

**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

#	GUIDE FOR CERTIFICATION & INSPECTION OF ROLLER BEARING MAINTENANCE FACILITIES EQUIPMENT & GAGES REQUIRED	Maj	Mod	Min
1	Shop Master Gages (Class X tolerance, 3 year maximum certification) MSRP H-II Rule 1.3 Masters, gauges, and the parts being gauged should be at approximately the same temperature			
2	Dial Bore Gages (0.0001" increments)			
3	Micrometers or other Suitable Gages - Probes			
4	Backing Ring Gages (Including 1 ½" Radius Gage) MSRP H-II Rule 1.5.8			
5	Feeler Gages (Suitable) MSRP H-II Rule 1.5.5.1 and Fig. 1.2			
6	Bench Lateral Device (Master to set lateral for automatics) MSRP H-II, Rule 1.7.3			
7	Lubrication (Adequate Gauging System) MSRP H-II, Rule 1.8.5			
8	Brinell width and spall limit gauge MSRP H-II, Fig. 1.3.F Rule 12.1 and 1.2.12.			
9	Other			

#	GENERAL SHOP REQUIREMENTS	Maj	Mod	Min
10	Shop Conditions: (Work Area, Lighting, Benches, & Tools) MSRP H-II Rule 1.5.3			
11	Parts and Bearing Assemblies Storage (Covered & Protected) MSRP H-II Rule 1.2.6			
12	Parts Cleaning (Adequate Removal of Lubrication and Dirt, Keeping Parts Together) Polymer cages Max Temp for washing is 190 Degrees F. MSRP H-II Rule 1.5 and Fig. 1.6 and AAR Technical Standards			
13	Manufacturers' Specifications & lateral Limits Posted in Each Section MSRP H-II Rules 1.5.3.2 and 1.7.3			
14	Inspection Area (Clean & Lighted) MSRP H-II Rule 1.5.3.1			
15	Bearing assemblies staged together until after inspection for Brinell (MSRP H-II Rule 1.2.1) also NOTE: If any raceway contains 10 or more brinells of any size, that component is not acceptable for further service. Bearing inner rings that are associated with unacceptable outer rings as a result of 10 or more brinells do not require decaging for inspection			
16	Other			

#	INSPECTION OF COMPONENT PARTS	Maj	Mod	Min
17	End Caps (N.F.L.) Configuration MSRP H-II Rule 1.5.10 and Fig. A.1			
18	Seal Wear Ring (If the lip contact path has worn to a depth of 0.005") MSRP H-II, Fig 1.6 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.			
19	Seal Wear Rings (0.005" Parallel) and visibly be inspected for having turned on the axle. MSRP H-II Rule 1.2			
20	Spacer (0.005" Parallel) MSRP H-II Rule 1.5.13			
21	Outer Ring (cups) : (Counterbore, Shop Markings, Proper Repairs, Repair Markings) MSRP H-II Rule 1.5.4 and Multiple other rules.			
22	Bar code labels applied, and information correct. MSRP H-II Rule 1.9.3			
23	Inner Ring: (Roller Assembly, Bore, Cage, Rollers, Proper Repairs, Markings) Brenco Class K cone assemblies must be from 1997 Production or later MSRP H-II Fig 3.7.23 (This figure has not been updated in the new manual)			
24	Backing Ring: (Radius, Breakout Diameter, Vent Fittings Plugged) MSRP H-II Rule 1.5.8 and 1.5.9			
#	INSPECTION OF COMPONENT PARTS	Maj	Mod	Min
25	Cap Screws (New or S/H checked with Gage) MSRP H-II Rule 1.5.14 and Fig. A.2			
26	Other			

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

#	BEARING MAINTENANCE PRACTICES	Maj	Mod	Min
28	Bench Lateral (Meets Requirements, Posted in Work Area) MSRP H-II Rule 1.5.3			
39	Lubrication: (Amount, Type of Grease, Grease Weight Log) MSRP H-II Rule 1.8			
30	Seal Application (New Only) Seated MSRP H-II Rule 1.5.12 and Fig. 1.6			
31	Remanufactured Parts: (Marking, Meet Specifications) MSRP H-II S-735			
32	Bearing Assemblies: (Packaging, Cardboard Tube or Similar Device (optional Protected) MSRP H-II Rule 1.8.12			
33	If placed in stock stored and covered properly, in a dry area free from dirt and moisture. MSRP H-II Rule 1.8.13			
34	Stress Relief Heat Treating (If 2S approved)			
35	Inner Cone M967 Plating (If 2E approved)			
36	Cone Face Wear Grinding (If 2G approved)			

	TOTAL EXCEPTIONS	Total	Total	Total
--	-------------------------	-------	-------	-------