

**Tuthill****SOTERA**
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400 Pump Retrofit Kit - Diaphragms with EPDM Seals

A. Drain Oil out of pump by removing sight caps.

B. Diaphragm Removal:

1. Remove diaphragm cover screws and drain any remaining fluid from pump.
2. Remove four small screws and O-rings that secure diaphragm.
3. Remove diaphragm and check valves by pulling check valves out of pump body.
NOTE: Valves may be tight. Be careful not to damage pump body when extracting old valves.

C. Install New Diaphragms:

1. Coat the ball of each check valve with a dab of oil or Vaseline.
2. Install the new diaphragms (3) as shown in the drawing. Note that the valves with the O-rings go nearest the inlet side of the pump.
3. Slide the small O-ring (5) on the four small phillips head screws (4) as shown. Put a drop of blue Loctite® (included) on the thread of each screw. Start all four screws before tightening securely.
4. Install pump covers and tighten to 50 inch*lbs. For phillips head screws, this is as tight as you can hand tighten with a screw driver. For Hex-head bolts, 50 inch*lbs is slightly more than snug. Do not over tighten hex head bolts!

D. Add Oil and replace Sight Caps:

1. Add 16 oz of 30 wt motor oil to the crank case through the sight cap opening.
2. Replace the sight cap O-rings (2) if needed, then tighten sight caps snug.

E. Inlet and outlet Flange Gaskets:

1. Included are two gaskets (1) for the pump inlet and outlet flanges. If your pump has a manufacture date on the front of the pump before 1295 (month-year) you will also need to replace these two gaskets. Re-install pump flange covers and tighten to 50 inch*lbs. For phillips head screws, this is as tight as you can hand tighten with a screw driver. For hex-head bolts, 5 inch*lbs is slightly more than snug. Do not over tighten hex head bolts!

KIT 400KTG9137 PARTS LIST			
Part	No.	Description	Qty.
1	400F6924	Flange Gasket BUNA-N	2
3	400G8964	Santoprene Diaphragm Assembly, includes check valves with black EPDM O-rings on inlet valves	2
4	400F6795	#10-24x1/2 Phillips Head Screw	8
5	400G8952	O-Ring -106, EPDM	8
6	400G8961	Blue Loctite tube	1

