

BRAKE

NOTE: To replace the rings or inspect the interior, only the piston and rod assembly need be removed.



Figure 25

1. Using a screwdriver, hold the piston rod stationary and with a wrench, turn the yoke clockwise as far as it will go. Push in on the yoke to force the internal mechanism toward the closed end of the cylinder, check for clearance between the rod guide and retaining snap ring. There should be no contact between the two components. If contact is made or if yoke damaged the guide while being

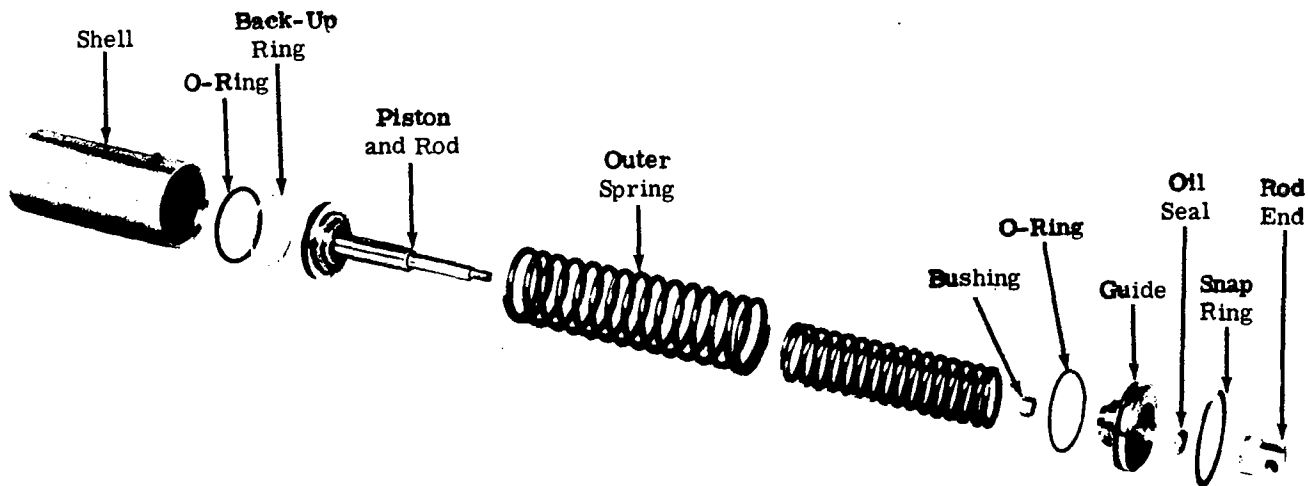


Figure 26

The port on the cylinder side is connected to the transmission sump. Its only function is to allow oil seeping past the piston to return to the transmission sump.

B. Removal

1. Pull cable button to release the brake. Then remove the floor board.

2. Disconnect both hydraulic lines and cap all openings.

3. Remove the pins at both ends. Remove the assembly from the truck.

C. Disassembly. Fig. 26.

CAUTION: Use care when releasing spring pressure during complete disassembly as the combined force of both springs in the cylinder is approximately 330 lbs.

turned, place a washer between the guide and yoke.

2. If no contact is made between guide and yoke, remove the snap ring. Pull the interior parts from the cylinder being careful of piston binding in the cylinder after the guide is free of the open end.

3. If upon inspection, all parts are determined to be in good condition, replace piston and guide rings and put the assembly back into the cylinder. Otherwise complete disassembly is necessary.

NOTE: The guide seal condition can be determined by shaft and cylinder bore appearance. Scratches on the shaft, dirt, abrasive particles or other foreign materials in the cylinder bore or on the shaft indicate seal failure.

NOTE: A film of oil and possibly some liquid oil may be present inside of the cylinder. Provided

BRAKE

the oil is clean, this condition can be considered normal.

CAUTION: Because of high spring pressures involved, further disassembly can be dangerous unless all parts are held in alignment and tilting is prevented.

4. Place piston and rod assembly in a press having a stroke of at least six inches. Make sure the yoke can be turned with a wrench and a screw driver can be inserted in the rod slot when pressure of the press is applied to the assembly. The method to accomplish this depends on the equipment available.

5. If an open bed press is available, lay two metal rails across the press bed and place assembly on the metal rails with yoke down. Adjust the distance between rails to allow yoke rotation and align piston rod with press ram.

6. Apply enough pressure to break contact between guide and clevis. Working from the bottom, remove the yoke.

7. Gently decrease pressure applied to the guide, until press ram breaks contact with the sleeve. This will require a ram stroke of approximately six inches.

8. Remove parts from the press to a clean work area. Remove guide seal and discard.

D. Cleaning and Inspection

Except for the rings, which should be discarded, all parts can be cleaned with solvent.

Visually examine all parts for pits, nicks, burrs, and linear scratches.

Slight imperfections may be removed with fine sand paper or emery cloth. Otherwise, replace the damaged parts.

The shaft should be in excellent condition to provide the necessary sealing needed to keep out dirt, water and other foreign particles. Any of these entering cylinder bore, may eventually enter the transmission sump, and cause extensive damage to the transmission.

Discard springs that are pitted or fatigued.

E. Assembly

1. Apply film of grease to shaft and the piston on the shaft side. Apply a coat of grease to the coil surfaces of both springs.

2. Press a new seal into the guide, with lip toward the outside. If bushing has been removed, press in a new one.

3. Place a new O-ring on the guide and one on the piston. Install the back-up ring on the shaft side of the piston next to the O-ring.

4. Fill cavity between the bushing and seal with grease and leave a thin film on the bushing. Lubricate the remaining parts with oil, making sure the cylinder bore is completely covered.

5. Use reverse of disassembly procedure for the remainder of the assembling.

6. Screw the clevis onto the rod until the clearance between the piston and cylinder closed end is 1/16 inch. This is the only parking brake adjustment needed and is determined as follows: Push the yoke toward the cylinder as far as it will go. Place a "straight-edge" across open end of the cylinder and measure the distance from the "straight-edge" to the guide face. Pull yoke to the opposite extreme, and determine the distance from the "straight-edge" to guide. Screw the yoke onto the rod if the difference between the two measurements is less than 1/16 inch, unscrew the clevis if the difference is more.

F. Installation

Use reverse of removal procedure, lubricate clevis pins and check operation.

RELEASING ANCHOR

A. General

The releasing anchor is found on the "S" Series powershift models only and has three functions, these are: (1) It anchors the rod end of the brake (2) Allows manual release of the brake (3) Automatically sets the brake after being released manually.

Two roll pins, a bracket, spring, latch, shaft and a lever attached to a cable, make up the releasing anchor mechanism. Fig. 27.

The function of each component is as follows: