



# **AAR Interchange Rules Revisions Update For 2019**

**Presented to Chicago Railroad Mechanical  
Association by Nichole Fimple (AAR) on 1/14/19**

# Field Manual of the Interchange Rules

**Note that July 2018 changes are not included in this presentation, nor are many changes that were strictly editorial in nature.**



# Rule 3 Testing of Air Brakes

## ■ Editorially Revised Rule 3.B Chart A Title and item 3):

CHART A

### TESTS AND ATTENTION REQUIRED PER MSRP S-486, LATEST REVISION

All cars set out of trains requiring tests for items listed below in Chart A, must receive attention per Chart A while on the handling line railroad.	Single Car Air Brake Test	Brake Pipe Leakage Test (Sect. 3.3)	Slack Adjuster Test (Sect. 4.1)	Empty-Load Test (empty car only) (Sect. 4.6)	Retainer Valve Test (Sect. 4.2)	Brake Cylinder Leakage Test (Sect. 4.5)	Clean Dirt Collector
1) Car is past due for a single car air brake test per the ABT due date in Umler when car is on shop or repair track. If BC tap is not installed, apply approved brake cylinder pressure tap.	X						
2) Air brakes inoperative or cut out when car is set out or on shop or repair track	X						
3) Attention per Rule 3.A.1.b. or Rule 3.A.1.c.	X						
4) Car with wheel thermal cracks or condemnable built up tread or slid flat.	X						



# Rule 3 Testing of Air Brakes

- Removed Rule 3.E.5:

- 5. Additional stenciling (on reservoir) for ABDX and DB-60 valves must be removed when car is on a shop or repair track.
- Renumber existing 3.E.6-19 to 3.E.5-18

- Reference C-13238, 11/14/18



# Rule 4 Air Brakes Valves and Parts

- Replaced Rule 4.E.12.c:
  - c. ~~Testing or adjusting body mounted brakes or truck mounted brakes shown in Rule 3, Figure 10, with slack adjusters.~~ **Adjusting body mounted brake cylinder travel.**



- Reference: C-13239, 11/14/18

# Rule 5 Air Brake Hoses, Hose Supports, and Trainlines

- Removed Rule 5 Job Code 1210:

- Removed:

- 1210 AIR HOSE EXTENSION COUPLING

- For end of car trainline air hose per AAR Standard S-4013.  
(Condition Codes 1, 2)

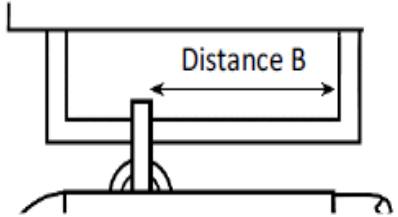
- (Why Made Codes 01, 02, 03, 15, 24, 25, 31, 45)

- Reference: C-13229, 11/12/18



# Rule 6 End Hose Arrangement Performance and Angle Cock Placement

## ■ Rule 6 Figure 1:

Distance B (not applicable to cars equipped with spreader bar and welded stops)	Measurement of space between trolley loop to rear trolley stop	
Requirement for Distance B	<del>Distance B must be not less than Distance A minus 1.5 inches.</del> Distance B must be at least 1½ inches longer than Distance A	



# Rule 6 End Hose Arrangement Performance and Angle Cock Placement

- New Rule 6.A.2.f:

- f. Air hose end extensions applied to cars other than those defined in Rule 6.B.1. Repair is permissible at locations other than shop or repair track.

- Rule 6.F.3

- Added Condition Code 0  
0 = Labor attention

- Rule 6.F.6

- Added Why Made Code 42  
42 = Improperly located or applied

- Rule 6.F Job Codes

- Added Job Code 1210  
1210 AIR HOSE EXTENSION COUPLING  
For end of car trainline air hose per AAR Standard S-4013.  
(Condition Codes 0, 1, 2)  
(Why Made Codes 01, 02, 03, 15, 24, 25, 31, 42, 45)

- Reference: C-13229, 11/12/18





# Rule 7 Brake Beams, Hangers, Brackets, Wear Plates and Brake Connection Pins, Hanger Pins, or Bolts

## ■ Rule 7.A.1:

### ■ Updated 7.A.1.k:

- k. On cars ~~stenciled for~~ equipped with composition brake shoes, when brake head has been incorrectly modified or does not provide for acceptance of rejection lug on composition brake shoes.

### ■ Removed 7.A.1.l:

- l. On cars stenciled for composition brake shoes, when brake head does not provide for acceptance of rejection lugs on composition brake shoes, brake head should be modified as shown in MSRP Standard S-372.

### ■ Renumbered 7.A.1.m-q to 7.A.1.l-p:

## ■ Reference: C-13238 11/14/18



# Rule 7 Brake Beams, Hangers, Brackets, Wear Plates and Brake Connection Pins, Hanger Pins, or Bolts

## ■ Inserted New Rule 7.B.8:

- 7.B.8 Brake heads that do not provide for acceptance of rejection lugs on composition high friction brakes shoes shall be modified as shown in MSRP S-372.
- Renumbered existing 7.B.8-11 to 7.B.9-12

## ■ Removed Rule 7.E.4:

- 4. If car is not stenciled, consider No. 18 Brake Beam as standard to car.

## ■ Reference: C-13238 11/14/18



# Rule 8 Automatic Slack Adjuster

- Replaced Rule 8.E.1(a):
  - (a). ~~Testing or adjusting body mounted brakes or truck mounted brakes shown in Rule 3, Figure 10, with slack adjusters.~~ Adjusting body mounted brake cylinder travel.



- Reference: C-13239, 11/14/18

# Rule 13 Hand Brakes – Geared and Non-geared

## ■ Updated Rule 13.F Job Codes 1908, 1909, 1910:

### **\*\*1908 HAND BRAKE HOUSING ASSEMBLY, GROUP T**

Geared vertical lever design, AAR approved thin type. Complete with lever handle. Includes upper chain.

(Condition Codes 1, 3)

(Why Made Codes 01, 02, 03, 05, 06, 08, 12, 25)

### **\*\*1909 HAND BRAKE ASSEMBLY, GROUP U**

Geared vertical lever design, AAR approved thin type. Complete with handle.

Includes upper chain.

(Condition Codes 1, 3)

(Why Made Codes 01, 02, 03, 05, 06, 08, 09, 12, 25)

### **\*\*1910 HAND BRAKE HOUSING ASSEMBLY, GROUP V**

Geared vertical lever design, AAR approved. Complete with lever handle. Includes upper chain.

