

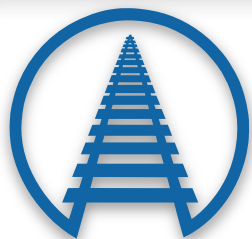


ASSOCIATION OF
AMERICAN RAILROADS





AAR Interchange Rules Revisions



Presented to NARMO 2014 by

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2014

FIELD MANUAL

OF THE

A A R

INTERCHANGE RULES



ASSOCIATION
OF AMERICAN
RAILROADS



Contents

Revised Rule 5 Job Code
Range increased top
value of Job Code 1632



Table of Contents		
<i>(Job Code Ranges follow the title of each rule)</i>		
		<u>Page #</u>
Rule A		5
Rule B		6
Rule 1	— Care of Freight Cars	7
AIR BRAKE EQUIPMENT		
Rule 2	— Vacant	12
Rule 3	— Testing of Air Brakes—(1139–1159)	13
Rule 4	— Air Brake Valves and Parts—(1116–1612)	35
Rule 5	— Air Brake Hoses, Hose Supports, and Train Lines—(1160–1632)	64
Rule 6	— Brake Beams—(1650–1698)	97
Rule 7	— Brake Beam Hangers, Brackets, Wear Plates and Brake Connection Pins, Hanger Pins or Bolts—(1742)	107
Rule 8	— Automatic Slack Adjuster—(1574–1601)	110
Rule 9	— Vacant	118
Rule 10	— Brake Beam and Bottom Rod Supports—(1768–1770)	119
Rule 11	— Brake Levers, Guides and Brake Connection Rods—(1153–1816)	123
Rule 12	— Brake Shoes and Shoe Keys—(1830–1852)	131
Rule 13	— Hand Brakes – Geared and Non-Geared—(1856–4482)	138
Rules 14 and 15	— Vacant	156
COUPLERS, YOKES, DRAFT GEARS, UNCOUPLING LEVERS AND SUPPORT BRACKETS		
Rule 16	— Couplers, Type E and Parts—(2004–4474)	157
Rule 17	— Couplers, Type E/F and Parts—(2051–4478)	185
Rule 18	— Couplers, Type F and Parts—(2075–4478)	200
Rule 19	— Yokes, Type E—(2312–4470)	224
Rule 20	— Yokes, Type E/F and F—(2354–4470)	229
Rule 21	— Draft Gears, Carriers and Followers—(2400–4470)	234
Rule 22	— Uncoupling Levers and Support Brackets—(2480–2486)	251
Rules 23 to 35	— Vacant	262
ROLLER BEARINGS AND ADAPTERS		
Rule 36	— Roller Bearings—(2814–2867)	263
Rule 37	— Roller Bearing Adapters—(2870–2891)	279
Rules 38 to 40	— Vacant	291
WHEELS AND AXLES		
Rule 41	— Wheels—(3001–3151)	292
Rule 42	— Vacant	352
Rule 43	— Axles—(3250–3280)	353
Rule 44	— Wheel Sets—(3328–3399)	357
Rule 45	— Vacant	366

Contents

Revised Rule B

12. Car Owner equals the car mark owner



RULE B

1. Except when otherwise specified, all Standards, Specifications and Publications referenced in these Rules will be the latest revision.
2. When specified in these Rules, new components must be manufactured in a facility that has a current AAR M-1003 Certification per AAR Specification for Quality Assurance, Section J.
3. When specified in these Rules, components must be reconditioned in a facility that has a current AAR M-1003 certification per AAR Specification for Quality Assurance, Section J.
4. When specified in these Rules, all car construction and repairs must be performed in a facility that has a current AAR M-1003 certification per AAR Specification for Quality Assurance, Section J.
5. Non-conformances detected on new or reconditioned M-1003 covered products and services must have a M-1003 Quality Assurance Material Non-conformance Report, Form QA-7.1, prepared and submitted to the Quality Assurance Committee Coordinator.
6. Any deviation from correct repairs identified in the Rules herein will be considered a wrong repair unless owner's permission is received.
7. Any repairs performed by a subscriber to the Interchange Agreement of the Association of American Railroads must be done in compliance with AAR Interchange Rules and applicable Governmental Regulations.
8. Unless otherwise specified, Rules referenced in this book identify Interchange Rules.
9. Material removed from cars and properly reconditioned or classified, in accordance with AAR Requirements, may be sold for further use on Interchange cars.
10. Obsolete material: When the handling line making repairs is responsible for said repairs, material charge (new, reconditioned or secondhand) less scrap credit for obsolete material removed is in order against the car owner when the correct components are applied.
11. For repairs not shown or described in these Rules, see Rule 72 for instructions.
12. Car owner equals the car mark owner.
13. When making repairs, the repairing party must determine if there are any AAR Maintenance Advisories, Early Warnings, DDCT incidents, or other EHMS actionable alerts on the equipment and handle them as provided for in the appropriate rules. Repairing party must report applicable activity code in Early Warnings, Maintenance Advisories, or EHMS at Railinc.
14. Unless otherwise specified in these Rules, labor and/or labor hours will be defined as billed hours.

RULE 1 – CARE OF FREIGHT CARS

Added Clarification for car being sent Home for repair.

- h. When creating waybill for any defective or damaged car for movement to shop under any interchange rule, waybill must include code “HR.”



RULE 1

3. Disposition

- a. All requests for disposition must be processed through DDCT (see Rule 115). Car owner must utilize DDCT and furnish disposition requested under this Rule within two full business days after the date of request. If disposition is not received within time limits, handling carrier may designate repair shop.
- b. Disposition request should indicate last commodity contained.
- c. Cars with defective center sills, side sills, crossbearers, or body bolsters must be repaired or handled under the provisions of Rules 107 and 108.
- d. Empty foreign freight cars having defects that could cause transfer of lading must be sent home with stencil or decal applied per Rule 80.
- e. Any leaky tank, regardless of commodity carried, shall have stenciled on each side adjacent to car number in 3 inch letters the words “LEAKY TANK. DO NOT LOAD UNTIL REPAIRED”. Also, the location of the leaky tank must be stenciled with the symbol “X”. Owner shall be immediately notified that the car is being held for disposition, such notification to indicate point where the car is held and location of leak. Owner must furnish disposition within 15 days. Stenciling must not be removed until the tank is repaired. In addition, car must be sent home with stencil or decal applied per Rule 80.
- f. Uninsulated tank car tanks (112A and 114A Class) having cuts or burns caused by contact with the car wheels, regardless of depth, must be sent home with stencil or decal applied per Rule 80.
- g. Empty pressure differential cars built to AAR Specification 207 W having exterior shell abruptly bent, cut or gouged similar to illustration “A” and “B” of Rule 95 must be sent home. Stencil or decal must be applied per Rule 80.
- h. When creating waybill for any defective or damaged car for movement to shop under any interchange rule, waybill must include code “HR.”
- i. Disposition must be obtained from the car owner for all cars sent to a shop under paragraph c., d., e., f., g., or l. of this section. All cars moved to a home shop, or to and from a shop located on the billing road or an intermediate road that is not further than the nearest home shop capable of making repairs, must be waybilled on a non-revenue waybill provided the handling railroads have the car service responsibility for the return of such cars to the owner. Authority for sending cars to shops and the major defects must be shown on the waybill. Waybill must show “moving per AAR Interchange Rule 1”. Private marked cars must be waybilled in accordance with applicable tariffs. It is the responsibility of the waybilling carrier to determine that cars are routed properly in accordance with applicable car service rules, directives, special car orders or tariffs. If a car cannot be properly routed in accordance with the above provisions, the owner is responsible for providing routing and arranging for transportation with the out-of-route carriers.
- j. Paragraphs a. and i. of this section is not intended to affect the rights or obligations that any carriers may have in accordance with national pools, bilateral agreements, or private marked cars moving under tariffs.

RULE 1 – CARE OF FREIGHT CARS

Revised 1.5.a. Gages

(use of gages must be demonstrated upon request by the MID)



RULE 1

- k. Handling line receiving disposition under paragraph i. must initiate movement of car toward home shop designated by the car owner within 5 business days from the date the disposition is received, except for those cars handled under Rule 107 and Rule 108. Car movement will be determined by TRAIN II records.
 - l. Any leaking hopper car or covered hopper, regardless of commodity carried, shall have stenciled on each side adjacent to car number in 3 inch letters the words "LEAKY HOPPER. DO NOT LOAD UNTIL REPAIRED." Also, the location of the leak must be stenciled with the symbol "X." Owner shall be immediately notified that the car is being held for disposition, such notification to indicate point where car is held and the location of the leak on the car. Owner must furnish disposition within 2 business days. Stenciling must not be removed until the leak is repaired. In addition, car must be sent home with stencil or decal applied per Rule 80.
- 4. Ownership Identification**
- a. In the application of all Rules contained in this Manual, cars shall be treated as belonging to companies or individuals whose reporting marks are stenciled on the car.
- 5. Gages and Publications Required for All Repair Tracks**
- a. Gages (use of gages must be demonstrated upon request by the MID)
 - (1) Single Car Air Brake Test device.
 - (2) Steel wheel gage or other AAR approved alternate standard.
 - (3) Standard wheel defect gage No. 34401 or 34401A.
 - (4) Simplified steel wheel gage.
 - (5) Wheel back-to-back service limit gage. (Go/No-Go or alternate type capable of measuring a 1/4 inch difference).
 - (6) Adapter wear gage.
 - (7) E coupler contour condemning limit gage (5 5/16 inch) No. 25623-1, Side A.
 - (8) E coupler secondhand and parts replacement contour limit gage (5 1/2 inch) No. 25623-1, Side B.
 - (9) E coupler reconditioned contour limit gage (5 inch) No. 28393.
 - (10) E knuckle nose worn limit gage No. 44057.
 - (11) F knuckle nose worn limit gage No. 49822.
 - (12) F knuckle wear and stretch gage No. 44250-3.
 - (13) F coupler contour limit gage No. 47120-2.
 - (14) F coupler Guard Arm Distortion Gage No. 36527-2A or No. 36527-3.
 - (15) Pedestal Ceiling Wear Gage No. EC-1200.
 - (16) Tread worn hollow gage.
 - (17) 70, 100, and 125 ton (Grade C) Ride Control, Super Service Ride Control, SK-1546-1, and SK-1546-2 gages.

RULE 1 – CARE OF FREIGHT CARS

Added AAR Form MD-500
to 1.5.b.10

located at

<http://www.aar.com> in the
Technical Standards
section.



RULE 1

- b. Publications [contact manufacturer directly for items b.(3) through b.(5) and b.(15) through b.(18) links to publications at <http://www.mid.aar.com/>]
- (1) Field Manual of the AAR Interchange Rules (current year and revisions).
 - (2) Code of Air Brake System Tests for Freight Equipment (AAR Standard S-488).
 - (3) Instruction Leaflet No. 2391, Sup. 1, Repair Track Maintenance, Freight Brake Equipments "AB" Type.
 - (4) Repair Track Maintenance, Freight Brake Equipment DB-60 and DB-60L Control Valves.
 - (5) Repair Track Maintenance, Freight Brake Equipment ABDX and ABDXL Control Valves.
 - (6) Brake Systems Safety Standards for Freight and Other Non-Passenger Trains and Equipment (FRA).
 - (7) Railroad Freight Car Safety Standards (FRA).
 - (8) Reflectorization of Rail Freight Rolling Stock (FRA)
 - (9) Safety Appliance Standards (FRA)
 - (10)
 - a. AAR Forms: MD-11, AAR Roller Bearing Hot Box and Shop Inspection Report, MD-12, AAR Failed Axle Report, MD-115, Defective Wheels Removed, Causing Derailments, or Line-of-Road Setouts Reports, MD-500, Truck Side Frame and Bolster Failure Report, all located at <http://www.aar.com> in the Technical Standards section.
 - b. M-1003, QA-7.1 Non-Conformance Report, or access to online reporting at <http://aar.iirx.net>.
 - (11) Lubrication Manual, Manual of Standards and Recommended Practices Section H-III.
 - (12) Circular letters that revise an Interchange Rule or the Manual of Standards and Recommended Practices (MSRP) and identified as mandatory must be maintained until next revision of the manual is published.
 - (13) Certified tank car facilities need additional publications as listed in Rule 81.E.
 - (14) Wheel and Axle Manual, MSRP, Section G-II (only if performing ultrasonic testing of wheels.)
 - (15) Miner Field Guide
 - (16) Stucki's "Pocket Guide"
 - (17) Amsted Rail's "Shop and Field Inspection Pocket Guide"
 - (18) Standard Car Truck's "Installation and Maintenance Procedure," SK-2724A
 - (19) American Welding Society: AWS D15.1 Railroad Welding Specification for Cars and Locomotives should be available on January 1, 2014

RULE 1 – CARE OF FREIGHT CARS

Revised 1.5.b.15 Miner Field Guide



RULE 1

- b. Publications [contact manufacturer directly for items b.(3) through b.(5) and b.(15) through b.(18) links to publications at <http://www.mfd.aar.com/>]
 - (1) Field Manual of the AAR Interchange Rules (current year and revisions).
 - (2) Code of Air Brake System Tests for Freight Equipment (AAR Standard S-486).
 - (3) Instruction Leaflet No. 2391, Sup. 1, Repair Track Maintenance, Freight Brake Equipments "AB" Type.
 - (4) Repair Track Maintenance, Freight Brake Equipment DB-60 and DB-60L Control Valves.
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- (14) Wheel and Axle Manual, MSRP, Section G-II (only if performing ultrasonic testing of wheels.)
- (15) **Miner Field Guide**
- (16) Stucki's "Pocket Guide"
- (17) Amsted Rail's "Shop and Field Inspection Pocket Guide"
- (18) Standard Car Truck's "Installation and Maintenance Procedure," SK-2724A
- (19) American Welding Society: AWS D15.1 Railroad Welding Specification for Cars and Locomotives should be available on January 1, 2014

RULE 1 – CARE OF FREIGHT CARS

Editorially changed B.19
American Welding Society
AWS D15.1 Railroad
specification for cars and
locomotives **should be**
available on January 1,
2014



RULE 1

- b. Publications [contact manufacturer directly for items b.(3) through b.(5) and b.(15) through b.(18) links to publications at <http://www.mid.aar.com/>]
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 - (4) Repair Track Maintenance, Freight Brake Equipment DB-60 and DB-60L Control Valves.
 - (5) Repair Track Maintenance, Freight Brake Equipment ABDX and ABDXL Control Valves.
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 - (7) Railroad Freight Car Safety Standards (FRA).
 - (8) ReflectORIZATION of Rail Freight Rolling Stock (FRA)
 - (9) Safety Appliance Standards (FRA)
 - (10)
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 - (19) American Welding Society: AWS D15.1 Railroad Welding Specification for Cars and Locomotives should be available on January 1, 2014

RULE 1 – CARE OF FREIGHT CARS

Deleted 1.b.20

(20) MSRP Section S, Specifications M-201, M-210, and M-214 (only if welding on steel castings)



RULE 1

- b. Publications [contact manufacturer directly for items b.(3) through b.(5) and b.(15) through b.(18) links to publications at <http://www.mid.aar.com/>]
 - (1) Field Manual of the AAR Interchange Rules (current year and revisions).
 - (2) Code of Air Brake System Tests for Freight Equipment (AAR Standard S-486).
 - (3) Instruction Leaflet No. 2391, Sup. 1, Repair Track Maintenance, Freight Brake Equipments "AB" Type.
 - (4) Repair Track Maintenance, Freight Brake Equipment DB-60 and DB-60L Control Valves.
 - (5) Repair Track Maintenance, Freight Brake Equipment ABDX and ABDXL Control Valves.
 - (6) Brake Systems Safety Standards for Freight and Other Non-Passenger Trains and Equipment (FRA).
 - (7) Railroad Freight Car Safety Standards (FRA).
 - (8) Reflectorization of Rail Freight Rolling Stock (FRA)
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 - (10)
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 - b. M-1003, QA-7.1 Non-Conformance Report, or access to online reporting at <http://aar.iirx.net>.
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 - (20) MSRP Section S, Specifications M-201, M-210, and M-214 (only if welding on steel castings)

RULE 1 – CARE OF FREIGHT CARS

Clarified 1.6.b. by deleted reference to FDA Standards

b. Once a covered hopper car is graded N, Equipment Shipping STCC Code—Animal Ruminants, it will remain in such status until cleaned per FDA standards.



RULE 1						
6. Car Classification						
a. Cars graded must be reported to TRAIN II®/Umler as required in Rule 93.						
(1) Classify cars to highest possible grade.						
(2) Cars are in general good condition for service and in compliance with applicable rules, laws and regulations, and general conditions as shown in the following grade charts.						
b. Once a covered hopper car is graded N, Equipment Shipping STCC Code—Animal Ruminants, it will remain in such status.						
c. All empty Box Cars (XL, XLI, XM, XP, XPI, RB, RC, RBL, RP, RPL) and Gondola Cars (GB, GBS) must be inspected and graded when on shop, repair, upgrade, or clean out tracks as outlined in this rule.						
Car Type—Box						
	Grade					
	A	B	L	C	K	U
Roof	Watertight	Watertight	Meets A or B Standard Except Roof Not Watertight	Not Watertight		Car is unfit for loading. Secure disposition per Section 3
Floor	Smooth No Splinters No Leaks, Odor, Oil Spots, Contamination	Won't Leak Lading No Protruding Patches No Leaks, Odor or Contamination	Meets A or B Standard	Will Hold Rough Freight	Car Contaminated as Listed in AAR Interchange Rule 97	
Lining	Intact Smooth No Splinters Watertight	Intact Watertight	Meets A or B Standard Except Lining Not Watertight	Poor		
Doors	Watertight Fixtures (Including Locks, Hasps) in Good Condition	Watertight Fixtures (Including Locks, Hasps) in Good Condition	Meets A or B Standard Except Doors Not Watertight	Fixtures (Including Locks, Hasps) in Good Condition		
— 11 —						

RULE 1 – CARE OF FREIGHT CARS

Deleted Car Type LO – FDA Standard

Car Type—Cleaned Covered Hopper (LO)—FDA Standard

Grade	
	P
Interior	Car cleaned to FDA standard



RULE 1

Car Type—Gondola

Grade					
A	B	C	D	K	U
.No holes in floors	.Holes in floor 1"–6", over less than 10% of area not located over trucks	.Holes in floor 6"–12", over less than 10% of area not located over trucks	.Holes over 12" over more than 10% of floor area, but less than 30%	.Car Contaminated	.Car is unfit for loading. Secure disposition per Section 3
.No holes in sides	.Holes in sides 1"–6" over less than 10% of area	.Holes in sides 1"–6" over less than 10% of area	.Holes in side larger than 6"		
.Gates not missing	.Gates not missing	.Gates not missing	.Gates may be missing		

Car Type—Dirty Box or Gondola

Grade			
	X	Y	Z
Interior	.Meets class A criteria above but contains refuse	.Meets class B criteria above but contains refuse	.Meets class C criteria above but contains refuse

RULE 2 – VACANT

— 12 —

RULE 3 – TESTING OF AIR BRAKES

Added new B.8.c.

When setting piston travel on cars equipped with empty/load devices, condition the empty/load equipment for a loaded brake setting. For detailed instructions for setting equipment to loaded position, refer to MSRP section E, S-486



RULE 3

- c. For cars with relay valves and multiple reservoirs, one brake cylinder pressure tap shall be applied in accordance with 3.B.7.a. or 3.B.7.b. and additional tap(s) shall be located between the relay valve(s) and the brake cylinder(s) being controlled by the relay valve. If the relay valve controls only one cylinder, a tap mounted in a blanking plate on the cylinder may be used.
- 8. A car on a shop or repair track shall be tested to determine that the air brakes apply and remain applied until a release is initiated, and the piston travel shall be inspected.
 - a. The following steps are required:
 - 1. Charge the car to 90 psi
 - 2. Make a 30 psi brake pipe reduction
 - 3. Reduction must not produce an emergency application
 - 4. Confirm brake shoes are against all wheels
 - 5. Inspect for nominal piston travel
 - 6. Recharge brake pipe to 90 psi
 - 7. Brakes must release
 - b. Piston travel outside of the nominal limits prescribed in Section A.4 of this rule shall be adjusted according to the appropriate standard, S-4009, "Compression Slack Adjusters—Inspection, Testing, Removal, and Application," or S-4010, "Tension Slack Adjusters—Inspection, Testing, Removal, and Application." Adjustment of piston travel is a non-billable item, except for Job Codes 1150 through 1152.
 - c. When setting piston travel on cars equipped with empty/load devices, condition the empty/load equipment for a loaded brake setting. For detailed instructions for setting equipment to loaded position, refer to MSRP Section E, S-486.
- 9. Except for cars equipped with 10 inch and 8 1/2 inch body mounted brake cylinders, all cars shall have legible decals, or stickers affixed to the car or shall be equipped with a badge plate displaying the permissible brake cylinder piston travel range for the car when performing the initial terminal (Class I) brake test and inspection and the length at which the piston travel renders the brake ineffective, if different from the initial terminal brake test and inspection limits.
 - a. Decals or stickers must meet the requirements of AAR Specification M-947-92 and must be a minimum size of 7 inch by 8 inch. Decals or stickers must contain all of the information for the particular brake type; the nominal piston travel or brake indication for initial terminal inspection, the ineffective piston travel dimension or indication and the initial setup information. Reference the figures shown in this rule. See Rule 80 for application and billing.
- 10. During accelerated application, valve operation of the NYAB DB-20 emergency portion, air may be observed escaping from the interface of the side cover and body. This is air which is being released to exhaust by the operation of the accelerated application valve and does not constitute a condemnable leak (see Rule 4, Figures 9 and 10).

RULE 3 – TESTING OF AIR BRAKES

Editorially revised D.1.
Welding Requirements
Not permitted unless
otherwise specified.



RULE 3

11. Slack adjusters repaired or renewed on other than repair track may be tested without the use of a single car test device. 20 psi reductions must be made from a brake pipe pressure of at least 80 psi. All other steps in AAR Standard S-486 paragraph 4.1 must be followed.
12. When performing a Single Car Air Brake Test, reflective sheeting must be inspected per Rule 66—Reflective Sheeting.
13. When performing a single car air brake test in shop or on repair track, for cars equipped with F-Type trainline brackets (see Rule 17.A.2.a., Figure B, or Rule 18.A.2.a., Figure H), using a 7/8-inch, pin retainer bolt shall have the bolt replaced with a pin assembly according to 17.A.2.a. or 18.A.2.a.
14. During release valve operation, an intermittent escape of air may be noted around the bottom cover of the release valve. During the initial stages of a brake application, an intermittent escape of air may be noted around the bottom cover of the service portion. This is air that is being released to exhaust by operation of the valve portion and does not constitute a condemnable leak. (See Rule 4, Figures 9 and 10.)
15. When performing a Single Car Air Brake Test, angularity of body and truck levers must be inspected per *MSRP S-486*, paragraph 3.8. Prior to angularity inspection, all condemnable brake pins, levers, and shoes must be replaced per Rules 11 and 12 before air is applied. If, after replacement of condemnable components, the levers are binding or fouling, brake rigging must be adjusted.

C. Recondition Requirements

1. Not applicable.

D. Welding Requirements

1. Not permitted unless otherwise specified.

E. General Information

1. All job codes per Section F are owners responsibility, at all times.
2. When on a shop or repair track; beams, brake hangers, hanger pins and brackets, bottom rod and brake beam safety supports should be inspected and renewed or repaired if necessary.
3. Charges for truck mounted piston travel adjustments are not permitted in conjunction with wheel, single car air brake test, brake beam, slack adjuster, slack adjuster actuator/control rod, or brake cylinder renewal and/or brake cylinder cleaning on same truck.
4. a. Charges are permissible when truck mounted brakes with slack adjusters shown in Figures 4, 5, 6, 7, 8, 9, 11, and 12 are adjusted.
b. The following truck mounted piston assemblies do not require adjustment: Nycopac IIA and TMB 60.
c. UNIFRATE (Figure 11) and ABSCO (Figure 12) are no longer in production; use Job Code 4450, Rule 75, if adjustments are made.

RULE 3 – TESTING OF AIR BRAKES

Revised E.14.

Additional Charge per rule 75 may be made if jacking car is necessary to safely accomplish repairs. The jacking procedure utilized to perform repairs safely will be determined by the repairing facility and/or repair force. Exception to choice of jacking procedure will not be allowed.



RULE 3

13. If car is listed in Maintenance Advisory MA-63 or Early Warning EW-5171, "Cars Overdue for Periodic Air Brake Testing", and Single Car Test is performed, Job Code 1139, Job Code 1140, or Job Code 1142 should be reported and car must be removed from Maintenance Advisory MA-63 or Early Warning EW-5171.

14. Additional charge per Rule 75 may be made if jacking of car is necessary to safely accomplish repairs. The jacking procedure utilized to perform repairs safely will be determined by the repairing facility and/or repair force. Exception to choice of jacking procedure will not be allowed.

15. Any additional labor required to effect repairs and/or necessary attention to articulated equipment should be billed per Job Code 4460, Rule 75.

16. Any additional labor required to effect repairs and/or necessary attention to interconnected tank equipment should be billed per Job Code 4760, Rule 81.

17. Any additional labor required to effect repairs and/or necessary attention to draw bar connected equipment should be billed per Job Code 4462, Rule 75.

F. Billing Repair Data Requirements

1. Location

- Show location for Job Codes 1150, 1151, 1152, and 1155 per truck.
- Show location on articulated cars and drawbar-connected cars as stenciled on reservoir for Job Codes 1139, 1140, 1142, 1144, 1145, 1146, 1147, 1155, 1157 and 1159.

2. Quantity

- Show quantity.

3. Condition Code

- 0 = Labor Attention
7 = Service Attention

4. Job Code Applied

- Show applicable code
- Show qualifier per Section E. for Job Codes preceded by **

5. Description

- Show applicable description

6. Why Made Code (Use only Why Made Codes shown for specific Job Codes)

- 09 = Account Repairs
12 = Inoperative
13 = Attention Required as Directed by Early Warning EW-5171
20 = Air Brakes Cut Out
21 = Overdate/Overage
24 = Attention Required
25 = Owner's Request
28 = Adjustment Required

RULE 4 – AIR BRAKE VALVES AND PARTS

Added New A.2.and A.2.a.

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

- a. Piston travel indicator broken, missing, or bent beyond repair or misapplied

RULE 4 – AIR BRAKE VALVES AND PARTS

A. Wear Limits, Gaging, Cause For Renewal or Attention

1. Condemnable at Any Time
 - a. Bent, broken, worn, missing or inoperative parts
 - b. Obsolete material
 - c. Submerged (valvular components only)
 - d. Fire or heat damage
 - e. Brake cylinder pressure tap
 - (1) When a single car air brake test is required, apply approved brake cylinder pressure tap, if not so equipped.
 - (2) When a single car air brake test is performed, improperly located or applied.
 - f. Wrong (not standard to car)
 - g. Cut-out cock handle extension on single-sided pipe brackets
 - (1) When a single car air brake test is performed, the handle is to be painted orange, if not already orange.
2. Condemnable When Car Is on Shop or Repair Track for Any Reason
 - a. Piston travel indicator broken, missing, or bent beyond repair or misapplied



RULE 4 – AIR BRAKE VALVES AND PARTS

Added New B.12

12. Piston travel indicator, replace in kind as indicated on the sticker, decal, or badge plate.



RULE 4		
4. All new air brake valves and rubber parts (including gaskets, packing cups, diaphragms and repair kits) must be manufactured in facilities that have received an AAR Quality Assurance Certification as required in AAR Specification M-1003.		
Correct Repair Chart for Pressure Retaining Valves		
Removed	What Can Be Applied	Remarks
1967 Three Position	1967 Three Position	None.
Four Position Release Control	1967 Three Position	Use applicable Job Code when bracket is renewed.
Obsolete	1967 Three Position	Exchange bracket or strainer when necessary. Use applicable Job Code when bracket is renewed.
5. Pressure retaining valves not listed are considered obsolete.		
Correct Repair Chart for Vent Valves		
Removed	What Can Be Applied	Remarks
No. 8 Vent Valve	No. 8 Vent Valve KM2 Valve VX Valve	None.
KM2 Valve	KM2 Valve VX Valve	None.
VX Valve	VX Valve KM2 Valve	None.
6. Combined dirt collector and cut-out cock or branch pipe cut-out cock must be of approved ball type construction.		
7. Brake cylinder pressure modulating valves must be replaced in kind.		
8. On any freight car requiring attention (cleaning and/or repairs) to a truck mounted brake cylinder, all other brake cylinders on the same truck must also receive cleaning and testing, and repairs as necessary. Cars are to be stenciled per Rule 80.		
9. Anytime a brake beam with integral brake cylinder is removed for cause, all brake cylinders on that truck must be cleaned. This does not apply to TMX/UBX brake beams which utilize a separable brake cylinder.		
10. Brake cylinders must be cleaned per original equipment manufacturer's specifications. This does not apply to TMX/UBX brake beams which utilize a separate brake cylinder.		
11. Automatic single car test device 4-port access plate and receiver must be replaced in kind.		
12. Piston travel indicator, replace in kind as indicated on the sticker, decal, or badge plate.		
— 37 —		
C-11926		

RULE 4 – AIR BRAKE VALVES AND PARTS

Revised E.20.

20. Additional charge per Rule 75 may be made if jacking of car is necessary to safely accomplish repairs.

The jacking procedure utilized to perform repairs safely will be determined by the repairing facility and/or repair force. Exception to choice of jacking procedure will not be allowed.



RULE 4

14. Submerged valvular components must be replaced. Submerged brake cylinders must be cleaned and other submerged air brake components must be handled in accordance with Instruction Leaflet No. 2391, Sup. 1, Repair Track Maintenance—Freight Brake Equipments "AB" Type. Report Job Code 1116 for cleaning.
15. Figures 13 and 14 show two examples of service and emergency portion body castings with secondary valves and covers.
16. Report Why Made Code 27 for initial application of tap fitting to Job Codes 1498, 1500, 1502, 1504, 1505, and 1506.
17. When Job Codes 1316 or 1320 are reported and the service or emergency portions are found with Section A defects, portion(s) renewed may be charged separately.
18. When pipe bracket studs are replaced, use Job Code 4410 or Job Code 4412, Rule 74, with qualifier CT.
19. All rubber parts, including pipe bracket gaskets, packing cups, and control valve pipe bracket strainers, must be replaced with new when exposed.
 - a. Rubber parts used to create an air pressure seal shall not be applied if over 5 years old.
20. Additional charge per Rule 75 may be made if jacking of car is necessary to safely accomplish repairs. The jacking procedure utilized to perform repairs safely will be determined by the repairing facility and/or repair force. Exception to choice of jacking procedure will not be allowed.
21. Any additional labor required to effect repairs and/or necessary attention to articulated equipment should be billed per Job Code 4460, Rule 75.
22. Any additional labor to effect repair and/or necessary attention to interconnected tank equipment should be billed per Job Code 4780, Rule 81.
23. Any additional labor required to effect repairs and/or necessary attention to draw bar connected equipment should be billed per Job Code 4462, Rule 75.

RULE 4 – AIR BRAKE VALVES AND PARTS

Editorially Revised Classification Chart for Empty Load Devices Group #2

Added E/N 32905-L/50



RULE 4

24. Shown below is a classification chart for empty/load devices and Figure 15 which provides an identification chart.

Classification Chart for Empty Load Devices

Group #	Device Types	Comments
1	E/N 6600-1(60, 50), 6600-2, 6600-3, 6600-1U, NYAB SC-1, SC-1u (60, 50) Wabtec SC-1, SC-1U E/N 6000-6 Sloan 7100, 7200, 7260 (discontinued)	Separate sensor valves, proportional valves, and sometimes separate reservoirs. Bill using separate job codes for each component.
2	E/N 32905-L, E/N 32905-L/50 , ENX-50*, ENX-60*, ENX-40 NYAB EL-60, EL60i, (60, 50, 40) Wabtec ELX-B (60, 50) ELX-U (60, 50)	One-piece unitized valve including sensor arm and sometimes the reservoir.
3	E/N 6200X-40B, 6200X-30B, 6200-5B, 6200-50/50B Wabtec ELX-S (60, 50, 35, 30 percent) NYAB EL-60SS (40, 50 percent)	Unitized valve for slope-sheet mounting, includes valve, sensor, and reservoir in one unit.
	E/N 6200, 6200-1, 6200-2, 6200-3, 6200-4, 6200-5/30-B, 6200-109, 6200-118, 6200-134, 6200-141, 6200-143	Unitized valve for slope-sheet mounting, includes valve, sensor, and reservoir in one unit. Manufacture discontinued

*Conditionally approved

NOTE: Empty/load valves within groups are not necessarily interchangeable.

25. F-type trainline brackets with 7/8 inch pin retainer bolt (see Rule 17.A.2.a., Figure B, or Rule 18.A.2.a., Figure H), that are removed for repair or renewal shall be applied with a pin assembly in accordance with 17.A.2.a. or 18.A.2.a.
26. Initial application of the automatic single car test device access plate and receiver is to be made by car mark owner or on authority of the car mark owner.

RULE 4 – AIR BRAKE VALVES AND PARTS

Deleted E.26 from Rule 4
and relocated to Rule 5

RULE 4		
24. Shown below is a classification chart for empty/load devices and Figure 15 which provides an identification chart.		
Classification Chart for Empty Load Devices		
Group #	Device Types	Comments
1	E/N 6600-1(60, 50), 6600-2, 6600-3, 6600-1U, NYAB SC-1, SC-1u (60, 50) Wabtec SC-1, SC-1U	Separate sensor valves, proportional valves, and sometimes separate reservoirs. Bill using separate job codes for each component.
	E/N 6000-6 Sloan 7100, 7200, 7260 (discontinued)	
2	E/N 32905L, ENX-50*, ENX-60*, ENX-40* NYAB EL-60, EL60i, (60, 50, 40) Wabtec ELX-B (60, 50) ELX-U (60, 50)	One-piece unitized valve including sensor arm and sometimes the reservoir.
3	E/N 6200X-40B, 6200X-30B, 6200-5B, 6200-50/50B Wabtec ELX-S (60, 50, 35, 30 percent) NYAB EL-60SS (40, 50 percent)	Unitized valve for slope-sheet mounting, includes valve, sensor, and reservoir in one unit.
	E/N 6200, 6200-1, 6200-2, 6200-3, 6200-4, 6200-5/30-B, 6200-109, 6200-118, 6200-134, 6200-141, 6200-143	Unitized valve for slope-sheet mounting, includes valve, sensor, and reservoir in one unit. Manufacture discontinued

*Conditionally approved
NOTE: Empty/load valves within groups are not necessarily interchangeable.

25. F-type trainline brackets with 7/8 inch pin retainer bolt (see Rule 17.A.2.a., Figure B, or Rule 18.A.2.a., Figure H), that are removed for repair or renewal shall be applied with a pin assembly in accordance with 17.A.2.a. or 18.A.2.a.

26. Repair welding is not permitted on E shank trainline support brackets at the locations shown in Figures 16 and 17. Recommended course of action is to 1) repair with S-4030 trolley; or 2) repair with coupler-mounted bracket.

27. Initial application of the automatic single car test device access plate and receiver is to be made by car mark owner or on authority of the car mark owner.



RULE 4 – AIR BRAKE VALVES AND PARTS

Editorially deleted F.1.b
and F.1.c

re-lettered



RULE 4	
F. Billing Repair Data Requirements	
1. Location	
a.	Show location for repairs to truck-mounted brake cylinders and related components.
b.	For cars equipped with multiple empty/load valves or slack adjusters, show location per Rule 83.
2. Quantity	
a.	Show Quantity
3. Condition Code	
1 =	New
2 =	Secondhand
3 =	Reconditioned
7 =	Service attention
9 =	Remove and replace same part
4. Job Code Applied	
a.	Show applicable code
b.	Show qualifier per Section B for slack adjusters preceded by *
c.	Show car part code per Rule 83 as qualifier for pipe, pipe bending, pipe straightening off car, and pipe fittings preceded by **
5. Description	
a.	Show applicable description
6. Why Made Code (use only Why Made Codes shown for specific Job Codes)	
01 =	Worn out
02 =	Broken
03 =	Missing
04 =	Defective
05 =	Bent
06 =	Bent beyond repair
07 =	Obsolete material
08 =	Wrong (not standard to car)
09 =	Account repairs
10 =	Damaged in removal
11 =	Removed in good condition, account of associated repair.
12 =	Inoperative
15 =	Leaking
20 =	Air brakes cut out
21 =	Overdate
24 =	Attention required
25 =	Owner's request
27 =	Initial application
31 =	Fire or heat damage per Rule 95
32 =	Submerged per Rule 95
— 53 —	
C-12044	

RULE 4 – AIR BRAKE VALVES AND PARTS

Rule 4 Fig. 16 and 17 were moved to Rule 5 and re-numbered accordingly.

FIGURE 16



FIGURE 17



RULE 4 – AIR BRAKE VALVES AND PARTS

Editorially added

Why Made Code 07

(Obsolete) to

Job Codes 1296 and 1304

- 1296 AB EMERGENCY PORTION
For removal only.
(Why Made Codes 02, 03, 07, 09, 12, 15, 25, 31, 32, 35)
- 1304 AB SERVICE PORTION
For removal only.
(Why Made Codes 02, 03, 07, 09, 12, 15, 25, 31, 32, 35)



RULE 4 – AIR BRAKE VALVES AND PARTS

Deleted Job Codes:

1308 ABC SERVICE PORTION

1418 J-1 CHANGE OVER PORTION

1422 RELAY VALVE PORTION CLEANED



RULE 4 – AIR BRAKE VALVES AND PARTS

Added new Job Code 1460

1460 PISTON TRAVEL INDICATOR

Any kind, complete

(Condition Code 1)

(Why Made codes 02, 03, 06, 25, 31, 42)



RULE 4	
Job Code	Description
1440	AB CYLINDER NON-PRESSURE HEAD Material only. To obtain labor charge AB cylinder must be cleaned and charged for per Job Code 1456. (Condition Codes 1, 2) (Why Made Codes 02, 03, 06, 25, 31, 45)
1444	AB CYLINDER PISTON AND HOLLOW ROD Material only. To obtain labor charge AB cylinder must be cleaned and charged for per Job Code 1456. (Condition Codes 1, 2) (Why Made Codes 01, 02, 03, 06, 25, 31, 32, 35, 45)
1448	AB CYLINDER RELEASE SPRING Material only. Includes non-pressure head gasket and all securements. To obtain labor charge AB cylinder must be cleaned and charged for per Job Code 1456. (Condition Codes 1, 2) (Why Made Codes 01, 02, 03, 25, 31, 45)
1452	AB CYLINDER PUSH ROD (Condition Codes 1, 2) (Why Made Codes 01, 02, 03, 06, 25, 31, 45)
1454	AB CYLINDER NON-PRESSURE HEAD SPRING GUIDE Material only. Spring guide (10 x 12 brake cylinders only). To obtain labor charge AB cylinder must be cleaned and charged for per Job Code 1456. (Condition Codes 1) (Why Made Codes 01, 02, 03, 06, 25, 31, 45)
1456	AB CYLINDER CLEANED, SEPARATELY Includes packing cup. One charge per cylinder. (Condition Code 7) (Why Made Codes 09, 12, 32, 35)
1460	PISTON TRAVEL INDICATOR Any kind, complete (Condition Code 1) (Why Made Codes 02, 03, 06, 25, 31, 42)
1476	TRUCK BRAKE CYLINDER BODY Any size. Applicable when body only is broken or otherwise non-repairable. Do not charge Job Code 1488 with this Job Code. (Condition Codes 1, 2, 3) (Why Made Codes 02, 04, 45)

RULE 5 – AIR BRAKE HOSES, HOSE SUPPORTS, AND TRAIN LINES

Revised B.1

New AAR Approved air brake hose must be used. The age of hose is determined by a date stamp on the hose. Except for system cars, M-601 end air hose shall not be applied if over 3 years old, and M-618 intermediate hose shall not be applied if over 5 years old.



RULE 5
FIGURE 9

e. If trolley arrangement does not meet criteria as outlined above, adjust equipment to meet the above parameters. Contact car owner with questions.

f. Pipe fitting—wrong (not standard to car). See Section E.

