With the cylinder removed from machine, cleaned, retracted, and drained of oil, proceed as follows:

**DISASSEMBLY**

1. Secure the cylinder in a vise or other method to prevent rotation. Rotate cylinder so the slot in barrel is positioned for easy access. Insure immediate area is clean so parts can be laid out.

2. Using pin spanner wrench--rotate gland counter clockwise--square wire should back out of slot on side of cylinder body. If square wire does not back out--rotate gland until end of wire can be seen in slot--insert screwdriver into slot under end of square wire and then rotate gland counter clockwise and remove square wire.

3. Pull on piston rod to remove gland and piston from tube.
   Note: If seals catch in retaining ring groove, it may be necessary to cut seal through slot in tube and pull out with needle-nose pliers.

4. If rod does not have a clevis, pull gland off end opposite piston. If clevis is threaded on remove and then remove gland. If rod clevis is welded then the rod must be restrained and the piston must be removed to get the gland off.

5. Remove seals and check all parts for nicks, scratches, cracks and abnormal wear.

Before reassembly check that new seals have been installed and all internal parts are free of visible contamination.

**ASSEMBLY**

1. Reassemble gland on rod, piston if removed and secure or if clevis was removed replace.

2. Coat piston OD and gland seal area with light grease and apply light coat of hydraulic oil to tube ID.

3. Insert piston, gland and rod assembly into tube. Line up hole in gland retaining groove with slot in cylinder barrel.

4. Insert new retaining wire in hole in gland and rotate gland clockwise until wire is completely in tube.

5. Test cylinder - cylinder is now ready for reassembly in machine.