(Condition Codes 1, 3)

(Why Made Codes 01, 02, 03, 05, 06, 08, 12, 25)



# Rule 16 Couplers, Type E and Parts

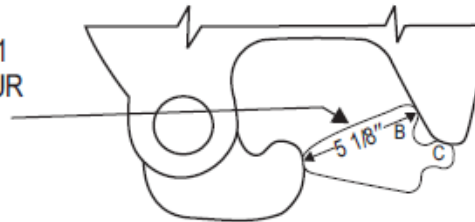
## ■ Updated Rule 16.A.1.b(2):

### RULE 16

- (2) Any coupler found out of gage per Figure A must be renewed unless contour can be restored to the provisions of Figure B as measured with Gage No. 25623-1 with application of knuckle and/or knuckle lock.

FIGURE B

GAGE NO. 25623-1  
CHECKS CONTOUR  
AFTER PARTS  
REPLACEMENT



THE CONTOUR IS ACCEPTABLE WHEN THE GAGE CANNOT BE PASSED VERTICALLY THROUGH THE CONTOUR IN THE POSITION SHOWN WITH POINTS B AND C CONTACTING GUARDARM WITH THE KNUCKLE IN ~~FULL~~ PULL POSITION.



# Rule 16 Couplers, Type E and Parts

- Updated Rule 16 F Job Codes:

- Removed Condition Code 1 from Job Codes:

2009, 2010, 2012, 2017, 2018, 2019, 2021, 2022,  
2023, 2038, 2043, 2047

- Reference: C-13245, 11/14/18



# Rule 17 Couplers, Type E/F and Parts

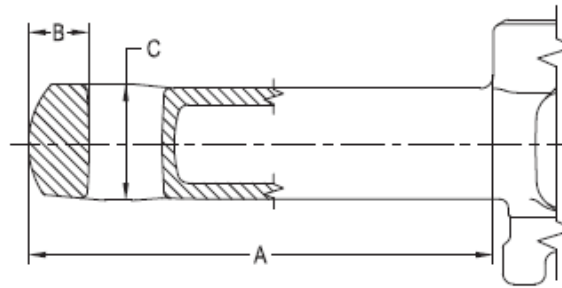
- Removed Rule 17.A.1.b and Figure A and renumbered accordingly.
- Inserted New Rule 17.A.2.a and Figure B and renumbered accordingly.
  - a. When coupler is removed for any reason, measure coupler shank length, rear wall thickness, and butt thickness. Coupler must be replaced if any measurement is less than shown in table for Figure B.
- Reference: C-13240, 11/14/18



# Rule 17 Couplers, Type E/F and Parts

## ■ Inserted New Rule 17 Figure B:

FIGURE B



Coupler Type	Min Shank Length "A" (inches)	Min. Rear Wall Thickness "B" (inches)	Min. Butt Thickness "C" (inches)
All E68, SE68, SBE68, EF511, EF512, and EF526 couplers	35 $\frac{13}{16}$	3	6 $\frac{3}{8}$
All EF525 and EF528 couplers	37 $\frac{13}{16}$	3	6 $\frac{3}{8}$
All EF601 couplers	45 $\frac{13}{16}$	3	6 $\frac{3}{8}$
All E69, SE69, SBE69, EF811, and EF812 couplers	52 $\frac{13}{16}$	3	6 $\frac{3}{8}$

## ■ Reference: C-13240, 11/14/18





# Rule 17 Couplers, Type E/F and Parts

- Inserted New Rule 17.E.13:

- E.13. Required coupler height is same as for E Type.
- Reference: C-13240, 11/14/18

- Updated Rule 17 F Job Codes:

- Removed Condition Code 1 from Job Codes:

2183, 2185, 2189, 2192, 2194



# Rule 22 Uncoupling Levers and Support Brackets

- Updated Rule 22.A.2.a:

2. Condemnable When Car Is on Shop or Repair Track for Any Reason

a. Both nonmetallic inserts are missing on the hook end or both are missing on the handle end. Replace telescoping uncoupling lever and report Why Made Code as 04—Defective if ~~both non-metallic inserts are missing on the hook end or if both are missing on the handle end.~~



- Reference: C-13261, 12/11/18

# Rule 22 Uncoupling Levers and Support Brackets

## ■ Updated Rule 22.B Correct Repair Charts:

### Group A — AAR Standard Uncoupling Levers or Adjustable Type Levers for Freight Cars With Standard Draft Gears with a Total Travel of 6½ inches

Removed	What Can Be Applied	Remarks
Group A	Group A Group B	Must be manufactured in accordance with <del>AAR Standards</del> <b>MSRP</b> S-131 (Figure 1) or S-133 (Figure 2)

#### Group A Name And Type

AAR S-131 (Figure 1)  
 AAR S-133 (Figure 2)  
 \*Garbe FL-4265  
 \*Holland Unirod  
 Jaxon UE 2  
 Jaxon UE 3  
 \*\* LeverX Model LX-1  
 \*Pick Ind. 851-82  
 Stanrail Style SA  
 Stanrail Style EZ-SA  
 \*Stanray Style R-T  
 \*Teams Inc. Model 7320  
 \*Triax Style R-T  
 \*Triax Style RT2  
 \*No longer manufactured

Workhorse Rail WREZSA

## ■ Reference: C-13261, 12/11/18



# Rule 22 Uncoupling Levers and Support Brackets

## ■ Updated Rule 22.B Correct Repair Charts:


**Group B — AAR Standard Adjustable Type Levers for Freight Cars With Standard Draft Gears or End of Car Cushioning up to 15 inches Total Travel With E60, E67 or F70 Couplers**

Removed	What Can Be Applied	Remarks
Group B	Group B	Must be applied in accordance with <del>AAR Standard</del> <b>MSRP</b> S-134. (Figure 3)

Group B Name And Type

AAR S-134

Jaxon UE 1

\*  Stanrail Style 1A

\*Triax Style 1T

\*No longer manufactured

## ■ Reference: C-13261, 12/11/18



# Rule 22 Uncoupling Levers and Support Brackets

## ■ Updated Rule 22.B Correct Repair Charts:

### Group C-1 — Approved Uncoupling Levers for Cars Equipped With Wide Striker Opening, End of Car Cushioning or Center of Car Cushioning

Removed	What Can Be Applied	Remarks	
Group C-1	Group C-1	Manufacture conforms with <del>AAR Specification</del> <b>MSRP</b> M-961. Use Tables in Section E.6. as a guide for application.	
Group C-1 Names And Type		Table	Color
<del>Chief B758</del>		<del>A-B</del>	<del>Blue</del>
Jaxon CLB		A-B	Blue
<del>Jaxon UTB</del>		<del>A-B</del>	<del>Blue</del>
<del>LeverX TLX 2</del>		<del>A-B</del>	<del>Blue</del>
Stanrail 586		A-B	Blue

## ■ Reference: C-13261, 12/11/18



# Rule 22 Uncoupling Levers and Support Brackets

## ■ Updated Rule 22.B Correct Repair Charts:

### Group C-2 — Approved Uncoupling Levers for Cars Equipped With Wide Striker Opening, End of Car Cushioning or Center of Car Cushioning

