

**ASSOCIATION OF AMERICAN RAILROADS  
SAFETY AND OPERATIONS  
Mechanical Inspection Department**

Routine       Special       Shop Certification       Follow up Inspection

M-1003 Approved       ISO Approved

SR = See Report      Attachments      Y/N      N/A      NI = Not Inspected

#	<b>GUIDE FOR CERTIFICATION &amp; INSPECTION OF ROLLER BEARING MAINTENANCE FACILITIES EQUIPMENT &amp; GAGES REQUIRED</b>	Maj	Mod	Min
1	Shop Master Gages (Class X tolerance, 3 year maximum certification) <b>MSRP H-II Rule 3.5.6 Masters, gauges, and the parts being gauged should be at approximately the same temperature</b>			
2	Dial Bore Gages (0.0001" increments)			
3	Micrometers or other Suitable Gages - Probes			
4	Backing Ring Gages (Including 1 1/2" Radius Gage)			
5	Feeler Gages (Suitable) <b>MSRP H-II Rule 3.5.8 and Fig. 3.10</b>			
6	Inspection Stand (Suitable) <b>MSRP H-II Rule 3.5.8</b>			
7	Bench Lateral Device (Master to set lateral for automatics) <b>MSRP H-II, Rule 3.7.4</b>			
8	Lubrication Device (Adequate Gauging System) <b>MSRP H-II, Rule 3.8.3</b>			
9	Brinell width and spall limit gauge <b>MSRP H-II, Fig. 1.5F. Rule 1.15.5</b>			
10	Other			

#	<b>GENERAL SHOP REQUIREMENTS</b>	Maj	Mod	Min
11	Shop Conditions: (Work Area, Lighting, Benches, & Tools) <b>MSRP H-II Rule 3.4.1</b>			
12	Parts and Bearing Assemblies Storage (Covered & Protected) <b>MSRP H-II Rule 3.8.11</b>			
13	Parts Cleaning (Adequate Removal of Lubrication and Dirt, Keeping Parts Together) <b>Polymer cages Max Temp for washing is 190 Degrees F. MSRP H-II Rule 3.3.</b>			
14	Manufacturers' Specifications & lateral Limits Posted in Each Section <b>MSRP H-II Rule 3.4.1</b>			
15	Inspection Area (Clean & Lighted) <b>MSRP H-II Rule 3.4.1</b>			
16	Bearing assemblies staged together until after inspection for Brinell ( <b>MSRP H-II Rule 1.15.10</b> ) also <b>NOTE: If any raceway contains 10 or more brinells of any size, that component is not acceptable for further service.</b> Bearing inner rings that are associated with unacceptable outer rings as a result of 10 or more brinells do not require decaging for inspection			
17	Other			

#	INSPECTION OF COMPONENT PARTS	Maj	Mod	Min
18	End Caps (N.F.L.) Configuration <b>MSRP H-II Rule 3.5.2 and Fig 3.19</b>			
19	Seal Wear Ring (If the lip contact path has worn to a depth of 0.005" ) <b>MSRP H-II, Fig 3.7.1</b> Timken Axle saver Seal Wear Ring's Part number P/N K15159 or P/N K15392 with date before 08 03 <u>do not install on the inboard side</u> (adjacent to the backing ring), installation at this position may result in galling of the axle when the bearing is pressed onto the journal, which can cause fracture of the axle in service.			
20	Seal Wear Rings (0.005" Parallel) and visibly be inspected for having turned on the axle. <b>MSRP H-II Rule 3.5.3.1 and 3.5.3.6</b>			
21	Spacer (0.005" Parallel) <b>MSRP H-II Rule 3.5.5</b>			
22	Outer Ring: (Counterbore, Shop Markings, Proper Repairs, Repair Markings)			
23	Bar code labels applied, and information correct. <b>MSRP H-II Rule 3.6.1.1</b>			
24	Inner Ring: (Roller Assembly, Bore, Cage, Rollers, Proper Repairs, Markings) <b>Brenco Class K cone assemblies must be from 1997 Production or later MSRP H-II Fig 3.7.23</b>			
25	Backing Ring: (Radius, Breakout Diameter, Vent Fittings Plugged) <b>MSRP H-II Rule 3.5.12</b>			
#	INSPECTION OF COMPONENT PARTS	Maj	Mod	Min
26	Cap Screws (New or S/H checked with Gage) <b>MSRP H-II Rule 3.5.13</b>			
27	Other			

#	INSPECTION OF BEARING ASSEMBLIES	Maj	Mod	Min
28	Approved Bearing Assemblies: No. _____ #			

#	BEARING MAINTENANCE PRACTICES	Maj	Mod	Min
29	Bench Lateral (Meets Requirements, Posted in Work Area) <b>MSRP H-II Rule 3.7.4</b>			
30	Lubrication: (Amount, Type of Grease, Grease Weight Log) <b>MSRP H-II Rule 3.8</b>			
31	Seal Application (New Only) Seated <b>MSRP H-II Rule 3.8.7</b>			
32	Remanufactured Parts: (Marking, Meet Specifications) <b>MSRP H-II Rule 6.0</b>			
33	Bearing Assemblies: (Packaging, Cardboard Tube or Similar Device (optional) Protected) <b>MSRP H-II Rule 3.8.9</b>			
34	If placed in stock stored and covered properly, in a dry area free from dirt and moisture. <b>MSRP H-II Rule 3.8.11</b>			
35	Stress Relief Heat Treating (if applicable) <b>N/A</b>			
36	Inner Cone M967 Plating (if applicable) <b>N/A</b>			
37	Cone Face Wear Grinding (if applicable) <b>N/A</b>			

TOTAL EXCEPTIONS		Total	Total	Total