ASSOCIATION OF AMERICAN RAILROADS Mechanical Inspection Department Freight Car Maintenance Inspection

	AAR Inspection Report								
A. Outbo Reporting Marks	Reason Bad Ordered		Exception Noted			Status/Comments			

B. Inbound	B. Inbound Inspection (Bad Order Verification)							
Reporting Marks	Reason Bad Ordered	Exception Noted Maj Mod Min			Load or	Status/Comments		
Marks		Maj	Moa	IVIIII	Empty			

AAR	AAR Inspection Report					
C.	Train Yard Inspection			Mod	Min	Rule Violation
		Inspection	Ž			Interchange Rules & CFR 49, Part 215, 231 & 232
	a)	Number of cars inspected Outbound				,
		Units checked for out-of-date air test?				
		tion of Car Structure				
	c)	Center sills, end sills, side sills, body bolsters, side				
		bearings, center plates, decks, draft sills?				
	d)	Wheel sets inspected for defects listed in Rule 36,				
		37, 41, 43 and 90 (Field Manual)?				
	Trucks					
	e)	Side Frames and Bolsters inspected for defects?				
		Securement				
	f)	Open Top Loads secured as required?				
	g)	Container pedestals and hitch components				
		inspected for missing components and cracked				
		securements?				
	h)	TOFC/COFC Interchange Rules?				
	_	Appliances				
	i)	Ladders, ladder treads, handholds, and sill steps inspected for defects?				
	j)	Running boards, dome platforms, brake steps and crossover platforms inspected for defects.				
	Yard I	Billing				
		Are repairs compatible with the actual billing repair card?				
	Initial	Terminal Air Brake Test				
	1)	Train brake air system charged properly with				
		retaining valves and valve pipes in good condition?				
	m)					
	n)	Train charged to 15 lbs. of feed valve setting but				
		not less than 75 lbs?				
	o)	20 lb. reduction made and leakage reported?				
	p)	Proper inspection of train brakes?				
	q)	Piston travel inspected for proper operating range?				
	r)	Release signal for brakes given and proper notification of test completion?				
	s)	EOT device applied and in compliance?				
	t)	Other?				
			<u> </u>			

Scr	Scrap Inspection Scrap Material Inspections a. Component Materials # Inspected					Min	Rule Violation
							Interchange Rules 83, 120
a. C							_
		<u>Condemn</u>	Non-Condemn				
1	Air hoses						
2	Adapters						
3	Brake shoes						
4	Truck bolsters						
5	Brake beams						
6	Coupler knuckles						
7	Coupler bodies						
8	Coupler yokes						
9	Coupler component						
10	Draft gears						
11	Truck side frames]
12	Truck springs						1
13	Other?						
Rer	pair Practices		<u> </u>				
	Brake						Interchange Rules 2 - 13
c. d. e. f. g.	Single Car Air Brake To reported as required? Single Car Test device, and 28mm test coupling Brake Cylinder measure Daily Test of SCABT d Single Car Air Brake To Model 3050, 3050-A, 3 cocks removed at time of Is set & release done in Other?	Brake cylinder g in-date? ement tap appli evice properly est properly de 200 & 3200-A of SCABT?	r pressure gage ied? demonstrated? monstrated? Sloan angle				
Cot	upler/Draft Gear						Interchange Rules 16-22
	Draft systems inspected						
I .	b. Use of coupler gages adequately demonstrated?						
b.	c. Coupler and draft components being removed for						
b. c.		onems comp i		1			
b. c.	condemnable defects?	011 0 1110					
b. c.		oneg 1					
b. c.	condemnable defects?						
b. c.	condemnable defects?	onems cemg :					
b. c.	condemnable defects?	onems cemg :					

