00001234560002 b LOCOREPT2004-10-31-12.12.01.000004 b ABCD |
| Detail Record | + 0001 b ABCD00001234560002 b LOCOPERF2004-10-31-12.12.01.000004 b ABCD |
| Detail Record | + 0001 b ABCD00001234560002 b LOCODTDN2004-10-31-12.12.01.000004 b 20041030 |
| Detail Record | + 0001 b ABCD00001234560002 b LOCOSPLC2004-10-31-12.12.01.000004 b 115341000 |
| Detail Record | + 0001 b ABCD00001234560002 b LOCOSCDD2004-10-31-12.12.01.000004 b 20051030 |
| Detail Record | + 0001 b ABCD00001234560002 b LOCOINDD2004-10-31-12.12.01.000004 b 20051030 |
| Data Group Summary | =DS0001SUM0006 |
| Data Group Header | *DH0002FRA |
| Detail Record | + 0001 b ABCD00001234560002 b LOCOREPT2004-10-31-12.12.01.000004 b ABCD |
| Detail Record | + 0001 b ABCD00001234560002 b LOCOPERF2004-10-31-12.12.01.000004 b ABCD |
| Detail Record | + 0001 b ABCD00001234560002 b LOCODTDN2004-10-31-12.12.01.000004 b 20021030 |
| Detail Record | + 0001 b ABCD00001234560002 b LOCOSPLC2004-10-31-12.12.01.000004 b 115341000 |
| Detail Record | + 0001 b ABCD00001234560002 b LOCOSCDD2004-10-31-12.12.01.000004 b 20061030 |
| Detail Record | + 0001 b ABCD00001234560002 b LOCOINDD2004-10-31-12.12.01.000004 b 20061030 |
| Data Group Summary | =DS0002SUM0006 |
| Data Group Header | *DH0003 ECC |
| Detail Record | + 0001 b ABCD00001234560002 b LOCODDNE2004-10-31-12.12.01.000004 b 20071030 |
| Data Group Summary | =DS0003SUM0001 |
| Control Group Summary | =CS6543210003 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

23 Report Reflectorization Event

23.1 Inbound Transaction Types

The following are valid values for the TRANSACTION TYPE field on the Data Group Header Record for inbound Reflectorization Event.

| Transaction Type | Description |
|------------------|--|
| REF | Reflectorization Event. |
| RFN | Nullification of a reflectorization event. |

23.2 Outbound Transaction Types

The following are valid values for the TRANSACTION TYPE field on the Data Group Header Record for outbound Reflectorization Event.

| Transaction Type | Description |
|------------------|---------------------------------------|
| REF | Reflectorization Event. |
| RFN | Reflectorization Event nullification. |

23.3 Input Element IDs

The following are the valid values for element ID for Reflectorization Events on an inbound UMLRC00 message.

| Element ID | Description | Format | Length | Mandatory/ Optional |
|------------|-------------|--------------------|--------|------------------------|
| REPT | Reporter | character | 4 | mandatory |
| PERF | Performer | character | 4 | mandatory |
| SPLC | SPLC | character | 9 | mandatory |
| DTDN | Date Done | date (CCYYMMDD) | 8 | mandatory |

23.4 Output Element IDs

The following are the valid values for element ID for Reflectorization Events on outbound UMLRC60/UMLRC61 messages.

A transaction type of 'REF' or 'RFN' will send the following elements.

| Element ID | Description | Format | Length |
|------------|-------------|--------------------|--------|
| REPT | Reporter | character | 4 |
| PERF | Performer | character | 4 |
| SPLC | SPLC | character | 9 |
| DTDN | Date Done | date (CCYYMMDD) | 8 |

23.5 Detail Record Format

Refer to Appendix Q – Detail Record Format for Equipment for a description of the detail record format for equipment related transactions.

23.6 Message Examples For Reporting of Reflectorization Event

In the examples below, the shaded area **b** represents a value of space.

23.6.1 UMLRC00

| Inbound UMLRC00 TRAIN II message to report a reflectorization event for a piece of equipment: | |
|---|--|
| Message Header | #ABCD bbbb 0001 UMLRC00 0410311212RRDC bbbb / |
| Control Group Header | *CH12345620041031121200USERID bb |
| Data Group Header | *DH0001REF |
| Detail Record | + 0001 b ABCD0000123456REPT b ABCD |
| Detail Record | + 0001 b ABCD0000123456PERF b ABCD |
| Detail Record | + 0001 b ABCD0000123456DTDN b 20041030 |
| Detail Record | + 0001 b ABCD0000123456SPLC b 115341000 |
| Data Group Summary | =DS0001SUM0004 |
| Control Group Summary | =CS1234560001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

23.6.2 UMLRC60

| Outbound UMLRC60 TRAIN II message to report a reflectorization event for a piece of equipment: | |
|--|--|
| Message Header | #RRDC bbbb 0001 UMLRC60 0410311212ABCD bbbb / |
| Control Group Header | *CH65432120041031121200USERID bb ABCD12345620041031121200 |
| Data Group Header | *DH0001REF |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCREPT b ABCD |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCPERF b ABCD |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCDTDN b 20041030 |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCSPLC b 115341000 |
| Data Group Summary | =DS0001SUM0001 |
| Control Group Summary | =CS6543210001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

Umler TRAIN II Messaging Specifications

23.6.3 UMLRC61

| Outbound UMLRC61 TRAIN II message to report a reflectorization event for a piece of equipment: | |
|--|--|
| Message Header | #RRDC bbbb 0001 UMLRC61 0410311212ABCD bbbb / |
| Control Group Header | *CH65432120041031121200USERID bb ABCD12345620041031121200 |
| Data Group Header | *DH0001 REF |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCREPT2004-10-31-12.12.01.000004 b ABCD |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCPERF2004-10-31-12.12.01.000005 b ABCD |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCDTDN2004-10-31-12.12.01.000006 b 20041030 |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCSPLC2004-10-31-12.12.01.000007 b 115341000 |
| Data Group Summary | =DS0001SUM0001 |
| Control Group Summary | =CS6543210001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

23.7 Message Examples For Nullification of Reflectorization Event

NOTE: The transactions sent for nullification will depend on the inspection history of the equipment. The following shows what transactions are received depending on the equipment's reflectorization event history.

| # of inspections in history for equipment (besides transaction being nullified) | Transactions received |
|---|--|
| 0 | RFN – Reflectorization Event nullification |
| 1 or more | RFN – Reflectorization Event nullification REF – Reflectorization Event |

In the examples below, the shaded area **b** represents a value of space.

23.7.1 UMLRC00 – Nullification for equipment with prior reflectorization event history

| Inbound UMLRC00 TRAIN II message to report a nullification reflectorization event for a piece of equipment: | |
|---|---|
| Message Header | #ABCD bbbb 0001UMLRC000410311212RRDC bbbb / |
| Control Group Header | *CH12345620041031121200USERID bb |
| Data Group Header | *DH0001 REF |
| Detail Record | +0001 b ABCD0000123456REPT b ABCD |
| Detail Record | +0001 b ABCD0000123456PERF b ABCD |
| Detail Record | +0001 b ABCD0000123456DTDN b 20041030 |
| Detail Record | +0001 b ABCD0000123456SPLC b 115341000 |
| Data Group Summary | =DS0001SUM0004 |
| Control Group Summary | =CS1234560001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

Umler TRAIN II Messaging Specifications

23.7.2 UMLRC60

| Outbound UMLRC60 TRAIN II message sent in response to a nullification of a reflectorization event: | |
|--|--|
| Message Header | #RRDC bbbb 0001 UMLRC60 0410311212ABCD bbbb / |
| Control Group Header | *CH65432120041031121200USERID bb ABCD12345620041031121200 |
| Data Group Header | *DH0001 RFN |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCREPT b ABCD |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCPERF b ABCD |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCDTDN b 20041030 |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCSPLC b 115341000 |
| Data Group Summary | =DS0001SUM0004 |
| Data Group Header | *DH0002 REF |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCREPT b ABCD |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCPERF b ABCD |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCDTDN b 20021030 |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCSPLC b 115341000 |
| Data Group Summary | =DS0002SUM0004 |
| Control Group Summary | =CS6543210002 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

23.7.3 UMLRC61

| Outbound UMLRC61 TRAIN II message sent in response to a nullification of a reflectorization event: | |
|--|--|
| Message Header | #RRDC bbbb 0001 UMLRC61 0410311212ABCD bbbb / |
| Control Group Header | *CH65432120041031121200USERID bb ABCD12345620041031121200 |
| Data Group Header | *DH0001 RFN |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCREPT2004-10-31-12.12.01.000004 b ABCD |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCPERF2004-10-31-12.12.01.000004 b ABCD |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCDTDN2004-10-31-12.12.01.000004 b 20041030 |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCSPLC2004-10-31-12.12.01.000004 b 115341000 |
| Data Group Summary | =DS0001SUM0004 |
| Data Group Header | *DH0002 REF |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCREPT2004-10-31-12.12.01.000004 b ABCD |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCPERF2004-10-31-12.12.01.000005 b ABCD |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCDTDN2004-10-31-12.12.01.000006 b 20021030 |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCSPLC2004-10-31-12.12.01.000007 b 115341000 |
| Data Group Summary | =DS0002SUM0004 |
| Control Group Summary | =CS6543210002 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

Umler TRAIN II Messaging Specifications

23.7.4 UMLRC00 – Nullification for equipment without prior reflectorization event history

| Inbound UMLRC00 TRAIN II message to report a nullification reflectorization event for a piece of equipment: | |
|---|--|
| Message Header | #ABCD bbbb 0001 UMLRC00 0410311212RRDC bbbb / |
| Control Group Header | *CH12345620041031121200USERID bb |
| Data Group Header | *DH0001 RFN |
| Detail Record | + 0001 b ABCD0000123456REPT b ABCD |
| Detail Record | + 0001 b ABCD0000123456PERF b ABCD |
| Detail Record | + 0001 b ABCD0000123456DTDN b 20041030 |
| Detail Record | + 0001 b ABCD0000123456SPLC b 115341000 |
| Data Group Summary | =DS0001SUM0004 |
| Control Group Summary | =CS1234560001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

23.7.5 UMLRC60

| Outbound UMLRC60 TRAIN II message sent in response to a nullification of a reflectorization event | |
|---|--|
| Message Header | #RRDC bbbb 0001 UMLRC60 0410311212ABCD bbbb / |
| Control Group Header | *CH65432120041031121200USERID bb ABCD12345620041031121200 |
| Data Group Header | *DH0001 RFN |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCREPT b ABCD |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCPERF b ABCD |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCDTDN b 20041030 |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCSPLC b 115341000 |
| Data Group Summary | =DS0001SUM0004 |
| Control Group Summary | =CS6543210001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

23.7.6 UMLRC61

| Outbound UMLRC61 TRAIN II message sent in response to a nullification of a reflectorization event: | |
|--|--|
| Message Header | #RRDC bbbb 0001 UMLRC61 0410311212ABCD bbbb / |
| Control Group Header | *CH65432120041031121200USERID bb ABCD12345620041031121200 |
| Data Group Header | *DH0001 RFN |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCREPT2004-10-31-12.12.01.000004 b ABCD |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCPERF2004-10-31-12.12.01.000004 b ABCD |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCDTDN2004-10-31-12.12.01.000004 b 20041030 |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCSPLC2004-10-31-12.12.01.000004 b 115341000 |
| Data Group Summary | =DS0001SUM0004 |
| Control Group Summary | =CS6543210001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

24 Create a Company Specific Group Header

Company specific equipment group UMLRC60/UMLRC61 messages are only sent to the submitter of the message. They are not distributed to other TRAIN II recipients.

24.1 Inbound Transaction Types

The following are valid values for the TRANSACTION TYPE field on the Data Group Header Record for inbound creation of a company specific group header.

| Transaction Type | Description |
|------------------|---|
| GHA | Create a company specific group header. |

24.2 Outbound Transaction Types

The following are valid values for the TRANSACTION TYPE field on the Data Group Header Record for outbound creation of a company specific group header.

| Transaction Type | Description |
|------------------|---|
| GHA | Create a company specific group header. |

24.3 Input Element IDs

The following are the valid values for element ID for creation of a company specific group header on an inbound UMLRC00 message. NOTE: The Group ID cannot contain embedded spaces.

| Element ID | Description | Format | Length | Mandatory/Optional |
|------------|-------------------|-----------|--------|--------------------|
| GRID | Group ID | character | 20 | mandatory |
| GRNM | Group Name | character | 80 | mandatory |
| GRDS | Group Description | character | 80 | optional |
| GRFA | Group Field A | character | 80 | optional |
| GRFB | Group Field B | character | 80 | optional |
| GRFC | Group Field C | character | 80 | optional |
| GRFD | Group Field D | character | 80 | optional |
| GRFE | Group Field E | character | 80 | optional |
| GRFF | Group Field F | character | 80 | optional |
| GRFG | Group Field G | character | 80 | optional |
| GRFH | Group Field H | character | 80 | optional |
| GRFI | Group Field I | character | 80 | optional |
| GRFJ | Group Field J | character | 80 | optional |
| GRFK | Group Field K | character | 80 | optional |
| GRFL | Group Field L | character | 80 | optional |
| GRFM | Group Field M | character | 80 | optional |
| GRFN | Group Field N | character | 80 | optional |
| GRFO | Group Field O | character | 80 | optional |
| GRFP | Group Field P | character | 80 | optional |
| GRFQ | Group Field Q | character | 80 | optional |
| GRFR | Group Field R | character | 80 | optional |
| GRFS | Group Field S | character | 80 | optional |
| GRFT | Group Field T | character | 80 | optional |
| GRFU | Group Field U | character | 80 | optional |
| GRFV | Group Field V | character | 80 | optional |
| GRFW | Group Field W | character | 80 | optional |
| GRFX | Group Field X | character | 80 | optional |
| GRFY | Group Field Y | character | 80 | optional |
| GRFZ | Group Field Z | character | 80 | optional |

24.4 Output Element IDs

The following are the valid values for element ID for creation of a company specific group header on outbound UMLRC60/UMLRC61 messages. NOTE: The Group ID cannot contain embedded spaces.

| Element ID | Description | Format | Length |
|-------------------|--------------------|---------------|---------------|
| GRID | Group ID | character | 20 |
| GRNM | Group Name | character | 80 |
| GRDS | Group Description | character | 80 |
| GRFA | Group Field A | character | 80 |
| GRFB | Group Field B | character | 80 |
| GRFC | Group Field C | character | 80 |
| GRFD | Group Field D | character | 80 |
| GRFE | Group Field E | character | 80 |
| GRFF | Group Field F | character | 80 |
| GRFG | Group Field G | character | 80 |
| GRFH | Group Field H | character | 80 |
| GRFI | Group Field I | character | 80 |
| GRFJ | Group Field J | character | 80 |
| GRFK | Group Field K | character | 80 |
| GRFL | Group Field L | character | 80 |
| GRFM | Group Field M | character | 80 |
| GRFN | Group Field N | character | 80 |
| GRFO | Group Field O | character | 80 |
| GRFP | Group Field P | character | 80 |
| GRFQ | Group Field Q | character | 80 |
| GRFR | Group Field R | character | 80 |
| GRFS | Group Field S | character | 80 |
| GRFT | Group Field T | character | 80 |
| GRFU | Group Field U | character | 80 |
| GRFV | Group Field V | character | 80 |
| GRFW | Group Field W | character | 80 |
| GRFX | Group Field X | character | 80 |
| GRFY | Group Field Y | character | 80 |
| GRFZ | Group Field Z | character | 80 |

24.5 Message Examples

In the examples below, the shaded area **b** represents a value of space.

24.5.1 UMLRC00

| Inbound UMLRC00 TRAIN II message to create a company specific equipment group. | |
|--|---|
| Message Header | #ABCD bbbb 0001 UMLRC00 0410311212RRDC bbbb / |
| Control Group Header | *CH12345620041031121200USERID bb |
| Data Group Header | *DH0001 GHA |
| Detail Record | + GRIDb ABCDGROUPID1 GRNM b GROUP OF BOX CARS |
| Detail Record | + GRIDb ABCDGROUPID1 GRDSb GROUP OF BOX CARS TO TRACK |
| Detail Record | + GRIDb ABCDGROUPID1 GRFAb TRACK BOX CARS |
| Data Group Summary | =DS0001SUM0003 |
| Control Group Summary | =CS1234560001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

24.5.2 UMLRC60

| Outbound UMLRC60 TRAIN II message to create a company specific equipment group. | |
|---|---|
| Message Header | #RRDC bbbb 0001 UMLRC60 0410311212ABCD bbbb / |
| Control Group Header | *CH65432120041031121200USERID bb ABCD12345620041031121200 |
| Data Group Header | *DH0001 GHA |
| Detail Record | + GRIDb ABCDGROUPID1 GRNM b GROUP OF BOX CARS |
| Detail Record | + GRIDb ABCDGROUPID1 GRDSb GROUP OF BOX CARS TO TRACK |
| Detail Record | + GRIDb ABCDGROUPID1 GRFAb TRACK BOX CARS |
| Detail Record | =DS0001SUM0003 |
| Control Group Summary | =CS6543210001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

24.5.3 UMLRC61

| Outbound UMLRC61 TRAIN II message to create a company specific equipment group. | |
|---|--|
| Message Header | #RRDC bbbb 0001 UMLRC61 0410311212ABCD bbbb / |
| Control Group Hdr | *CH65432120041031121200USERID bb ABCD12345620041031121200 |
| Data Group Header | *DH0001 GHA |
| Detail Record | + GRIDb ABCDGROUPID1 GRNM2004-10-31-12.12.01.000007 b GROUP OF BOX CARS |
| Detail Record | + GRIDb ABCDGROUPID1 GRDS 2004-10-31-12.12.01.000007 b GROUP OF BOX CARS TO TRACK |
| Detail Record | + GRIDb ABCDGROUPID1 GRFA 2004-10-31-12.12.01.000007 b TRACK BOX CARS |
| Data Group Sum | =DS0001SUM0003 |
| Control Group Sum | =CS6543210001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

25 Update a Company Specific Group Header

Company specific equipment group UMLRC60/UMLRC61 messages are only sent to the submitter of the message. They are not distributed to other TRAIN II recipients.

25.1 Inbound Transaction Types

The following are valid values for the TRANSACTION TYPE field on the Data Group Header Record for inbound update of a company specific group header.

| Transaction Type | Description |
|------------------|----------------------------------|
| GHU | Update a company specific group. |

25.2 Outbound Transaction Types

The following are valid values for the TRANSACTION TYPE field on the Data Group Header Record for outbound update of a company specific group header.

| Transaction Type | Description |
|------------------|----------------------------------|
| GHU | Update a company specific group. |

25.3 Input Element IDs

The following are the valid values for element ID for update of a company specific group header on an inbound UMLRC00 message.

| Description | Format | Length | Mandatory/Optional |
|-------------------|-----------|--------|--------------------|
| Group ID | character | 20 | mandatory |
| Group Name | character | 80 | mandatory |
| Group Description | character | 80 | optional |
| Group Field A | character | 80 | optional |
| Group Field B | character | 80 | optional |
| Group Field C | character | 80 | optional |
| Group Field D | character | 80 | optional |
| Group Field E | character | 80 | optional |
| Group Field F | character | 80 | optional |
| Group Field G | character | 80 | optional |
| Group Field H | character | 80 | optional |
| Group Field I | character | 80 | optional |
| Group Field J | character | 80 | optional |
| Group Field K | character | 80 | optional |
| Group Field L | character | 80 | optional |
| Group Field M | character | 80 | optional |
| Group Field N | character | 80 | optional |
| Group Field O | character | 80 | optional |
| Group Field P | character | 80 | optional |
| Group Field Q | character | 80 | optional |
| Group Field R | character | 80 | optional |
| Group Field S | character | 80 | optional |
| Group Field T | character | 80 | optional |
| Group Field U | character | 80 | optional |
| Group Field V | character | 80 | optional |
| Group Field W | character | 80 | optional |
| Group Field X | character | 80 | optional |
| Group Field Y | character | 80 | optional |
| Group Field Z | character | 80 | optional |

25.4 Output Element IDs

The following are the valid values for element ID for update of a company specific group header on outbound UMLRC60/UMLRC61 messages.

| Element ID | Description | Format | Length |
|-------------------|--------------------|---------------|---------------|
| GRID | Group ID | character | 20 |
| GRNM | Group Name | character | 80 |
| GRDS | Group Description | character | 80 |
| GRFA | Group Field A | character | 80 |
| GRFB | Group Field B | character | 80 |
| GRFC | Group Field C | character | 80 |
| GRFD | Group Field D | character | 80 |
| GRFE | Group Field E | character | 80 |
| GRFF | Group Field F | character | 80 |
| GRFG | Group Field G | character | 80 |
| GRFH | Group Field H | character | 80 |
| GRFI | Group Field I | character | 80 |
| GRFJ | Group Field J | character | 80 |
| GRFK | Group Field K | character | 80 |
| GRFL | Group Field L | character | 80 |
| GRFM | Group Field M | character | 80 |
| GRFN | Group Field N | character | 80 |
| GRFO | Group Field O | character | 80 |
| GRFP | Group Field P | character | 80 |
| GRFQ | Group Field Q | character | 80 |
| GRFR | Group Field R | character | 80 |
| GRFS | Group Field S | character | 80 |
| GRFT | Group Field T | character | 80 |
| GRFU | Group Field U | character | 80 |
| GRFV | Group Field V | character | 80 |
| GRFW | Group Field W | character | 80 |
| GRFX | Group Field X | character | 80 |
| GRFY | Group Field Y | character | 80 |
| GRFZ | Group Field Z | character | 80 |

Umler TRAIN II Messaging Specifications

25.5 Message Examples

In the examples below, the shaded area **b** represents a value of space.

