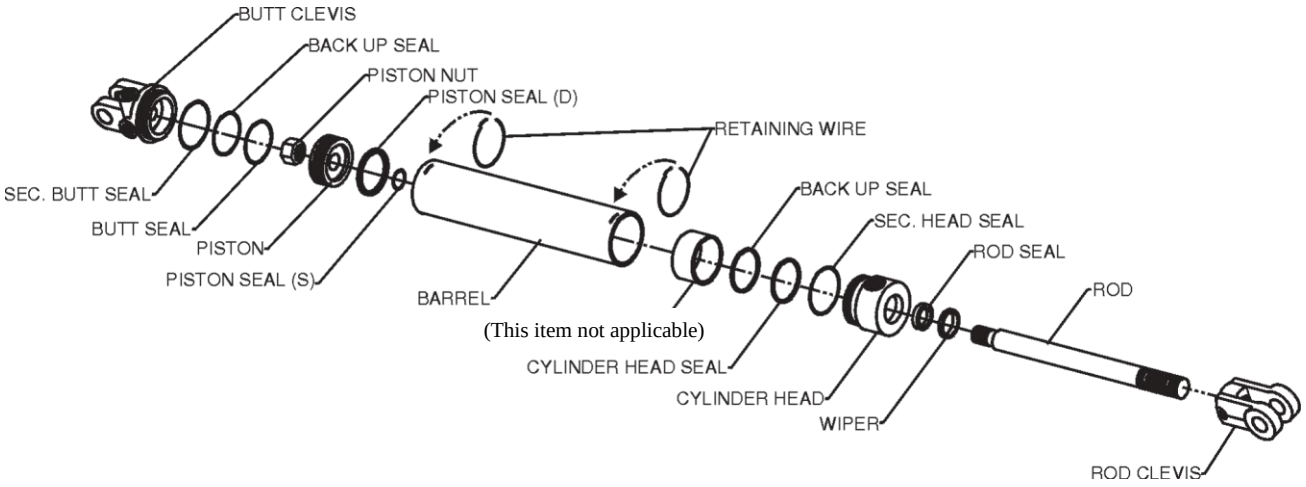
WYR-LOK CYLINDER REPAIR



1. Replacement cylinder head and butt seals must be available before beginning disassembly as they will be damaged during the procedure. The piston seal may also be subject to damage during disassembly.

2 Secure the cylinder snugly in a vice. Do not over tighten the vice or the barrel will compress.

3. Locate the slots at either end of the barrel. The cylinder head will be removed first.

4. Using a thin blade screwdriver, insert the blade into the end of the slot near the cylinder head and pry the retaining wire up slightly.

5. With the screwdriver under the wire, rotate the cylinder head to thread the wire out. The cylinder head can be turned with a pin wrench in the holes provided, with a pipe wrench, or with a strap wrench.

6. Thread the wire completely out of the barrel. Note which hole in the cylinder head that the wire was inserted in (there are 4 holes in the cylinder head. When reinstalling the cylinder head, the wire must be inserted in the same hole and the wire must be installed in the opposite rotation from removal (ie. If the cylinder head was turned clockwise to remove the wire, it must be turned counterclockwise for installation). This will ensure correct port orientation.

7. With the cylinder head wire completely removed, disassembly can continue. Ensure that the ports at both ends of the cylinder are open to the atmosphere. Insert a long pin or a bar thru the pin hole on the shaft mount. Use this bar to fully extend the shaft. A hard pull should dislodge the cylinder head from the barrel.

8. Continue to pull on the shaft until the o-ring on the cylinder head becomes lodged in the slot in the barrel. Insert a knife in the slot and cut the o-ring and back up seal. These seals can be threaded out thru the slot in the barrel.

9. Continue to pull on the shaft. The cylinder head, piston and shaft will pull free from the barrel.

10. If the seal at the butt end of the cylinder needs to be replaced, disassembly is the same as for the cylinder head (see steps #3, 4 and 5). Again, note the rotation used to remove the wire and use the opposite rotation for assembly. There is only one wire hole in the butt.

11. To remove the piston nut, do not clamp the shaft in a vice as it may be damaged. Locate a pin that will fit nicely thru the shaft clevis. Insert the pin vertically in a vice and tighten it securely. Insert the shaft clevis over the pin.

12. Remove the piston nut. The piston and cylinder head can now be removed.

13. Inspect all components for wear and scoring. Closely inspect the bore of the barrel for scoring or wear marks. Check the shaft closely for wear marks, scoring, pitting or rust (discoloration of nitrosteel shafts is normal). Check the bore of the cylinder head for wear marks, scoring and rust. Check the outside diameter of the piston for wear marks or scoring. Check seals for wear, nicks, tearing or other damage.

14. Replace all damaged components. It is recommended that all seals be replaced, even if there is no visible damage.

15. Assembly is the opposite of disassembly. Use a small amount of oil to lubricate all seals prior to assembly. Caution must be used to prevent seal damage.