

EEC File Number Car Type & Marks Built Date Rebuilt Date Company Address Rack Mark Rack Built Date Rack Rebuilt Date		N—New R—Reconditioned S—Secondhand X—Compliance Required NA—Not Applicable WA—When Applicable NCR—No Change Required Circle for compliance, Cross off for noncompliance.			Rule 88 Sample Car Inspection Checklist
CATEGORY	SPECIFICATIONS	☐ RB / ILS	☐ MOD	☐ IGRL	
(1) Air Brake Equipment	(a) <i>MSRP</i> S-400 must be followed.	X	NCR	NCR	
	(b) Unit must be equipped with DB-10/20 or ABDX type control valve portions.	R	NCR	X	
	(c) Retaining valve must be located in accordance with <i>MSRP</i> S-445.	X	X	X	
	(d) Pipes must be of welded fabrication or other AAR-approved or conditionally approved fittings for fabrication and assembly. Brake pipe fittings at ends of units and flexible branch pipe on cushioned underframe units must be threaded or alternate approved types.	X	X	X	
	(e) Combined type dirt collector and cut-out cock or branch pipe cut-out cock and angle cock must be of approved ball type valve construction.	R	X	X	
	(f) Single Car Test must be performed in accordance with provisions of AAR Field Manual Rule 3 and properly registered in Umler per AAR Office Manual Rule 93.	X	WA	WA	
	(g) Brake pipe length must be stenciled per AAR Field Manual Rule 80, Section B.	X	X	WA	
	(h) Units must meet the current new car braking ratios for both air and hand brakes as listed in the current version of <i>MSRP</i> S-401. • 1 car for a single car production • 2 cars for lots of 2 to 30 cars • 3 cars for lots exceeding 30 cars	NA	NA	X	
	(i) Units must meet the braking ratios for both air and hand brakes as listed in Tables 1A and 1B on Page 37.	X	X	NA	
	(j) Units must be equipped with high friction composition brake shoes or tread-conditioning brake shoes.	X	NA	X	
	(k) Units must be equipped, except by design, with AAR Standard No. 18 or higher capacity brake beams.	X	X	X	
	(l) Units must be equipped with closed brake rod supports.	X	X	X	
	(m) Units, other than tank cars, having conventional body mounted brake rigging must have approved Group E double acting slack adjusters.	R	WA	X	
	(n) Units with truck-mounted brakes must have approved double-acting compression slack adjusters or relay system.	WA / X	WA	WA	
	(o) Brake pipe restriction test must be performed per <i>MSRP</i> S-471 on any units if any changes are made to the brake pipe or its fittings.	WA	WA	WA	
	(p) Units must be equipped with AAR-approved geared hand brakes.	R	X	X	
	(q) Units must be tested to ensure that brakes will remain applied as determined by a brake cylinder leakage test in accordance with <i>MSRP</i> S-401. (Verify this has been done)	X	WA	WA	
	(r) Tank cars with body-mounted brake rigging must be equipped with a Group R water-resistant slack adjuster.	R	X	R	
(s) Units must be equipped with 4-pressure receivers for accepting the Automated Single Car Test Device.	X	X	X		
(2) Automatic Equipment Identification	(a) Units must be equipped with AEI tags that are listed in the "What Can Be Applied" column under Correct Repairs in Rule 63.	X	X	X	
(3) Body Bolster	(a) Units must conform to <i>MSRP</i> M-1001, Design, Fabrication, and Construction of Freight Cars. The Charpy V-notch requirements in Chapter 3 apply only to new material added, not to existing material.	X	X	X	
(4) Brake Steps	(a) Metal brake step and end platforms must be of an AAR-approved type meeting the requirements of <i>MSRP</i> S-226.	X	NCR	NCR	
(5) Couplers, Yokes, Draft Gears and Support Brackets	(a) Must be equipped with SBE60DE, SE60DE, SBE67CE, SE67CE (except those tank cars requiring double shelf couplers per Code of Federal Regulations Title 49, Part 179.14) couplers, approved rotary dump type couplers, where applicable, or Grade E couplers shown in AAR Field Manual Rules 17 or 18, Correct Repair Tables, under What Can Be Applied column.	R	NCR	NCR	
