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Service Instructions For The Motor
Section of the HB (312) & HK (315) Series

PI333750
8/05

For Use With
Seal Kits 300333750

USE EXPLODED VIEW ON BACK FOR REFERENCE

- A) To aid in reassembly of the motor, make a "V" shaped set of lines from the endcover to the housing using either paint or a marker. With shaft facing down, secure motor in vise by clamping on to housing (13). Loosen and remove four bolts (12) holding motor assembly together. Remove endcover (11) from motor making sure not to drop endcover piston (9). Using needle nose pliers or two small screwdrivers, lift endcover piston (9) out of endcover (11). Remove white Teflon seal (3) and O-ring seal (2) from endcover piston (9) and discard. Remove the piston spring (10) from endcover (11) and lay aside.
- B) Lift commutator container and commutator (8) from motor and lay aside. Place commutator on a flat, clean surface with the seal (4) facing up. Place the tip of a small screwdriver on the seal (4) and gently tap until opposite side of seal lifts from groove. Remove seal (4) and discard.
- C) Remove manifold (7) and rotor assembly from motor. Remove all seals (1) from components and discard. **(Caution - Do not allow rolls to drop from rotor assembly when removing rotor assembly for motor.)** Remove drive link (5) from motor and lay aside.

At this point, all parts should be cleaned in an oil-based solvent and dried using compressed air (For safety, observe all OSHA safety guidelines). All new seals should be lightly coated in clean oil prior to installation.
- D) Insert the drive link (5) into the shaft with the tapered end facing up. Place a body seal (1) into the groove in the face of the rotor assembly (6). With the seal side of the rotor assembly (6) facing the housing (13), line up the splines of the drive link (5) and the rotor assembly (6) and lower the rotor assembly onto the housing (13) making sure to use the alignment marks as a guide to assure correct orientation of the rotor assembly (and the remaining components).
- E) Place a body seal (1) into the groove in each face of the manifold (7). Lift the drive link (5) approximately .100 and place the tip of a small screwdriver under the disk-shaped portion of the drive link to hold it up. Making sure that the notch in the manifold is aligned with the notch in the rotor and that the side with the largest holes faces down. Lower the manifold (7) onto the motor and engage the disk shaped portion of the drive link (5) into the groove in the manifold (5) (See Figure 1). Remove the screwdriver and lower the manifold (7).
- F) If the disk is engaged in the groove, the end of the drive link will protrude above the surface of the manifold. If it doesn't, remove manifold and repeat this step. Using bolts or line up pins align the components assembled thus far. Make sure that components are matching the "V" shape that you drew earlier and that the bolt holes are all aligned. Once everything is aligned make sure that the drive link is still engaged in the manifold. **(The motor will not operate if the drive link is not engaged in the manifold).**
- G) Install the commutator seal (4) into the commutator (8) with the metal side facing up. Use finger pressure to press the seal down flush with the surface of the commutator. Place the commutator container (8) onto the manifold (7) and then place the commutator onto the protruding end of the drive link (5) making sure that the seal side faces up.
- H) Install the remaining body seal (1) in the groove in the face of the endcover (11). Install the piston spring (10) into the endcover (11), then the white Teflon seal (3), followed by the O-ring seal (2). Lining up the alignment pin, press the piston (9) into the endcover (11). While holding the endcover piston (9) into the endcover (11), lower the endcover assembly onto the motor.
- I) Install the four assembly bolts (12) and pre-torque to 10 ft. lbs. Final torque all bolts to 50 ft. lbs.

