Steel cage inspection
Place roller assembly on back face (large diameter face) when checking clearances. If the roller pocket of the cage is worn to the extent that a 0.060” feeler gage can be inserted between the roller and the cage bridge, the roller assembly should not be returned to service.

Polymer cage inspection
It is recommended that cone assemblies be returned to Timken for reconditioning. Wash using only water and detergent solutions, not exceeding 190˚ F. Visually inspect for damage. Only remove rollers from the marked “inspection” pocket (if cage is provided with this feature). Check and ensure proper roller orientation when reapplying these rollers. Separable roller should only be reassembled into the cone from which it was removed. DO NOT mix rollers. DO NOT disassemble or attempt to reapply other rollers. DO NOT stress relieve cone assemblies and DO NOT plate cone bores of cone assemblies with cages applied. Failure to follow these guidelines could lead to unsatisfactory bearing performance and equipment damage.

A. Roller assembly – cage inspection.

B. Outer ring (cup).
When outer ring shows wear from adapter, the minimum O.D. is to be measured in the adapter pad wear areas. If the outer ring is distorted in the area of the counterbore, a close visual inspection of the inside and outside surfaces is required. Outer rings that have hair line cracks must be scrapped.

C. Seal – scrap used seals.

D. Spacer width – bench lateral. A spacer must be selected or the spacer may be ground to provide the bearing bench lateral play specified below for the type of lateral measuring equipment used:

<table>
<thead>
<tr>
<th>Class And Size</th>
<th>Roller Assembly</th>
<th>Outer Ring (Cup)</th>
<th>Backing Ring</th>
<th>Amount Of Grease (Ounces)</th>
</tr>
</thead>
<tbody>
<tr>
<td>F (61/2 x 12)</td>
<td>6.1880”</td>
<td>6.1885”</td>
<td>0.003”</td>
<td>9.9250”</td>
</tr>
<tr>
<td>G (7 x 12)</td>
<td>7.0005”</td>
<td>7.0010”</td>
<td>0.003”</td>
<td>10.8630”</td>
</tr>
<tr>
<td>GG (67/8)</td>
<td>6.8755”</td>
<td>6.8760”</td>
<td>0.003”</td>
<td>11.18730”</td>
</tr>
</tbody>
</table>

E. Seal wear ring – outside surface. If the outside surface of the seal wear ring is scratched or cracked or if the lip contact path has worn to a depth of 0.005” (0.010” on diameter), the seal wear ring must be scrapped.

F. Seal wear ring – fit in backing ring. The seal wear ring must have a tight fit in the backing ring counterbore.

G. Backing ring – size and radius. Backing rings that are bent or distorted must be scrapped. Check the backing ring size and the bore radius for excessive corrosion with the AAR gage as shown in the Roller Bearing Manual.

H. Backing ring – size and radius (non-fitted). Backing rings are to be measured in the adapter pad wear areas. If the outer ring is distorted in the area of the counterbore, a close visual inspection of the inside and outside surfaces is required. Outer rings that have hair line cracks must be scrapped.

I. Backing ring – size (fitted). Check counterbore.

J. Backing ring – radius (fitted). Check bore radius for excessive corrosion. Fillet region must not be galled or pitted. Use fillet gauge as specified in MSRP section H-II. Light pitting and rusting is acceptable.

K. Vent fitting. Check the vent fitting to see that it is not clogged, hardened, or damaged. Hardened or damaged vent fittings should be replaced. (Part Number K90718).

NOTE: Contact The Timken Company for information on bearing parts that are not shown.

L. Sure-Fit - size (fitted). Scrap all used compression rings.

Failure to observe the following warnings could create risk of death or serious injury.

WARNING

Never spin a cone assembly.
The rollers may be forcefully expelled, creating a risk of bodily harm.

Do not install on the inboard side (adjacent to the backing ring) of any bearing assembly, any Timken Axle Saver™ Seal Wear Ring’s P/N K151590 or P/N K153392 with date code before 08 03. 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.
**Polymer cage can be retrofitted at reconditioning.**

Replacements for individual backing rings are available upon request.

NOTE: Every reasonable effort has been made to ensure the accuracy of the information contained in this writing, but no liability is accepted for errors, omissions or for any other reason.

<table>
<thead>
<tr>
<th>Class and Size</th>
<th>Roller Assembly (Steel Cage)</th>
<th>Roller Assembly (Polymer Cage)</th>
<th>Outer Ring (Cup)</th>
<th>Spacer</th>
<th>HDL Seal</th>
<th>EcoTurn Seal</th>
<th>Seal Wear Ring (Without Holes)</th>
<th>With Shroud Vented</th>
<th>Without Shroud Vented</th>
<th>With Shroud No Vent</th>
<th>Without Shroud Vented</th>
<th>With Shroud Vented</th>
<th>Without Shroud No Vent</th>
<th>Without Shroud No Vent</th>
<th>Sure-Fit</th>
</tr>
</thead>
<tbody>
<tr>
<td>F (6 1/2 x 12)</td>
<td>HM133444**</td>
<td>HM133444F</td>
<td>HM133416XD</td>
<td>K147750</td>
<td>K165474</td>
<td>K85509</td>
<td>K151590</td>
<td>K95516</td>
<td>K125696</td>
<td>K504080</td>
<td>K529701</td>
<td>K125685</td>
<td>K151303</td>
<td>K524466</td>
<td>K160685</td>
</tr>
<tr>
<td>G (7 x 12)</td>
<td>HM136948**</td>
<td>HM136948F</td>
<td>HM136916XD</td>
<td>K150189</td>
<td>K965501</td>
<td>K147767</td>
<td>K153391</td>
<td>—</td>
<td>—</td>
<td>K147696</td>
<td>—</td>
<td>K153497</td>
<td>K151304</td>
<td>K150037</td>
<td>—</td>
</tr>
<tr>
<td>GG (6/7/8)</td>
<td>H337844**</td>
<td>H337844F</td>
<td>H337816XD</td>
<td>K150188</td>
<td>K147769</td>
<td>K524662</td>
<td>K153522</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
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</tbody>
</table>

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The Timken team applies their know-how to improve the reliability and performance of machinery in diverse markets worldwide. The company designs, makes and markets high-performance mechanical components, including bearings, belts, chain, gears and related mechanical power transmission products and services.

**Stronger. By Design.**