Removed	What Can Be Applied	Remarks	
Group C-2	Group C-2	Manufacture conforms with <del>AAR Specification</del> <b>MSRP</b> M-961. Use Tables in Section E.6. as a guide for application.	
Group C-2 Names And Type		Table	Color
<del>Chief Y745</del>		<del>C-D-E</del>	<del>Yellow</del>
Jaxon CLY		C-D-E	Yellow
<del>Jaxon UTY</del>		<del>C-D-E</del>	<del>Yellow</del>
Stanrail TTEF-15W		C-D-E	Yellow

## ■ Reference: C-13261, 12/11/18



# Rule 22 Uncoupling Levers and Support Brackets

## ■ Updated Rule 22.B Correct Repair Charts:

### Group D — Telescoping Levers No Longer Manufactured

Removed	What Can Be Applied	
Group D	Group C-1 Group C-2 Group D	Product no longer manufactured or does not comply with <del>AAR Specification</del> <b>MSRP</b> M-961. Use Section E.6. as a guide for application.
Group D Names And Type		
<del>ACE 4-H-4776 (Cable Operated)</del>	Nordek RH-3782	Stanray Style 1-TXE
Garbe Iron Works TL-B3172	Pick 852-83K	Stanray Style 1-TXF
Garbe Iron Works TL-3272	Resco 6381	Stanray Style 4JB
Garbe Iron Works TL-B3285	Resco 8081	Stanray Style 5
Garbe Iron Works TL-3586	Resco 8081A	Triax TXE
Holland D-101	Stanrail 1-TXE	Triax 4C
Holland 2-55	Stanrail TTE-12	Triax 5
Holland 2D-117	<del>Stanrail TTE-12W</del>	Triax Style 4-JB
Holland ECON-3		4CX
Holland ECON 2-33		TXE2
<del>Holland 2-44</del>		TXF
Nordek RH-3168		

Chief B758

Chief Y745

Jaxon UTB

Jaxon UTY

LeverX TLX-2



■ Reference: C-13261, 12/11/18

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4/1/2019

# Rule 22 Uncoupling Levers and Support Brackets

- Updated Rule 22.E.6.a, b, c, d and e:
  - Updated MSRP References
  - Added asterisks to identify Uncoupling Levers no longer in production



- Reference: C-13261, 12/11/18



# Rule 36 Roller Bearings

## ■ Rule 36.E.5

- **E.5.** When a roller bearing axle is removed from the car due to a suspected/confirmed overheated roller bearing or Acoustic bearing alert (WM50, WM51, WM52, WM95, or WM91):
  - an MD-11 report must be initiated at [www.railinc.com/md11](http://www.railinc.com/md11) or approved alternate method **within 15 days of wheel set removal**;
  - the roller bearing cup must be marked along the circumference with a 2 inch wide white or yellow vinyl tape to identify the bearing for future teardown;
  - **do not cover the bearing cup serial number**;
  - the roller bearing cup must be marked with the car initial and number, bearing fail side, axle position, date of removal, Why Made Code and unique identifier (MDID) provided by MD-11 system. This should be completed using a paint pen or other suitable marking method on the tape.

## ■ Reference: C-13241, 11/14/18

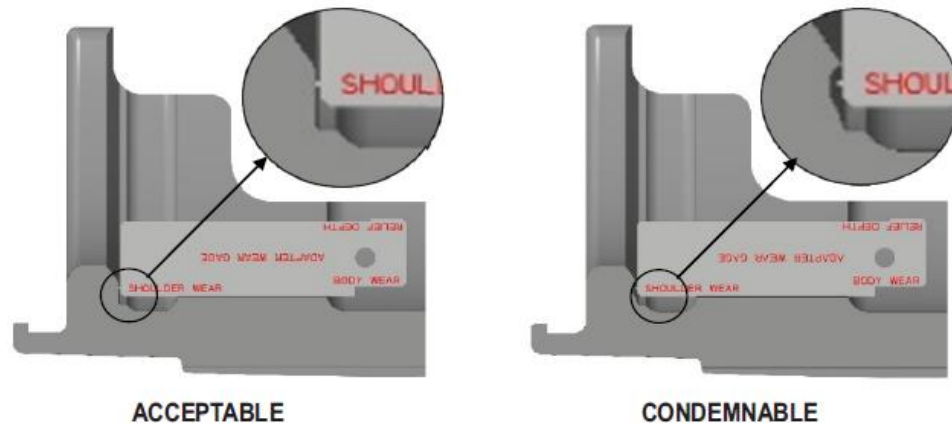


# Rule 37 Roller Bearing Adapters

## ■ Updated Rule 37.A.6.c Figure 4:

FIGURE 4

ADAPTER SECTION



WORN ADAPTER SHOWING  
CONDEMNABLE THRUST SHOULDER  
WEAR AS GAGE TIP DOES NOT  
CONTACT SHOULDER INDICATING  
MORE THAN .025" ALLOWABLE WEAR  
(THIS WEAR CAUSED BY THRUST  
LOADING FROM END OF ROLLER  
BEARING CUP). CHECK BOTH  
SHOULDERS AT LOCATIONS WHERE  
WEAR IS MAXIMUM.