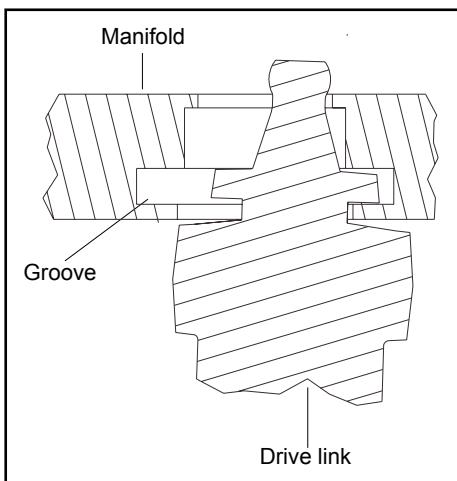
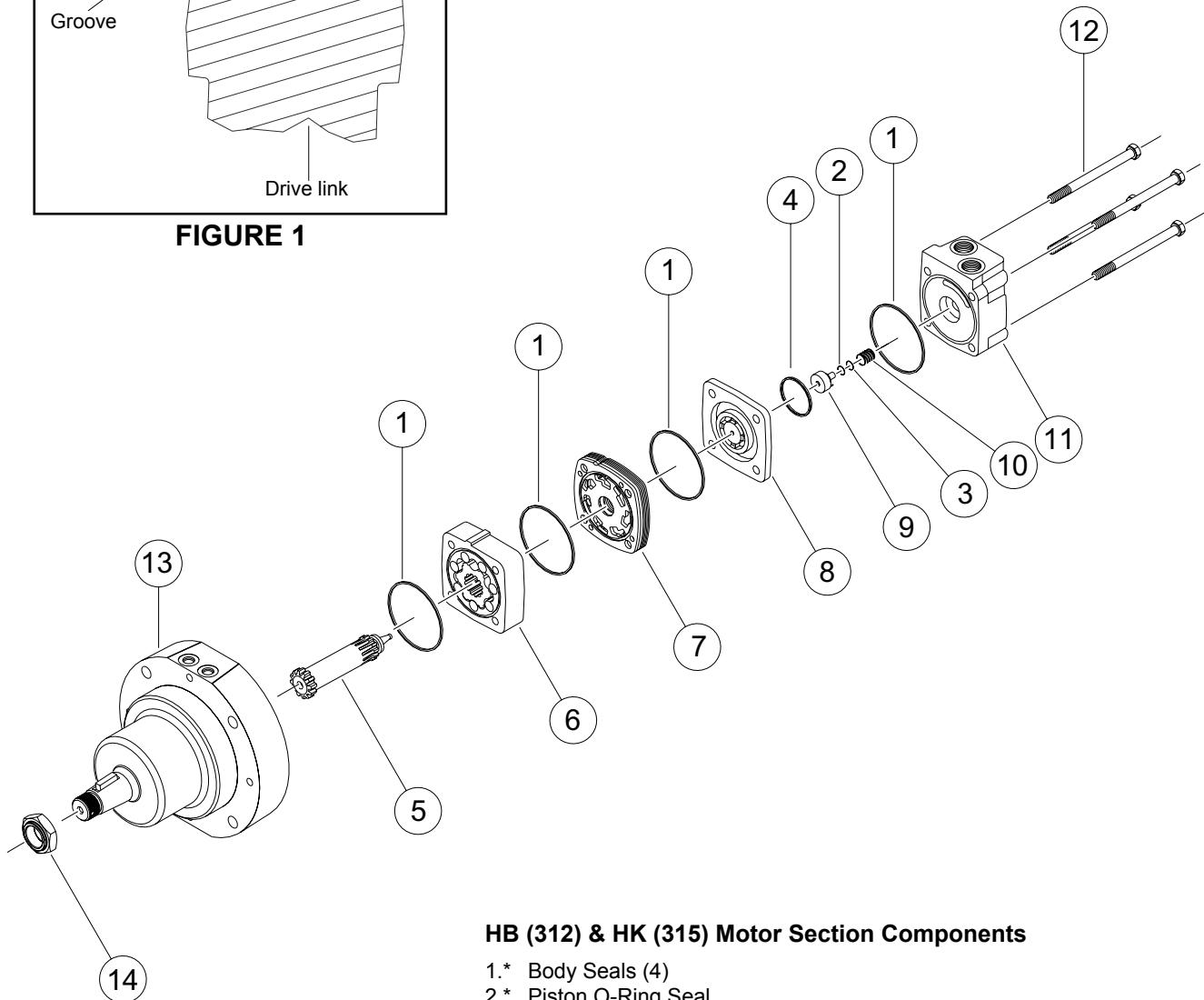


FIGURE 1



HB (312) & HK (315) Motor Section Components

- 1.* Body Seals (4)
- 2.* Piston O-Ring Seal
- 3.* Back Up Seal
- 4.* Commutator Seal
- 5. Drive Link
- 6. Rotor Assembly
- 7. Manifold
- 8. Commutator Assembly
- 9. Endcover Piston
- 10. Piston Spring
- 11. Endcover
- 12. Assembly Bolts
- 13. Housing Assembly

* Contained in seal kit 300333750