AAR	Inspection Report				
E	Repair Practices - Continued	Maj	Mod	Min	Rule Violation
3.	Running Gear	-			Interchange Rules 36 - 44
	a. Wheels, axles, roller bearings are being removed for				
	condemnable defect?				
	b. Wheel gages properly used?				
	c. Condemned wheels properly identified with car initial,				
	car number, why made code, location on car, & repair				
	date, i.e.:				
	(60) Flange thin (61) High impact 80<90 Kips				
	(62) Flange vertical (63) Tread worn hollow				
	(64) Flange high (65) High impact \geq 90Kips				
	(66) Flange cracked or broken				
	(67) Wheel out-of-round detected by gage				
	(68) Rim cracked or broken				
İ	(73) Rim thin (74) Thermal cracks				
	(75) Tread shelled (76) Tread built-up				
	(77) Tread grooved (78) Tread slid flat				
1	(80) Scrape/Dent/Gouge (83) Cracked or broken plate				
	(85) Loose Wheel				
	d. Condemned bearings properly identified?				
	(04) Defective internal parts as per FM Rule 36.A.3				
	(50) Roller bearing Overheated				
	(51) Roller bearing Temperature per MSRP F 2.0 & 4.1				
	(52) Roller bearing Temperature per MSRP F 2.0 & 4.2				
	(92)Loose/Missing Cap Screw				
	(91) Non-verified TADS (96) Verified TADS				
	(93) Seals loose or cocked (97) Loose backing ring				
	(95) Roller bearing fused due to Overheating				
	(99) Damaged seals				
	e. Are bearing adapters properly gauged when trucks are				
	disassembled? f. Are Maintenance Advisory's checked for outstanding				
	,				
	active wheel impacts? g. When renewing a wheel set, are Maintenance				
	g. When renewing a wheel set, are Maintenance Advisory's checked and updated when required?				
	h. Adapters being removed for Condemnable Defects?				
	(01) Worn out (02) Broken				
	(05) Bent (08) Wrong (Not standard to car)				
	i. Are overheated and TADS bearings marked properly				
	i. Other?				
4.	Car Body				Interchange Rules 57 - 79
	a. AEI transponders properly programmed, applied, &				
	read?				
	b. Constant contact side bearings inspected and measured				
	as required?				
	c. Car body center plate checked for defective condition?				
	d. Other?				
		l	1	l	l

	Repair Practices - Continued	Maj	Mod	Min	Rule Violation
,	Truck Side Frames/Bolsters	Ĭ			Interchange Rules 46 - 50
	a. When trucks dismantled or wheels changed, is wear on				
	side frame columns and bolster gibs being measured?				
	b. Is car checked in EHMS for Truck Hunting Index?				
	Truck Side Frames:				
	c. Inspected for defects?				
	d. Pairing buttons incorrect (must be within one button				
	side to side when applied).				
	e. When trucks dismantled are thrust lugs measured?				
	f. Are pedestal roofs checked for squareness per MSRP				
	Section D S-327 when required?				
	g. Other?				
	Truck Bolsters:				
	h. Inspected for defects?				
	i. Friction casting wear limits checked?				
	j. When truck is dismantled for other cause, are pocket				
	wear plates worn 50% from new replaced as required?				
	k. Other?				
	Gages & Publications				Interchange Rule 1
	Gages Required				
	a. Single Car Air Brake Test device.				
	b. Steel wheel gage or other AAR approved alternate				
	standard.				
	c. Standard wheel defect gage No. 34401 or 34401A				
	d. Simplified steel wheel gage.				
	e. Wheel back-to-back service limit gage, (Go/No-Go or				
	alternate type capable of measuring a ¼" difference).				
	f. Adapter wear gage.				
	g. E coupler contour condemning limit age (5 5/16 inch)				
	No. 25623-1, Side A . (or Side A & B Gage)				
	h. E coupler secondhand and parts replacement contour				
	limit gage (5 1/8 inch) No. 25623-1, Side B. (or Side A				
	& B Gage)				
	i. E coupler reconditioned contour limit gage (5 inch) No.				
	28393.				
	j. E knuckle nose worn limit gage No. 44057.				
	k. F knuckle nose worn limit gage No. 49822.				
	1. F knuckle wear & stretch gage No. 44250-3.				
	m. F coupler contour limit gage No. 47120-2.				
	n. F coupler guard arm distortion gage No. 36527-2A or 3				
	o. Pedestal Ceiling Wear Gage No. EC-1200.				
	p. Tread Worn Hollow Gage.				
	q. 70,100,&125 ton (Grade C) Ride Control				
	r. Super Service Ride Control				
	s. SK-1546-1				
	t. SK-1546-2				