	(b) Units with length between 85 feet over end sills (85 feet, 8 inches over strikers on units that do not have end sills) and 89 feet, 4 inches over end sills (90 feet over strikers on units that do not have end sills) must be equipped with couplers having 48 inch shanks (60 inch pulling face to coupler pivot). This does not apply to span bolsters having integral draft arms.	NCR	NCR	NCR	
	(c) Couplers with F coupler shanks applied to cars with draft gears and Y45 yokes must be equipped with the coupler pin support shown in <i>MSRP</i> S-243 or other design of equivalent strength, attached with bolts, rivets, or two-piece rivets.	X	X	NCR	
	(d) Unit must be equipped with an AAR-approved Grade E cast steel coupler, AAR-approved Grade E cast steel yoke, AAR-approved Grade E cast steel knuckle, <i>MSRP</i> M-118 knuckle pin, and an AAR-approved Grade E draft gear follower.	R	NCR	NCR	
	(e) Coupler connections to end of car cushioning devices must be equivalent in strength to an AAR-approved Grade E steel yoke.	X	NCR	NCR	
	(f) Units with total weight on rail of up to and including 286,000 pounds not equipped with sliding sill or end-of-car cushioning devices must have AAR-approved draft gears conforming to <i>MSRP</i> M-901E or M-901G. Units with total weight on rail over 286,000 pounds not equipped with sliding sill or end-of-car cushioning devices, must have AAR-approved draft gears conforming to <i>MSRP</i> M-901G or M-901H, unless proven by test that peak coupler force does not exceed 1,250,000 pounds at 10 mph.	R	NCR	X	
	(g) When applying <i>MSRP</i> M-901E or M-901G draft gears, the striker arrangement must be modified to provide a 3 3/4 inches horn to striker horizontal clearance and a 13-inch key slot.	X	X	X	
	(h) Units with total weight on rail of 220,000 pounds and over that are equipped with a coupler and a draft gear without integral follower must be equipped with a draft gear follower as specified in <i>MSRP</i> S-119. A Y44 Grade E follower is mandatory for applications requiring a Y44 draft gear follower. A Y46HTE or Y46AE follower is mandatory for applications requiring a Y46 draft gear follower.	S	NCR	NCR	
	(i) All freight cars that are not equipped with draft gears must be outfitted with Approved <i>MSRP</i> M-921B, M-921D, or M-921E cushion units.	R	NCR	NCR	
	(j) Must have a minimum of Grade C Draft System.	NA	X	X	
(k) The maximum vertical clearance in cushion unit pockets, between the yoke and pocket wear plates, shall be no more than 3/16 inch.	X	NCR	NCR		
(6) Doors	(a) Boxcar doors must be AAR approved meeting the requirements of <i>MSRP</i> S-212 (sliding doors) or <i>MSRP</i> S-213 (plug doors).	X	WA	NCR	
(7) Floors	(a) On open top freight cars, new and redecked, with wood decking, every other piece of decking running full width of unit must be attached with a minimum of 4 fasteners (1/2 inch diameter bolts, or equivalent), based on a board having 6 inches maximum width and 10 feet 6 inches maximum length. For varying sizes and arrangements of deck boards, the number of fasteners to be used should be proportionate to a board of these dimensions. Fasteners must be applied through or directly to underframe members. Intermediate boards must also have 4 fasteners per board that may be provided with floor clips in lieu of bolts applied through or directly to underframe members.	X	WA	NCR	
	(b) Threads on decking bolts must be upset or chisel checked to prevent nuts from loosening in service.	X	WA	NCR	