25.5.1 UMLRC00

| Inbound UMLRC00 TRAIN II message to update a company specific equipment group. | |
|--|---|
| Message Header | #ABCD bbbb 0001 UMLRC00 0410311212RRDC bbbb / |
| Control Group Header | *CH12345620041031121200USERID bb |
| Data Group Header | *DH0001 GHU |
| Detail Record | + GRIDb ABCDGROUPID1 GRNM b GROUP OF GONDOLAS |
| Detail Record | + GRIDb ABCDGROUPID1 GRDSb GROUP OF GONDOLAS TO TRACK |
| Detail Record | + GRIDb ABCDGROUPID1 GRFAb TRACK GONDOLAS |
| Data Group Summary | =DS0001SUM0003 |
| Control Group Summary | =CS1234560001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

25.5.2 UMLRC60

| Outbound UMLRC60 TRAIN II message to update a company specific equipment group. | |
|---|---|
| Message Header | #RRDC bbbb 0001 UMLRC60 0410311212ABCD bbbb / |
| Control Group Header | *CH65432120041031121200USERID bb ABCD12345620041031121200 |
| Data Group Header | *DH0001 GHU |
| Detail Record | + GRIDb ABCDGROUPID1 GRNM b GROUP OF GONDOLAS |
| Detail Record | + GRIDb ABCDGROUPID1 GRDSb GROUP OF GONDOLAS TO TRACK |
| Detail Record | + GRIDb ABCDGROUPID1 GRFAb TRACK GONDOLAS |
| Detail Record | =DS0001SUM0003 |
| Control Group Summary | =CS6543210001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

25.5.3 UMLRC61

| Outbound UMLRC61 TRAIN II message to update a company specific equipment group. | |
|---|--|
| Message Header | #RRDC bbbb 0001 UMLRC61 0410311212ABCD bbbb / |
| Control Group Hdr | *CH65432120041031121200USERID bb ABCD12345620041031121200 |
| Data Group Header | *DH0001 GHU |
| Detail Record | + GRIDb ABCDGROUPID1 GRNM2004-10-31-12.12.01.000007 b GROUP OF GONDOLAS |
| Detail Record | + GRIDb ABCDGROUPID1 GRDS 2004-10-31-12.12.01.000007 b GROUP OF GONDOLAS TO TRACK |
| Detail Record | + GRIDb ABCDGROUPID1 GRFA 2004-10-31-12.12.01.000007 b TRACK GONDOLAS |
| Data Group Summary | =DS0001SUM0003 |
| Control Group Sum | =CS6543210001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

26 Delete a Company Specific Group Header

Company specific equipment group UMLRC60/UMLRC61 messages are only sent to the submitter of the message. They are not distributed to other TRAIN II recipients.

26.1 Inbound Transaction Types

The following are valid values for the TRANSACTION TYPE field on the Data Group Header Record for inbound deletion of a company specific group header.

| Transaction Type | Description |
|------------------|----------------------------------|
| GHD | Update a company specific group. |

26.2 Outbound Transaction Types

The following are valid values for the TRANSACTION TYPE field on the Data Group Header Record for outbound deletion of a company specific group header.

| Transaction Type | Description |
|------------------|----------------------------------|
| GHD | Update a company specific group. |

26.3 Input Element IDs

The following are the valid values for element ID for update of a company specific group header on an inbound UMLRC00 message.

| Element ID | Description | Format | Length | Mandatory/Optional |
|------------|-------------|-----------|--------|--------------------|
| GRID | Group ID | Character | 20 | mandatory |

26.4 Output Element IDs

The following are the valid values for element ID for update of a company specific group header on outbound UMLRC60/UMLRC61 messages.

| Element ID | Description | Format | Length |
|------------|-------------|-----------|--------|
| GRID | Group ID | Character | 20 |

26.5 Message Examples

In the examples below, the shaded area **b** represents a value of space.

26.5.1 UMLRC00

| Inbound UMLRC00 TRAIN II message to delete a company specific equipment group. | |
|--|---|
| Message Header | #ABCD bbbb 0001UMLRC000410311212RRDC bbbb / |
| Control Group Header | *CH12345620041031121200USERID bb |
| Data Group Header | *DH0001 GHDGRIDb ABCDGROUPID1 |
| Data Group Summary | =DS0001SUM0000 |
| Control Group Summary | =CS1234560001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

26.5.2 UMLRC60

| Outbound UMLRC60 TRAIN II message to delete a company specific equipment group. | |
|---|--|
| Message Header | #RRDC bbbb 0001UMLRC600410311212ABCD bbbb / |
| Control Group Header | *CH65432120041031121200USERID bb ABCD12345620041031121200 |
| Data Group Header | *DH0001 GHDGRIDb ABCDGROUPID1 |
| Detail Record | =DS0001SUM0000 |
| Control Group Summary | =CS6543210001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

26.5.3 UMLRC61

| Outbound UMLRC61 TRAIN II message to delete a company specific equipment group. | |
|---|--|
| Message Header | #RRDC bbbb 0001UMLRC610410311212ABCD bbbb / |
| Control Group Header | *CH65432120041031121200USERID bb ABCD12345620041031121200 |
| Data Group Header | *DH0001 GHDGRIDb ABCDGROUPID1 |
| Data Group Summary | =DS0001SUM0000 |
| Control Group Summary | =CS6543210001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

27 Add Equipment to a Company Specific Equipment Group

27.1 Inbound Transaction Types

The following are valid values for the TRANSACTION TYPE field on the Data Group Header Record for inbound adding equipment to a company specific equipment group.

| Transaction Type | Description |
|------------------|--|
| GEA | Add equipment to a company specific equipment group. |

27.2 Outbound Transaction Types

The following are valid values for the TRANSACTION TYPE field on the Data Group Header Record for outbound adding equipment to a company specific equipment group.

| Transaction Type | Description |
|------------------|--|
| GEA | Add equipment to a company specific equipment group. |

27.3 Input Element IDs

The following are the valid values for element ID for adding equipment to a company specific equipment group transaction on an inbound UMLRC00 message.

| Element ID | Description | Format | Length | Mandatory/Optional |
|------------|--------------|-----------|--------|--------------------|
| GRID | Group ID | character | 20 | mandatory |
| 0001 | Equipment ID | character | 14 | mandatory |

Umler TRAIN II Messaging Specifications

27.4 Output Element IDs

The following are the valid values for element ID for adding equipment to a company specific equipment group transaction on outbound UMLRC60/UMLRC61 messages.

| Element ID | Description | Format | Length |
|------------|--------------|-----------|--------|
| GRID | Group ID | character | 20 |
| 0001 | Equipment ID | character | 14 |

27.5 Message Examples

In the examples below, the shaded area **b** represents a value of space.

27.5.1 UMLRC00

| Inbound UMLRC00 TRAIN II message to add equipment to a company specific equipment group: | |
|--|---|
| Message Header | #ABCD bbbb 0001UMLRC000410311212RRDC bbbb / |
| Control Group Header | *CH12345620041031121200USERID bb |
| Data Group Header | *DH0001 GEA |
| Detail Record | + GRIDb ABCDGROUPID1 0001b ABCD0000123456 |
| Data Group Summary | =DS0001SUM0001 |
| Control Group Summary | =CS1234560001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

27.5.2 UMLRC60

| Outbound UMLRC60 TRAIN II message to add equipment to a company specific equipment group: | |
|---|--|
| Message Header | #RRDC bbbb 0001UMLRC600410311212ABCD bbbb / |
| Control Group Header | *CH65432120041031121200USERID bb ABCD12345620041031121200 |
| Data Group Header | *DH0001 GEA |
| Detail Record | + GRIDb ABCDGROUPID1 0001b ABCD0000123456 |
| Data Group Summary | =DS0001SUM0001 |
| Control Group Summary | =CS6543210001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

27.5.3 UMLRC61

| Outbound UMLRC61 TRAIN II message to add equipment to a company specific equipment group: | |
|---|--|
| Message Header | #RRDC bbbb 0001UMLRC610410311212ABCD bbbb / |
| Control Group Header | *CH65432120041031121200USERID bb ABCD12345620041031121200 |
| Data Group Header | *DH0001 GEA |
| Detail Record | + GRIDb ABCDGROUPID1 0001 2004-10-31-12.12.01.000007 b ABCD0000123456 |
| Data Group Summary | =DS0001SUM0001 |
| Control Group Summary | =CS6543210001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

28 Remove Equipment from a Company Specific Equipment Group

28.1 Inbound Transaction Types

The following are valid values for the TRANSACTION TYPE field on the Data Group Header Record for inbound removal of equipment from a company specific group transaction.

| Transaction Type | Description |
|------------------|---|
| GER | Remove equipment from a company specific equipment group. |

28.2 Outbound Transaction Types

The following are valid values for the TRANSACTION TYPE field on the Data Group Header Record for outbound removal of equipment from a company specific group transaction.

| Transaction Type | Description |
|------------------|---|
| GER | Remove equipment from a company specific equipment group. |

28.3 Input Element IDs

The following are the valid values for element ID for removal of equipment from a company specific group transaction on an inbound UMLRC00 message.

| Element ID | Description | Format | Length | Mandatory/Optional |
|------------|--------------|-----------|--------|--------------------|
| GRID | Group ID | character | 20 | mandatory |
| 0001 | Equipment ID | character | 14 | mandatory |

28.4 Output Element IDs

The following are the valid values for element ID for removal of equipment from a company specific group transaction on outbound UMLRC60/UMLRC61 messages.

| Element ID | Description | Format | Length |
|------------|--------------|-----------|--------|
| GRID | Group ID | character | 20 |
| 0001 | Equipment ID | Character | 14 |

28.5 Message Examples

In the examples below, the shaded area **b** represents a value of space.

Umler TRAIN II Messaging Specifications

28.5.1 UMLRC00

| Inbound UMLRC00 TRAIN II message to remove equipment from a company specific equipment group: | |
|---|--|
| Message Header | #ABCD bbbb 0001 UMLRC00 0410311212RRDC bbbb / |
| Control Group Header | *CH12345620041031121200USERID bb |
| Data Group Header | *DH0001 GER |
| Detail Record | + GRID bb ABCDGROUPID1 0001 b ABCD0000123456 |
| Data Group Summary | =DS0001SUM0001 |
| Control Group Summary | =CS1234560001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

28.5.2 UMLRC60

| Outbound UMLRC60 TRAIN II message to remove equipment from a company specific equipment group: | |
|--|--|
| Message Header | #RRDC bbbb 0001 UMLRC60 0410311212ABCD bbbb / |
| Control Group Header | *CH65432120041031121200USERID bb ABCD12345620041031121200 |
| Data Group Header | *DH0001 GER |
| Detail Record | + GRID bb ABCDGROUPID1 0001 b ABCD0000123456 |
| Data Group Summary | =DS0001SUM0001 |
| Control Group Summary | =CS6543210001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

28.5.3 UMLRC61

| Outbound UMLRC61 TRAIN II message to remove equipment from a company specific equipment group: | |
|--|---|
| Message Header | #RRDC bbbb 0001 UMLRC61 0410311212ABCD bbbb / |
| Control Group Header | *CH65432120041031121200USERID bb ABCD12345620041031121200 |
| Data Group Header | *DH0001 GER |
| Detail Record | + GRID bb ABCDGROUPID1 0001 2004-10-31-12.12.01.000007 b ABCD0000123456 |
| Data Group Summary | =DS0001SUM0001 |
| Control Group Summary | =CS6543210001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

29 UMLRC50 Functional Acknowledgement Message

When UMLRC00 messages are sent to Railinc an UMLRC50 will be sent to the sender if the UMLRC00 encounters any envelope errors/warnings.

The message will contain a status code that indicates if the message encountered any enveloping issues.

The status code can contain one of the following values:

- W = Warning errors encountered but message still processed
- E = Envelope errors encountered and the message was not processed.

After the status code is a four position code that gives more description to the warning or error. Please refer to Appendix U for a list of all envelope codes.

After the status/error code is a six position field. This field will always contain zeros unless the UMLRC00 message sent did not contain a control group sequence number that is one greater than the previously sent control group sequence number. If there is a control group sequence number issue, then this field will contain the control group sequence number that Umler was expecting to receive.

Here are examples of UMLRC50 messages:

29.1 UMLRC50 - Warning Response

| Outbound UMLRC50 TRAIN II message to indicate a message that passed envelope checking but encountered a warning situation: | |
|--|---|
| Message Header | #RRDCbbb0001UMLRC500207301605ABCDbbb/ |
| Control Group Header | *CH12345620041031121200USERIDbbABCD12345620041031121200 |
| Detail Record | +W2009000123 |
| Control Group Summary | =CS1234560001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

29.2 UMLRC50 - Error Response

| Outbound UMLRC50 TRAIN II message to indicate a message that failed envelope checking: | |
|--|---|
| Message Header | #RRDCbbb0001UMLRC500207301605ABCDbbb/ |
| Control Group Header | *CH12345620041031121200USERIDbbABCD12345620041031121200 |
| Detail Record | +E2008000190 |
| Control Group Summary | =CS1234560001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

30 UMLRC71 Transaction Status Message

When UMLRC00 messages are sent to Railinc, one UMLRC71 will be sent to the sender to provide a summary of processing of the UMLRC00.

The message will contain an inbound transaction count, a processed transaction count, and an error transaction count.

One UMLRC71 will be sent for each UMLRC00 sent to Railinc.

30.1 Layout of UMLRC71 Detail Record

The following is the layout of the UMLRC71 *detail record*.

+nnnnnnn123456

where:

| Value | Description |
|---------|--|
| + | The delimiter to start a detail record |
| nnnnnnn | Summary count identifier |
| 123456 | Count that relates to the summary count identifier |

30.2 Example of UMLRC71 Message

| Outbound UMLRC71 TRAIN II message communicating the transaction status: | |
|---|---|
| Message Header | #RRDCbbb0001UMLRC710207301605ABCDbbb/ |
| Control Group Header | *CH12345620041031121200USERIDbbABCD12345620041031121200 |
| Detail Record | +INBOUNDCOUNT000100 |
| Detail Record | +PROCESSCOUNT000095 |
| Detail Record | +ERROREDCOUNT000005 |
| Control Group Summary | =CS1234560003 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

31 UMLRE70 Error Response Message

When UMLR Inbound messages are sent into Railinc and encounter any business rule related error, an UMLRE70 will be sent to customers who request error messages.

An error code will be populated in one of the following places:

- (1) On the Data Header record the error code will appear after the transaction type to identify an error has occurred in the transaction.
- (2) On the detail record for element related errors.

31.1 Layout of UMLRE70 Data Group Header Segment

The layout of the UMLRE70 *data group header* segment for all transactions except the header delete is:

*DH0001tttEEEEEEEEEEEE

| Value | Description |
|--------------|--|
| *DH | The delimiter to start the data group header |
| 0001 | Data group sequence number |
| ttt | Transaction type |
| EEEEEEEEEEEE | Response code for transaction. |

The layout of the UMLRE70 *data group header* segment for header delete is:

*DH0001tttP001bxxxxxxxEEEEEEEEEEEE

| Value | Description |
|--------------|---|
| *DH | The delimiter to start the data group header |
| 0001 | Data group sequence number |
| ttt | Transaction type |
| P001 | The ELEMENT ID for the unit being deleted (pool ID) |
| b | A value of space |
| xxxxxxx | The Pool ID |
| EEEEEEEEEEEE | Response code for transaction. |

31.2 Layouts of UMLRE70 Detail Record

The following is the layout of the UMLRE70 *detail record* for pool header transactions ('HA', 'HC').

+P001**b**xxxxxxxxxyyyyEEEEEEEEEE**b**vvvvvvvvv

where:

| Value | Description |
|------------|--|
| + | The delimiter to start a detail record |
| P001 | The ELEMENT ID for the unit being updated (pool ID) |
| b | A value of space |
| xxxxxxx | The Pool ID |
| yyy | The ELEMENT ID for the field being changed |
| EEEEEEEEEE | Response code for element. |
| b | A value of space |
| vvvvvvvvv | The variable length ELEMENT VALUE that corresponds to the ELEMENT ID provided in this example as yyyy. Minimum length = 0 Maximum length = 240 |

The following is the layout of the UMLRE70 *detail record* for equipment related transactions.

+0001**b**xxxxxxxxxxxxxxxx0002**b**eeeyyyyEEEEEEEEEE**b**vvvvvvvvv

where:

| Value | Description |
|--------------|--|
| + | The delimiter to start a detail record |
| 0001 | The ELEMENT ID for the unit being updated (equipment ID) |
| b | A value of space |
| xxxxxxxxxxxx | The equipment initial and number |
| 0002 | The ELEMENT ID for equipment group |
| b | A value of space |
| eee | The equipment group. |
| yyy | The ELEMENT ID for the field being changed |
| EEEEEEEEEE | Response code for element. |
| b | A value of space |
| vvvvvvvvv | The variable length ELEMENT VALUE that corresponds to the ELEMENT ID provided in this example as yyyy. Minimum length = 0 Maximum length = 240 |

31.3 Examples of UMLRE70 Messages

31.3.1 Add a Pool Header Error Response

| Outbound UMLRE70 TRAIN II message to indicate an error in a Pool Header add: | |
|--|---|
| Message Header | #RRDC bbbb 0001 UMLRE70 0207301605ABCD bbbb / |
| Control Group Header | *CH12345620020730160000USERID bb |
| Data Group Header | *DH0001 HAb HA00000001 |
| Detail Record | + P001b 1234567P002000000000 b STONE CONTAINER |
| Detail Record | + P001b 1234567P003000000000 b COSHOCTON |
| Detail Record | + P001b 1234567P004000000000 2b HO |
| Detail Record | + P001b 1234567P005000000000 b AABCD |
| Detail Record | + P001b 1234567P006000000000 b DEFG |
| Detail Record | + P001b 1234567P007000000000 b C |
| Detail Record | + P001b 1234567P008000000000 b 2 |
| Detail Record | + P001b 1234567P009000000000 b Extended Pool Description text |
| Detail Record | + P001b 1234567P010000000000 b COSHOCTON |
| Detail Record | + P001b 1234567P011000000000 b OH |
| Data Group Summary | =DS0001SUM0010 |
| Control Group Summary | =CS1234560001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

The error code '000000002' means that an invalid value was sent.

31.3.2 Change a Pool Header Error Response

| Outbound UMLRE70 TRAIN II message to indicate an error in a Pool Header change: | |
|---|--|
| Message Header | #RRDC bbbb 0001 UMLRE70 0207301605ABCD bbbb / |
| Control Group Header | *CH12345620020730160000USERID bb |
| Data Group Header | *DH0001 Hcb HC00000001 |
| Detail Record | + P001b 1234567P006000000000 2b X |
| Data Group Summary | =DS0001SUM0001 |
| Control Group Summary | =CS1234560001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

The error code '000000002' means that an invalid value was sent.

