

60K HP Seal Kit Manual (WA-1008-4)

The kit includes the following:

- (4) D333 Seal HP w/ O-rings (004406-1)
- B305 Lube (28339)
- (4) HP Hoops (11077)

-also needed: HP Seal Tool Kit, Rubber Mallet, AccuGoop (11448), Blue Goop (A-2185)

Kit installation procedure:

- 1. Remove cylinder from pump.
- 2. Place the cylinder on the Seal Guide tool.
- 3. Use the small (stepped) end of the installation tool to push the internal backup sleeve through the cylinder, forcing the seals and hoops out the other end of the cylinder. Do not remove this sleeve. Turn the cylinder over and repeat this process.
- 4. Inspect the cylinder bore at both ends of the cylinder. If the inside bore finish is blemished, remove the backup sleeve and go to the next step. If the ID is good, skip to Step 6.
- 5. To refinish the ID cylinder bore, place the cylinder on a table and with a piece of 180 grit abrasive paper in each end and roll the cylinder back and forth to remove any blemishes (right). Repeat this process with Scotch Brite to polish the surface. Clean the cylinder thoroughly after polishing.
- 6. With clean hands, remove the O-rings and seals from their bags. Apply grease form the enclosed packet to the O-ring and install the O-ring on the seal without twisting the O-ring.



- 7. With the backup sleeve in place, thread the seal guide tool onto one end of the cylinder. Install the installation sleeve into the sleeve guide with the larger ID (tapered) end up.
- 8. Lubricate the ID of the sleeve with grease and load the seal with the O-ring side down into the sleeve. Keep the seal square while inserting it into the sleeve with your







fingers.

- 9. Use the blunt (non-stepped) end of the installation tool to hand-press the seal the rest of the way into the cylinder (right).
- 10. Place the hoop with the sharp (tapered) end down into the installation sleeve.
- 11. Push the hoop down into the sleeve with the blunt end of the installation tool. Secure the hoop in place by tapping the installation tool the rest of the way in with a rubber mallet.



12. Remove the tools from the finished end of the cylinder and repeat the seal installation process to the opposite end of the cylinder.

- 13. Apply AccuGoop to the end of the plunger.
- 14. While supporting the end of the cylinder with your hand to keep the seal and hoop from popping out of the other end of the cylinder, push and rotate the cylinder onto the plunger.
- 15. Apply Blue Goop to the threads on both ends of the cylinder. Thread the cylinder into the end bell.

Over time, the cylinder bore will open up, loosening the hoops; in this case, take special care in installing the cylinder. Eventually, use will wear the cylinder wall enough to require a complete replacement.