(8) Covered Hopper Car Gravity Outlet Gates	(a) Must be equipped with AAR-approved <i>MSRP</i> S-233 outlet gates.	NCR	WA	NCR	
(9) Insulation	(a) Insulation must be encapsulated without rips or tears.	X	WA	NCR	
(10) Jacking and Lifting Provisions	(a) Units must be Equipped with jacking pads. (b) Units must have provisions for lifting loaded unit as shown in <i>MSRP</i> S-234.	X NCR	WA NCR	NCR	
(11) Length of Unit	(a) Length of unit over pulling face of couplers to be 35 feet 1/2 inch minimum for units with total weight on rail of 220,000 pounds and 41 feet 10 1/2 inches for units with total weight on rail of 263,000 pounds up to and including 286,000 pounds. (b) Length of units with two trucks must not exceed 89 feet 4 inches over end sills and 90 feet over strikers, except for allowance of sliding sill length to accommodate cushioning travel.	NCR X	WA WA	NCR NA	
(12) Light-weighting	(a) Must be in accordance with the <i>Field Manual of AAR Interchange Rules</i> , Rule 70.	X	X	X	
(13) Reflective Sheeting	(a) Units must have reflective sheeting and must be in compliance with <i>MSRP</i> S-910.	X	NCR	NCR	
(14) Painting and Marking	(a) If unit is to be painted, it must be done in accordance with <i>MSRP</i> M-1001.	X	X	X	
	(b) All units must be marked in accordance with <i>MSRP</i> S-910 or <i>MSRP</i> M-1002, Specifications for Tank Cars, as applicable.	X	X	X	
	(c) A multi-level superstructure recognized as being rebuilt shall be marked by the owner as follows at the top of shear bay panels, AR and BL location using minimum 1/2-inch characters: —Superstructure owner —Superstructure number —Original date built (month & year) —Rebuilt (month & year)	X / NA	NA	NA	
	(a) Units must be equipped with journal roller bearings of AAR-approved designs. (b) Units with 4-wheel trucks and a gross rail load of 263,000 up to and including 286,000 pounds shall be equipped with Class K or Class G bearings.	R / X NA	X NA	X NA	
(15) Roller Bearings					
(16) Roof Coating	(a) Boxcars must not have underside of roof coated with an asphalt base material.	X	X	X	
(17) Safety Appliances	(a) Safety appliances of the car types covered by <i>MSRP</i> S-2044 must comply with <i>MSRP</i> S-2044.	NCR	WA	NCR	
(18) Sealing Devices	(a) Covered hopper cars to be equipped with sealing devices on outlet in accordance with <i>MSRP</i> S-233.	X	WA	NCR	
(19) Sills	(a) Body center plates must meet the design and application requirements of <i>MSRP</i> M-1001 for Design, Fabrication, and Construction of Freight Cars.	NCR	NCR	NCR	
	(b) Flanged-type body center plates must be attached in accordance with the requirements of <i>MSRP</i> S-204 or S-2055.	X	WA	NCR	
	(c) Unless the design is approved by AAR, body center plates consisting of cylindrical bowls welded to backing plate or car body without an AAR-approved interlocking feature are prohibited.	X	X	X	
	(d) Center sills must conform to <i>MSRP</i> M-1001, Design, Fabrication, and Construction of Freight Cars. The Charpy V-notch requirements in Chapter 3 apply only to new material added, not to existing material.	X	WA	X	
(20) Truck Components	(a) Units must have trucks equipped with AAR-approved side frames and bolsters.	R	X	X	
	(b) Units must have trucks equipped with snubbing devices or built-in snubbing features. Units must have trucks equipped with springs having not less than 3 11/16 inches travel. High capacity cars, special cars, or units with conventional four-wheel trucks may be equipped with trucks having minimum spring travel of 2 1/2 inches if approved by the AAR Equipment Engineering Committee.	X	WA	NCR	
	(c) Units with 4 wheel trucks must be equipped with trucks as follows: *263,000 GRL units with high center-of-Gravity (90 inches and over loaded CG), trucks must be listed in M-965. *Autoracks - trucks must be listed in M-950 *286,000 GRL units - trucks must be listed in Rule 46	X	WA	WA	
	(d) Units with 263,000 to 268,000 pounds GRL and over must have wear liners applied to the center plate portion of cast steel truck bolsters in accordance with the requirements in <i>MSRP</i> S-308. <u>Units with GRL of 286,000 must be equipped with bowl type polymer liners.</u>	X	WA	NCR	
	(e) Body side bearing wear plates, plus attachments, must be in accordance with <i>MSRP</i> S-235.	X	WA	NCR	
