

High-Pressure Seal Kit Manual (001198-1)

This kit includes:

- (4) HP Seal (004406-1)
- (4) Hoop
- (2) Bronze Back-up
- Grease packet

Not included: Rubber mallet, Blue Goop (A-2185), Back-up Seal Sleeve, Seal Guide Tool

Kit installation procedure:

- 1. Remove the high-pressure (HP) cylinder(s) from the pump.
- 2. Position the HP cylinder on the seal guide tool. Position the small (stepped) end of the installation tool into the top of the HP cylinder.
- 3. Use a rubber mallet to push the internal back-up seal sleeve through the HP cylinder forcing the seal and the hoop out of the other end. Do not remove the sleeve from the cylinder.
- 4. Turn the cylinder over so the dynamic end is facing up and repeat, using the non-stepped end of the installation tool to push out the other seal.
- 5. Clean the cylinder thoroughly and check the bore at both ends. If the inside bore finish is blemished, smooth them out by holding a scouring pad in both ends and roll the cylinder back and forth on a surface.
- 6. Apply grease to the O-rings. Install all four onto the HP seals; be sure not to twist the O-rings.
- 7. Thread the seal guide tool onto one end of the cylinder. While it does not matter which end is done first, it is helpful to begin with the static (flat) end of the cylinder.
- 8. Put the installation sleeve into the sleeve guide with the larger ID (tapered) end up. Lubricate the ID of the installation sleeve with some of the grease packet. Put the HP seal into the sleeve with the O-ring side down.
- 9. Use the blunt (non-stepped) end of the installation tool to hand-press the HP seal into the cylinder.



- 10. Put the hoop into the sleeve, sharp (tapered) end first, and push it into the sleeve with the blunt end of the installation tool. Set it into place by tapping the installation tool with a rubber mallet until the tool bottoms at the cylinder face.
- 11. Remove the seal guide tools from the top of the cylinder.
- 12. Apply a light coat of grease to both ends of the back-up seal sleeve.
- 13. Put the sleeve into the other end of the cylinder and repeat Steps 7-11.
- 14. Apply Blue Goop to both threads of the cylinder.
- 15. Remove the old bronze back-up ring from the plunger.
- 16. Apply Blue Goop to the threads on both ends of the cylinder and to the threads of the end cap.
- 17. Replace the bronze back-up with a new one from the kit.
- 18. Put the cylinder back on the plunger, dynamic side first.