B. Correct Repairs

1. New AAR Approved air brake hose must be used. The age of hose is determined by a date stamp on the hose. Except for system cars, M-601 end air hose shall not be applied if over 3 years old, and M-618 intermediate hose shall not be applied if over 5 years old.
2. Replacement flexible brake pipe or branch pipe hose, except standard end hose, must be in accordance with AAR Specification M-818.
3. Standard end air hoses applied must have the standard wide-lip coupling design per AAR Standard S-491.
4. All air brake hoses must be manufactured or assembled in facilities that have received an AAR Quality Assurance Certification in accordance with AAR Specification M-1003.
5. All brake system hoses (except end air brake hose assemblies and hoses of less than 5/8 inch inside diameter) removed for cause must be replaced with hoses meeting M-818 and M-927 requirements, or approved alternate.
6. Hoses of less than 5/8 inch inside diameter must be replaced with hoses of wire reinforced construction.

C-11950

RULE 5 – AIR BRAKE HOSES, HOSE SUPPORTS, AND TRAIN LINES

Editorially Revised D.1

Welding not permitted unless otherwise specified.



RULE 5

14. Extra heavy pipe and fittings must be used. Nipple at angle cock may be extra heavy or standard weight. Extra heavy pipe fittings (other than nipples) must have some marking to indicate extra heavy.
15. Flange type fittings $\frac{3}{4}$ inch or less must be of a type meeting AAR requirements not requiring threading of pipe.
16. Welded type fittings must be replaced with welded type or other AAR approved or conditionally approved fittings.
17. Pipe fittings used in repair of air brake system must be threaded or welded type or other AAR approved or conditionally approved fittings. Compression fittings, other than Lokring fittings, are not approved for use other than on threaded angle cocks.
18. All brake cylinder hoses removed for cause must be replaced with hoses meeting M-618 and M-927 requirements or approved alternate.
19. Contact car owners for repair procedures to non-metallic air brake piping and bill per Rule 72.
20. When straightening brake pipe, the proper repair procedure is to remove brake pipe from car, heat and straighten, hammer the brake pipe to knock any scale loose, blow out brake pipe, then install back on car.
21. If the pipe off car is bent cold in a pipe bender, the pipe must be blown out to remove any loose scale.

C. Recondition Requirements

1. Not applicable for hose portion.
2. Hose assemblies reconditioned must be equipped with wide lip couplings and nipples in accordance with AAR Standard S-491, and must be assembled by ferrule clamping.

D. Welding Requirements

1. Welding not permitted unless otherwise specified.

E. General Information

1. Flexible referred to in these rules includes reinforced rubber covered hose anywhere in the brake system.
2. Change-out of overdate (8 years old or date obliterated) end air hose is permissible and billable at locations other than shop or repair track.
3. Pipe fitting wrong (not standard to car) repairs are permissible and billable at locations other than shop or repair track.
4. Pipe clamps of the "U" bolt type made of round steel must only be used on pressure retainer valve pipe or to secure angle cock.
5. Pipe clamps of the "U" bolt type, used to secure air brake pipe to car body must have flattened contact surface not less than the diameter of the bolt.
6. Split type pipe clamp and/or support bolts need not be secured with nut locks or lock nuts, provided legs of the split are properly spread.
7. Pipe 15 inches or less in length shall be classed as a nipple.

RULE 5 – AIR BRAKE HOSES, HOSE SUPPORTS, AND TRAIN LINES

Revised E.16.

The jacking procedure utilized to perform repairs safely will be determined by the repairing facility and/or repair force. Exception to choice of jacking procedure will not be allowed.



RULE 5

16. Additional charge per Rule 75 may be made if jacking of car is necessary to safely accomplish repairs. The jacking procedure utilized to perform repairs safely will be determined by the repairing facility and/or repair force. Exception to choice of jacking procedure will not be allowed.
17. Additional charge may be made for accessories or fixtures such as pipe clamps or pipe hangers, which require R&R or R in order to make repairs.

RULE 5 – AIR BRAKE HOSES, HOSE SUPPORTS, AND TRAIN LINES

Added Paragraph 26 from Rule 4, revised and re-numbered to 15.

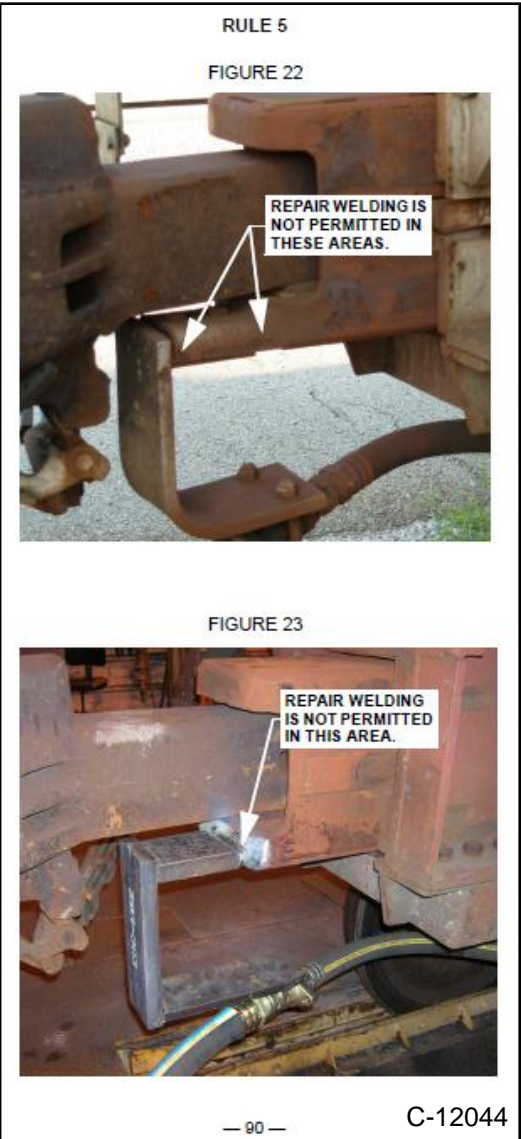


RULE 5

8. Self-locking nuts must not be used on any studs securing air brake portions to pipe brackets or to studs used to secure parts to portion.
9. Self-locking cap screws which conform to SAE J429 must be used for securing fittings on reservoir, pipe bracket and brake cylinder.
10. Where cap screws are used as bolts, they must be non-self-locking type with self-locking nuts.
11. Self-locking nuts conforming to SAE J429 must be used on the following:
 - a. Bolts securing brake valve pipe bracket to car body bracket ($\frac{5}{8}$ inch diameter).
 - b. Bolts securing combined reservoir to car body bracket (1 inch diameter).
 - c. Bolts securing brake cylinder to car body bracket ($\frac{5}{8}$ inch diameter).
 - d. Bolts securing retaining valve bracket to car body ($\frac{3}{8}$ inch diameter).
 - e. Bolts securing branch pipe tee to car body bracket ($\frac{5}{8}$ inch diameter).
 - f. Angle cock "U" bolts ($\frac{5}{8}$ inch diameter).
 - g. Bolts securing angle cock brackets to coupler body.
12. High tensile steel bolts which comply with the physical properties of ASTM Specifications A-325, A-449, or SAE Grade 5 must be used for securing combined reservoir and AB type valve pipe bracket to car body brackets and angle cock bracket secured to coupler body. The self-locking nuts used with these high tensile steel bolts must be tightened with no more force than normally employed with the non-high tensile bolts previously used to avoid damage to castings.
13. Billing repair data not required when the following operations are performed for which labor and/or material charge is not permitted:
 - a. Adjusting angle cocks.
 - b. Tightening union or connection other than in mechanical refrigeration units.
 - c. Replace air hose gaskets.
14. Bottom rod supports shall not be used for end hose supports.
15. Repair welding is not permitted on E shank trainline support brackets (S-4021) at the locations shown in Figures 22 and 23. When the S-4021 design trainline support bracket is found defective for cracked weld, bent, or broken requiring attention, the recommended repair is to 1) repair with S-4030 trolley; or 2) repair with S-4021 replacement bracket.
When replacing the S-4021 design trainline bracket, use the following billing procedures:
 - a. S-4030 trolley, report repair per Rule 72.
 - b. For initial application of S-4021 replacement bracket, report Job Code 1632 and Why Made Code 27.
 - c. For renewal of S-4021 replacement bracket, report Job Code 1632 and appropriate Why Made Code.
 - d. For remove and replace (R&R), report Job Code 1632, Condition Code 9, and Why Made Code 09.

RULE 5 – AIR BRAKE HOSES, HOSE SUPPORTS, AND TRAIN LINES

Added Figures 16 and 17
from rule 4 and re-numbered



RULE 5 – AIR BRAKE HOSES, HOSE SUPPORTS, AND TRAIN LINES

Added

Why Made Code 27 - Initial Application to Section F.6



RULE 5

F. Billing Repair Data Requirements

1. Location
 - a. Not applicable
2. Quantity
 - a. Show quantity
3. Condition Code
 - 0 = Labor attention
 - 1 = New
 - 2 = Secondhand
 - 3 = Reconditioned
 - 9 = R&R
4. Job Code Applied
 - a. Show applicable code
 - b. Show car part code per Rule 83 as qualifier for pipe, pipe bending, pipe straightening, and pipe fittings preceded by **.
5. Description
 - a. Show applicable description
6. Why Made Code (Use only Why Made Codes shown for specific Job Codes)
 - 01 = Worn out
 - 02 = Broken
 - 03 = Missing
 - 04 = Defective
 - 05 = Bent
 - 06 = Bent beyond repairs
 - 07 = Obsolete material
 - 08 = Wrong (not standard to car)
 - 09 = Account repairs
 - 15 = Leaking
 - 19 = Adjust clearance (End air hose)
 - 21 = Overdate
 - 22 = Obliterated
 - 24 = Attention required
 - 25 = Owner's request
 - 27 = Initial application**
 - 31 = Fire or heat damage per Rule 95
 - 45 = Wrong size component
7. Job Code Removed
 - a. Show applicable code
 - b. Show car part code per Rule 83 as qualifier for pipe, pipe bending, pipe straightening, and pipe fittings preceded by **.

RULE 5 – AIR BRAKE HOSES, HOSE SUPPORTS, AND TRAIN LINES

Added New Job Code 1632

S-4021 REPLACEMENT BRACKET

Approved S-4021 replacement bracket

(Condition Codes 1, 2, 9)

(Why Made Codes 01, 02, 03, 05, 06, 09, 24, 25, 27)

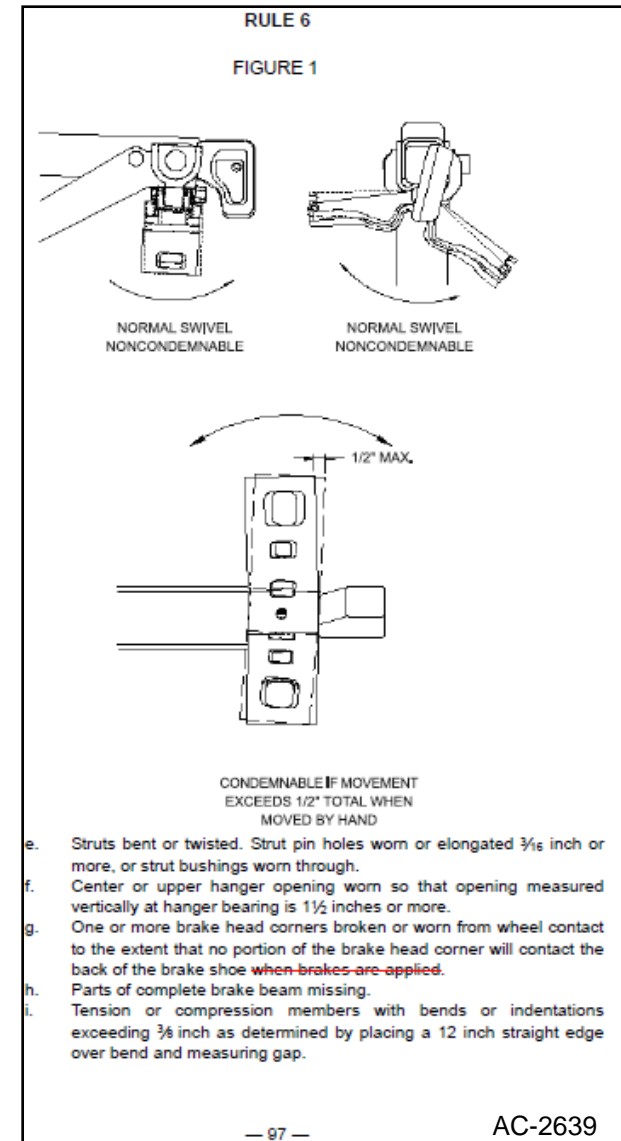


RULE 5	
Job Code	Description
***1260 **	CAP SCREW, AIR BRAKE PART, RENEWED Cap screw, any type, or tee or hex head bolt and nut for all air brake parts and fittings. Not applicable when fitting or air brake part is R&R or R. (Condition Codes 1, 2) (Why Made Codes 01, 02, 03, 25)
1264	BRANCH PIPE TEE BODY Any type. (Condition Codes 1, 2) (Why Made Codes 01, 02, 03, 15, 25, 31, 45)
1492	TRUCK BRAKE CYLINDER HOSE, COMPLETE (Condition Codes 1) (Why Made Codes 03, 04, 15, 21, 25, 31)
1628	AIR BRAKE HOSE AAR APPROVED, STANDARD COUPLING Complete. (Condition Codes 1) (Why Made Codes 03, 04, 07, 15, 21, 22, 25, 31)
1629	AIR BRAKE HOSE AAR APPROVED, STRAIGHT SHANK COUPLING Complete. (Condition Codes 1) (Why Made Codes 03, 04, 07, 15, 21, 22, 25, 31)
1630	AIR BRAKE HOSE 33 INCHES OR OVER Complete, any AAR Approved. (Condition Codes 1) (Why Made Codes 03, 04, 07, 08, 15, 21, 22, 25, 31, 45)
1632	S-4021 REPLACEMENT BRACKET Approved S-4021 replacement bracket (Condition Codes 1, 2, 9) (Why Made Codes 01, 02, 03, 05, 06, 09, 24, 25, 27)
1999	See Rule 72

RULE 6 – BRAKE BEAMS

Deleted

“When brakes are applied”
from A.1.g.



RULE 6 – BRAKE BEAMS

Added

Certificate #'s 224 to paragraph 3.a and Certificate # 225 to paragraphs 3.b.



RULE 6

1. The following unit brake beams are approved per AAR Standard S-344-89 for application to all cars. Reconditioning of only these brake beams is permitted:
 - a. No. 18: Certificate No.'s 103, 111, 134, 138, 200, 203, 205, 211, 214, 216, 217, 218, 219, 220.
 - b. No. 24: Certificate No.'s 114, 118, 136, 137, 137L, 201, 204, 212, 213, 215, 221, 222, 223.
 - c. No. 28: Certificate No. 90.
2. The following unit brake beams are approved as part of a truck-mounted system for application to that system only. Reconditioning of these beams shall be performed to OEM specifications or with an AAR-approved procedure only.
 - a. TMX
 - b. UBX
 - c. TMB-60
 - d. Waboopac
 - e. Nycopac
3. The following hanger brake beams are conditionally approved per AAR Standard S-344-89 and may only be replaced in kind to other than new cars. Reconditioning of only these brake beams is permitted:
 - a. No. 18: Certificate No.'s 50, 52, 60, 61, 84, 123, 224.
 - b. No. 24: Certificate No. 91, 213, 225.
 - c. No. 28: Certificate No.'s 88, 90, 105.
4. Mounted cylinder type brake beams must be replaced in kind with respect to both beam and cylinder size.
5. Brake beams applied (other than mounted cylinder types) must be new or reconditioned.
6. All new brake beams must be manufactured in facilities that have received an AAR Quality Assurance Certification as required in AAR Specification M-1003.
7. It is permissible to replace the condemnable brake head only on beams so designed. Beams which have replaceable brake heads are marked with Certificate No.'s 217, 218, 219, 221, 222, and 223.

C. Recondition Requirements

1. Brake beams must be reconditioned in accordance with AAR Specification M-300 of the Manual of Standards and Recommended Practices at facilities that have been certified in accordance with this specification.
2. Brake beams must be reconditioned in a facility that has an AAR Quality Assurance Certification in accordance with AAR Specification M-1003.
3. Only brake beams that have passed all of the requirements in S-344-89, or have been specifically approved for reconditioning by the AAR can be reconditioned.
4. Reconditioning of brake beam certificate numbers 129, 131 and 141 is specifically prohibited.

RULE 6 – BRAKE BEAMS

Revised E.7 Added Statement

“The jacking procedure utilized to perform repairs safely will be determined by the repairing facility and/or repair force. Exception to choice of jacking procedure will not be allowed.”



RULE 6	
D. Welding Requirements	
1.	No welding of cracks or fractures or building up permitted on tension members.
E. General Information	
1.	Whenever a car is on a shop or repair track; beams, brake hangers, hanger pins and brackets, bottom rod and brake beam safety supports should be inspected and renewed or repaired if necessary.
2.	Brake head worn by contact with wheel is owner's responsibility.
3.	No labor charge allowed for adjusting hanger type brake beams when dropped down due to missing brake shoe and key. Do not report on Billing Repair Data.
4.	If car is not stenciled, consider No. 18 Brake Beam as standard to car.
5.	Any additional labor required to effect repairs and/or necessary attention to articulated equipment should be billed per Job Code 4480, Rule 75.
6.	Any additional labor required to effect repairs and/or necessary attention to interconnect tank equipment should be billed per Job Code 4760, Rule 81.
7.	Additional charge per Rule 75 may be made if jacking of car is necessary to safely accomplish repairs. The jacking procedure utilized to perform repairs safely will be determined by the repairing facility and/or repair force. Exception to choice of jacking procedure will not be allowed.
8.	Any additional labor required to effect repairs and/or necessary attention to draw bar connected equipment should be billed per Job Code 4482, Rule 75.
F. Billing Repair Data Requirements	
1.	Location
a.	Show location
2.	Quantity
a.	Show quantity
b.	When reporting brake beams show 1 at all times
3.	Condition Code
1	= New
2	= Secondhand
3	= Reconditioned
0	= Labor attention
4.	Job Code Applied
a.	Show applicable code
5.	Description
a.	Show applicable description

RULE 7 – BRAKE BEAM HANGERS, BRACKETS, WEAR PLATES AND BRAKE CONNECTION PINS, HANGER PINS OR BOLTS

Revised E.4 Added Statement

“The jacking procedure utilized to perform repairs safely will be determined by the repairing facility and/or repair force. Exception to choice of jacking procedure will not be allowed.”



RULE 7 – BRAKE BEAM HANGERS, BRACKETS, WEAR PLATES AND BRAKE CONNECTION PINS, HANGER PINS OR BOLTS

A. Wear Limits, Gaging, Cause For Renewal

1. At any time
 - (a) Bent brake beam hanger brackets and bracket wear plates.
 - (b) Broken
 - (c) Missing brake beam hangers, brake connection pins and hanger pins or bolts.
 - (d) Worn brake beam hanger brackets and bracket wear plates to a depth of 50% of its original diameter, or worn oblong so that remaining material is less than 60% of the original section.
 - (e) Worn connection pins or bolts $\frac{1}{8}$ inch or more from original diameter at any point.
2. When on shop or repair track
 - (a) Worn brake beam hangers to $\frac{3}{4}$ inch or less, measured vertically or through the corners of the radius.

B. Correct Repairs

1. Hanger pins of diameter or sectional area equal to AAR Recommended Practice should be used.
2. Maintain brake beam hanger brackets and bracket wear plates standard to car.
3. Brake beam hangers difference in length of $\frac{3}{8}$ inch (plus or minus) from that standard to car, is a correct repair.
4. New brake beam hangers must be used.

C. Recondition Requirements

1. Not applicable to brake hangers, connection pins, hanger pins or bolts.
2. See Section D relating to brake beam hanger brackets and bracket wear plates.

D. Welding Requirements

1. Building up worn eyes for brake beam hangers is permissible.
2. Connection pins, hanger pins or bolts must not be welded.
3. Cracks and/or fractures of brake beam hangers must not be welded.

E. General Information

1. Brake beam hangers with a diameter or sectional area equal to AAR Recommended Practices should be used wherever practicable.
2. Wear limits for brake beam hangers, hanger pins and connection pins or bolts are intended primarily for measurement when on shop or repair tracks.
3. No labor allowed for reversing brake connection bolt or pin.
4. Additional charge per Rule 75 may be made if jacking of car is necessary to safely accomplish repairs. The jacking procedure utilized to perform repairs safely will be determined by the repairing facility and/or repair force. Exception to choice of jacking procedure will not be allowed.

RULE 8 – AUTOMATIC SLACK ADJUSTER

Add NYAB to B.2

Deleted the word “Noted”
from the end of paragraph 3.



RULE 8 – AUTOMATIC SLACK ADJUSTER

A. Wear Limits, Gaging, Cause For Renewal or Attention

1. Condemnable at any time
 - (a) Bent, broken, worn, missing or inoperative.
 - (b) Obsolete material.
 - (c) Fire or heat damage
 - (d) Submerged

B. Correct Repairs

1. New or reconditioned slack adjusters must be used in making repairs to cars in interchange service.
2. When a new slack adjuster is applied the control rod must be secured as follows after the control rod bolt has been tightened: After making several brake applications (from a 20 psi reduction) to insure that correct piston travel will be maintained, weld the control rod as follows. SAB, Sloan, NYAB, and Universal automatic slack adjusters, $\frac{3}{16}$ inch weld (1 inch long 2 places). Elcon-National automatic slack adjusters, $\frac{3}{16}$ inch weld (halfway around). Welding of the control rod is not required when the slack adjuster is designed with a threaded control rod, the jam nut is used to lock the adjusting nut in place.
3. When adjusting piston travel for cause, sleeve and jam nuts must be in contact with each other and orientated in accordance with Figures 1 and 2 for the truck-mounted brake (TMB) systems.

FIGURE 1

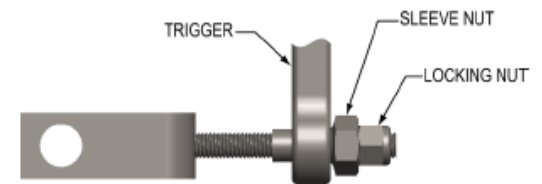
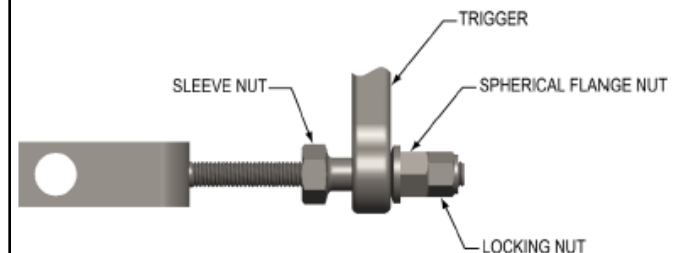


FIGURE 2



RULE 8 – AUTOMATIC SLACK ADJUSTER

Added * (Asterisk) to
Qualifier 04, Group J



RULE 8			
Group G – Mechanical Slack Adjusters – Obsolete			
Removed	What Can Be Applied	Remarks	
Group G	Group E	Replace in accordance with instructions in AAR Manual of Standards and Recommended Practices RP-400 (use Job Code 1574 for applied and 1580 for removed).	
	Qualifier	Group G Name of Manufacturer	Manufacturer Designation
	'01	Ajax-Consolidated Co.	Type FFA
	'02	Universal Railway Devices Co.	Type B
*Manufacture discontinued.			
Group H – Mechanical Double-Acting – Automatic Type			
Removed	What Can Be Applied	Remarks	
Group H	Group H	None.	
	Group E	Car owner's permission required. Replace in accordance with instructions in AAR Manual of Standards and Recommended Practices RP-400 (Use Job Code 1574).	
	Qualifier	Group H Name of Manufacturer	Manufacturer Designation
	01	Elcon-National, Inc.	Model 2000-R
Group J – Short Mechanical Double-Acting – Automatic Type (Double Jaw)			
Removed	What Can Be Applied	Remarks	
Group J	Group J	Group J	
	Qualifier	Name of Manufacturer	Manufacturer Designation
	01	American SAB Company	Model DRV 2-101KDJ
	'02	Elcon-National, Inc.	Model 9100DJ
	'03	Sloan Valve Co.	Model 5002DJS
	'04	Universal Railway Devices Co.	Model 4
*Manufacture discontinued.			
— 113 —			

RULE 8 – AUTOMATIC SLACK ADJUSTER

Added to Group L

Qualifier 06 NYAB KRD-133L 70 ton



RULE 8

Group K – Mechanical Double-Acting Automatic – Special Length

Removed	What Can Be Applied	Remarks	
Group K	Group K	None	
	Qualifier	Group K Name of Manufacturer	Manufacturer Designation
	*01	Sloan Valve Co.	Model 5006-DJ
	02	Universal Railway Devices Co.	Model 10, 10S
	*03	Ellicon-National, Inc.	Model 9100-12

*Manufacture discontinued.

Group L – TTX Truck Mounted Brake – Mechanical Double-Acting Automatic – Automatic Compression Slack Adjusters

Removed	What Can Be Applied	Remarks		
Group L	Group L	Group L		
	Qualifier	Name of Manufacturer	Manufacturer Designation	Truck Size
	*01	Universal Railway Devices Co.	Model 7	70 ton
	02	Universal Railway Devices Co.	Model 5	70 ton
	*03	Ellicon-National, Inc.	Model 7100-10	70 ton
	04	Ellicon-National, Inc.	Model 7100-21	70 ton
	*05	Triax-YSD	TTC-357	70 ton
	06	NYAB	KRD-133L	70 ton

*Manufacture discontinued.

Group M – Thrall/Davis Truck Mounted Brake – Mechanical Double-Acting Automatic Compression Slack Adjusters

Removed	What Can Be Applied	Remarks		
Group M	Group M	Group M		
	Qualifier	Name of Manufacturer	Manufacturer Designation	Truck Size
	*01	Universal Railway Devices Co.	Model 7D	70, 100 & 125 ton
	02	Universal Railway Devices Co.	Model 5D	70, 100 & 125 ton
	*03	Ellicon-National, Inc.	Model 7100-30	70, 100 & 125 ton
	04	Ellicon-National, Inc.	Model 7100-40	70, 100 & 125 ton
	*05	Triax-YSD	TTC-356	70, 100 & 125 ton
	*06	Triax-YSD	TTC-356-E	70, 100 & 125 ton

*Manufacture discontinued.

— 114 —

C-11947

RULE 8 – AUTOMATIC SLACK ADJUSTER

Editorially revised D.1

Welding not permitted unless otherwise specified.



RULE 8	
C. Recondition Requirements	1. Reconditioning of slack adjusters must be in accordance with Specifications for General Repairs and Reclamation of Automatic Mechanical Double-Acting Slack Adjusters as shown in S-423 of the AAR Manual of Standards and Recommended Practices.
D. Welding Requirements	1. Welding not permitted unless otherwise specified.
E. General Information	1. Billing repair data not required when the following operations are performed, for which labor and/or material charge is not permitted: (a) Testing or adjusting body mounted brakes or truck mounted brakes shown in Rule 3, Figure 10, with slack adjusters. 2. Additional charge per Rule 75 may be made if jacking of car is necessary to safely accomplish repairs. The jacking procedure utilized to perform repairs safely will be determined by the repairing facility and/or repair force. Exception to choice of jacking procedure will not be allowed.
F. Billing Repair Data Requirements	1. Location (a) Show location on articulated cars and drawbar-connected cars per Rule 83 for body mounted brake cylinders and related components. (b) For cars equipped with multiple slack adjusters, show location per Rule 83. 2. Quantity a. Show quantity 3. Condition Code 1 = New 2 = Secondhand 3 = Reconditioned 8 = Remove, Repair, and Replace Same Part (RR&R) 9 = R&R 4. Job Code Applied a. Show applicable code b. Show qualifier per Section B for slack adjusters preceded by *. 5. Description a. Show applicable description 6. Why Made Code (Use only Why Made Codes shown for specific Job Codes) 01 = Worn out 02 = Broken 03 = Missing 05 = Bent 06 = Bent beyond repairs 07 = Obsolete material
— 116 —	
C-11947	

RULE 8 – AUTOMATIC SLACK ADJUSTER

Revised Rule 8.E.2.

“The jacking procedure utilized to perform repairs safely will be determined by the repairing facility and/or repair force. Exception to choice of jacking procedure will not be allowed.”



RULE 8	
C. Recondition Requirements	
1. Reconditioning of slack adjusters must be in accordance with Specifications for General Repairs and Reclamation of Automatic Mechanical Double-Acting Slack Adjusters as shown in S-423 of the AAR Manual of Standards and Recommended Practices.	
D. Welding Requirements	
1. Welding not permitted unless otherwise specified.	
E. General Information	
1. Billing repair data not required when the following operations are performed, for which labor and/or material charge is not permitted:	
(a) Testing or adjusting body mounted brakes or truck mounted brakes shown in Rule 3, Figure 10, with slack adjusters.	
2. Additional charge per Rule 75 may be made if jacking of car is necessary to safely accomplish repairs. The jacking procedure utilized to perform repairs safely will be determined by the repairing facility and/or repair force. Exception to choice of jacking procedure will not be allowed.	
F. Billing Repair Data Requirements	
1. Location	
(a) Show location on articulated cars and drawbar-connected cars per Rule 83 for body mounted brake cylinders and related components.	
(b) For cars equipped with multiple slack adjusters, show location per Rule 83.	
2. Quantity	
a. Show quantity	
3. Condition Code	
1 = New	
2 = Secondhand	
3 = Reconditioned	
8 = Remove, Repair, and Replace Same Part (RR&R)	
9 = R&R	
4. Job Code Applied	
a. Show applicable code	
b. Show qualifier per Section B for slack adjusters preceded by *.	
5. Description	
a. Show applicable description	
6. Why Made Code (Use only Why Made Codes shown for specific Job Codes)	
01 = Worn out	
02 = Broken	
03 = Missing	
05 = Bent	
06 = Bent beyond repairs	
07 = Obsolete material	

RULE 8 – AUTOMATIC SLACK ADJUSTER

Deleted Job
Codes 1584 ND
1590 for low
usage

~~*1584 SLACK ADJUSTER, GROUP H~~
~~Complete. R&R not applicable when slack adjuster is renewed or repaired.~~
~~(Condition Codes 1, 3, 9)~~
~~(Why Made Codes 01, 02, 03, 08, 09, 12, 25, 31, 32, 35)~~

~~*1590 SLACK ADJUSTER, GROUP K~~
~~Complete. R&R not applicable when slack adjuster is renewed or repaired.~~
~~(Condition Codes 1, 3, 9)~~
~~(Why Made Codes 01, 02, 03, 08, 09, 12, 25, 31, 32, 35)~~



RULE 10 – BRAKE BEAM AND BOTTOM ROD SUPPORTS

Revised Rule 10.E.3.

“The jacking procedure utilized to perform repairs safely will be determined by the repairing facility and/or repair force. Exception to choice of jacking procedure will not be allowed.”



RULE 10

C. Recondition Requirements

1. None.

D. Welding Requirements

1. None.

E. General Information

1. Do not report on billing repair data unless defective or missing brake beam supports and/or bottom rod safety supports are renewed.
2. All cars must be equipped with AAR approved bottom rod safety supports except as follows:
 - a. Where bottom rod passes through truck bolster or is secured with AAR approved brake pin locking device to prevent their accidental loss, bottom rod safety supports are not required. When such locking devices are used, both the bottom rod and brake beam strut (or fulcrum bracket) must be so equipped. All bottom rods on the same truck must be secured in the same manner, that is, bottom rod safety supports or approved brake pin locking devices.
 - b. Where truck is equipped with hangerless brake beams or where brake beam safety ledges are cast integral with side frames, brake beam safety supports are not required.
3. Additional charge per Rule 75 may be made if jacking of car is necessary to safely accomplish repairs. The jacking procedure utilized to perform repairs safely will be determined by the repairing facility and/or repair force. Exception to choice of jacking procedure will not be allowed.
4. Any additional labor required to effect repairs and/or necessary attention to articulated equipment should be billed per Job Code 4480, Rule 75.
5. Any additional labor required to effect repairs and/or necessary attention to interconnected equipment should be billed per Job Code 4780, Rule 81.
6. Any additional labor required to effect repairs and/or necessary attention to draw bar connected equipment should be billed per Job Code 4482, Rule 75.

F. Billing Repair Data Requirements

1. Location
 - a. Show location
2. Quantity
 - a. Show quantity
3. Condition Code
 - 1 = New
 - 2 = Secondhand
4. Job Code Applied
 - a. Show applicable code
5. Description
 - a. Show applicable description

RULE 11 – BRAKE LEVERS, GUIDES AND BRAKE CONNECTION RODS

Revised Rule 11.E.6.

“The jacking procedure utilized to perform repairs safely will be determined by the repairing facility and/or repair force. Exception to choice of jacking procedure will not be allowed.”



RULE 11

E. General Information

1. No labor charge allowed for straightening these items on car.
2. Report new or secondhand for Job Code 1796 and Job Code 1814 when top rod is renewed.
3. Report RR&R for Job Code 1796 when top rod is removed, straightened and replaced.
4. Report R&R for Job Code 1796 when top rod is removed, repaired and replaced. Additionally, report Job Code 1814 and/or Job Code 1816 as required.
5. Charges for body mounted brake lever adjustments are not permitted in conjunction with any wheel, single car air brake test, brake beam, truck brake lever, slack adjuster, slack adjuster actuator/control rod repair or replacement.
6. Additional charge per Rule 75 may be made if jacking of car is necessary to safely accomplish repairs. The jacking procedure utilized to perform repairs safely will be determined by the repairing facility and/or repair force. Exception to choice of jacking procedure will not be allowed.
7. Any additional labor required to effect repairs and/or necessary attention to articulated equipment should be billed per Job Code 4460, Rule 75.
8. Any additional labor required to effect repairs and/or necessary attention to interconnected equipment should be billed per Job Code 4760, Rule 81.
9. Any additional labor required to effect repairs and/or necessary attention to draw bar connected equipment should be billed per Job Code 4462, Rule 75.

RULE 12 – BRAKE SHOES AND SHOE KEYS

Editorially revised D.1
Welding not permitted
unless otherwise specified

RULE 12	
C. Recondition Requirements	1. None.
D. Welding Requirements	1. Welding not permitted unless otherwise specified.
E. General Information	1. High friction composition brake shoes over 2 inches thick are prohibited on freight cars.
F. Billing Repair Data Requirements	1. Location a. Not applicable
	2. Quantity a. Show quantity
	3. Condition Code 1 = New
	4. Job Code Applied a. Show applicable code
	5. Description a. Show applicable description
	6. Why Made Code (use only Why Made Codes shown for specific Job Codes) 01 = Worn out 02 = Broken 03 = Missing 08 = Wrong (not standard to car) 10 = Damaged in removal 25 = Owner's request
	7. Job Code Removed a. Show applicable code
	8. Responsibility Code 1 = Owner 2 = Handling Line 3 = Defect Card
	9. Job Codes and Standard Reporting Descriptions a. Not applied at any time, including the necessary labor and material to complete the operation, regardless of whether work is performed separately or in connection with any other repair.



RULE 13 – HAND BRAKES – GEARED AND NON-GEARED

Editorially revised Group D chart by adding Group D to What Can Be applied

RULE 13			
Group D – Horizontal Wheel Type – Tank Cars Only, For Replacement Only			
Removed	What Can Be Applied	Remarks	
Group D	Group D Group N Group Q	For groups N and Q, do not alter car without owner's permission.	
	Qualifier	Group D Name of Manufacturer	Type Designation
	01	Ellico-National (Superior)	(571) 30620
	02	Ellico-National (Superior)	(603) 30630
Group E – Lever Type – AAR 1966, AAR-E-80 or AAR-E-1980, Manufacture Discontinued			
Removed	What Can Be Applied	Remarks	
Group E	Group N Group Q Group T Group V	For groups N, Q, and T, do not alter car without owner's permission.	
	Qualifier	Group E Name of Manufacturer	Type Designation
	01	Klasing Hand Brake Co.	700
	02	Ellico-National Inc.	1260
	06	Universal Railway Devices Co.	2633
Group F – Lever Type (Thin Line), AAR 1966, AAR-F-80 or AAR-F-1980, Manufacture Discontinued			
Removed	What Can Be Applied	Remarks	
Group F	Group T	Application of these brakes restricted to special service cars, upon which standard lever type brakes cannot be used.	
	Qualifier	Group F Name of Manufacturer	Type Designation
	01	Ellico-National Inc.	D-2150
	04	Universal Railway Devices Co.	2417
	05	Ellico-National Inc.	7800



RULE 13 – HAND BRAKES – GEARED AND NON-GEARED

Editorially added Job Code 4482 to F.2.a.

a. Show 1 at all times (except for Job Codes 1986, 1988, 1990, and 4482)

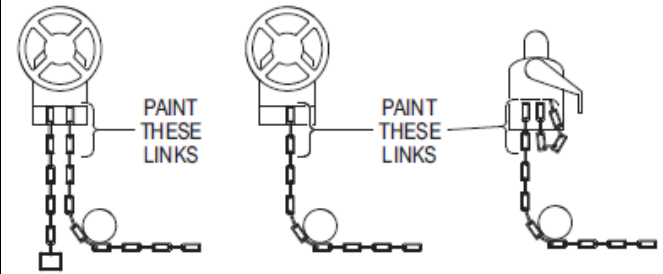


RULE 13

10. Why Made Code 11 may be only used when necessary to renew a vertical brake wheel to comply with the provision of the correct repair chart in Section B.

11. The hand brake load bearing chain in all hand brakes must be painted as an indication the hand brake is not applied.

- With the hand brake fully released, paint the first three (3) visible links as indicated below, when on shop or repair track.
- The color shall be Fluorescent Orange or White.
- When inspecting cars, if painted chain links on the load bearing chain are not visible then it must be determined if the hand brake is released.
- Painted links being hidden from view is not an indication of a fully applied hand brake.



F. Billing Repair Data Requirements

- Location
 - For articulated cars and drawbar-connected cars, show unit location per Rule 83.14.d for Job Codes 1856–1988 and 1992.
- Quantity
 - Show 1 at all times (except for Job Codes 1986, 1988, 1990, and 4482)
- Condition Code
 - New
 - Secondhand
 - Reconditioned
 - Remove, repair and replace same part
 - Remove and replace same part (Applies only to Job Code preceded by *)
- Job Code Applied
 - Show applicable code
 - Show qualifier per Section B for Job Codes preceded by **
 - Show applicable car part identification code per Rule 83 in qualifier column for Job Codes preceded by ***.

— 151 —

RULE 13 – HAND BRAKES – GEARED AND NON-GEARED

Editorially deleted Job Codes for low usage:

1868 HAND BRAKE HOUSING ASSEMBLY, GROUP D

1872 HAND BRAKE HOUSING ASSEMBLY, GROUP E

1884 HAND BRAKE HOUSING ASSEMBLY, GROUP H

1890 HAND BRAKE HOUSING ASSEMBLY, GROUP J

1892 HAND BRAKE HOUSING ASSEMBLY, GROUP K

1972 BRAKE SHAFT RATCHET PAWL

1982 HAND BRAKE RATCHET ASSEMBLY, HORIZONTAL



RULE 16 – COUPLERS, TYPE E AND PARTS

Added

B.16. Effective January 1, 2014, all coupler replacements/transfers must be reported by the repairing party along with the applied coupler AAR Component ID to Railinc (see Office Manual Rule 93). Reporting should be within 24 hours of the repair event. The AAR Component ID can be found on the coupler tag or may be obtained from Railinc for any coupler produced after July 2013. For any coupler being transferred or for couplers produced prior to July 2013, the AAR Component ID may be generated/acquired by performing a field registration at <http://www.railinc.com>.



RULE 16

CORRECT REPAIR CHART— CARRIER WEAR PLATES

Coupler Design	Coupler Carrier Wear Plate Removed	What Can Be Applied	Remarks
With Shank Wear plate	Metallic	Metallic	
	Manganese	Manganese	
	Non-metallic	Metallic or Manganese	
	None	Metallic or Manganese	
Without Shank Wear plate	Metallic	AAR Approved Non-metallic or Manganese	
	Manganese	Manganese	
	Non-metallic	AAR Approved Non-metallic or Manganese	
	None	AAR Approved Non-metallic or Manganese	

14. Whenever couplers designed for use without shank wear plates are installed, either manganese steel or AAR approved non-metallic coupler carrier wear plates must be applied, if not so equipped.

