



# What is the DX/Procedures Manual?

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## What is the DX/Procedures Manual?

The Car Repair Billing Data Exchange (CRBDX), maintained by Railinc, is a monthly exchange of repair bills for foreign freight equipment. Repairing entities submit bills of car repairs in a proprietary format. These bills are sorted and sent to the billed party for the equipment. The Procedures Manual provides the required formats and examples on how to properly submit these invoices.



# Where do I find the Procedures Manual?

The Procedures Manual can be found on Railinc.com @  
[https://www.railinc.com/rportal/equipment\\_repair](https://www.railinc.com/rportal/equipment_repair)

The screenshot shows the Railinc website interface. At the top is the Railinc logo and navigation links for 'Careers' and 'Contact Us'. Below the logo is a red navigation bar with links: 'ABOUT RAILINC', 'PRODUCTS & SERVICES', 'COLLABORATION', and 'REFERENCE FILES'. The 'PRODUCTS & SERVICES' section is active, displaying a banner image of a train and a worker. On the left is a sidebar menu with links: 'Products and Services Overview', 'Car Accounting', 'CEPM Project', 'Clear Path System', and 'Damage Prevention and'. The main content area is titled 'Equipment Repair' and contains text about Railinc's services to ease car repair accounting. On the right is an 'ACCOUNT ACCESS' section with fields for 'User ID' and 'Password', a 'Sign In' button, and links for 'Register Here', 'Forgot User ID?', and 'Forgot Password?'. At the bottom right, there is a 'PRODUCTS & SERVICES RailSight' logo.

## Related Links

- [CRB Procedures Manual](#)
- [CRB User Guide](#)
- [CRBDX Error Codes](#)



# 2014 Car Repair Billing Procedures Manual

## Car Repair Billing Procedures Manual

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EFFECTIVE JANUARY 1, 2014

DOCUMENT VERSION NUMBER 10.0





# Procedures Manual Version Control & History

Version History		
Version	Date	Major Changes/Descriptions
10.0	Jan-01-2014	<ol style="list-style-type: none"><li>1. Updated the current "8P" edit to include contact types RTUSA, RTMEX, and RTCAN. If any of the "RT" types are in FindUs.Rail, the requirement will be satisfied and the submitter will not receive the 8P error code. – (C.1, C.5)</li><li>2. Added a table to Appendix X (CID Reporting) to show when Component ID's and their associated AAR Rule number will be Information Only as well as Mandatory Rejects. – (Appendix X)</li><li>3. Added an example to Appendix X what the Price Matrix will look like with the new "CID(Y/N):" field that indicates for each job code whether or now a Component ID is required. – (Appendix X)</li><li>4. Created new Job Code 3399 to account for Wheel Set transfers from a location on a car to a different location on the same car or the transfer of any size wheel set from one car to a location on an entirely different car per Rule 36.E with Condition Code 2 and Why Made 25. – (Appendix A section A.7)</li><li>5. Updated the Edit Charts to reflect the years 2014 and 2015. – (C.3, C.4, C.5, C.6 and Appendix D)</li><li>6. Created new Error Code Z6 as an Information Only error to indicate when new Job Code 3399 is entered but Why Made Code is not equal to 25 and/or Condition Code is not equal to 2. – (C.1, C.3, Appendix D)</li><li>7. Created new Error Code Z7 as an Information Only error to indicate when the Labor or Material price do not match the Price Master when Machine Priceable = "Y". – (C.1, C.3, Appendix D)</li></ol>



# Benefits of the Data Exchange

## 1 Data Exchange Procedures

### 1.1 Benefits from Car Repair Billing Data Exchange

The Car Repair Billing (CRB) Data Exchange System will afford each participant the opportunity to electronically accumulate individual car repair costs for accounting, auditing and analytical purposes. In years past, the paper compilation of repair data has been cumbersome and administratively expensive. Implementation of the Car Repair Billing Exchange by the AAR/Railinc has greatly reduced these costs by automating, standardizing and centralizing the data collection and distribution processes. Lower costs were observed in both data capture and audit function, and these cost reductions become even more impressive as the number of participants/subscribers has grown.

At present, Data Exchange files, representing over 500 marks, arrive at Railinc for processing. On a monthly basis, these files contain over 1 million car repair records and represent over \$100M in car repair data. This centralization and distribution process represents a powerful tool for Railroads, Equipment Owners and Third Party Providers in communicating and reconciling account data.



