RULE 90

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 Unitr file, as required by the AAR Unitr 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 609-C friction castings.
      (3) Effective June 1, 2018, all tank cars not equipped with long travel constant contact side bearings.
   b. Flat Cars
      (1) Container pedestal bolster or onecess removabe.

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 ¼ inch rotator 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. 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. Cast iron brake shoes.
   g. Manual body-mounted slack adjusters.
   h. AB, ABC, or Z1AW type control valve portions.
   i. Vent valves not in compliance with AAR Specification S-401.
   k. F type couplings on other than brake pipe hose.
2. Draft System Components
   a. Type "D" and "E" 5 × 7 inch (E 63, E 63 HT and E 63 AHT) couplers.
   b. E50, E560, CE60HT and E60HT couplers in Grade C Steel.
   c. E50 Knuckles.
   d. All type "F" couplers, with pin bearing block, cast in Grade C steel
      prior to March 1970. Includes catalog numbers CF70HT, CF70AHT,
      CF71HT, CF72HT, CF72AHT, CF79HT, CF79AHT.
   e. Lightweight Grade C steel couplers, catalog numbers E61, E61HT,
      E61AHT, CE61AHT, BE61HT, BE61BHT, and E61BC.
   f. Grade C couplers identified by a ¾ inch × 11/8 inch × 2½ inch notch in
      the rear surface of the horn.
   g. Riveted type yoke.
   h. Keyless type yoke.
   i. Vertical key type yoke.
   j. Y-30 designed yoke.
   k. Farlow draft attachment.
   l. Miner FR-10 and Miner FR-19-F draft gears.
   m. Freightmaster end-of-car cushioning unit models AR-F, HD-F, HD-FR,
      HD-FR8 and HD-FT, without coupler pin retainer modification.
   n. Grade A or B draft system components.

3. Gravity Discharge Gates
   a. Scissor type gates.

4. Journal Bearings and Components
   a. Friction (plain) journal bearings.
   b. Cartridge type solid journal bearings.
   c. NSK roller bearing in size 6½ × 12 inches (Certificate No. 11).
   d. Oil lubricated roller bearings.
   e. Hyatt "Hy-Roll" cylindrical bearings (Certificate No. 2), all sizes.
   f. SKF "Piggybacker" spherical rollers (Certificate No. 7) 6 × 11 inches.
   g. Journal roller bearings equipped with cap screw seal rings.
   h. All roller bearings with non-rotating housing end covers.
   i. Units equipped with Journal Classes A, B, or C are not recognized
      under Rule 70.13.6.b. and are prohibited in interchange.

5. Truck Components
   a. Allied Full-Cushion trucks.
   b. Arch bars or cast steel pedestal type side frames having short wheel
      base and no bolster.
   c. Cast steel side frames having "I", "T" or "L" Section.
   d. Cast steel side frames with repair patches or reinforcing plates.
   e. AAR identification marks or pattern numbers missing from side
      frames.
   f. Side frames over 50 years old based on date cast.
   g. All cars with converted friction bearing truck side frames, or in any
      combination with roller bearing side frames.
RULE 90

h. Truck side frames having the following pattern numbers:

<table>
<thead>
<tr>
<th>ASF</th>
<th>National Castings</th>
<th>Scullin Steel</th>
</tr>
</thead>
<tbody>
<tr>
<td>7776</td>
<td>3375-16</td>
<td>4956</td>
</tr>
<tr>
<td>7323</td>
<td>3375-16</td>
<td>4770</td>
</tr>
<tr>
<td>5336</td>
<td>3375-20</td>
<td>4891</td>
</tr>
<tr>
<td>21182</td>
<td>Buckeye</td>
<td>4542</td>
</tr>
<tr>
<td>5171</td>
<td>5811-A</td>
<td></td>
</tr>
</tbody>
</table>

(Cast prior to June, 1941)

Pittsburgh Steel Foundry

| 3-1776 | F-400           | 5220          |
| 3-1673 | F-536           | 5321-A        |
| 3-1674 |                  | 5321-B        |
| 4-1962 | Dominion        | 5321-C        |
| 4-2945 | TF-5-00         | 6260-D        |
| 12897  | Dresser         | 5321-H        |
| 12021  | TF-5-05         | 6428-A        |
| 21263  |                | 2364          |

Canadian Steel Foundry

| 26565  | UF-466          | 5413-B        |
|        |                | 7207          |
|        | 5483-A          | 42-CS-180     |

i. All flat cars designated FB, F3C, and FBS that are equipped with roller or block type side bearings.