15. Whenever couplers equipped with shank wear plates are installed, either metallic or manganese steel coupler carrier wear plates must be applied, if not so equipped.

16. Effective January 1, 2014, all coupler replacements/transfers must be reported by the repairing party along with the applied coupler AAR Component ID to Railinc (see Office Manual Rule 93). Reporting should be within 24 hours of the repair event. The AAR Component ID can be found on the coupler tag or may be obtained from Railinc for any coupler produced after July 2013. For any coupler being transferred or for couplers produced prior to July 2013, the AAR Component ID may be generated/acquired by performing a field registration at <http://www.railinc.com>.

FIGURE F SAMPLE IMAGE OF COUPLER BAR CODE TAG

Rail Services Corporation
Coupler
AAR Component ID
SHOP1234567890

C-11955

— 189 —

RULE 16 – COUPLERS, TYPE E AND PARTS

Revised Figure F



RULE 16			
CORRECT REPAIR CHART— CARRIER WEAR PLATES			
Coupler Design	Coupler Carrier Wear Plate Removed	What Can Be Applied	Remarks
With Shank Wear plate	Metallic	Metallic	
	Manganese	Manganese	
	Non-metallic	Metallic or Manganese	
	None	Metallic or Manganese	
Without Shank Wear plate	Metallic	AAR Approved Non-metallic or Manganese	
	Manganese	Manganese	
	Non-metallic	AAR Approved Non-metallic or Manganese	
	None	AAR Approved Non-metallic or Manganese	

14. Whenever couplers designed for use without shank wear plates are installed, either manganese steel or AAR approved non-metallic coupler carrier wear plates must be applied, if not so equipped.

15. Whenever couplers equipped with shank wear plates are installed, either metallic or manganese steel coupler carrier wear plates must be applied, if not so equipped.

16. Effective January 1, 2014, all coupler replacements/transfers must be reported by the repairing party along with the applied coupler AAR Component ID to Railinc (see Office Manual Rule 93). Reporting should be within 24 hours of the repair event. The AAR Component ID can be found on the coupler tag or may be obtained from Railinc for any coupler produced after July 2013. For any coupler being transferred or for couplers produced prior to July 2013, the AAR Component ID may be generated/acquired by performing a field registration at <http://www.railinc.com>.

FIGURE F SAMPLE IMAGE OF COUPLER BAR CODE TAG

— 169 —

RULE 16 – COUPLERS, TYPE E AND PARTS

Added new D.6.

Repair welding is not permitted on E shank trainline support brackets. Refer to Rule 5, Section E, for correct repair.



RULE 16

4. Welding of manganese coupler carrier wear plate to the carrier, or on top of cast manganese carrier wear plate (AAR Standard S-269), is permitted using an AWS EFeMn welding rod, or equivalent (11-14% manganese). Weld deposit must be removable by oxy-fuel torch.

5. Application of coupler shelves by welding is prohibited.

6. Repair welding is not permitted on E shank trainline support brackets. Refer to Rule 5, Section E, for correct repair.

E. General Information

1. Any modification of sill construction such as cutting or burning of slots or holes is not permissible.

2. Apply knuckle pin fastener (cotter key or clip) to coupler knuckle pins only on open top hopper and fixed end gondolas.

3. Coupler body having burned out key slot or having butt end modified by torch cutting for accommodation of Farlow attachment, must not be applied.

4. Coupler bodies must not be painted.

5. Coupler must meet all requirements of Coupler Contour Gage No. 28393 where coupler is comprised of new coupler body and secondhand or reconditioned coupler parts.

6. Shank wear plates may be applied only if coupler is removed from the car and work is performed in accordance with AAR Specification S-137.

7. When shank wear plates are applied, all weld splatter must be ground from wear plate surface and all sharp corners on the wear plate must be broken.

8. No labor allowed for adjusting Bettendorf type carrier irons when turned over. Do not report on billing repair data.

9. No labor allowed for straightening carrier irons on car. Do not report on billing repair data.

10. No labor or material allowed for coupler hole cap not welded to coupler.

11. Cast steel carrier iron may be repaired by riveting (use two countersunk rivets) or welding a steel plate.

12. Required Coupler Heights

a. Empty cars	Minimum 32½ inches	Maximum 34½ inches
b. Loaded cars	Minimum 31½ inches	Maximum 33½ inches

Measured from top of rail to center of face of coupler knuckle. Where possible, adjustments should be made when car is empty.

13. Adjustment of Coupler Heights

a. Place coupler in proper alignment with draft gear using coupler carrier wear plate where necessary. If shim required is less than ¼ inch realignment is unnecessary; where coupler is in proper alignment and minimum coupler height has not resulted, further adjustment must be made at truck springs, center plates, or journal boxes.

b. Truck spring shims must be of hardwood of not less than 5/8 inch thickness or steel of not less than ¼ inch or more than ½ inch. When shimming truck springs, shim(s) must be applied under all springs (main and side) on entire truck.

RULE 16 – COUPLERS, TYPE E AND PARTS

Revised Rule 16.E.18.

“The jacking procedure utilized to perform repairs safely will be determined by the repairing facility and/or repair force. Exception to choice of jacking procedure will not be allowed.”



RULE 16

16. Charge for R&R of coupler should be billed separately (using Job Code 4474) when coupler is not renewed and R&R is associated with repairs made under provisions of Rule 19, 20, 21, 59, 69, 72, 74, 75, and/or 82. Charge for R&R of coupler not applicable to apply coupler carrier, carrier wear plate, or striker shim. R&R covers coupler complete.
17. See AAR Specification M-211 for coupler and coupler part markings, and AAR Standard S-119 for Y44A and Y44AE, draft gear followers.
18. Additional charge per Rule 75 may be made if jacking of car is necessary to safely accomplish repairs. The jacking procedure utilized to perform repairs safely will be determined by the repairing facility and/or repair force. Exception to choice of jacking procedure will not be allowed.
19. Any additional labor required to effect repairs and/or necessary attention to articulated equipment should be billed per Job Code 4460, Rule 75.
20. Any additional labor required to effect repairs and/or necessary attention to interconnected tank equipment should be billed per Job Code 4760, Rule 81.
21. Any additional labor required to effect repairs and/or necessary attention to draw bar connected equipment should be billed per Job Code 4462, Rule 75.

RULE 16 – COUPLERS, TYPE E AND PARTS

Added new F.10 and F.10.a.

10. AAR Component ID

- a. Effective January 1, 2014, show assigned AAR component ID for the applied coupler.

RULE 16	
7. Job Code Removed	
a. Show applicable code	
b. Show qualifier per Section E for Job Codes preceded by **	
8. Responsibility Code	
1 = Owner	
2 = Handling Line	
3 = Defect Card	
9. Job Code and Standard Reporting Descriptions	
a. Net applied at any time, including all necessary labor and material to complete the operation, regardless of whether work is performed separately or in connection with any other repair, except as applicable per Section E of this Rule.	
10. AAR Component ID	
a. Effective January 1, 2014, show assigned AAR component ID for the applied coupler.	
Job Code	Description
**2004	COUPLER BODY, OBSOLETE For removal only. (Why Made Codes 07, 08)
**2009	COUPLER BODY, E80DC Charge for R&R of coupler to be billed per Job Code 4474. (Condition Codes 1, 2, 3) (Why Made Codes 01, 02, 03, 05, 06, 08, 11, 23, 25, 79, 82, 86, 87, 88)
**2010	COUPLER BODY, SBE60DC Charge for R&R of coupler to be billed per Job Code 4474. (Condition Codes 1, 2, 3) (Why Made Codes 01, 02, 03, 05, 06, 08, 11, 23, 25, 79, 82, 86, 87, 88)
**2011	COUPLER BODY, SBE60DE, OR SBE60EE Charge for R&R of coupler to be billed per Job Code 4474. (Condition Codes 1, 2, 3) (Why Made Codes 01, 02, 03, 05, 06, 08, 11, 23, 25, 79, 82, 86, 87, 88)
**2012	COUPLER BODY, SE80DC Charge for R&R of coupler to be billed per Job Code 4474. (Condition Codes 1, 2, 3) (Why Made Codes 01, 02, 03, 05, 06, 08, 11, 25, 79, 82, 86, 87, 88)
**2013	COUPLER BODY, E80DE, OR E80EE Charge for R&R of coupler to be billed per Job Code 4474. (Condition Codes 1, 2, 3) (Why Made Codes 01, 02, 03, 05, 06, 08, 11, 23, 25, 79, 82, 86, 87, 88)
**2016	COUPLER BODY, BE80AHT For Removal Only. Charge for R&R of coupler to be billed per Job Code 4474. (Why Made Codes 01, 02, 03, 05, 06, 08, 11, 23, 25, 79, 82, 86, 87, 88)
— 179 —	
C-12041	



RULE 16 – COUPLERS, TYPE E AND PARTS

Editorially added

Why Made Code 07
(Obsolete) to Job Code 2020



RULE 16	
Job Code	Description
**2017	COUPLER BODY, E80CHT, OR E80CC Charge for R&R of coupler to be billed per Job Code 4474. (Condition Codes 1, 2, 3) (Why Made Codes 01, 02, 03, 05, 06, 08, 11, 23, 25, 79, 82, 86, 87, 88)
**2018	COUPLER BODY, SBE80CC Charge for R&R of coupler to be billed per Job Code 4474. (Condition Codes 1, 2, 3) (Why Made Codes 01, 02, 03, 05, 06, 08, 11, 23, 25, 79, 82, 86, 87, 88)
**2019	COUPLER BODY, SBE80CE Charge for R&R of coupler to be billed per Job Code 4474. (Condition Codes 1, 2, 3) (Why Made Codes 01, 02, 03, 05, 06, 08, 11, 23, 25, 79, 82, 86, 87, 88)
**2020	COUPLER BODY, BE80BHT For Removal Only. Charge for R&R of coupler to be billed per Job Code 4474. (Why Made Codes 01, 02, 03, 05, 06, 07 , 08, 11, 23, 25, 79, 82, 86, 87, 88)
**2021	COUPLER BODY, SE80CHT, OR SE80CC Charge for R&R of coupler to be billed per Job Code 4474. (Condition Codes 1, 2, 3) (Why Made Codes 01, 02, 03, 05, 06, 08, 11, 25, 79, 82, 86, 87, 88)
**2022	COUPLER BODY, E80CHTE, OR E80CE Charge for R&R of coupler to be billed per Job Code 4474. (Condition Codes 1, 2, 3) (Why Made Codes 01, 02, 03, 05, 06, 08, 11, 23, 25, 79, 82, 86, 87, 88)
**2023	COUPLER BODY, SE80CHTE, OR SE80CE Charge for R&R of coupler to be billed per Job Code 4474. (Condition Codes 1, 2, 3) (Why Made Codes 01, 02, 03, 05, 06, 08, 11, 25, 79, 82, 86, 87, 88)
**2024	COUPLER BODY, SE80DE, OR SE80EE Charge for R&R of coupler to be billed per Job Code 4474. (Condition Codes 1, 2, 3) (Why Made Codes 01, 02, 03, 05, 06, 08, 11, 25, 79, 82, 86, 87, 88)
**2026	ANY SPECIAL E TYPE COUPLER BODY Charge for R&R of coupler to be billed per Job Code 4474. This Job Code may be used to cover the removal only of special Type E Coupler Body. (Why Made Codes 01, 02, 03, 05, 06, 08, 11, 23, 25, 79, 82, 86, 87, 88)
**2037	COUPLER BODY, SBE87CE, OR SBE87DE Charge for R&R of coupler to be billed per Job Code 4474. (Condition Codes 1, 2, 3) (Why Made Codes 01, 02, 03, 05, 06, 08, 11, 23, 25, 79, 82, 86, 87, 88)

RULE 16 – COUPLERS, TYPE E AND PARTS

Added Job Code 6999

6999 Effective January 1, 2014, to be used only when there is no specific Job Code for a component that requires the reporting of an AAR component ID. Report car part identification code “HR” for applied coupler, and report applicable location. Job Code Description.



RULE 16	
Job Code	Description
2162	COUPLER CARRIER, 20 INCHES LONG OR LESS Any type or kind for standard striker opening. Per end of car. (Condition Codes 1, 2, 8) (Why Made Codes 01, 02, 03, 05, 06, 08, 25, 45)
2164	COUPLER CARRIER, OVER 20 INCHES LONG Any type or kind for intermediate striker opening. Per end of car. (Condition Codes 1, 2, 8) (Why Made Codes 01, 02, 03, 05, 06, 08, 25, 45)
2166	COUPLER CARRIER, OVER 28 INCHES LONG Any type or kind for wide striker opening. Tube design, I beam, fabricated, including carrier wear plate. Per end of car. (Condition Codes 1, 2, 8) (Why Made Codes 01, 02, 03, 05, 06, 08, 25, 45)
2246	SOLID DRAW BAR, E OR F TYPE Any type. Refer to Rule 83, Figure E for locations. Job Code 2246 is only to be used when the draw bar is replaced or completely removed from car, if necessary to complete repairs. Not to be billed with Job Code 4462 at same location. For partial disconnect, bill using Job Code 4462, Rule 75. (Condition Codes 1, 2, 3, 9) (Why Made Codes 01, 02, 03, 05, 06, 09, 11, 25, 86)
2999	SEE RULE 72.
*4474	R&R COUPLER BODY, E TYPE Charge for R&R of coupler should be billed separately using Job Code 4474 when coupler is not renewed and R&R is associated with repairs made under provisions of Rule 19, 20, 21, 59, 69, 72, 74, 75, and/or 82. Charge for R&R of coupler not applicable to apply or repair coupler carrier, carrier wear plate, or striker shim. R&R covers coupler complete. (Condition Code 9) (Why Made Code 09)
6999	Effective January 1, 2014, to be used only when there is no specific Job Code for a component that requires the reporting of an AAR component ID. Report car part identification code “HR” for applied coupler, and report applicable location.

RULE 17 – COUPLERS, TYPE E/F AND PARTS

Added

B.16. Effective January 1, 2014, all coupler replacements/transfers must be reported by the repairing party along with the applied coupler AAR Component ID to Railinc (see Office Manual Rule 93). Reporting should be within 24 hours of the repair event. The AAR Component ID can be found on the coupler tag or may be obtained from Railinc for any coupler produced after July 2013. For any coupler being transferred or for couplers produced prior to July 2013, the AAR Component ID may be generated/acquired by performing a field registration at <http://www.railinc.com>.



RULE 17

16. Effective January 1, 2014, all coupler replacements/transfers must be reported by the repairing party along with the applied coupler AAR Component ID to Railinc (see Office Manual Rule 93). Reporting should be within 24 hours of the repair event. The AAR Component ID can be found on the coupler tag or may be obtained from Railinc for any coupler produced after July 2013. For any coupler being transferred or for couplers produced prior to July 2013, the AAR Component ID may be generated/acquired by performing a field registration at <http://www.railinc.com>.

FIGURE D SAMPLE IMAGE OF COUPLER BAR CODE TAG



C. Recondition Requirements

1. Coupler bodies and their parts must be reconditioned in accordance with AAR Specification M-212 at facilities which have been certified in accordance with this specification.
2. Coupler bodies must be reconditioned in a facility that has a Quality Assurance Certification in accordance with AAR Specification M-1003.

D. Welding Requirements

1. Coupler body
Knuckle lock
2. No welding permitted to any other coupler parts except as provided for in the original design.
3. Application of coupler shelves by welding is prohibited.

} Welding permitted
as provided in AAR
Specification M-212.

RULE 17 – COUPLERS, TYPE E/F AND PARTS

Revised Figure D



RULE 17

16. Effective January 1, 2014, all coupler replacements/transfers must be reported by the repairing party along with the applied coupler AAR Component ID to Railinc (see Office Manual Rule 93). Reporting should be within 24 hours of the repair event. The AAR Component ID can be found on the coupler tag or may be obtained from Railinc for any coupler produced after July 2013. For any coupler being transferred or for couplers produced prior to July 2013, the AAR Component ID may be generated/acquired by performing a field registration at <http://www.railinc.com>.

FIGURE D SAMPLE IMAGE OF COUPLER BAR CODE TAG



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1. Coupler body
Knuckle lock
2. No welding permitted to any other coupler parts except as provided for in the original design.
3. Application of coupler shelves by welding is prohibited.

} Welding permitted
as provided in AAR
Specification M-212.



RULE 17 – COUPLERS, TYPE E/F AND PARTS

Revised Rule 17.E.8.

“The jacking procedure utilized to perform repairs safely will be determined by the repairing facility and/or repair force. Exception to choice of jacking procedure will not be allowed.”



RULE 17

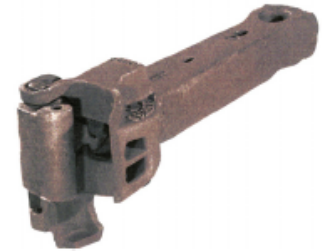
8. Additional charge per Rule 75 may be made if jacking of car is necessary to safely accomplish repairs. The jacking procedure utilized to perform repairs safely will be determined by the repairing facility and/or repair force. Exception to choice of jacking procedure will not be allowed.
9. Any additional labor required to effect repairs and/or necessary attention to articulated equipment should be billed per Job Code 4480, Rule 75.
10. Any additional labor required to effect repairs and/or necessary attention to interconnected tank equipment should be billed per Job Code 4780, Rule 81.
11. Any additional labor required to effect repairs and/or necessary attention to draw bar connected equipment should be per Job Code 4482, Rule 75.

FIGURE E



STANDARD E/F COUPLER

FIGURE F



STANDARD SBE COUPLER

F. Billing Repair Data Requirements

1. Location
 - a. Show location, except for coupler knuckle pins
2. Quantity
 - a. Show quantity
3. Condition Code
 - 1 = New
 - 2 = Secondhand
 - 3 = Reconditioned
 - 8 = Remove, repair and replace same part
 - 9 = Remove and replace same part (applies only to Job Code preceded by *)
4. Job Code Applied
 - a. Show applicable code
 - b. Show qualifier per Section E for Job Codes preceded by **
5. Description
 - a. Show applicable description

RULE 17 – COUPLERS, TYPE E/F AND PARTS

Added new F.10 and F.10.a.

10. AAR Component ID

- a. Effective January 1, 2014, show assigned AAR component ID for the applied coupler.



RULE 17

6. Why Made Code (use only Why Made Codes shown for specific Job Codes)
 - 01 = Worn out
 - 02 = Broken (When not covered by other Why Made Codes)
 - 03 = Missing
 - 05 = Bent
 - 06 = Bent beyond repairs
 - 07 = Obsolete material
 - 08 = Wrong (not standard to car)
 - 09 = Account repairs (Applies only to Job Codes preceded by *)
 - 11 = Removed in good condition account of associated repairs
 - 16 = Out of alignment or improper height
 - 23 = Government regulatory requirement
 - 24 = Attention required
 - 25 = Owner's request
 - 31 = Fire or heat damage per Rule 95
 - 41 = Cracked
 - 45 = Wrong size component
 - 79 = Cracked behind horn
 - 82 = Cracked front face
 - 86 = Cracked key slot
 - 87 = Cracked pin protector
 - 88 = Cracked behind pulling lug
7. Job Code Removed
 - a. Show applicable code
 - b. Show qualifier per Section E for Job Codes preceded by **
8. Responsibility Code
 - 1 = Owner
 - 2 = Handling Line
 - 3 = Defect Card
9. Job Codes and Standard Reporting Descriptions
 - a. Net applied at any time, including all necessary labor and material to complete the operation, regardless of whether work is performed separately or in connection with any other repair, except as applicable per Section E of this Rule.
10. AAR Component ID
 - a. Effective January 1, 2014, show assigned AAR component ID for the applied coupler;

RULE 17 – COUPLERS, TYPE E/F AND PARTS

Editorially Revised Job Code 2276, Figures Cited

RULE 17	
Job Code	Description
**2192	COUPLER BODY, SBE68BC Charge for R&R of coupler to be billed per Job Code 4478. (Condition Codes 1, 2, 3) (Why Made Codes 01, 02, 03, 05, 06, 08, 11, 23, 25, 79, 82, 86, 87, 88)
**2193	COUPLER BODY, SBE68BE Charge for R&R of coupler to be billed per Job Code 4478. (Condition Codes 1, 2, 3) (Why Made Codes 01, 02, 03, 05, 06, 08, 11, 23, 25, 79, 82, 86, 87, 88)
**2194	COUPLER BODY, SBE68AE Charge for R&R of coupler to be billed per Job Code 4478. (Condition Codes 1, 2, 3) (Why Made Codes 01, 02, 03, 05, 06, 08, 11, 23, 25, 79, 82, 86, 87, 88)
**2195	ANY SPECIAL E/F TYPE COUPLER BODY Charge for R&R of coupler to be billed per Job Code 4478. This job code may be used to cover the removal only of a special type E/F coupler body. (Why Made Codes 01, 02, 03, 05, 06, 08, 11, 23, 25, 45, 79, 82, 86, 87, 88)
**2196	COUPLER BODY, SE69AE, SE69BE or SE69CE Charge for R&R of coupler to be billed per Job Code 4478. (Condition Codes 1, 2, 3) (Why Made Codes 01, 02, 03, 05, 06, 08, 23, 25, 79, 82, 86, 87, 88)
2272	COUPLER TO YOKE CONNECTION PIN, TYPE F Any Y47 type. (Condition Codes 1, 2, 3) (Why Made Codes 01, 02, 03, 08, 25)
2274	F TYPE YOKE CONNECTION PIN CARRIER Any type or kind, bottom only. (Condition Codes 1, 2) (Why Made Codes 01, 02, 03, 05, 25, 45)
2276	Y-47 PIN RETAINER ASSEMBLY Per Rule 17.A, Figure C, and Rule 18.A, Figure 1 (Condition Codes 1, 2) (Why Made Codes 01, 02, 03, 05, 24, 25, 45)
2999	SEE RULE 72.



RULE 17 – COUPLERS, TYPE E/F AND PARTS

Added Job Code 6999

6999 Effective January 1, 2014, to be used only when there is no specific Job Code for a component that requires the reporting of an AAR component ID. Report car part identification code “HR” for applied coupler, and report applicable location. Job Code Description.



RULE 17	
Job Code	Description
*4478	R&R COUPLER BODY, TYPE E/F OR F Charge for R&R of coupler should be billed separately (using Job Code 4478) when coupler is not renewed and R&R is associated with repairs made under provisions of Rule 19, 20, 21, 59, 69, 72, 74, 75, and/or 82. Charge for R&R of coupler not applicable to apply or repair coupler carrier, carrier wear plate, or striker shim. R&R covers coupler complete. (Condition Code 9) (Why Made Code 09)
6999	Effective January 1, 2014, to be used only when there is no specific Job Code for a component that requires the reporting of an AAR component ID. Report car part identification code “HR” for applied coupler, and report applicable location.

RULE 18 – COUPLERS, TYPE F AND PARTS

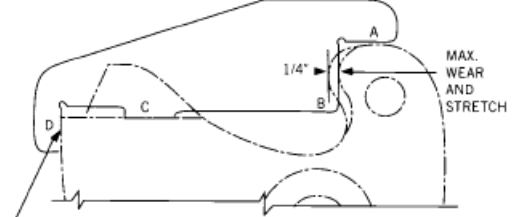
Editorially revised the Figure Cited in 2.a.

a. 7/8-inch F-type retainer bolt must be replaced with pin assembly that meets the requirements of AAR Specification M-119 when a two-flange trainline bracket is suspended from the pin. See **Figure I** for example application. (A bolt must be used if the trainline bracket has only one flange.)



RULE 18

FIGURE G



POINT 'D' MUST NOT TOUCH OR CLEAR MORE THAN 1/4" WITH A, B, & C SEATED.

GAGE No. 44250-3

MISC. COUPLER PARTS

- m. Any coupler part bent, broken, cracked, missing.
- n. Coupler carrier top plate cracked, broken, bent or missing. See Carrier Wear Plate Correct Repair Chart.
- o. Heat damage for non-metallic parts.
- p. Yoke pin carrier plate bent, cracked, broken, or missing.
- q. Vertical coupler pin carrier plate has one or more fasteners either loose or missing.
- r. Y-47 pin retainer assembly worn out, broken, missing or loose. See Figures H and I. Keeper (secondary securement) in Figure I is not part of the assembly.
- s. Knuckles found broken or with cracks in any area (including flag hole) determined by visual inspection and/or by utilizing non-destructive testing as defined in AAR Specification M-220 shall be scrapped.
- t. Couplers of other than double shelf design on any DOT tank cars.

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

- a. 7/8-inch F-type retainer bolt must be replaced with pin assembly that meets the requirements of AAR Specification M-119 when a two-flange trainline bracket is suspended from the pin. See **Figure I** for example application. (A bolt must be used if the trainline bracket has only one flange.)
- b. If the keeper (secondary securement) is missing or ineffective, it must be replaced or repaired.
- c. All type F couplers with pin bearing blocks: F70BHT, F70BHTE, F71BHT, F72BHT, F73HT, F73HTE, F70BHT AND F70BHTE.

— 207 —

RULE 18 – COUPLERS, TYPE F AND PARTS

B.14. Effective January 1, 2014, all coupler replacements/transfers must be reported by the repairing party along with the applied coupler AAR Component ID to Railinc (see Office Manual Rule 93). Reporting should be within 24 hours of the repair event. The AAR Component ID can be found on the coupler tag or may be obtained from Railinc for any coupler produced after July 2013. For any coupler being transferred or for couplers produced prior to July 2013, the AAR Component ID may be generated/acquired by performing a field registration at <http://www.railinc.com>.



RULE 18

10. Couplers with welded top shelves cannot be applied or reapplied when removed for any reason.
11. 7/8 inch F-type retainer bolt must be replaced with the pinned arrangement shown in 18.A.2.a., Figure H. The pin must be assembled with a keeper similar to the Figure H arrangement. The cotter pin shall have both legs bent.
12. Missing coupler knuckle pins will be replaced with metallic coupler knuckle pins.
13. Initial application of the pin shown in Figure H may be performed at locations other than shop or repair track.
14. Effective January 1, 2014, all coupler replacements/transfers must be reported by the repairing party along with the applied coupler AAR Component ID to Railinc (see Office Manual Rule 93). Reporting should be within 24 hours of the repair event. The AAR Component ID can be found on the coupler tag or may be obtained from Railinc for any coupler produced after July 2013. For any coupler being transferred or for couplers produced prior to July 2013, the AAR Component ID may be generated/acquired by performing a field registration at <http://www.railinc.com>.

FIGURE J SAMPLE IMAGE OF COUPLER BAR CODE TAG



RULE 18 – COUPLERS, TYPE F AND PARTS

Revised Figure J



RULE 18

10. Couplers with welded top shelves cannot be applied or reapplied when removed for any reason.
11. 7/8 inch F-type retainer bolt must be replaced with the pinned arrangement shown in 18.A.2.a., Figure H. The pin must be assembled with a keeper similar to the Figure H arrangement. The cotter pin shall have both legs bent.
12. Missing coupler knuckle pins will be replaced with metallic coupler knuckle pins.
13. Initial application of the pin shown in Figure H may be performed at locations other than shop or repair track.
14. Effective January 1, 2014, all coupler replacements/transfers must be reported by the repairing party along with the applied coupler AAR Component ID to Railinc (see Office Manual Rule 93). Reporting should be within 24 hours of the repair event. The AAR Component ID can be found on the coupler tag or may be obtained from Railinc for any coupler produced after July 2013. For any coupler being transferred or for couplers produced prior to July 2013, the AAR Component ID may be generated/acquired by performing a field registration at <http://www.railinc.com>.

FIGURE J SAMPLE IMAGE OF COUPLER BAR CODE TAG

A sample image of a coupler bar code tag, identical to the one in the previous block. It contains the text: "Rail Services Corporation", "Coupler", "AAR Component ID", and "SHOP1234567890", followed by a 1D barcode.

— 213 —

C-11955



RULE 18 – COUPLERS, TYPE F AND PARTS

Revised Rule 18.E.9.

“The jacking procedure utilized to perform repairs safely will be determined by the repairing facility and/or repair force. Exception to choice of jacking procedure will not be allowed.”

RULE 18		
Coupler Type	Min. Clearance Top of Shank to Striker Dimension "A" (inches)	Min. Clearance Spring Basket Top to Underside of Carrier Lip. Dimension "B" (inches)
F70, F71, F72, SF70 29 1/4" length	1 1/8	1 5/8
F79, SF79 43" length	2 3/8	3 1/2
F73 60" length	Consult Car Owner for Dimensions. These couplers are used in special car designs and dimensions vary.	

9. Additional charge per Rule 75 may be made if jacking of cars is necessary to safely accomplish repairs. **The jacking procedure utilized to perform repairs safely will be determined by the repairing facility and/or repair force. Exception to choice of jacking procedure will not be allowed.**
10. Any additional labor required to effect repairs and/or necessary attention to articulated equipment should be billed per Job Code 4480, Rule 75.
11. Any additional labor required to effect repairs and/or necessary attention to interconnected tank equipment should be billed per Job Code 4780, Rule 81.
12. Any additional labor required to effect repairs and/or necessary attention to draw bar connected equipment should be billed per Job Code 4482, Rule 75.
13. Charge for R&R of coupler should be billed separately (using Job Code 4478) when coupler is not renewed and R&R is associated with repairs made under provisions of Rule 19, 20, 21, 59, 69, 72, 74, 75, and/or 82. Charge for R&R of coupler not applicable to apply coupler carrier, carrier wear plate, or striker shim. R&R covers coupler complete.
14. See AAR Specification M-211 for coupler and coupler parts markings, and AAR Standard S-119 for Y46AE draft gear followers.
15. Coupler Manufacturer Qualifier Chart (Refer to Rule 16.)
16. Lubrication of coupler carriers for long shank couplers.
 - a. When cars equipped with F73 or F79 couplers are on repair track for any reason, coupler carriers on cars equipped with other than non-metallic wear plates must be lubricated.
 - b. Lubricant must be an extreme-pressure dry film lubricant, open gear compound, or equivalent. The lubricant should not attract dust or dirt and should be water resistant.
 - c. Apply a small bead (1/4 inch to 3/8 inch diameter) of lubricant across the carrier on each side of the coupler shank. The coupler need not be moved.



RULE 18 – COUPLERS, TYPE F AND PARTS

Added new F.10 and F.10.a.

10. AAR Component ID

- a. Effective January 1, 2014, show assigned AAR component ID for the applied coupler.



RULE 18	
7. Job Code Removed	
a. Show applicable code	
b. Show qualifier per Section E for Job Codes preceded by **	
8. Responsibility Code	
1 = Owner	
2 = Handling Line	
3 = Defect Card	
9. Job Code and Standard Reporting Descriptions	
a. Net applied at any time, including all necessary labor and material to complete the operation, regardless of whether work is performed separately or in connection with any other repair, except as applicable per Section E of this Rule.	
10. AAR Component ID	
a. Effective January 1, 2014, show assigned AAR component ID for the applied coupler.	
Job Code	Description
2075	COUPLER KNUCKLE PIN NON-METALLIC TYPE (Condition Codes 1, 2) (Why Made Codes 02, 05, 25, 31)
2076	COUPLER KNUCKLE PIN, METALLIC C10 type. (Condition Codes 1, 2) (Why Made Codes 02, 03, 05, 25)
2167	CARRIER WEAR PLATE/STRIKER SHIM (NON-METALLIC) Non-metallic. Used to adjust Type E/F and F coupler height and/or align coupler with draft gear. Per end of car. (Condition Code 1) (Why Made Codes 02, 03, 08, 11, 16, 25, 45)
2168	COUPLER CARRIER, 20 INCHES OR LESS, SPRING TYPE, METALLIC Spring type carrier for standard striker opening. Any metallic type or kind. Report carrier iron bottom and/or support springs separately. Per end of car. (Condition Codes 1, 2, 8) (Why Made Codes 01, 02, 03, 05, 06, 08, 25, 45)
2169	CARRIER WEAR PLATE/STRIKER SHIM (METALLIC) Metallic, except for manganese. Used to adjust Type E/F and F coupler height and/or align coupler with draft gear. Per end of car. (Condition Code 1) (Why Made Codes 02, 03, 08, 11, 16, 25, 45)
— 220 —	
C-11955	

RULE 18 – COUPLERS, TYPE F AND PARTS

Editorially Revised Job Code 2276, Figures Cited



RULE 18	
Job Code	Description
2260	COUPLER ROTARY LOCK LIFT ASSEM. TYPE F F7 type. (Condition Codes 1) (Why Made Codes 01, 02, 03, 06, 08, 25)
2264	COUPLER LOCK LIFT ROTOR, TYPE F Any F8 type. (Condition Codes 1) (Why Made Codes 01, 02, 03, 06, 08, 25)
2268	COUPLER KNUCKLE THROWER, TYPE F Any F31 type. (Condition Codes 1, 2) (Why Made Codes 01, 02, 03, 05, 08, 25)
2272	COUPLER TO YOKE CONNECTION PIN, TYPE F Any Y47 type. (Condition Codes 1, 2, 3) (Why Made Codes 01, 02, 03, 08, 25)
2274	F TYPE YOKE CONNECTION PIN CARRIER Any type or kind, bottom only. (Condition Codes 1, 2) (Why Made Codes 01, 02, 03, 05, 25, 45)
2276	Y-47 PIN RETAINER ASSEMBLY Per Rule 17.A, Figure C, and Rule 18.A, Figure I (Condition Codes 1, 2) (Why Made Codes 01, 02, 03, 05, 24, 25, 45)
2999	SEE RULE 72
*4478	R&R COUPLER BODY TYPE E/F OR F Charge for R&R of coupler should be billed separately (using Job Code 4478) when coupler is not renewed and R&R is associated with repairs made under provisions of Rule 19, 20, 21, 59, 69, 72, 74, 75, and/or 82. Charge for R&R of coupler not applicable to apply or repair coupler carrier, carrier wear plate, or striker shim. R&R covers coupler complete. (Condition Code 9) (Why Made Code 09)
6999	Effective January 1, 2014, to be used only when there is no specific Job Code for a component that requires the reporting of an AAR component ID. Report car part identification code "HR" for applied coupler, and report applicable location.

RULE 18 – COUPLERS, TYPE F AND PARTS

Added Job Code 6999

6999 Effective January 1, 2014, to be used only when there is no specific Job Code for a component that requires the reporting of an AAR component ID. Report car part identification code “HR” for applied coupler, and report applicable location. Job Code Description.



RULE 18	
Job Code	Description
2260	COUPLER ROTARY LOCK LIFT ASSEM. TYPE F F7 type. (Condition Codes 1) (Why Made Codes 01, 02, 03, 06, 08, 25)
2264	COUPLER LOCK LIFT ROTOR, TYPE F Any F8 type. (Condition Codes 1) (Why Made Codes 01, 02, 03, 06, 08, 25)
2268	COUPLER KNUCKLE THROWER, TYPE F Any F31 type. (Condition Codes 1, 2) (Why Made Codes 01, 02, 03, 05, 08, 25)
2272	COUPLER TO YOKE CONNECTION PIN, TYPE F Any Y47 type. (Condition Codes 1, 2, 3) (Why Made Codes 01, 02, 03, 08, 25)
2274	F TYPE YOKE CONNECTION PIN CARRIER Any type or kind, bottom only. (Condition Codes 1, 2) (Why Made Codes 01, 02, 03, 05, 25, 45)
2276	Y-47 PIN RETAINER ASSEMBLY Per Rule 17.A, Figure C, and Rule 18.A, Figure I (Condition Codes 1, 2) (Why Made Codes 01, 02, 03, 05, 24, 25, 45)
2999	SEE RULE 72
*4478	R&R COUPLER BODY TYPE E/F OR F Charge for R&R of coupler should be billed separately (using Job Code 4478) when coupler is not renewed and R&R is associated with repairs made under provisions of Rule 19, 20, 21, 59, 69, 72, 74, 75, and/or 82. Charge for R&R of coupler not applicable to apply or repair coupler carrier, carrier wear plate, or striker shim. R&R covers coupler complete. (Condition Code 9) (Why Made Code 09)
6999	Effective January 1, 2014, to be used only when there is no specific Job Code for a component that requires the reporting of an AAR component ID. Report car part identification code “HR” for applied coupler, and report applicable location.

RULE 19 – YOKES, TYPE E

Revised Rule 19.E.2.

“The jacking procedure utilized to perform repairs safely will be determined by the repairing facility and/or repair force. Exception to choice of jacking procedure will not be allowed.”



RULE 19

Additional charge per Rule 75 may be made if jacking of car is necessary to safely accomplish repair. The jacking procedure utilized to perform repairs safely will be determined by the repairing facility and/or repair force. Exception to choice of jacking procedure will not be allowed.

Material charges for component replacement should be billed separately using the Job Codes provided in Rules 19, 20 and/or 21.

For replacement and/or repair of non-job coded items, material, labor or securement is to be billed per the applicable rule.

3. Any additional labor required to effect repairs and/or necessary attention to articulated equipment should be billed per Job Code 4460, Rule 75.
4. Any additional labor required to effect repairs and/or necessary attention to interconnected tank equipment should be billed per Job Code 4760, Rule 81.
5. Any additional labor required to effect repairs and/or necessary attention to draw bar connected equipment should be billed per Job Code 4462, Rule 75.

F. Billing Repair Data Requirements

1. Location
 - a. Show location
2. Quantity
 - a. Show 1 at all times
3. Condition Code
 - 1 = New
 - 2 = Secondhand
 - 3 = Reconditioned
 - 9 = Remove and replace same part
4. Job Code Applied
 - a. Show applicable code
5. Description
 - a. Show applicable description
6. Why Made Code (use only Why Made Codes shown for specific Job Codes)
 - 01 = Worn out
 - 02 = Broken
 - 03 = Missing
 - 05 = Bent
 - 07 = Obsolete material
 - 08 = Wrong (not standard to car)
 - 09 = Account repairs
 - 11 = Removed in good condition, account of associated repairs
 - 25 = Owner's request
 - 41 = Cracked

RULE 19 – YOKES, TYPE E

Editorially added

Why Made Code 07 to Job
Code 2312 COUPLER
YOKE, Y40 OR BY40



RULE 19

7. Job Code Removed
 - a. Show applicable code
8. Responsibility Code
 - 1 = Owner
 - 2 = Handling Line
 - 3 = Defect Card
9. Job Code and Standard Reporting Descriptions
 - a. Job Codes with * are material only Job Codes. To properly bill for labor, reference Section E.

Job Code	Description
*2312	COUPLER YOKE, Y40 OR BY40 For removal only. Labor charge to complete repair is to be made per Rule 19, Section E. One labor charge per draft pocket regardless of whether yoke is replaced separately, removed and replaced (R&R), or repairs made in conjunction with other draft pocket repairs. (Why Made Codes 01, 02, 03, 05, 07 , 08, 11, 25, 41)
*2313	COUPLER YOKE, Y40HT, BY40HT, OR CY40HT For removal only. Labor charge to complete repair is to be made per Rule 19, Section E. One labor charge per draft pocket regardless of whether yoke is replaced separately, removed and replaced (R&R), or repairs made in conjunction with other draft pocket repairs. (Why Made Codes 01, 02, 03, 05, 08, 11, 25, 41)
*2314	COUPLER YOKE, Y40AHT, OR Y40AC Material only Job Code. Labor charge to complete repair is to be made per Rule 19, Section E. One labor charge per draft pocket regardless of whether yoke is replaced separately, removed and replaced (R&R), or repairs made in conjunction with other draft pocket repairs. (Condition Codes 1, 2, 3) (Why Made Codes 01, 02, 03, 05, 08, 11, 25, 41)
*2315	COUPLER YOKE, Y40AHT, Y40AE, SY40AE, YS93AE, OR WMNY40AE Material only Job Code. Labor charge to complete repair is to be made per Rule 19, Section E. One labor charge per draft pocket regardless of whether yoke is replaced separately, removed and replaced (R&R), or repairs made in conjunction with other draft pocket repairs. (Condition Codes 1, 2, 3) (Why Made Codes 01, 02, 03, 05, 08, 25, 41)
*2317	COUPLER YOKE, Y41AHT OR Y41AC Material only Job Code. Labor charge to complete repair is to be made per Rule 19, Section E. One labor charge per draft pocket regardless of whether yoke is replaced separately, removed and replaced (R&R), or repairs made in conjunction with other draft pocket repairs. (Condition Codes 1, 2, 3) (Why Made Codes 01, 02, 03, 05, 08, 11, 25, 41)

RULE 19 – YOKES, TYPE E

Revised Job Code 4470 LABOR, DRAFT GEAR AND/OR YOKE

“The jacking procedure utilized to perform repairs safely will be determined by the repairing facility and/or repair force. Exception to choice of jacking procedure will not be allowed.”



