

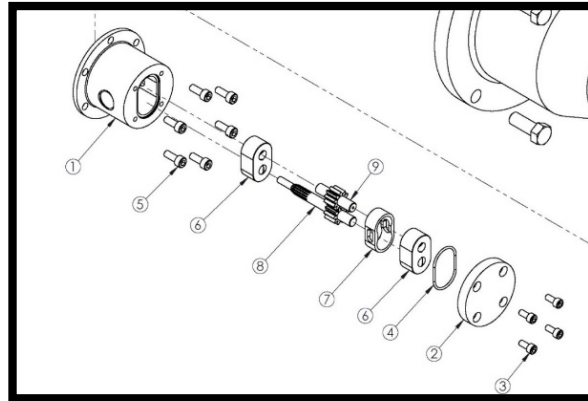
**Metallic (M) KOPkit**  
**REPLACEMENT INSTRUCTIONS**

*It is not necessary to remove pump from service!*  
*Estimated time to service: 30 Minutes*

- Find the figure that represents your pump. For E02 use Figure 3. For E05-E125, use Figure 4.
- Close all suction and discharge valves.
- Disconnect power source to motor. Follow local Lockout/Tagout procedures.
- Flush and drain pump. The containment can area, where the drive magnet is housed, will not fully drain and will contain some process fluid.
- Remove front cover hardware and front cover. (Fig 3 and Fig 4: 2, 3)
- Pull Out: front cover O-ring, front bearing, drive and idler gear/shaft assemblies, housing liner, rear bearing and center housing O-ring. (Fig 3: 4, 6, 7, 8, 9; Fig 4: 7, 8, 9, 10, 12, 13)
- Inspect parts for wear and replace with new items from new KOPkit. Actual items replaced depends on the suffix of the purchased KOPkit.
- Insert a bearing. Bearings are symmetrical and orientation does not matter.
- Install the liner until it seats against first bearing.
- Install the idler gear/shaft assembly in the top hole and against the first bearing.
- Install the drive gear/shaft assembly, splined end first. The gear should be against the first bearing. The assembly may have to rotate slightly to engage the drive magnet.
- Insert second bearing against the liner. Orientation does not matter.
- Inspect O-rings for damage and avoid pinching during assembly. O-ring lubricant may be needed to keep them in place during assembly. O-rings must be fully seated in housing grooves.
- Find the TORQUE SPECIFICATIONS CHART
- Replace the front cover and hardware, and observe the hardware torque requirements. Tighten hardware in a "crisscross" pattern
- Replace into service per site procedures.

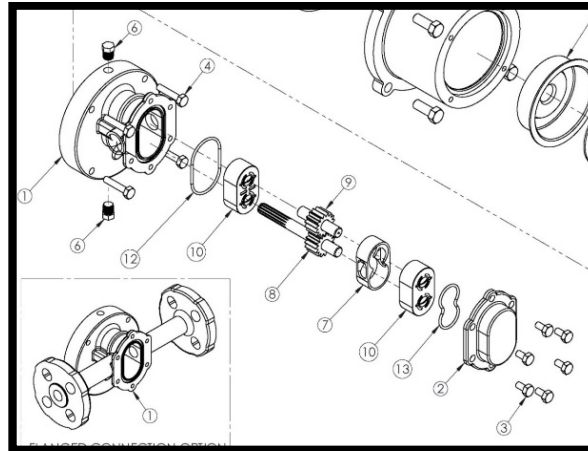


**FIGURE 3**  
 Metallic KOP KIT  
 Model E02



KOPkit Versions:  
 LTE: 4, 7, 8, 9  
 STD: 4, 6, 7, 8, 9

**FIGURE 4**  
 Metallic KOP KIT  
 Models E05, E12, E25, E75, E125



KOPkit Versions:  
 LTE: 7, 12, 8, 9  
 STD: 7, 8, 9, 10, 12, 13

**Eclipse KOPkit Installation Guide**

You are in possession of an Eclipse KOPkit, a "Keep-On-Pumping" spare parts kit. These KOPkits are designed to guard against unnecessary downtime and assure the highest level of efficient and uninterrupted service from your Eclipse pump.

**Eclipse Non-Metallic Pumps** have three (3) types of KOPkits (Figures 1&2). The KOPkit components are shown below by KOPkit Suffix:

Non-Metallic KOPkits	Light (-LTE)	Standard (-STD)	PRO (-PRO)
Drive Gear Assy	X	X	X
Idler Gear Assy	X	X	X
Liner	X	X	X
O-ring(s)	X	X	X
Bearing(s)		X	X
Hardware, Nut Plates			X

**Metallic Eclipse Pumps** have two (2) types of KOPkits (Figures 3&4) shown below by KOPkit Suffix:

Metallic KOPkits	Light (-LTE)	Standard (-STD)
Drive Gear Assy	X	X
Idler Gear Assy	X	X
Liner	X	X
O-ring(s)	X	X
Bearing(s)		X

**WARNING** BEFORE PERFORMING ANY MAINTENANCE REQUIRING PUMP DISASSEMBLY, BE SURE TO RELIEVE PRESSURE FROM THE PIPING SYSTEM, ISOLATE THE PUMP USING THE APPROPRIATE SHUTOFF/BLOCKING DEVICES, AND WHERE HAZARDOUS PROCESS MATERIALS ARE INVOLVED, RENDER THE PUMP SAFE TO PERSONNEL AND THE ENVIRONMENT BY CLEANING AND CHEMICALLY NEUTRALIZING AS APPROPRIATE. WEAR PROTECTIVE CLOTHING AND EQUIPMENT AS REQUIRED.