31.3.3 Delete a Pool Header Error Response

| Outbound UMLRE70 TRAIN II message to indicate an error in a Pool Header delete: | |
|---|--|
| Message Header | #RRDC bbbb 0001 UMLRE70 0207301605ABCD bbbb / |
| Control Group Header | *CH12345620020730160000USERID bb |
| Data Group Header | *DH0001 HDb P001 b 5551234000000004 |
| Data Group Summary | =DS0001SUM0000 |
| Control Group Summary | =CS1234560001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

The error code '000000004' means Pool does not exist.

Umler TRAIN II Messaging Specifications

31.3.4 Pool Assignment Error Response

| Outbound UMLRE70 TRAIN II message to indicate an error in pool assignment: | |
|--|---|
| Message Header | #RRDCCQXY0001UMLRE700207301425ABCDbbbb/ |
| Control Group Header | *CH65432120020730160100USERIDbbABCD12345620020730160000 |
| Data Group Header | *DH0001ECCECC0000001 |
| Detail Record | +0001bABCD00000014370002bBOXCP0010000000004b1234567 |
| Data Group Summary | =DS0001SUM0001 |
| Control Group Summary | =CS6543210001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

The error code '000000004' means Pool does not exist.

31.3.5 Lessee Change Error Response

| Outbound UMLRE70 TRAIN II message to indicate an error in a lessee change: | |
|--|---|
| Message Header | #RRDCCQXY0001UMLRE700207301425ABCDbbbb/ |
| Control Group Header | *CH65432120020730160100USERIDbbABCD12345620020730160000 |
| Data Group Header | *DH0001ECCECC0000001 |
| Detail Record | +0001bABCD00000014370002bBOXCLESE0000000066b |
| Data Group Summary | =DS0001SUM0001 |
| Control Group Summary | =CS6543210001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

The error code '0000000066' means a lessee removal was submitted for equipment that did not have a lessee MARK in the lessee field.

31.3.6 Equipment Management Code Error Response

| Outbound UMLRE70 TRAIN II message to indicate an error in an equipment management code change: | |
|--|---|
| Message Header | #RRDCCQXY0001UMLRE700207301425ABCDbbbb/ |
| Control Group Header | *CH65432120020730160100USERIDbbABCD12345620020730160000 |
| Data Group Header | *DH0001ECCECC0000001 |
| Detail Record | +0001bABCD00000014370002bBOXCTCUR0000000002bS |
| Data Group Summary | =DS0001SUM0001 |
| Control Group Summary | =CS6543210001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

The error code '0000000002' means that an invalid value was sent.

31.3.7 Car Grade Inspection Error Response

| Outbound UMLRE70 TRAIN II message to indicate an error in a car grade inspection: | |
|---|---|
| Message Header | #RRDCCQXY0001UMLRE700207301425ABCDbbbb/ |
| Control Group Header | *CH65432120020730160100USERIDbbABCD12345620020730160000 |
| Data Group Header | *DH0001CGICGI0000001 |
| Detail Record | +0001bABCD00001234560002bBOXCCG01000000000bA |
| Detail Record | +0001bABCD00000014370002bBOXCCG020000000013b9999 |
| Detail Record | +0001bABCD00001234560002bBOXCCG03000000000b1130 |
| Detail Record | +0001bABCD00001234560002bBOXCCG04000000000b115341000 |
| Detail Record | +0001bABCD00001234560002bBOXCCG05000000000bWXYZ |
| Data Group Summary | =DS0001SUM0005 |

Umler TRAIN II Messaging Specifications

| | |
|-----------------------|-------------------------------|
| Control Group Summary | =CS6543210001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

The error code '000000013' means invalid time entered.

31.3.8 Air Brake Test Inspection Error Response

| Outbound UMLRE70 TRAIN II message to indicate an error in an air brake test: | |
|--|--|
| Message Header | #RRDC bbb 0001 UMLRE70 0410311212ABCD bbb / |
| Control Group Header | *CH65432120041031121200USERID bb ABCD12345620041031121200 |
| Data Group Header | *DH0001 ABTABT0000001 |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCREPT 0000000000 b ABCD |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCPERF 0000000000 b ABCD |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCDTDN 0000000011 b 20041330 |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCSPLC 0000000000 b 115341000 |
| Data Group Summary | =DS0001SUM0004 |
| Control Group Summary | =CS6543210001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

The error code '000000011' means invalid date entered.

31.3.9 Door Lube Inspection Error Response

| Outbound UMLRE70 TRAIN II message to indicate an error in a door lube inspection: | |
|---|--|
| Message Header | #RRDC bbb 0001 UMLRE70 0410311212ABCD bbb / |
| Control Group Header | *CH65432120041031121200USERID bb ABCD12345620041031121200 |
| Data Group Header | *DH0001 DLIDL I0000001 |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCREPT 0000000000 b ABCD |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCPERF 0000000000 b ABCD |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCDTDN 0000000011 b 20041330 |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCSPLC 0000000000 b 115341000 |
| Data Group Summary | =DS0001SUM0004 |
| Control Group Summary | =CS6543210001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

The error code '000000011' means invalid date entered.

Umler TRAIN II Messaging Specifications

31.3.10 Autorack Repair Error Response

| Outbound UMLRE70 TRAIN II message to indicate an error in an autorack repair: | |
|---|--|
| Message Header | #RRDC bbbb 0001 UMLRE70 0410311212ABCD bbbb / |
| Control Group Header | *CH65432120041031121200USERID bb ABCD12345620041031121200 |
| Data Group Header | *DH0001 ARR 0000000000 |
| Detail Record | +0001 b ABCD00001234560002 b BOXCREPT0000000000 b ABCD |
| Detail Record | +0001 b ABCD00001234560002 b BOXCPERF0000000000 b ABCD |
| Detail Record | +0001 b ABCD00001234560002 b BOXCDTDN0000000011 b 20041330 |
| Detail Record | +0001 b ABCD00001234560002 b BOXCSPLC0000000000 b 115341000 |
| Data Group Summary | =DS0001SUM0004 |
| Control Group Summary | =CS6543210001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

The error code '000000011' means invalid date entered.

31.3.11 Autorack Certification Error Response

| Outbound UMLRE70 TRAIN II message to indicate an error in an autorack certification: | |
|--|--|
| Message Header | #RRDC bbbb 0001 UMLRE70 0410311212ABCD bbbb / |
| Control Group Header | *CH65432120041031121200USERID bb ABCD12345620041031121200 |
| Data Group Header | *DH0001 ARCARC 0000001 |
| Detail Record | +0001 b ABCD00001234560002 b BOXCREPT0000000000 b ABCD |
| Detail Record | +0001 b ABCD00001234560002 b BOXCPERF0000000000 b ABCD |
| Detail Record | +0001 b ABCD00001234560002 b BOXCDTDN0000000011 b 20041330 |
| Detail Record | +0001 b ABCD00001234560002 b BOXCSPLC0000000000 b 115341000 |
| Data Group Summary | =DS0001SUM0004 |
| Control Group Summary | =CS6543210001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

The error code '000000011' means invalid date entered.

Umler TRAIN II Messaging Specifications

31.3.12 Autorack Inspection Error Response

| Outbound UMLRE70 TRAIN II message to indicate an error in an autorack inspection: | |
|---|--|
| Message Header | #RRDC bbbb 0001 UMLRE70 0410311212ABCD bbbb / |
| Control Group Header | *CH65432120041031121200USERID bb ABCD12345620041031121200 |
| Data Group Header | *DH0001 ARIARI 0000001 |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCREPT 0000000000 b ABCD |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCPERF 0000000000 b ABCD |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCDTDN 0000000011 b 20041330 |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCSPLC 0000000000 b 115341000 |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCINID 0000000000 b ABCD |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCEXRS 0000000000 b 1 |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCEXSS 0000000000 b 1 |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCINSI 0000000000 b 1 |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCTPDS 0000000000 b 1 |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCUNOD 0000000000 b 1 |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCEXSP 0000000000 b 1 |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCINSP 0000000000 b 1 |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCEXDR 0000000000 b 1 |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCINDR 0000000000 b 1 |
| Data Group Summary | =DS0001SUM0014 |
| Control Group Summary | =CS6543210001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

The error code '000000011' means invalid date entered.

31.3.13 Vehicular Flat Certification Error Response

| Outbound UMLRE70 TRAIN II message to indicate an error in a vehicular flat certification: | |
|---|--|
| Message Header | #RRDC bbbb 0001 UMLRE70 0410311212ABCD bbbb / |
| Control Group Header | *CH65432120041031121200USERID bb ABCD12345620041031121200 |
| Data Group Header | *DH0001 VFCVFC 0000001 |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCREPT 0000000000 b ABCD |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCPERF 0000000000 b ABCD |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCDTDN 0000000011 b 20041330 |
| Detail Record | + 0001 b ABCD00001234560002 b BOXCSPLC 0000000000 b 115341000 |
| Data Group Summary | =DS0001SUM0004 |
| Control Group Summary | =CS6543210001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

The error code '000000011' means invalid date entered.

Umler TRAIN II Messaging Specifications

31.3.14 FRA Locomotive Inspection Error Response

| Outbound UMLRE70 TRAIN II message to indicate an error in a FRA Locomotive Inspection: | |
|--|--|
| Message Header | #RRDC bbbb 0001 UMLRE70 0410311212ABCD bbbb / |
| Control Group Header | *CH65432120041031121200USERID bb ABCD12345620041031121200 |
| Data Group Header | *DH0001 FRAFRA0000001 |
| Detail Record | +0001 b ABCD00001234560002 b BOXCREPT 0000000000 b ABCD |
| Detail Record | +0001 b ABCD00001234560002 b BOXCPERF 0000000000 b ABCD |
| Detail Record | +0001 b ABCD00001234560002 b BOXCDTDN 0000000011 b 20041330 |
| Detail Record | +0001 b ABCD00001234560002 b BOXCSPLC 0000000000 b 115341000 |
| Data Group Summary | =DS0001SUM0004 |
| Control Group Summary | =CS6543210001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

The error code '000000011' means invalid date entered.

31.3.15 Reflectorization Event Error Response

| Outbound UMLRE70 TRAIN II message to indicate an error in a reflectorization event: | |
|---|--|
| Message Header | #RRDC bbbb 0001 UMLRE70 0410311212ABCD bbbb / |
| Control Group Header | *CH65432120041031121200USERID bb ABCD12345620041031121200 |
| Data Group Header | *DH0001 REFREF0000001 |
| Detail Record | +0001 b ABCD00001234560002 b BOXCREPT 0000000000 b ABCD |
| Detail Record | +0001 b ABCD00001234560002 b BOXCPERF 0000000000 b ABCD |
| Detail Record | +0001 b ABCD00001234560002 b BOXCDTDN 0000000011 b 20041330 |
| Detail Record | +0001 b ABCD00001234560002 b BOXCSPLC 0000000000 b 115341000 |
| Data Group Summary | =DS0001SUM0004 |
| Control Group Summary | =CS6543210001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

The error code '000000011' means invalid date entered.

32 Size of TRAIN II Message Expanded

The maximum size allowed for a TRAIN II message is 4MB.

33 Customized Message Profiles for UMLRC60/61

Message profiles will be maintained by the Railinc administrator. Any changes to a company's message profile must be coordinated with the Railinc administrator.

33.1 Receive All Umler Data

Umler TRAIN II message subscribers can choose to receive messages for all Umler outbound activity.

In sections 32.2 and 32.3 please be aware of the following:

- When the relationship in one of the fields listed in these sections is established there is potential that you do not have the equipment record on your file. It is the responsibility of the TRAIN II customer to retrieve the equipment record needed.
- When the relationship ceases to exist in all of the fields the customer will receive the transaction that removed them from the triggering field. Future messages will not be sent.

33.2 Receive My Company's Data (Corporate Umbrella)

Umler TRAIN II message subscribers may elect to receive only messages when a transaction occurs on a piece of equipment where their company is present in one of the following elements. "My company" is defined as any mark within a company's corporate umbrella.

- Umler owner
- Mark owner
- Lessee
- Maintenance responsible party
- Rack owner
- Rack lessee

33.3 Receive Data For "Company of Interest"

Umler TRAIN II message subscribers may elect to receive only data when a transaction occurs on a piece of equipment where specified MARKS are present in one of the following elements:

- Umler owner
- Mark owner
- Lessee
- Maintenance responsible party
- Rack owner
- Rack lessee

33.4 Receive Specific Transactions

Umler TRAIN II message subscribers may elect to receive only messages that contain specific transactions. Companies can choose to receive all transaction types or choose one or more from the following:

Umler TRAIN II Messaging Specifications

- Pool headers, pool assignments, and equipment deletes
- Receive all equipment add, equipment change, and equipment delete transactions
- Receive all inspection transactions

Note: Subscription to receive specific inspection transactions will not be supported in Umler.

34 Generic Event Transaction Type

34.1 Generic Event

A new generic event transaction will be defined that will be used for all future TRAIN II inspection reporting. The transaction type will be 'EVT'. A dedicated element id called event type ('ETYP') will be used to determine which specific inspection is being reported. The event type element must be the first element in the generic inspection transaction.

The ETYP element value will be defined as character 3.

The elements that make up the details for an event transaction will be dependent on the value in the event type.

Existing inspection transactions will be reported as they are in the existing Umler system. There is no plan to convert these inspection transaction types to the new generic event transaction type.

34.1.1 Generic Event Transaction

The following examples assume that a new event type of "Axle Inspection" (AXL) is created.

To report a generic event a transaction type = 'EVT' is used on the data group header. The first element must be element ID = 'ETYP' which identifies the actual event (inspection) being reported.

| Inbound UMLRC00 TRAIN II message for a generic event transaction | |
|--|---------------------------------------|
| Message Header | #ABCDbbb0001UMLRC000607301425RRDCbbb/ |
| Control Group Header | *CH12345620060730160000USERIDbb |
| Data Group Header | *DH0001EVT |
| Element Detail | +0001bABCD0000000001ETYPbAXL |
| Element Detail | +0001bABCD0000000001REPTbABCD |
| Element Detail | +0001bABCD0000000001PERFbRAIL |
| Element Detail | +0001bABCD0000000001SPLCb411657000 |
| Element Detail | +0001bABCD0000000001DTDNb20061106 |
| Data Group Summary | =DS0001SUM0005 |
| Control Group Summary | =CS1234560001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

| Outbound UMLRC60 TRAIN II message for a generic event transaction | |
|---|---|
| Message Header | #ABCDbbb0001UMLRC600607301425RRDCbbb/ |
| Control Group Header | *CH12345620060730160000USERIDbbABCD12345620041031121200 |
| Data Group Header | *DH0001EVT |
| Element Detail | +0001bABCD00000000010002bBOXCETYPbAXL |
| Element Detail | +0001bABCD00000000010002bBOXCREPTbABCD |
| Element Detail | +0001bABCD00000000010002bBOXCPERFbRAIL |
| Element Detail | +0001bABCD00000000010002bBOXCSPLCb411657000 |
| Element Detail | +0001bABCD00000000010002bBOXCDTDNb20061106 |
| Data Group Summary | =DS0001SUM0005 |
| Control Group Summary | =CS1234560001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

Umler TRAIN II Messaging Specifications

34.1.2 Security Access Rights

Security access rights will be defined at the specific event type level instead of the generic event transaction type of 'EVT'.

For each new generic event type created a new security access right will be defined in Inspection Access Rights.

For example, if a new event type of 'AXL' is defined for an axle inspection a new Umler security access right will be defined for this event type and will need to be assigned to appropriate users.

34.1.3 Web Maintenance Screens

Each new specific event type will have a separate input screen on the Umler web interface. This is stated above with the following statement:

Web screens to support generic event transactions will utilize functionality that allows new inspections to be "defined on the fly".

34.1.4 Web Query Screens

All query screens will reference the specific event type instead of the generic event transaction type of 'EVT'.

For example, the transaction log screen will refer to the specific event type of 'AXL' instead of the generic event transaction type of 'EVT'.

This also impacts Notice Management and Simple Equipment Query.

34.1.5 Generic Event Nullification

A new generic event transaction will be defined that will be used for all future TRAIN II inspection reporting to nullify a generic event transaction. The transaction type will be 'EVN'. A dedicated element id called event type ('ETYP') will be used to determine which specific inspection is being nullified. The event type element must be the first element in the generic inspection transaction.

The ETYP element value will be defined as character 3.

The elements that make up the details for an event transaction will be dependent on the value in the event type.

Existing nullification of inspection transactions will be reported as they are in the existing Umler system. There is no plan to convert these inspection transaction types to the new generic event transaction type.

For nullification, all elements must be sent and the element value must exactly match what is currently on file in Umler.

The following examples is to nullify axle inspection.

To report a generic event nullification a transaction type = 'EVN' is used on the data group header. The first element must be element ID = 'ETYP' which identifies the actual event (inspection) being nullified.

Umler TRAIN II Messaging Specifications

| Inbound UMLRC00 TRAIN II message for a generic event nullification to report an axle inspection nullification | |
|---|--|
| Message Header | #ABCD bbbb 0001 UMLRC00 0607301425RRDC bbbb / |
| Control Group Header | *CH12345620060730160000USERID bb |
| Data Group Header | *DH0001 EVN |
| Element Detail | +0001 ABCD 0000000001 ETYP AXN |
| Element Detail | +0001 ABCD 0000000001REPT ABCD |
| Element Detail | +0001 ABCD 0000000001PERF RAIL |
| Element Detail | +0001 ABCD 0000000001SPLC 411657000 |
| Element Detail | +0001 ABCD 0000000001DTDN 20061106 |
| Data Group Summary | =DS0001SUM0005 |
| Control Group Summary | =CS1234560001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

| Outbound UMLRC60 TRAIN II message for a generic event nullification to report an axle inspection nullification | |
|--|--|
| Message Header | #ABCD bbbb 0001 UMLRC60 0607301425RRDC bbbb / |
| Control Group Header | *CH12345620060730160000USERID bb ABCD12345620041031121200 |
| Data Group Header | *DH0001 EVN |
| Element Detail | +0001 ABCD 00000000010002 BOXCETYP AXN |
| Element Detail | +0001 ABCD 00000000010002 BOXCREPT ABCD |
| Element Detail | +0001 ABCD 00000000010002 BOXCPERF RAIL |
| Element Detail | +0001 ABCD 00000000010002 BOXCSPLC 411657000 |
| Element Detail | +0001 ABCD 00000000010002 BOXCDTDN 20061106 |
| Data Group Summary | =DS0001SUM0005 |
| Control Group Summary | =CS1234560001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

| Outbound UMLRC61 TRAIN II message for a generic event nullification to report an axle inspection nullification | |
|--|--|
| Message Header | #ABCD bbbb 0001 UMLRC61 0607301425RRDC bbbb / |
| Control Group Header | *CH12345620060730160000USERID bb ABCD12345620041031121200 |
| Data Group Header | *DH0001 EVN |
| Element Detail | +0001 ABCD 00000000010002 BOXCETYP 2006-11-21-08.01.51.000001 AXN |
| Element Detail | +0001 ABCD 00000000010002 BOXCREPT 2006-11-21-08.01.51.000001 ABCD |
| Element Detail | +0001 ABCD 00000000010002 BOXCPERF 2006-11-21-08.01.51.000001 RAIL |
| Element Detail | +0001 ABCD 00000000010002 BOXCSPLC 2006-11-21-08.01.51.000001 411657000 |
| Element Detail | +0001 ABCD 00000000010002 BOXCDTDN 2006-11-21-08.01.51.000001 20061106 |
| Data Group Summary | =DS0001SUM0005 |
| Control Group Summary | =CS1234560001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

| Outbound UMLRE70 TRAIN II message for a generic event nullification to report an axle inspection nullification | |
|--|---|
| Message Header | #ABCD bbbb 0001 UMLRE70 0607301425RRDC bbbb / |
| Control Group Header | *CH12345620060730160000USERID bb ABCD12345620041031121200 |
| Data Group Header | *DH0001 EVN |
| Element Detail | +0001 ABCD 00000000010002 BOXCETYP 000000000 AXN |
| Element Detail | +0001 ABCD 00000000010002 BOXCREPT 0000000100 ABCD |
| Element Detail | +0001 ABCD 00000000010002 BOXCPERF 000000000 RAIL |
| Element Detail | +0001 ABCD 00000000010002 BOXCSPLC 000000000 411657000 |
| Element Detail | +0001 ABCD 00000000010002 BOXCDTDN 000000000 20061106 |
| Data Group Summary | =DS0001SUM0005 |
| Control Group Summary | =CS1234560001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

34.1.6 Security Access Rights

Nullification transactions currently do not have specific security rights so there is no impact to security for nullification of generic events.