RULE 19	
Job Code	Description
*2318	COUPLER YOKE, Y41AHE OR Y41AE Material only Job Code. Labor charge to complete repair is to be made per Rule 19, Section E. One labor charge per draft pocket regardless of whether yoke is replaced separately, removed and replaced (R&R), or repairs made in conjunction with other draft pocket repairs. (Condition Codes 1, 2, 3) (Why Made Codes 01, 02, 03, 05, 08, 25, 41)
2999	SEE RULE 72
4470	LABOR, DRAFT GEAR AND/OR YOKE Replacement or R&R of draft gear and/or yoke from draft pocket. Labor includes the removal and reapplication of draft gear carrier, removal and reapplication of draft gear/yoke assembly from the draft pocket, disassembly/reassembly of the draft gear and yoke assembly and all necessary securement. One labor charge per draft pocket regardless of whether component is replaced separately, removed and replaced (R&R), or repairs made in conjunction with other draft pocket repairs. All securement labor and material used to replace the draft system back into the draft pocket are included in Job Code 4470 and no additional charge will be allowed. Charge for replacement or R&R of coupler must be billed separately, per Section E of Rule 16, 17, or 18. Additional charge per Rule 75 may be made if jacking of car is necessary to safely accomplish repair. The jacking procedure utilized to perform repairs safely will be determined by the repairing facility and/or repair force. Material charges for component replacement must be billed separately using the Job Codes provided in Rule 19, 20, and/or 21. For replacement and/or repair of non-job coded items, material, labor or securement is to be billed per the applicable rule. Not to be used in conjunction with end-of-car cushioning yokes. See Rule 59.E.10. (Condition Codes 1, 9) (Why Made Codes 09, 25)

RULE 20 – YOKES, TYPE E/F AND F

Revised Rule 20.E.2.

“The jacking procedure utilized to perform repairs safely will be determined by the repairing facility and/or repair force. Exception to choice of jacking procedure will not be allowed.”



RULE 20

C. Recondition Requirements

1. Secondhand and reconditioned yokes must be in accordance with AAR Specification M-212 and work performed at facilities certified in accordance with this specification. Grade B cast steel yokes must not be reclaimed.
2. Yokes must be reconditioned in a facility that has a Quality Assurance Certification in accordance with AAR Specification M-1003.

D. Welding Requirements

1. No welding permitted except for reconditioning in accordance with AAR Specification M-212.

E. General Information

1. Refer to AAR Specification M-211 for yoke identification markings.
2. Labor to replace or remove and replace (R&R) draft gear and/or yoke is to be billed per Job Code 4470.

Labor includes the removal and reapplication of draft gear carrier, removal and reapplication of draft gear/yoke assembly from the draft pocket, disassembly/reassembly of the draft gear and yoke assembly and all necessary securement. One labor charge per draft pocket regardless of whether component is replaced separately, removed and replaced (R&R), or repairs made in conjunction with other draft pocket repairs. All securement labor and material used to replace the draft system back into the draft pocket are included in Job Code 4470 and no additional charge will be allowed.

Charge for replacement or R&R of coupler should be billed separately, per Section E of Rule 17 or 18.

Additional charge per Rule 75 may be made if jacking of car is necessary to safely accomplish repair. The jacking procedure utilized to perform repairs safely will be determined by the repairing facility and/or repair force. Exception to choice of jacking procedure will not be allowed.

Material charges for component replacement should be billed separately using the Job Codes provided in Rules 19, 20 and/or 21.

For replacement and/or repair of non-job coded items, material, labor or securement is to be billed per the applicable rule.

3. Any additional labor required to effect repairs and/or necessary attention to articulated equipment should be billed per Job Code 4460, Rule 75.
4. Any additional labor required to effect repairs and/or necessary attention to interconnected tank equipment should be billed per Job Code 4760, Rule 81.
5. Any additional labor required to effect repairs and/or necessary attention to draw bar connected equipment should be billed per Job Code 4462, Rule 75.

RULE 20 – YOKES, TYPE E/F AND F

Revised Rule 20.E.2.

“The jacking procedure utilized to perform repairs safely will be determined by the repairing facility and/or repair force. Exception to choice of jacking procedure will not be allowed.”



RULE 20

C. Recondition Requirements

1. Secondhand and reconditioned yokes must be in accordance with AAR Specification M-212 and work performed at facilities certified in accordance with this specification. Grade B cast steel yokes must not be reclaimed.
2. Yokes must be reconditioned in a facility that has a Quality Assurance Certification in accordance with AAR Specification M-1003.

D. Welding Requirements

1. No welding permitted except for reconditioning in accordance with AAR Specification M-212.

E. General Information

1. Refer to AAR Specification M-211 for yoke identification markings.
2. Labor to replace or remove and replace (R&R) draft gear and/or yoke is to be billed per Job Code 4470.

Labor includes the removal and reapplication of draft gear carrier, removal and reapplication of draft gear/yoke assembly from the draft pocket, disassembly/reassembly of the draft gear and yoke assembly and all necessary securement. One labor charge per draft pocket regardless of whether component is replaced separately, removed and replaced (R&R), or repairs made in conjunction with other draft pocket repairs. All securement labor and material used to replace the draft system back into the draft pocket are included in Job Code 4470 and no additional charge will be allowed.

Charge for replacement or R&R of coupler should be billed separately, per Section E of Rule 17 or 18.

Additional charge per Rule 75 may be made if jacking of car is necessary to safely accomplish repair. The jacking procedure utilized to perform repairs safely will be determined by the repairing facility and/or repair force. Exception to choice of jacking procedure will not be allowed.

Material charges for component replacement should be billed separately using the Job Codes provided in Rules 19, 20 and/or 21.

For replacement and/or repair of non-job coded items, material, labor or securement is to be billed per the applicable rule.

3. Any additional labor required to effect repairs and/or necessary attention to articulated equipment should be billed per Job Code 4460, Rule 75.
4. Any additional labor required to effect repairs and/or necessary attention to interconnected tank equipment should be billed per Job Code 4760, Rule 81.
5. Any additional labor required to effect repairs and/or necessary attention to draw bar connected equipment should be billed per Job Code 4462, Rule 75.

RULE 20 – YOKES, TYPE E/F AND F

Revised Job Code 4470 LABOR, DRAFT GEAR AND/OR YOKE

“The jacking procedure utilized to perform repairs safely will be determined by the repairing facility and/or repair force. Exception to choice of jacking procedure will not be allowed.”



RULE 20	
Job Code	Description
*2358	COUPLER YOKE, Y45HTE Material only job code. Labor charge to complete repair is to be made per Rule 20, Section E. One labor charge per draft pocket regardless of whether yoke is replaced separately, removed and replaced (R&R), or repairs made in conjunction with other draft pocket repairs. (Condition Codes 2) (Why Made Codes 01, 02, 03, 05, 08, 25, 41)
*2366	COUPLER YOKE, Y49HTE OR Y49AE Material only job code. Labor charge to complete repair is to be made per Rule 20, Section E. One labor charge per draft pocket regardless of whether yoke is replaced separately, removed and replaced (R&R), or repairs made in conjunction with other draft pocket repairs. (Condition Codes 1, 2, 3) (Why Made Codes 01, 02, 03, 05, 08, 25, 41)
2999	SEE RULE 72
4470	LABOR, DRAFT GEAR AND/OR YOKE Replacement or R&R of draft gear and/or yoke from draft pocket. Labor includes the removal and reapplication of draft gear carrier, removal and reapplication of draft gear/yoke assembly from the draft pocket, disassembly/reassembly of the draft gear and yoke assembly and all necessary securement. One labor charge per draft pocket regardless of whether component is replaced separately, removed and replaced (R&R), or repairs made in conjunction with other draft pocket repairs. All securement labor and material used to replace the draft system back into the draft pocket are included in Job Code 4470 and no additional charge will be allowed. Charge for replacement or R&R of coupler must be billed separately, per Section E of Rule 16, 17, or 18. Additional charge per Rule 75 may be made if jacking of car is necessary to safely accomplish repairs. The jacking procedure utilized to perform repairs safely will be determined by the repairing facility and/or repair force. Material charges for component replacement must be billed separately using the Job Codes provided in Rule 19, 20, and/or 21. For replacement and/or repair of non-job coded items, material, labor or securement is to be billed per the applicable rule. Not to be used in conjunction with end-of-car cushioning yokes when cushion unit is replaced at same location. See Rule 59. (Condition Codes 1,9) (Why Made Codes 09, 25)

RULE 21 – DRAFT GEARS, CARRIERS AND FOLLOWERS

Deleted A.1.c.3

(3) Worn more than $\frac{1}{8}$ inch at any location.

Added A.2.b

b. Followers

(1) Thickness worn more than $\frac{1}{8}$ inch at any location.



RULE 21 – DRAFT GEARS, CARRIERS AND FOLLOWERS

A. Wear Limits, Gaging, Cause for Renewal

1. Condemnable at Any Time

a. Draft Gear

- (1) Broken or split housings, housings with cracks of any length in critical areas, as shown in the following diagrams, or cracks 1 inch or longer anywhere in the housing. Cracks less than 1 inch in non-critical areas shall not be considered defects.
- (2) Broken or cracked yoke castings that are an integral part of the draft gear assembly, as shown in the following diagrams.
- (3) A bulge in the rear wall of housing more than $\frac{3}{16}$ inch.
- (4) Broken or cracked parts that bear on the follower at any time during the buff or draft stroke. Small chips are not defects.
- (5) Splitting or separation of rubber from metal plates as noted in the following diagrams (except Twin-Pack Systems Group Q and R).
- (6) Obvious heat or fire damage to rubber or rubber friction draft gears.
- (7) Draft gears with broken or missing external retaining bolt or rod only shall not be considered defective.
- (8) Missing.
- (9) Wrong (not standard to car).
- (10) Prohibited per Rule 90.

b. Carriers

- (1) Draft gear carrier cracked, broken, or worn more than 50% of the original thickness, wear plate missing or worn through.
- (2) Wrong (not standard to car).

c. Followers

- (1) Broken, bent $\frac{1}{2}$ inch or more, or missing.
- (2) Wrong (not standard to car).

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

a. Draft Gear

- (1) Installed draft gears with gear length less than specified in Section B, Correct Repairs, of this Rule.
- (2) Draft gears with loose friction components (except National NC-860 when not compressed).
- (3) When draft gear is removed in conjunction with other work, when defective or missing retaining bolts or rods are discovered.
- (4) Broken friction components that do not bear on the follower block, only if draft gear is removed for any other cause.

b. Followers

- (1) Thickness worn more than $\frac{1}{8}$ inch at any location.

RULE 21 – DRAFT GEARS, CARRIERS AND FOLLOWERS

Added

Qualifier 07 Stucki DynamIQ 742 to Group J



RULE 21					
Group H – M-901C, 4 ¾ Inches Travel, 36 Inch Pocket, Friction					
Removed	What Can Be Applied	Remarks			
Group H	Group H	Contact car owner for instructions.			
Qualifier	Group H Name and Type	AAR Spec.	Installed Length (inches)	Pocket Length (inches)	
*01	Cardwell Westinghouse Type Mark 80	M901C	33¾	36	
*02	Miner RF-75.....	M901C	33¾	36	
*No longer in production.					
Group I – (Vacant)					
Group J – M-901E, 3 ¼ Inches Travel, Standard Pocket					
Removed	What Can Be Applied	Remarks			
Group J	Group J Group K Group M Group N Group P Group Q Group R	Substitution of Groups K, P, Q, and R for Group J can be done only with car owner's permission			
Qualifier	Group J Name and Type	AAR Spec.	Installed Length (inches)	Pocket Length (inches)	
01	Cardwell Westinghouse Mark R500	M901E	22⅜	24⅝	
03	Miner RF 444	M901E	22⅜	24⅝	
*04	National NC-440	M901E	24⅝	24⅝	
*05	Dresser Inds., Waugh Type 650	M901E	24⅝	24⅝	
*06	Dresser Inds., Waugh Type 650-1	M901E	24⅝	24⅝	
07	Stucki DynamiQ 742	M901E	22⅜	24⅝	
*08	National NC-660	M901E	22⅜	24⅝	
*09	Dresser Inds., Waugh Type 735	M901E	22⅜	24⅝	
10	Cardwell Westinghouse Type Mark 50	M901E	22⅜	24⅝	
*11	National NC-550	M901E	22⅜	24⅝	
*12	National NC-440-1	M901E	24⅝	24⅝	
13	Miner SL-76	M901E	22⅜	24⅝	
14	Miner TF-880	M901E	22⅜	24⅝	
*15	Miner SF-79	M901E	22⅜	24⅝	
*16	Miner SF-81	M901E	22⅜	24⅝	
*17	National NC-660A	M901E	22⅜	24⅝	
18	Miner Crown SE	M901E	22⅜	24⅝	
*19	Cardwell Westinghouse Mark 325	M901E	22⅜	24⅝	
*20	Keystone XK-25	M901E	22⅜	24⅝	
21	Stucki PowRGuard XE	M901E	22⅜	24⅝	
22	Cardwell Westinghouse Mark 70E	M901E	22⅜	24⅝	

— 240 —

C-12031

RULE 21 – DRAFT GEARS, CARRIERS AND FOLLOWERS

Revised C.3

3. Draft gears reconditioned by a facility other than the original manufacturer must have an additional I.D. tag(s) **welded or riveted** to the housing showing the name of the facility doing the reconditioning.



RULE 21

Group R – M-901G, 3¼ Inches Travel, Standard Pocket, All Rubber, Non-Friction, Integral Yoke and Follower

Removed	What Can Be Applied	Remarks			
Group R	Group R Group Q Group K Group J	Substitution of Group Q, Group K or Group J for Group R can be done only with car owner's permission. When substituting Group J for Group R, verify compliance with car weight limitations of Section 3 of Rule 88 of AAR Office Manual. Bill per Rule 72.			
Qualifier	Group R Name and Type	AAR Spec.	Installed Length (inches)	Pocket Length (inches)	
*01	ASF-Keystone E-325G Twin-Pack Draft System	M901G	24⅝	24⅝	
02	ASF-Keystone F-325G Twin-Pack Draft System	M901G	24⅝	24⅝	
03	ASF-Keystone R-325G Twin-Pack Draft System	M901G	24⅝	24⅝	

*E-325G requires a special carrier plate. Contact car owner for instructions.

Group Z – Obsolete or Unidentifiable

Removed	What Can Be Applied	Remarks			
Group Z	Contact car owner for what can be applied	Bill per Rule 72.			
Qualifier	Group Z Name and Type	AAR Spec.	Installed Length (inches)	Pocket Length (inches)	
01	Obsolete (any name or type).....	Any	All	All	

C. Recondition Requirements

1. Draft gears must be reconditioned per AAR Specification M901B.
2. Draft gears must be reconditioned in a facility that has a Quality Assurance Certification in accordance with AAR Specification M-1003.
3. Draft gears reconditioned by a facility other than the original manufacturer must have an additional I.D. tag(s) **welded or riveted** to the housing showing the name of the facility doing the reconditioning.

— 244 —

C-11923

RULE 21 – DRAFT GEARS, CARRIERS AND FOLLOWERS

Revised D.1

1. Welding not permitted unless otherwise specified.



RULE 21		
Marking Identification of Reconditioned and Tested and Passed Stenciled Draft Gears		
Reconditioner's I.D. code or symbol shown on RTP Tag or paint stenciled on housing	Reconditioner's Non-OEM I.D. Tag	Reconditioner's Corporate Name
	KEYSTONE	Amsted Rail Company, Inc.
CN	CN TCONA	CN, Inc.
	CARDWELL	Cardwell Westinghouse Co. Wabtec Corporation
IDG	INDEPENDENT	A. Stucki Company
WHM	MINER	Miner Enterprises, Inc.
NS		Norfolk Southern Railway Co. Norfolk Southern Corp.
PRS	PROGRESS	Progress Rail Services, Inc.

D. Welding Requirements

1. Welding not permitted unless otherwise specified.

E. General Information

1. The standard 2¼ inch follower cannot be used with Mark 40 draft gears, inasmuch as this type gear requires ½ inch offset followers, Cardwell Westinghouse Co. Drawing F-948 with E couplers and Y48 with F couplers.
2. Gears not listed in Groups A to R shall be considered obsolete, except that approved for test draft gears may be replaced in kind on cars so stenciled.
3. Slab follower plates applied must have identification grooves or alternate stamp "E." Catalog No. Y44, Y44A, Y44HTE or Y44AE draft gear follower for use with rigid shank couplers:

(GROOVES OPTIONAL; SEE M-211 FIG A-8.)

Material per AAR Standard S-119 of the Manual of Standards and Recommended Practices (rolled version) or Specification M-211 (cast or forged version).

— 245 —

RULE 21 – DRAFT GEARS, CARRIERS AND FOLLOWERS

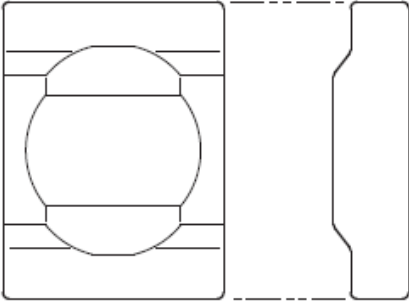
Revised E.7

“The jacking procedure utilized to perform repairs safely will be determined by the repairing facility and/or repair force. Exception to choice of jacking procedure will not be allowed.”



RULE 21

4. Catalog No. Y46HTE or Y46AE draft gear follower for vertical pin connection couplers:



Material per Specification M-211 of the AAR Manual of Standards and Recommended Practices.

5. Draft gears that are approved for test may be replaced in kind on cars so stenciled.

6. New draft gears must be manufactured in facilities that have received quality assurance certification in accordance with AAR Specification M-1003.

7. Labor to replace or remove and replace (R&R) draft gear and/or yoke is to be billed per Job Code 4470.

Labor includes the removal and reapplication of draft gear carrier, removal and reapplication of draft gear/yoke assembly from the draft pocket, disassembly/reassembly of the draft gear and yoke assembly and all necessary securement. One labor charge per draft pocket regardless of whether component is replaced separately, removed and replaced (R&R), or repairs made in conjunction with other draft pocket repairs. All securement labor and material used to replace the draft system back into the draft pocket are included in Job Code 4470 and no additional charge will be allowed.

Charge for replacement or R&R of coupler should be billed separately, per Rule 16, 17, or 18.

Additional charge per Rule 75 may be made if jacking of car is necessary to safely accomplish repairs. The jacking procedure utilized to perform repairs safely will be determined by the repairing facility and/or repair force. Exception to choice of jacking procedure will not be allowed.

Material charges for component replacement should be billed separately using the Job Codes provided in Rules 19, 20 and/or 21.

For replacement and/or repair of non-job coded items, material, labor or securement is to be billed per the applicable rule.

— 246 —

C-12041

RULE 21 – DRAFT GEARS, CARRIERS AND FOLLOWERS

Deleted Job Code 2428 for
low usage.

~~*2428~~

~~**~~

~~DRAFT GEAR, GROUP H~~

~~Material only Job Code. Labor charge to complete repair
is to be made per~~

~~Rule 21, Section E. One labor charge per draft pocket
regardless of whether~~

~~gear is replaced separately, removed and replaced
(R&R), or repairs made in~~

~~conjunction with other draft pocket repairs.~~

~~(Condition Codes 1, 2, 3)~~

~~(Why Made Codes 01, 02, 03, 08, 11, 12, 14, 25, 31, 41)~~



RULE 21 – DRAFT GEARS, CARRIERS AND FOLLOWERS

Revised Job code 4470

“The jacking procedure utilized to perform repairs safely will be determined by the repairing facility and/or repair force. Exception to choice of jacking procedure will not be allowed.”



RULE 21	
Job Code	Description
4470	<p>LABOR, DRAFT GEAR AND/OR YOKE</p> <p>Replacement or R&R of draft gear and/or yoke from draft pocket. Labor includes the removal and reapplication of draft gear carrier, removal and reapplication of draft gear/yoke assembly from the draft pocket, disassembly/reassembly of the draft gear and yoke assembly and all necessary securement. One labor charge per draft pocket regardless of whether component is replaced separately, removed and replaced (R&R), or repairs made in conjunction with other draft pocket repairs. All securement labor and material used to replace the draft system back into the draft pocket are included in Job Code 4470 and no additional charge will be allowed. Charge for replacement or R&R of coupler must be billed separately, per Section E of Rule 16, 17, or 18.</p> <p>Additional charge per Rule 75 may be made if jacking of car is necessary to safely accomplish repairs. The jacking procedure utilized to perform repairs safely will be determined by the repairing facility and/or repair force.</p> <p>Material charges for component replacement must be billed separately using the Job Codes provided in Rule 19, 20 and/or 21.</p> <p>For replacement and/or repair of non-job coded items, material, labor or securement is to be billed per the applicable rule.</p> <p>Not to be used in conjunction with end-of-car cushioning yokes when cushion unit is replaced at same location. See Rule 59.</p> <p>(Condition Codes 1, 9)</p> <p>(Why Made Codes 09, 25)</p>

RULE 36 – ROLLER BEARINGS

Editorially added

Group B5 to What Can Be Applied for group

RULE 36			
Group B3 – Bearings with Tapered Rollers (Rotating End Cap)			
Removed	What Can Be Applied	Remarks	
Group B3	Group B3		
Group B3	Group B Group B1 Group B2 Group B4 Group B5	Apply Group B, B1, B2, and B4 roller bearings only with car owner's permission. Exchange adapters if other than Group B3 or B5 is applied.	
Qualifier	Group B3 Manufacturer	Certificate Number	Description
01	Timken Company	27	6½ x 9
02	Brenco, Inc.	28	6½ x 9
03	SKF	30	6½ x 9
04	Brenco, Inc.	31	6½ x 9



RULE 36 – ROLLER BEARINGS

Deleted Job Code 2858 for low usage

~~2858 REMOVE CAP SCREW SEAL RINGS 1 WHEEL SET~~

~~Remove and reapply roller bearing end caps per Manual of Standards and Recommended Practices, Section G II. Includes two locking plates. Bill any additional material per Rule 72. All labor is included in the Job Code.~~

~~(Condition Code 7)~~

~~(Why Made Code 24)~~



RULE 37 – ROLLER BEARING ADAPTERS

Revised E.4

“The jacking procedure utilized to perform repairs safely will be determined by the repairing facility and/or repair force. Exception to choice of jacking procedure will not be allowed.”



RULE 37

3. For replacement of wrong size components within Job Codes 2870 or 2878, report Why Made Code 45. For replacement of wrong size components involving different job codes applied and removed, report Why Made Code 08.
4. Additional charge per Rule 75 may be made if jacking of car is necessary to safely accomplish repairs. The jacking procedure utilized to perform repairs safely will be determined by the repairing facility and/or repair force. Exception to choice of jacking procedure will not be allowed.
5. Any additional labor required to effect repairs and/or necessary attention to articulated equipment should be billed per Job Code 4460, Rule 75.
6. Any additional labor required to effect repairs and/or necessary attention to interconnected tank equipment should be billed per Job Code 4760, Rule 81.
7. Any additional labor required to effect repairs and/or necessary attention to draw bar connected equipment should be billed per Job Code 4462, Rule 75.

F. Billing Repair Data Requirements

1. Location
 - a. Show location
2. Quantity
 - a. Show 1 at all times
3. Condition Code
 - 1 = New
 - 2 = Second hand
4. Job Code Applied
 - a. Show applicable code
5. Description
 - a. Show applicable description
6. Why Made Code (use only Why Made Codes shown for specific Job Codes)
 - 01 = Worn out
 - 02 = Broken
 - 03 = Missing
 - 05 = Bent
 - 07 = Obsolete material
 - 08 = Wrong (not standard to car)
 - 11 = Removed in good condition, account of associated repairs
 - 25 = Owner's request
 - 33 = Derailment damage per Rule 95
 - 41 = Cracked
 - 45 = Wrong size component (applied when same job code is removed and applied)

RULE 41 – WHEELS

Editorially added

“A-28 and A-30 wheels” to
fourth paragraph in **A.1.I**



RULE 41

- I. Thermal cracks are transverse cracks running parallel to the axle and are formed from thermal expansion and contraction around the wheel circumference.

Heat checks appear as a fine network of superficial lines that are not consistently straight or parallel to the axle. This condition should not be confused with thermal cracking and is not cause for wheel removal.

Thermal cracks do not tend to appear in tight, uniform groups like heat checks. Thermal cracks are sometimes associated with overhanging brake shoes, tread bluing, or burnt-in brake heads but can be formed without any of these other conditions being present. WM68 (rim cracked or broken) or WM83 (wheel with cracked or broken plate only) must not be used when thermal cracks are present. If thermal cracks are present and extend into the plate, use WM69.

A thermal crack in any region of any wheel is condemnable if it is $\frac{1}{2}$ inch or longer in length. A thermal crack in any region of a straight plate wheel is condemnable at a length of $\frac{1}{4}$ inch or longer for **A-28 and A-30 wheels**.



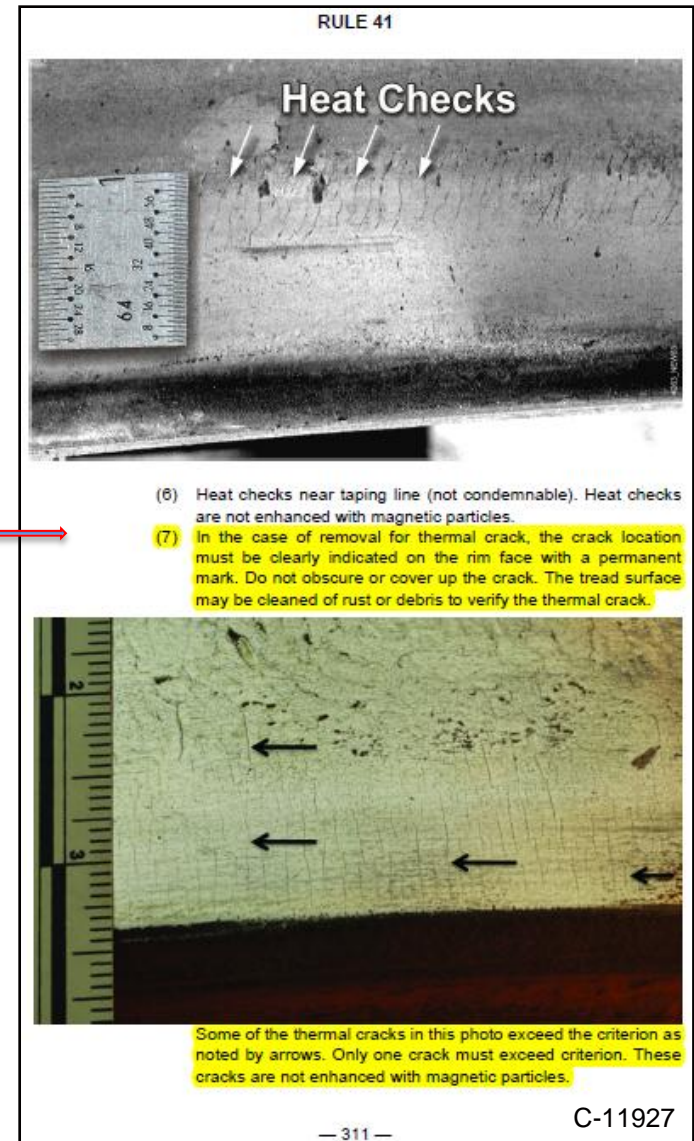
- (1) Thermal crack in flange—Why Made Code 74. Cracks are enhanced with magnetic particles to improve image.

RULE 41 – WHEELS

Added Notes and New Figure 7

(7) In the case of removal for thermal crack, the crack location must be clearly indicated on the rim face with a permanent mark. Do not obscure or cover up the crack. The tread surface may be cleaned of rust or debris to verify the thermal crack.

Some of the thermal cracks in this photo exceed the criterion as noted by arrows. Only one crack must exceed criterion. These cracks are not enhanced with magnetic particles.



RULE 41 – WHEELS

Added New A.41.A.1.y and z.

- y. Wheel tread worn hollow 5 mm or greater as measured by an AAR-approved gage. Wheels removed for this condition are not to be stenciled scrap as referenced in Rule 41.E.8.c.
- z. All CH-36 or CJ-36, one-wear, two-wear, 100-ton wheels as identified by the marks “SO,” ABEX (Southern).



RULE 41



Example 3: Condemnable for WM80 impacted scrape, dent or gouge and use of gage to measure depth

- v. Subsurface defect (Why Made 89). A wheel is condemnable whenever it has a subsurface defect in the rim that is deeper than $\frac{3}{8}$ inch from the tread and provides an ultrasonic indication larger than 50% of a $\frac{1}{8}$ inch diameter flat-bottomed hole at an equivalent depth. The location and depth of the subsurface defect must be clearly marked with paint on the outer surface of the wheel plate. Wheel removals may be performed under this criteria at locations where personnel are trained and equipped in accordance with MSRP, Section G-II for ultrasonic inspection of wheels in service.
 - w. Straight plate wheels, except A-28 and A-30.
 - x. Any Southern 36 inch one wear or two wear wheel that meets one or more of the following early removal defect criteria:
 - $\frac{15}{16}$ ths or less rim thickness
 - Tread shelling more or less continuous around the circumference of the wheel
 - 3 mm or more hollow tread
 - An indicated wheel impact load detector (WILD) impact with a ratio >3 or a dynamic >30 kips or a peak impact >70 kips
- Report wheel removal using Why Made Code 70.
- y. Wheel tread worn hollow 5 mm or greater as measured by an AAR-approved gage. Wheels removed for this condition are not to be stenciled scrap as referenced in Rule 41.E.8.c.
 - z. All CH-36 or CJ-36, one-wear, two-wear, 100-ton wheels as identified by the marks “SO,” ABEX (Southern).

C-11931
C-12036

— 316 —

RULE 41 – WHEELS

Deleted A.2.e.

- e. All CH-36 or CJ-36, one-wear, two-wear, 100-ton wheels as identified by the marks “SO,” ABEX (Southern).



RULE 41 – WHEELS

Revised A.2.f

- f. CH-36 or CJ-36 design wheels with 6 1/2 x 12 journals which have all the following identification markings—refer to the appropriate **Early Warning** for handling instructions:
- (1) Manufacturer GT, and cast dates from Jan 1998 (01 98) to Feb 2001 (02 01).
 - (2) Wheel mounting information = CN PU from Apr 1998 (04 98) to Feb 2001 (02 01) or is otherwise illegible.
 - (3) This rule also applies on any “expedite tracks” or similar track where wheelsets are changed.



RULE 41

2. Condemnable When Car Is on Shop or Repair Track for Any Reason
- a. All wrought steel wheels that can be identified as being manufactured by ARMCO.
 - b. Wrought steel one-wear 28 inch wheels with any of the following:
 - (1) Of B-28, D-28 or X-14 design as indicated by markings on wheels.
 - (2) No design markings.
 - (3) Illegible design markings.
 - c. Wrought steel wheels having rims measuring 1 inch or less and having no manufactured date or illegible manufactured date markings on wheels.
 - d. Cars may not have hollow-worn wheel indication greater than 4 millimeter, as measured by an AAR approved gage. Wheels removed for this condition are not to be stenciled SCRAP as referenced in Rule 41.E.8.c.
 - e. Detected by a Wheel Impact Load Detector reading from 80 kips to less than 90 kips for a single wheel. The detector used must have been calibrated per Appendix F. The detector must reliably measure peak impact and must provide a printable record of such measurements. Device calibration records must be maintained. Wheels with condemnable slid flat spots are handling line responsibility and must not be billed otherwise. This will be considered an Opportunistic Repair for the repairing party. Wheels removed for this condition are not to be stenciled SCRAP as referenced in Rule 41.E.8.c.
 - f. CH-36 or CJ-36 design wheels with 6 1/2 x 12 journals which have all the following identification markings—refer to the appropriate Early Warning for handling instructions:
 - (1) Manufacturer GT, and cast dates from Jan 1998 (01 98) to Feb 2001 (02 01).
 - (2) Wheel mounting information = CN PU from Apr 1998 (04 98) to Feb 2001 (02 01) or is otherwise illegible.
 - (3) This rule also applies on any “expedite tracks” or similar track where wheelsets are changed.

RULE 41 – WHEELS

Editorially revised Group G Qualifier 22.

“22 Any 36-inch wheels as identified by the marks “SO” ABEX (Southern)”



RULE 41		
Group G – Wheels – Obsolete		
Removed	What Can Be Applied	Remarks
Group G	Groups A-1, A-2 Groups B-1, B-2 Groups C-1, C-2 Groups D-1, D-2 Groups E-1, E-2 Groups J-1, J-2 Groups K-1, K-2 Groups L-1, L-2 Groups M-1, M-2 Groups N-1, N-2 Groups Q-1, R-1, S-1, T-1, U-1	Wheels applied must have at least the minimum rim thickness specified for the group applied and standard full narrow flange thickness. The applied and removed wheels must be of the same diameter.
	Qualifier	Group G Identification
	01	Davis Cast Steel
	02	AAR X-2 Cast Steel
	03	Southern dated prior to May 7, 1958, Cast Steel
	04	Griffin 70-ton, 3-riser ball rim design, Cast Steel
	05	AAR X-4 Cast Steel
	06	Wheels manufactured prior to 1-1-27, Wrot Steel Griffin Cast Steel two-wear, three-riser (marked CS-2), manufactured 1960-1963
	07	AAR X-5 Cast Steel
	08	Southern one-wear, 70-ton, manufactured 5-7-58 through 12-31-63, Cast Steel
	09	Southern one-wear, 70-ton marked "U1" manufactured 1-1-64 through 12-31-69, Cast Steel
	10	All Cast Iron Wheels
	11	B-28 or X-14 Wrot Steel
	12	1-Wear Wrot Steel 28 inch wheels without design designation
	13	D-28 Wrot Steel
	14	28 inch ARMCO Wheels
	15	33 inch ARMCO Wheels
	16	36 inch ARMCO Wheels
	17	38 inch ARMCO Wheels
	18	Straight-plate wheels
	19	Valdunes, Creusot-Loire non-heat-treated, 36-inch, straight-plate wheels marked "F" or "FW" manufactured in 1980 and 1981
	20	Mafersa or Edgewater wheels, 33-inch or 36-inch, manufactured in 1995-1998, and without legible UT stencil
	21	Any 36-inch wheels as identified by the marks "SO" ABEX (Southern)
	22	

RULE 41 – WHEELS

Added New A.41.A.1.y and z.

4. The Standard Steel Wheel Gage must not be used for condemning wheels due to thin flange. Wheel Defect Gage No. 34401 or 34401A or **alternate standard** is reserved for this purpose.



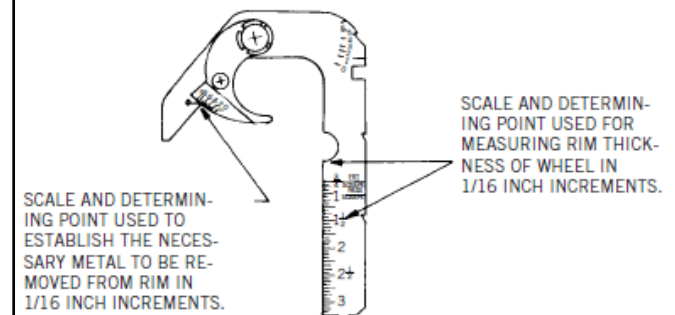
RULE 41

C. Recondition and Rim Thickness Gaging Requirements

1. Repairs must be performed in wheel and/or axle shops, approved in accordance with the Introduction to the AAR *Manual of Standards and Recommended Practices (MSRP)*, Section GII (Wheel and Axle Manual).
2. Wheels must be processed (including mounting) in a facility that has a Quality Assurance Certification in accordance with AAR Specification M-1003. All material found to be rejected must have an M-1003, QA-7.1 Nonconforming Report prepared and submitted to the AAR.
3. The AAR Standard Steel Wheel gage or other AAR approved alternate standard shall be used to determine rim and flange thickness before and after turning.

This Section is designed as a medium for instruction and use of the AAR Standard Steel Wheel gage.

STANDARD STEEL WHEEL GAGE



The gage illustrated above must not be used for Groups F and G wheels.

4. The Standard Steel Wheel Gage must not be used for condemning wheels due to thin flange. Wheel Defect Gage No. 34401 or 34401A or **alternate standard** is reserved for this purpose.

RULE 41 – WHEELS

Deleted existing E.14.

14. Thermal or heat checks are often caused by brake shoe heating and appear as a fine network of superficial lines and checks running in all directions on the surface of the wheel tread. This condition should not be confused with thermal cracking and is not cause for wheel removal.



RULE 41

7. Why Made Code 23 Government regulatory requirement (to be used only when removing wheels for defects covered by government regulatory requirements, not otherwise specified by the AAR Interchange Rules).
8. Stenciling of scrap wheels.
All wheels removed under the following conditions must be immediately stenciled in one inch letters "SCRAP" on the inside of the wheel plate of both wheels, and be scrapped at the wheel shop:
 - a. Wheels prohibited in interchange.
 - b. Wheels removed for Why Made Code 23, 70, or 89.
 - c. Wheels condemnable per 41.A.2.
 - d. Straight-plate wheels, except A-28 and A-30, removed from service for any wheelset defect.
9. When wheel sets are changed, car initial and number, Why Made Code and repair date must be applied to the wheel sets with crayon, or alternate method approved by AAR. To apply for approval of an alternate method, see the AAR *Manual of Standards and Recommended Practices*.
10. An AAR Form MD-115 report must be submitted via the AAR Web site (<http://md115.aar.com/>) within 15 days of wheel removal for each wheel removed for Why Made Codes: 66, 68, 69, 71 and 83. Wheels must be retained for 45 days. The report must contain an attachment of a digital photograph of the failed wheel fracture surface.
11. Shelled wheels removed for government regulatory conditions that are different than those in this rule will be billed as Why Made 75.
12. All stored wheelsets must be positioned to prevent contact with roller bearings and adjacent axes.
13. Mafersa and Edgewater wheels with legible but obscure or faint UT stencils, must have the stencil reapplied. The UT stencil must be white, 1 1/2 inch minimum height, and on the front plate.
14. Thermal or heat checks are often caused by brake shoe heating and appear as a fine network of superficial lines and checks running in all directions on the surface of the wheel tread. This condition should not be confused with thermal cracking and is not cause for wheel removal.
15. The responsible party will be notified through the Equipment Health Management System (EHMS) when a wheel is detected by a wheel impact load detector reading 85 kips or greater for a single wheel. This will be considered the Window of Opportunity for the responsible party. The detector used must have been calibrated per manufacturer's instructions. The detector must reliably measure peak impacts and must provide a printable record of such measurements. Device calibration records must be maintained. Wheels with condemnable slid flat spots are handling line responsibility and must not be billed otherwise. See Office Manual Rule 94.
16. When a wheel has a combination of high impact and other condemnable defects, report the Why Made Code for the other condemnable defect.

RULE 41 – WHEELS

Added new E.14

14. Section B straight plate wheel Correct Repair Charts except for A28 and A30 are maintained in this rule for removal identification purpose only. Wheel sets identified in these charts should be billed per Group G—Wheels—Obsolete.



