



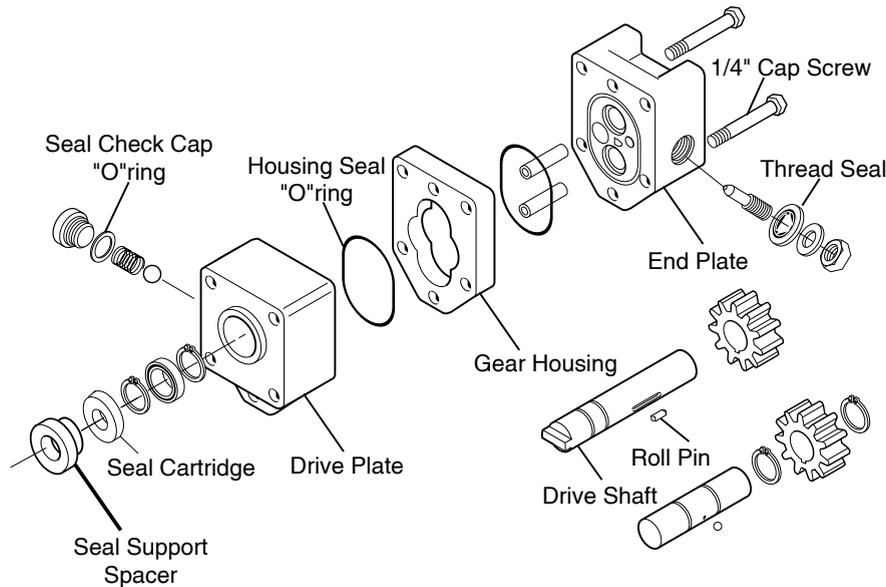
# SEAL REPLACEMENT INSTRUCTIONS FOR ACE HYDRAULIC MOTORS WITH CARTRIDGE TYPE SEAL (-L)

## HYDRAULIC MOTOR REPAIR KITS

Ace -L repair kits include a shaft seal and all "O" rings to rebuild motors equipped with the high pressure cartridge shaft seal. For conversion of quad ring seal motors to the cartridge seal a seal support spacer should be purchased seperately.

Motor Model	Repair Kit Part #	Repair Kit EDP #
BAC-75-HYD-202/203/204/206/210-L	RK-BAC-75-HYD-L	41374
BAC-75-HYD-304/305/306/307-L	RK-BAC-75-HYD-300-L	41362

## HYDRAULIC MOTOR PARTS



See Ace forms HYD-200N SERIES and HYD-300N SERIES for complete part listings.

## MOTOR CONVERSION FROM QUAD RING SEAL TO CARTRIDGE SEAL

Reference the motor nameplate model number to determine if the motor seal can be converted.

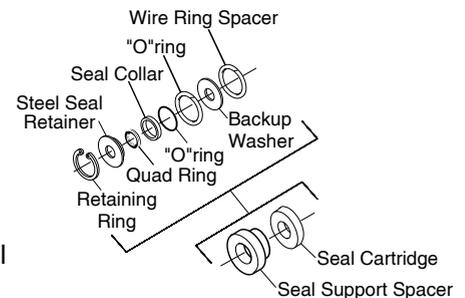
The following motors **can** be converted to the -L seal:

BAC-75-HYD-202, -203, -204, -206, -210, -304

The BAC-75-HYD-310 motors with date code G-5 or earlier **can not** be converted to the -L seal. The -L seal is standard in units G-6 and later.

To convert the seal follow DISASSEMBLY steps 1-5 on the following page.

Remove and discard the "O" rings, quad ring, retaining ring, steel seal retainer, seal collar, backup washer, and wire ring spacer. Then follow the ASSEMBLY steps.

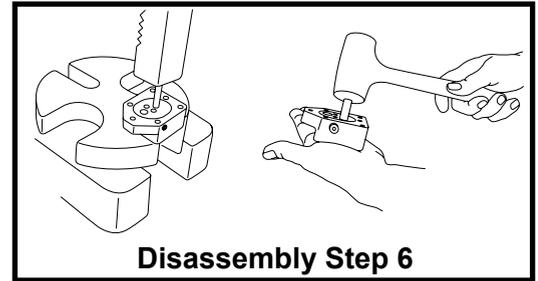


## -L REPAIR KIT INSTALLATION

**NOTE:** The seal cartridge comes on an installation bullet with a small diameter for storage and a larger diameter for installation. The seal lips curve towards the larger diameter when properly installed on the bullet. The seal should remain on the bullet until installation for best results.

### DISASSEMBLY:

1. Remove motor from pump by removing four cap screws.
2. Remove seal retaining ring from drive plate if installed and discard.
3. Remove two 1/4" cap screws (200 series) or four 3/8" cap screws (300 series).
4. Scribe a line on motor casing (end plate, drive plate, housing), note orientation, and pull apart.
5. Remove idler gear/shaft assembly, drive gear, and drive shaft dowel pin. **Note:** Failure to remove dowel pin will result in bushing damage.
6. Press or tap (non-marring hammer) drive shaft/bearing assembly, and seal cartridge out of drive plate.
7. Remove and discard old "O" rings and seal cartridge. Check shaft for wear or grooving under seal and replace if damaged.



### ASSEMBLY:

1. Place drive shaft/bearing assembly in drive plate.
2. Apply a thin film of hydraulic oil to the seal lips and bullet. Insert seal/bullet assembly over shaft tang. Press seal by hand over the installation bullet until the seal casing touches the drive plate.
3. Place a 3/4" (200 Series) or 15/16" (300 Series) deep socket over seal and press or tap into seal cavity until seated.
4. Remove the installation bullet and discard.
5. Lightly grease large "O" rings and insert in plate grooves. (300 series grooves in gear housing)
6. Place dowel pin and drive gear on drive shaft.
7. Place idler gear/shaft assembly in drive plate bushing.
8. Assemble the drive, center, and end plates aligning scribe marks.
9. Install two 1/4" cap screws - torque 6-8 ft-lbs (200 series) or four cap screws - torque 24 ft-lb (300 series). **Caution:** Do not over tighten.
10. Remove needle valve, replace thread seal (metal washer with rubber insert), and reassemble.
11. Remove seal check cap from drive plate with 5/32" allen wrench (200 series) or 7/8" wrench (300 series), replace seal check cap "O" ring, and reassemble.
12. Position coupler in pump shaft slot and seal support spacer around coupler. **Note:** The smaller diameter of the 200 series spacer must face the hydraulic motor. Fill the remaining area of the coupler/spacer cavity with coupler grease, align motor tang with coupler slot, and attach motor with four cap screws - torque 13 ft-lbs.