The main impact on query screens is the transaction log. When a generic event transaction is nullified the transaction log will capture the specific event type value associated with the nullification. For example, if an axle inspection 'AXL' is nullified the transaction log entry for the nullification would be 'AXN'.

35 TRAIN II Processing For Restencil

35.1 Inbound TRAIN II Restencil of Equipment

There will be no specific re-stencil function using TRAIN II. To accomplish a re-stencil in TRAIN II the equipment should be sent with an equipment add (ECA) transaction on an UMLRC00 inbound message with all needed elements to add equipment. The prior car ID sent with the ECA transaction should equal the equipment ID being added. If the equipment ID and prior ID are not the same the ECA will not be processed and will create a notice and send an UMLRE70 response.

An equipment delete (ECD) transaction can be sent in a separate inbound UMLRC00 message to delete the prior equipment if the customer chooses to do so but is not mandatory.

As a result of a successful inbound UMLRC00 equipment add (ECA) transaction an outbound UMLRC60/61 message will be produced with an equipment add (ECA) transaction and associated inspections for the equipment being added. An additional equipment change (ECC) transaction **MAY** also be sent with a status change for the prior equipment used in the restencil function.

35.2 Restencil Using Umler Website and Resulting TRAIN II Messages

If a web user restencils a piece of equipment using the restencil function from the Umler website then an outbound UMLRC60/61 message will be produced with an equipment add (ECA) transaction and associated inspections (on separate messages) for the equipment being added.

An additional equipment change (ECC) transaction can also be sent with a status change for the prior equipment used in the restencil function. If equipment is added in pre-registered status then the prior equipment status will not change at the time the equipment is added. If the equipment is added as an active piece of equipment the the prior equipment status will change to inactive and an ECC sent for the prior equipment status change.

36 TRAIN II Processing For Equipment Group Change

36.1 Inbound TRAIN II For Equipment Group Change

To change the equipment group on an UMLRC00 TRAIN II message an ECC transaction is sent to change the equipment group element.

As a result of a successful inbound UMLRC00 equipment group change two separate outbound UMLRC60/61 messages will be produced. The first message will be an equipment delete transaction (ECD). The second message will be equipment add (ECA).

36.2 Equipment Group Change Using Umler Website and Resulting TRAIN II Messages

There will be a specific function on the Umler website to change the equipment group. As a result of a successfully processed equipment group change two separate outbound UMLRC60/61 messages will be produced. The first message will be an equipment delete transaction (ECD). The second message will be equipment add (ECA).

37 Refresh Request

Refresh requests can be requested on the Umler website or by sending an inbound UMLRR00 message requesting a refresh as specified below.

37.1 UMLRC00 Inbound Refresh Request Message

A new message type called UMLRR00 will be defined to allow inbound refresh requests to the Umler system. This message type will support new refresh related transaction types. The table below documents the transaction types that will be supported by refresh request and limitations on the input.

| Transaction Type | Description | Input restriction on UMLRR00 |
|------------------|--------------------------------------|--|
| REQ | Refresh equipment. | Limited to 1,000 equipment on inbound UMLRR00 |
| RPH | Refresh pool header only. | Limited to 1,000 pool headers on inbound UMLRR00 |
| RPA | Refresh pool assignment only. | Limited to one pool id on inbound UMLRR00. |
| RPB | Refresh pool header and assignments. | Limited to one pool id on inbound UMLRR00. |
| RTM | Refresh by date range. | Limited to 1,000 equipment as a result of the request. |

37.1.1 UMLRR00 Processing

The following are guidelines for sending and the processing of UMLRR00 refresh request message type:

- An UMLRR50 envelope error response will be sent if message structure errors are identified on the inbound UMLRR00 message.
- There will be no equivalent to the UMLRE70 (error response) or UMLRE71 (message summary) messages for refresh request messages.
- Multiple data group headers can be sent on a single UMLRR00. However, separate data group headers should be sent for each different refresh request.
- A new control sequence number will be used for inbound UMLRR00 messages.
- A new control sequence number will be used for outbound UMLRR60/61 messages.
- The following are new response codes that can appear on the UMLRR50 message structure error:

Umler TRAIN II Messaging Specifications

| | 9000 | Miscellaneous errors |
|---|------|--|
| E | 9010 | The number of equipment/pool headers for which refresh request has been requested has exceeded the system limit of 1000. Or the number of pool headers specified for pool assignment of both pool header and assignment is greater than one which is not allowed. |
| E | 9011 | The date-time range for which refresh has been requested has more than 1000 transactions or spans more than one day and hence cannot be processed by the system. |
| E | 9012 | The start and/or end date-time format specified is not valid. |
| E | 9013 | The date range specified is greater than 24 hours and the message was not processed. |

The following sections describe in more details the processing of each refresh request type. Each refresh request type can be initiated through the Umler website or using the new UMLRR00 inbound refresh request message.

37.2 Equipment Characteristics Refresh

When an *equipment characteristics* refresh request is made using the Umler website or by sending an UMLRR00 inbound refresh request, one or more equipment IDs are entered or submitted.

For each equipment ID specified that exists in Umler, the system will send an Outbound UMLRR60/UMLRR61 TRAIN II message containing:

- ECD (equipment characteristic delete)
- ECA (equipment characteristic add) transaction
- Each inspection transaction existing for the equipment unit and the corresponding inspection due date data.

For each equipment ID specified that does not exist in Umler, the system will send an Outbound UMLRR60/UMLRR61 TRAIN II message containing an ECD (equipment characteristic delete) transaction for the equipment unit.

37.2.1 Message Examples For Equipment Characteristics Refresh

For equipment units that exist in Umler, the ECD transaction will always be the first data group header and the ECA transaction will always be the second data group header to appear in the UMLRR60/61 message. The order of the transactions in subsequent data groups is not guaranteed. For example, a door lube inspection data group may appear before or after an ABT data group (just as a door lube inspection may be reported before or after an ABT).

Umler TRAIN II Messaging Specifications

The following examples assume that the equipment unit ABCD0000001437 and ABCD0000001438 has a current car grade inspection, a current ABT, and a prior ABT. The example further assumes that the equipment unit has no other inspections (e.g. no door lube inspection, no reflectorization event, etc.). If the equipment unit had other inspections, the UMLRR60/UMLRR61 message would include additional data groups for those inspections and their corresponding due dates (if any).

Equipment ID ABCD0000001439 on the inbound UMLRC00 does not exist in Umler for the purpose of these examples and the result of that are shown in the section title equipment does not exist in Umler.

Also, the examples include an UMLRC00 inbound refresh request. The resulting UMLRR60/61 message examples also could have been initiated on the Umler website without the submittal of an UMLRR00 message.

37.2.1.1 UMLRR00

| Example Inbound UMLRR00 TRAIN II refresh request message | |
|--|---|
| Message Header | #RRDCCQXY0001 UMLRR00 0207301425ABCD bbbb / |
| Control Group Header | *CH65432120020730160100USERIDBB |
| Data Group Header | *DH0001 REQ |
| Detail Record | +0001 b ABCD0000001437 |
| Data Group Summary | =DS0001SUM0001 |
| Data Group Header | *DH0002 REQ |
| Detail Record | +0001 b ABCD0000001438 |
| Data Group Summary | =DS0002SUM0001 |
| Data Group Header | *DH0003 REQ |
| Detail Record | +0001 b ABCD0000001439 |
| Data Group Summary | =DS0003SUM0001 |
| Control Group Summary | =CS6543210003 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

37.2.1.2 UMLRR50

| Outbound UMLRR50 TRAIN II message to indicate a message that failed envelope checking: | |
|--|--|
| Message Header | #RRDC bbbb 0001 UMLRR50 0207301605ABCD bbbb / |
| Control Group Header | *CH12345620041031121200USERID bb ABCD12345620041031121200 |
| Detail Record | + E2008 000190 |
| Control Group Summary | =CS1234560001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

37.2.2 Message Examples For Equipment Existing in Umler

37.2.2.1 UMLRR60 Response For Equipment ID ABCD000001437

| Example Outbound UMLRR60 TRAIN II message created when equipment exists in Umler: | |
|---|--|
| Message Header | #RRDCCQXY0001 UMLRR60 0207301425ABCD bbbb/ |
| Control Group Header | *CH65432120020730160100USERID bbbbbbbbbbbbbbbbbbbb |
| Data Group Header | *DH0001 ECD |
| Detail Record | +0001 ABCD 00000014370002 b |
| Data Group Summary | =DS0001SUM0001 |
| Data Group Header | *DH0002 ECA |
| Detail Record | +0001 ABCD 00000014370002 bHOPPTCURbb |
| Detail Record | +0001 ABCD 00000014370002 bHOPPTCGRbb |
| Detail Record | +0001 ABCD 00000014370002 bHOPPTCPCbb |
| Detail Record | +0001 ABCD 00000014370002 bHOPPTCMEbb |
| Detail Record | +0001 ABCD 00000014370002 bHOPPTCMRbb |
| Detail Record | +0001 ABCD 00000014370002 bHOPPLESEbb |
| Detail Record | +0001 ABCD 00000014370002 bHOPPMNPTbABCD |
| Detail Record | +0001 ABCD 00000014370002 bHOPPUMETbE414 |
| Detail Record | +0001 ABCD 00000014370002 bHOPPUMMDbXM |
| Detail Record | +0001 ABCD 00000014370002 bHOPPP001b0000000 |
| Detail Record | +0001 ABCD 00000014370002 bHOPPTCODbb |
| Detail Record | +0001 ABCD 00000014370002 bHOPPTCCDbb |
| Data Group Summary | =DS0002SUM0012 |
| Data Group Header | *DH0003 CGI |
| Detail Record | +0001 ABCD 00000014370002 bHOPPCG01bA |
| Detail Record | +0001 ABCD 00000014370002 bHOPPCG02b20050201 |
| Detail Record | +0001 ABCD 00000014370002 bHOPPCG03b0900 |
| Detail Record | +0001 ABCD 00000014370002 bHOPPCG04b111111000 |
| Detail Record | +0001 ABCD 00000014370002 bHOPPCG05bWXYZ |
| Data Group Summary | =DS0003SUM0005 |
| Data Group Header | *DH0004 ABT |
| Detail Record | +0001 ABCD 00000014370002 bHOPPREPTbABCD |
| Detail Record | +0001 ABCD 00000014370002 bHOPPPERFbABCD |
| Detail Record | +0001 ABCD 00000014370002 bHOPPDTDNb20041030 |
| Detail Record | +0001 ABCD 00000014370002 bHOPPSPLCb115341000 |
| Data Group Summary | =DS0004SUM0004 |
| Data Group Header | *DH0005 ABP |
| Detail Record | +0001 ABCD 00000014370002 bHOPPREPTbABCD |
| Detail Record | +0001 ABCD 00000014370002 bHOPPPERFbABCD |
| Detail Record | +0001 ABCD 00000014370002 bHOPPDTDNb20021030 |
| Detail Record | +0001 ABCD 00000014370002 bHOPPSPLCb111111000 |
| Data Group Summary | =DS0005SUM0004 |
| Data Group Header | *DH0006 ECC |
| Detail Record | + 0001 ABCD 00000014370002 bBOXCDU58b20071030 |
| Detail Record | + 0001 ABCD 00000014370002 bBOXCDU13b20051030 |
| Data Group Summary | =DS0006SUM0002 |
| Control Group Summary | =CS6543210006 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

Umler TRAIN II Messaging Specifications

37.2.2.2 UMLRR61 Response For Equipment ID ABCD000001437

| Example Outbound UMLRR61 TRAIN II message created when equipment exists in Umler: | |
|---|---|
| Message Header | #RRDCCQXY0001 UMLRR61 0207301425ABCD bbbb / |
| Control Group Header | *CH65432120020730160100USERID bbbbbbbbbbbbbbbbbbbbbbbb |
| Data Group Header | *DH0001 ECD |
| Detail Record | +0001 ABCD 00000014370002 b 2003-02-21-08.01.01.000011 |
| Data Group Summary | =DS0001SUM0001 |
| Data Group Header | *DH0002 ECA |
| Detail Record | +0001 ABCD 00000014370002 b HOPPTCUR2003-02-21-08.01.01.000011 bb |
| Detail Record | +0001 ABCD 00000014370002 b HOPPTCGR2003-02-21-08.01.01.000011 bb |
| Detail Record | +0001 ABCD 00000014370002 b HOPPTCPC2003-02-21-08.01.01.000011 bb |
| Detail Record | +0001 ABCD 00000014370002 b HOPPTCME2003-02-21-08.01.01.000011 bb |
| Detail Record | +0001 ABCD 00000014370002 b HOPPTCMR2003-02-21-08.01.01.000011 bb |
| Detail Record | +0001 ABCD 00000014370002 b HOPPLESE2003-02-21-08.01.01.000011 bb |
| Detail Record | +0001 ABCD 00000014370002 b HOPPMNPT2003-02-21-08.01.01.000011 ABCD |
| Detail Record | +0001 ABCD 00000014370002 b HOPPUMET2003-02-21-08.01.01.000011 B414 |
| Detail Record | +0001 ABCD 00000014370002 b HOPPUMMD2003-02-21-08.01.01.000011 XXM |
| Detail Record | +0001 ABCD 00000014370002 b HOPPP0012003-02-21-08.01.01.000011 0000000 |
| Detail Record | +0001 ABCD 00000014370002 b HOPPTCOD2003-02-21-08.01.01.000011 bb |
| Detail Record | +0001 ABCD 00000014370002 b HOPPTCCD2003-02-21-08.01.01.000011 bb |
| Data Group Summary | =DS0002SUM0012 |
| Data Group Header | *DH0003 CGI |
| Detail Record | +0001 ABCD 00000014370002 b HOPPCG012003-02-21-08.01.01.000011 BA |
| Detail Record | +0001 ABCD 00000014370002 b HOPPCG022003-02-21-08.01.01.000011 20050201 |
| Detail Record | +0001 ABCD 00000014370002 b HOPPCG032003-02-21-08.01.01.000011 0900 |
| Detail Record | +0001 ABCD 00000014370002 b HOPPCG042003-02-21-08.01.01.000011 111111000 |
| Detail Record | +0001 ABCD 00000014370002 b HOPPCG052003-02-21-08.01.01.000011 WXYZ |
| Data Group Summary | =DS0003SUM0005 |
| Data Group Header | *DH0004 ABT |
| Detail Record | +0001 ABCD 00000014370002 b HOPPREPT2003-02-21-08.01.01.000011 ABCD |
| Detail Record | +0001 ABCD 00000014370002 b HOPPPERF2003-02-21-08.01.01.000011 ABCD |
| Detail Record | +0001 ABCD 00000014370002 b HOPPDTDN2003-02-21-08.01.01.000011 20041030 |
| Detail Record | +0001 ABCD 00000014370002 b HOPPSPLC2003-02-21-08.01.01.000011 115341000 |
| Data Group Summary | =DS0004SUM0004 |
| Data Group Header | *DH0005 ABP |
| Detail Record | +0001 ABCD 00000014370002 b HOPPREPT2003-02-21-08.01.01.000011 ABCD |
| Detail Record | +0001 ABCD 00000014370002 b HOPPPERF2003-02-21-08.01.01.000011 ABCD |
| Detail Record | +0001 ABCD 00000014370002 b HOPPDTDN2003-02-21-08.01.01.000011 20021030 |
| Detail Record | +0001 ABCD 00000014370002 b HOPPSPLC2003-02-21-08.01.01.000011 111111000 |
| Data Group Summary | =DS0005SUM0004 |
| Data Group Header | *DH0006 ECC |
| Detail Record | +0001 ABCD 00000014370002 b BOXCDU582003-02-21-08.01.01.000011 20071030 |
| Detail Record | +0001 ABCD 00000014370002 b BOXCDU132003-02-21-08.01.01.000011 20051030 |
| Data Group Summary | =DS0006SUM0002 |
| Control Group Summary | =CS6543210006 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

Umler TRAIN II Messaging Specifications

37.2.2.3 UMLRR60 Response For Equipment ID ABCD000001438

| Example Outbound UMLRR60 TRAIN II message created when equipment exists in Umler: | |
|---|---|
| Message Header | #RRDCCQXY0001 UMLRR60 0207301425ABCD bbbb / |
| Control Group Header | *CH65432120020730160100USERID bbbbbbbbbbbbbbbbbbbbbbbb |
| Data Group Header | *DH0001 ECD |
| Detail Record | +0001 ABCD00000014370002b |
| Data Group Summary | =DS0001SUM0001 |
| Data Group Header | *DH0002 ECA |
| Detail Record | +0001 ABCD00000014370002bHOPPTCURbb |
| Detail Record | +0001 ABCD00000014370002bHOPPTCGRbb |
| Detail Record | +0001 ABCD00000014370002bHOPPTCPCbb |
| Detail Record | +0001 ABCD00000014370002bHOPPTCMEbb |
| Detail Record | +0001 ABCD00000014370002bHOPPTCMRbb |
| Detail Record | +0001 ABCD00000014370002bHOPPLESEbb |
| Detail Record | +0001 ABCD00000014370002bHOPPMNPTbABCD |
| Detail Record | +0001 ABCD00000014370002bHOPPUMETbB414 |
| Detail Record | +0001 ABCD00000014370002bHOPPUMDbXM |
| Detail Record | +0001 ABCD00000014370002bHOPPP001b0000000 |
| Detail Record | +0001 ABCD00000014370002bHOPPTCODbb |
| Detail Record | +0001 ABCD00000014370002bHOPPTCCDbb |
| Data Group Summary | =DS0002SUM0012 |
| Data Group Header | *DH0003 CGI |
| Detail Record | +0001 ABCD00000014370002bHOPPCG01bA |
| Detail Record | +0001 ABCD00000014370002bHOPPCG02b20050201 |
| Detail Record | +0001 ABCD00000014370002bHOPPCG03b0900 |
| Detail Record | +0001 ABCD00000014370002bHOPPCG04b111111000 |
| Detail Record | +0001 ABCD00000014370002bHOPPCG05bWXYZ |
| Data Group Summary | =DS0003SUM0005 |
| Data Group Header | *DH0004 ABT |
| Detail Record | +0001 ABCD00000014370002bHOPPREPTbABCD |
| Detail Record | +0001 ABCD00000014370002bHOPPPERFbABCD |
| Detail Record | +0001 ABCD00000014370002bHOPPDTDNb20041030 |
| Detail Record | +0001 ABCD00000014370002bHOPPSPLCb115341000 |
| Data Group Summary | =DS0004SUM0004 |
| Data Group Header | *DH0005 ABP |
| Detail Record | +0001 ABCD00000014370002bHOPPREPTbABCD |
| Detail Record | +0001 ABCD00000014370002bHOPPPERFbABCD |
| Detail Record | +0001 ABCD00000014370002bHOPPDTDNb20021030 |
| Detail Record | +0001 ABCD00000014370002bHOPPSPLCb111111000 |
| Data Group Summary | =DS0005SUM0004 |
| Data Group Header | *DH0006 ECC |
| Detail Record | + 0001 ABCD00000014370002b BOXCDU58 b 20071030 |
| Detail Record | + 0001 ABCD00000014370002b BOXCDU13 b 20051030 |
| Data Group Summary | =DS0006SUM0002 |
| Control Group Summary | =CS6543210006 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