RULE 41	
7.	Why Made Code 23 Government regulatory requirement (to be used only when removing wheels for defects covered by government regulatory requirements, not otherwise specified by the AAR Interchange Rules).
8.	Stenciling of scrap wheels. All wheels removed under the following conditions must be immediately stenciled in one inch letters "SCRAP" on the inside of the wheel plate of both wheels, and be scrapped at the wheel shop: a. Wheels prohibited in interchange. b. Wheels removed for Why Made Code 23, 70, or 89. c. Wheels condemnable per 41.A.2. d. Straight-plate wheels, except A-28 and A-30, removed from service for any wheelset defect.
9.	When wheel sets are changed, car initial and number, Why Made Code and repair date must be applied to the wheel sets with crayon, or alternate method approved by AAR. To apply for approval of an alternate method, see the <i>AAR Manual of Standards and Recommended Practices</i> .
10.	An AAR Form MD-115 report must be submitted via the AAR Web site (http://md115.aar.com/) within 15 days of wheel removal for each wheel removed for Why Made Codes: 66, 68, 69, 71 and 83. Wheels must be retained for 45 days. The report must contain an attachment of a digital photograph of the failed wheel fracture surface.
11.	Shelled wheels removed for government regulatory conditions that are different than those in this rule will be billed as Why Made 75.
12.	All stored wheelsets must be positioned to prevent contact with roller bearings and adjacent axles.
13.	Mafersa and Edgewater wheels with legible but obscure or faint UT stencils, must have the stencil reapplied. The UT stencil must be white, 1 1/2 inch minimum height, and on the front plate.
14.	Section B straight plate wheel Correct Repair Charts except for A28 and A30 are maintained in this rule for removal identification purpose only. Wheel sets identified in these charts should be billed per Group G—Wheels—Obsolete.
15.	The responsible party will be notified through the Equipment Health Management System (EHMS) when a wheel is detected by a wheel impact load detector reading 65 kips or greater for a single wheel. This will be considered the Window of Opportunity for the responsible party. The detector used must have been calibrated per manufacturer's instructions. The detector must reliably measure peak impacts and must provide a printable record of such measurements. Device calibration records must be maintained. Wheels with condemnable slid flat spots are handling line responsibility and must not be billed otherwise. See Office Manual Rule 94.
16.	When a wheel has a combination of high impact and other condemnable defects, report the Why Made Code for the other condemnable defect.

RULE 44 – WHEEL SETS

Editorially revised E.8 – Added several Job Codes

8. Refer to Rule 36.E.10 for identification requirements for Job Codes 3344, 3345, 3346, 3347, 3348, 3349, 3350, **3352, 3353, 3354, 3362, 3374, 3376, 3377, and 3379.**



RULE 44

E. General Information

1. Condition codes as shown in this rule pertain to the material condition of the roller bearings and axles.
2. See Rules 38, 41 and 43 for additional applicable Job Codes, removed and applied, which must be reported.
3. A new wheel set is one placed in service for the first time since the newly manufactured wheel plates were mounted.
4. A turned wheel set is one removed from service and subsequently processed at an AAR approved wheel shop or facility with roller bearing mounting certification (Status Code 9).
5. Wheels applied must be narrow full flange contour.
6. See Figure B — This is an example of the required wheel billing data as stated in Section F of Rules 38, 41, 43, and 44.
7. When any component of the wheel set is determined to be handling line or defect card responsibility, that wheel set will be billed as handling line or defect card responsibility, whichever is applicable.
8. Refer to Rule 36.E.10 for identification requirements for Job Codes 3344, 3345, 3346, 3347, 3348, 3349, 3350, **3352, 3353, 3354, 3362, 3374, 3376, 3377, and 3379.**
9. Additional charge per Rule 75 may be made if jacking of car is necessary to safely accomplish repairs. The jacking procedure utilized to perform repairs safely will be determined by the repairing facility and/or repair force. Exception to choice of jacking procedure will not be allowed.
10. Any additional labor required to effect repairs and/or necessary attention to articulated equipment should be billed per Job Code 4460, Rule 75.
11. Any additional labor required to effect repairs and/or necessary attention to interconnected tank equipment should be billed per Job Code 4760, Rule 81.
12. Any additional labor required to effect repairs and/or necessary attention to draw bar connected equipment should be billed per Job Code 4462, Rule 75.

RULE 44 – WHEEL SETS

Revised E.9.

“The jacking procedure utilized to perform repairs safely will be determined by the repairing facility and/or repair force. Exception to choice of jacking procedure will not be allowed.”



RULE 44

E. General Information

1. Condition codes as shown in this rule pertain to the material condition of the roller bearings and axles.
2. See Rules 36, 41 and 43 for additional applicable Job Codes, removed and applied, which must be reported.
3. A new wheel set is one placed in service for the first time since the newly manufactured wheel plates were mounted.
4. A turned wheel set is one removed from service and subsequently processed at an AAR approved wheel shop or facility with roller bearing mounting certification (Status Code 9).
5. Wheels applied must be narrow full flange contour.
6. See Figure B — This is an example of the required wheel billing data as stated in Section F of Rules 36, 41, 43, and 44.
7. When any component of the wheel set is determined to be handling line or defect card responsibility, that wheel set will be billed as handling line or defect card responsibility, whichever is applicable.
8. Refer to Rule 36.E.10 for identification requirements for Job Codes 3344, 3345, 3346, 3347, 3348, 3349, 3350, 3352, 3353, 3354, 3362, 3374, 3376, 3377, and 3379.
9. Additional charge per Rule 75 may be made if jacking of car is necessary to safely accomplish repairs. The jacking procedure utilized to perform repairs safely will be determined by the repairing facility and/or repair force. Exception to choice of jacking procedure will not be allowed.
10. Any additional labor required to effect repairs and/or necessary attention to articulated equipment should be billed per Job Code 4460, Rule 75.
11. Any additional labor required to effect repairs and/or necessary attention to interconnected tank equipment should be billed per Job Code 4760, Rule 81.
12. Any additional labor required to effect repairs and/or necessary attention to draw bar connected equipment should be billed per Job Code 4462, Rule 75.

RULE 44 – WHEEL SETS

Editorially Revised Billing
Repair Card.

Corrected Why Made 90 to
Why Made Code 11



RULE 44

ASSOCIATION OF AMERICAN RAILROADS - BILLING REPAIR CARD

REPAIRING PARTY <u>ABCR</u>		REPAIRING PARTY INVOICE NO. _____		DOCUMENT REFERENCE NO. _____	
CAR INITIAL <u>ACCR</u>	CAR NUMBER <u>654321</u>	KIND OF CAR <u>B</u>	LOAD/EMPTY <u>E</u>		
REPAIR DATE <u>09/13/11</u>	SPLC <u>999999</u>	REPAIR FACILITY TYPE <u>RT</u>	DEFECT CARD DATE _____		
	DETAIL SOURCE <u>BR</u>	DEFECT CARD PARTY _____			

Location on Car	QTY	CC	Job Code App	GPR	Description of Repair Made	Component Tag ID	Wheel Reporting Information										Why Made Code Rmvd	Job Code Rmvd	GPR Resp Code	Net Charge									
							APPLIED WHEEL		REMOVED WHEEL		APPLIED WHEEL										REMOVED WHEEL								
							MO	YR	MFR	CLS	Slde	Frg	MO	YR	MFR	CLS	Slde	Frg											
R1	1	7	3021	02	Wheel, 33 inch, 1W HF-CSP		08	10	SW	B	23	00	04	99	JW	B	16	08	60	3031	02	1							
L1	1	7	3021	02	Wheel, 33 inch, 1W HF-CSP		08	10	SW	B	23	00	04	99	JW	B	16	08	60	3031	02	1							
R1	1	1	2814	01	Roller Bearing, 6 x 11														11	2814	03	1							
L1	1	1	2814	01	Roller Bearing, 6 x 11														11	2814	03	1							
1	1	1	3274		Axle - RW5, 6 X 11 inch														11	3274		1							
1	1	1	3333		New Wheel Set, 33 inch	ABCD1234567890													09	3333		1							
R2	1	7	3021	02	Wheel, 33 inch, 1W HF-CSP		08	10	GC	B	23	00	04	99	JW	B	16	08	60	3031	02	1							
L2	1	7	3021	02	Wheel, 33 inch, 1W HF-CSP		08	10	GC	B	23	00	04	99	JW	B	16	08	60	3031	02	1							
R2	1	3	2814	03	Roller Bearing, 6 x 11														11	2814	03	1							
L2	1	3	2814	03	Roller Bearing, 6 x 11														11	2814	03	1							
2	1	2	3274		Axle - RW5, 6 X 11 inch														11	3274		1							
2	1	3	3333		New Wheel Set, 33 inch	ABCD1234567891													09	3333		1							
R3	1	7	3021	02	Wheel, 33 inch, 1W HF-CSP		08	10	SW	B	23	00	04	99	JW	B	16	08	60	3031	02	1							
L3	1	7	3021	02	Wheel, 33 inch, 1W HF-CSP		08	10	SW	B	23	00	04	99	JW	B	16	08	60	3031	02	1							
L3	1	1	2814	01	Roller Bearing, 6 x 11														11	2814	03	1							
3	1	3	3274		Axle - RW5, 6 X 11 inch														11	3274		1							
3	1	4	3333		New Wheel Set, 33 inch	ABCD1234567892													09	3333		1							
R4	1	7	3021	02	Wheel, 33 inch, 1W HF-CSP		08	10	GC	B	23	00	04	99	JW	B	16	08	60	3031	02	1							
L4	1	7	3021	02	Wheel, 33 inch, 1W HF-CSP		08	10	GC	B	23	00	04	99	JW	B	16	08	60	3031	02	1							
R4	1	3	2814	03	Roller Bearing, 6 x 11														11	2814	03	1							
L4	1	3	2814	03	Roller Bearing, 6 x 11														11	2814	03	1							
4	1	1	3274		Axle - RW5, 6 X 11 inch														11	3274		1							
4	1	5	3333		New Wheel Set, 33 inch	ABCD1234567893													09	3333		1							
																	TOTAL												

FIGURE B

RULE 44 – WHEEL SETS

Added Condition Code:

2 = Wheel set transfer, any size

Added Why Made Code:

25 = Owner's request

Added F.10.b

b. Show assigned AAR Component ID for the transferred wheel set.



RULE 44	
F. Billing Repair Data Requirements	
1. Location	a. Show location for each wheel set
2. Quantity	a. Show 1 at all times
3. Condition Code	1 = Wheel set with new roller bearings and new axle 2 = Wheel set transfer, any size 3 = Wheel set with reconditioned roller bearings and reconditioned/secondhand axle 4 = Wheel set with new roller bearings and reconditioned/secondhand axle 5 = Wheel set with reconditioned roller bearings and new axle
4. Job Code Applied	a. Show applicable code
5. Description	a. Show applicable description
6. Why Made Code	09 = Account repairs 25 = Owner's request
7. Job Code Removed	a. Show same Job Code as applied. This also applies for Why Made Code 08.
8. Responsibility Code	1 = Owner 2 = Handling Line 3 = Defect Card
9. Job Codes and Standard Reporting Descriptions	a. Job Codes for individual wheel sets cover all material and labor to apply at the car, except as noted in Section E of this Rule. See Rules 36, 41 and 43 for additional reporting information.
10. AAR Component ID	a. Show assigned AAR Component ID for the applied wheel set. b. Show assigned AAR Component ID for the transferred wheel set.

RULE 44 – WHEEL SETS

Added New Job Code 3399

3399 WHEEL SET TRANSFER, ANY SIZE 2 wheel plates, 1 axle, and 2 roller bearings. This Job Code is to bill for a transfer of any size wheel set on a car to a different location on the same car or the transfer of any wheel set from one car to a location on an entirely different car per Rule 36.E.

(Condition Code 2)

(Why Made Code 25)

RULE 44	
Job Code	Description
3399	WHEEL SET TRANSFER, ANY SIZE 2 wheel plates, 1 axle, and 2 roller bearings. This Job Code is to bill for a transfer of any size wheel set on a car to a different location on the same car or the transfer of any wheel set from one car to a location on an entirely different car per Rule 36.E. (Condition Code 2) (Why Made Code 25)
6999	To be used only when there is no specific Job Code for a component that requires the reporting of an AAR Component ID. Report car part identification code "FN" for applied wheel set and report the applicable location.
RULE 45 – VACANT	
— 366 —	
C-12043	



RULE 46 – TRUCK SYSTEM PERFORMANCE

Added new
ASC 17823 Friction Wedge



RULE 46			
Table 2			
Approved M-976 Truck Systems			
Truck Design	Motion Control	Ridemaster	Barber S-2-E
Outer Load Springs	(7) D5	(7) D5	(7) D-5
Inner Load Springs	(5) D5	(5) D5	(5) D-5
Inner Inner Load Springs	—	—	—
Outer Stabilizing Spring	(2) 5062	(2) 5062	(2) B-380
Inner Stabilizing Spring	(2) 5063	(2) 5063	(2) B-361
Inner Inner Stabilizing Spring	—	—	(2) D-6-A
Friction Wedge	ASF PN 17882 SCT 17882	ASF PN 17882 ASC 17823	SCT PN 917 or SCT PN 917-C
Adapter Pads	ASF 1771 Adapter with 10601 Pad*	ASF 1771 Adapter with 10454 Pad	AAR Standard with SCT 5578 Pad
	SCT S2-86 6366 Adapter with S2-86 6367 Pad	—	SCT S2-86 6366 Adapter with S2-86 6367 Pad
	—	—	NSC Steel RB Adapter with respective pad

*Cars built with Motion Control trucks prior to January 1, 2008, had ASF 10454 adapter pads applied when built new. These trucks may continue in service with the ASF 10454 pads or may be converted by car owner authority to the ASF 10601 pads.

Truck Design	Barber S-2-D	Barber S-2-D
Outer Load Springs	(7) D-5	(7) D-5
Inner Load Springs	(4) D-5	(4) D-5
Inner Inner Load Springs	—	—
Outer Stabilizing Spring	(2) B-701	(2) B-701
Inner Stabilizing Spring	(2) B-702	(2) B-702
Inner Inner Stabilizing Spring	(2) D-6-A	(2) D-6-A
Friction Wedge	SCT PN 935-SW	SCT PN 907-SW
Adapter Pads	AAR Standard Adapter with SCT 5578 Pad	AAR Standard Adapter with SCT 5578 Pad
	SCT S2-86 6366 Adapter with S2-86 6367 Pad	SCT S2-86 6366 Adapter with S2-86 6367 Pad
	NSC Steel RB Adapter with respective Pad	—

— 386 —

RULE 46 – TRUCK SYSTEM PERFORMANCE

Added new components to
Approved M-976
Nevis 1174

Approved S-286
ASC-17815



RULE 46		
Table 2 (continued)		
Approved M-976 Truck Systems (continued)		
Truck Design	Barber S-2-HD	Barber S-2-HD-9C
Outer Load Springs	(8) D-5	(7) D-5
Inner Load Springs	(7) D-8	(7) D-5
Inner Inner Load Springs	(4) D-8-A	—
Outer Stabilizing Spring	(2) B-353	(2) B-353
Inner Stabilizing Spring	(2) B-354	(2) B-354
Inner Inner Stabilizing Spring	—	—
Friction Wedge	SCT PN 915-SW	SCT PN 915-SW
	ASC 915-SW	ASC 915-SW
	Consolequip QSW-15	Consolequip QSW-15
	Pennsy 1705 (RH) 1708 (LH) Nevis 1174	Pennsy 1705 (RH) 1708 (LH) Nevis 1174
Adapter Pads	AAR Standard Adapter with SCT 5578 Pad	AAR Standard Adapter with SCT 5578 Pad
	ASF1771 Adapter with 10454 Pad	ASF1771 Adapter with 10454 Pad
	SCT S2-88 6386 Adapter with S2-88 6387 Pad	SCT S2-88 6386 Adapter with S2-88 6387 Pad
	NSC Steel RB Adapter with respective Pad	NSC Steel RB Adapter with respective Pad
Approved S-286 Truck Systems		
Approved Car Types	Open Top Cars with C.G. Less than 95" and Covered Hopper Cars with 45'-9" Truck Centers and C.G. Less than 95.5"	Open Top Cars with C.G. Less than 95"
Truck Design	Barber S-2-E	Super Service Ride Control S-286
Outer Load Springs	(7) D5	(8) D7
Inner Load Springs	(7) D5	(5) D7
Inner Inner Load Springs	—	—
Outer Stabilizing Spring	(2) B-353	(2) 2167
Inner Stabilizing Spring	(2) B-354	(2) 2168
Inner Inner Stabilizing Spring	—	—
Friction Wedge	SCT PN 945-SW	ASC PN 17815 ASC-17815
Adapter Pads	AAR Standard Adapter with SCT 5578 Pad	ASF1771 Adapter with 10454 Pad
	SCT S2-88 6386 Adapter with S2-88 6387 Pad	—

— 387 —

C-12032

RULE 46 – TRUCK SYSTEM PERFORMANCE

Revised E.6.

“The jacking procedure utilized to perform repairs safely will be determined by the repairing facility and/or repair force. Exception to choice of jacking procedure will not be allowed.”



RULE 46	
C. Recondition Requirements	
1. See Rules 47, 48, 50 and 60.	
D. Welding Requirements	
1. See Rules 47, 48, 60	
E. General Information	
1. When car is on a shop or repair track and body is raised off trucks for any reason, irrespective of responsibility, the center bowl must be cleaned of all loose rust scale and debris. Except for bowls with non-metallic liners, center bowls requiring lubrication must be lubricated with one of the following:	
a. Permanent type liners, which will properly lubricate the center bowl as approved by the Equipment Engineering Committee.	
b. Lubricants of other types must be approved by the AAR Committee on Wheels, Axles, Bearings, and Lubrication prior to application to cars in interchange.	
2. Loose fasteners should be repaired in accordance with Rules 74 and 82.	
3. Disposition from owner must be obtained for cars with a truck exceeding condemning limits detected by a hunting detector. The car owner is to be advised that home shop disposition is for exceeding the truck hunting index. Use DDCT Incident Type Rule 1 for truck hunting to request shop disposition from owner.	
4. The responsible party will be notified through the Equipment Health Management System (EHMS) when a truck is detected by a truck hunting detector that has one salient systems truck hunting absolute value greater than or equal to 0.20. This will be considered the window of opportunity for the responsible party when the car is in home shop. Inspect for defects per Rule 46.A.1, 46.A.2, and Rule 62.	
5. Disposition from owner must be obtained for cars with a truck exceeding condemning limits detected by a truck performance detector. The car owner is to be advised that home shop disposition is for exceeding the truck performance criteria. Use DDCT Incident Type Rule 1 for truck performance to request shop disposition from owner.	
6. Additional charge per Rule 75 may be made if jacking of car is necessary to safely accomplish repairs. The jacking procedure utilized to perform repairs safely will be determined by the repairing facility and/or repair force. Exception to choice of jacking procedure will not be allowed.	
7. Any additional labor required to effect repairs and/or necessary attention to articulated equipment should be billed per Job Code 4480, Rule 75.	
8. Any additional labor required to effect repairs and/or necessary attention to interconnected tank equipment should be billed per Job Code 4760, Rule 81.	
9. Any additional labor to effect repairs and/or necessary attention to draw bar connected equipment should be billed per Job Code 4462, Rule 75.	

RULE 47 – TRUCK BOLSTERS

Corrected Standard Referenced

- d. Replacement of vertical wear liners or repair of existing vertical wear liner welds. Vertical liners must be replaced in kind. Replacement liners must meet the requirements of **AAR Standard S-307** (or other material approved by the AAR).



RULE 47

- j. When car is on shop or repair track and body is raised off trucks for any reason, irrespective of responsibility, the center bowl must be cleaned of all loose rust, scale and debris and, except for bowls with non-metallic liners, center bowls requiring lubrication must be lubricated with one of the following:
- (1) Permanent type liners which will properly lubricate the center bowl as approved by the Equipment Engineering Committee.
 - (2) Lubricants of other types must be approved by the AAR Committee on Wheels, Axles, Bearings and Lubrication prior to application to cars in interchange.

B. Correct Repairs

1. A replacement truck bolster must have a matching AAR 9-digit code. For cases where the code cannot be matched, see MSRP S-392 for design features for suitable substitution.
2. The following truck bolsters must not be applied:
 - a. Not having AAR identification marks or pattern numbers.
 - b. Over 30 years based on date cast unless application is by authority of car owners for use on their own cars.
3. Truck bolsters arranged for "wide land" bolster rotation stops are not interchangeable with bolsters incorporating the standard rotation lug.
4. Welding is permitted only in the lined areas of Figure B.
5. Whenever bolsters are removed from the car for other than field repairs, the work must be done in full compliance with Specification M-214. The following field repairs may be performed:
 - a. Repair or replacement of gibs.
 - b. Replacement of cast integral horizontal lever support.
 - c. Repair of cracks in bowl rims, provided the cracks do not extend below the top horizontal surface of the adjacent bolster body.
 - d. Replacement of vertical wear liners or repair of existing vertical wear liner welds. Vertical liners must be replaced in kind. Replacement liners must meet the requirements of **AAR Standard S-307** (or other material approved by the AAR).
 - e. Replacement of pocket wear plates and inserts. Repair of existing pocket wear plate or insert welds. If pocket was not originally equipped with wear plates, they may not be applied. Sloped pockets may not be restored.
 - f. Side bearing cages may be secured by welding if originally secured by welding.
 - g. Repair of cracked or broken cast integral cages. Removal or replacement of cast integral cages is not considered a field repair.
6. Figure C shows suggested method for application of new gibs, replacement wear plates, and cast integral horizontal lever support.
7. Loose securements should be repaired in accordance with Rules 74 and 82.

RULE 47 – TRUCK BOLSTERS

Added new B.10

10. Effective January 1, 2014, all bolster replacements/transfers must be reported by the repairing party along with the applied bolster AAR Component ID to Railinc (see Office Manual Rule 93). Reporting should be within 24 hours of the repair event. The AAR Component ID can be found on the bolster tag or may be obtained from Railinc for any bolster produced after July 2013. For any bolster being transferred or for bolsters produced prior to July 2013, the AAR Component ID may be generated/acquired by performing a field registration at <http://www.railinc.com>.



RULE 47



8. Application of replacement shims, horizontal wear liners, and full bowl liners (metallic and non-metallic).

- a. Replace liners with in kind material
- b. If the top surface of bolster bowl rim has insufficient clearance or the vertical bearing surface (engagement) is less than 1 1/8 inch per Rule 46, or the side bearing height cannot be otherwise adjusted per Rule 62, then the following repairs can be made:
 - (1) For 70 ton bolsters—apply no more than two steel shims, liners, or combination thereof per truck.
 - (2) For 100 ton or more capacity bolsters—apply no more than two liners per truck.

9. The following bolsters are prohibited on tank cars with commodity or residue of inhalation hazard as identified with placards shown below or stenciled with "Inhalation Hazard" on the side of the tank car. In addition, for all cars, the following bolsters do not qualify for secondhand application or for M-214 reconditioning.

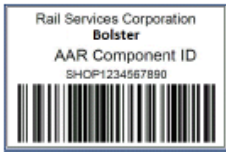
Columbus Steel Castings patterns with dates between 11-03 and 7-04:

B-10769
B-10884
B-10773
B-10763
B-10767
B-10762
B-10675



10. Effective January 1, 2014, all bolster replacements/transfers must be reported by the repairing party along with the applied bolster AAR Component ID to Railinc (see Office Manual Rule 93). Reporting should be within 24 hours of the repair event. The AAR Component ID can be found on the bolster tag or may be obtained from Railinc for any bolster produced after July 2013. For any bolster being transferred or for bolsters produced prior to July 2013, the AAR Component ID may be generated/acquired by performing a field registration at <http://www.railinc.com>.

FIGURE A SAMPLE IMAGE OF BOLSTER BAR CODE TAG



— 394 —

C-11955

RULE 47 – TRUCK BOLSTERS

Added new E.9

9. An AAR Form MD-500 Report must be submitted via the AAR Web site (<http://md500.aar.com>) within 15 days of bolster removal for each bolster removed for Why Made Codes 02 and 41.



RULE 47

7. For replacement of wrong size components within Job Code 3520, report Why Made Code 45. For replacement of wrong size components involving different job codes applied and removed, report Why Made Code 08.
 8. New truck bolsters must be manufactured in a facility that is certified in accordance with AAR Specification M-210 and Quality Assurance Certified in accordance with AAR Specification M-1003.
 9. An AAR Form MD-500 Report must be submitted via the AAR Web site (<http://md500.aar.com>) within 15 days of bolster removal for each bolster removed for Why Made Codes 02 and 41. The report must contain an attachment of a digital photograph of the reported bolster fracture.
 10. Additional charge per Rule 75 may be made if jacking of car is necessary to safely accomplish repairs. The jacking procedure utilized to perform repairs safely will be determined by the repairing facility and/or repair force. Exception to choice of jacking procedure will not be allowed.
 11. Any additional labor required to effect repairs and/or necessary attention to articulated equipment should be billed per Job Code 4480, Rule 75.
 12. Any additional labor required to effect repairs and/or necessary attention to interconnected tank equipment should be billed per Job Code 4760, Rule 81.
 13. Any additional labor to effect repairs and/or necessary attention to draw bar connected equipment should be billed per Job Code 4462, Rule 75.
- F. Billing Repair Data Requirements**
1. Location
 - a. Show location
 2. Quantity
 - a. Show quantity
 3. Condition Code
 - 0 = Labor attention
 - 1 = New
 - 2 = Secondhand
 - 3 = Reconditioned
 - 9 = Remove and replace same part—not applicable. Report when vertical wear liner is repaired and not renewed.
 4. Job Code Applied
 - a. Show applicable code
 5. Description
 - a. Show applicable description
 6. Why Made Code (use only Why Made Codes shown for specific Job Codes)
 - 01 = Worn out
 - 02 = Broken
 - 03 = Missing
 - 04 = Defective
 - 05 = Bent

RULE 47 – TRUCK BOLSTERS

Revised E.10.

“The jacking procedure utilized to perform repairs safely will be determined by the repairing facility and/or repair force. Exception to choice of jacking procedure will not be allowed.”



RULE 47	
7.	For replacement of wrong size components within Job Code 3520, report Why Made Code 45. For replacement of wrong size components involving different job codes applied and removed, report Why Made Code 08.
8.	New truck bolsters must be manufactured in a facility that is certified in accordance with AAR Specification M-210 and Quality Assurance Certified in accordance with AAR Specification M-1003.
9.	An AAR Form MD-500 Report must be submitted via the AAR Web site (http://md500.aar.com) within 15 days of bolster removal for each bolster removed for Why Made Codes 02 and 41. The report must contain an attachment of a digital photograph of the reported bolster fracture.
10.	Additional charge per Rule 75 may be made if jacking of car is necessary to safely accomplish repairs. The jacking procedure utilized to perform repairs safely will be determined by the repairing facility and/or repair force. Exception to choice of jacking procedure will not be allowed.
11.	Any additional labor required to effect repairs and/or necessary attention to articulated equipment should be billed per Job Code 4460, Rule 75.
12.	Any additional labor required to effect repairs and/or necessary attention to interconnected tank equipment should be billed per Job Code 4760, Rule 81.
13.	Any additional labor to effect repairs and/or necessary attention to draw bar connected equipment should be billed per Job Code 4462, Rule 75.
F. Billing Repair Data Requirements	
1.	Location a. Show location
2.	Quantity a. Show quantity
3.	Condition Code 0 = Labor attention 1 = New 2 = Secondhand 3 = Reconditioned 9 = Remove and replace same part—not applicable. Report when vertical wear liner is repaired and not renewed.
4.	Job Code Applied a. Show applicable code
5.	Description a. Show applicable description
6.	Why Made Code (use only Why Made Codes shown for specific Job Codes) 01 = Worn out 02 = Broken 03 = Missing 04 = Defective 05 = Bent

RULE 47 – TRUCK BOLSTERS

Added new F.10

10. AAR Component ID
 - a. Effective January 1, 2014, show assigned AAR component ID for the applied bolster.

RULE 47

- 06 = Bent beyond repairs
- 07 = Obsolete material
- 08 = Wrong (not standard to car)
- 11 = Removed in good condition account of associated repairs
- 19 = Adjust clearance
- 24 = Attention required
- 25 = Owner's request
- 29 = Broken outside of bolster ring area
- 31 = Fire or heat damage per Rule 95
- 41 = Cracked
- 45 = Wrong size component (applies when same job code is removed and applied)
- 7. Job Code Removed
 - a. Show applicable code
- 8. Responsibility Code
 - 1 = Owner
 - 2 = Handling Line
 - 3 = Defect Card
- 9. Job Codes and Standard Reporting Descriptions
 - a. Not applied at any time, including all necessary labor and material to complete the operation, regardless of whether work is performed separately or in connection with any other repair, except as applicable per Section E of this Rule.

10. AAR Component ID
 - a. Effective January 1, 2014, show assigned AAR component ID for the applied bolster.

Job Code	Description
3520	TRUCK BOLSTER—70 TON Cast steel, stabilized. Grade B or High Tensile steel. (Condition Codes 1, 2, 3) (Why Made Codes 01, 02, 03, 05, 06, 08, 25, 29, 41, 45)
3524	TRUCK BOLSTER—100 TON Cast steel, stabilized. Grade B or High Tensile steel. (Condition Codes 1, 2, 3) (Why Made Codes 01, 02, 03, 05, 06, 08, 25, 29, 41)
3528	TRUCK BOLSTER—125 TON Cast steel, stabilized. Grade B or High Tensile steel. (Condition Codes 1, 2, 3) (Why Made Codes 01, 02, 03, 05, 06, 08, 25, 29, 41)



RULE 47 – TRUCK BOLSTERS

Added Job Code

6999 Effective January 1, 2014, to be used only when there is no specific Job Code for a component that requires the reporting of an AAR component ID. Report car part identification code “FF” for applied bolster, and report applicable location.

Editorially corrected Car Part Code FJ to FF

RULE 47	
Job Code	Description
3571	FULL BOWL LINER—METALLIC Per Section E. Per end of car. Must be used on 100 ton or more capacity cars. Use Condition Code 0 when liner is removed. (Condition Code 0, 1) (Why Made Codes 01, 02, 03, 04, 05, 06, 08, 19, 25)
3772	TRUCK SIDE FRAME/BOLSTER FRICTION CASTING WEAR PLATE—RIDE CONTROL Any capacity or size applied to either side frame or bolster location, report repairs per side frame location with a maximum of 4 per location. Truck must be dismantled to the extent necessary to effect repair in order to obtain charge. (Condition Code 1) (Why Made Codes 01, 02, 03, 08, 45)
3774	TRUCK SIDE FRAME/BOLSTER FRICTION CASTING WEAR PLATE—STABILIZED Any capacity or size applied to either side frame or bolster location, report repairs per side frame location with a maximum of 4 per location. Truck must be dismantled to the extent necessary to effect proper repair in order to obtain charge. (Condition Code 1) (Why Made Codes 01, 02, 03, 08, 45)
4466	LABOR, ACCESS TRUCK SIDE FRAME WEAR PLATE To be used only when attention is required to friction casting wear plate securement. Bill securement per Rule 74 and/or Rule 82. Not applicable in conjunction with renewal of friction castings, friction casting wear plates, truck bolster, or truck side frame at same location. (Condition Code 0) (Why Made Code 24)
3999	SEE RULE 72.
6999	Effective January 1, 2014, to be used only when there is no specific Job Code for a component that requires the reporting of an AAR component ID. Report car part identification code “FF” for applied bolster, and report applicable location.



RULE 48 – TRUCK SIDE FRAMES, TRANSOMS AND SPRING PLANKS

Added new A.1.e.

- e. Clip-on-type pedestal roof liner broken such that it no longer provides a full bearing surface for the bearing adapter crown to rest against.



RULE 48 – TRUCK SIDE FRAMES, TRANSOMS AND SPRING PLANKS

A. Wear Limits, Gaging, Cause For Renewal or Attention

1. Condemnable at Any Time
 - a. Prohibited per Rule 90.
 - b. Broken, cracked, missing, bent, wrong size.
 - c. Worn or corroded more than 25% in any section of the side frame, except on specific areas mentioned elsewhere in Section A of this rule.
 - d. Weld-on pedestal roof liners missing or broken.
 - e. Clip-on-type pedestal roof liner broken such that it no longer provides a full bearing surface for the bearing adapter crown to rest against.
 - f. Unit brake beam guide bracket broken, bent, or worn such that the brake beam end extensions cannot move freely.
 - g. Spring plank or transom with welding that is not of original construction weld.
 - h. Truck side frame friction casting wear plate missing, broken, loose, or worn through.
2. Condemnable When on Shop or Repair Track for Any Reason
 - a. Truck side frame friction casting wear plates with 1/8 inch or more of wear in any area.
 - b. Empty load sensor contact plate broken, cracked, or missing (as indicated by the presence of weld remnants in the application area).
3. Condemnable as Noted in the Item
 - a. Clip-on-type pedestal roof liners (on cars so equipped) when the car is jacked at that truck location for any other reason, missing, broken, or cracked.
 - b. Pedestal roof, when the wheel set is removed at that location for any other reason, if gage EC-1200 rocks or contacts roof at the center as shown in Figure A.

RULE 48 – TRUCK SIDE FRAMES, TRANSOMS AND SPRING PLANKS

Revised A.3.b.

- b. Pedestal roof, when the wheel set is removed at that location for any other reason, if gage EC-1200 rocks or contacts roof at the center as shown in Figure A.



RULE 48 – TRUCK SIDE FRAMES, TRANSOMS AND SPRING PLANKS

A. Wear Limits, Gaging, Cause For Renewal or Attention

1. Condemnable at Any Time
 - a. Prohibited per Rule 90.
 - b. Broken, cracked, missing, bent, wrong size.
 - c. Worn or corroded more than 25% in any section of the side frame, except on specific areas mentioned elsewhere in Section A of this rule.
 - d. Weld-on pedestal roof liners missing or broken.
 - e. Clip-on-type pedestal roof liner broken such that it no longer provides a full bearing surface for the bearing adapter crown to rest against.
 - f. Unit brake beam guide bracket broken, bent, or worn such that the brake beam end extensions cannot move freely.
 - g. Spring plank or transom with welding that is not of original construction weld.
 - h. Truck side frame friction casting wear plate missing, broken, loose, or worn through.
2. Condemnable When on Shop or Repair Track for Any Reason
 - a. Truck side frame friction casting wear plates with 1/8 inch or more of wear in any area.
 - b. Empty load sensor contact plate broken, cracked, or missing (as indicated by the presence of weld remnants in the application area).
3. Condemnable as Noted in the Item
 - a. Clip-on-type pedestal roof liners (on cars so equipped) when the car is jacked at that truck location for any other reason, missing, broken, or cracked.
 - b. Pedestal roof, when the wheel set is removed at that location for any other reason, if gage EC-1200 rocks or contacts roof at the center as shown in Figure A.

RULE 48 – TRUCK SIDE FRAMES, TRANSOMS AND SPRING PLANKS

Added new B.9

9. Effective January 1, 2014, all bolster replacements/transfers must be reported by the repairing party along with the applied bolster AAR Component ID to Railinc (see Office Manual Rule 93). Reporting should be within 24 hours of the repair event. The AAR Component ID can be found on the bolster tag or may be obtained from Railinc for any bolster produced after July 2013. For any bolster being transferred or for bolsters produced prior to July 2013, the AAR Component ID may be generated/acquired by performing a field registration at <http://www.railinc.com>.



RULE 48

9. Effective January 1, 2014, all side frame replacements/transfers must be reported by the repairing party along with the applied side frame AAR Component ID to Railinc (see Office Manual Rule 93). Reporting should be within 24 hours of the repair event. The AAR Component ID can be found on the side frame tag or may be obtained from Railinc for any side frame produced after July 2013. For any side frame being transferred or for side frames produced prior to July 2013, the AAR Component ID may be generated/acquired by performing a field registration at <http://www.railinc.com>.

FIGURE B SAMPLE IMAGE OF SIDE FRAME BAR CODE TAG


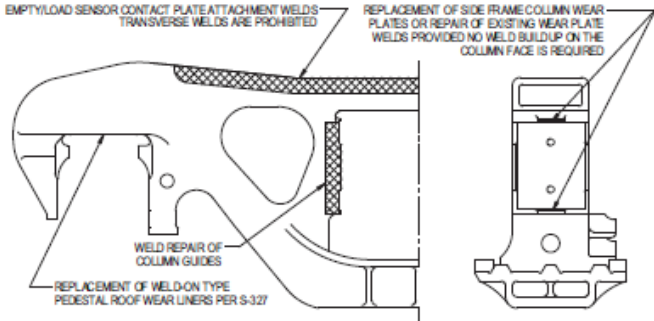


FIGURE C



C. Recondition Requirements

1. Truck side frames must be classified and/or reconditioned in a facility that is certified in accordance with AAR Specifications M-214 and M-1003.
2. Reconditioning of spring planks and transoms is prohibited.

D. Welding Requirements

1. All welding must be in accordance with Rule 82.
2. See AAR Specification M-214 for truck side frame welding.

C-11955

— 405 —

RULE 48 – TRUCK SIDE FRAMES, TRANSOMS AND SPRING PLANKS

Add new E.8

8. An AAR Form MD-500 Report must be submitted via the AAR Web site (<http://md500.aar.com>) within 15 days of side frame removal for each side frame removed for Why Made Codes 02 and 41. The report must contain an attachment of a digital photograph of the reported side frame fracture.



RULE 48	
E. General Information	
1.	Owner is responsible for roller bearing, side frame or bolster damage due to a failed transom or spring plank.
2.	Owner is responsible for side frame damage caused by failure of truck bolster.
3.	New, reconditioned, or secondhand truck side frames used in repairs must have accumulation of dirt, paint, rust, and scale removed. Side frames may be coated with light-bodied paint that will not prevent detection of flaws or cracks in ordinary inspection.
4.	Permissible field repairs performed per Section B.6 of this rule must not be billed as secondhand or reconditioned side frames.
5.	Spring planks or transoms removed for improper weld must be reported using WM 08, Wrong—Not Standard to Car and billed per Rule 72.
6.	For replacement of wrong size components within Job Code 3720, report Why Made Code 45. For replacement of wrong size components involving different job codes applied and removed, report Why Made Code 08.
7.	New truck side frames must be manufactured in a facility that is certified in accordance with AAR Specification M-210 and Quality Assurance Certified in accordance with AAR Specification M-1003.
8.	An AAR Form MD-500 Report must be submitted via the AAR Web site (http://md500.aar.com) within 15 days of side frame removal for each side frame removed for Why Made Codes 02 and 41. The report must contain an attachment of a digital photograph of the reported side frame fracture.
9.	Additional charge per Rule 75 may be made if jacking of car is necessary to safely accomplish repairs. The jacking procedure utilized to perform repairs safely will be determined by the repairing facility and/or repair force. Exception to choice of jacking procedure will not be allowed.
10.	Any additional labor required to effect repairs and/or necessary attention to articulated equipment should be billed per Rule 75, Job Code 4460.
11.	Any additional labor required to effect repairs and/or necessary attention to draw-bar-connected equipment should be billed per Rule 75, Job Code 4462.
12.	Any additional labor required to effect repairs and/or necessary attention to interconnected tank equipment should be billed per Rule 81, Job Code 4760.
F. Billing Repair Data Requirements	
1.	Location
a.	Show location
2.	Quantity
a.	Show quantity
3.	Condition Code
	0 = Labor attention
	1 = New
	2 = Secondhand

RULE 48 – TRUCK SIDE FRAMES, TRANSOMS AND SPRING PLANKS

Revised E.9.

“The jacking procedure utilized to perform repairs safely will be determined by the repairing facility and/or repair force. Exception to choice of jacking procedure will not be allowed.”