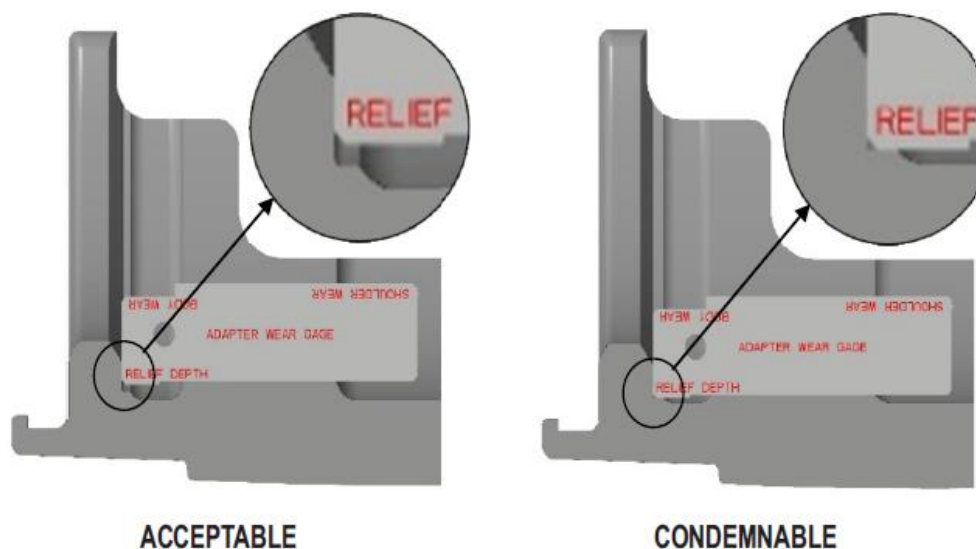
## ■ Reference: C-13247, 11/19/18



# Rule 37 Roller Bearing Adapters

## ■ Updated Rule 37.A.6.d Figure 5:

FIGURE 5  
ADAPTER SECTION



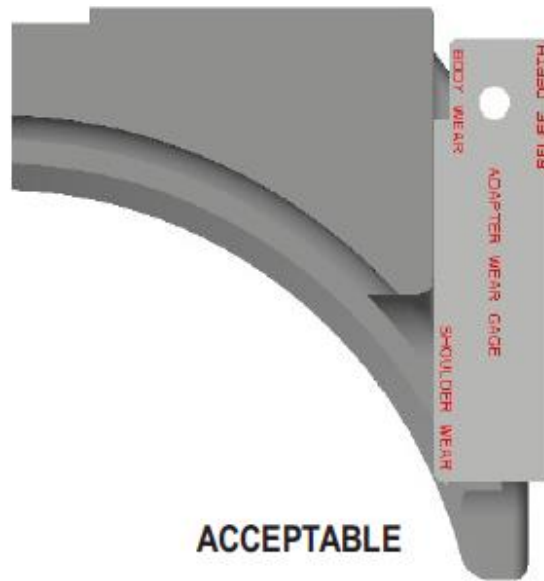
WORN ADAPTER SHOWING  
CONDEMNABLE BORE WEAR AS THERE  
IS NO CLEARANCE BETWEEN GAGE AND  
MACHINED RELIEF. CHECK BOTH ENDS  
OVER FULL ARC OF ADAPTER BORE.

## ■ Reference: C-13247, 11/19/18



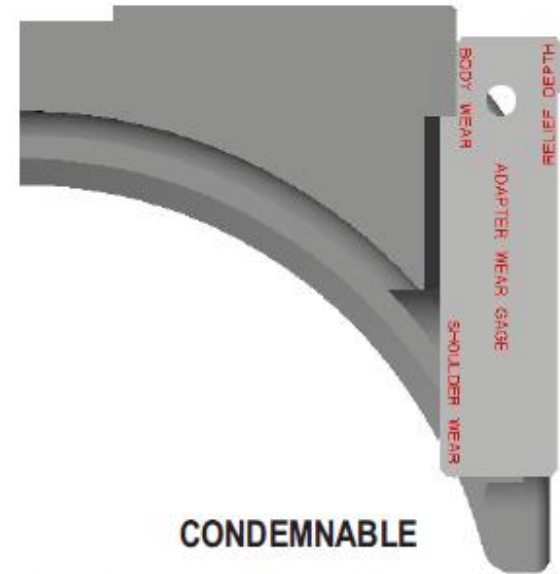
# Rule 37 Roller Bearing Adapters

- Updated Rule 37.A.6.f Figure 6:



**ACCEPTABLE**

NEW ADAPTER SHOWING HOW GAGE CONTACTS FULLY ALONG SIDE BETWEEN LUGS.



**CONDEMNABLE**

WORN ADAPTER SHOWING CONDEMNABLE BODY WEAR AS THERE IS CLEARANCE BETWEEN GAGE AND BODY OF ADAPTER.

- Reference: C-13247, 11/19/18



# Rule 41 Wheels

- Updated Rule 41.A.1.b:
  - A.1.b. Vertical flange Why Made **Code** 62: Flat vertical surface extending ~~one~~ **1** inch or more from tread. Apply gage as follows:



# Rule 44 Wheel Sets

## ■ New Rule 44.E.16-18:

- 16. A Purchased Core Wheel Set is one that was obtained most recently from a retired car and meets the definition of a Turned Wheel Set, adding to the supply of wheel sets obtained through the conventional unit exchange process. Purchased Core Wheel Sets cannot be split into multiple AAR Component ID's.
- 17. For Purchased Core Wheel Sets, Condition Code G may not be billed unless side readings of both wheel plates are 20/16 inches or greater. All Purchased Core Wheel Sets with a side reading(s) less than 20/16 inches will be billed with Condition Code F.
- 18. For purchased core wheel sets, wheel shops will apply a laminated bright yellow hanging tag on the axle body that is approximately 4" x 6" and labelled "Purchased Core". This tag will remain on the axle body until wheel set is applied to and associated with a railcar, at which time it must be removed.

## ■ Reference: C-13234, 11/13/18



# Rule 44 Wheel Sets

## ■ Rule 44.F.3:

### ■ Updated Rule 44.F Condition Codes to Add:

F = Purchased core wheel set with reconditioned roller bearings and reconditioned/secondhand axle

G = Purchased core wheel set with new roller bearings and reconditioned/secondhand axle

## ■ Rule 44.F Job Codes:

### ■ Updated Rule 44.F Job Codes to Add Condition Codes F and G to the following Job Codes:

3329, 3334, 3337, 3339, 3342, 3345, 3348, 3350,  
and 3353

## ■ Reference: C-13234, 11/13/18



# Rule 48 Truck Side Frames, Transoms and Spring Planks

## ■ Updated Rule 48.A.3.c Table 1:

- c. Thrust lugs, when trucks are disassembled and wear exceeds limits shown in Table 1:

Table 1

Thrust Lug Wear Limits (inches)

Side Frame	Journal Size	Nominal	Remove If Over
Most side frames	6× 11 or 6 × 8	7 1/4	7 7/16
	6 1/2 × 12 or 6 1/2 × 9	7 3/4	7 15/16
	7 × 12 or 7 × 9	8 3/4	8 15/16
Shear pad design with letter "B" in the 7th position of side frame 9-digit code	6× 11 or 6 × 8	7 7/16	7 5/8
	6 1/2 × 12 or 6 1/2 × 9	7 15/16	8 1/8
	7 × 12 or 7 × 9	8 15/16	9 1/8





# Rule 53 Running Boards—Dome Platforms— Brake Steps—Cross Platforms

- Updated Rule 53.B.1.d Group No. 2 – Steel – unsupported span not to exceed 7 feet:
  - Added:  
Eaton B-Line Round Hole Perfo-Grip Plate Running Board



- Reference: C-13242, 11/14/18

# Rule 57 Center Sills

- Updated Rule 57 – Sills must be spliced in accordance with the following specifications, Item 4:
  - Removed:
    - 4. Replacement of bellmouth striker assembly on High Cube 86 foot boxcars to be as shown in MSRP Section C, Standard S-251.
- Updated Rule 57 – General Information, Item 4:
  - 4. For rolled center sills the repair material shall have minimum yield strength of 50 ksi and charpy requirements meeting *MSRP-C-II*, ~~Specification M-1001, Chapter 3, Paragraph 3.1.9.~~
  - 5. For cars equipped with fabricated center sills ~~please~~ contact the car owner for material requirements.