Umler TRAIN II Messaging Specifications

37.2.2.4 UMLRR61 Response For Equipment ID ABCD0000001438

| Example Outbound UMLRR61 TRAIN II message created when equipment exists in Umler: | |
|---|---|
| Message Header | #RRDCCQXY0001 UMLRR61 0207301425ABCD bbbb / |
| Control Group Header | *CH65432120020730160100USERID bbbbbbbbbbbbbbbbbbbbbbbb |
| Data Group Header | *DH0001 ECD |
| Detail Record | +0001 ABCD 00000014380002 b 2003-02-21-08.01.01.000011 |
| Data Group Summary | =DS0001SUM0001 |
| Data Group Header | *DH0002 ECA |
| Detail Record | +0001 ABCD 00000014380002 b HOPPTCUR2003-02-21-08.01.01.000011 bb |
| Detail Record | +0001 ABCD 00000014380002 b HOPPTCGR2003-02-21-08.01.01.000011 bb |
| Detail Record | +0001 ABCD 00000014380002 b HOPPTCPC2003-02-21-08.01.01.000011 bb |
| Detail Record | +0001 ABCD 00000014380002 b HOPPTCME2003-02-21-08.01.01.000011 bb |
| Detail Record | +0001 ABCD 00000014380002 b HOPPTCMR2003-02-21-08.01.01.000011 bb |
| Detail Record | +0001 ABCD 00000014380002 b HOPPLESE2003-02-21-08.01.01.000011 bb |
| Detail Record | +0001 ABCD 00000014380002 b HOPPMNPT2003-02-21-08.01.01.000011 ABCD |
| Detail Record | +0001 ABCD 00000014380002 b HOPPUMET2003-02-21-08.01.01.000011 B414 |
| Detail Record | +0001 ABCD 00000014380002 b HOPPUMMD2003-02-21-08.01.01.000011 XXM |
| Detail Record | +0001 ABCD 00000014380002 b HOPPP0012003-02-21-08.01.01.000011 0000000 |
| Detail Record | +0001 ABCD 00000014380002 b HOPPTCOD2003-02-21-08.01.01.000011 bb |
| Detail Record | +0001 ABCD 00000014380002 b HOPPTCCD2003-02-21-08.01.01.000011 bb |
| Data Group Summary | =DS0002SUM0012 |
| Data Group Header | *DH0003 CGI |
| Detail Record | +0001 ABCD 00000014380002 b HOPPCG012003-02-21-08.01.01.000011 BA |
| Detail Record | +0001 ABCD 00000014380002 b HOPPCG022003-02-21-08.01.01.000011 20050201 |
| Detail Record | +0001 ABCD 00000014380002 b HOPPCG032003-02-21-08.01.01.000011 0900 |
| Detail Record | +0001 ABCD 00000014380002 b HOPPCG042003-02-21-08.01.01.000011 111111000 |
| Detail Record | +0001 ABCD 00000014380002 b HOPPCG052003-02-21-08.01.01.000011 WXYZ |
| Data Group Summary | =DS0003SUM0005 |
| Data Group Header | *DH0004 ABT |
| Detail Record | +0001 ABCD 00000014380002 b HOPPREPT2003-02-21-08.01.01.000011 ABCD |
| Detail Record | +0001 ABCD 00000014380002 b HOPPPERF2003-02-21-08.01.01.000011 ABCD |
| Detail Record | +0001 ABCD 00000014380002 b HOPPDTDN2003-02-21-08.01.01.000011 20041030 |
| Detail Record | +0001 ABCD 00000014380002 b HOPPSPLC2003-02-21-08.01.01.000011 115341000 |
| Data Group Summary | =DS0004SUM0004 |
| Data Group Header | *DH0005 ABP |
| Detail Record | +0001 ABCD 00000014380002 b HOPPREPT2003-02-21-08.01.01.000011 ABCD |
| Detail Record | +0001 ABCD 00000014380002 b HOPPPERF2003-02-21-08.01.01.000011 ABCD |
| Detail Record | +0001 ABCD 00000014380002 b HOPPDTDN2003-02-21-08.01.01.000011 20021030 |
| Detail Record | +0001 ABCD 00000014380002 b HOPPSPLC2003-02-21-08.01.01.000011 111111000 |
| Data Group Summary | =DS0005SUM0004 |
| Data Group Header | *DH0006 ECC |
| Detail Record | +0001 ABCD 00000014380002 b BOXCDU582003-02-21-08.01.01.000011 20071030 |
| Detail Record | +0001 ABCD 00000014380002 b BOXCDU132003-02-21-08.01.01.000011 20051030 |
| Data Group Summary | =DS0006SUM0002 |
| Control Group Summary | =CS6543210006 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

37.2.3 Message Examples For Equipment Not Existing in Umler

37.2.3.1 UMLRR60 Response For Equipment ID ABCD0000001439

| Outbound UMLRR60 TRAIN II message created when equipment does not exist in Umler: | |
|---|---|
| Message Header | #RRDCCQXY0001UMLRR600207301425ABCDbbbb/ |
| Control Group Header | *CH65432120020730160100USERIDbbbbbbbbbbbbbbbbbbbb |
| Data Group Header | *DH0001ECD |
| Detail Record | +0001bABCD00000014390002b |
| Data Group Summary | =DS0001SUM0001 |
| Control Group Summary | =CS6543210001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

37.2.3.2 UMLRR61 Response For Equipment ID ABCD0000001439

| Outbound UMLRR61 TRAIN II message created when equipment does not exist in Umler: | |
|---|--|
| Message Header | #RRDCCQXY0001UMLRR610207301425ABCDbbbb/ |
| Control Group Header | *CH65432120020730160100USERIDbbbbbbbbbbbbbbbbbbbb |
| Data Group Header | *DH0001ECD |
| Detail Record | +0001bABCD00000014390002b 2003-02-21-08.01.01.000011 |
| Data Group Summary | =DS0001SUM0001 |
| Control Group Summary | =CS6543210001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

37.3 Pool Data Refresh

37.3.1 Pool Header Only

When a *pool data - pool header only* refresh request is made using the Umler website or by sending an UMLRR00 inbound refresh request, one or more pool IDs are entered or submitted.

For each pool ID specified that exists in Umler, the system will send an Outbound UMLRR60/UMLRR61 TRAIN II message containing an HA (pool header add) transaction for the pool header.

For each pool ID specified that does not exist in Umler, the system will send an Outbound UMLRR60/UMLRR61 TRAIN II message containing an HD (pool header delete) transaction for the pool header.

37.3.1.1 Message Example For Inbound UMLRR00 Pool Header Only Refresh

37.3.1.1.1 UMLRR00

| Example Inbound UMLRR00 TRAIN II message created when pool header exists in Umler: | |
|--|--|
| Message Header | #RRDC bbbb 0001 UMLRR00 0207301605ABCD bbbb / |
| Control Group Header | *CH65432120020730160100USERID bb |
| Data Group Header | *DH0001RPH |
| Detail Record | + P001b 1234567 |
| Data Group Summary | =DS0001SUM0001 |
| Data Group Header | *DH0002RPH |
| Detail Record | + P001b 1234568 |
| Data Group Summary | =DS0002SUM0001 |
| Control Group Summary | =CS6543210002 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

37.3.1.2 Message Examples For Pool Header Existing in Umler

37.3.1.2.1 UMLRR60 For Pool Header 1234567 That Exists in Umler

| Example Outbound UMLRR60 TRAIN II message created when pool header exists in Umler: | |
|---|--|
| Message Header | #RRDC bbbb 0001 UMLRR60 0207301605ABCD bbbb / |
| Control Group Header | *CH65432120020730160100USERID bb ABCD12345620020730160000 |
| Data Group Header | *DH0001 HAb |
| Detail Record | + P001b 1234567P002 b STONE CONTAINER |
| Detail Record | + P001b 1234567P003 b TANEYTOWN |
| Detail Record | + P001b 1234567P004 b MD |
| Detail Record | + P001b 1234567P005 b |
| Detail Record | + P001b 1234567P006 b C |
| Detail Record | + P001b 1234567P007 b l |
| Detail Record | + P001b 1234567P008 b |
| Detail Record | + P001b 1234567P009 b |
| Detail Record | + P001b 1234567P010 b |
| Detail Record | + P001b 1234567P011 b ABCD |
| Detail Record | + P001b 1234567P012 b |
| Detail Record | + P001b 1234567P013 b |
| Detail Record | + P001b 1234567P014 b |
| Data Group Summary | =DS0001SUM0013 |
| Control Group Summary | =CS6543210001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

Umler TRAIN II Messaging Specifications

37.3.1.2.2 UMLRR61 for pool header 1234567 that exists in Umler

| Example Outbound UMLRR61 TRAIN II message created when pool header exists in Umler: | |
|---|---|
| Message Header | #RRDCbbb0001UMLRR610207301605ABCDbbb/ |
| Control Group Header | *CH65432120020730160100USERIDbbABCD12345620020730160000 |
| Data Group Header | *DH0001HAb |
| Detail Record | +P001b1234567P0022003-02-21-08.01.01.000005bSTONE CONTAINER |
| Detail Record | +P001b1234567P0032003-02-21-08.01.01.000005bTANEYTOWN |
| Detail Record | +P001b1234567P0042003-02-21-08.01.01.000005bMD |
| Detail Record | +P001b1234567P0052003-02-21-08.01.01.000005b |
| Detail Record | +P001b1234567P0062003-02-21-08.01.01.000005bC |
| Detail Record | +P001b1234567P0072003-02-21-08.01.01.000005b1 |
| Detail Record | +P001b1234567P0082003-02-21-08.01.01.000005b |
| Detail Record | +P001b1234567P0092003-02-21-08.01.01.000005b |
| Detail Record | +P001b1234567P0102003-02-21-08.01.01.000005b |
| Detail Record | +P001b1234567P0112003-02-21-08.01.01.000005bABCD |
| Detail Record | +P001b1234567P0122003-02-21-08.01.01.000005b |
| Detail Record | +P001b1234567P0132003-02-21-08.01.01.000005b |
| Detail Record | +P001b1234567P0142003-02-21-08.01.01.000005b |
| Data Group Summary | =DS0001SUM0013 |
| Control Group Summary | =CS6543210001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

Umler TRAIN II Messaging Specifications

37.3.1.3 Message Examples for Pool Header Not Existing in Umler

37.3.1.3.1 UMLRR60 for pool header 1234568 that does not exist in Umler

| Example Outbound UMLRR60 TRAIN II message created when pool header does not exist in Umler: | |
|--|--|
| Message Header | #RRDC bbbb 0001 UMLRR60 0207301605ABCD bbbb / |
| Control Group Header | *CH65432120020730160100USERID bb ABCD12345620020730160000 |
| Data Group Header | *DH0001 HDb P001 b 1234568 |
| Data Group Summary | =DS0001SUM0000 |
| Control Group Summary | =CS6543210001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

37.3.1.3.2 UMLRR61 for pool header 1234568 that does not exist in Umler

| Example Outbound UMLRR61 TRAIN II message created when pool header does not exist in Umler: | |
|--|--|
| Message Header | #RRDC bbbb 0001 UMLRR61 0207301605ABCD bbbb / |
| Control Group Header | *CH65432120020730160100USERID bb ABCD12345620020730160000 |
| Data Group Header | *DH0001 HDb P001 b 12345682003-02-21-08.01.01.000015 |
| Data Group Summary | =DS0001SUM0000 |
| Control Group Summary | =CS6543210001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

Umler TRAIN II Messaging Specifications

37.3.2 Pool Assignment Only

When a *pool data - pool assignment only* refresh request is made using the Umler website or by sending an UMLRR00 inbound refresh request, one or more pool IDs are entered or submitted.

For each equipment unit assigned to one of the specified pool IDs, the system will send an Outbound UMLRR60/UMLRR61 TRAIN II message containing an ECC (equipment characteristic change) transaction for the equipment unit. The message will include all car management-related elements:

1. Pool ID
2. Equipment Management Codes
3. Umler Transportation Codes
4. Lessee

37.3.2.1 Message Example For Inbound UMLRR00 Pool Assignment Only Refresh

37.3.2.1.1 UMLRR00

| Example Inbound UMLRR00 TRAIN II message created when pool assignment exists in Umler: | |
|--|--|
| Message Header | #RRDC bbbb 0001 UMLRR00 0207301605ABCD bbbb / |
| Control Group Header | *CH65432120020730160100USERID bb |
| Data Group Header | *DH0001RPA |
| Detail Record | + P001b 1234567 |
| Data Group Summary | =DS0001SUM0001 |
| Control Group Summary | =CS6543210001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

37.3.2.2 Message Examples For Outbound Refresh Messages

37.3.2.2.1 UMLRR60

| Example Outbound UMLRR60 TRAIN II message created for equipment unit assigned to specified pool: | |
|--|--|
| Message Header | #RRDCCQXY0001 UMLRR60 0207301425ABCD bbbb / |
| Control Group Header | *CH65432120020730160100USERID bbbbbbbbbbbbbbbbbbbb |
| Data Group Header | *DH0001 ECC |
| Detail Record | +0001 abcd 00000014370002 bHOPPTCURbb |
| Detail Record | +0001 abcd 00000014370002 bHOPPTCGRbb |
| Detail Record | +0001 abcd 00000014370002 bHOPPTCPCbc |
| Detail Record | +0001 abcd 00000014370002 bHOPPTCMEbb |
| Detail Record | +0001 abcd 00000014370002 bHOPPTCMRbb |
| Detail Record | +0001 abcd 00000014370002 bHOPPLESEbb |
| Detail Record | +0001 abcd 00000014370002 bHOPPP001b 1234567 |
| Detail Record | +0001 abcd 00000014370002 bHOPPTCODbc |
| Detail Record | +0001 abcd 00000014370002 bHOPPTCCDbb |
| Data Group Summary | =DS0001SUM009 |
| Control Group Summary | =CS6543210001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

Umler TRAIN II Messaging Specifications

37.3.2.2 UMLRR61

| Example Outbound UMLRR61 TRAIN II message created for equipment unit assigned to specified pool: | |
|--|---|
| Message Header | #RRDCCQXY0001UMLRR610207301425ABCDbbbb/ |
| Control Group Header | *CH65432120020730160100USERIDbbbbbbbbbbbbbbbbbbbb |
| Data Group Header | *DH0001ECC |
| Detail Record | +0001bABCD00000014370002bHOPPTCUR2003-02-21-08.01.51.000001bb |
| Detail Record | +0001bABCD00000014370002bHOPPTCGR2003-02-21-08.01.51.000001bb |
| Detail Record | +0001bABCD00000014370002bHOPPTCPC2003-02-21-08.01.51.000001bc |
| Detail Record | +0001bABCD00000014370002bHOPPTCME2003-02-21-08.01.51.000001bb |
| Detail Record | +0001bABCD00000014370002bHOPPTCMR2003-02-21-08.01.51.000001bb |
| Detail Record | +0001bABCD00000014370002bHOPPLESE2003-02-21-08.01.51.000001bb |
| Detail Record | +0001bABCD00000014370002bHOPPP0012003-02-21-08.01.51.000001b1234567 |
| Detail Record | +0001bABCD00000014370002bHOPPTCOD2003-02-21-08.01.51.000001bc |
| Detail Record | +0001bABCD00000014370002bHOPPTCCD2003-02-21-08.01.51.000001bb |
| Data Group Summary | =DS0001SUM009 |
| Control Group Summary | =CS6543210001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

37.3.3 Both (Pool Header and Pool Assignments)

When a *pool data - both* refresh request is made using the Umler website or by sending an UMLRR00 inbound refresh request, one or more pool IDs are entered or submitted.

For each pool ID specified that exists in Umler, the system will send an Outbound UMLRR60/UMLRR61 TRAIN II message containing an HA (pool header add) transaction for the pool header.

For each pool ID specified that does not exist in Umler, the system will send an Outbound UMLRR60/UMLRR61 TRAIN II message containing an HD (pool header delete) transaction for the pool header.

For each equipment unit assigned to one of the specified pool IDs, the system will send an Outbound UMLRR60/UMLRR61 TRAIN II message containing an ECC (equipment characteristic change) transaction for the equipment unit. The message will include all car management-related elements:

1. Pool ID
2. Equipment Management Codes
3. Umler Transportation Codes
4. Lessee

37.3.3.1 Message Examples for Pool Header Existing in Umler

37.3.3.1.1 UMLRR00

| Example Inbound UMLRR00 TRAIN II message created when pool exists in Umler: | |
|---|---|
| Message Header | #RRDCbbbb0001UMLRR000207301605ABCDbbbb/ |
| Control Group Header | *CH65432120020730160100USERIDbb |
| Data Group Header | *DH0001RPH |
| Detail Record | +P001b1234567 |
| Detail Record | +P001b1234568 |
| Data Group Summary | =DS0001SUM0002 |
| Control Group Summary | =CS6543210001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

Umler TRAIN II Messaging Specifications

37.3.3.1.2 UMLRR60 for pool header 1234567 that exists in Umler

| Example Outbound UMLRR60 TRAIN II message created when pool exists in Umler: | |
|--|---|
| Message Header | #RRDCbbb0001UMLRR600207301605ABCDbbb/ |
| Control Group Header | *CH65432120020730160100USERIDbbABCD12345620020730160000 |
| Data Group Header | *DH0001HAb |
| Detail Record | +P001b1234567P002bSTONE CONTAINER |
| Detail Record | +P001b1234567P003bTANEYTOWN |
| Detail Record | +P001b1234567P004bMD |
| Detail Record | +P001b1234567P005b |
| Detail Record | +P001b1234567P006bC |
| Detail Record | +P001b1234567P007b1 |
| Detail Record | +P001b1234567P008b |
| Detail Record | +P001b1234567P009b |
| Detail Record | +P001b1234567P010b |
| Detail Record | +P001b1234567P011bABCD |
| Detail Record | +P001b1234567P012b |
| Detail Record | +P001b1234567P013b |
| Detail Record | +P001b1234567P014b |
| Data Group Summary | =DS0001SUM0013 |
| Control Group Summary | =CS6543210001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

37.3.3.1.3 UMLRR61 for pool header 1234567 that exists in Umler

| Example Outbound UMLRR61 TRAIN II message created when pool exists in Umler: | |
|--|---|
| Message Header | #RRDCbbb0001UMLRR610207301605ABCDbbb/ |
| Control Group Header | *CH65432120020730160100USERIDbbABCD12345620020730160000 |
| Data Group Header | *DH0001HAb |
| Detail Record | +P001b1234567P0022003-02-21-08.01.01.000005bSTONE CONTAINER |
| Detail Record | +P001b1234567P0032003-02-21-08.01.01.000005bTANEYTOWN |
| Detail Record | +P001b1234567P0042003-02-21-08.01.01.000005bMD |
| Detail Record | +P001b1234567P0052003-02-21-08.01.01.000005b |
| Detail Record | +P001b1234567P0062003-02-21-08.01.01.000005bC |
| Detail Record | +P001b1234567P0072003-02-21-08.01.01.000005b1 |
| Detail Record | +P001b1234567P0082003-02-21-08.01.01.000005b |
| Detail Record | +P001b1234567P0092003-02-21-08.01.01.000005b |
| Detail Record | +P001b1234567P0102003-02-21-08.01.01.000005b |
| Detail Record | +P001b1234567P0112003-02-21-08.01.01.000005bABCD |
| Detail Record | +P001b1234567P0122003-02-21-08.01.01.000005b |
| Detail Record | +P001b1234567P0132003-02-21-08.01.01.000005b |
| Detail Record | +P001b1234567P0142003-02-21-08.01.01.000005b |
| Data Group Summary | =DS0001SUM0013 |
| Control Group Summary | =CS6543210001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

Umler TRAIN II Messaging Specifications

37.3.3.2 Message Examples for Pool Header Not Existing in Umler

37.3.3.2.1 UMLRR60 for pool header 1234568 that does not exist in Umler

| Example Outbound UMLRR60 TRAIN II message created when pool does not exist in Umler: | |
|--|--|
| Message Header | #RRDC bbbb 0001 UMLRR60 0207301605ABCD bbbb / |
| Control Group Header | *CH65432120020730160100USERID bb ABCD12345620020730160000 |
| Data Group Header | *DH0001 HDb P001 b 1234568 |
| Data Group Summary | =DS0001SUM0000 |
| Control Group Summary | =CS6543210001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

37.3.3.2.2 UMLRR61 for pool header 1234568 that does not exist in Umler

| Example Outbound UMLRR61 TRAIN II message created when pool does not exist in Umler: | |
|--|--|
| Message Header | #RRDC bbbb 0001 UMLRR61 0207301605ABCD bbbb / |
| Control Group Header | *CH65432120020730160100USERID bb ABCD12345620020730160000 |
| Data Group Header | *DH0001 HDb P001 b 12345682003-02-21-08.01.01.000015 |
| Data Group Summary | =DS0001SUM0000 |
| Control Group Summary | =CS6543210001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

37.3.3.3 Message Examples for Pool Assignment Existing in Umler

37.3.3.3.1 UMLRR00

| Example Inbound UMLRC00 TRAIN II message created when pool exists in Umler: | |
|---|--|
| Message Header | #RRDC bbbb 0001 UMLRR00 0207301605ABCD bbbb / |
| Control Group Header | *CH65432120020730160100USERID bb |
| Data Group Header | *DH0001RPH |
| Detail Record | + P001b 1234567 |
| Data Group Summary | =DS0001SUM0001 |
| Control Group Summary | =CS6543210001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

Umler TRAIN II Messaging Specifications

37.3.3.3.2 UMLRR60

| Example Outbound UMLRR60 TRAIN II message created for equipment unit assigned to specified pool: | |
|---|---|
| Message Header | #RRDCCQXY0001UMLRR600207301425ABCDbbbb/ |
| Control Group Header | *CH65432120020730160100USERIDbbbbbbbbbbbbbbbbbbbb |
| Data Group Header | *DH0001ECC |
| Detail Record | +0001bABCD00000014370002bHOPPTCURbb |
| Detail Record | +0001bABCD00000014370002bHOPPTCGRbb |
| Detail Record | +0001bABCD00000014370002bHOPPTCPCbC |
| Detail Record | +0001bABCD00000014370002bHOPPTCMEbb |
| Detail Record | +0001bABCD00000014370002bHOPPTCMRbb |
| Detail Record | +0001bABCD00000014370002bHOPPLESEbb |
| Detail Record | +0001bABCD00000014370002bHOPPP001b1234567 |
| Detail Record | +0001bABCD00000014370002bHOPPTCODbC |
| Detail Record | +0001bABCD00000014370002bHOPPTCCDbb |
| Data Group Summary | =DS0001SUM009 |
| Control Group Summary | =CS6543210001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

37.3.3.3.3 UMLRR61

| Example Outbound UMLRR61 TRAIN II message created for equipment unit assigned to specified pool: | |
|---|---|
| Message Header | #RRDCCQXY0001UMLRR610207301425ABCDbbbb/ |
| Control Group Header | *CH65432120020730160100USERIDbbbbbbbbbbbbbbbbbbbb |
| Data Group Header | *DH0001ECC |
| Detail Record | +0001bABCD00000014370002bHOPPTCUR2003-02-21-08.01.51.000001bb |
| Detail Record | +0001bABCD00000014370002bHOPPTCGR2003-02-21-08.01.51.000001bb |
| Detail Record | +0001bABCD00000014370002bHOPPTCPC2003-02-21-08.01.51.000001bC |
| Detail Record | +0001bABCD00000014370002bHOPPTCME2003-02-21-08.01.51.000001bb |
| Detail Record | +0001bABCD00000014370002bHOPPTCMR2003-02-21-08.01.51.000001bb |
| Detail Record | +0001bABCD00000014370002bHOPPLESE2003-02-21-08.01.51.000001bb |
| Detail Record | +0001bABCD00000014370002bHOPPP0012003-02-21-08.01.51.000001b1234567 |
| Detail Record | +0001bABCD00000014370002bHOPPTCOD2003-02-21-08.01.51.000001bC |
| Detail Record | +0001bABCD00000014370002bHOPPTCCD2003-02-21-08.01.51.000001bb |
| Data Group Summary | =DS0001SUM009 |
| Control Group Summary | =CS6543210001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

37.4 Date/Time Range Refresh

When a *date/time range* refresh request is made using the Umler website or by sending an UMLRR00 inbound refresh request, the user specifies a starting date/time and an ending date/time in the refresh request.

