

## **Cleaning and Seal Replacement Procedure for Haight Pump Model 5E**

Refer to **drawing # 5E001000** for component reference numbers. Procedure assumes the pump and motor assembly has been removed from the Filter/Fryer system.

- Step # 1. Loosen and remove the four cover bolts (#8).
- Step # 2 Loosen the 3 set screws on the motor hub, and remove pump from motor.
- Step # 3. Remove pump cover (#7). *Hint: Grasping the pump head on the sides and striking the shaft on a wood surface, will aid in cover removal.*
- Step # 4. Remove rotor (#6) and shaft and pinion assembly (#1 & #5). *Hint: Mark the rotor and pinion with a magic marker before removal to insure that it is reinstalled in the same orientation to prevent possible binding.)*
- Step # 5 Pry the shaft seal (#2) out of the housing. Remove the cover o-ring (#9) from the cover.
- Step # 6. Clean rotor, housing, cover and shaft and pinion assembly in warm soapy water. Be sure that all debris is cleaned away from gear teeth. Inspect for excessive or damage.
- Step # 7 Press new shaft lip seal into the housing, the lip should be facing into the pump. This is a press fit so you will need a press, vice or other mechanical assistance for installation. Be sure to protect all machined surfaces from damage.
- Step # 8 Install new cover o-ring on the cover. *Hint: Gently stretch the o-ring and drop into place, never "roll" the o-ring this can result in a twisted condition that will leak.*
- Step # 9. Lubricate the shaft and pinion assembly, rotor, housing and cover with clean cooking oil.
- Step # 10. With a rotating motion, carefully slide shaft and pinion assembly back into pump housing. *Turning the shaft and pinion during installation will reduce damage to the pump's lip seal.*
- Step # 11. Install rotor into pump casing, aligning the marks you made in step # 4
- Step #9. Install pump cover, with seal, into pump housing.
- Step #10. Install cover bolts tightening them alternately in a criss-cross pattern until snug. Ensure the shaft turns freely during the tightening process. If the shaft starts to bind, wiggle the cover to adjust the crescent location relative to the gears. Complete tightening with same pattern to 40 to 60 inch pounds. Test pump to insure the shaft turns freely.
- Step # 11 Install the pump back into the motor, rotating the pump so the pump shaft and motor shaft become properly engaged. The pump hub end must be fully inserted into the mating motor hub for proper shaft engagement.
- Step # 12 Rotate the pump to the desired location and tighten the three mounting set screws