Repair Practices - Continued	Maj	Mod	Min	Rule Violation
Publications Required				Interchange Rule 1
u. Field Manual of the AAR Interchange Rules. (current				
year and revisions)				
v. Code of Air Brake System Tests for Freight				
Equipment. (AAR Standard S-486) 6/2013				
w. Instruction Leaflet No. 2391, Sup. 1 Repair Track				
Maintenance, Freight Brake Equipment "AB"				
Type.(4/1991)				
x. Repair Track Maintenance, Freight Brake Equipment				
DB-60 and DB-60L Control Valves.(9/2013)				
y. Repair Track Maintenance, Freight Brake Equipment				
ABDX & ABDXL Control Valves.(9/2004)				
z. $CFR49 Parts - 215(6/12)$, $224(6/12)$, $231(6/12)$ and				
232(6/12)				
aa. AAR Forms MD-11(3/10),MD12(4/13), MD-				
115(6/10), M-1003 QA-7.1 (8/14), MD-500 Form 7/13				
online version				
bb. Lubrication Manual, Manual of Standards and				
Recommended Practices Section H-III. (11/2011)				
cc. Mandatory AAR circular letters maintained.				
dd. Stucki's "Yard & Shop Insp. Pocket Guide." (5/2011)				
ee. Miner's "Field Guide." (2013 VI.I online version)				
ff. Amsted Rail Group's "Shop and Field Inspection				
Pocket Guide"(5/2005)				
gg. SCT -SK2724A Installation and Maintenance				
Procedure ((10/2006)				
hh. Certified tank car facilities need additional publications				
as listed in Rule 81.E.				
ii. Wheel and Axle Manual, MSRP, Section G-II, only if				
performing ultrasonic testing of wheels.				
jj. AWS D15.1 Railroad Welding Specification for				
Railcars & Locomotives (2012 AMD1)				
kk. Other				

Min	Interchange Rules
	Interchange Rules
	Interchange Rules
Min	Rule Violations
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	Interchange Rules and
	Instruction Pamphlets
	mstruction rumpmets
	Min

Outbound Defects

<u>Air Brakes</u>	Coupler/Draft Gear
Hand Brake Lubed Properly	Proper Coupler Height –32 ½" - 34 ½" Empty
Proper Air Hose Height – 6" Empty 5" Loaded from Top of Rail	31 ½"-33 ½" Loaded from Top of Rail to Middle of Knuckle
Proper Trolley Arrangement per FM Rule 5 Figure 9	Metal Coupler Carriers Lubed on EF Couplers
Single Sided Pipe Bracket Cut out Cock Handle Extension	Uncoupling Levers Adjusted Properly
painted Orange when SCABT is performed	Non-Metallic or Manganese Wear Plates Applied
Piston Travel Decals applied & Proper Stencils on Consolidated Stencil	Y47 pin assembly bolt replaced with 7/8" pin per FM Rule 17 Figure C
<u>Car Body</u>	Truck Side Frames/Bolsters
Safety Appliances Repaired Properly	Wedge Rise Height Above Condemning Limits
Crossover Platforms and Running Boards Repaired Properly	Loose Column Wear Plate Securements
Box Car Doors Lubricated if over 12 months	Column Wear Plates Worn 1/8" or More
Screw Type Trailer Hitches Lubricated if over 6 months Non-Retractable Trailer Hitches Lubricated if over 18 months	Pedestal Roof Liners Missing or Broken on Same End Repairs Were Made
Side Bearing Clearance Measured and Adjusted Properly	Pedestal Roof Liner Stop Liners Applied in Correct Location & Welded Properly
Center Sill Webs free from Cracks or Broken Car Graded on Box Cars and Gondolas and Entered into Umler	Minimum One Inch Letters "H" Applied on CP – HT Wheels