	(f) Springs must be of AAR-approved design.	R	X	X	
	(g) Units having trucks with friction snubbing systems must have visual indicators incorporated to indicate the combined wear of the system.	NCR / X	NCR	NCR	
	(h) Facility must identify the spring grouping used from <i>MSRP</i> Section D Standards S-340, S-341, S-342, or S-343	X	X	X	
	(i) All units, must be equipped with long-travel constant-contact side bearings conforming to <i>MSRP</i> M-948.	X	X	X	
	(j) Units with 4-wheel trucks and a gross rail load greater than 268,000 up to and including 286,000 pounds, intended for Free/Unrestricted Interchange service must be equipped with trucks in accordance with <i>MSRP</i> M-976.	X	X	X	
(21) Wheels and Axles	(a) Units must be equipped with heat-treated curved-plate wheels.	X	X	X	
	(b) Units must be equipped with AAR-approved raised wheel seat design axles.	S / X	S	NCR	
	(c) Units with 4-wheel trucks and a gross rail load greater than 268,000 pounds up to and including 286,000 pounds intended for free/unrestricted interchange must be equipped with wheels and axles in compliance with <i>MSRP</i> S-286. Axles must be ultrasonically tested in accordance with <i>MSRP</i> M-101 (for new) and <i>MSRP</i> S-659 (for reconditioned).	R	WA	R	
	(a) General service flatcars must be equipped with lading strap anchors, as indicated in <i>MSRP</i> S-230.	X	WA	NCR	
	(b) Units in TOFC service must be equipped with trailer hitches meeting the requirements of <i>MSRP</i> M-928.	X	WA	NCR	
	(c) Units in COFC service must have "intermodal container support and securement systems" meeting the requirements outlined in <i>MSRP</i> M-952.	X	WA	NCR	
	(d) Superstructure and attachments must meet the requirements of <i>MSRP</i> M-941, M-950, M-950A, M-956, as appropriate.	X	WA	NA	
	(e) Superstructures equipped with hinged deck systems must have all hinge pins replaced. Hinges worn in excess of 25% or broken must be replaced. Hinged decks must have positive lock-up and lock-down system.	X	WA	NA	
	(f) Superstructure must be equipped with side protection with provisions for approved end enclosures, except side screens need not be replaced with 6% side screens on rebuilt superstructures.	X	WA	NA	
	(g) Each corner at each deck must have portable bridge plate hinges.	X	X	NA	
	(h) Superstructure must be equipped with continuous low-profile channel-style tie-down track in accordance with <i>MSRP</i> M-957.	WA	WA	NA	
	(i) Tie-down device shall be replaced with new equipment; or the existing equipment must be removed, disassembled, inspected, repaired as necessary, reassembled, and lubricated prior to reapplication.	X	WA	NA	
	(j) New multi-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 new built superstructures.	NA	NA	NA	
	(k) 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.	X	NA	NA	
	(a) Must conform to all applicable AAR Interchange requirements in effect on the date built or rebuilt or granted Increased Life Status.	X	NA	NA	
(23) Units	(c) Effective January 1, 2023, front draft lug attachments to the draft sill must meet the 500,000 lb. draft case in M-1001 Chapter 4.	X	WA	X	
	(d) Must be manufactured or rebuilt/modified or upgraded for Increased Life Status in a facility that has an AAR Quality Assurance Certification, as required in <i>MSRP</i> M-1003.	X	X	NA	

ASSOCIATION OF AMERICAN RAILROADS RULE 88 INSPECTION - EXCEPTIONS TAKEN	
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COMPONENT INFORMATION			
	New/R	Shop Marks	CID Numbers
Shop where brake valves were recondition/new?			
Shop where roller bearings were reconditioned/new?			
Shop where side frames/bolsters were reconditioned/new?			
Shop where hand brakes were reconditioned/new?			
Shop where cushioning units were reconditioned/new?			
Shop where brake beams were reconditioned/new?			
Shop where slack adjusters were reconditioned/new?			
Did you take pictures of Left and Right sides and "B" end "A" end?			

Send Report to:

Recipients Name

Recipients Title

Company Name

Address 1

Address 2

City, State, Zip Code

email address

Representative(s) present during inspection:

Contacts Name:

Contacts Title:

Contacts Email Address:

Contacts Name:

Contacts Title:

Contacts Email Address:

AAR Inspector: