ASSOCIATION OF AMERICAN RAILROADS Mechanical Inspection Department Freight Car Maintenance Inspection

AAR Inspection Report						
A. Outbo	ound Inspection (Completed Ca	rs)				
Reporting	Reason Bad Ordered	Exce	ption N	loted	Load	Status/Comments
Marks		Maj	Mod		or Empty	

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

Train Yard Inspection			Mod	Min	Rule Violation
Train 1	Inspection				Interchange Rules & CFR 49, Part 215, 231 & 232
	Number of cars inspected Outbound				49, 1 art 213, 231 & 232
	Units checked for out-of-date air test?				
Inspec	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?				
Load S	Securement				
f)	1 1				
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 F	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?				
2)					
0) n)	20 lb. reduction made and leakage reported? Proper inspection of train brakes?				
p) 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?				

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
	a. Draft systems inspected for defective conditions?						
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	AAR Inspection Report						
E	Repair Practices - Continued	Maj	Mod	Min	Rule Violation		
E 3.	Running Gear 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, repair date and why made code, i.e.: (60) Flange thin (61)High impact 80<90 Kips (62) Flange vertical (63) Tread worn hollow (64) Flange high (65) High impact ≥ 90Kips (66) Flange cracked or broken (67) Wheel out-of-round detected by gage (68) Rim cracked or broken (73) Rim thin (74) Thermal cracks (75) Tread shelled (76) Tread built-up (77) Tread grooved (78) Tread slid flat (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 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 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 j. Other? Car Body	Maj	Mod	Min	Interchange Rules 36 - 44 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? 						

•	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				

F.	AAR Billing and Forms	Maj	Mod	Min	Page / of 8
	A A D DUE				
	AAR Billing				Interchange Rules
	a. All items of repair covered in proper detail on the				
	original record of repairs and signed by the party authorized to vouch for correctness? (foreign car or				
	defect card/Joint Inspection Certificate only)				
	b. Original Record of Repairs retained as required?				
	c. Defect Card/Joint Inspection Card (JIC) checked versus				
	repairs billed.				
	d. Jacking charges properly recorded?				
	e. Obsolete material charges proper?				
	f. Are CID codes getting entered into Umler when				
•	required parts are being replaced?				
	AAR Forms				
	g. Defect Cards issued for Rule 95 conditions as required?				
	h. Defect Card/Joint Inspection Certificate checked for				
	accuracy?				
	i. Field Manual Rule 95.C.4 - Damaged Car Reports,				
	maintained as required?				
	j. Form MD-11, AAR Roller Bearing Hot Box and Shop				
	Inspection Report completed as required?				
	k. Form MD-115, Defective Wheels Removed, Causing				
	Derailments, or Line-of-Road Setouts Report				
	completed as required?				
	1. M-1003, QA - 7.1 Non Conformance Report completed				
	as required?				
	m. If the facility filling out the MD-500 form when				
	cracked/broken side frames/bolsters are replaced?				
	n. Other?	3.5 .	3.7.1	3.71	
G.	Material ID/Packaging & Storage Air Brake Valves	Maj	Mod	Min	Rule Violations
	a. Control & auxiliary brake valves properly stored and covered?				
					Interchange Rules and
	b. Truck mounted piston assemblies properly covered?				Instruction Pamphlets
	c. Body mounted piston assemblies properly covered?d. Clean choke filters in emergency portion valves				
	d. Clean choke filters in emergency portion valves received from vendors?				
	D 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				
	f. End air hoses in date and properly stored? Must be				
	separated/labeled for use on own cars.				
	* 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				
	g. Intermediate air hoses in date and properly stored? Must be separated/labeled for use on own cars.				
	Wheel Sets				
	h. Wheel sets properly stored? Lubricants				
	h. AAR required lubricants properly labeled and protected				
	to prevent contamination M-914, M-942, M-971, SAE 30 oil, & SAE 50 oil?				
	Covered Commodities				
	i. New / reconditioned / repaired items performed in				
	Accordance with Specification M-1003 as required?				
1	j. Other?	1			

Outbound Defects

Air Brakes	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 1/2"-33 1/2" 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