



# Seal Replacement Instructions For Poly Self-Priming Pumps FMC-75SP and GE-85SP Series

## PUMP REPAIR KIT

This repair kit includes the mechanical seal assembly, shaft seal O-ring, volute seal O-ring, and sealing washers.

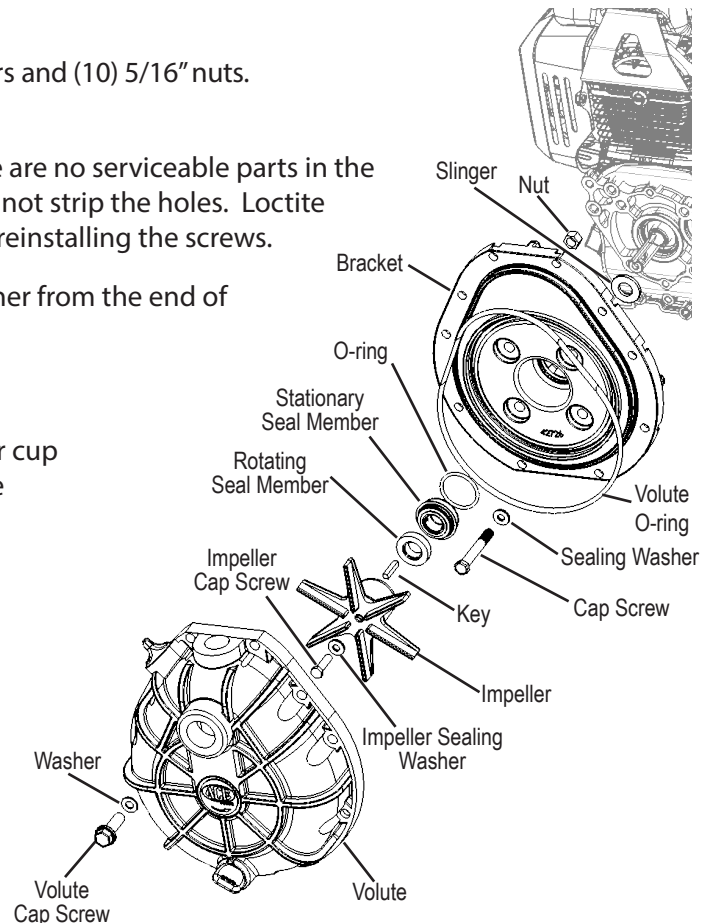
Pump Series	Standard Seal	Severe Duty Seal
FMC-75SP Models	RK-FMC-75SP	RK-FMCSC-75SP
GE-85SP Models	RK-GE-85SP	RK-GESC-85SP

## REPAIR KIT INSTALLATION

Disassembly:

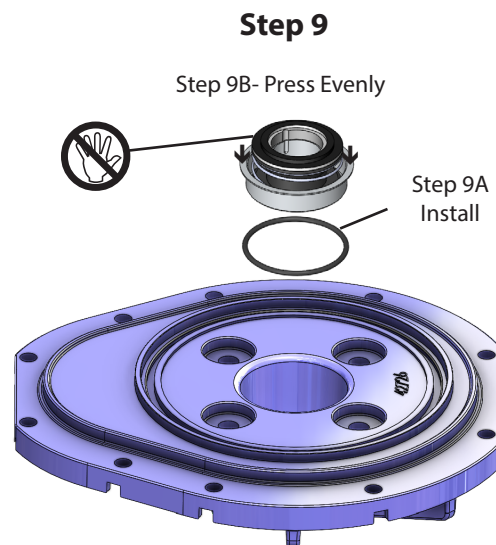
- 1) Remove (10) 5/16" volute cap screws, (10) 5/16" flat washers and (10) 5/16" nuts.
- 2) Remove volute and volute O-ring. Discard used O-ring.  
**Note:** Do not remove the screws inside the volute. There are no serviceable parts in the assembly. Only remove in case of blockage using care to not strip the holes. Loctite 435 or equivalent locking material should be used when reinstalling the screws.
- 3) Remove the impeller cap screw and impeller sealing washer from the end of the engine shaft. Discard the used sealing washer.
- 4) Remove the impeller from the engine shaft.
- 5) Remove and discard the rotating seal member and rubber cup from the impeller hub by prying with a screwdriver inside the seal ID. Verify that the key is in place in the impeller keyway. If the key is loose apply silicone and reinstall in the keyway.

- 6) Clean the impeller seal bore prior to installing the new seal. Wet the rubber cup with soapy water to lubricate the seal for installation. Place a clean, non-abrasive cloth over the seal face to prevent damage during installation. Use your hand to press the seal into the bore until it is seated flat.



- 7) Remove the bracket from the engine by removing (4) cap screws and (4) sealing washers. Discard the used sealing washers.
- 8) Turn the bracket over and press or tap out the stationary seal and O-ring. Discard used O-ring and seal.
- 9) Clean the seal bore. **9A)** Install the new O-ring under the seal cup on the new stationary seal. **9B)** Press or tap the seal cup evenly into the seal bore with a 1-1/2" pipe nipple.

**Caution:** Be careful not to touch or contaminate the seal face.



#### Assembly:

- 1) Clean engine shaft internal threads with brake cleaner or similar degreasing material and dry.
- 2) Verify the slinger is on the engine shaft and clear of the keyway against the shaft shoulder.
- 3) Place the bracket carefully over the engine shaft.
- 4) Attach the bracket to the engine using (4) cap screws and (4) sealing washers. The rubber side of the washer faces the bracket. Torque bolts to 10 ft-lb (14 N-m).  
**Caution:** Aluminum engine housing threads may strip if over tightened.
- 5) Verify that the slinger is on the shaft with clearance on both sides for proper function.
- 6) Verify that the key is in place in the impeller keyway. If the key is loose apply silicone and reinstall in the keyway.  
**Caution:** Be careful not to touch or contaminate the seal face.
- 7) Install the impeller over the engine shaft, aligning the impeller key with the shaft keyway.
- 8) Attach the impeller with (1) cap screw and (1) sealing washer. The rubber side of the sealing washer faces the impeller.  
**Important:** Apply included removable thread locker (Nut Lock) to screw threads and torque to 60 in-lb (7 N-m).
- 9) Lightly grease the volute O-ring and place onto the pump bracket around the pilot.
- 10) Install the volute to the bracket with (10) 5/16" cap screws, (10) 5/16" flat washers and (10) 5/16" hex nuts. Start all bolts first then torque opposing bolts until all are tightened to 60 in-lb (7 N-m) of torque.