# Benefits of the Data Exchange

## 1.1.1 Additional Data Exchange Submission Benefits

- A. Consistency to ensure that all subscribers comply with AAR pricing procedures.
- B. Low data capturing costs as the Data Exchange minimizes the need to manually enter Billing Repair Data (BRCs) payable prior to internal audit.
- C. Potential reduction in auditing costs by minimizing data entry and eliminating manual auditing of bills payable.
- D. Potential increased recovery by providing an economical means to prevent revenue lost through improper billing charges.
- E. Electronic data submission supports in house auditing functions.
- F. Increased identification of critical and non-critical billing errors. (Refer to [Appendix C](#))
- G. Facilitates electronic billing and re-billing as internal programs could generate new BRC detail and Counter Billing Authority (CBA) requirements.
- H. Increased accuracy of the electronic billing data can be utilized for in house and AAR analytical purposes.



# Benefits of the Data Exchange

## 1.1.3 Maintenance History Benefits—Industry

- A. Early Warning (EW) and Maintenance Advisory (MA) information related to repair history by the AAR.
- B. Support AAR committee information requirements.
- C. Permit monitoring of industry performance by the AAR.
- D. Increased flexibility of retrieving data for special studies per the authorization of the AAR.
- E. Facilitates research to support technical and cost benefit studies by the AAR.
- F. Analyze failure trends of components among car series for design and component manufacturer problems by the AAR.





# Data Exchange Record Formats

## G.1 Data Exchange Formats

Changes to the Data Exchange record formats are highlighted in the following tables.

**Important Note:** Mandatory and informational edits for Record Format 1 referenced in Appendix [C.3](#).

Record Format 1—Repair/Misc Charges						
Legend:		N = Numeric		R = Required		
		A = Alphabetic		O = Optional		
		A/N = Alphanumeric		C = Conditionally Required		
Field Name		Column	Length	Format	R/O/C	Notes
Record Format		1	1	A/N	R	Always "1"
Invoice	Billing/Invoicing Party	2	4	A/N	R	This could be a Railroad, Contractor, Car Owner, Lessor or Running Repair Agent.
	Billed Party	6	4	A/N	R	
	Account Date (YYMM)	10	4	N	R	
	Invoice Number	14	16	A/N	R	
	Price Master Currency Indicator	30	1	A/N	R	U=US, C=Canada
	Detail Source	31	2	A/N	R	<b>BR</b> Billing Repair Data <b>CB</b> Counter Billing <b>DC</b> Defect Card <b>DE</b> Destroyed Equipment (Rule 107) <b>DM</b> Dismantled Equipment (Rule 108) <b>DR</b> Defect Card Rebuttal Billing



# Editing Payables

## **3 Editing Payables**

### **3.1 Scope and Purpose**

The scope and purpose of this documentation is not to establish a single system within the industry but to provide basic guidelines for editing CRB and to prepare an Electronic Car History File for the use of the car owner.

Each car owner should design a system which meets their own managerial requirements within their own processing and economic limitations. Consideration should be given to:



# Considerations for Editing Payables

- Use of the Car Repair Billing Procedures Manual
- Methods of capturing non Data Exchange payable data
- Method for verifying car ownership and recording maintenance activity
- Retention of all repair detail as required
- Method to include exception letters
- Incorporation of multiple owner car fleets
- Integration with other managerial data processing systems
- Scope of charges for each car or class of cars:
  - Running Repairs
  - Damages, Destroyed, Miscellaneous Charges, etc.
  - Heavy Repair Expenses
- Extent and nature of management controls
  - Budget Planning
  - Verification of Bills Prior to Payment
  - Billing Trends by Billing/Invoicing Party and/or Repairing Party
  - Volume of Exceptions Identified



# AAR Price Master

## 4 Price Master

### 4.1 Scope and Purpose

The Association of American Railroads (AAR) and Railway Association of Canada (RAC) Price Masters contain the costs for repairs as specified in the AAR Field Manual of the Interchange Rules. Both Price Masters are currently updated and released quarterly on January 1, April 1, July 1 and October 1 of each year. If crucial to meet industry requirements, interim Price Masters may be released. Records in both Price Masters contain the direct material price, the labor time standard for the fixed portion of the labor, the time standard for the variable portion of the labor, the labor cost for the fixed and variable portion of the labor and the credit for the material removed.

Note: There are two Price Master files distributed each quarter to recipients. The USPM.ZIP/CAPM.ZIP files include the current quarter data as well as the data from the previous three quarters. The USSHPM.ZIP/CASHPM.ZIP files are a shorter version of the Price Master file which include the current quarter data along with one previous quarter's data.



# AAR Component ID

## A.16 AAR Component ID

**AAR Component ID** – The crux of the AAR component tracking processes is the standard AAR Component ID. The AAR Component ID is found on the AAR standard bar code and is used as the primary identifier in all industry databases. It is used to track critical components, as defined by the AAR. The AAR Component ID consists of a 4 character (or 4 byte) Company code and a 10 digit (or 10 byte) number. Combined, these unique 14 bytes are the standard AAR Component ID (for example: ABCD1234567890).

All wheel sets should have on them at least one AAR standard bar code label with the AAR Component ID (both encoded and in human readable form). It is intended that this methodology will be duplicated for all tracked critical components in the AAR realm.



