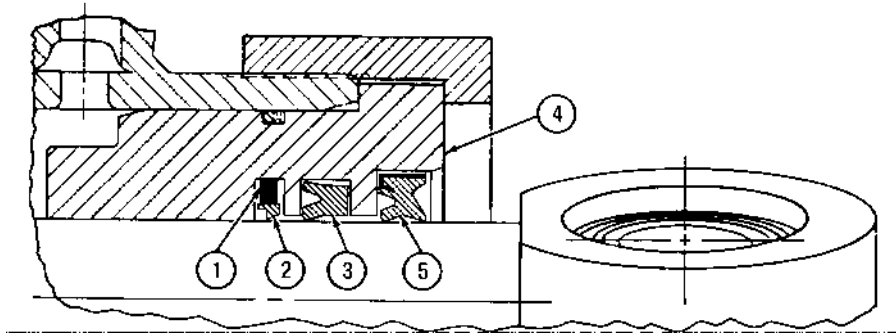


Installation of the Step Buffer Seal Assembly, the U-Cup Seal, and the Double Lip Wiper Seal in Hydraulic Cylinders

SCMS: 7555, 7562

Introduction

This instruction gives the procedure for installing Step Buffer, U-Cup and Double Lip Wiper Seals in the head in hydraulic cylinders.



1. Install the nitrile expander ring (1) of the step buffer seal in the innermost seal groove of the cylinder head (4).

2. Install the Teflon seal ring (2) of the step buffer seal in the same groove, on top of the expander ring with the step cut facing the piston end of the head. To ease its installation, the teflon seal ring may be folded into a "kidney" shape. The ring is durable and will return to its original shape without damage.

3. Install the u-cup seal (3) in the head with the open end of the "u" facing the piston end of the head.

4. Use sandpaper or emery cloth to "roughen" the surfaces of the counter bore in the cylinder head and the outside diameter of the double-lip wiper's metal shell (5).

5. Clean the counter bore in the head and the outside diameter of the double-lip wiper with 8T9011 Cleaner or 6V1541 Quick Cure Primer until neither discolors a clean white towel.

NOTE: The metal shell of the double-lip wiper is coated with a corrosion inhibitor which may prevent proper bonding of the seal to the cylinder head if it is not removed. After cleaning, do not touch the counter bore or the metal shell because oil from your fingers may prevent a good bond. Handle the seal by the lips only.

6. Apply 6V1541 Quick Cure Primer on the counter bore and the metal shell of the wiper and allow it to dry. It will dry in approximately 30 seconds.

7. Apply 7M7456 Bearing Mount evenly but not excessively to both the counter bore and the metal shell of the double-lip wiper.
8. Press the wiper into the counter bore until the metal shell is seated firmly against the bottom of the counter bore. Wipe away any excess bearing mount. Allow the bearing mount to dry for 15 minutes before assembling the cylinder.
9. Lightly lubricate the seals and wear ring with clean hydraulic fluid before installing the head on the cylinder rod.