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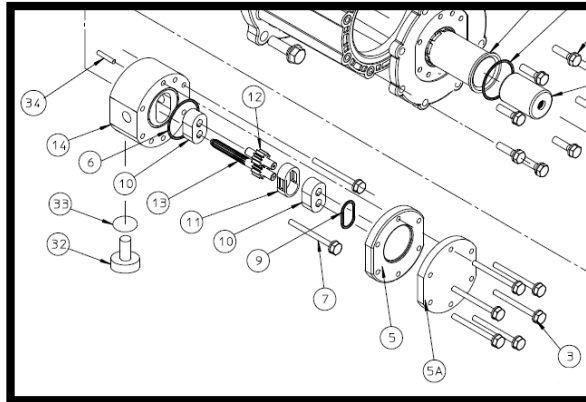
**Non-Metallic (NM) KOPkit  
REPLACEMENT INSTRUCTIONS**

*It is not necessary to remove pump from service!  
Estimated time to service: 30 Minutes*

- Find the figure that represents your pump. For E02 use Figure 1. For E05-E125, use Figure 2.
- Close all suction and discharge valves.
- Disconnect power source to motor. Follow local Lockout/Tagout procedures.
- Flush and drain pump. The containment can area, where the drive magnet is housed, will not fully drain and will contain some process fluid.
- Remove front cover hardware and front cover. (Fig 1: 3, 5, 5A, 7; Fig 2: 3, 4, 5, 5A)
- Pull Out: front cover O-ring, front bearing, drive and idler gear/shaft assemblies, housing liner, rear bearing and center housing O-ring. (Fig 1 and Fig 2: 6, 9, 10, 11, 12, 13)
- Inspect parts for wear and replace with new items from new KOPkit. Actual items replaced depends on the suffix of the purchased KOPkit.
- Insert a bearing. Bearings are symmetrical and orientation does not matter.
- Install the liner until it seats against first bearing
- Install the idler gear/shaft assembly in the top hole and against the first bearing.
- Install the drive gear/shaft assembly, splined end first. The gear should be against the first bearing. The assembly may have to rotate slightly to engage the drive magnet.
- Insert second bearing against the liner. Orientation does not matter.
- Inspect O-rings for damage and avoid pinching during assembly. O-ring lubricant may be needed to keep them in place during assembly. O-rings must be fully seated in housing grooves.
- Find the TORQUE SPECIFICATIONS CHART
- Replace the front cover and hardware, and observe the hardware torque requirements. Tighten hardware in a "crisscross" pattern.
- Replace into service per site procedures.

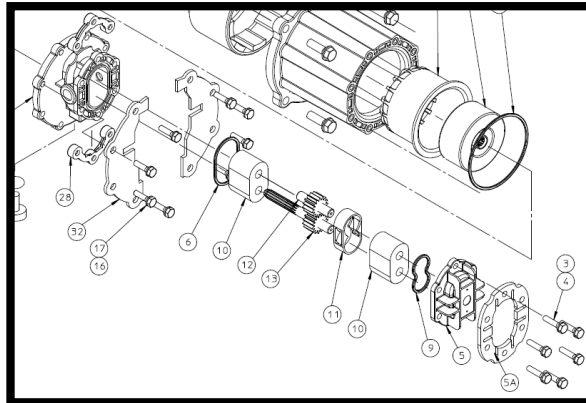


**FIGURE 1**  
Non-Metallic KOPkit  
Model E02



**KOPkit Versions:**  
**LTE:** 6, 11, 12, 13  
**STD:** 6, 9, 10, 11, 12, 13  
**PRO:** 3, 5A, 6, 9, 10, 11, 12, 13

**FIGURE 2**  
Non-Metallic KOP KIT  
Models: E05, E12, E25, E75, E125



**KOPkit Versions:**  
**LTE:** 6, 11, 12, 13  
**STD:** 6, 9, 10, 11, 12, 13  
**PRO:** 5A, 6, 9, 10, 11, 12, 13

**TORQUE SPECIFICATIONS CHART**

Pump Model	Bolt Position		Bolt Size	Recom. Torque
				in-lbs (N-m)
E02	NM	Front Cover-to- Housing	10-32	15 (1.7)
			8-32	20 (2.3)
	NM	Housing adaptor-to-spool	1/4-20	48 (4.5)
	M	Housing-to-spool	3/8 - 16	40 (4.5)
	Spool-to-motor adaptor or motor		3/8 - 16	72 (8.1)
E05 & E12	NM	Front Cover-to- Housing	1/4-20	60 (6.8)
			M	
	NM	Housing-to-spool	1/4-20	
			M	
Spool-to-motor adaptor or motor		3/8 - 16	72 (8.1)	
E25	NM	Front Cover-to- Housing	1/4-20	72 (8.1)
			M	1/4-28
	NM	Housing-to-spool	3/8 - 16	120 (13.6)
			M	1/4-28
	NM	Spool-to-motor adaptor	3/8 - 16	120 (13.6)
			M	1/4-28
	Base mount-to-spool		3/8 - 16	120 (13.6)
Flange bolts (min. to seal)		Varies	120 (13.6)	
E75 & E125	NM	Front Cover-to- Housing	3/8 - 16	120 (13.6)
			M	
	NM	Housing-to-spool	3/8 - 16	
			M	
	NM	Spool-to-motor adaptor	3/8 - 16	
			M	
NM	Base mount-to-spool	3/8 - 16		