

Item numbers in these instructions refer to the drawings found on the back of this sheet.
If any seals are not adequately greased Molykote 55 or equivalent is recommended.

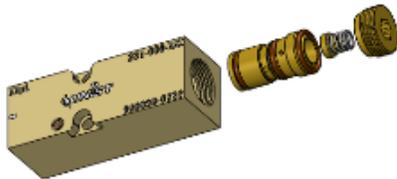
Tools Needed:

- 1/4" hex key
- 3/32" hex key
- 7/64" hex key
- A clean surface

1. If necessary, remove the pump from the pump stack using a 7/64" hex key.
2. Remove the two bolts (item 20) that hold the air cap to the pump body using an 3/32" hex key.
3. Remove air cap (item 18), air piston (item 16), metering pin (item 15), and spring (item 14) from the air side. Set on a clean surface.



4. Use the 1/4" hex key to remove the brass plug (item 12) from the fluid side (bottom) of the pump.
5. Remove the check seal, spring, pump inserts and all seals (items 2-11). Depending how long the pump has been in service and what fluids have been ran through the pump this can be accomplished by either banging the bottom of the pump body on a hard smooth surface or pushing on the inserts from the opposite side to force the parts out.



6. Discard all old seals and internal pump components. Clean any debris from the inside of the pump block to ensure contaminants do not interfere with pump performance upon re-assembly.

7. Drop the brass washer (item 2) into the fluid side of the pump body. Ensure it sits flat on the internal shelf
8. Ensure there is a light coat of grease on the -012 O-ring (item 3) and drop it on top of the washer. Ensure it sits flat on the washer.
9. The -008 X-ring (item 4) should be in the counter bore of the fluid inlet insert (item 5). Ensure this is assembled and lightly greased.
10. Insert the fluid inlet insert (item 5) into the pump body with the -008 X-ring (item 4) facing the washer.
11. Ensure there is an -012 O-ring (item 3) and -008 U-cup (item 6) installed on the fluid displacement chamber (item 7) and they are lightly greased. The -007 U-cup lips should be installed facing into the bore. Install this assembly with the U-cup facing the other insert.
12. Ensure the outlet check valve is assembled with the flat check seal (item 8) and the brass housing (item 9). Install this assembled with the seal facing the inside of the pump.
13. Install the outlet check valve spring (item 10) around the nub on the outlet check valve housing (item 9)
14. Ensure the -013 O-ring (item 11) is lightly greased and install on the chamfer of the displacement chamber (item 7)
15. Install and tighten the brass plug (item 12) to 75 in-lbs [8.5 Nm]
16. Flip the pump over and install the metering pin return spring (item 13) and metering pin (item 14). Ensure the metering pin has a light coat of grease around the smaller diameter shaft.
17. Ensure the air piston (item 18) is coated with super lube or equivalent grease. Install the air piston into the air cap (16). Twist the parts as you slide them together.
18. Ensure there is a -016 O-ring (item 17) installed in the groove of the air cap (item 16) and install the assembly into the pump.
19. Use the air cap retainer (item 19) to hold the air cap in place and tighten screws (item 20) to 6 in-lbs using 3/32" hex key.