j. Truck bolsters having the following pattern numbers:

<table>
<thead>
<tr>
<th>ASF</th>
<th>Dofasco</th>
<th>Dresser</th>
<th>Birdsboro</th>
<th>Lenoir Car Works</th>
</tr>
</thead>
<tbody>
<tr>
<td>7107</td>
<td>BO-7119</td>
<td></td>
<td>1458</td>
<td>CS-184</td>
</tr>
<tr>
<td>21183-B</td>
<td>BO-9089-A</td>
<td>BO-5234</td>
<td>1468</td>
<td>CS-611</td>
</tr>
<tr>
<td>21183-N</td>
<td>BO-9104</td>
<td>BO-5261</td>
<td>1471</td>
<td>National Castings</td>
</tr>
<tr>
<td>21189-AH</td>
<td>BO-6105</td>
<td>BO-5263</td>
<td>1494</td>
<td>National Castings</td>
</tr>
<tr>
<td>21189-F</td>
<td>BO-9109</td>
<td>BO-5297</td>
<td>1494</td>
<td>of Mexico</td>
</tr>
<tr>
<td>21338</td>
<td>BO-9149</td>
<td>BO-5633</td>
<td>4841</td>
<td>52122</td>
</tr>
<tr>
<td>21338-A</td>
<td>BO-9197</td>
<td>BO-7076</td>
<td>5175</td>
<td>52202</td>
</tr>
<tr>
<td>21338-J</td>
<td>BO-7076-A</td>
<td>BO-7076-A</td>
<td>5482-C</td>
<td>National Castings</td>
</tr>
<tr>
<td>21680-B*</td>
<td>Buckeye</td>
<td>BO-7079</td>
<td>5482-H</td>
<td>National Castings</td>
</tr>
<tr>
<td>22056-E</td>
<td>B-738</td>
<td>BO-7091</td>
<td>5598-A</td>
<td>of Mexico</td>
</tr>
<tr>
<td>22057-S</td>
<td>B-750</td>
<td>BO-7098</td>
<td>5912-C</td>
<td>52122</td>
</tr>
<tr>
<td></td>
<td>B-766</td>
<td>BO-7115</td>
<td>7599-A</td>
<td>52202</td>
</tr>
<tr>
<td></td>
<td>B-5053</td>
<td>BO-7137</td>
<td>7791</td>
<td></td>
</tr>
<tr>
<td></td>
<td>B-7185</td>
<td>BO-7184</td>
<td>7864</td>
<td></td>
</tr>
<tr>
<td></td>
<td>B-7194</td>
<td>BO-7192</td>
<td>7928-A</td>
<td></td>
</tr>
<tr>
<td></td>
<td>BO-7332</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>BO-7378</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Exempted when truck spring nest includes conditionally accepted supplemental or unit snubbers listed in AAR specification M-965.

k. Truck bolsters having AAR identification marks or pattern numbers missing.

l. Truck bolsters over 50 years old based on date cast.

m. Pressed or structural steel truck bolsters manufactured prior to 1971. New designs, after 1971, of this type bolster must be presented to the AAR for approval.

— 660 —
RULE 90

n. All cars with truck side frame designs that shield roller bearings from hot box detectors, unless equipped with other AAR approved means of detection, such as on-board detectors.
a. Truck side frames with cartridge bearings.

6. Wheels and Axles
   a. Cast iron wheels.
   b. Griffin cast steel wheels, one-wear, 70-ton, three-riser, ball rim design.
   c. AAR X-2 Cast Steel wheels.
   e. Griffin cast steel 33 inch two-wear wheels, three-riser (marked X5 or CS-2), manufactured 1960-1963.
   f. Davis cast steel wheels.
   g. Cast steel wheels marked "AAR X-4".
   h. Wrought steel wheels manufactured prior to 1927.
   i. Southern (ABEX) one-wear, 70-ton cast steel wheels dated May 7, 1958 to January 1, 1964 marked with the symbol "70T" cast on the back of the wheel plate.
   j. Southern (ABEX) one-wear 70-ton cast steel wheels dated January 1, 1964 through December 31, 1969 marked with the symbols "CJ-33" and "U1" or "70T" and "U1" cast on the back of the plate.
   k. Tubular type axles.
   l. Valdunos, Crousot-Loire non-heat-treated, 36 inch, straight-plate wheels marked "F" or "FW" manufactured in 1980 and 1981.
   m. Straight plate wheels.
   n. Materoa or Edgecator wheels, 33 inch or 38 inch, manufactured in 1995-1996, and without a legible UT stencil.