RULE 48	
E. General Information	
1.	Owner is responsible for roller bearing, side frame or bolster damage due to a failed transom or spring plank.
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4.	Permissible field repairs performed per Section B.6 of this rule must not be billed as secondhand or reconditioned side frames.
5.	Spring planks or transoms removed for improper weld must be reported using WM 08, Wrong—Not Standard to Car and billed per Rule 72.
6.	For replacement of wrong size components within Job Code 3720, report Why Made Code 45. For replacement of wrong size components involving different job codes applied and removed, report Why Made Code 08.
7.	New truck side frames must be manufactured in a facility that is certified in accordance with AAR Specification M-210 and Quality Assurance Certified in accordance with AAR Specification M-1003.
8.	An AAR Form MD-500 Report must be submitted via the AAR Web site (http://md500.aar.com) within 15 days of side frame removal for each side frame removed for Why Made Codes 02 and 41. The report must contain an attachment of a digital photograph of the reported side frame fracture.
9.	Additional charge per Rule 75 may be made if jacking of car is necessary to safely accomplish repairs. The jacking procedure utilized to perform repairs safely will be determined by the repairing facility and/or repair force. Exception to choice of jacking procedure will not be allowed.
10.	Any additional labor required to effect repairs and/or necessary attention to articulated equipment should be billed per Rule 75, Job Code 4480.
11.	Any additional labor required to effect repairs and/or necessary attention to draw-bar-connected equipment should be billed per Rule 75, Job Code 4482.
12.	Any additional labor required to effect repairs and/or necessary attention to interconnected tank equipment should be billed per Rule 81, Job Code 4780.
F. Billing Repair Data Requirements	
1.	Location
a.	Show location
2.	Quantity
a.	Show quantity
3.	Condition Code
	0 = Labor attention
	1 = New
	2 = Secondhand

RULE 48 – TRUCK SIDE FRAMES, TRANSOMS AND SPRING PLANKS

Added new F.10

10. AAR Component ID
 - a. Effective January 1, 2014, show assigned AAR component ID for the applied bolster.



RULE 48	
3 = Reconditioned	
8 = Remove, repair and replace same part	
4. Job Code Applied	
a. Show applicable code	
5. Description	
a. Show applicable description	
6. Why Made Code (use only Why Made Codes shown for specific Job Codes)	
01 = Worn out	
02 = Broken	
03 = Missing	
05 = Bent	
06 = Bent beyond repair	
07 = Obsolete material	
08 = Wrong (not standard to car)	
24 = Attention required	
25 = Owner's request	
41 = Cracked	
45 = Wrong size component (applies when same job code is removed and applied)	
7. Job Code Removed	
a. Show applicable code	
8. Responsibility Code	
1 = Owner	
2 = Handling Line	
3 = Defect Card	
9. Job Codes and Standard Reporting Descriptions	
a. Net applied at any time, including all necessary labor and material to complete the operation, regardless of whether work is performed separately or in connection with any other repair, except as applicable per Section E of this Rule.	
10. AAR Component ID	
a. Effective January 1, 2014, show assigned AAR component ID for the applied side frame.	

RULE 48 – TRUCK SIDE FRAMES, TRANSOMS AND SPRING PLANKS

Added Job Code 6999

6999 Effective January 1, 2014, to be used only when there is no specific Job Code for a component that requires the reporting of an AAR component ID. Report car part identification code “FJ” for applied side frame, and report applicable location.



RULE 48	
Job Code	Description
4488	LABOR, ACCESS TRUCK SIDE FRAME WEAR PLATE To be used only when attention is required to friction casting wear plate securement. Bill securement per Rule 74 and/or Rule 82. Not applicable in conjunction with renewal of friction castings, friction casting wear plates, truck bolster, or truck side frame at same location. (Condition Code 0) (Why Made Code 24)
3999	SEE RULE 72
6999	Effective January 1, 2014, to be used only when there is no specific Job Code for a component that requires the reporting of an AAR component ID. Report car part identification code "FJ" for applied side frame, and report applicable location.
RULE 49 – VACANT	
— 409 —	
C-11955	

RULE 50 – TRUCK SPRINGS, (COIL, ELLIPTIC, SNUBBERS AND PACKAGE)

Editorially Revised D.1

D. Welding Requirements

1. Welding not permitted unless otherwise specified.

RULE 50

D. Welding Requirements

1. Welding not permitted unless otherwise specified.

E. General Information

1. Secondhand coil truck springs applied to cars in interchange service must not have permanent set exceeding $\frac{1}{4}$ inch below the new nominal free height. If springs are to be shot peened, measurement for condemning free height must be made prior to shot peening.
2. No charge permitted for repositioning truck springs, shims or snubbers out of place, loaded or empty car. Do not report on billing repair data.
3. Cars equipped with springs having $2\frac{1}{2}$ inch or greater travel must be stenciled on ends of car with one of the following AAR designations:

SPRG D-3

SPRG D-4

SPRG D-5

SPRG D-7

Where special spring group is used appropriate stencil should be applied to indicate grouping. (For example, SPRG 7 OC D-4 and 3 IC D-5.) Where not possible to stencil on ends, stencil may be applied on side at diagonal corners.

4. Cars equipped with unit or other supplemental snubber devices must be stenciled in accordance with Section L of the AAR Manual of Standards and Recommended Practices.
5. Additional charge per Rule 75, except as provided for in Rule 67.8, may be made if jacking of car is necessary to safely accomplish repairs. The jacking procedure utilized to perform repairs safely will be determined by the repairing facility and/or repair force. Exception to choice of jacking procedure will not be allowed.

TRUCK SPRING IDENTIFICATION TABLE

Diameter (inches)	New Nominal Free Height (inches)	Spring Travel (inches)
$3\frac{1}{4}$ $5\frac{1}{2}$	AAR-D3 $9\frac{1}{16}$ $9\frac{1}{16}$	$2\frac{1}{2}$ $2\frac{1}{2}$
	AAR-D4 $9\frac{5}{8}$ $9\frac{5}{8}$	$3\frac{1}{16}$ $3\frac{1}{16}$
$3\frac{3}{8}$ $5\frac{1}{2}$	AAR-D5 $10\frac{5}{16}$ $10\frac{1}{2}$	$3\frac{3}{4}$ $3\frac{11}{16}$
	AAR-D6 $9\frac{15}{16}$	$3\frac{3}{8}$
$3\frac{7}{16}$	AAR-D6A Ø	$3\frac{5}{16}$
$3\frac{1}{2}$ $5\frac{1}{2}$	AAR-D7 $10\frac{3}{4}$ $10\frac{13}{16}$	$4\frac{3}{16}$ $4\frac{1}{4}$



RULE 50 – TRUCK SPRINGS, (COIL, ELLIPTIC, SNUBBERS AND PACKAGE)

Revised E.5.

“The jacking procedure utilized to perform repairs safely will be determined by the repairing facility and/or repair force. Exception to choice of jacking procedure will not be allowed.”



RULE 50

D. Welding Requirements

1. Welding not permitted unless otherwise specified.

E. General Information

1. Secondhand coil truck springs applied to cars in interchange service must not have permanent set exceeding $\frac{1}{4}$ inch below the new nominal free height. If springs are to be shot peened, measurement for condemning free height must be made prior to shot peening.
2. No charge permitted for repositioning truck springs, shims or snubbers out of place, loaded or empty car. Do not report on billing repair data.
3. Cars equipped with springs having $2\frac{1}{2}$ inch or greater travel must be stenciled on ends of car with one of the following AAR designations:

SPRG D-3

SPRG D-4

SPRG D-5

SPRG D-7

Where special spring group is used appropriate stencil should be applied to indicate grouping. (For example, SPRG 7 OC D-4 and 3 IC D-5.) Where not possible to stencil on ends, stencil may be applied on side at diagonal corners.

4. Cars equipped with unit or other supplemental snubber devices must be stenciled in accordance with Section L of the AAR Manual of Standards and Recommended Practices.
5. Additional charge per Rule 75, except as provided for in Rule 67.8, may be made if jacking of car is necessary to safely accomplish repairs. The jacking procedure utilized to perform repairs safely will be determined by the repairing facility and/or repair force. Exception to choice of jacking procedure will not be allowed.

TRUCK SPRING IDENTIFICATION TABLE

Diameter (inches)	New Nominal Free Height (inches)	Spring Travel (inches)
$3\frac{1}{4}$ $5\frac{1}{2}$	AAR-D3 $9\frac{1}{16}$ $9\frac{1}{16}$	$2\frac{1}{2}$ $2\frac{1}{2}$
$3\frac{3}{8}$ $5\frac{1}{2}$	AAR-D4 $9\frac{5}{8}$ $9\frac{5}{8}$	$3\frac{1}{16}$ $3\frac{1}{16}$
$3\frac{3}{8}$ $5\frac{1}{2}$	AAR-D5 $10\frac{5}{16}$ $10\frac{1}{4}$	$3\frac{3}{4}$ $3\frac{11}{16}$
$3\frac{7}{16}$	AAR-D6 $9\frac{15}{16}$	$3\frac{3}{8}$
2	AAR-D6A 9	$3\frac{5}{16}$
$3\frac{1}{2}$ $5\frac{1}{2}$	AAR-D7 $10\frac{3}{4}$ $10\frac{13}{16}$	$4\frac{3}{16}$ $4\frac{1}{4}$

RULE 53 – RUNNING BOARDS—DOME PLATFORMS —BRAKE STEPS— CROSSOVER PLATFORMS

Added new approved products

Group No. 1—Steel

Wabash National Running Boards—2 inch
Wabash National running boards—1 5/8 inch
Graepel Perforation—Graepel Open
Stucki de Mexico, 473S Running Board
Stucki de Mexico, 508S Running Board
Stucki de Mexico, 486S Brake Step
Graepel Perforation – Graepel Open
Stucki de Mexico
DFW Grating Inc.
Group No. 1- Fiberglass
DFW Grating Inc. Fiberglass Running Board (2 inch)

Group No. 2—Steel

Wabash National Running Boards—2 inch
Wabash National running boards—1 5/8 inch
Graepel Perforation—Graepel Open
Stucki de Mexico, 474S Running Board
Stucki de Mexico, 510S End Platform

Group No. 3—Steel

Stucki de Mexico, 509S Running Board



RULE 53 – RUNNING BOARDS—DOME PLATFORMS—BRAKE STEPS— CROSSOVER PLATFORMS

A. Wear Limits, Gaging, Cause For Renewal

1. a. Broken, bent, missing, metal deterioration. Galvanized metal discoloration due to heat is not considered deterioration and cause for renewal.
- b. Improperly located or applied

B. Correct Repairs

CORRECT REPAIR CHART—DOME PLATFORM AND RUNNING BOARD

Removed	What Can Be Applied	Remarks
Metal Plate Type	Metal Plate Type	None
Metal Grate Type	Metal Grate Type	None
Fiberglass Grate Type	Fiberglass Grate Type	None

1. Material listed below has been approved by the Equipment Engineering Committee for conformity to AAR Specifications as to width, clear opening, deflection under load and non-skid features and may be renewed in kind or substituted for each other when used as specified providing metal plate type, metal grating type and fiberglass grating type running boards are not intermixed.

- a. Group No. 1—Steel—unsupported span not to exceed 4 feet
 - American Grating Special Grating, 1, 2, 3
 - *Apex Tri-Lok, Type A Assembled Type Grating
 - Apex Tri-Lok, Type A-1 Assembled Type Grating
 - Apex Type "S" Perforated Plate Type
 - Apex Type "SL" Perforated Plate Type
 - ARI, Sure Tread Grating
 - *Canadian Gypsum Grip Strut Safety Plate
 - DFW Grating Inc. Diamond Plate Type Running Board
 - DFW Grating Inc. Round Hole Safety Plank Running Board (2 inch)
 - DFW Grating Inc. Round Hole Safety Plank (1 1/2 inch)
 - Fisher and Ludlow—Deck Span Plank Special Grating
 - Fisher and Ludlow Flowforge, Type FBR Grating
 - Fisher and Ludlow 8 inch "Shur Grip" End Platform, Perforated Plate Type.
 - Fisher and Ludlow 24 inch "Shur Grip" Running Board, Perforated Plate Type.
 - Cooper B-Line Inc. Grip Strut Safety Plate
 - Cooper B-Line Inc. Perf-O-Grip Safety Plate
 - IKG Borden Weldforged Grating Type WRR-BBC
 - IKG Grating Type
 - IKG Deck Span Safety Plate
 - Amico-ISG Safety-Grip Perforated Plate Types 2 & 3
 - Amico-Klemp Welded Grating
 - Morton Perforated Open-Grip Plate Type
 - Morton Deck Span Safety Plate
 - *U.S.G. Industries Grip Strut Safety Plate
 - G.S. Metals Grip Strut Cross Brace Type
 - G.S. Metals Perf-O-Grip Cross Brace Type

RULE 53 – RUNNING BOARDS—DOME PLATFORMS —BRAKE STEPS— CROSSOVER PLATFORMS

Editorially Deleted Job Code 4032 for Low Usage

**4032 FIBERGLASS END CROSSOVER BOARD, 72 INCHES OR
LESS**

Each.

(Condition Codes 1, 2, 9)

(Why Made Codes 02, 03, 09, 25, 26, 31, 34, 45)



RULE 59 – CUSHIONED UNDERFRAME DEVICES

Entire Rule Revised



RULE 59 – CUSHIONED UNDERFRAME DEVICES

A. Cause for Renewal

1. Cushion units shall be considered defective when the following conditions are found:
 - a. Cracked or broken portion of hydraulic cylinder stops, or piston rod and attachments.
 - b. Leaking clearly formed droplets. (Natural weepage is not considered cause for renewal.)
 - c. Sliding sill off center.
 - d. End of car unit in full or partial buff position.
 - e. Gas return unit with piston rod not fully extended.
 - f. Missing.
 - g. Unit condition indicator (UCI, pressure indicator) shows loss of pressure if unit so equipped. (See Section E)
2. Return springs, if used, shall be considered defective when:
 - a. Missing.
 - b. Broken.
 - c. Spring rods broken.
 - d. Spring rod nuts missing.
 - e. Not standard to cushion unit.

B. Correct Repairs

CORRECT REPAIR CHARTS, APPROVED EOC AND COC UNITS

EOC refers to end of car units and COC refers to center of car.

1. Units within the same group are interchangeable; however, the instructions in the replacement guidelines charts must be followed.
2. In addition to the following tables, whenever end of car cushioning units are removed from a car, preload cushioning units conforming to AAR Specification M-921B, M-921D, M-921E, or M-921F must be applied as indicated in the table below:

AAR Specification	Gross Rail Load Capacity
M-921B	180,000–315,000 lbs.
M-921D	Auto racks 120,000–180,000 lbs.
M-921E	Active Draft Auto Racks 120,000–240,000 lbs.
M-921F	Active Draft 180,000–315,000 lbs.

3. Application of secondhand devices is prohibited on foreign cars. Secondhand or externally repaired devices may be applied or reapplied by the car owner.
4. Refer to Figure A for coupler retention installation procedure.
5. If cushioning device is not listed in these charts, contact the car owner for replacement information. Bill applicable labor per Rule 50, Section F.
6. Unless otherwise denoted, cushioning devices shown on these charts are conditionally approved.
7. The designation of "TYPE" equals variations between manufacturers that may require minor modifications to accommodate for height, travel, or unit clearances (between types).

— 438 —

C-11930
C-12041
C-12044

RULE 60 – BODY CENTER PLATES

Revised E.2.

“The jacking procedure utilized to perform repairs safely will be determined by the repairing facility and/or repair force. Exception to choice of jacking procedure will not be allowed.”



RULE 60 – BODY CENTER PLATES	
A. Wear Limits, Gaging, Cause For Renewal or Attention	
1. Condemnable at Any Time	
a. Cracked, broken, loose, or missing.	
2. Condemnable When Car Is on Shop or Repair Track for Any Reason	
a. Worn:	
1. Center plate diameter reduced to 13 inch (for a 14 inch dia. center plate), or 15 inch (for a 16 inch dia. center plate) at any point.	
2. Center plate height reduced more than 3/8 inch.	
B. Correct Repairs	
1. Body center plates must be replaced with new or reclaimed secondhand plates of latest design shown in Section C, AAR Manual of Standards and Recommended Practices. Center plates of special design must be replaced with new or reclaimed secondhand plates of same special design.	
2. When bolts are used in securement of body center plates, bolts must be high tensile steel (Grade 5, ASTM A-325 or higher grade).	
3. New body center plates must be manufactured in facilities that have received a Quality Assurance Certification as required in AAR Specification M-1003.	
4. Center plate with loose securement should be billed per Rule 74 or Rule 82.	
C. Reconditioned Requirements	
1. Worn center plates may have wear surface built up by welding and then machined or ground smooth to proper contour, without removal from car.	
D. Welding Requirements	
1. All welding must be in accordance with Field Manual Rule 82. No heat treatment is required for building up of worn center plate on the car.	
E. General Information	
1. Cracked or broken separable center plates must not be repaired by welding unless on loaded car or on car with unusual design center plate, in which case repair weld may be made as a temporary repair to allow car to be forwarded to destination and to home shop. Cars with center plate so welded must be home shopped and the owner so notified. Charge for temporary repair is permissible.	
2. Additional charge per Rule 75 may be made if jacking of car is necessary to safely accomplish repairs. The jacking procedure utilized to perform repairs safely will be determined by the repairing facility and/or repair force. Exception to choice of jacking procedure will not be allowed.	
3. Any additional labor required to effect repairs and/or necessary attention to articulated equipment should be billed per Job Code 4460, Rule 75.	
4. Any additional labor required to effect repairs and/or necessary attention to interconnected tank equipment should be billed per Job Code 4760, Rule 81.	
5. Any additional labor required to effect repairs and/or necessary attention to draw bar connected equipment should be billed per Job Code 4462, Rule 75.	
— 499 —	
C-12041	

RULE 61 – BODY SIDE BEARINGS

Revised E.5.

“The jacking procedure utilized to perform repairs safely will be determined by the repairing facility and/or repair force. Exception to choice of jacking procedure will not be allowed.”



RULE 61 – BODY SIDE BEARINGS																					
A. Wear Limits, Gaging, Cause For Renewal or Attention																					
1. Cracked, broken, loose or missing.																					
2. Bent or worn in excess of $\frac{1}{8}$ inch.																					
3. Wrong (not standard to car).																					
B. Correct Repairs																					
1. When bolts are used in securement of body side bearings, bolts must be high tensile steel (Grade 5, ASTM A-325 or higher grade).																					
2. Body side bearings with loose securement should be billed per Rules 74 and 82.																					
C. Recondition Requirements																					
1. Not applicable.																					
D. Welding Requirements																					
1. All welding must be in accordance with Field Manual Rule 82.																					
E. General Information																					
1. When car is on shop or repair track for any reason, the body side bearing and/or wear plate must be inspected.																					
2. Minimum thickness of body side bearing is $\frac{5}{8}$ inch measured at centerline of fastener (except cars built prior to 1981 with flat bearings, $\frac{3}{8}$ inch).																					
3. If a body side bearing plate of the same length is not available, it is permissible to substitute a plate that is up to 3 inches longer, provided the cross section and hole center spacing remain the same. Substitution with a plate that is of shorter length than standard to the car is prohibited.																					
4. Side Bearing Measurement Qualifier Chart (for Job Codes 4093 and 4094 only)																					
<table><tr><th colspan="2">Constant Contact Side Bearing (inches)</th></tr><tr><td>01</td><td>— 4 $\frac{13}{16}$ or less</td></tr><tr><td>02</td><td>— 4 $\frac{7}{8}$</td></tr><tr><td>03</td><td>— 4 $\frac{15}{16}$</td></tr><tr><td>04</td><td>— 5</td></tr><tr><td>05</td><td>— 5 $\frac{1}{16}$</td></tr><tr><td>06</td><td>— 5 $\frac{1}{8}$</td></tr><tr><td>07</td><td>— 5 $\frac{3}{16}$</td></tr><tr><td>08</td><td>— 5 $\frac{1}{4}$</td></tr><tr><td>09</td><td>— 5 $\frac{5}{16}$ or more</td></tr></table>		Constant Contact Side Bearing (inches)		01	— 4 $\frac{13}{16}$ or less	02	— 4 $\frac{7}{8}$	03	— 4 $\frac{15}{16}$	04	— 5	05	— 5 $\frac{1}{16}$	06	— 5 $\frac{1}{8}$	07	— 5 $\frac{3}{16}$	08	— 5 $\frac{1}{4}$	09	— 5 $\frac{5}{16}$ or more
Constant Contact Side Bearing (inches)																					
01	— 4 $\frac{13}{16}$ or less																				
02	— 4 $\frac{7}{8}$																				
03	— 4 $\frac{15}{16}$																				
04	— 5																				
05	— 5 $\frac{1}{16}$																				
06	— 5 $\frac{1}{8}$																				
07	— 5 $\frac{3}{16}$																				
08	— 5 $\frac{1}{4}$																				
09	— 5 $\frac{5}{16}$ or more																				
5. Additional charge per Rule 75 may be made if jacking of car is necessary to safely accomplish repairs. The jacking procedure utilized to perform repairs safely will be determined by the repairing facility and/or repair force. Exception to choice of jacking procedure will not be allowed.																					
— 501 —																					
C-12041																					

RULE 62 – TRUCK SIDE BEARINGS

Revised E.16.

“The jacking procedure utilized to perform repairs safely will be determined by the repairing facility and/or repair force. Exception to choice of jacking procedure will not be allowed.”



RULE 62

15. Center plate extension pads (CPEP) must not be used in conjunction with constant contact side bearings (CCSB).
16. Additional charge per Rule 75 may be made if jacking of car is necessary to safely accomplish repair. The jacking procedure utilized to perform repairs safely will be determined by the repairing facility and/or repair force. Exception to choice of jacking procedure will not be allowed.
17. Any additional labor required to effect repairs and/or necessary attention to articulated equipment should be billed per Job Code 4460, Rule 75.
18. Any additional labor required to effect repairs and/or attention to interconnected tank equipment should be billed per Job Code 4760, Rule 81.
19. Any additional labor required to effect repairs and/or necessary attention to draw bar connected equipment should be billed per Job Code 4462, Rule 75.
20. Labor to install and/or replace constant contact side bearing components should be billed per Job Code 4452, Rule 75.

F. Billing Repair Data Requirements

1. Location
 - a. Show location
2. Quantity
 - a. Show quantity
3. Condition Code
 - 1 = New
 - 2 = Secondhand
 - 0 = Labor attention
4. Job Code Applied
 - a. Show applicable code
5. Description
 - a. Show applicable description
6. Why Made Code (use only Why Made Codes shown for specific Job Codes)
 - 01 = Worn out
 - 02 = Broken
 - 03 = Missing
 - 05 = Bent
 - 09 = Account repairs
 - 19 = Adjust clearance
 - 25 = Owner's request
 - 45 = Wrong size component
7. Job Code Removed
 - a. Show applicable code

RULE 64 – TIE DOWN AND LOAD RESTRAINING DEVICES

Added new Job Code 4921

4921 CONTAINER PEDESTAL WITH AUTOMATIC LOW PROFILE LOCK

Any type with spring-loaded latch. Includes all labor to install. Includes base plate. Must make sure container pedestal lock is level with opposite lock when installing.

(Condition Codes 1, 2, 9)

(Why Made Codes 01, 02, 03, 06, 09, 12, 25, 45)



RULE 64	
Job Code	Description
4921	CONTAINER PEDESTAL WITH AUTOMATIC LOW PROFILE LOCK Any type with spring-loaded latch. Includes all labor to install. Includes base plate. Must make sure container pedestal lock is level with opposite lock when installing. (Condition Codes 1, 2, 9) (Why Made Codes 01, 02, 03, 06, 09, 12, 25, 45)
4923	PEDESTAL LATCH ASSEMBLY TWIST TYPE Includes latch, securement bolt(s), and spring. (Condition Codes 1, 9) (Why Made Codes 01, 02, 03, 06, 09, 12, 25, 45)
4924	PEDESTAL LATCH ASSEMBLY HOOK TYPE Includes latch, securement bolt(s) and spring. (Condition Codes 1, 9) (Why Made Codes 01, 02, 03, 06, 09, 12, 25, 45)
4925	RATCHET WINCH FOR CABLE TIE-DOWN Ratchet winch complete for center beam cars. Cable to be billed separately per Job Code 4926. (Condition Codes 1, 9) (Why Made Codes 01, 02, 03, 06, 09, 12, 25, 45)
4926	CABLE ASSEMBLY COMPLETE, 3/8 INCH x APPROXIMATELY 17 FEET For bulkhead center beam cars. Includes cable, chain, edge protector, cable clamp, and all labor to apply to winch. See AAR Open Top Loading Rules. (Condition Codes 1, 9) (Why Made Codes 01, 02, 03, 06, 09, 12, 25, 45)
4928	EDGE PROTECTOR, METAL For bulkhead center beam cars. Applicable when replaced individually. Not billable when Job Code 4926 is billed at same location. (Condition Codes 1, 2) (Why Made Codes 01, 02, 03, 06, 25)
4930	EDGE PROTECTOR, PLASTIC For bulkhead center beam cars. Applicable when replaced individually. Not billable when Job Code 4926 is billed at same location. (Condition Codes 1, 2) (Why Made Codes 01, 02, 03, 06, 25)
4599	SEE RULE 72

— 523 —

C-12040

RULE 64 – TIE DOWN AND LOAD RESTRAINING DEVICES

Revised Job Code 4924

4924 PEDESTAL LATCH ASSEMBLY
HOOK TYPE Includes latch,
securement bolt(s) and spring.
(Condition Codes 1, 9) (Why Made
Codes 01, 02, 03, 06, 09, 12, 25, 45)

RULE 64	
Job Code	Description
4921	CONTAINER PEDESTAL WITH AUTOMATIC LOW PROFILE LOCK Any type with spring-loaded latch. Includes all labor to install. Includes base plate. Must make sure container pedestal lock is level with opposite lock when installing. (Condition Codes 1, 2, 9) (Why Made Codes 01, 02, 03, 06, 09, 12, 25, 45)
4923	PEDESTAL LATCH ASSEMBLY TWIST TYPE Includes latch, securement bolt(s), and spring. (Condition Codes 1, 9) (Why Made Codes 01, 02, 03, 06, 09, 12, 25, 45)
4924	PEDESTAL LATCH ASSEMBLY HOOK TYPE Includes latch, securement bolt(s) and spring. (Condition Codes 1, 9) (Why Made Codes 01, 02, 03, 06, 09, 12, 25, 45)
4925	RATCHET WINCH FOR CABLE TIE-DOWN Ratchet winch complete for center beam cars. Cable to be billed separately per Job Code 4926. (Condition Codes 1, 9) (Why Made Codes 01, 02, 03, 06, 09, 12, 25, 45)
4926	CABLE ASSEMBLY COMPLETE, 3/8 INCH x APPROXIMATELY 17 FEET For bulkhead center beam cars. Includes cable, chain, edge protector, cable clamp, and all labor to apply to winch. See AAR Open Top Loading Rules. (Condition Codes 1, 9) (Why Made Codes 01, 02, 03, 06, 09, 12, 25, 45)
4928	EDGE PROTECTOR, METAL For bulkhead center beam cars. Applicable when replaced individually. Not billable when Job Code 4926 is billed at same location. (Condition Codes 1, 2) (Why Made Codes 01, 02, 03, 06, 25)
4930	EDGE PROTECTOR, PLASTIC For bulkhead center beam cars. Applicable when replaced individually. Not billable when Job Code 4926 is billed at same location. (Condition Codes 1, 2) (Why Made Codes 01, 02, 03, 06, 25)
4599	SEE RULE 72



RULE 64 – TIE DOWN AND LOAD RESTRAINING DEVICES

Added New Job Code 4923

4923 PEDESTAL LATCH ASSEMBLY TWIST TYPE Includes latch, securement bolt(s), and spring.
(Condition Codes 1, 9) (Why Made Codes 01, 02, 03, 06, 09, 12, 25, 45)

RULE 64	
Job Code	Description
4921	CONTAINER PEDESTAL WITH AUTOMATIC LOW PROFILE LOCK Any type with spring-loaded latch. Includes all labor to install. Includes base plate. Must make sure container pedestal lock is level with opposite lock when installing. (Condition Codes 1, 2, 9) (Why Made Codes 01, 02, 03, 06, 09, 12, 25, 45)
4923	PEDESTAL LATCH ASSEMBLY TWIST TYPE Includes latch, securement bolt(s), and spring. (Condition Codes 1, 9) (Why Made Codes 01, 02, 03, 06, 09, 12, 25, 45)
4924	PEDESTAL LATCH ASSEMBLY HOOK TYPE Includes latch, securement bolt(s) and spring. (Condition Codes 1, 9) (Why Made Codes 01, 02, 03, 06, 09, 12, 25, 45)
4925	RATCHET WINCH FOR CABLE TIE-DOWN Ratchet winch complete for center beam cars. Cable to be billed separately per Job Code 4926. (Condition Codes 1, 9) (Why Made Codes 01, 02, 03, 06, 09, 12, 25, 45)
4926	CABLE ASSEMBLY COMPLETE, 3/8 INCH x APPROXIMATELY 17 FEET For bulkhead center beam cars. Includes cable, chain, edge protector, cable clamp, and all labor to apply to winch. See AAR Open Top Loading Rules. (Condition Codes 1, 9) (Why Made Codes 01, 02, 03, 06, 09, 12, 25, 45)
4928	EDGE PROTECTOR, METAL For bulkhead center beam cars. Applicable when replaced individually. Not billable when Job Code 4926 is billed at same location. (Condition Codes 1, 2) (Why Made Codes 01, 02, 03, 06, 25)
4930	EDGE PROTECTOR, PLASTIC For bulkhead center beam cars. Applicable when replaced individually. Not billable when Job Code 4926 is billed at same location. (Condition Codes 1, 2) (Why Made Codes 01, 02, 03, 06, 25)
4599	SEE RULE 72



RULE 67 – MISCELLANEOUS INSTRUCTIONS

Revised Paragraphs 6 and 8

Revised Job Code 4458

Job Code 4458 Labor, Jack
Car—with Truck Separation

Added Job Code 4461

Job Code 4461 Labor, Jack
Car—without Truck Separation



RULE 67 – MISCELLANEOUS INSTRUCTIONS

1. Patching of coupler striking plate or buffer castings is not permitted.
2. When splicing insulation in refrigerator or insulated box cars the following will apply:
 - a. Must be of the same thickness standard to car.
 - b. Must cover the full vertical and horizontal section of the damaged panel or portion thereof.
 - c. Joints must be located to insure secure fastening to posts or belt rails of car framing.
 - d. Where quilted material is used the edges must be lapped to avoid butt or open joints, then covered with waterproof paper.
 - e. Splices are not permitted between framing members of car.
3. Renewal of any net applied item includes all labor and material necessary to perform that job, including paints, and application of cements where used, exclusive of any other net applied Job Codes other than those found in Rules 69, 74, 75 and 82, unless otherwise specified.
4. No labor shall be charged and billing repair data is not required for the following:
 - a. Tightening or adjusting auto loading devices where renewing, straightening or welding is not involved.
 - b. Inspection of cars (other than periodic maintenance inspection of mechanical refrigeration units).
5. No labor or material shall be charged and billing repair data is not required for the following:
 - a. Any form of lubrication not provided in a specific rule.
 - b. Adjustment of lading when not covered by defect card or adjustment authority.
 - c. Adjusting or rearranging of car parts unless specifically provided for in other rules.
6. For any repair that is to be billed as handling line (responsibility code 2) or Defect Card (responsibility code 3) responsibility, all additional labor to safely accomplish repair will be billed as handling line or defect card responsibility, whichever is applicable. The items of labor to be charged in this manner include, but are not limited to:

Job Code 4452 Labor, Constant Contact Side Bearing Components

Job Code 4456 Train Delay Allowance—Line of Road

Job Code 4457 Setout/Pickup Allowance—Line of Road

Job Code 4458 Labor, Jack Car—with Truck Separation

Job Code 4459 Labor, Jack Car—Line of Road

Job Code 4460 Articulated Connection—Labor

Job Code 4461 Labor, Jack Car—without Truck Separation

Job Code 4462 Solid Draw Bar Connection—Labor

Job Code 4466 Labor, Access Truck Side Frame Wear Plate

Job Code 4470 Labor, Draft Gear and/or Yoke R&R

Job Code 4474 R&R Coupler Body, E Type

Job Code 4478 R&R Coupler Body, E/F or F Type

Job Code 4482 Labor, Fall Protection

Job Code 4760 Disconnection of Tanktrain Coupling

RULE 68 – REFRIGERATION EQUIPMENT

Editorially Revised D.1

D. Welding Requirements

1. Welding not permitted unless otherwise specified.

Editorially Deleted Job Codes for Low Usage

4108 REFRIGERANT, R-401B

4109 REFRIGERANT, R-404A

4126 AIR CLEANER ELEMENT—
DRY TYPE—RENEWED

4172 RESET OVERLOAD/CIRCUIT
BREAKER

RULE 68 – REFRIGERATION EQUIPMENT	
A. Cause For Renewal or Service	1. As required
B. Correct Repairs	1. As required
C. Recondition Requirements	1. Not applicable
D. Welding Requirements	1. Welding not permitted unless otherwise specified.
E. General Information	<ol style="list-style-type: none">1. Where mechanical refrigeration unit is involved, the R&R or R of complete part or parts of such units, unless covered by a specific Job Code in this rule, shall be based on actual labor per Job Code 4150 of this Rule, regardless of method of securement, plus material charges in this rule or per Rule 72, for manufactured material.2. Periodic inspection of such units must be made only by owners or their authorized representatives.3. Bolts, nuts, screws, or union are reportable only when such items are renewed separately or are tightened.4. No labor or material is reportable for pre-tripping inspection of mechanical refrigeration unit in refrigerator cars and no billing repair data is necessary. However, charge for material and labor for repairs made at time of pre-tripping is in order.5. Handling line is responsible for labor expended in priming and/or pressurizing fuel systems when required as the result of unit running out of fuel only and no billing repair data is necessary.6. Job Codes 4144, 4148 and 4162 may be used only once per shopping. Chargeable only for loaded cars or cars to be subsequently loaded by repairing line or any line in same switching district.7. Refrigerants, other than R-401B and R-404A, should be billed per Rule 72 for materials and Job Code 4150 for labor to apply.



RULE 69 – MISCELLANEOUS MATERIAL

Revised E.7.

“The jacking procedure utilized to perform repairs safely will be determined by the repairing facility and/or repair force. Exception to choice of jacking procedure will not be allowed.”



RULE 69 – MISCELLANEOUS MATERIAL

A. Cause for Renewal

1. As required.

B. Correct Repairs

1. Car owner must be contacted to determine proper strength of steel when replacing side posts, side sheets, end sheets, side sills, slope sheets, roof, bottom cover plates and floor stringers.

C. Recondition Requirements

1. As required.

D. Welding Requirements

1. As required.

E. General Information

1. Items of repair consisting of, or fabricated from, standard steel mill shapes requiring no special dies where no standard Job Code has been provided under other rules must be charged under this rule. The cost of fabricated material must not exceed the cost of manufactured material.
2. Fabrication consists of drilling, cutting, shaping and/or shearing.
3. AAR standard material must be used to replace defective Non-AAR Standard material. Any resulting increase in cost is responsibility of car owner.
4. In reporting items of material on weight basis, round to the nearest pound.
5. For items reported on weight basis, the scrap weight of part removed shall be equal to the weight of the part applied.
6. If renewal of any item is on a per pound basis and the item so handled is composed of more than one part, reporting must show weight of each component that is renewed individually. Where the item is handled as a unit without disassembling, the total weight of the unit is proper.
7. Additional charge per Rule 75 may be made if jacking of car is necessary to safely accomplish repair. The jacking procedure utilized to perform repairs safely will be determined by the repairing facility and/or repair force. Exception to choice of jacking procedure will not be allowed.
8. Additional charge per Rule 75 may be made if R&R of draft gear/yoke assembly is necessary to safely accomplish repairs.
9. Additional charge per Rule 16, 17, or 18 may be made if R&R of coupler is necessary to safely accomplish repairs.
10. Any additional labor required to effect repairs and/or necessary attention to articulated equipment should be billed per Job Code 4460, Rule 75.
11. Any additional labor required to effect repairs and/or necessary attention to interconnected tank equipment should be billed per Job Code 4780, Rule 81.
12. Any additional labor required to effect repairs and/or necessary attention to draw bar connected equipment should be billed per Job Code 4462, Rule 75.
13. Additional charge for application of chain (Job Code 4200) to the freight car may be made. Charge to be reported as actual time and reported using Job Code 4450.

RULE 71 – CARD BOARDS AND RECEPTACLES

Section B completely re-written

B. Correct Repairs Card Boards

1. For Use of Placards Required by D.O.T. Regulations.
 - a. Either a flat surface not less than 16 x 16 inches or a DOT placard holder shall be provided.
 - b. Locate as follows:
2. For Use of Bad Order Cards
 - a. Either brackets or boards shall be provided not less than 5½ x 9 inches.
 - b. Locate as follows:
3. Brackets for accommodation of any of the above card boards, must be secured to car by either welding, rivets or bolts with ends riveted over nuts. (1) At both ends of car, on right side, with lower edge or corner not over 5 feet 8 inches above top of rail. (2) On each side of the car, in the left quadrant or on left door, with lower edge or corner not over 5 feet above top of rail. (1) Cars with side sills, attached to each side of car, near bottom at left-hand end. (2) On cars equipped with center sills only, attached to outer end of running board support or body bolster.

RULE 71 – CARD BOARDS AND RECEPTACLES

A. Cause for Renewal

1. As required

B. Correct Repairs

Card Boards

1. For Use of Placards Required by D.O.T. Regulations.

- a. Either a flat surface not less than 16 x 16 inches or a DOT placard holder shall be provided.
- b. Locate as follows:
 - (1) At both ends of car, on right side, with lower edge or corner not over 5 feet 8 inches above top of rail.
 - (2) On each side of the car, in the left quadrant or on left door, with lower edge or corner not over 5 feet above top of rail.

2. For Use of Bad Order Cards

- a. Either brackets or boards shall be provided not less than 5½ x 9 inches.
- b. Locate as follows:
 - (1) Cars with side sills, attached to each side of car, near bottom at left-hand end.
 - (2) On cars equipped with center sills only, attached to outer end of running board support or body bolster.

3. Brackets for accommodation of any of the above card boards, must be secured to car by either welding, rivets or bolts with ends riveted over nuts.

C. Recondition Requirements

1. Not applicable

D. Welding Requirements

1. Welding not permitted unless otherwise specified.

E. General Information

1. Cars must be equipped with card boards and/or receptacles for the use of various cards and placards.
2. Replacement and repair of defect card receptacle is no longer permitted except where hard copy of defect card is present on the car. Bill per Rule 72 for the replacement of the receptacle and Rule 74 or 82 for the securement using qualifier KT.



RULE 71 – CARD BOARDS AND RECEPTACLES

Editorially Revised D.1

D. Welding Requirements

1. Welding not permitted unless otherwise specified.

RULE 71 – CARD BOARDS AND RECEPTACLES

A. Cause for Renewal

1. As required

B. Correct Repairs

Card Boards

1. For Use of Placards Required by D.O.T. Regulations.
 - a. Either a flat surface not less than 16 x 16 inches or a DOT placard holder shall be provided.
 - b. Locate as follows:
 - (1) At both ends of car, on right side, with lower edge or corner not over 5 feet 8 inches above top of rail.
 - (2) On each side of the car, in the left quadrant or on left door, with lower edge or corner not over 5 feet above top of rail.
2. For Use of Bad Order Cards
 - a. Either brackets or boards shall be provided not less than 5½ x 9 inches.
 - b. Locate as follows:
 - (1) Cars with side sills, attached to each side of car, near bottom at left-hand end.
 - (2) On cars equipped with center sills only, attached to outer end of running board support or body bolster.
3. Brackets for accommodation of any of the above card boards, must be secured to car by either welding, rivets or bolts with ends riveted over nuts.

C. Recondition Requirements

1. Not applicable

D. Welding Requirements

1. Welding not permitted unless otherwise specified.

E. General Information

1. Cars must be equipped with card boards and/or receptacles for the use of various cards and placards.
2. Replacement and repair of defect card receptacle is no longer permitted except where hard copy of defect card is present on the car. Bill per Rule 72 for the replacement of the receptacle and Rule 74 or 82 for the securement using qualifier KT.



RULE 72 – MANUFACTURED MATERIAL

Revised E.9.

“The jacking procedure utilized to perform repairs safely will be determined by the repairing facility and/or repair force. Exception to choice of jacking procedure will not be allowed.”



RULE 72

c. For items of repair where there is no published labor allowance shown in the AAR Office Manual for a similar part and there is no securement necessary to complete the repair, actual labor per Job Code 4450, Rule 75 or Job Code 4150, Rule 68 as applicable, will be charged. No additional labor or securement will be allowed except where applicable per Section E of this Rule.

9. Additional charge per Rule 75 may be made if jacking of car is necessary to safely accomplish repair. The jacking procedure utilized to perform repairs safely will be determined by the repairing facility and/or repair force. Exception to choice of jacking procedure will not be allowed.

10. Additional charge per Rule 75 may be made if R&R of draft gear/yoke assembly is necessary to safely accomplish repairs.

