

SERIES 4030, 4280, 4360D, 4380, 4382 & 4392 | MECHANICAL SEAL KITS | SERVICE WORK INSTRUCTIONS

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Refer to appropriate service work instructions (swi) file for breakdown instructions for the pump being serviced. Mechanical seal replacement instructions are included in the pump swi. The following instructions are included for convenience.



CAUTION

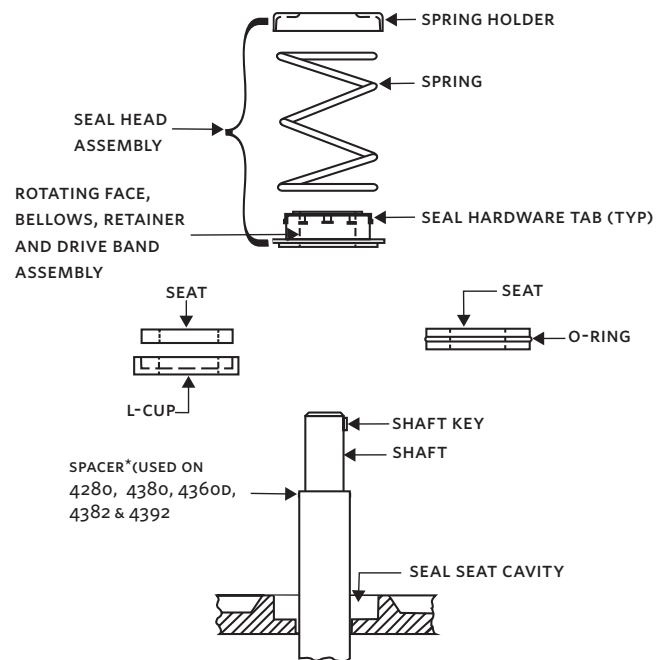
Always disconnect power supply from motor before beginning service work.

SEAL KIT INSTALLATION INSTRUCTIONS

- 1 Remove impeller and mechanical seal from pump or motor shaft. The mechanical seal spring and spring holder usually comes free with the impeller. The mechanical seal rotating element must be pried loose with pry bars or screwdrivers. Once loosened, the seal may be pulled free of the shaft.
- 2 When removing the impeller and seal from a motor shaft, take care to retrieve the spacer from between the impeller and shaft sleeve. Store for later use.
- 3 The o-ring or L-cup mounted mechanical seal seat must be pried loose from the recess in the adapter. To do this: Separate the adapter from the bearing housing or motor. A screwdriver may then be used to push the seal seat out of the adapter from the rear.
- 4 Clean the shaft sleeve surface, ensuring the entire former seal elastomeric residue has been removed. Inspect for damage and replace if necessary. (See separate instructions, File No. 6042.25, for removal of the motor shaft sleeve). Inspect the water slinger and replace if damaged.
- 5 Silicon carbide is a suitable replacement for ceramic, ni-resist, or tungsten carbide and is the seal seat of choice. Ceramic and silicon carbide are more brittle than ni-resist or tungsten carbide and should be handled accordingly.
- 6 Install a new seal seat in the adapter cavity, being sure the lapped (polished) surface of the insert is facing up. Ensure that the cavity has been thoroughly cleaned. Lubricate the outside of the seat elastomer o-ring or L-cup with a small amount of temporary rubber lubricant emulsion and press down, straight and even, into the cavity. Do not press the seat in with bare fingers; use a clean cloth or the cardboard

disc typically supplied with the seal. Contamination of the polished and lapped seat face could cause immediate leakage.

- 7 Replace the adapter, taking care that the seal seat is carefully guided over the shaft.



***IMPORTANT:** Spacer may come off when old seal kit is removed. Be sure it is on when installing new seal kit.



CAUTION

Do not use oil, Vaseline or other petroleum or silicon based products for seal elastomer lubrication. Otherwise elastomer swelling may occur, causing seal failure. Recommended: International Products Corp P-80 Rubber Lubricant Emulsion in USA & UK www.ipcol.com

- 8 Lubricate the inside of the seal rotating assembly (The 'rubber' bellows) with a small amount of temporary rubber lubricant emulsion and slide onto the shaft sleeve with a twisting motion, carbon face first, until pressed to the carbon face. Ensure the seal is securely in place by pushing firmly with 2 screw drivers simultaneously on opposite tabs of the seal hardware. Push the rotating seal retainer and seal hardware tabs simultaneously to ensure the elastomer is not over-stretched.

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9 Remove the spring retainer from the seal spring and place the seal spring over the seal rotating assembly. Re-install the shaft sleeve spacer, if appropriate, and impeller key on the shaft and place the seal spring retainer onto the impeller hub register.

Slide the impeller into place on the shaft, taking care and ensuring the seal spring is kept in place on the seal rotating assembly and fits well into the retainer on the impeller hub. Secure impeller and finish reassembling pump.

SEAL KIT PART NUMBER	S - 1.25"	9975001-817	975000-982	9975001-813
	M - 1.625"	9975001-837	975000-984	9975001-833
	L - 2.125"	9975001-877	975000-985	9975001-873
Fluid type	All glycols > 30% WT CONC abrasives (TDS) >2000PPM		General non & potable water	All other non-potable fluids
Temperature	To 250°F / 121°C		=/< 200°F / 93°C	> 200°F / 93°C
Seal type	2A			
Rotating face	Sintered silicon carbide	Resin bonded carbon	Antimony loaded carbon	
Stationary face	Sintered silicon carbide			
Seat elastomer	EPDM (L-CUP)		EPDM (O-ring)	
Secondary seal	EPDM			
Spring	Stainless steel			
Rotating hardware	Stainless steel			
Material code	SCSC L EPSS 2A	C-SC L EPSS 2A	ACSC O EPSS 2A	

Used on: 4030/4280 4380/4382/4392 VIL & 4360D

Seal Type: 2A

Pump Construction: BF/AB/AI

Stationary face: Sintered silicon carbide

Secondary Seal: EPDM

Spring: Stainless steel

Rotating Hardware: Stainless steel

Notes:

- 1 Seal kit consists of rotating seal head, spring and holder, stationary seal seat with O-ring or L-cup. Pump casing gasket and other minor hardware components possibly required to reassemble the pump are not included. Consult service parts bulletins for more detail.
- 2 O-ring and L-cup style seats are interchangeable between centerline discharge pumps. Both styles are used as standard for inside seals after October 2011.
- 3 O-ring and L-cup style seats are **NOT** interchangeable between centerline and legacy tangential discharge pumps.

TORONTO

+1 416 755 2291

BUFFALO

+1 716 693 8813

BIRMINGHAM

+44 (0) 8444 145 145

MANCHESTER

+44 (0) 8444 145 145

BANGALORE

+91 (0) 80 4906 3555

SHANGHAI

+86 21 3756 6696