For all pool headers added, changed, or deleted during the specified date/time range, the system will send messages as follows:

1. If the pool header exists in Umler, the system will send an Outbound UMLRR60/UMLRR61 TRAIN II message containing an HA (pool header add) transaction representing the current state of the pool header.
2. If the pool header does not exist in Umler, the system will send an Outbound UMLRR60/UMLRR61 TRAIN II message containing an HD (pool header delete) transaction for the pool header.

For all equipment units added, changed, deleted, or for which inspections were reported, the system will send messages as follows:

1. If the equipment unit exists in Umler, the system will send an Outbound UMLRR60/UMLRR61 TRAIN II message containing an ECD (equipment delete) immediately followed by an ECA (equipment add) transaction followed by each inspection transaction existing for the equipment unit and the corresponding inspection due date data.
2. If the equipment unit does not exist in Umler, the system will send an Outbound UMLRR60/UMLRR61 TRAIN II message containing an ECD (equipment characteristic delete) transaction for the equipment unit.

Umler TRAIN II Messaging Specifications

The following illustrates the format of an inbound UMLRR0 elemental reporting detail record on equipment add/change transactions.

+2009-02-21-08.01.51.0000012009-02-21-10.01.51.000001

Minimum length of UMLRR0 elemental reporting detail segment = 53

Maximum length of UMLRR0 elemental reporting detail segment = 53

| Value | Description |
|----------------------------|---|
| + | The delimiter to start a detail record |
| 2009-02-21-08.01.51.000001 | The starting DB2 format date/timestamp of refresh request |
| 2009-02-21-10.01.51.000001 | The ending DB2 format date/timestamp of refresh request |

37.4.1 Message Examples for Date/Timestamp for all pool headers added, changed, or deleted during the specified date/time range, the system will send messages as follows

37.4.1.1 UMLRR0

| Example Inbound UMLRR0 TRAIN II message created when pool exists in Umler: | |
|--|--|
| Message Header | #RRDC bbbb 0001 UMLRR00 0207301605ABCD bbbb / |
| Control Group Header | *CH65432120020730160100USERID bb |
| Data Group Header | *DH0001RTM |
| Detail Record | +2009-02-21-08.01.51.0000012009-02-21-10.01.51.000001 |
| Data Group Summary | =DS0001SUM0001 |
| Control Group Summary | =CS6543210001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

37.4.1.2 Message Examples for Pool Header Existing in Umler

37.4.1.2.1 UMLRR60 for pool header 1234567 that exists in Umler

| Example Outbound UMLRR60 TRAIN II message created when pool exists in Umler: | |
|--|--|
| Message Header | #RRDC bbbb 0001 UMLRR60 0207301605ABCD bbbb / |
| Control Group Header | *CH65432120020730160100USERID bb ABCD12345620020730160000 |
| Data Group Header | *DH0001 HAb |
| Detail Record | + P001b 1234567P002 b STONE CONTAINER |
| Detail Record | + P001b 1234567P003 b TANEYTOWN |
| Detail Record | + P001b 1234567P004 b MD |
| Detail Record | + P001b 1234567P005 b |
| Detail Record | + P001b 1234567P006 b C |
| Detail Record | + P001b 1234567P007 b 1 |
| Detail Record | + P001b 1234567P008 b |
| Detail Record | + P001b 1234567P009 b |
| Detail Record | + P001b 1234567P010 b |
| Detail Record | + P001b 1234567P011 b ABCD |
| Detail Record | + P001b 1234567P012 b |
| Detail Record | + P001b 1234567P013 b |
| Detail Record | + P001b 1234567P014 b |
| Data Group Summary | =DS0001SUM0013 |
| Control Group Summary | =CS6543210001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

Umler TRAIN II Messaging Specifications

37.4.1.2.2 UMLRR61 for pool header 1234567 that exists in Umler

| Example Outbound UMLRR61 TRAIN II message created when pool exists in Umler: | |
|--|---|
| Message Header | #RRDC bbb 0001 UMLRR61 0207301605ABCD bbb / |
| Control Group Header | *CH65432120020730160100USERID bb ABCD12345620020730160000 |
| Data Group Header | *DH0001 HAb |
| Detail Record | + P001b 1234567P0022003-02-21-08.01.01.000005 b STONE CONTAINER |
| Detail Record | + P001b 1234567P0032003-02-21-08.01.01.000005 b TANEYTOWN |
| Detail Record | + P001b 1234567P0042003-02-21-08.01.01.000005 b M |
| Detail Record | + P001b 1234567P0052003-02-21-08.01.01.000005 b |
| Detail Record | + P001b 1234567P0062003-02-21-08.01.01.000005 b C |
| Detail Record | + P001b 1234567P0072003-02-21-08.01.01.000005 b 1 |
| Detail Record | + P001b 1234567P0082003-02-21-08.01.01.000005 b |
| Detail Record | + P001b 1234567P0092003-02-21-08.01.01.000005 b |
| Detail Record | + P001b 1234567P0102003-02-21-08.01.01.000005 b |
| Detail Record | + P001b 1234567P0112003-02-21-08.01.01.000005 b ABCD |
| Detail Record | + P001b 1234567P0122003-02-21-08.01.01.000005 b |
| Detail Record | + P001b 1234567P0132003-02-21-08.01.01.000005 b |
| Detail Record | + P001b 1234567P0142003-02-21-08.01.01.000005 b |
| Data Group Summary | =DS0001SUM0013 |
| Control Group Summary | =CS6543210001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

Umler TRAIN II Messaging Specifications

37.4.1.3 Message Examples for Pool Header Not Existing in Umler

37.4.1.3.1 UMLRR60 for pool header 1234568 that does not exist in Umler

| Example Outbound UMLRR60 TRAIN II message created when pool does not exist in Umler: | |
|--|--|
| Message Header | #RRDC bbbb 0001 UMLRR60 0207301605ABCD bbbb / |
| Control Group Header | *CH65432120020730160100USERID bb ABCD12345620020730160000 |
| Data Group Header | *DH0001 HD P001 b 1234568 |
| Data Group Summary | =DS0001SUM0000 |
| Control Group Summary | =CS6543210001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

37.4.1.3.2 UMLRR61 for pool header 1234568 that does not exist in Umler

| Example Outbound UMLRR61 TRAIN II message created when pool does not exist in Umler: | |
|--|--|
| Message Header | #RRDC bbbb 0001 UMLRR61 0207301605ABCD bbbb / |
| Control Group Header | *CH65432120020730160100USERID bb ABCD12345620020730160000 |
| Data Group Header | *DH0001 HD P001 b 12345682003-02-21-08.01.01.000015 |
| Data Group Summary | =DS0001SUM0000 |
| Control Group Summary | =CS6543210001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

37.4.1.4 Message Examples for Pool Assignment Existing in Umler

37.4.1.4.1 UMLRR60

| Example Outbound UMLRR60 TRAIN II message created for equipment unit assigned to specified pool: | |
|--|--|
| Message Header | #RRDCCQXY0001 UMLRR60 0207301425ABCD bbbb / |
| Control Group Header | *CH65432120020730160100USERID bbbbbbbbbbbbbbbbbbbbbbbb |
| Data Group Header | *DH0001 ECC |
| Detail Record | +0001 b ABCD00000014370002 b HOPPTCUR bb |
| Detail Record | +0001 b ABCD00000014370002 b HOPPTCGR bb |
| Detail Record | +0001 b ABCD00000014370002 b HOPPTCPC bc |
| Detail Record | +0001 b ABCD00000014370002 b HOPPTCME bb |
| Detail Record | +0001 b ABCD00000014370002 b HOPPTCMR bb |
| Detail Record | +0001 b ABCD00000014370002 b HOPPLESE bb |
| Detail Record | +0001 b ABCD00000014370002 b HOPPP001 b 1234567 |
| Detail Record | +0001 b ABCD00000014370002 b HOPPTCOD bc |
| Detail Record | +0001 b ABCD00000014370002 b HOPPTCCD bb |
| Data Group Summary | =DS0001SUM009 |
| Control Group Summary | =CS6543210001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

37.4.1.4.2 UMLRR61

| Example Outbound UMLRR61 TRAIN II message created for equipment unit assigned to specified pool: | |
|--|---|
| Message Header | #RRDCCQXY0001 UMLRR61 0207301425ABCD bbbb / |
| Control Group Header | *CH65432120020730160100USERID bbbbbbbbbbbbbbbbbbbbbbbb |
| Data Group Header | *DH0001 ECC |
| Detail Record | +0001 b ABCD00000014370002 b HOPPTCUR2003-02-21-08.01.51.000001 bb |
| Detail Record | +0001 b ABCD00000014370002 b HOPPTCGR2003-02-21-08.01.51.000001 bb |
| Detail Record | +0001 b ABCD00000014370002 b HOPPTCPC2003-02-21-08.01.51.000001 bc |
| Detail Record | +0001 b ABCD00000014370002 b HOPPTCME2003-02-21-08.01.51.000001 bb |
| Detail Record | +0001 b ABCD00000014370002 b HOPPTCMR2003-02-21-08.01.51.000001 bb |

Umler TRAIN II Messaging Specifications

| | |
|-----------------------|---|
| Detail Record | +0001bABCD00000014370002bHOPPLESE2003-02-21-08.01.51.000001bb |
| Detail Record | +0001bABCD00000014370002bHOPPP0012003-02-21-08.01.51.000001b1234567 |
| Detail Record | +0001bABCD00000014370002bHOPPTCOD2003-02-21-08.01.51.000001bc |
| Detail Record | +0001bABCD00000014370002bHOPPTCCD2003-02-21-08.01.51.000001bb |
| Data Group Summary | =DS0001SUM009 |
| Control Group Summary | =CS6543210001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

37.4.2 Message Examples for Date/Timestamp refresh for all equipment units added, changed, deleted, or for which inspections were reported

37.4.2.1.1 UMLRR00

| Example Inbound UMLRR00 TRAIN II message created for date/timestamp: | |
|--|---|
| Message Header | #RRDCbbb0001UMLRR000207301605ABCDbbb/ |
| Control Group Header | *CH65432120020730160100USERIDbb |
| Data Group Header | *DH0001RTM |
| Detail Record | +2009-02-21-08.01.51.0000012009-02-21-10.01.51.000001 |
| Data Group Summary | =DS0001SUM0001 |
| Control Group Summary | =CS6543210001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

Umler TRAIN II Messaging Specifications

37.4.2.2 UMLRR60 response for equipment ID ABCD0000001437

| Example Outbound UMLRR60 TRAIN II message created when equipment exists in Umler: | |
|---|---|
| Message Header | #RRDCCQXY0001 UMLRR60 0207301425ABCD bbbb / |
| Control Group Header | *CH65432120020730160100USERID bbbbbbbbbbbbbbbbbbbbbbbbbbbb |
| Data Group Header | *DH0001 ECD |
| Detail Record | +0001 ABCD00000014370002b |
| Data Group Summary | =DS0001SUM0001 |
| Data Group Header | *DH0002 ECA |
| Detail Record | +0001 ABCD00000014370002bHOPPTCURbb |
| Detail Record | +0001 ABCD00000014370002bHOPPTCGRbb |
| Detail Record | +0001 ABCD00000014370002bHOPPTCPCbb |
| Detail Record | +0001 ABCD00000014370002bHOPPTCMEbb |
| Detail Record | +0001 ABCD00000014370002bHOPPTCMRbb |
| Detail Record | +0001 ABCD00000014370002bHOPPLESEbb |
| Detail Record | +0001 ABCD00000014370002bHOPPMNPTbABCD |
| Detail Record | +0001 ABCD00000014370002bHOPPUMETbB414 |
| Detail Record | +0001 ABCD00000014370002bHOPPUMDbXM |
| Detail Record | +0001 ABCD00000014370002bHOPPP001b0000000 |
| Detail Record | +0001 ABCD00000014370002bHOPPTCODbb |
| Detail Record | +0001 ABCD00000014370002bHOPPTCCDbb |
| Data Group Summary | =DS0002SUM0012 |
| Data Group Header | *DH0003 CGI |
| Detail Record | +0001 ABCD00000014370002bHOPPCG01bA |
| Detail Record | +0001 ABCD00000014370002bHOPPCG02b20050201 |
| Detail Record | +0001 ABCD00000014370002bHOPPCG03b0900 |
| Detail Record | +0001 ABCD00000014370002bHOPPCG04b111111000 |
| Detail Record | +0001 ABCD00000014370002bHOPPCG05bWXYZ |
| Data Group Summary | =DS0003SUM0005 |
| Data Group Header | *DH0004 ABT |
| Detail Record | +0001 ABCD00000014370002bHOPPREPTbABCD |
| Detail Record | +0001 ABCD00000014370002bHOPPPERFbABCD |
| Detail Record | +0001 ABCD00000014370002bHOPPDTDNb20041030 |
| Detail Record | +0001 ABCD00000014370002bHOPPSPLCb115341000 |
| Data Group Summary | =DS0004SUM0004 |
| Data Group Header | *DH0005 ABP |
| Detail Record | +0001 ABCD00000014370002bHOPPREPTbABCD |
| Detail Record | +0001 ABCD00000014370002bHOPPPERFbABCD |
| Detail Record | +0001 ABCD00000014370002bHOPPDTDNb20021030 |
| Detail Record | +0001 ABCD00000014370002bHOPPSPLCb111111000 |
| Data Group Summary | =DS0005SUM0004 |
| Data Group Header | *DH0006 ECC |
| Detail Record | + 0001 ABCD00000014370002b BOXCDU58 b 20071030 |
| Detail Record | + 0001 ABCD00000014370002b BOXCDU13 b 20051030 |
| Data Group Summary | =DS0006SUM0002 |
| Control Group Summary | =CS6543210006 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

Umler TRAIN II Messaging Specifications

37.4.2.3 UMLRR61 response for equipment ID ABCD0000001437

| Example Outbound UMLRR61 TRAIN II message created when equipment exists in Umler: | |
|---|---|
| Message Header | #RRDCCQXY0001 UMLRR61 0207301425ABCD bbb / |
| Control Group Header | *CH65432120020730160100USERID bbbbbbbbbbbbbbbbbbbbbbbb |
| Data Group Header | *DH0001 ECD |
| Detail Record | +0001 ABCD00000014370002b 2003-02-21-08.01.01.000011 |
| Data Group Summary | =DS0001SUM0001 |
| Data Group Header | *DH0002 ECA |
| Detail Record | +0001 ABCD00000014370002b HOPPTCUR2003-02-21-08.01.01.000011 bb |
| Detail Record | +0001 ABCD00000014370002b HOPPTCGR2003-02-21-08.01.01.000011 bb |
| Detail Record | +0001 ABCD00000014370002b HOPPTCPC2003-02-21-08.01.01.000011 bb |
| Detail Record | +0001 ABCD00000014370002b HOPPTCME2003-02-21-08.01.01.000011 bb |
| Detail Record | +0001 ABCD00000014370002b HOPPTCMR2003-02-21-08.01.01.000011 bb |
| Detail Record | +0001 ABCD00000014370002b HOPPLESE2003-02-21-08.01.01.000011 bb |
| Detail Record | +0001 ABCD00000014370002b HOPPMNPT2003-02-21-08.01.01.000011 ABCD |
| Detail Record | +0001 ABCD00000014370002b HOPPUMET2003-02-21-08.01.01.000011 B414 |
| Detail Record | +0001 ABCD00000014370002b HOPPUMMD2003-02-21-08.01.01.000011 XXM |
| Detail Record | +0001 ABCD00000014370002b HOPPP0012003-02-21-08.01.01.000011 00000000 |
| Detail Record | +0001 ABCD00000014370002b HOPPTCOD2003-02-21-08.01.01.000011 bb |
| Detail Record | +0001 ABCD00000014370002b HOPPTCCD2003-02-21-08.01.01.000011 bb |
| Data Group Summary | =DS0002SUM0012 |
| Data Group Header | *DH0003 CGI |
| Detail Record | +0001 ABCD00000014370002b HOPPCG012003-02-21-08.01.01.000011 A |
| Detail Record | +0001 ABCD00000014370002b HOPPCG022003-02-21-08.01.01.000011 20050201 |
| Detail Record | +0001 ABCD00000014370002b HOPPCG032003-02-21-08.01.01.000011 0900 |
| Detail Record | +0001 ABCD00000014370002b HOPPCG042003-02-21-08.01.01.000011 111111000 |
| Detail Record | +0001 ABCD00000014370002b HOPPCG052003-02-21-08.01.01.000011 WXYZ |
| Data Group Summary | =DS0003SUM0005 |
| Data Group Header | *DH0004 ABT |
| Detail Record | +0001 ABCD00000014370002b HOPPREPT2003-02-21-08.01.01.000011 ABCD |
| Detail Record | +0001 ABCD00000014370002b HOPPPERF2003-02-21-08.01.01.000011 ABCD |
| Detail Record | +0001 ABCD00000014370002b HOPPDTDN2003-02-21-08.01.01.000011 20041030 |
| Detail Record | +0001 ABCD00000014370002b HOPPSPLC2003-02-21-08.01.01.000011 115341000 |
| Data Group Summary | =DS0004SUM0004 |
| Data Group Header | *DH0005 ABP |
| Detail Record | +0001 ABCD00000014370002b HOPPREPT2003-02-21-08.01.01.000011 ABCD |
| Detail Record | +0001 ABCD00000014370002b HOPPPERF2003-02-21-08.01.01.000011 ABCD |
| Detail Record | +0001 ABCD00000014370002b HOPPDTDN2003-02-21-08.01.01.000011 20021030 |
| Detail Record | +0001 ABCD00000014370002b HOPPSPLC2003-02-21-08.01.01.000011 111111000 |
| Data Group Summary | =DS0005SUM0004 |
| Data Group Header | *DH0006 ECC |
| Detail Record | + 0001 ABCD00000014370002b BOXCDU582003-02-21-08.01.01.000011 20071030 |
| Detail Record | + 0001 ABCD00000014370002b BOXCDU132003-02-21-08.01.01.000011 20051030 |
| Data Group Summary | =DS0006SUM0002 |
| Control Group Summary | =CS6543210006 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