# Rule 59 Cushioned Underframe Devices

- Updated Rule 59:
  - Correct Repairs – Figure B
  - Revised EOC Tables
  - New EOC-27 Tables

RULE 59

## EOC-27

Pocket Group EOC-27D 50K preload, 10 inch travel used with E-68 or E-69 couplers and F-type floating yoke, low deck

EOC-27D	100K Preload		Billing Qualifier
Type	Manufacturer	Model	
1	FMI	10KN5LD	01
1	AHO	10F-RED LD, 10F-RECD LD	03
1	KRE	10G-D, 10G-D/U	10

Replacement guidelines for EOC-27 pocket

REMOVED	INSTALL	OWNER'S PERMISSION REQUIRED	MODIFICATIONS REQUIRED
Type 1	Type 1	NO	None required

- Revised COC Tables
- New Figure in Section E
- Revised Job Codes
- New Job Code 5850

\*5850 POCKET GROUP EOC-27D  
 \*\* (Condition Codes 1, 3, 9)  
 (Why Made Codes 1C, 01, 02, 03, 04, 09, 15, 25, 46)

- Reference: C-13235, 11/13/18 and C-13266, 12/31/18



# Rule 62 Truck Side Bearings

## ■ Revised Rule 62:

- Removed Rule 62.A.1.c and f, renumbered accordingly.
- Inserted New Rule 62.A.2.c and d, renumbered accordingly:

A.2.c Housing or metal top cap cracked (any combination of cracks totaling more than 1 inch in length).

A.2.d Metal caps worn through wear limit indicators, where such indicators exist, when the car is jacked at that truck location for some other reason

## ■ Reference: C-13243, 11/14/18

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# Rule 62 Truck Side Bearings

- Revised Rule 62.E.4:

- 4. Where side bearing clearance cannot be adjusted otherwise, the use of a ~~one-piece~~ horizontal steel center plate shim liners per Rule 47.E is permissible. accordingly.



# Rule 63 Automatic Equipment Identification (AEI)

- Updated Rule 63:

- Updated Rule 63.A.3.f:

- f. Length (a 1 ft variation is allowed from Umler-specified length) as measured ~~from end sill to end sill~~ over pulling faces of couplers in normal position.



# Rule 66 Reflective Sheeting

## ■ Updated Rule 66.A:

- A. Wear Limits, Gaging, Cause For Renewal, Cause for Attention
  - 1. At any time
    - a. Cars without any FRA 224 stamped reflective sheeting.
    - b. ~~Cars with sheeting lacking the FRA-224 stamp (grandfathered cars) and with 20% or more of the minimum required reflective sheeting on a single side damaged, obscured, missing, or fire or heat damaged.~~
  - 2. Condemnable when car is on shop or repair track for any reason
    - a. A single side has all (100%) required single yellow FRA-224 stamped sheets completely obscured or missing.

- Reference: C-13236, 11/13/18 and C-13266, 12/31/18



# Rule 66 Reflective Sheeting

## ■ Updated Rule 66.A continued:

### ■ 32. At time of Single Car Air Brake Test (SCABT)

~~a. Cars with yellow FRA-224 stamped sheeting with 20% (per Chart 1) or more of the minimum required reflective sheeting on a single side damaged, obscured, missing, or fire or heat damaged.~~

~~b. Cars with yellow sheeting lacking the FRA-224 stamp (grandfathered cars).~~

a. Any required single yellow FRA-224 stamped sheet that does not meet the minimum retroreflectivity value per Rule 66 paragraph E.10. This rule is effective upon issue. Compliance is required by July 1, 2019.

b. Any required single yellow FRA-224 stamped sheet with 20% (approximately the size of a 4 inch by 4 inch comparator panel) or more of the sheet obscured, missing, or damaged such that the retroreflective properties are nonexistent. Note: A comparator panel represents approximately 20% of a 4 inch by 18 inch sheet.

c. Improperly located or oriented yellow FRA-224 stamped sheeting.

d. Cars with white reflective sheeting. See E.1

## ■ Reference: C-13236, 11/13/18 and C-13266, 12/31/18





# Rule 66 Reflective Sheeting

## ■ Updated Rule 66.B:

### ■ **B. Correct Repairs**

1. All required reflective sheeting, as defined in column **B** of Chart 1, must be cleaned at time of Single Car Air Brake Test and evaluated for retroreflective performance.

CHART 1

A	B
Car Length (feet)*	Required Number of Yellow Strips 4" × 18" per side
Less than 50	7
50 to 60	8
Over 60 to 70	9
Over 70 to 80	10
Over 80 to 90	11
Over 90 to 100**	12

\* Car length measured from end sill to end sill. See Figure 1.

\*\* Freight cars over 100 feet in length must be equipped with an additional 1/2 square foot (1 ea. 4" × 18" strip) of sheeting on each side for every additional 10 feet of length. {4" × 18" = 1/2 foot square (ft<sup>2</sup>)}

■ Reference: C-13236, 11/13/18 and C-13266, 12/31/18



# Rule 66 Reflective Sheeting

- Updated Rule 66.B continued:

- 4. ~~Sheeting not stamped with FRA-224 need not be covered, painted over, maintained, cleaned, or removed, with the exception of A.1.b. or A.2.b. defects.~~ Defective sheeting must be removed, covered, or otherwise painted over.

5. Cars found with cause for attention per Rule 66.A.1.a., A.1.b., or A.2.b. A.3.d. require a complete application of FRA-224 stamped yellow sheeting.

- Reference: C-13236, 11/13/18 and C-13266, 12/31/18



# Rule 66 Reflective Sheeting

- Updated Rule 66.E:

- Revised E.1, removed E.2 and E.3, renumbered accordingly:

## E. General Information

~~1. FRA-224 Compliant sheeting may be identified by the “FRA-224” stamp. Existing white sheeting on a car is compliant if marked with “FRA-224”~~

~~except at until time of next single car air brake test.~~

~~2. Grandfathered car: has only sheeting that lacks the FRA-224 stamp.~~

~~3. Damaged means scratched, broken, chipped, peeled, or delaminated.~~

- Reference: C-13236, 11/13/18 and C-13266, 12/31/18



# Rule 66 Reflective Sheeting

- Updated Rule 66.E continued:

- Added New E.10:

10. This section describes the process for conducting a performance evaluation of retroreflective sheeting (“sheeting”) on railroad freight cars and locomotives using a comparator panel (“panel”) or electronic handheld retroreflectometer. Note that yellow sheeting is allowed for locomotives and freight cars, and that white sheeting is allowed for locomotives only.

- a. Sheeting must be visually evaluated with use of a light source. The light source must be of sufficient intensity to illuminate sheeting and overcome the ambient lighting conditions. A brighter light is recommended in daylight conditions
- b. Panels must conform to the requirements in *MSRP S-916* with a retroreflective range of 150–170 cd/lx/m<sup>2</sup> for yellow sheeting and 250– 285 cd/lx/m<sup>2</sup> for white. Because this inspection is a comparison, slight variances between flashlights, inspector vision, inspector height, ambient light, distance, etc., are overcome.