# FTP Inbound/Outbound Files

## **Appendix B FTP Inbound / Outbound Files**

### **B.1 Inbound/Outbound Files**

Railinc will set up and designate an FTP (File Transfer Protocol) mailbox for every participating (Data Exchange and/or Price Master) company. The Data Exchange participant must send/receive the monthly invoices to/from the designated mailboxes in accordance with the Data Exchange production schedule. Similarly, the Price Master recipient receives the Price Master file from the same mailbox.



## C.3 Edit Chart - Record Format 1

### C.3 Edit Chart 3—Data Exchange



CRB Data Exchange Edits Comparison Chart—Record Format 1					
<b>Global Edit:</b>	All "Alphabetic" and "Alphanumeric" codes MUST be Left-Justified. All "Numeric" fields MUST be Right-Justified. "Alphanumeric" fields may include special characters unless otherwise specified. "Must be Present" must be greater than spaces.				
<i>(Sorted in position order)</i>				2014	2015
Item	Positions	Edit	Error Code	DX Error Type	DX Error Type
1	1	<b>Record Format</b> —Must be '1'.	1A	Mandatory Reject	Mandatory Reject
2	2–5	<b>Billing/Invoicing Party Initial</b> —Must be present and alphanumeric. This should be a Railinc registered identifier of the Billing/Invoicing Party.	1B	Mandatory Reject	Mandatory Reject
3	6–9	<b>Billed Party</b> —Must be present and alphanumeric. This should be a Railinc registered identifier of the Billed/Invoiced Party.	1C	Mandatory Reject	Mandatory Reject
4	10–13	<b>Account Date (YYMM)</b> —Must be present and valid numeric date format (YYMM). Must not be older than one year from the current year/month and must not be in the future. If a resubmitted invoice, then must not be older than 17 months from the current year/month and not be in the future.	1D	Mandatory Reject	Mandatory Reject
5	14–29	<b>Invoice Number</b> —Must be present and alphanumeric.	1E	Mandatory Reject	Mandatory Reject



# AAR Component ID (CID) Reporting

## Appendix X AAR Component ID (CID) Reporting

**How to submit AAR Component ID billing repair data via the AAR/Railinc Data Exchange system to be billed during the Monthly Billing Cycle.**

**Note: Refer to Appendix W for reporting components under Detail Source JD**

Listed below are guidelines for submitting AAR Component ID and Billing Repair data.

**Note:** Refer to AAR Field Manual Rules 16, 17, 18, 44, 47, 48 and/or Rule 72, Section F, for Billing Repair data requirements.





# CEPM Reporting Requirement Timeline

CEPM Reporting Requirement Dates Table		
CEPM Component	DX Informational Error	DX Mandatory Reject
Wheel Sets (FM 44)	January 1 <sup>st</sup> 2013	October 1 <sup>st</sup> 2013
Couplers, Side frames, Bolsters (FM 16, 17, 18, 47, 48)	January 1 <sup>st</sup> 2014	July 1 <sup>st</sup> 2014
Service portion, Emergency portion and AB pipe bracket portion (FM 4)	n/a	n/a



# Price Matrix Indicator for CID

**Important Note:** Job Codes requiring a CEPM Component ID are identified in the AAR Price Matrix by the field "CID (Y/N):" where the indicator is shown as "Y" as noted in the example below.

JOB 3333		NEW WHEEL SET 33 INCH, 6 X 11 AXLE				QLFR - 00		RULE		44
SINGLE UNIT LOCATION		1 2 3 4				MAX UNITS				1
ARTICULATED LOCATION		1 2 3 4 5 6 7 8 9 X Y Z				MAX UNITS				1
DRAW BAR LOCATION		1 2 3 4 5 6 7 8 9 P Q R S T				MAX UNITS				1
		H V W X Y Z								
MATL UNIT-- EACH		CID (Y/N) : Y				SECUREMENT PART-		SEC. QTY		0.000
REMOVED	COND	WHY MADE		RESP CODE	MATERIAL	STD HRS	LABOR	CREDIT	PRICE	
3333	1	09		1,3	2450.00	0.837 (V)	100.44 (V)	0.00	2550.44	
3333	1,3,4,5	09		2	0.00	0.000	0.00	0.00	0.00	
3333	3	09		1,3	2100.00	0.837 (V)	100.44 (V)	0.00	2200.44	
3333	4	09		1,3	1504.80	0.837 (V)	100.44 (V)	0.00	1605.24	
3333	5	09		1,3	1528.10	0.837 (V)	100.44 (V)	0.00	1628.54	



# Questions??

## Questions??

- CRB Contact Information
  - Email: [csc@railinc.com](mailto:csc@railinc.com)
  - Phone: 1-877-RAILINC (724-5462)