37.4.3 Message Examples for Equipment Not Existing in Umler

37.4.3.1 UMLRR60 response for equipment ID ABCD0000001439

| Outbound UMLRR60 TRAIN II message created when equipment does not exist in Umler: | |
|---|---|
| Message Header | #RRDCCQXY0001UMLRR60207301425ABCDbbbb/ |
| Control Group Header | *CH65432120020730160100USERIDbbbbbbbbbbbbbbbbbbbb |
| Data Group Header | *DH0001ECD |
| Detail Record | +0001bABCD00000014390002b |
| Data Group Summary | =DS0001SUM0001 |
| Control Group Summary | =CS6543210001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

37.4.3.2 UMLRR61 response for equipment ID ABCD0000001439

| Outbound UMLRR61 TRAIN II message created when equipment does not exist in Umler: | |
|---|--|
| Message Header | #RRDCCQXY0001UMLRR610207301425ABCDbbbb/ |
| Control Group Header | *CH65432120020730160100USERIDbbbbbbbbbbbbbbbbbbbb |
| Data Group Header | *DH0001ECD |
| Detail Record | +0001bABCD00000014390002b 2003-02-21-08.01.01.000011 |
| Data Group Summary | =DS0001SUM0001 |
| Control Group Summary | =CS6543210001 |
| Trailer | \$0001EOM! Where ! = hex '9C' |

Appendix A - Message Header – Inbound/Outbound

| FIELD NAME | FIELD DESCRIPTION | FIELD FORMAT/LENGTH | REQUIRED /OPTIONAL |
|------------------------|--|---------------------------------------|--------------------|
| REC-START | Always a pound sign (#). Identifies start of a message header. | Alphanumeric – 1 character | R |
| ORIGIN-ROAD-NETWORK-ID | The network ID of the originator of the message. | Alphanumeric – 4 characters | R |
| ORIGIN-SUB-ADDRESS | Office within the railroad originating the message. This field may be blank. | Alphanumeric – 4 characters | R |
| MESSAGE-NUMBER | Ranges sequentially from 0001 to 9999. Identifies the message for purposes of reference and control. Discontinuity or duplication in the number alerts the addressee to possible loss or repetition of messages. | Numeric – 4 digits | R |
| MESSAGE-ID | The message type and the processing system required at the destination station to process data in this message. | Alphanumeric – 7 characters | R |
| DATE-PREPARED | Year, month, and day of message preparation or transmission depending on the procedure used in the individual railroad telecommunications system. | Numeric – 6 digits FORMAT = YYMMDD | R |
| TIME-PREPARED | Hour and minute of message preparation or transmission depending on the procedure used in the individual railroad telecommunications system. | Numeric – 4 digits FORMAT = HHMM | R |
| DEST-ROAD-NETWORK-ID | The network ID of the destination station. For messages sent to RAILINC, the Road Mark will be RRDC. | Alphanumeric – 4 characters | R |
| DEST-SUB-ADDRESS | The office within the destination station. This field may be blank. | Alphanumeric – 4 characters | R |
| END-CHARACTER | Always a slash (/). Indicates the end of a message header. | Alphanumeric – 1 character | R |

Appendix B - Control Group Header – Inbound

| FIELD NAME | FIELD DESCRIPTION | FIELD FORMAT/LENGTH | REQUIRED/OPTIONAL |
|-------------------------------|--|--|-------------------|
| REC-START | Always *CH. Identifies start of a control group header record. | Alphanumeric – 3 characters | R |
| CONTROL-GROUP-SEQUENCE-NUMBER | Ranges sequentially from 000001 to 999999. Identifies the Group Level record within a message for reference and control purposes. Discontinuity or duplication in the number alerts the addressee to possible loss or repetition of data. On Inbound messages this number is assigned by the submitter. On Outbound messages RAILINC will assign the next sequential number for the destination. | Numeric – 6 digits | R |
| DATE-PREPARED | Century, Year, month, and day of message preparation or transmission depending on the procedure used in the individual railroad telecommunications system. | Numeric – 8 digits FORMAT =CCYYMMDD | R |
| TIME-PREPARED | Hour and minute of message preparation or transmission depending on the procedure used in the individual railroad telecommunications system. | Numeric – 6 digits FORMAT = HHMMSS | R |
| USERID | The User Identification assigned for messaging customers. | Alphanumeric – 8 characters | R |

Appendix C - Control Group Header – Outbound

| FIELD NAME | FIELD DESCRIPTION | FIELD FORMAT/LENGTH | REQUIRED/OPTIONAL |
|--|--|---|-------------------|
| REC-START | Always *CH. Identifies start of a control group header record. | Alphanumeric – 3 characters | R |
| OUTBOUND-CONTROL-GROUP-SEQUENCE-NUMBER | Ranges sequentially from 000001 to 999999. Identifies the Group Level record within a message for reference and control purposes. Discontinuity or duplication in the number alerts the addressee to possible loss or repetition of data. On Inbound messages this number is assigned by the submitter. On Outbound messages RAILINC will assign the next sequential number for the destination. | Numeric – 6 digits | R |
| OUTBOUND-DATE-PREPARED | Century, Year, month, and day of message preparation or transmission depending on the procedure used in the individual railroad telecommunications system. | Numeric – 8 digits FORMAT =CCYYMMDD | R |
| OUTBOUND-TIME-PREPARED | Hour and minute of message preparation or transmission depending on the procedure used in the individual railroad telecommunications system. | Numeric – 6 digits FORMAT = HHMMSS | R |
| INBOUND-USERID | The User Identification assigned for messaging customers. This field will contain the USERID that caused the Outbound Umler TRAIN II message to be created for Outbound Umler TRAIN II messages being sent to the MARK associated with the USERID that caused the Outbound Umler TRAIN II message to be created. This field will contain the MARK associated with the USERID that caused the Outbound Umler TRAIN II to be created when being sent to a MARK that is not associated with the USERID. | Alphanumeric – 8 characters | R |
| INBOUND-NETWORK-ID | The network ID that sent the original Inbound Umler TRAIN II message. | Alphanumeric – 4 characters | O |
| INBOUND-CONTROL-GROUP-SEQUENCE-NUMBER | Ranges sequentially from 000001 to 999999. This field will contain the original control number sent on an Inbound Umler TRAIN II message to the original message sender. Outbound messages sent to other than the Inbound message sender will contain spaces. Spaces will also be sent in this field Outbound Messages created by other than Umler TRAIN II Inbound messages (for example the Umler web interface). | Numeric – 6 digits | O |

Umler TRAIN II Messaging Specifications

| | | | |
|--|--|--|----------|
| <p>INBOUND- DATE- PREPARED</p> | <p>Century, Year, month, and day that was sent on the original Inbound Umler TRAIN II message. This field will only be populated on the outbound message sent to the original Inbound message sender. This field will contain spaces on messages sent to other than the sender. This field will contain spaces on Outbound Messages created by other than Umler TRAIN II Inbound messages (for example the Umler web interface).</p> | <p>Numeric – 8 digits FORMAT =CCYYMMDD</p> | <p>R</p> |
| <p>INBOUND- TIME- PREPARED</p> | <p>Hour and minute that was sent on the original Inbound Umler TRAIN II message. This field will only be populated on the outbound message sent to the original Inbound message sender. This field will contain spaces on messages sent to other than the sender. This field will contain spaces on Outbound Messages created by other than Umler TRAIN II Inbound messages (for example the Umler web interface).</p> | <p>Numeric – 6 digits FORMAT = HHMMSS</p> | <p>R</p> |

Appendix D - Data Group Header – Inbound

The following is the layout for inbound data group header for all transaction types except Pool Header Delete (HD). The Pool Header Delete (HD) format is shown on next page.

| FIELD NAME | FIELD DESCRIPTION | FIELD FORMAT/LENGTH | REQUIRED/OPTIONAL |
|----------------------------|---|-----------------------------|-------------------|
| REC-START | Always *DH. Identifies start of a data group header record. | Alphanumeric – 3 characters | R |
| DATA-GROUP-SEQUENCE-NUMBER | Ranges sequentially from 0001 to 9999. Identifies the Group Level record within a message for reference and control purposes. Discontinuity or duplication in the number alerts the addressee to possible loss or repetition of data. | Numeric – 4 digits | R |
| TRANSACTION TYPE | The type of transaction. | Alphanumeric – 3 characters | R |

Umler TRAIN II Messaging Specifications

The following is the layout for inbound data group header for pool header delete (HD). Note that there are three additional fields on pool header delete to identify the pool being deleted.

| FIELD NAME | FIELD DESCRIPTION | FIELD FORMAT/LENGTH | REQUIRED/OPTIONAL |
|----------------------------|--|-----------------------------|--------------------------|
| REC-START | Always *DH. Identifies start of a data group header record. | Alphanumeric – 3 characters | R |
| DATA-GROUP-SEQUENCE-NUMBER | Ranges sequentially from 0001 to 9999. Identifies the Group Level record within a message for reference and control purposes. Discontinuity or duplication in the number alerts the addressee to possible loss or repetition of data. | Numeric – 4 digits | R |
| TRANSACTION TYPE | The type of transaction. | Alphanumeric – 3 characters | R |
| ELEMENT-ID | The Element Identifier for the data being updated. This field is used to assign the same value to multiple units, which will be listed in the detail record. This field will only be present on Pool Header Delete transactions. For all other transactions this field will not exist. | Alphanumeric – 4 characters | R |
| ACTION-TYPE | Action type associated with an ELEMENT_ID that can have multiple occurrences. For Phase I and II this field will always be blank if transmitted. This field will only be present on Pool Header Delete transactions. For all other transactions this field will not exist. | Alphanumeric – 1 character | R |
| ELEMENT-VALUE | The value to be assigned to the Element Identifier for multiple units defined in the detail record. This field will only be present on Pool Header Delete transactions. For all other transactions this field will not exist. | Alphanumeric – 7 characters | R |

Appendix E - Data Group Header – Outbound UMLRC60/UMLRR60

The following is the layout for outbound data group header for all transaction types except Pool Header Delete (HD). The Pool Header Delete (HD) format is shown on next page.

| FIELD NAME | FIELD DESCRIPTION | FIELD FORMAT/LENGTH | REQUIRED/OPTIONAL |
|----------------------------|---|-----------------------------|--------------------------|
| REC-START | Always *DH. Identifies start of a data group header record. | Alphanumeric – 3 characters | R |
| DATA-GROUP-SEQUENCE-NUMBER | Ranges sequentially from 0001 to 9999. Identifies the Group Level record within a message for reference and control purposes. Discontinuity or duplication in the number alerts the addressee to possible loss or repetition of data. | Numeric – 4 digits | R |
| TRANSACTION TYPE | The type of transaction. | Alphanumeric – 3 characters | R |

Umler TRAIN II Messaging Specifications

The following is the layout for outbound data group header for pool header delete (HD). Note that there are three additional fields on pool header delete to identify the pool being deleted.

| FIELD NAME | FIELD DESCRIPTION | FIELD FORMAT/LENGTH | REQUIRED/OPTIONAL |
|----------------------------|--|-----------------------------|--------------------------|
| REC-START | Always *DH. Identifies start of a data group header record. | Alphanumeric – 3 characters | R |
| DATA-GROUP-SEQUENCE-NUMBER | Ranges sequentially from 0001 to 9999. Identifies the Group Level record within a message for reference and control purposes. Discontinuity or duplication in the number alerts the addressee to possible loss or repetition of data. | Numeric – 4 digits | R |
| TRANSACTION TYPE | The type of transaction. | Alphanumeric – 3 characters | R |
| ELEMENT-ID | The Element Identifier for the data being updated. This field is used to assign the same value to multiple units, which will be listed in the detail record. This field will only be present on Pool Header and Car Grade Inspection transactions. For all other transactions this field will not exist. | Alphanumeric – 4 characters | O |
| ACTION-TYPE | Action type associated with an ELEMENT_ID that can have multiple occurrences. For Phase I and II this field will always be blank if transmitted. | Alphanumeric – 1 character | O |
| ELEMENT-VALUE | The value to be assigned to the Element Identifier for multiple units defined in the detail record. This field will only be present on Pool Header and Car Grade Inspection transactions. For all other transactions this field will not exist. | Alphanumeric – Variable | O |

Appendix F - Data Group Header – Outbound UMLRC61/UMLRR61

| FIELD NAME | FIELD DESCRIPTION | FIELD FORMAT/LENGTH | REQUIRED/OPTIONAL |
|----------------------------|---|--------------------------------|-------------------|
| REC-START | Always *DH. Identifies start of a data group header record. | Alphanumeric – 3 characters | R |
| DATA-GROUP-SEQUENCE-NUMBER | Ranges sequentially from 0001 to 9999. Identifies the Group Level record within a message for reference and control purposes. Discontinuity or duplication in the number alerts the addressee to possible loss or repetition of data. | Numeric – 4 digits | R |
| TRANSACTION TYPE | The type of transaction. | Alphanumeric – 3 characters | R |
| ELEMENT-ID | The Element Identifier for the data being updated. This field is used to assign the same value to multiple units, which will be listed in the detail record. This field will only be present on Pool Header delete ('HD ') and equipment delete ('ECD') transactions. For all other transactions this field will not exist. | Alphanumeric – 4 characters | O |
| ACTION-TYPE | Action type associated with an ELEMENT_ID that can have multiple occurrences. For Phase I and II this field will always be blank if transmitted. | Alphanumeric – 1 character | O |
| ELEMENT-VALUE | The value to be assigned to the Element Identifier for multiple units defined in the detail record. This field will only be present on Pool Header delete ('HD ') and equipment delete ('ECD') transactions. For all other transactions this field will not exist. | Alphanumeric – Variable | O |
| ELEMENT-UPDATE-TS | The date and time that the element was posted to the Umler repository. This field will only exist for Pool Header delete ('HD ') and equipment delete ('ECD') transactions. For all other transactions this field will not exist. | DB2 Timestamp - 26 characters. | O |

Appendix G– UMLRC00 Inbound Detail

| FIELD NAME | FIELD DESCRIPTION | FIELD FORMAT/LENGTH | REQUIRED/OPTIONAL |
|-----------------|---|-----------------------------|-------------------|
| REC-START | Always a plus sign (+). Identifies start of a detail level record. | Alphanumeric – 1 character | R |
| ELEMENT-ID-1 | The Element Identifier for the data being updated. | Alphanumeric – 4 characters | R |
| ACTION-TYPE-1 | Action type associated with an ELEMENT_ID that can have multiple occurrences. This field will always be blank. | Alphanumeric – 1 character | R |
| ELEMENT-VALUE-1 | The value to be assigned to the Element Identifier. | Alphanumeric – Variable | R |
| ELEMENT-ID-2 | The Element Identifier for the data being updated. | Alphanumeric – 4 characters | O |
| ACTION-TYPE-2 | Action type associated with an ELEMENT_ID that can have multiple occurrences. Blank =Report for all elements that are not associated with a component. A =Report to add a component level D =Report to delete a component level E =Report for element update for elements associated with component. Note: Values of ‘A’ and ‘E’ are only valid for ECA and ECC transactions. Value of ‘D’ is only valid for ECC transaction. All other transaction types will only send blank in this field. | Alphanumeric – 1 character | O |
| ELEMENT-VALUE-2 | The value to be assigned to the Element Identifier. | Alphanumeric – Variable | O |

Appendix H – UMLRC60/UMLRR60 Outbound Detail

The following is the layout for Outbound Detail for the following transaction types: Header Add (HA) and Header Change (HC).

| FIELD NAME | FIELD DESCRIPTION | FIELD FORMAT/LENGTH | REQUIRED/OPTIONAL |
|-------------------|---|-----------------------------|--------------------------|
| REC-START | Always a plus sign (+). Identifies start of a detail level record. | Alphanumeric – 1 character | R |
| ELEMENT-ID | The Element Identifier for the data being updated. | Alphanumeric – 4 characters | R |
| ACTION-TYPE | Action type associated with an ELEMENT_ID that can have multiple occurrences. This field will always be blank. | Alphanumeric – 1 character | R |
| ELEMENT-VALUE | The value to be assigned to the Element Identifier. | Alphanumeric – Variable | R |
| ELEMENT-ID-2 | The Element Identifier for the data being updated. | Alphanumeric – 4 characters | R |
| ACTION-TYPE-2 | Action type associated with an ELEMENT_ID that can have multiple occurrences. This field will always be blank for pool header transactions. | Alphanumeric – 1 character | R |
| ELEMENT-VALUE-2 | The value to be assigned to the Element Identifier. | Alphanumeric – Variable | R |

Umler TRAIN II Messaging Specifications

The following is the layout for Outbound Detail for the Equipment Characteristic Change (ECC), Equipment Characteristic Add (ECA), and car grade inspections (CGI).

| FIELD NAME | FIELD DESCRIPTION | FIELD FORMAT/LENGTH | REQUIRED/OPTIONAL |
|-----------------|---|-----------------------------|-------------------|
| REC-START | Always a plus sign (+). Identifies start of a detail level record. | Alphanumeric – 1 character | R |
| ELEMENT-ID-1 | The Element Identifier for the data being updated. | Alphanumeric – 4 characters | R |
| ACTION-TYPE-1 | Action type associated with an ELEMENT_ID that can have multiple occurrences. This field will always be blank. | Alphanumeric – 1 character | R |
| ELEMENT-VALUE-1 | The value to be assigned to the Element Identifier. | Alphanumeric – Variable | R |
| ELEMENT-ID-2 | The Element Identifier for the equipment group. | Alphanumeric – 4 characters | R |
| ACTION-TYPE-2 | Action type associated with an ELEMENT_ID that can have multiple occurrences. This field will always be blank. | Alphanumeric – 1 character | R |
| EQUIP GROUP | The equipment group of the equipment ID in the detail record. | Alphanumeric – 4 characters | R |
| ELEMENT-ID-3 | The Element Identifier for the data being updated. | Alphanumeric – 4 characters | R |
| ACTION-TYPE-3 | Action type associated with an ELEMENT_ID that can have multiple occurrences. Blank =Report for all elements that are not associated with a component. A =Report to add a component level D =Report to delete a component level E =Report for element update for elements associated with component. Note: Values of ‘A’ and ‘E’ are only valid for ECA and ECC transactions. Value of ‘D’ is only valid for ECC transaction. All other transaction types will only send blank in this field. | Alphanumeric – 1 character | R |
| ELEMENT-VALUE-3 | The value to be assigned to the Element Identifier. | Alphanumeric – Variable | R |

Appendix I – UMLRC61/UMLRR61 Outbound Detail

The following is the layout for Outbound Detail for the following transaction types: Header Add (HA) and Header Change (HC).

| FIELD NAME | FIELD DESCRIPTION | FIELD FORMAT/LENGTH | REQUIRED/OPTIONAL |
|-------------------|---|--------------------------------|-------------------|
| REC-START | Always a plus sign (+). Identifies start of a detail level record. | Alphanumeric – 1 character | R |
| ELEMENT-ID | The Element Identifier for the data being updated. | Alphanumeric – 4 characters | R |
| ACTION-TYPE | Action type associated with an ELEMENT_ID that can have multiple occurrences. This field will always be blank. | Alphanumeric – 1 character | R |
| ELEMENT-VALUE | The value to be assigned to the Element Identifier. | Alphanumeric – Variable | R |
| ELEMENT-ID-2 | The Element Identifier for the data being updated. | Alphanumeric – 4 characters | R |
| ELEMENT-TIMESTAMP | The date and time that the element was posted to the Umler repository. | DB2 Timestamp - 26 characters. | R |
| ACTION-TYPE-2 | Action type associated with an ELEMENT_ID that can have multiple occurrences. This field will always be blank for pool header transactions. | Alphanumeric – 1 character | R |
| ELEMENT-VALUE-2 | The value to be assigned to the Element Identifier. | Alphanumeric – Variable | R |