- Reference: C-13236, 11/13/18 and C-13266, 12/31/18



# Rule 66 Reflective Sheeting

## ■ Updated Rule 66.E continued:

### ■ New E.10 continued:

- c. Handheld annular retroreflectometers may be used to evaluate for a minimum retroreflective value of 150 cd/lx/m<sup>2</sup> for yellow sheeting and 250 cd/lx/m<sup>2</sup> for white, when measured at -4° entrance angle and 0.2° observation angles. Measurements at 30° entrance and 0.5° observation angles are not required.
- d. Other direct measurement technologies may be used if authorized by the AAR.
- e. Retroreflective sheeting performance inspection procedures:

#### **Initial Inspection**

1. Clean all sheeting on the car/locomotive being inspected.
2. While maintaining a uniform distance from the car/locomotive as you move down the side (15 ft is preferred but not required), examine each individual sheet with a light source and determine if comparison is needed. Use of a light source will allow the inspector to verify if the cleaning was sufficient and to identify the following:
  - Sheeting with condemnable degradation that need not be further evaluated with a panel; or
  - Sheeting that is obviously good that needs not be further evaluated, or
  - Sheeting that is suspect

## ■ Reference: C-13236, 11/13/18 and C-13266, 12/31/18



# Rule 66 Reflective Sheeting

- Updated Rule 66.E continued:

- New E.10 continued:

**Performance Inspection (required for suspect material)**

1. Ensure that the panel is within the calibration date.
2. Place the panel over the sheeting to be evaluated.
3. Select a distance from the side of the car/locomotive that can be held for all reflective sheeting inspections (15 ft is preferred but not required).
4. Evaluate individual reflective sheets at a position straight out from the side of the car/locomotive.
5. Hold the light source adjacent to the eye to take full advantage of the reflective sheeting's property that reflects light back to the source.
6. Compare the reflected light intensity of the reflector to that of the comparator panel.
  - If the reflective sheeting's reflected light intensity appears brighter than the panel, the sheeting passes the inspection.
  - If the reflected light intensity difference between the panel and the reflective sheeting cannot be discerned or if the panel appears brighter than the sheeting, the sheeting must be replaced.

- Reference: C-13236, 11/13/18 and C-13266, 12/31/18



# Rule 66 Reflective Sheeting

- Updated Rule 66.F:

- Updated F.6 Why Made Codes:

- Added:

- 1F = Reflective sheeting does not meet the minimum reflectivity levels per Rule 66

- Updated F Job Codes:

- 5500 REFLECTIVE SHEETING, INITIAL APPLICATION OR COMPLETE RENEWAL ONLY

- Any AAR-approved type, 4 × 18 inch

- (Condition Code 1)

- (Why Made Codes 1F, 27, 44, 45, 49)

- 5502 REFLECTIVE SHEETING

- Any AAR-approved type, 4 × 18 inch

- (Condition Code 1)

- (Why Made Codes 1F, 03, 09, 25, 31, 42, 43, 45, 49)

- Reference: C-13236, 11/13/18 and C-13266, 12/31/18



# Rule 70 Lightweights, Weight Limits And Overloading

- Removed Rule 70.F:
  - **F. Billing Repair Data Requirements**
    1. Bill per Section B.5.





# Rule 72 Manufactured Material

## ■ Updated Rule 72 Job Code 5799:

### 5799 TRANSFER OF LADING PER Rule 108

Where transfer of lading is required, the actual cost will be at the car mark owner expense. Handling line to bill the car mark owner directly. Billing must be reported by the handling line using Job Code 5799, and the detail record (Detail Source BR) must be reported ~~via the AAR Car Repair Billing Data Exchange System~~ per Office Manual Rule 112.

(Condition Code 0)

(Why Made Code 09)



# Rule 75 Miscellaneous Labor

## ■ Updated Rule 75.F.4 Job Code Applied:

### ■ 4. Job Code Applied

a. Show applicable code.

b. Show applicable car part identification code per Rule 83 in qualifier column for job codes preceded by \*\*

**c. Show qualifier per Section E for job codes preceded by \*\*\***

## ■ Updated Rule 75.F.7 Job Code Removed:

### ■ 7. Job Code Removed

a. Show applicable code (Use same as job code applied)

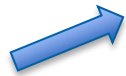
b. For job codes preceded by \*\* use same **car part code** qualifier as for job code applied

**c. For job codes preceded by \*\*\* use same qualifier as for job code applied**



# Rule 75 Miscellaneous Labor

## ■ Updated Rule 75.F Job Code 4453:



\*\*\*4453 MAINTENANCE ADVISORY INSPECTION—(ACF CENTERFLOW COVERED HOPPER CARS)

NOTIFICATION USED FOR REPORTING OF DEFINED INSPECTIONS AS REQUIRED BY A MAINTENANCE ADVISORY-102 (MA-102)

Use qualifiers found in Rule 75.E.9 for reporting inspection results.

Report Job Code 4454 to obtain labor charge for inspection.

(Condition Code 0)

(Why Made Code 13)



# Rule 80 ~~Painting and Stenciling~~ Markings

- Updated Rule 80.B.1:

B.1. Reporting marks, car initial and number, in no less than 9 inch characters on sides of car (7 inch characters are allowed on flat cars) and in 4 inch characters on ends of car. End of car marks are not required on flat cars.

- Removed B.2-5

- Added new B.2-4:

2. Apply built mark (BLT MO-YR) at BL and AR corners of car.
3. On cars with 75 feet or greater brake pipe length and when length is not included on badge plate, apply length mark (BLP XXX) at BL and AR corners on sides of car above built mark.
4. Apply markings on clean, dry surface. Either decals or stencils can be used for repair.

- Reference: C-13232, 11/12/18 and C-13266, 12/31/18



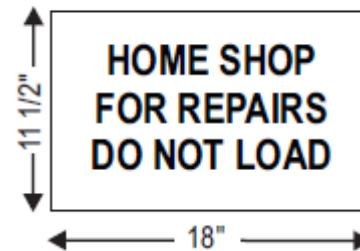
# Rule 80 Markings

## ■ Updated Rule 80.B.6:

### 6. 5. Home Shop Marking

- a. When applied, Home Shop Markings shall be at least 2 inch letters reading “HOME SHOP FOR REPAIRS DO NOT LOAD” and shall contrast with the car body.
- b. When applied Home Shop Decal shall be as shown in Figure A below and shall utilize black letters and black border on green-yellow backgrc

FIGURE A



- c. When a car is sent to home shop, Home Shop Marking or Decal shall be applied to each side of car adjacent to car number.

