

## **Seal Replacement Guidelines for SPICER® Drive Axles**

## **APPLICABLE FOR THE FOLLOWING DRIVE AXLES:**

DDH/RDH40, DSH/RSH40, DSP/RSP40, DST40(P), DDT41(P), DSP/RSP41, DST41(P), DDH/RDH44, DSH/RSH44, DA/RA344, DS/RS344, DA/RA404(P), DD/RD404, DS/RS404(P), DA/EA405(P), DD/RD405, DS/RS405(P), DD/RD454, DS/RS454(P)

### **REPLACE SEAL**

Dana strongly recommends using seal drivers when installing new seals. Use the proper driver to make sure that the seal is square and installed to the proper depth.

▲ CAUTION Oil seals can be easily damaged prior to installation. Use care when handling the new seal to prevent damage or contamination. Leave the seal in its package until installation. On new yokes, leave the protector on the yoke until it is installed on the shaft to prevent damage or contamination.

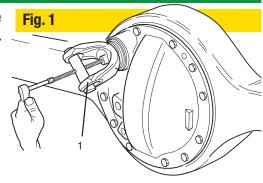
- 1. Inspect axle end-play at the yoke. Service if beyond specified limit.
- 2. Remove the old yoke using appropriate tool. A yoke puller tool may be made from the center section of most gear puller tools or may be purchased from your local tool distributor. (Fig. 1)
- 3. Remove seal. Use care when removing the old seal to prevent damage to the housing seal bore.
- 4. Inspect the seal bore area for any damage (nicks, gouges, corrosion). Carefully remove any slight damage with a crocus cloth. Clean the bore area to remove any loose debris.

# **CAUTION** Do not use any silicone or permatex-type bore sealant with this seal.

5. Remove the new seal from its package and install with the proper driver. Please refer to the Seal Installation Chart on page 2 of the Spicer® Seal Installation Tool Kit bulletin.

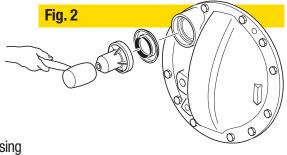
# **CAUTION** Due to the resiliency of the plastic driver, hammer rebound may occur when the seal is seated. Keep clear of the hammer rebound path!

- 6. Handle the seal by its outside diameter avoiding any contact with the seal lips. During installation, use the proper driver to make sure that the seal is mounted properly.
- 7. Use a rubber mallet to drive the seal tool in until the flange bottoms on the housing cover bore face. The flange will locate the seal at the proper depth. (Fig. 2)



## Spicer® Seal Installation Tool Kit







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### **GUIDELINES FOR REUSING YOKE**

**CAUTION** Do not use the yoke if it has any damage on the seal surface (nicks or scratches).

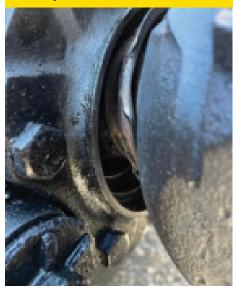
The surface of the yoke and the lips of the seal form a critical interface which retains the axle's lubricant while sealing the axle from outside contaminants. The condition of the yoke hub's surface is a very important factor in determining seal life.

Carefully inspect the seal surface area of the yoke hub for signs of wear and damage. Do not reuse the yoke if there is noticeable wear, such as heavy grooving, beyond normal polishing from the seal lips.

**Note:** Do not rework the yoke with abrasives such as emery paper or crocus cloth. Clean the surface of the yoke as necessary using chemical cleaners. Remove all trace of the chemicals from the yoke after cleaning.

**CAUTION** Do not use wear sleeves. Wear sleeves increase the yoke hub surface diameter and cause premature seal wear and repeat seal failure.

# Examples of wear sleeves causing premature seal wear:



Information Source: Spicer® Tandem Drive Axles Service Manual

Edmonton Alberta 833.442.0442 Mount Pearl Newfoundland 844,442,0442 Moncton New Brunswick 844.442.0442 Quebec City Quebec 844,442,0442

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