Umler TRAIN II Messaging Specifications

The following is the layout for Outbound Detail for the Equipment Characteristic Change (ECC), Equipment Characteristic Add (ECA), and Car Grade Inspection (CGI).

| FIELD NAME | FIELD DESCRIPTION | FIELD FORMAT/LENGTH | REQUIRED/OPTIONAL |
|---------------------|---|--------------------------------|-------------------|
| REC-START | Always a plus sign (+). Identifies start of a detail level record. | Alphanumeric – 1 character | R |
| ELEMENT-ID-1 | The Element Identifier for the data being updated. | Alphanumeric – 4 characters | R |
| ACTION-TYPE-1 | Action type associated with an ELEMENT_ID that can have multiple occurrences. For Phase I and II this field will always be blank. | Alphanumeric – 1 character | R |
| ELEMENT-VALUE-1 | The value to be assigned to the Element Identifier. | Alphanumeric – Variable | R |
| ELEMENT-ID-2 | The Element Identifier for the equipment group. | Alphanumeric – 4 characters | R |
| ACTION-TYPE-2 | Action type associated with an ELEMENT_ID that can have multiple occurrences. This field will always be blank. | Alphanumeric – 1 character | R |
| EQUIP GROUP | The equipment group of the equipment ID in the detail record. | Alphanumeric – 4 characters | R |
| ELEMENT-ID-3 | The Element Identifier for the data being updated. | Alphanumeric – 4 characters | R |
| ELEMENT-TIMESTAMP-3 | The date and time that the element was posted to the Umler repository. | DB2 Timestamp - 26 characters. | R |
| ACTION-TYPE-3 | Action type associated with an ELEMENT_ID that can have multiple occurrences. Blank =Report for all elements that are not associated with a component. A =Report to add a component level D =Report to delete a component level E =Report for element update for elements associated with component. Note: Values of ‘A’ and ‘E’ are only valid for ECA and ECC transactions. Value of ‘D’ is only valid for ECC transaction. All other transaction types will only send blank in this field. | Alphanumeric – 1 character | R |
| ELEMENT-VALUE-3 | The value to be assigned to the Element Identifier. | Alphanumeric – Variable | R |

Appendix J – UMLRC50 Outbound Detail

| FIELD NAME | FIELD DESCRIPTION | FIELD FORMAT/LENGTH | REQUIRED/OPTIONAL |
|-------------------------|---|-----------------------------|-------------------|
| REC-START | Always a plus sign (+). Identifies start of a detail level record. | Alphanumeric – 1 character | R |
| MESSAGE-STATUS | The status of the message as processed at central site. The valid values for this field are: ‘E’ = Envelope error; message not processed. ‘W’ = Envelope warning; message processed. | Alphanumeric – 1 character | R |
| ERROR-CODE | Identifies reason for error of the transaction. Refer to Appendix T for a list of these error codes. | Alphanumeric – 4 characters | R |
| CONTROL NUMBER EXPECTED | If the control number sent on the INBOUND UMLRC00 message was out of sync then this field communicates the next control number that RAILINC was expecting to receive. If there is no control number issue then this field will have a value of zeros. | Numeric – 6 digits | R |

Appendix K – UMLRC71 Outbound Detail

| FIELD NAME | FIELD DESCRIPTION | FIELD FORMAT/LENGTH | REQUIRED/OPTIONAL |
|--------------------------|--|-----------------------------|--------------------------|
| REC-START | Always a plus sign (+). Identifies start of a detail level record. | Alphanumeric – 1 character | R |
| SUMMARY-COUNT-IDENTIFIER | Identifies the count provided on the detail record. Valid values are: 'INBOUNDCOUNT', 'PROCESSCOUNT', 'ERROREDCOUNT' | Alphanumeric – 7 characters | R |
| SUMMARY-COUNT | The count that relates to the SUMMARY-COUNT-IDENTIFIER. | Numeric – 6 digits | R |

Appendix L – Data Group Summary Record – Inbound/Outbound

| FIELD NAME | FIELD DESCRIPTION | FIELD FORMAT/LENGTH | REQUIRED/OPTIONAL |
|----------------------------|--|-----------------------------|--------------------------|
| REC-START | Always =DS. Identifies start of a control group summary record. | Alphanumeric – 3 character | R |
| DATA-GROUP-SEQUENCE-NUMBER | Corresponds to the GROUP-SEQUENCE-NUMBER of the data group level record preceding the detail level records in the message. | Numeric – 4 digits | R |
| TEXT | Always equal to “SUM”. | Alphanumeric – 3 characters | R |
| DETAIL-COUNT | Identifies the total number of detail records within the group. | Numeric – 4 digits | R |

Appendix M – Control Group Summary Record – Inbound/Outbound

| FIELD NAME | FIELD DESCRIPTION | FIELD FORMAT/LENGTH | REQUIRED/OPTIONAL |
|-------------------------------|---|----------------------------|--------------------------|
| REC-START | Always an equal sign (=CS). Identifies start of a Summary record. | Alphanumeric – 3 character | R |
| CONTROL-GROUP-SEQUENCE-NUMBER | Corresponds to the GROUP-SEQUENCE-NUMBER of the group level record preceding the detail level records in the message. | Numeric – 6 digits | R |
| DATA-GROUP-COUNT | Identifies the total number of data group levels within the message. | Numeric – 4 digits | R |

Appendix N – Message Trailer – Inbound/Outbound

| FIELD NAME | FIELD DESCRIPTION | FIELD FORMAT/LENGTH | REQUIRED/OPTIONAL |
|---------------------|---|-----------------------------|-------------------|
| REC-START | Always a dollar sign (\$). Identifies start of a message trailer. | Alphanumeric – 1 character | R |
| CONTROL-GROUP-COUNT | Total number of control group level records within the message for detection of possible data loss. Always equal to “0001”. | Numeric – 4 digits | R |
| TEXT | Always equal to “EOM”. | Alphanumeric – 3 characters | R |
| END-CHARACTER | Always hex 9C. Indicated the end of a message trailer. | Alphanumeric – 1 character | R |

Appendix O - Data Group Header – Outbound UMLRE70

| FIELD NAME | FIELD DESCRIPTION | FIELD FORMAT/LENGTH | REQUIRED/OPTIONAL |
|----------------------------|--|------------------------------|-------------------|
| REC-START | Always *DH. Identifies start of a data group header record. | Alphanumeric – 3 characters | R |
| DATA-GROUP-SEQUENCE-NUMBER | Ranges sequentially from 0001 to 9999. Identifies the Group Level record within a message for reference and control purposes. Discontinuity or duplication in the number alerts the addressee to possible loss or repetition of data. | Numeric – 4 digits | R |
| TRANSACTION TYPE | The type of transaction. | Alphanumeric – 3 characters | R |
| ERROR CODE | A transaction level error code. An error code will appear in the data group header for an error that is transaction related. Examples include: Pool Header not found to delete, not authorized for transaction type. | Alphanumeric – 10 characters | R |
| ELEMENT-ID | The Element Identifier for the data being updated. This field is used to assign the same value to multiple units, which will be listed in the detail record. This field will only be present on Pool Header and Car Grade Inspection transactions. For all other transactions this field will not exist. | Alphanumeric – 4 characters | O |
| ACTION-TYPE | Action type associated with an ELEMENT_ID that can have multiple occurrences. For Phase I and II this field will always be blank if transmitted. | Alphanumeric – 1 character | O |
| ELEMENT-VALUE | The value to be assigned to the Element Identifier for multiple units defined in the detail record. This field will only be present on Pool Header and Car Grade Inspection transactions. For all other transactions this field will not exist. | Alphanumeric – Variable | O |

Appendix P – UMLRE70 Outbound Error Message Detail

The following is the layout for Outbound Error Message Detail for the following transaction types: Header Add (HA) and Header Change (HC).

| FIELD NAME | FIELD DESCRIPTION | FIELD FORMAT/LENGTH | REQUIRED/OPTIONAL |
|-------------------|---|------------------------------|--------------------------|
| REC-START | Always a plus sign (+). Identifies start of a detail level record. | Alphanumeric – 1 character | R |
| ELEMENT-ID | The Element Identifier for the data being updated. | Alphanumeric – 4 characters | R |
| ACTION-TYPE | Action type associated with an ELEMENT_ID that can have multiple occurrences. For Phase I and II this field will always be blank. | Alphanumeric – 1 character | R |
| ELEMENT-VALUE | The value to be assigned to the Element Identifier. | Alphanumeric – Variable | R |
| ELEMENT-ID-2 | The Element Identifier for the data being updated. | Alphanumeric – 4 characters | R |
| ERROR CODE | A detail level error code. An error code will appear in detail record for an error that is element related. | Alphanumeric – 10 characters | R |
| ACTION-TYPE-2 | Action type associated with an ELEMENT_ID that can have multiple occurrences. For Phase I and II this field will always be blank. | Alphanumeric – 1 character | R |
| ELEMENT-VALUE-2 | The value to be assigned to the Element Identifier. | Alphanumeric – Variable | R |

Umler TRAIN II Messaging Specifications

The following is the layout for Outbound Detail for the Equipment Characteristic Change (ECC), Equipment Characteristic Add (ECA), and Car Grade Inspection (CGI).

| FIELD NAME | FIELD DESCRIPTION | FIELD FORMAT/LENGTH | REQUIRED/OPTIONAL |
|-------------------|---|------------------------------|--------------------------|
| REC-START | Always a plus sign (+). Identifies start of a detail level record. | Alphanumeric – 1 character | R |
| ELEMENT-ID-1 | The Element Identifier for the data being updated. | Alphanumeric – 4 characters | R |
| ACTION-TYPE-1 | Action type associated with an ELEMENT_ID that can have multiple occurrences. For Phase I and II this field will always be blank. | Alphanumeric – 1 character | R |
| ELEMENT-VALUE-1 | The value to be assigned to the Element Identifier. | Alphanumeric – Variable | R |
| ELEMENT-ID-2 | The Element Identifier for the equipment group. | Alphanumeric – 4 characters | R |
| ACTION-TYPE-2 | Action type associated with an ELEMENT_ID that can have multiple occurrences. For Phase I and II this field will always be blank. | Alphanumeric – 1 character | R |
| EQUIP GROUP | The equipment group of the equipment ID in the detail record. | Alphanumeric – 4 characters | R |
| ELEMENT-ID-3 | The Element Identifier for the data being updated. | Alphanumeric – 4 characters | R |
| ERROR CODE | A detail level error code. An error code will appear in detail record for an error that is element related. | Alphanumeric – 10 characters | R |
| ACTION-TYPE-3 | Action type associated with an ELEMENT_ID that can have multiple occurrences. For Phase I and II this field will always be blank. | Alphanumeric – 1 character | R |
| ELEMENT-VALUE-3 | The value to be assigned to the Element Identifier. | Alphanumeric – Variable | R |

Appendix Q – Detail Record Format For Equipment

The detail records following a data group header for equipment related transactions will always be formatted the same.

The following is an example of a how an UMLRC00 detail record will be formatted following a data group header on equipment transactions.

+0001bxxxxxxxxxxxxxxxxxyyybvvvvvvvv

where:

| Value | Description |
|--------------|---|
| + | The delimiter to start a detail record |
| 0001 | The ELEMENT ID for the equipment ID being updated |
| b | A value of space |
| xxxxxxxxxxxx | The equipment initial and number |
| yyyy | The ELEMENT ID for the field being changed |
| b | A value of space |
| vvvvvvvv | The variable length ELEMENT VALUE that corresponds to the ELEMENT ID provided in this example as yyyy Minimum length = 0 Maximum length = 240 |

The following is an example of a how an UMLRC60 detail record will be formatted following a data group header on equipment transactions.

+0001bxxxxxxxxxxxx0002beeeeyyybvvvvvvvv

where:

| Value | Description |
|--------------|---|
| + | The delimiter to start a detail record |
| 0001 | The ELEMENT ID for the equipment ID being updated |
| b | A value of space |
| xxxxxxxxxxxx | The equipment initial and number |
| 0002 | The ELEMENT ID for equipment group |
| b | A value of space |
| eeee | The equipment group. |
| yyyy | The ELEMENT ID for the field being changed |
| b | A value of space |
| vvvvvvvv | The variable length ELEMENT VALUE that corresponds to the ELEMENT ID provided in this example as yyyy Minimum length = 0 Maximum length = 240 |

Umler TRAIN II Messaging Specifications

The following is an example of a how an UMLRC61 detail record will be formatted following a data group header on equipment transactions.

+0001**b**xxxxxxxxxxxxxxxx0002**b**eeeyyyydddddddddddddddddddd**b**vvvvvvvvv

where:

| Value | Description |
|----------------------|--|
| + | The delimiter to start a detail record |
| 0001 | The ELEMENT ID for the equipment ID being updated |
| b | A value of space |
| xxxxxxxxxxxxxxxx | The equipment initial and number |
| 0002 | The ELEMENT ID for equipment group |
| b | A value of space |
| eeee | The equipment group. |
| yyyy | The ELEMENT ID for the field being changed |
| dddddddddddddddddddd | 26 character DB2 timestamp field. |
| b | A value of space |
| vvvvvvvvv | The variable length ELEMENT VALUE that corresponds to the ELEMENT ID provided in this example as yyyy. Minimum length = 0 Maximum length = 240 |

Appendix R – Umler Element Identifiers (Element ID) For Phase 1/2

Please refer to industry reference files for all Umler element IDs. Given the dynamic nature of Umler it was decided to remove this information from this document.

Appendix S – Umler Transaction Types and Element Identifiers (Element ID) For Phase 1/2

For a complete list of transaction types and elements, download the most current [Umler Reference Files](#) and open the appropriate files. Given the dynamic nature of Umler, the information has been removed from this document.

Appendix T – Umler Error/Warning Response Codes For Phase 1/2

For a complete list of all Umler Error/Warning Response Codes, download the most current [Umler Reference Files](#) and open the appropriate files. Given the dynamic nature of Umler, the information has been removed from this document.

Appendix U – UMLRC50 Outbound Error Message Detail

| ERROR TYPE | ERROR CODE | ERROR DESCRIPTION |
|------------|-------------|--|
| | 1000 | # Message Header Errors |
| E | 1001 | A message header segment (#) was found within the message (not at the beginning of the message). |
| | 2000 | *CG Control Group Header errors |
| E | 2001 | Only one control group header segment (*CG) allowed in a message. |
| E | 2002 | The control group header segment was found at the beginning of the message. The control group header segment can only follow the message header segment. |
| E | 2003 | The control group header segment was found after another control group header segment. Only one control group header segment is allowed on a message and it must follow the message header segment. |
| E | 2004 | The control group header segment was found after a data group header segment. Only one control group header segment is allowed in a message and it must follow the message header segment. |
| E | 2005 | The control group header segment was found after a data group summary segment. Only one control group header segment is allowed in a message and it must follow the message header segment. |
| E | 2006 | The control group header segment was found after a control group summary segment. Only one control group header segment is allowed in a message and it must follow the message header segment. |
| E | 2007 | The control group header segment was found after a trailer segment. Only one control group header segment is allowed in a message and it must follow the message header segment. |
| E | 2008 | The control group sequence number sent was not within an acceptable range of what the Umler system was expecting. The control group sequence number that Umler was expecting is being returned on the UMLRC50 message. |
| W | 2009 | Warning – control group sequence number sent was not what the Umler system was expecting. However, the sequence number sent was within greater than ten of what Umler was expecting so the message was processed. |
| | 3000 | *DG Data Group Header errors |
| E | 3001 | The data group header segment was found at the beginning of the message. The data group header segment can only follow the control group header segment or the data group summary segment. |

Umler TRAIN II Messaging Specifications

| ERROR TYPE | ERROR CODE | ERROR DESCRIPTION |
|-------------------|-------------------|--|
| E | 3002 | The data group header segment was found after the message header segment. The data group header segment can only follow the control group header segment or the data group summary segment. |
| E | 3003 | The data group header segment was found after another data group header segment. The data group header segment must be followed by a data group summary record. |
| E | 3004 | The data group header segment was found after the control group summary segment. The data group header segment can only follow the control group header segment or the data group summary segment. |
| E | 3005 | The data group header segment was found after the trailer segment. The data group header segment can only follow the control group header segment or the data group summary segment. |
| E | 3006 | An invalid transaction type was sent. |
| | 4000 | =DS Data Group Summary related errors |
| E | 4001 | The data group summary segment was found at the beginning of the message. The data group summary segment can only follow the data group header segment or detail segments. |
| E | 4002 | The data group summary segment was found after the message header segment. The data group summary segment can only follow the data group header segment or detail segments. |
| E | 4003 | The data group summary segment was found after the control group header segment. The data group summary segment can only follow the data group header segment or detail segments. |
| E | 4004 | The data group summary segment was found after another data group summary segment. |
| E | 4005 | The data group summary segment was found after the control group summary segment. The data group summary segment can only follow the data group header segment or detail segments. |
| E | 4006 | The data group summary segment was found after the trailer segment. The data group summary segment can only follow the data group header segment or detail segments. |
| E | 4007 | The data group summary detail count does not match the actual number of detail segments with the data group. |
| E | 4008 | The data group header control sequence number does not match the data group summary control sequence number. |
| | 5000 | =CS Control Group Summary related errors |

Umler TRAIN II Messaging Specifications

| ERROR TYPE | ERROR CODE | ERROR DESCRIPTION |
|-------------------|-------------------|---|
| E | 5001 | The control group summary segment was found at the beginning of the message. The control group summary segment can only follow the data group summary segment. |
| E | 5002 | The control group summary segment was found after the message header segment. The control group summary segment can only follow the data group summary segment. |
| E | 5003 | The control group summary segment was found after the control group header segment. The control group summary segment can only follow the data group summary segment. |
| E | 5004 | The control group summary segment was found after the data group header segment. The control group summary segment can only follow the data group summary segment. |
| E | 5005 | The control group summary segment was found after another control group summary segment. Only one control group summary segment is allowed per message. |
| E | 5006 | The control group summary segment was found after the trailer segment. The control group summary segment can only follow the data group summary segment. |
| E | 5007 | Only one control group summary segment is allowed per message. |
| E | 5008 | The control group summary data group count does not match the actual number of data groups with the control group. |
| E | 5009 | The control group header control sequence number does not match control group summary control sequence number. |
| | 6000 | \$ Trailer related errors |
| E | 6001 | The control group header segment was followed by a trailer segment. The only segment allowed after the control group header segment is a data group header segment. |
| E | 6002 | The trailer segment was found after the message header segment. The trailer segment can only follow the control group summary segment. |
| E | 6003 | The trailer segment was found after the control group header segment. The trailer segment can only follow the control group summary segment. |
| E | 6004 | The trailer segment was found after the data group header segment. The trailer segment can only follow the control group summary segment. |
| E | 6005 | The trailer segment was found after the data group summary segment. The trailer segment can only follow the control group summary segment. |

Umler TRAIN II Messaging Specifications

| ERROR TYPE | ERROR CODE | ERROR DESCRIPTION |
|------------|-------------|---|
| E | 6006 | The trailer segment was found after another trailer segment. Only one trailer segment is allowed per message. |
| E | 6007 | Only one trailer segment is allowed per message. |
| | 7000 | Detail Record errors |
| E | 7001 | There was a different equipment IDS sent within a data group header. Only one equipment ID can be sent within a data group header. |
| | 9000 | Miscellaneous errors |
| E | 9001 | There were no detail records present for a transaction type other than a header delete (HD). The UMLRC00 must contain detail records for all transaction types other than a header delete (HD). |
| E | 9002 | The network identifier in the message header of the inbound UMLRC00 message is not subscribed at RAILINC to send UMLRC00 messages. |
| E | 9003 | The network identifier in the message header of the inbound UMLRC00 message is not subscribed at RAILINC to receive UMLRC50 messages. |
| E | 9004 | The network identifier in the message header of the inbound UMLRC00 message is not subscribed at RAILINC to receive UMLRE70 messages. |
| E | 9005 | The message size of the UMLRC00 exceeded the maximum allowable TRAIN II message size into the Umler system. |
| E | 9010 | The number of equipments/pool headers for which refresh request has been requested has exceeded the system limit of 1000. Or the number of pool headers specified for pool assignment of both pool header and assignment is greater than one which is not allowed. |
| E | 9011 | The date-time range for which refresh has been requested has more than 1000 transactions or spans more than one day and hence cannot be processed by the system. |
| E | 9012 | The start and/or end date-time format specified is not valid. |
| E | 9013 | The date range specified is greater than 24 hours and the message was not processed. |