## ■ Reference: C-13232, 11/12/18 and C-13266, 12/31/18



# Rule 80 Markings

- Removed Rule 80.B.7, Renumbered B.8 to B.6, with revisions:
  - 8- 6. Piston Travel Range Markings
    - a. Truck mounted brakes—The markings shall be located on both sides of the car body as near as practical to a bolster and oriented so that it may be read by a person positioned adjacent to the car.
    - b. Single body mounted brake cylinders—The markings shall be located on both sides of the car body as near as practical to the brake cylinder so that it may be read by a person positioned adjacent to the car.
    - c. Articulated Cars—The markings shall be located on both sides of the car body as near as practical to the brake cylinder on each truck and oriented so that it may be read by a person positioned adjacent to the car.
    - d. Decals shall be in accordance with MSRP M-947, shall be a minimum 7" × 8", and shall contain all of the information for the brake type in accordance with the applicable figures in Rule 3 (Figures 1 through 12).

- Reference: C-13232, 11/12/18 and C-13266, 12/31/18



# Rule 80 Markings

- Added New Rule B.7:

7. Excess Height Markings for cars with structure at a height of 16 feet 10 inches or more above top of rail
  - a. Four excess height decals in accordance with MSRP S-910; each shall be located as near as practical to the bottom corners of the sides.
  - b. “EXCESS HEIGHT CAR” markings, one on each end of car, in 3 inch black characters; each shall be located 15 feet or more above top of rail, or as high as practical.

- Reference: C-13232, 11/12/18 and C-13266, 12/31/18



# Rule 80 Markings

- Removed Rule 80.E.1-11:
- Renumber E.12-13 to E.1-2, with revisions:

## E. General Information

1. Additional charge per Rule 75 may be made when fall protection equipment is used to accomplish repairs.
2. Other markings shall be applied only when authorized by the car owner or the car owner's designee.

- Reference: C-13232, 11/12/18 and C-13266, 12/31/18





# Rule 83 Preparation of Original Record of Repair and Billing Repair Data

## ■ Rule 83.15 Condition Codes:

- Added New Condition Codes F and G

F = Purchased core wheel set with reconditioned roller bearings and reconditioned/secondhand axle

G = Purchased core wheel set with new roller bearings and reconditioned/secondhand axle

- Reference: C-13234, 11/13/18 and C-13266, 12/31/18

## ■ Rule 83.17 Why Made Codes:

- Added New Why Made Code 1F

1F = Reflective sheeting does not meet the minimum reflectivity levels per Rule 66

- Reference: C-13236, 11/13/18 and C-13266, 12/31/18



# Rule 88 Mechanical Requirements for Acceptance

- Removed Rule 88.A.7.g:
  - g. Cars equipped with “approved for test” draft gears must be stenciled as required by the AAR Equipment Engineering Committee.
- Updated Rule 88.A.10:
  - 10. Reflective sheeting, ~~effective November 28, 2015,~~ must be in compliance with ~~AAR MSRP S-910~~ **Rule 66.**
- Reference: C-13232, 11/12/18 and C-13266, 12/31/18



# Rule 88 Mechanical Requirements for Acceptance

- Removed Rule 88.A.14 and renumbered A.15-17 to A.14-16
- Updated newly renumbered A.15.f (5), (8) and (9):
  - (5) Cars equipped with outside heaters having no internal connections and not equipped with caps must be **marked** “EXTERIOR HEATER PIPES—NO INLET OR OUTLET PIPE CAPS REQUIRED.”
  - (8) Tanks, pressure relief valves and other components of tank cars shall be qualified/retested and **marked** at the intervals specified in the AAR M-1002 Specifications for Tank Cars and applicable DOT Regulations.
  - (9) Must be equipped with AAR Specification M-948 approved long travel constant contact side bearings. ~~Note: All tank cars must be equipped by June 1, 2018.~~
- Reference: C-13232, 11/12/18 and C-13266, 12/31/18



# Rule 88 Mechanical Requirements for Acceptance

- Updated Rule 88.B.1.a, d and added new e:

- B. From Owner

This section specifies the minimum mechanical requirements for all cars released into interchange service or offered at interchange from owner, unless otherwise noted:

- 1. At Any Time

- a. Badge Plate

- (1) Cars must have a badge plate in accordance with MSRP S-374. Cars equipped with S-4022 piping shall be marked "CAR EQUIPPED WITH S-4022 PIPING" in 1 inch characters as near as practicle to the badge plate unless indicated on badge plate.

- Reference: C-13232, 11/12/18 and C-13266, 12/31/18



# Rule 88 Mechanical Requirements for Acceptance

## ■ Updated Rule 88.B.1.d:

### ■ d. Stencilling Marking – When car sides are repainted, markings must be applied in accordance with MSRP S-910.

- (1) Reporting marks and car numbers on one side of each truck bolster.
- (2) Cars that exceed the dimensions of Plate B must be marked per MSRP S-913.
- (3) Reporting marks and car number must be marked on inside of plug type side door.
- (4) When air brake test date in Umler is overdue at the time stenciled reporting marks are changed, a single car air brake test must be performed and the air brake test date updated in Umler.

## ■ Reference: C-13232, 11/12/18 and C-13266, 12/31/18



# Rule 88 Mechanical Requirements for Acceptance

- Added New Rule 88.B.1.e and renumbered accordingly:
  - e. Marking—Other than when car sides are repainted
    - (1) Cars equipped with exterior thermal coatings or interior protective coatings must be marked in accordance with MSRP S-910, Appendix B.
    - (2) Tanks equipped with exterior heater coils must be marked “EXTERIOR HEATER COIL EQUIPPED” in 1 inch characters per MSRP M-1002.
    - (3) Cars equipped with chain tie-downs must be marked in accordance with MSRP S-910, Appendix B.
  
- Reference: C-13232, 11/12/18 and C-13266, 12/31/18



# Rule 88 Mechanical Requirements for Acceptance

## ■ Revised Rule 88.B.5:

- 5. Any freight car requiring permanent general repairs in excess of the hour limitations of Rule 108 must have all truck mounted brake cylinders on the car cleaned and lubricated, ~~unless the cylinders were cleaned and lubricated within the last 5 years as indicated by stenciling on the side frame, or by proof or verification from the owner that the truck mounted brake cylinders have had such work accomplished within the past 5 years.~~

- Reference: C-13232, 11/12/18 and C-13266, 12/31/18



# Rule 88 Mechanical Requirements for Acceptance

## ■ Added New Rule 88.B.9.c and d:

- c. Multi-level racks receiving a certification inspection under the provisions of Rule 88 must be marked as shown below:
  - “Rack Certified” Month/Year
  - Company or Railroad—Location
  - Mark to be applied in 1 inch letters and located on the inside of the rack at the BL and AR corners, above lub stencil.
  
- d. Cars receiving a certification inspection under the provisions of Rule 88 must be marked as shown below:
  - “Car Certified” Month/Year
  - Company or Railroad—Location
  - Mark to be applied in 1 inch letters to the left of the car initial and number on both sides of the car.