11. Additional charge per Rule 16, 17, or 18 may be made if R&R of coupler is necessary to safely accomplish repairs.

12. Any additional labor required to effect repairs and/or necessary attention to articulated equipment should be billed per Job Code 4460, Rule 75.

13. Any additional labor required to effect repairs and/or necessary attention to interconnected tank equipment should be billed per Job Code 4760, Rule 81.

14. Any additional labor required to effect repairs and/or necessary attention to drawbar connected equipment should be billed per Job Code 4462, Rule 75.

F. Billing Repair Data Requirements

1. Location

a. Show location

2. Quantity

a. Show quantity

3. Condition Code

0 = Transportation freight charge. Use with Job Code 5999 only.

1 = New

2 = Secondhand

3 = Reconditioned

9 = Remove and replace same part—report securement or actual labor per Section E, Paragraphs 7 and 8

4. Job Code Applied

a. Show applicable code

b. Show applicable car part identification code per Rule 83, in qualifier column

5. Description

a. Show narrative description to properly identify part. (Limit description to 50 letters; spaces between words to count as letters.)

6. Why Made Code

a. Show applicable code (See Why Made Codes in Rule 83)

RULE 74 – SECUREMENT

Revised B.3.

3. Coupler supports, draft gear carriers, and **vertical coupler pin retainer plates** must be secured with high tensile bolts and self locking nuts, high tensile two-piece rivets, or rivets.



RULE 74		
CORRECT REPAIR CHART—SECUREMENT – Continued		
Removed	What Can Be Applied	Remarks
Galvanized or Zinc-Coated Bolts or Two Piece Galvanized or Zinc-Coated Rivets	Same	Used only for aluminum material securement.
B. Correct Repairs (continued) <ol style="list-style-type: none"> Items of securement which are not included in a standard Job Code per Section F, Item 9, Paragraph a. or b. of a given Rule, shall be reported in accordance with this Rule. When welding is used as a securement, provisions set forth in Rule 82 will apply. Coupler supports, draft gear carriers, and vertical coupler pin retainer plates must be secured with high tensile bolts and self locking nuts, high tensile two-piece rivets, or rivets. High tensile designates ASTM A-325, SAE Grade 5, or higher grade of fastener. 		
C. Recondition Requirements <ol style="list-style-type: none"> Not applicable 		
D. Welding Requirements <ol style="list-style-type: none"> Welding not permitted unless otherwise specified. 		
E. General Information <ol style="list-style-type: none"> "I", "J" or "U" bolts will be reported per Job Code 4404. No labor shall be charged and billing repair data is not required for the following: <ol style="list-style-type: none"> Tightening bolt nuts and rod nuts (other than Cardwell spring rods or bolt nuts in mechanical refrigeration units). Cotters or split keys, spreading. Screws tightened (other than in mechanical refrigeration units). No labor or material shall be charged and billing repair data is not required for the following: <ol style="list-style-type: none"> Cut washers, nut locks or lock washers, any size. Cotters 7/16 inch or less or split keys renewed, when used in connection with other parts R&R or R. Staples, under all conditions. Wood screws, metal screws, nails or lag screws not permitted in making repairs to safety appliances. Use of carriage bolts to secure safety devices is prohibited except where permitted by design. 		
— 561 —		

RULE 74 – SECUREMENT

Editorially Revised D.1

D. Welding Requirements

1. Welding not permitted unless otherwise specified.

RULE 74		
CORRECT REPAIR CHART—SECUREMENT – Continued		
Removed	What Can Be Applied	Remarks
Galvanized or Zinc-Coated Bolts or Two Piece Galvanized or Zinc-Coated Rivets	Same	Used only for aluminum material securement.
B. Correct Repairs (continued)		
1. Items of securement which are not included in a standard Job Code per Section F, Item 9, Paragraph a. or b. of a given Rule, shall be reported in accordance with this Rule.		
2. When welding is used as a securement, provisions set forth in Rule 82 will apply.		
3. Coupler supports, draft gear carriers, and vertical coupler pin retainer plates must be secured with high tensile bolts and self locking nuts, high tensile two-piece rivets, or rivets.		
4. High tensile designates ASTM A-325, SAE Grade 5, or higher grade of fastener.		
C. Recondition Requirements		
1. Not applicable		
D. Welding Requirements		
1. Welding not permitted unless otherwise specified.		
E. General Information		
1. "I", "J" or "U" bolts will be reported per Job Code 4404.		
2. No labor shall be charged and billing repair data is not required for the following:		
a. Tightening bolt nuts and rod nuts (other than Cardwell spring rods or bolt nuts in mechanical refrigeration units).		
b. Cotters or split keys, spreading.		
c. Screws tightened (other than in mechanical refrigeration units).		
3. No labor or material shall be charged and billing repair data is not required for the following:		
a. Cut washers, nut locks or lock washers, any size.		
b. Cotters 7/16 inch or less or split keys renewed, when used in connection with other parts R&R or R.		
c. Staples, under all conditions.		
4. Wood screws, metal screws, nails or lag screws not permitted in making repairs to safety appliances.		
5. Use of carriage bolts to secure safety devices is prohibited except where permitted by design.		
— 561 —		



RULE 74 – SECUREMENT

Revised E.8.

“The jacking procedure utilized to perform repairs safely will be determined by the repairing facility and/or repair force. Exception to choice of jacking procedure will not be allowed.”



RULE 74

6. Pedestal frame retainer keys will be attached using a ¾ inch bolt of material specification ASTM A325 or SAE Grade 5 with mechanical type fastener or lock nut or an approved two-piece rivet, both of which are applied with a hardened steel plain washer (with the exception of two-piece rivets having a flange collar which does not require a washer). It is recommended practice that nut be dipped in car oil and applied with a torque of 225 minimum 275 maximum ft.-lb. When using the turn of the nut method to torque, the nut is to be tightened an additional ½ turn from the snug tight condition.
7. When pipe bracket studs are replaced, use Job Codes 4410 and 4412 and qualifier CT.
8. Additional charge per Rule 75 may be made if jacking of car is necessary to safely accomplish repairs. The jacking procedure utilized to perform repairs safely will be determined by the repairing facility and/or repair force. Exception to choice of jacking procedure will not be allowed.
9. Additional charge per Rule 75 may be made if R&R of draft gear/yoke assembly is necessary to safely accomplish repairs.
10. Additional charge per Rule 16, 17, or 18 may be made if R&R of coupler is necessary to safely accomplish repairs.
11. Any additional labor required to effect repairs and/or necessary attention to articulated equipment should be billed per Job Code 4460, Rule 75.
12. Any additional labor required to effect repairs and/or necessary attention to interconnected tank equipment should be billed per Job Code 4760, Rule 81.
13. Any additional labor required to effect repairs and/or necessary attention to draw bar connected equipment should be billed per Job Code 4462, Rule 75.
14. Additional charge per Rule 75 may be made when fall protection safety equipment is necessary to safely accomplish repairs.

F. Billing Repair Data Requirements

1. Location
 - a. Applicable to Job Codes 4404, 4406, 4410, 4412, 4414, 4416, 4418, 4422, 4424, 4426, 4428, and 4430.
2. Quantity
 - a. Show quantity
3. Condition Code
 - 1 = New
4. Job Code Applied
 - a. Show applicable code
 - b. Show applicable car part identification code per Rule 83 in qualifier column (not required for Job Code 4400)
5. Description
 - a. Show description

RULE 75 – MISCELLANEOUS LABOR

Revised E.2.

“The jacking procedure utilized to perform repairs safely will be determined by the repairing facility and/or repair force. Exception to choice of jacking procedure will not be allowed.”



RULE 75 – MISCELLANEOUS LABOR	
A. Cause For Labor Attention	1. When required
B. Correct Repairs	1. As required
	2. Labor to straighten gondola ends must be charged on an actual time basis only as required to obtain safety appliance clearance and must be limited to 8 hours per car. Repairs exceeding 8 hours per car require the car owner's permission or handling under the guidelines of Rule 108, paragraphs 2 through 5.
C. Recondition Requirements	1. Not applicable
D. Welding Requirements	1. As required
E. General Information	1. Labor attention, where no standard Job Code has been provided in a specific Rule or where Rule 74 does not apply, shall be reported on an actual time basis, per Job Code 4450 of this rule.
	2. Labor to jack car is to be billed per end of car and billed per Job Code 4458, 4459, or 4461. The jacking procedure utilized to perform repairs safely will be determined by the repairing facility and/or repair force. For Job Codes 4458 and 4459, labor includes all work necessary to raise car, disconnect/reconnect brake rigging, lubrication of center plate, moving truck to A-frame, removing/replacing center pin, and lowering of car, as necessary. Job Code 4458 or 4459 may be charged if the car is raised to safely accomplish repairs even if it is not necessary to perform all the operations listed in the preceding sentence. For Job Code 4461, labor includes all work necessary to raise and lower car body, lubrication of center plate as necessary, and lowering of car. All wheel set renewals report either Job Code 4458 or 4459 when applicable regardless of jacking method used.
	3. Labor to replace or remove and replace (R&R) draft gear and/or yoke is to be billed per Job Code 4470.
	Labor includes the removal and reapplication of draft gear carrier, removal and reapplication of draft gear/yoke assembly from the draft pocket, disassembly/reassembly of the draft gear and yoke assembly and all necessary securement. One labor charge per draft pocket regardless of whether component is replaced separately, removed and replaced (R&R), or repairs made in conjunction with other draft pocket repairs. Securement labor and material, that is, bolts and weld, used to replace the draft system back into the draft pocket are included in Job Code 4470 and no additional charge will be allowed.
	Charge for replacement or R&R of coupler should be billed separately, per Rule 16, 17, or 18.
	Material charges for component replaced should be billed separately using the Job Codes provided in Rules 19, 20 and/or 21.

RULE 75 – MISCELLANEOUS LABOR

Added Job Code to E.5.

Job Code 4461 Labor, Jack
Car—without Truck
Separation

Revised Job Code 4458 4458 LABOR, JACK CAR— WITH TRUCK SEPARATION



RULE 75

For replacement and/or repair of non-Job Coded items, material, labor, or securement is to be billed per the applicable rules.

- Additional charge per Rule 16.E., 17.E., or 18.E. may be made if R&R of coupler is necessary to safely accomplish repairs.

- For any repair that is to be billed as handling line (responsibility code 2) or Defect Card (responsibility code 3) responsibility, all additional labor to safely accomplish repair will be billed as handling line or defect card responsibility, whichever is applicable. The items of labor to be charged in this manner include, but are not limited to:

Job Code 4452 Labor, Constant Contact Side Bearing Components

Job Code 4456 Train Delay Allowance—Line of Road

Job Code 4457 Setout/Pickup Allowance—Line of Road

Job Code 4458 Labor, Jack Car—with Truck Separation

Job Code 4459 Labor, Jack Car—Line of Road

Job Code 4460 Articulated Connection—Labor

Job Code 4461 Labor, Jack Car—without Truck Separation

Job Code 4462 Solid Drawbar Connection Labor

Job Code 4466 Labor, Access Truck Side Frame Wear Plate

Job Code 4470 Labor, Draft Gear and/or Yoke R&R

Job Code 4474 R&R Coupler Body, E Type

Job Code 4478 R&R Coupler Body, E/F or F Type

Job Code 4482 Labor, Fall Protection

Job Code 4760 Disconnection of Tanktrain Coupling

- In the event that a handling line or defect card responsibility repair is made at the same location as an owner responsibility repair, all additional labor to safely accomplish the handling line or defect card repair will be billed as handling line or defect card responsibility, whichever is applicable.
- Labor to install and/or replace constant contact side bearing components should be billed per Job Code 4452.
- For the purpose of reporting quantity in conjunction with loading and unloading allowances of multi-unit equipment, the quantity is to be reported as 1 per unit segment regardless of the number of vehicles the unit segment was transported in.
- For the purpose of reporting maintenance advisory inspection results, specific Job Codes and qualifiers may be defined. When suspect ACF centerflow covered hopper cars are on repair track, it must be reported. See table below.

Job Code	Qual. #	Qual. Desc.	Circular Letter Ref.
4453	01	Kit, no crack	C-10728
4453	02	Kit, crack	C-10728
4453	03	No kit, no crack	C-10728
4453	04	No kit, crack	C-10728

— 587 —

C-12041

C-12041

RULE 75 – MISCELLANEOUS LABOR

Added Job Code 4461 to F.1.a and F.1.d



RULE 75	
F. Billing Repair Data Requirements	
1. Location	
a. Applicable to Job Codes 4450, 4452, 4453, 4458, 4459, 4460, 4461, 4462, 4470, 4474, 4478, and 4480	
b. For articulated cars, show articulated connection location per Rule 83, Figure D, for Job Code 4460.	
c. For drawbar-connected cars, show drawbar location per Rule 83, Figure E, for Job Code 4462.	
d. For articulated cars and drawbar-connected cars, show truck location per Rule 83, Figures D and E, for Job Codes 4458, 4459, and 4461.	
2. Quantity	
a. Show quantity	
b. For Job Code 4450 show actual labor hours carried to the nearest 1/10 hour. For example, 1.2 hours would be reported as 0012; 30 minutes (0.5 hours) would be reported as 0005; and 1 hour would be reported as 0010.	
3. Condition Code	
1 = New material applied	
9 = Remove and replace same part	
0 = Labor attention	
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 **	
5. Description	
a. Show applicable description	
6. Why Made Code (use only Why Made Codes shown for specific Job Codes)	
05 = Bent	
09 = Account repairs	
13 = Attention required, as directed by maintenance advisory or early warning letter.	
14 = Bulged out	
24 = Attention Required	
25 = Owner's request	
7. Job Code Removed	
a. Show applicable code (Use same as Job Code applied)	
b. For Job Codes preceded by ** use same qualifier as for Job Code applied	
8. Responsibility Code	
1 = Owner	
2 = Handling Line	
3 = Defect Card	
— 568 —	
C-12041	

RULE 75 – MISCELLANEOUS LABOR

Revised Job Codes 4456 and 4457, added paragraph

“This Job Code, when applicable, should be billed on the same Billing Repair Card with the repair charges for the AAR condemnable defect(s) that causes the service interruption. “



RULE 75	
9. Job Codes and Standard Reporting Descriptions	
Job Code	Description
**4450	LABOR, FREIGHT CAR Repair, renew, remove, replace and/or straighten parts in place on freight cars, where not covered by a specific Job Code. Includes all applicable overheads per Office Manual Rule 111. Net labor per hour. (Condition Code 0) (Why Made Codes 05, 09, 14, 25)
4452	LABOR, CONSTANT CONTACT SIDE BEARING COMPONENTS To be used only when applying constant contact side bearing components, any size or type, per side bearing location. Defective material must be reported separately per Rule 72 to obtain charge. Use Job Codes 3576 or 3580 when renewing constant contact side bearing housing. (Condition Code 0) (Why Made Codes 09, 25)
4453	MAINTENANCE ADVISORY INSPECTION—NOTIFICATION USED FOR REPORTING OF DEFINED INSPECTIONS AS REQUIRED BY A MAINTENANCE ADVISORY (Condition Code 0) (Why Made Code 13)
4455	RULE 88 B.2 INSPECTION—LABOR Used for optional reporting of Field Manual Rule 88, Section B.2 inspection. (Condition Code 0) (Why Made Code 24, 25)
4456	TRAIN DELAY ALLOWANCE—LINE OF ROAD Use this Job Code only to bill a train delay allowance only when caused by a car on line of road with an AAR condemnable defect that causes the train delay as specified in Rule 91. Charge for jacking car on line-of-road, if required, must be billed per Job Code 4459. This Job Code, when applicable, should be billed on the same Billing Repair Card with the repair charges for the AAR condemnable defect(s) that causes the service interruption. (Condition Code 0) (Why Made Code 09)

RULE 75 – MISCELLANEOUS LABOR

Revised Job Code 4458

“To obtain charge, truck must be removed from under car or wheel set renewed. Charge not permissible when Job Code 4461 is performed at the same location on car.”



RULE 75	
Job Code	Description
4457	<p>SETOUT/PICKUP ALLOWANCE—LINE OF ROAD</p> <p>Use this Job Code only to bill the switching of a car out and back into a train when the car was the cause of a train delay caused by an AAR condemnable defect as specified in Rule 91.</p> <p>This Job Code can only be billed in conjunction with Job Code 4456.</p> <p>Charge for jacking car on line-of-road, if required, must be billed per Job Code 4459.</p> <p>This Job Code, when applicable, should be billed on the same Billing Repair Card with the repair charges for the AAR condemnable defect(s) that causes the service interruption.</p> <p>(Condition Code 0)</p> <p>(Why Made Codes 09)</p>
4458	<p>LABOR, JACK CAR—WITH TRUCK SEPARATION</p> <p>Labor to jack car is to be billed per end of car and billed per Job Code 4458. Labor includes all work necessary to raise car, disconnect/reconnect brake rigging, lubrication of center plate, moving truck to A-frame, removing/replacing center pin, and lowering of car, as necessary. Job Code 4458 may be charged if the car is raised to safely accomplish repairs even if it is not necessary to perform all the operations listed in the preceding sentence if wheel set renewal is required at the same truck location.</p> <p>To obtain charge, truck must be removed from under car or wheel set renewed. Charge not permissible when Job Code 4461 is performed at the same location on car.</p> <p>For drawbar connected equipment, 1 jacking charge allowed per truck.</p> <p>For articulated equipment, 1 jacking charge allowed per articulation. Additional jacking required for disconnecting and reconnecting of articulated connector is included in Job Code 4460.</p> <p>(Condition Code 1)</p> <p>(Why Made Codes 09, 25)</p>
4459	<p>LABOR, JACK CAR—LINE OF ROAD</p> <p>Labor to jack car is to be billed per end of car and billed per Job Code 4459. Labor includes all work necessary to raise car, disconnect/reconnect brake rigging, lubrication of center plate, removing/replacing center pin, and lowering of car as necessary. Job Code 4459 may be charged if the car is raised to safely accomplish repairs even if it is not necessary to perform all the operations listed in the preceding sentence.</p> <p>For drawbar connected equipment, 1 jacking charge allowed per truck.</p> <p>This Job Code can only be billed in conjunction with Job Code 4458.</p> <p>For articulated equipment, 1 jacking charge allowed per articulation. Additional jacking required for disconnecting and reconnecting of articulated connector is included in Job Code 4460.</p> <p>(Condition Code 1)</p> <p>(Why Made Code 09)</p>

RULE 75 – MISCELLANEOUS LABOR

Added New Job Codes 4461

4461 LABOR, JACK CAR— WITHOUT TRUCK SEPARATION

Labor to jack car is to be billed per end of car and billed per Job Code 4461. Labor includes all work necessary to raise and lower car body, lubrication of center plate as necessary. Charge not permissible when Job Code 4458 is performed at the same location on car. For drawbar connected equipment, 1 jacking charge allowed per truck. For articulated equipment, 1 jacking charge allowed per articulation. Additional jacking required for disconnecting and reconnecting of articulated connector is included in Job Code 4460.

(Condition Code 1)

(Why Made Codes 09, 25)



RULE 75	
Job Code	Description
4460	ARTICULATED CONNECTION—LABOR Disconnect and reconnect articulated connection includes any additional jacking, blocking male unit, and respotting equipment, also includes R&R intermediate air hoses and brake rod or chains when necessary in order to facilitate repairs. One charge per articulation. (Condition Code 0) (Why Made Codes 09, 25)
4461	LABOR, JACK CAR—WITHOUT TRUCK SEPARATION Labor to jack car is to be billed per end of car and billed per Job Code 4461. Labor includes all work necessary to raise and lower car body, lubrication of center plate as necessary. Charge not permissible when Job Code 4458 is performed at the same location on car. For drawbar connected equipment, 1 jacking charge allowed per truck. For articulated equipment, 1 jacking charge allowed per articulation. Additional jacking required for disconnecting and reconnecting of articulated connector is included in Job Code 4460. (Condition Code 1) (Why Made Codes 09, 25)
4462	SOLID DRAWBAR CONNECTION—LABOR Disconnect and reconnect solid drawbar connection includes respotting equipment, R&R intermediate air hoses and brake rod or chains when necessary in order to safely accomplish repairs. One charge per drawbar. Job Code 4462 not to be billed with Job Code 2246 at the same location. (Condition Code 9) (Why Made Codes 09, 25)
4466	LABOR, ACCESS TRUCK SIDE FRAME WEAR PLATE To be used only when attention is required to friction casting wear plate securement. Bill securement per Rule 74 and/or Rule 82. Not applicable in conjunction with renewal of friction castings, friction casting wear plates, truck bolster, or truck side frame at same location. (Condition Code 0) (Why Made Code 24)

— 571 —

C-12041

RULE 75 – MISCELLANEOUS LABOR

Revised Job Code 4470

“The jacking procedure utilized to perform repairs safely will be determined by the repairing facility and/or repair force. Exception to choice of jacking procedure will not be allowed.”



RULE 75	
Job Code	Description
4470	<p>LABOR, DRAFT GEAR AND/OR YOKE</p> <p>Replacement or R&R of draft gear and/or yoke from draft pocket. Labor includes the removal and reapplication of draft gear carrier, removal and reapplication of draft gear/yoke assembly from the draft pocket, disassembly/reassembly of the draft gear and yoke assembly and all necessary securement. One labor charge per draft pocket regardless of whether component is replaced separately, removed and replaced (R&R), or repairs made in conjunction with other draft pocket repairs. Securement labor and material, that is, bolts and weld, used to replace the draft system back into the draft pocket are included in Job Code 4470 and no additional charge will be allowed.</p> <p>Charge for replacement or R&R of coupler must be billed separately, per Section E of Rules 16, 17, or 18.</p> <p>Additional charge per Rule 75 may be made if jacking of car is necessary to safely accomplish repairs. The jacking procedure utilized to perform repairs safely will be determined by the repairing facility and/or repair force.</p> <p>Material charges for component replacement must be billed separately using the Job Codes provided in Rules 19, 20, and/or 21.</p> <p>For replacement and/or repair of non-Job Coded items, material, labor or securement is to be billed per the applicable rule.</p> <p>Not to be used in conjunction with end-of-car cushioning yokes when cushion unit is replaced at same location. See Rule 59.</p> <p>(Condition Codes 1, 9)</p> <p>(Why Made Codes 09, 25)</p>
4474	<p>R&R COUPLER BODY, E TYPE</p> <p>Charge for R&R of coupler should be billed separately (using Job Code 4474) when coupler is not renewed and R&R is associated with repairs made under provisions of Rules 19, 20, 21, 59, 69, 72, 74, 75, and/or 82.</p> <p>Charge for R&R of coupler not applicable to apply or repair coupler carrier, carrier wear plate, or striker shim. R&R covers coupler complete.</p> <p>(Condition Code 9)</p> <p>(Why Made Code 09)</p>
4478	<p>R&R COUPLER BODY, E/F OR F TYPE</p> <p>Charge for R&R of coupler should be billed separately (using Job Code 4478) when coupler is not renewed and R&R is associated with repairs made under provisions of Rules 19, 20, 21, 59, 69, 72, 74, 75, and/or 82.</p> <p>Charge for R&R of coupler not applicable to apply or repair coupler carrier, carrier wear plate, or striker shim. R&R covers coupler complete.</p> <p>(Condition Code 9)</p> <p>(Why Made Code 09)</p>
4480	<p>LOAD R&R FOR SAFETY APPLIANCE REPAIR, OPEN TOP CAR</p> <p>Does not include safety appliance. Net labor per end of car.</p> <p>(Condition Code 9)</p> <p>(Why Made Code 09)</p>

RULE 77 – DOOR AND DOOR PARTS

Editorially Revised d.1

D. Welding Requirements

1. Welding not permitted unless otherwise specified.

RULE 77 – DOOR AND DOOR PARTS

A. Cause for Renewal

1. As required

B. Correct Repairs

1. As required

C. Recondition Requirements

1. Not applicable

D. Welding Requirements

1. Welding not permitted unless otherwise specified.

E. General Information

1. Renewal of insulated or non-insulated flush plug type or side full sliding plain type doors and all types of metal doors, side or end, must be reported per Rule 72.
2. No charge permitted and no billing repair data is required for renewal of seal hook or pin secured by chain, including chain for such items.
3. When empty car is in shop or on repair track for any reason, side full sliding plain doors must be inspected, cycled and lubricated and repairs performed as necessary. Sliding side doors must be closed upon release from shop or repair track.
4. When empty car is on repair track for any reason, plug door mechanism (both lubed and non-lubed types) must be inspected and lube type doors must be lubricated. Lubrication is not required when door exterior is stenciled and the date is within the last 12 months, or it is a non-lube type (lubeless) plug door. See Rule 4 of the AAR Lubrication Manual for procedures. In addition, doors must be adjusted, when required, to insure ease of operation and prevent binding on bottom threshold plate. Plug doors must be closed upon release from shop or repair track.
5. End doors on loaded enclosed multi-level automobile rack cars must be closed and locked.
6. End doors on empty enclosed multi-level automobile rack cars must be closed and locked. Cars moving to home shop account bad order doors which cannot be closed and locked must be secured for safe movement.
7. Geared type plug door operating levers must have an anti-spin device, and door stenciled "ASD" near the operating lever, if not already equipped, when
 - a. Any work is required on the operating mechanism when on shop or repair track.
 - b. Any time more than 85 man-hours of work is required on the car.
8. Lever type plug door operating levers must have an anti-kickback device, and door stenciled "AKD" near the operating lever, installed if not already equipped, when
 - a. Any work is required on the operating mechanism when on shop or repair track.
 - b. Any time more than 85 man hours of work are required on the car.
9. Bill the application of an anti-spin or anti-kickback device per Rule 72.
10. Reference Rule 1 when repairing box car doors.

— 576 —



RULE 81 – TANK AND TANK CAR REPAIRS

Editorially Revised B.3 Added
and has a current AAR M-1002
Certification per Appendix B of
AAR Specifications for Tank
Cars, Section C-III.



RULE 81 – TANK AND TANK CAR REPAIRS

A. Cause For Repairs

1. As required

B. Correct Repairs

1. End platform safety railing may be renewed in kind or substituted for each other when used as specified providing steel pipe and solid steel are not intermixed.
 - a. 1½ inch schedule 40 steel pipe.
 - b. 7⁄8 inch diameter solid steel.
2. When safety railing is 1½ inch pipe and involves flattening, pipe must be reinforced with a steel pipe insert at least 11 inches long or twice the length of the flattened portion, whichever is greater (see Figure A).
3. Tank cars with tanks requiring welded repair, removal of deformations, alteration, conversion or qualification must be processed in a facility that has a current AAR M-1003 Certification per AAR Specification for Quality Assurance, Section J, and has a current AAR M-1002 Certification per Appendix B of AAR Specifications for Tank Cars, Section C-III.

C. Recondition Requirements

1. As required

D. Welding Requirements

1. Welding is not permitted to tanks of tank cars unless;
 - a. Facility performing welding is certified to M-1002 and M-1003 by the AAR for welded repairs to tanks of welded construction.
 - b. All applicable requirements of the current Hazardous Materials Regulations of the Department of Transportation and Appendix R of AAR Specifications for Tank Cars have been complied with.
2. On tank cars without continuous center sills (stub sill design) welding of cracks in parent metal of the stub sill structural members, or in sill-to-pad welds, is not permitted if any portion of the cracks are within 12 inches of the attachment of the stub sill or in the tank reinforcing pad, except welding which is performed by welders qualified in accord with the AAR's Specifications for Tank Cars, and by a M-1002/M-1003 certified facility.
3. Welding is not permitted to the following:
 - a. Side railings, operating platform safety railings, and all other handrails/guardrails, except as shown in Figure A, or as provided for in the original approved design.
 - b. Tank car end platform safety railings are not to be rewelded if cracked or broken at the center of the car bracket. Perform field repairs as shown in Figure B. Refer to Section E.16 of this Rule for additional instructions.
4. Welding is permitted to handrail supports if provided for in the original approved design.

RULE 81 – TANK AND TANK CAR REPAIRS

Editorially Revised D.1.a Deleted

(or an extension thereof)



RULE 81 – TANK AND TANK CAR REPAIRS

A. Cause For Repairs

1. As required

B. Correct Repairs

1. End platform safety railing may be renewed in kind or substituted for each other when used as specified providing steel pipe and solid steel are not intermixed.
 - a. 1¼ inch schedule 40 steel pipe.
 - b. 7⁄8 inch diameter solid steel.
2. When safety railing is 1¼ inch pipe and involves flattening, pipe must be reinforced with a steel pipe insert at least 11 inches long or twice the length of the flattened portion, whichever is greater (see Figure A).
3. Tank cars with tanks requiring welded repair, removal of deformations, alteration, conversion or qualification must be processed in a facility that has a current AAR M-1003 Certification per AAR Specification for Quality Assurance, Section J, and has a current AAR M-1002 Certification per Appendix B of AAR Specifications for Tank Cars, Section C-III.

C. Recondition Requirements

1. As required

D. Welding Requirements

1. Welding is not permitted to tanks of tank cars unless:
 - a. Facility performing welding is certified to M-1002 and M-1003 by the AAR for welded repairs to tanks of welded construction.
 - b. All applicable requirements of the current Hazardous Materials Regulations of the Department of Transportation and Appendix R of AAR Specifications for Tank Cars have been complied with.
2. On tank cars without continuous center sills (stub sill design) welding of cracks in parent metal of the stub sill structural members, or in sill-to-pad welds, is not permitted if any portion of the cracks are within 12 inches of the attachment of the stub sill or in the tank reinforcing pad, except welding which is performed by welders qualified in accord with the AAR's Specifications for Tank Cars, and by a M-1002/M-1003 certified facility.
3. Welding is not permitted to the following:
 - a. Side railings, operating platform safety railings, and all other handrails/guardrails, except as shown in Figure A, or as provided for in the original approved design.
 - b. Tank car end platform safety railings are not to be rewelded if cracked or broken at the center of the car bracket. Perform field repairs as shown in Figure B. Refer to Section E.16 of this Rule for additional instructions.
4. Welding is permitted to handrail supports if provided for in the original approved design.

RULE 81 – TANK AND TANK CAR REPAIRS

Editorially Revised E.3

3. Repairing and testing tank of tank car shall be on actual time basis, per Job Code 4450, Rule 75.



RULE 81

E. General Information

1. For items of repair to tank cars that are common to all cars, see the specific Rule that governs.
2. Painting tanks of tank cars, including underframe and parts, will be reported as outlined in Rule 80.
3. Repairing and testing tank of tank car shall be on actual time basis, per Job Code 4450, Rule 75.
4. Cleaning tanks of tank cars, in connection with repairs to tank proper, shall be on actual time basis, per Job Code 4450, Rule 75.
5. Repairs to tank car head shields and their attachments (excluding hand brake and safety appliance attachments) must be performed only at the direction of the car owner and by an AAR certified shop as shown in Appendix B of Specifications of Tank Cars.
6. Pipe union must not be used in making repairs to handrails of tank cars.
7. Additional charge may be made for accessories such as pipe clamps which require R&R or R in order to make repairs.
8. The application of fabricated tank car handrails/dome safety platform handrails as provided for in the original approved construction shall be reported on a securement basis per Rule 74.
9. No labor shall be charged and billing repair data is not required for the following, except on authority of Defect Card or endorsed Joint Inspection Certificate.
 - a. Handrail/platform railing straightened on car.
 - b. Handrail brackets or supports straightened on car.
10. Charge for disconnection of TANKTRAIN coupling only 1 time per connection of 2 tank cars. Always disconnect interconnecting flexible hose on A end.
11. Additional charge per Rule 75 may be made if jacking of car is necessary to safely accomplish repairs. The jacking procedure utilized to perform repairs safely will be determined by the repairing facility and/or repair force. Exception to choice of jacking procedure will not be allowed.
12. When placard holders are attached to running boards, they must be attached to a mounting surface of sufficient strength to prevent damage to the running board and to minimize transmission of vibrations to the placard holders or moved to mount on structure other than the running board, that has sufficient strength. Placard holders must be located out of the splash zone, which is over the wheels.
13. Certified tank car facilities refer to M-1002, C-III, Appendix B for required publications.



RULE 81 – TANK AND TANK CAR REPAIRS

Revised E.11

“The jacking procedure utilized to perform repairs safely will be determined by the repairing facility and/or repair force. Exception to choice of jacking procedure will not be allowed.”



RULE 81

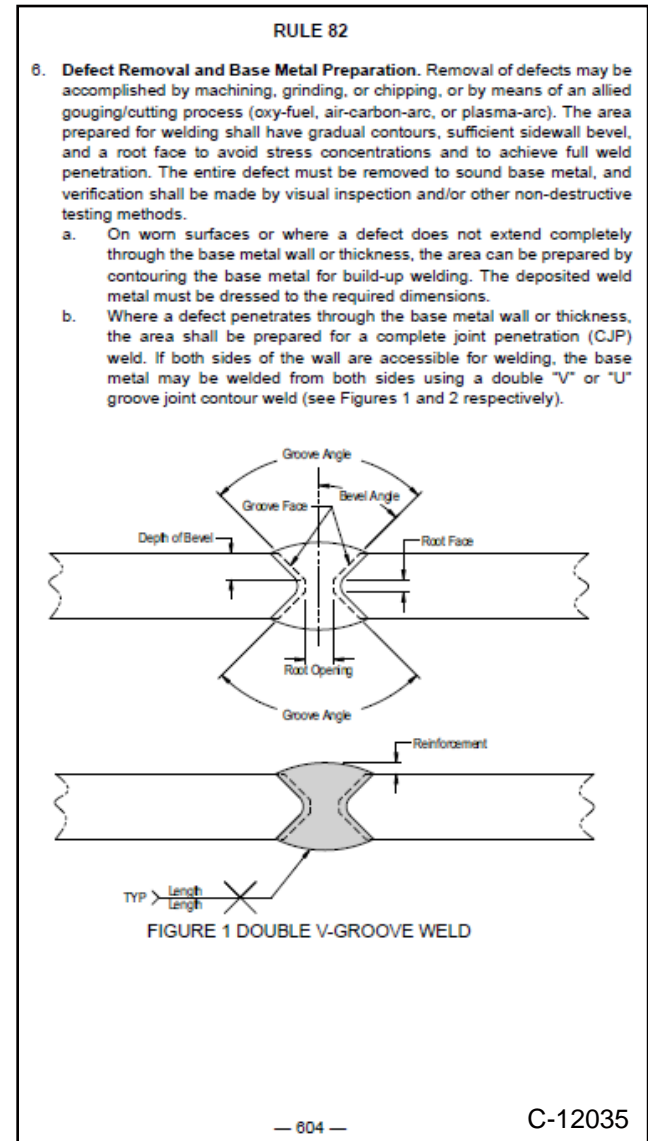
E. General Information

1. For items of repair to tank cars that are common to all cars, see the specific Rule that governs.
2. Painting tanks of tank cars, including underframe and parts, will be reported as outlined in Rule 80.
3. Repairing and testing tank of tank car shall be on actual time basis, per Job Code 4450, Rule 75.
4. Cleaning tanks of tank cars, in connection with repairs to tank proper, shall be on actual time basis, per Job Code 4450, Rule 75.
5. Repairs to tank car head shields and their attachments (excluding hand brake and safety appliance attachments) must be performed only at the direction of the car owner and by an AAR certified shop as shown in Appendix B of Specifications of Tank Cars.
6. Pipe union must not be used in making repairs to handrails of tank cars.
7. Additional charge may be made for accessories such as pipe clamps which require R&R or R in order to make repairs.
8. The application of fabricated tank car handrails/dome safety platform handrails as provided for in the original approved construction shall be reported on a securement basis per Rule 74.
9. No labor shall be charged and billing repair data is not required for the following, except on authority of Defect Card or endorsed Joint Inspection Certificate.
 - a. Handrail/platform railing straightened on car.
 - b. Handrail brackets or supports straightened on car.
10. Charge for disconnection of TANKTRAIN coupling only 1 time per connection of 2 tank cars. Always disconnect interconnecting flexible hose on A end.
11. Additional charge per Rule 75 may be made if jacking of car is necessary to safely accomplish repairs. The jacking procedure utilized to perform repairs safely will be determined by the repairing facility and/or repair force. Exception to choice of jacking procedure will not be allowed.
12. When placard holders are attached to running boards, they must be attached to a mounting surface of sufficient strength to prevent damage to the running board and to minimize transmission of vibrations to the placard holders or moved to mount on structure other than the running board, that has sufficient strength. Placard holders must be located out of the splash zone, which is over the wheels.
13. Certified tank car facilities refer to M-1002, C-III, Appendix B for required publications.

RULE 82 – WELDING AND ALLIED PROCESSES

Revised E.6

Added new paragraph and figures



RULE 82 – WELDING AND ALLIED PROCESSES

Revised E.8

“The jacking procedure utilized to perform repairs safely will be determined by the repairing facility and/or repair force. Exception to choice of jacking procedure will not be allowed.”



RULE 82

4. Welding Job Codes covered by this rule include labor and material for defect or weld removal, surface or base metal preparation (including preheat when required) fit up of parts to be welded, and all welding consumables, gas, and electric current.
5. Aluminum, stainless steel welding, and carbon steel groove welds over 1 inch in size will be charged on actual time basis.
6. Welding of tank of tank car shall be on actual time basis, per Job Code 4450, Rule 75.
7. Additional charge per Rule 75 may be made if post-weld heat treatment or stress relieving is required. Contact the car owner for specific requirements.
8. Additional charge per Rule 75 may be made if jacking of car is necessary to safely accomplish repairs. The jacking procedure utilized to perform repairs safely will be determined by the repairing facility and/or repair force. Exception to choice of jacking procedure will not be allowed.
9. Additional charge per Rule 75 may be made if R&R of draft gear/yoke assembly is necessary to safely accomplish repairs.
10. Additional charge per Rule 16.E., 17.E., or 18.E. may be made if R&R of coupler is necessary to safely accomplish repairs.
11. Any additional labor required to effect repairs and/or necessary attention to articulated equipment should be billed per Job Code 4480, Rule 75.
12. Any additional labor required to effect repairs and/or necessary attention to interconnected tank equipment should be billed per Job Code 4780, Rule 81.
13. Any additional labor required to effect repairs and/or necessary attention to drawbar connected equipment should be billed per Job Code 4462, Rule 75.
14. Additional charge per Rule 75 may be made when fall protection safety equipment is necessary to safely accomplish repairs.

