Installation Instructions for Split Oil Seals

TIMKEN

Peak Performance Depends on Proper Seal Installation

Timken's full line of large bore industrial seals can help you save maintenance time and money while improving equipment and bottom line performance. Optimizing the effectiveness of all types of seals depends on proper handling and installation techniques.

Timken split oil seals should be installed with the split at the top of the horizontally-mounted shaft. To get the most out of your Timken split oil seals, we recommend using the following installation methods.

Proper Installation

1. Make sure your equipment meets the specification requirements (shaft and bore diameters, surface finish an hardness) for Timken split oil seals before proceeding with installation.

2. Clean and remove all burrs and sharp edges from the shaft and housing bore.

3. Grease the shaft with a thin coat of application-appropriate lubrication.

4. Open the Timken split oil seal joint sideways (see Figure 1) and place it around the shaft near the recess into which the seal will be installed.

5. Adjust the seal so its split is in the 12 o'clock position.

6. Beginning with the split ends, insert the seal into the housing bore. Make sure the ends of the seal are touching (see Figure 2). Compress the leading edge of the seal (see Figure 3) to install the seal into the housing.

7. Working downwards on both sides, continue inserting the seal into the housing bore, finishing at the bottom.

8. Seat the seal securely into the housing by tapping it with a mallet on a block of wood or other similar material. Use care to prevent damage to the seal or equipment. Once the seal is properly seated in the housing bore, it should protrude from the housing surface by 0.015" (0.381 mm [see Figure 4]). The 0.015" protrusion is built into the width of the seal, allowing for compression. (This protrusion is not required for Model 26 split seals.)

9. Compress the seal into the housing by bolting the cover plate tightly into position (see Figure 5). Consult Figure 6 for cover plate recommendations.

10. When replacing a conventional seal with a split oil seal, the equipment recess depth may be greater than the thickness of the split seal. In this instance, use filler gaskets or a split metal washer to fill the voided space.

11. When installing a split oil seal at the end of a plain or sleeve bearing, allow for a drain or vent between the seal and the bearing to prevent excess pressure from building.

Figure 1



Figure 2



Figure 3



Figure 4

0.015" Ref.

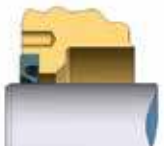

Figure 5



Note: Typical Model 23 figures shown for illustation purposes only.

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