## ■ Reference: C-13232, 11/12/18 and C-13266, 12/31/18





# Rule 88 Mechanical Requirements for Acceptance

- Added New Rule 88.B.10.e:
  - e. When tanks have been inspected in accordance with Rule 88.B.2, they must be marked in the qualification stencil per MSRP Section C-III, “Specifications for Tank Cars,” Appendix C.



- Reference: C-13232, 11/12/18 and C-13266, 12/31/18

# Rule 90 Cars and/or Car Parts Prohibited in Interchange

## ■ Updated Rule 90.A.3:

### ■ 3. Special Equipment

#### a. Tank Cars

(1) Having wood shims between the longitudinal anchorage and underframe.

(2) ~~Tank cars~~ **Equipped** with D-3 single coil side springs or 609-C friction castings.

(3) ~~Effective June 1, 2018, a~~ **All** tank cars not equipped with long travel constant contact side bearings.

## ■ Updated Rule 90.B.5:

- i. All flat cars designated FB, FBC, and FBS that are **not** equipped with **constant contact** ~~roller or block type side bearings.~~



# Rule 95 Handling and/or Delivering Line Responsibility

- Updated Rule 95.B.5.g:
  - (g) Two or more screen side panels missing.
  - (h) Screen Side panel cut through thickness of metal 3 inches or more in length or bent inward 3 inches or more.
  
- Updated Rule 95 Illustrations A, B and C captions:
  - Illustration A – ~~TANK SHEET ABRUPTLY BENT~~
  - Illustration B – ~~TANK SHEET CUT~~
  - Illustration C – ~~TANK SHEET GOUGED~~
  
- Reference: C-13244, 11/14/18



# Appendix A (Field and Office Manuals)

## ■ Updated: Betterments

Improvements to a freight car ~~of existing parts through the~~ substitution of superior for inferior **component(s)** parts **or modification(s) to a freight car that extend its life or increase its utility**, that **and** are capitalized in accordance with GAAP (Generally Accepted Accounting Principles **(GAAP)**). These betterments are recorded in the equipment owner's investment account on their balance sheet.

■ Reference: C-13230 11/12/18

## ■ Updated: **Car Repair Billing** Data Exchange System

The AAR's system of collecting, sorting, analyzing and distributing freight car repair information to participating railroads and car owners.



# Appendix A (Field and Office Manuals)

- **NEW: Wheel Set, Purchased Core:**

One that was obtained most recently from a retired car and meets the definition of a Turned Wheel Set, adding to the supply of wheel sets obtained through the conventional unit exchange process. Must be identified with a laminated bright yellow hanging tag on the axle body that is approximately 4" x 6" and labelled "Purchased Core". Purchased Core Wheel Sets cannot be split into multiple AAR Component ID's.

- Reference: C-13234, 11/13/18 and C-13266, 12/31/18



# Appendix I (Field and Office Manuals)

- Appendix I (ECP Brakes) content removed.

- Show as vacant:

Appendix I  
VACANT



# Office Manual of the Interchange Rules

**Note that most editorial changes are not included in this presentation.**



# Rule 80 Markings

- Updated Rule 80:

- Revised title:

- Rule 80 ~~Painting and Stenciling~~ **Markings**





# Rule 107 Handling of Damaged or Destroyed Equipment

- Added the following to the end of Rule 107.E.2.d:

The damaging carrier may request a breakdown from car owner verifying calculation, including any values for labor and materials for components removed. Refer to Umler Data Specification Manual

(<https://www.railinc.com/rportal/documents/18/260655/UmlerDataSpecs.pdf>) Appendix O, “Reporting Rail Car and Superstructure Cost.”

- Reference: C-13230, 11/12/2018



# Rule 112 Car Repair Billing

- Removed Rule 112.E.1.a:

a. The initial invoicing of car repairs must be billed within 12 months from date of repair. Example: For repairs made in July, the bill must be received by the billed party, as defined in Rule 112.H.2, no later than the August Data Exchange (the date in August that the detail source data supporting the invoice is available) of the following year.



# Rule 112 Car Repair Billing

## ■ Updated Rule 112.E.1.b:

~~b.~~ Effective January 1, 2019, the initial invoicing of car repairs for Detail Sources BR and GB must be billed within 6 months from the date of repair. Example: For repairs made in January, the bill must be received by the billed party, as defined in Rule 112.H.2, no later than the August Data Exchange (the date in August that the detail source data supporting the invoice is available). For detail sources other than BR and GB, the invoicing of car repairs must be billed within 12 months from the date of repair. Example: For repairs made in January, the bill must be received by the billed party, as defined in Rule 112.H.2, no later than the February Data Exchange (the date in February that the detail source data supporting the invoice is available) of the following year.



# Rule 112 Car Repair Billing

- Updated Rule 112.G.7:

7. Presentation of the invoice will be either paper mailed to the responsible party; or **emailed** as a PDF attachment **or mutually agreed upon suitable alternative** ~~to an email presented to the Billed Party. The presentation method will be at the discretion of the Billing Party. The invoice must be sent to the email or mail address as shown in FindUs.Rail (Rule 114).~~

- Reference C-13233, 11/12/2018 and C-13266, 12/31/18



# Appendix H Running Repair Agents

- Updated Associations in Appendix H

- Please Note:

The April 1, 2019 release of the Office Manual will be the last printed version of Running Repair Agents. Effective July 1, 2019, the list of Running Repair Agents will be removed and replaced with a statement indicating that the list of Running Repair Agents may be found at

<https://www.railinc.com/findusrail>.

- Reference C-13249, 11/26/18



# Appendix H Running Repair Agents



Home

Contacts ▼

Categories ▼

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Search MARKs

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Help ▼

## Welcome

FindUs.Rail is a web-based centralized database that allows users to review and manage their company's contact information. It h  
Contacts are organized under various categories, each managed by Company Administrators. Administrators can add, update, an

## Signatories to the AAR Interchange Rules

To search and verify a MARK/Company is a signatory to the AAR Interchange Rules, please click [here](#).

## Running Repair Agent

[Running Repair Agents - Active \(Office Manual Appendix H\)](#)

[Running Repair Agents - Active and Historical \(Office Manual Appendix H\)](#)



# Labor Rates/Cost Factors/Service Fees

The following rates/fees became effective on January 1, 2019:

- Hourly Labor Rate: \$140.83 ↑
- Cost Factor (Rule 107): 201 ↓
- EHMC/EHMS Fees:
  - Railroads \$2,146.13 per billion revenue ton miles ↓
  - Private Car Owners \$0.05 per car (static)
- Technical Services User Fee: \$2.20 per car ↓
- DDCT Car Owner Fee: \$0.92 per car (static)
- Car Repair Billing Fee: \$0.60 per car (static)
- Intermodal User Fee: \$0.50 per intermodal equipment semiannually (static)



# Field and Office Manuals

## Questions/Comments

