

AAR Manual of Standards and Recommended Practices

Wheels and Axles

RP-633

AAR MD-11 ROLLER BEARING INSPECTION REPORT

<p>CAR INITIAL [][][]</p> <p>CAR NUMBER [][][][][][]</p> <p>GROSS RAIL LOAD [][] K</p> <p>BEARING POSITION [][]</p>	<p>CAR TYPE []</p> <p>B = Box F = Flat G = Gondola H = Hopper Open Top I = Intermodal L = Covered Hopper M = Miscellaneous P = Passenger T = Tank U = Locomotive</p>	<p>JOURNAL SIZE []</p> <p>D = 5-1/2 x 10 E = 6 x 11 F = 6-1/2 x 12 G = 7 x 12 K = 6-1/2 x 9 L = 6 x 8 M = 7 x 9</p> <p>BURNT-OFF JOURNAL Y = Yes; N = No []</p>	<p>DATE OF FAILURE Month [][] Day [][] Year [][]</p> <p>METHOD OF DETECTION []</p> <p>A = Acoustic Detection B = Warm Bearing Trending D = Derailment H = Hot Bearing Detector O = Other _____</p>																								
<p>WHEEL TREAD DEFECT SETOUT BEARING POSITION Why Made Code 65,67,75,76 78 or 11 []</p>		<p>HIGHEST PEAK WILD [] Last 30 Days</p>	<p>ELASTOMERIC ADAPTER PAD [] Y = Yes; N = No; U = Unknown</p>																								
<p>DISTRESSED BEARING VERIFIED [] Y = Yes; N = No</p>		<p>SUFFICIENT FIELD INFORMATION SUPPLIED [] Y = Yes; N = No</p>																									
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<p>CERTIFICATE NUMBER [][][]</p> <p>DATE CUP MANUFACTURED Month [][] Year [][]</p> <p>MOUNTING INFORMATION Company Mark [][][] Shop Code [][] Month [][] Year [][]</p> <p>LAST RECONDITIONED Company Mark [][][] Shop Code [][] Month [][] Year [][]</p> <p>TIMES CUP RECONDITIONED [] 0-1-2-3-4</p> <p>CAP SCREW SEAL RINGS [] Y = Yes; N = No</p> <p>CONES MANUFACTURED INBOARD Month [][] Year [][] OUTBOARD Month [][] Year [][]</p> <p>CAGE TYPE [] M = Metallic; O = Other</p> <p>SEAL MANUFACTURER / DATE Company Code [][] Month [][] Year [][]</p>	<p style="text-align: center;">DEFECTIVE BEARING</p> <p>Cone Bore Plated Y/N []</p>	<p style="text-align: center;">MATE (OPPOSITE) BEARING</p> <p>Cone Bore Plated Y/N []</p>																									
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<p>FAILURE PROGRESSION MODE (FPM) [][]</p>	<table style="width: 100%; font-size: x-small;"> <tr> <td>AD = Adapter Displaced/Worn Broken</td> <td>MD = Manufacturer / Remanufacturer / Reconditioner Defects</td> </tr> <tr> <td>AP = Application Defect</td> <td>NV = Non-Verified Setout</td> </tr> <tr> <td>BD = Bearing Destroyed, Undetermined</td> <td>SP = Fatigue Spalling</td> </tr> <tr> <td>DS = Displaced Seal</td> <td>TR = Truck Related</td> </tr> <tr> <td>LO = Loose Bearing Failure</td> <td>WD = Wheel Tread Defect</td> </tr> <tr> <td>LU = Lubrication</td> <td>WE = Water Etch</td> </tr> <tr> <td>ME = Mechanical</td> <td></td> </tr> </table>			AD = Adapter Displaced/Worn Broken	MD = Manufacturer / Remanufacturer / Reconditioner Defects	AP = Application Defect	NV = Non-Verified Setout	BD = Bearing Destroyed, Undetermined	SP = Fatigue Spalling	DS = Displaced Seal	TR = Truck Related	LO = Loose Bearing Failure	WD = Wheel Tread Defect	LU = Lubrication	WE = Water Etch	ME = Mechanical											
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<p>RAILROAD REPORTING MARK [][][][]</p> <p>INVESTIGATING OFFICER _____</p>	<p>Report Must Be Sent to: WABL Committee Manager</p> <p>Email: wabl@aar.com</p> <p>FAX: 719-585-1895</p> <p>Mail: Association of American Railroads 55500 DOT Road Pueblo, CO 81001</p>																										

AAR Form MD-11 Roller Bearing Hot Box and Shop Inspection Report—Rev. 03/2010
Paragraphs 2.5.3 and 3.1.3

Fig. 4.76

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Instructions for Completing Form MD-11

Car Initial: Letter designation on car
 Car Number: Two- to six-digit number following car initial
 Gross Rail Load: Max. loaded car weight in 1,000s of pounds
 Bearing Position: Car side and axle count from B-end of car
 Car Type: From list on form
 Journal Size: From list (marked on end cap of bearing)—no entry required for locomotive bearings
 Burnt Off Journal: Bearing burnt off axle? (Yes or No)
 Date of Failure: Month - Day - Year
 Method of Detection: From list on form

Table 1

Colored Locking Plate Certificate Numbers			
Timken	01	1A	Orange
Brenco	05	05A	Green
Hyatt	06	06A	Blue
Fag	13		Red
Koyo	14		White
NTN	10	19	Purple
SKF	23		Yellow
FAG	26		Brown
RBI	29		Gold

Wheel Tread Defect Setout Bearing (if applicable)	
Why Made Code:	Wheel defect code from list on form
Highest Peak WILD:	Highest detector reading in 1,000s of pounds in last 30 days
Elastomeric Adapter Pad:	Non-steel pad above bearing adapter (Yes or No)

Distressed Bearing Verified: Yes or No
 Sufficient Field Information Supplied: Yes or No

Information for Both Distressed and Mate Bearings	
Certificate Number:	Bearing certificate on end cap or, if colored, locking plate per Table 1
Date Cup Manufactured:	Month (2-digit number or 1-digit letter) and year of bearing manufacture (on cup)
Cone Bore Plated:	Yes or No
Mounting Information:	The company mark, shop code, and month and year are found on the locking plate.
Last Reconditioned:	The company mark, shop code, and month and year are found on the inside of the cup (see <i>Manual of Standards and Recommended Practices</i> , Section H, Vol. II, Rule 3.28 for more information).
Times Cup Reconditioned:	Enter total number of reconditioned marks found on inside diameter of outer ring (cup)
Cap Screw Seal Rings:	Yes or No
Cones Manufactured:	Inboard—Month and year Outboard—Month and year
Cage Type:	Metallic or Other
Seal Manufacturer Date:	Company code: select from list on form Month and year
Failure Progression Mode:	Select from list on form
Railroad Reporting Mark:	Reporting mark of railroad investigating officer
Signature of Investigating Officer:	As applicable

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Fig. 4.76 (Concluded)

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