F. Billing Repair Data Requirements

1. Location
 - a. Show location
2. Quantity
 - a. For weld applied show number of lineal inches
3. Condition Code
 - 0 = Labor
4. Job Code Applied
 - a. Show applicable code
 - b. Show applicable car part identification code per Rule 83 in qualifier column
5. Description
 - a. Show applicable description

RULE 83 – PREPARATION OF ORIGINAL RECORD OF REPAIR AND BILLING REPAIR DATA

Added New Qualifiers

“AO” TRAINLINE TROLLEY
 “DI” TRAINLINE BRACKET

RULE 83	
Car Part Codes	
16. Codes to be used for reporting Billing Repair Data when car part identification code is required by Section F4 and F7 of a given repair Rule:	
BRAKE EQUIPMENT	BRAKE EQUIPMENT
AA AIR BRAKE CYLINDER	BZ HAND BRAKE BELL CRANK CHAIN
AB AIR BRAKE CYLINDER PUSH ROD	CA HAND BRAKE BRACKET
AC AIR BRAKE EMERGENCY PORTION	CB HAND BRAKE CONNECTING CHAIN
AD AIR BRAKE HOSE	CC HAND BRAKE LEVER
AE AIR BRAKE HOSE CHAIN	CD HAND BRAKE LEVER FULCRUM
AF AIR BRAKE HOSE CLAMP	CE HAND BRAKE PAWL
AG AIR BRAKE HOSE "S" HOOK	CF HAND BRAKE PAWL PLATE
AH AIR BRAKE RELEASE ROD	CG HAND BRAKE PAWL WEIGHT
AI EMPTY LOAD DEVICE	CH HAND BRAKE RATCHET
AJ AIR BRAKE RESERVOIR	CJ HAND BRAKE RATCHET WHEEL
AK AIR BRAKE SERVICE PORTION	CK HAND BRAKE RELEASE SPRING
AL AIR BRAKE VALVE	CL HAND BRAKE ROD GUIDE
AM AIR BRAKE VALVE SUPPORT	CM HAND BRAKE ROD—HORIZONTAL
AN ANCHOR CLEVIS	CN HAND BRAKE ROD—VERTICAL
AO TRAINLINE TROLLEY	CP HAND BRAKE SHAFT
AP ANGLE COCK	CQ HAND BRAKE WHEEL
AQ ANGLE COCK BRACKET	CR LEVER CONNECTION ROD
AR ANGLE COCK "U" BOLT	CS NUMBER 8 VENT VALVE
AS WIRE BRAID AIR HOSE	CT PIPE BRACKET
AT BOTTOM ROD	CU PUSH ROD
AU BOTTOM ROD BRACKET	CV QUICK SERVICE VALVE
AV BOTTOM ROD SAFETY SUPPORT	CW REDUCTION RELAY VALVE
AW BRAKE BEAM	CX RELEASE VALVE
AX BRAKE BEAM CYLINDER HOSE	CY RELEASE VALVE BRACKET
AY BRAKE BEAM CYLINDER PUSH ROD	CZ RELEASE VALVE HANDLE
AZ BRAKE BEAM MOUNTED CYLINDER	DA RESERVOIR SUPPORT
BA BRAKE CYLINDER SUPPORT	DB RETAINER VALVE
BB BRAKE HEAD WEAR PLATE	DC RETAINER VALVE SHIELD
BC BRAKE LEVER BADGE PLATE	DD SLACK ADJUSTER
BD BRAKE PIN	DE SLACK ADJUSTER ACTUATING ROD
BE BRAKE SHOE	DF TOP ROD
BF BRAKE SHOE KEY	DG TRUCK DEAD LEVER
BG CLEVIS	DH TRUCK LIVE LEVER
BH CONNECTING ROD	DI TRAINLINE BRACKET
BJ CUTOUT COCK	DJ VENT PROTECTOR
BK CYLINDER LEVER	
BL CYLINDER LEVER GUIDE	
BM DEAD LEVER ANCHOR	
BN DEAD LEVER FULCRUM	
BP DEAD LEVER FULCRUM BRACKET	
BQ DIRT COLLECTOR	
BR DIRT COLLECTOR & CUTOUT COCK	
BS FLOATING LEVER	
BT FLOATING LEVER FULCRUM	
BU FLOATING LEVER GUIDE	
BV FULCRUM BRACKETS	
BW HAND BRAKE	
BX HAND BRAKE BELL CRANK	
BY HAND BRAKE BELL CRANK BRACKET	

— 622 —

C-11953



RULE 83 – PREPARATION OF ORIGINAL RECORD OF REPAIR AND BILLING REPAIR DATA

Added New Qualifiers

- c. In cases where a road cannot handle cars built to the maximum dimensions of the equipment diagram as outlined in Plate C over all of its lines, it must report the restricted areas of its lines which cannot handle such cars to the originating carrier and/or shipper upon their request prior to start of the movement.



RULE 88	
3. Automatic Equipment Identification (AEI)	a. AEI tags must be in compliance with AAR Standard S-9203 for Equipment Identification.
4. Axles	a. AAR Standard (raised wheel seat) or AAR Alternate Standard (black collar) axles are required.
5. Center Plates	a. Center plates, body and truck, integral and separable type, must comply with AAR Standards S-204, S-206, S-207 and S-208.
6. Clearances	a. No part of body or truck shall be less than 2¾ inches above top of running rail under all allowable wear and spring deflection conditions. b. Minimum clearance for tank cars above top of rail of body-mounted valves, caps and other fixtures shall be 9 inches on empty cars and 7 inches on loaded cars. This excludes exterior heater coil caps, which must be left off in transit, and cap retaining chains. c. In cases where a road cannot handle cars built to the maximum dimensions of the equipment diagram as outlined in Plate C over all of its lines, it must report the restricted areas of its lines which cannot handle such cars to the originating carrier and/or shipper upon their request prior to start of the movement.
7. Couplers, Yokes, Draft Gears, Uncoupling Levers	a. Cars must be equipped with AAR approved couplers and parts identified by "AAR" cast in raised letters, AAR catalog number, or AAR identification number cast or stamped on the item. b. Cars must be equipped with AAR approved uncoupling levers. c. Articulated locklift assembly, either single or double type, required on all bottom operated type E or E/F couplers. d. AAR standard or AAR Alternate Standard draft key retainers required on all cars equipped with coupler draft keys. e. Coupler draft keys must be equipped with steel washers as shown Rule 16, Section E unless cars have 2 inch wide key slot bearing surface, or where prohibited by striker and related design. f. Draft gears and yokes must be AAR approved and identified with cast or steel stamped letters "AAR". g. Cars equipped with "approved for test" draft gears must be stenciled as required by the AAR Equipment Engineering Committee.
8. Cushioning Devices	a. Cushioning devices must be AAR approved as listed in Rule 59.
9. Receptacles and Card Boards	a. Cars must have receptacles and card boards applied per Rule 71.
10. Reflective sheeting, effective November 28, 2015, must be in compliance with AAR MSRP S-910.	

RULE 83 – PREPARATION OF ORIGINAL RECORD OF REPAIR AND BILLING REPAIR DATA

Deleted B.1.d.(h) and Re-numbered

- (h) Cars equipped with high friction composition brake shoes must be stenciled at all four corners in not less than 1½ inch block letters, indicating type and thickness of brake shoes standard to car.



RULE 83 – PREPARATION OF ORIGINAL RECORD OF REPAIR AND BILLING REPAIR DATA

Revised B.2.a Added
Failure to comply with Rule 88.B.2 may result in the revocation of AAR-M-1003 facility QA certification



RULE 88	
(h)	When structural limitation of a car is less than truck capacity, a star symbol (*) must be applied to the left of the "LD LMT" stencil.
	Refrigerator cars with floor rack capacity less than 25,000 pounds must be stenciled per Section L of the AAR Manual of Standards and Recommended Practices.
(2)	When air brake test date is more than 12 months old 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.
e.	When brake cylinder volume is changed, such as increasing or decreasing the number of brake cylinders, the equalization pressure must remain in conformance with S-401.
2. Inspection and Repair	
a.	All cars, other than tank cars, released into service after rebuilding or heavy repair must comply with the requirements of this section. Heavy repairs are defined for this rule as repairs exceeding 85 hours, including painting and lining. Purging, cleaning and water testing are not considered repairs in this rule. Tank cars must meet the requirements of Note 5. Failure to comply with Rule 88.B.2 may result in the revocation of AAR-M-1003 facility QA certification.
b.	A thorough inspection must be performed and repairs where necessary must be made to the following: <ul style="list-style-type: none">(1) Body bolsters and center plates.(2) Center sills.(3) Crossbearers.(4) Cross ties.(5) Draft systems and components.(6) End sills.(7) Side sills.(8) Trucks.<ul style="list-style-type: none">a. When wedge rise exceeds the limits indicated in Figures A-1, A-2, A-3, B-1, C-1 and D-1 or manufacturer's recommendations, it must be corrected by installation of new AAR approved stabilizer parts, or the trucks must be repaired in accordance with the procedures outlined in AAR Specification M-214, or truck designer's recommendations.
(9)	Tank car jackets.
(10)	Hand brakes. <ul style="list-style-type: none">a. Drive shaft or drive shaft bearing wear in excess of 3/32 inch requires removal of hand brake. This wear can be measured using a 3/32 inch hex wrench. If a 1/2 inch length of the wrench can be inserted between drive shaft and bearing, remove hand brake.

RULE 90 – CARS AND/OR CAR PARTS PROHIBITED IN INTERCHANGE

Revised B.2.a Added

- e. Effective January 1, 2014, rubber sealed compression fittings in the trainline. Permitted are angle cock and end cock threaded compression fittings with associated threaded nipple and coupling per S-400, Section 10.1, and associated threaded fittings and couplings to allow replacement without welding. LOKRING permanent fittings are also permitted. For purposes of this rule, the freight car trainline is that portion of brake pipe between the two nipples that connect to the end angle cocks or end cocks.

RULE 90 – CARS AND/OR CAR PARTS PROHIBITED IN INTERCHANGE

A. CARS

1. Cars more than 40 years old as measured from the year of original construction except as otherwise provided for in Office Manual Rule 88.
 - a. In the case of tank cars with separate built dates for tank and underframe, the underframe built date will govern for determining prohibition in interchange.
 - b. Section A.1.a. above will apply to both tank and underframe for AAR Specification tank cars with separate built dates for tank and underframe.
 - c. Empty cars more than 40 years old moving to be dismantled per Rule 89 are exempt from this rule.
2. Cars not properly registered in the Umler file, as required by the AAR Umler Data Specification Manual.
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 809-C friction castings.
 - b. Flat Cars
 - (1) Container pedestals bolted or otherwise removable.

B. CAR PARTS

1. Air Brake Equipment
 - a. Pressure retaining valves less than standard 3-position type.
 - b. Pipe clamps of "J" bolt type on other than ¾ inch retainer pipe.
 - c. Pipe clamps of "U" bolt type made of round steel, except on pressure retaining valve pipe or to secure angle cock.
 - d. End air hose assemblies assembled with narrow-lip coupling.
 - e. Effective January 1, 2014, rubber sealed compression fittings in the trainline. Permitted are angle cock and end cock threaded compression fittings with associated threaded nipple and coupling per S-400, Section 10.1, and associated threaded fittings and couplings to allow replacement without welding. LOKRING permanent fittings are also permitted. For purposes of this rule, the freight car trainline is that portion of brake pipe between the two nipples that connect to the end angle cocks or end cocks.
 - f. Effective January 1, 2014. Cast iron brake shoes.
 - g. Effective January 1, 2014. Manual body-mounted slack adjusters.
 - h. Effective January 1, 2014. AB, ABC, or Z1AW type control valve portions.
 - i. Effective January 1, 2014. Vent valves not in compliance with AAR Specification S-401.
 - j. Effective January 1, 2014. Combined dirt collector and cut-out cock not in compliance with AAR Specification S-493.
 - k. Effective January 1, 2014. F type couplings on other than brake pipe hose.



RULE 91 – SERVICE INTERRUPTION

Revised B.2.a Added

6. The repair charge is as permitted in existing job codes. **The service interruption Job Codes should be billed on the same Billing Repair Card with the repair charges for the AAR-condemnable defect(s) that causes the service interruption.**



RULE 91 – SERVICE INTERRUPTION	
1. This Rule provides for a service interruption allowance to the handling line railroad for costs associated with train delays caused by an AAR condemnable defect that causes a train delay on line of road. The AAR condemnable defect that causes the delay may be repaired at the delay location or a setout location. The repair setout location could be on line of road or at a terminal	
2. Train delay allowance Job Code is not allowed when:	
a. A train is within the yard limits of the departure terminal.	
b. Causing condition is a non-billable item.	
c. Causing condition is a handling line defect.	
d. Causing condition is an end air hose failure.	
e. Causing condition is an end air hose separation.	
f. Causing condition is a broken knuckle or knuckle pin.	
g. The handling line slows the train speed to move it safely to terminal without stopping the train.	
h. Causing condition had been identified at AAR condemnable level by an Early Warning, Maintenance Advisory or EHMS alert prior to the line of road failure. (Documentation or reference to the specific alert must be provided by car owner when billing exception is taken.)	
3. Setout/pickup allowance Job Code and jacking on line of road allowance Job Code can only be billed in connection with a train delay allowance.	
4. Setout billing cannot be charged for a setout at a facility where mechanical personnel are employed.	
5. Records of service interruptions involving billable defects must be maintained and be printable.	
6. The repair charge is as permitted in existing job codes. The service interruption Job Codes should be billed on the same Billing Repair Card with the repair charges for the AAR-condemnable defect(s) that causes the service interruption.	
7. Components of the service interruption job codes for railroads are based on industry averages as follows:	
a. Train Delay—average train delay as measured on an hourly basis. This cost includes the train stop cost, the train crew cost, the locomotive cost, and the freight car cost. This does not include the associated system train delay costs of any trains following that train which was stopped for the defined defect in this rule.	
b. Setout/Pickup—the average cost to switch the car out and switch the car back into a train.	
c. Jacking on line of road—the average cost to set up and raise car for repair.	
8. See Rule 75 for Service Interruption Job Codes.	
— 664 —	
C-11954	

RULE 92 – TRANSFER OR ADJUSTMENT OF LADING

Revised 1.d and 1.e

- d. Gross weight of car and lading in excess of the weight restrictions as furnished by the railroads in the Waybill Route.
- e. Car or load not in compliance with the clearances furnished by the railroad in the Waybill Route.

RULE 92 – TRANSFER OR ADJUSTMENT OF LADING

1. Transfer or adjustment authority must be issued at interchange for the following:
 - a. Cars not loaded in compliance with:
 - (1) AAR Rules Governing Loading of Commodities in Open Top Cars. This includes renewal of blocking and/or securement details which are missing or defective, with or without load shift.
 - (2) AAR Circular—Covering Loading of Carload Shipment of Commodities in Closed Cars. Closed cars need not be opened for interior inspection of loads unless they show exterior evidence of distress conditions.
 - (3) Department of transportation regulations for the transportation of explosives and other dangerous articles by freight.
 - b. Where hazardous materials are leaking and receiving line decides to transfer rather than repair, receiving line must notify shipper prior to transferring load.
 - c. Defective equipment that is not safe to operate or safe for lading, receiving road to be the judge. Defective equipment should be repaired where practical to preclude issuance of transfer authorities.
 - d. Gross weight of car and lading in excess of the weight restrictions as furnished by the railroads in the Waybill Route.
 - e. Car or load not in compliance with the clearances furnished by the railroad in the Waybill Route.
 - f. Cars loaded for or delivered to a steamship, ferry or barge line for transportation outside the continental United States (including Alaska) without permission of the owner filed with the AAR.
 - g. Cars and/or car parts prohibited in interchange per Rule 90, unless waiver has been issued.
 - h. Cars transporting hazardous materials with prohibited and/or restricted components as outlined in the FRA Railroad Freight Car Safety Standards. Handling line may make repairs or transfer load. Shipper must be notified prior to transfer.
 - i. Cars loaded between 2 and 120 days after an AAR Equipment Alert has been issued for the receiving load unless an AAR Early Warning Letter is issued in the 120 day period.



RULE 92 – TRANSFER OR ADJUSTMENT OF LADING

Revised c(1) and c(2)

1. Gross weight of car and lading in excess of the weight restrictions as furnished by the railroads in the Waybill Route.
2. Car or load not in compliance with the clearances furnished by the railroad in the Waybill Route.



RULE 92	
5. The cost of transferring or rearranging the lading of freight cars shall be assumed as follows:	
a. By the delivering road when:	
(1) Car is not safe to run and/or unsafe for lading.	
(2) Car is not loaded in compliance with AAR Rules Governing Loading of Commodities in Open Top Cars.	
(3) Car is not loaded in compliance with AAR Circular—Covering Loading of Carload Shipments of Commodities in Closed Cars.	
(4) Car is not loaded in compliance with DOT Regulations for the transportation of explosives and other dangerous commodities by freight.	
(5) Load becomes a concentrated overload due to shifting of lading enroute.	
b. By the originating carrier (either switching or road haul) when transfer or rearrangement of load at junction or intermediate point is due to:	
(1) Load in excess of stenciled or registered load limit.	
(2) Overloading in violation of the AAR Rules Governing Loading of Commodities in Open Top Cars or AAR Circular—Covering Loading of Carload Shipment of Commodities in Closed Cars.	
(3) Cars loaded for or delivered to a steamship, ferry, or barge line for transportation outside the continental United States (including Alaska) without permission of the owner filed with the AAR.	
(4) Cars and/or car parts prohibited in interchange per Rule 90, unless waiver has been issued.	
(5) Cars loaded between 2 and 120 days after an AAR Equipment Alert has been issued unless an AAR Early Warning Letter is issued in the 120 day period.	
c. By the originating road haul carrier (the road which originates the billing and participates in the road haul revenue) when transfer or rearrangement of lading at junction or intermediate point is due to:	
(1) Gross weight of car and lading in excess of the weight restrictions furnished by the railroads in the Waybill Route.	
(2) Car or load not in compliance with the clearances furnished by the railroads in the Waybill Route.	
(3) Cars loaded in violation of Car Service Rule 10.	
— 667 —	
C-11944	

RULE 97 – CONTAMINATION DAMAGE

Editorially Revised A.3

3. Covered hopper must not be loaded with animal ruminants unless equipment is assigned for that purpose.

RULE 97 – CONTAMINATION DAMAGE

A. CARRIER PLACING CAR FOR LOADING

1. Box cars graded A or B per Rule 1, or refrigerator cars, must not be loaded with K graded commodities listed in Appendix A to AAR Car Service Rule 14, for example:
 - a. Inedible Animal Products
 - (1) Hides, pelts & skins
 - (2) Animal tankage
 - (3) Tallow
 - (4) Glue stock
 - b. Waste and Scrap Materials
 - (1) Aluminum scrap
 - (2) Iron & steel scrap
 - (3) Fly ash
 - c. Hazardous Materials and Waste
 - (1) Waste batteries
 - (2) Waste asbestos
 - (3) Hazardous chemicals
 - d. Petroleum or Coal Products
 - (1) Gasoline fuels
 - (2) Petroleum compounds
 - e. Chemicals and Allied Products
 - (1) Sodium compounds
 - (2) Ammonium compounds
 - (3) Fertilizers
 - (4) Carbon lamp blacks
 - f. Sugar Products
 - (1) Raw sugar cane or beets
 - (2) Sugar molasses
 - g. Fish Scrap or Oils
 - (1) Fish meal oil
 - (2) Fish scrap
 - h. Bulk Commodities
 - (1) Crushed shells
 - (2) Cotton seed hulls
2. Box cars or refrigerator cars must not be loaded with municipal waste (STC Code 4020114) unless equipment is assigned for that purpose.
3. Covered hopper must not be loaded with animal ruminants unless equipment is assigned for that purpose.



RULE 115 – DAMAGED AND DEFECTIVE CAR TRACKING (DDCT)

Revised A.11 Added A.11.b.

- b. When car owner designates another party for a car on incident types 95 or 107, the designated party upon acceptance must handle all car owner requirements under these rules including but not limited to shop disposition, Actual Depreciated Value, Joint Inspection, and rendering of invoice to damaging carrier. If the designated party does not accept the car incident, the car owner retains all responsibility for the incident. The designated party must be registered in FindUs.Rail with all mandatory fields. The designated party must be signatory to the AAR Interchange Rules. The car mark owner forfeits authority to render any invoice for the designated car incident once the designated party accepts the incident.



RULE 115 – DAMAGED AND DEFECTIVE CAR TRACKING (DDCT)

A. Damaged and Defective Car Tracking (DDCT) System

1. The use of DDCT is mandatory for cars being handled in accordance with AAR Interchange Rules.
2. The purpose of the DDCT is to provide a single source for processing of damaged and/or defective rail cars in accordance with the AAR Interchange Rules.
3. DDCT is accessed via <http://www.railinc.com> using your Single Sign On login and choosing the DDCT application.
4. User Guide for DDCT is available at the DDCT application.
5. All car owners must furnish the original owner cost or rebuilt cost and built date to Umler for use by the system. DDCT will use the cost to calculate an estimated depreciated value on cars involved in Rule 107 incidents.
6. DDCT handles four incident types involving AAR Rules:
 - a. Rule 1 (includes all disposition requests that are car owner's responsibility noted in other AAR Interchange Rules)
 - b. Rule 95
 - c. Rule 107
 - d. Rule 108
7. Responsible handling carrier in possession of the car will be able to
 - a. Initiate a Rule 107.B incident as described in the Office Manual of the AAR Interchange Rules.
 - b. Receive the estimated depreciated value.
 - c. Create a defect card and release car for safe movement.
8. The issuance of defect cards must be made through DDCT. Paper defect cards will not be issued.
9. Cars involved in Rule 95.A, damaged under load and considered safe to move to destination but not fit for further service, will be reported as a Rule 107 incident.
10. Disposition Shop must report
 - a. Car on hand at shop to DDCT.
 - b. All other information as required in DDCT User Guide.
11.
 - a. Car owner may elect to designate another party for handling of an individual car.
 - b. When car owner designates another party for a car on incident types 95 or 107, the designated party upon acceptance must handle all car owner requirements under these rules including but not limited to shop disposition, Actual Depreciated Value, Joint Inspection, and rendering of invoice to damaging carrier. If the designated party does not accept the car incident, the car owner retains all responsibility for the incident. The designated party must be registered in FindUs.Rail with all mandatory fields. The designated party must be signatory to the AAR Interchange Rules. The car mark owner forfeits authority to render any invoice for the designated car incident once the designated party accepts the incident.
12. Transactions initiated by DDCT will be used for updating Car Hire records.

RULES 116 TO 119 – VACANT

C-11952

— 689 —

RULE 125 – EARLY WARNING/MAINTENANCE ADVISORY (EW/MA) SYSTEM

Added New B.6. and Re-Numbered

6. Use DDCT when directed to “contact owner for disposition” by the Maintenance Advisory. Use Rule 1 Incident Type.



RULE 125		
Severity Codes		
4. Either the Maintenance Advisory will be issued or a determination made that the condition warrants some other handling such as an Early Warning or a Circular Letter. If it is determined that a Maintenance Advisory is warranted, the AAR will assign one of the following severity codes:		
Severity Code	Definition	
04	Withhold empty car from loading; contact owner for disposition; report Activity Code ME.	
05	Withhold empty car from loading; inspect, repair or contact owner for disposition; report Activity Code MR, MH, ME, or MC. If Code MC reported, car returned to service, but continued inspection required.	
06	AAR defined	
Reporting		
5. Maintenance Advisories will be processed using the EW/MA Advisory System as further described in the EW/MA Advisory Procedures Manual, http://ew.railinc.com . All carriers, private car owners, or shops will report the activity codes by using the Early Warning website (http://ew.railinc.com) or by sending an inbound message in TRAIN II format to the RAILINC network.		
6. Use DDCT when directed to "contact owner for disposition" by the Maintenance Advisory. Use Rule 1 Incident Type.		
7. Cars will be handled or deleted from the Maintenance Advisory as the appropriate activity codes are reported as specified in the Maintenance Advisory Letter or EW/MA Advisory Procedures Manual. The following activity codes will be used to report a car inspection or repair:		
Activity Code	Definition	EW Status
MC	Car inspected; return car to service; continued inspections required.	Open
ME	Car inspected and moving to shop.	Open
MF	The final inspection MH or MR was reported in error; revert car to prior severity code. MF can only be reported by the reporter of the prior activity code or the AAR.	Open
MP	The prior preliminary inspection ME/MC was reported in error; revert car to prior severity code. MP can only be reported by the reporter of the prior activity code or the AAR.	Open
MH	Car repaired; return to service.	Final
MI	Car deleted from Umler; reported by the AAR.	Final
MK	Maintenance Advisory cancelled by the AAR	Final
MN	Car incorrectly added to EW or upgraded to another EW; reported by the AAR.	Final
MR	Car inspected; return car to service; no continued inspection required.	Final
MY	Car moved from MA to EW. MY can only be reported by the AAR. See MA's.	Final

— 702 —

C-11844

APPENDIX A - DEFINITIONS

Added Definition for Contract Shop

Contract Shop: Any repairs performed by a subscriber to the interchange agreement of the Association of American Railroads, including any repairs performed on the subscriber's behalf by a contract shop, must be done in compliance with AAR Interchange Rules and applicable governmental regulations.



APPENDIX A

Bilateral Agreements: Agreements entered into to deviate from the rules between or among two or more subscribers. The ability to use these agreements to opt out of the AAR interchange rules for purposes such as specifying points where repairs are to be made, or specifying repair time limits, or defining specific replacement parts, or condemning limits for such parts, specifying different labor rates or material charges or addressing other issues otherwise covered by the AAR Interchange Rules will be the province of the respective subscribers.

Billing: The invoice submitted to the responsible party (car owner, intermediate road, defect card road) for repairs performed or damage compensation due.

Billing Repair Card: A presentation of repair data in accordance with AAR Rule 83.

Binding or Fouling: When a brake lever, brake rod, or brake beam connecting rod comes into contact with any part of the car preventing the system from working as intended.

Break (Broken): Unless defined otherwise in a specific Rule, break (broken) means a fracture resulting in complete separation into parts.

Built Date/Rebuilt Date: The month and year a car is built or rebuilt. See AAR Umler Data Specification Manual.

Business Day: Monday through Friday during the normal working hours of 8:00 a.m. to 5:00 p.m., excluding holidays.

Car: See Unit.

Car Kind Symbols: Symbols used on Billing Repair Card to identify kind of car repaired. See AAR Rule 83.

Car Owner: The company or individual whose assigned mark is stenciled on an interchange freight car.

Car Part Code: Two character code used to identify the area where repairs were performed on a car. See AAR Rule 83.

Component: A part of the freight car that is job coded.

Condemnable: Any condition warranting inspection, repair, or testing of a freight car as specified in any section of the Interchange Rules.

Conditionally Approved: The status of a practice or procedure, an item of equipment, a design, product, device, or facility which has been reviewed by the AAR and found to meet the applicable requirements for use in interchange service with restrictions imposed as to quantity, period of service, type of application, test conditions, or other limitations as stated in the applicable standard, specification, or alternate standard. This term is used in lieu of former status "approved for test."

Condition Codes: One character numerical code used on Billing Repair Cards to indicate grade of material applied or repairs performed. See AAR Field Manual Rule 83.

Contract Shop: Any repairs performed by a subscriber to the interchange agreement of the Association of American Railroads, including any repairs performed on the subscriber's behalf by a contract shop, must be done in compliance with AAR Interchange Rules and applicable governmental regulations.

Controlled Interchange/Restricted: An interchange freight car placed in service under the provisions of AAR MSRP M-1001, Chapter XII.

Correct Repairs: Material and repairs specified in Section B of any AAR Interchange Rule.

APPENDIX A - DEFINITIONS

Added Definition for Designated Party

Designated Party: A company or agent that a car mark owner elects to handle Rule 115 (DDCT) incidents. The designated party must be registered in FindUs.Rail and must be signatory to the AAR interchange Rules. Upon acceptance of a DDCT incident from the car mark owner, the designated party must handle all car owner requirements related to the DDCT incident including, but not limited to, shop disposition, Actual Depreciated Value, Joint Inspection, and rendering of invoice to damaging carrier.



APPENDIX A

Corrosive Service: Defined by D.O.T. Regulations for Class 8.

Cost Factors: Indices used to adjust the original cost of a freight car for annual price fluctuations.

Counter Billing Authority (CBA): A document that issues authorization to collect an overcharge (similar to a credit memo) or to deduct (offset) an overcharge from a bill.

Cracked: Unless defined otherwise in a specific Rule, cracked means fractured without complete separation into parts, except that castings with shrinkage cracks or hot tears that do not significantly diminish the strength of the member are not considered to be cracked.

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

Data Summary: A Data Summary is a real-time compilation of relevant data for a specified category (e.g., wheel impact data, acoustic bearing data, overload/imbalance data, etc.). Information contained in a Data Summary may be used to facilitate safe and economical operations. Approved Data Summary definitions are documented in AAR MSRP Section F.

DDCT: The rail industry's system for managing damaged and defective cars (Damaged Defective Car Tracking).

Defect Card: A document accepting responsibility for damage or loss to an interchange freight car dated prior to 1/5/11. After 1/5/11, an incident created in the DDCT system where an active record in the system indicates the handling line accepting responsibility for damage or loss to an interchange freight car as outlined in AAR Rule 95.

Delivering Line: Subscriber offering a freight car in interchange.

Depreciated Value: The reproduction value of a freight car adjusted for depreciation up to the date of the damage, based on annual rate of depreciation shown in AAR Rule 107.

Derailment: Anytime the wheels of a car or engine come off the head of the rail.

Designated Party: A company or agent that a car mark owner elects to handle Rule 115 (DDCT) incidents. The designated party must be registered in FindUs.Rail and must be signatory to the AAR interchange Rules. Upon acceptance of a DDCT incident from the car mark owner, the designated party must handle all car owner requirements related to the DDCT incident including, but not limited to, shop disposition, Actual Depreciated Value, Joint Inspection, and rendering of invoice to damaging carrier.

Dismantling Allowance: The compensation due when it has been determined that equipment must be retired and prohibited from re-entering interchange service. Dismantling allowance is calculated by dividing the lightweight of car/rack by 2240 (gross ton) times the current value of Job Code 4489 (dismantling allowance) at time of settlement. See AAR Rule 107.

Disposition: Destination and routing instructions issued by a car owner to the handling line per AAR Rules 1, 114, and 115.

D.O.T.: Department of Transportation

Drawbar-Connected Car: A multi-unit car which is semi-permanently connected by a solid drawbar connector or other special coupling arrangement, without sharing trucks, and identified by a single car number.

APPENDIX A - DEFINITIONS

Editorially Revised Definition of FindUs.Rail

FindUs.Rail: Mandatory site for the location of contact information by railroads, car owners, and repair shops or facilities



APPENDIX A	
Early Warning:	A directive issued by the AAR for interchange freight cars having mechanical defects or potential safety problems.
Equipment Alert:	An informational notice issued by the AAR covering interchange freight cars identified as unacceptable to an individual railroad for mechanical reasons.
Expedite Track:	A repair location not meeting the definition of a repair track (that is, mobile repair vehicles and tracks performing repairs not requiring full repair equipment).
Equipment Type Code:	Four character alphanumeric code identifying a general physical description of specific car types of the Umler Data Specification Manual.
Extended Service Status Unit(s):	Units that did not originally meet the requirements of AAR Field Manual Rule 88.A.1.a, but which have been approved by the Equipment Engineering Committee for extended interchange service for up to 50 years.
Fall Protection:	Safety equipment that provides fall protection used by repair personnel when required by government regulation in order to safely accomplish repairs.
Field Manual:	The AAR Interchange Rules which specify the inspection, repair, and handling requirements of interchange freight cars.
Final Alert Level:	The point where a component or system places undue stress upon the physical plant and equipment.
FindUs.Rail:	Mandatory site for the location of contact information by railroads, car owners, and repair shops or facilities.
Fixed Labor:	A labor charge that does not vary with the quantity applied. The fixed labor charge is always calculated as one (1) times the fixed labor (F).
Foreign Car:	Any car not owned by the subscriber.
Foreign Repair:	Any repair performed to an interchange freight car by a company other than the car owner (or car owner's agent in the case of contract shop repairs).
Free/Unrestricted Interchange Service:	A freight car placed in the North American interchange system recognized as meeting all interchange requirements. Also referred to as interchange service.
Government Directive:	Any instruction issued by a federal, state or local agency pertaining to inspection, repair or disposition of interchange freight cars.
Government Regulatory Requirement:	Mechanical requirements placed on freight cars by various governmental agencies.
Handling Line:	The railroad of record in the AAR TRAIN II® System having possession of an interchange freight car.
Home Line/Home Road:	The road which owns the car or upon which the home of a private car is designated or located.
Home Shop:	A repair facility designated by the car owner and found in FindUs.Rail per AAR Rules 1, 114, and 115.
Interchange:	The transfer or delivery of a freight car from one subscriber to another as indicated in the AAR TRAIN II® System.
Interchange Acceptance:	A freight car is considered interchanged when accepted by the receiving subscriber or if possession is so indicated in the AAR TRAIN II® System.

— 712 —

APPENDIX A - DEFINITIONS

Revised Definition of Jacking

Jacking: Raising of the car body by any means necessary in order to safely accomplish repairs (See Rule 75, Job Code 4458, 4459, or 4461).



APPENDIX A	
Interchange Freight Car:	A freight car placed in interchange service by a subscriber.
Interchange Point:	The designated interchange location.
Intermediate Line:	A railroad which is neither the delivering nor originating carrier for a freight car. For billing purposes a subscriber which is neither the car owner nor the responsible party.
Jacking:	Raising of the car body by any means necessary in order to safely accomplish repairs (See Rule 75, Job Code 4458, 4459, or 4461).
Job Code:	A 4 digit number that identifies the inspection, repair, and/or testing performed, or the car component applied or removed.
Joint Inspection Certificate (JIC):	A document detailing unfair usage damage or loss or extensive owner's defects as outlined in AAR Rules 95 and 108. See AAR Rule 103.
Labor Rate:	Consists of direct labor, indirect labor, fringe benefits and non-labor overhead costs associated with car repair; refer to AAR Office Manual Rule 111.5 for further detail.
Lightweight:	The scale weight of an empty car to the nearest 100 pounds.
Line of Road:	Outside yard limits.
Load Limit:	The maximum permissible weight that can be loaded into or on a car based upon journal size or as indicated in Umler.
Loading Allowance:	Job Code 4486 as defined in AAR Rule 75, or the amount of compensation allowed for loading damaged equipment onto other equipment.
Loose:	Unless defined otherwise in a specific Rule, loose means a component that is readily moveable by hand.
Maintenance Advisory:	An informational notice issued by the AAR for interchange freight cars having minor mechanical defects or on which preventive/corrective maintenance is to be performed.
Modified Unit(s):	Units which are modified to include any of the changes as referenced in AAR Office Manual Rule 88.
Net Applied:	A Job Code that includes all labor and material necessary to complete the repair.
New Unit(s):	A unit having a completely new car body and underframe, with individual components meeting the requirements as specified in AAR Office Manual Rule 88.
Newly Acquired Unit(s):	An existing unit sold and purchased for use in interchange service.
Nonconformance:	The deficiency which causes the associated product or service not to meet the applicable standard.
Obsolete:	Components no longer acceptable for interchange service as set forth in these rules.
Office Manual:	The AAR Interchange Rules which specify labor and material pricing, sale, acquisition, and settlement for interchange freight cars.
Opportunistic Repair:	Specific authorized repairs identified as Opportunistic Repairs in Section A of any AAR Interchange Rule.
Original Cost:	Original ledger value of original owner. See AAR Umler Data Specification Manual.

APPENDIX A - DEFINITIONS

Added Definition for Wheel Set Transfer

Wheel Set Transfer: Transfer of a wheel set from a location on a car to a different location on the same car or the transfer of a wheel set from one car to a location on an entirely different car.



APPENDIX A

Specification: Detailed description of requirements for a design, product, device, or facility. These requirements may pertain to performance, methods of fabrication, material, quality control, laboratory and field test procedures, or other criteria. Specifications are not considered mandatory unless designated as a "standard" by the sponsoring committee.

Sponsoring Railroad: A railroad that has established a relationship with a running repair agent to make running repairs while on the railroad's property. The railroad is responsible for all agents' running repair activity performed on the sponsoring railroad's property.

Standard: A specification, procedure, practice, definition, design, product, or device which is approved by the AAR to serve as the requirement for use in interchange service. Any manufacturer producing material to the requirements of an AAR Standard must provide evidence of compliance upon request.

Standard Point Location Code (S.P.L.C.): Numeric code indicating the geographic station where repair(s) are performed for a given shopping.

Submerged: When any portion of a component has been under water.

System Car: A car owned by the subscriber.

System Repair: A repair performed by owner of the car.

Telerailed Automated Information Network (TRAIN II®): A system operated by the Association of American Railroads which identifies boundary crossings and other equipment movements.

Total (Gross) Allowable Weight on Rail: The maximum allowable weight of a car and lading on rail or as indicated in Umler. See AAR Rule 70. Also referred to as Gross Rail Load (GRL).

Transportation Codes: Alphabetic codes describing an AAR or FRA interchange restriction. See AAR Umler Data Specification Manual.

Umler: The Umler system is an electronic resource that contains critical data for North American rail fleet, such as internal and external dimensions, cubic or gallon capacity, and weight information for each unit. See AAR Rule 93 and AAR Umler Data Specification manual.

Unfair Usage: Damage or loss to any freight car as specified in AAR Rule 95.

Unit: A car, multi-unit car, articulated car, or multi-level superstructure which is identified by a unique reporting mark and number.

Unit Segment: An individual section of a multi-unit car.

Unloading Allowance: The amount of compensation allowed for unloading damaged equipment from other equipment. (Job Code 4488 of AAR Rule 75).

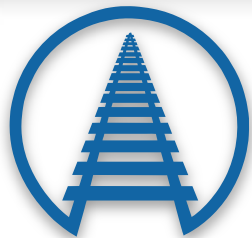
Variable Labor: A labor charge that varies with the quantity applied. The variable labor charge is always calculated as the quantity applied times the variable labor (V).

Wheel, Narrow Full Flange Contour: A wheel with a finger reading less than 2.

Wheel Set: Includes 2 wheel plates, 2 bearings and 1 axle.

Wheel Set, New: One placed in service for the first time since the newly manufactured wheel plates were mounted.

Wheel Set Transfer: Transfer of a wheel set from a location on a car to a different location on the same car or the transfer of a wheel set from one car to a location on an entirely different car.



AAR Interchange Rules Revisions

Office Manual of the Interchange Rules

Office Manual of the Interchange Rules



Note that most editorial 2013 changes will not be included in this presentation.

OM Rule 88-Requirements for Acceptance

- Add to Category (21) c vii –
Chocks fully approved or conditionally approved by showing equivalency to chock systems that were approved prior to January 1, 2010, are not allowed on new built superstructures.
- Add new Category (21) c viii –

Rebuilt tri-level superstructures shall be equipped with new or reconditioned low-profile chocks fully approved or conditionally approved by the AAR SEFCC Committee since January 1, 2010.

Chocks fully approved or conditionally approved by showing equivalency to chock systems that were approved prior to January 1, 2010, are not allowed on tri-level superstructures at time of rebuild.
- Column RB is to be X, all others columns to be NA

Reference C-12056, 11/22/13



Rule 114-Mandatory Contact List

- **Rule 114.12 (Approved)**

12. The reporting mark owner is responsible for reporting and maintaining current and accurate contact information in FindUs.Rail as prescribed in Rule 114.2.

a. When the AAR assigns a new reporting mark and/or transfers an existing reporting mark, Railinc is authorized to update FindUs.Rail with contact information provided at time of reporting mark assignment or transfer.

b. When it is determined that an owner of an existing reporting mark has not reported all mandatory contact information as outlined in Rule 114.2, Railinc is authorized to update FindUs.Rail with contact information provided at time of reporting mark assignment.

Reference C-12045, 11/1/13



Rules 121, 123 and Appendix A-CBA

- Rule 121, 123 and Appendix A revisions are pending as of 1/6/14. The changes as published in C-12059 on 11/25/13 when adopted will be effective as of August 1, 2013.

Cost Benefit Analysis: The methodology described in the Association of American Railroads Cost Benefit Analysis Procedure, used to identify all of the relevant estimated costs and benefits.

Equipment Maintenance Improvement Benefit: An extension of the life of a freight car or component or the reduction of the life cycle cost of maintenance of a freight car or component or the reduction of the frequency or severity of damage to the freight car.

Safety Benefit: A reduction or elimination of the probability of the following occurring as a result of a derailment or other accident or incident:

Personal injury to employees or the public,

Release of hazardous materials,

Damage to equipment, right of way or property.

Revision: A modification to an existing AAR Interchange Rule or Standard or the addition of a new AAR Interchange Rule or Standard.



Appendix B-Maintenance Pool Billing

- The exchange rate for the conversion from Canadian dollar to U.S. dollar, use Bank of Canada --Monthly average exchange rates, U.S. dollar noon, 90 day, reference website:
www.bankofcanada.ca/rates/exchange/monthly-average-lookup/
- The exchange rate for the conversion from Mexico peso to U.S. dollar, use Banco de Mexico –End of month exchange rates, fixed, reference website:
www.banxico.org.mx/portal-mercado-cambiario/foreign-exchange-markets--exc.html
- Charges are to be prorated depending on existing circumstances, on a car participation basis, or a car requirement basis. The method of prorating charges is at the option of the pool operator.
- Rule 3 vacated along with several editorial updates.

Reference C-12034, 10/30/13



Labor Rates/Cost Factors/Service Fees

- The following rates/fees become effective on January 1, 2014:
- Hourly Labor Rate-\$110.88 (increase)
- Cost Factor-202
- ATSI/EHMS Fees
 - Railroads \$2061.23 per billion revenue ton miles (up)
 - Private Car Owners \$0.05 per car (static)
- Technical Services User Fee-\$2.26 per car (increase)
- DDCT Car Owner fee static at \$0.70 per car (static)
- Car Repair Billing Fee-\$0.45 per car (static)



Field and Office Manuals

Questions/Comments

