

# Installation of Type 1

Shaft Seals  
Bulletin 1200

# WEINMAN®

www.cranepumps.com

## Split Case Pumps - Horizontally Mounted

### Important:

Before attempting to install any parts, READ instructions carefully.

### General Instructions

Remove top half of the casing. After determining size and type of pump from name plate, find setting location of seal collar, either X, Y, Z, from Table 1. If the seal collar needs resetting, rotate it 30° before tightening set screws. Complete rotating element from the pump and remove pump half coupling, bearings, bearing housings and caps, sleeve lock nuts, seal caps and old seal parts. Leave shaft sleeve and seal collar on shaft. NOTE: Sleeve and sleeve lock nuts appear only on Fig. 2 construction.

### Installing Floating Seat

Make sure synthetic seat ring is tight against the shoulder of the floating seat, with rounded edge at rear, to facilitate insertion. The ring is correctly assembled when shipped.

Remove old stationary seat and clean seal cap. Oil outer surface of the seal ring with light oil, push the assembly into the cavity of the seal cap, seating it firmly and squarely. If it is impossible to insert the floating seat with the fingers, use tubing of a size that will make contact on the outer edge of the floating seat (see Fig. 4). If the floating seat has a solid seating surface, instead of the shouldered one shown in Fig. 4, the cardboard shipping disc should be used to prevent marring sealing surface. Do NOT assemble this shipping disc with seal in pump. It is used to prevent marring sealing faces during shipment.

### Installing Washer and Bellows Assembly

Be sure the sleeve (or shaft) is clean and polished smooth before installing new parts. Oil sleeve (or shaft) and the thimble with light oil, to allow the washer and bellows assembly to be easily pushed into position.

Pump	Shaft Group	Fig. 1 Sleeveless Shaft "X"	Fig. 2 With Shaft Sleeve "Y"	Fig. 3 Balanced Seal "Z"
2L4, 2L5, 2L6 3L6, 4L2, 4L3, 5L3	15/16	1 1/16	1 1/8	1 7/16
3L4, 3L5, 4L1 5L2, 6L3	1 1/8	1 1/8	1 1/2	1 7/8
4L4, 5L1 6L2, 8L3	1 3/8	1 1/2	1 1/2	2
6L1, 8L2 10L3	1 9/16	1 1/2	2 1/16	2 5/16
10L2	1 3/4	1 1/2	2 1/16	2 5/16
8L1, 12L2	2 1/8	1 15/16	2 3/8	2 9/16

Dimensions are in inches.

Table 1

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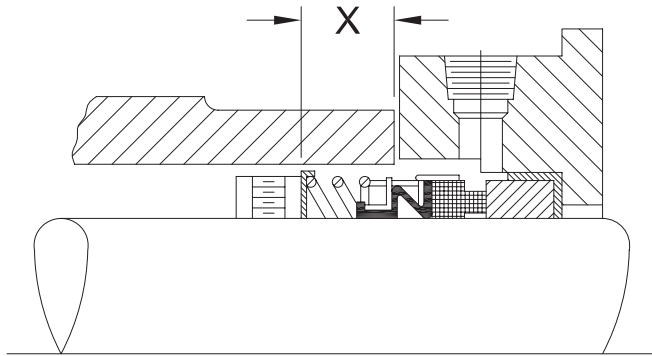


Fig. 1

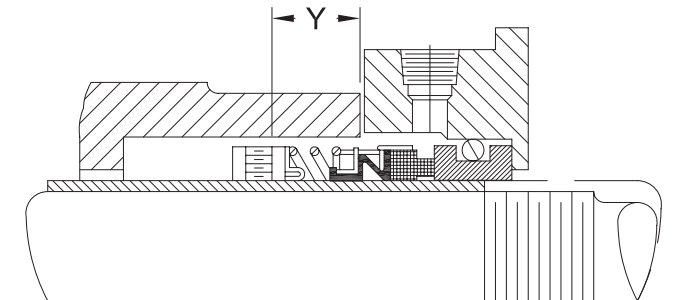


Fig. 2

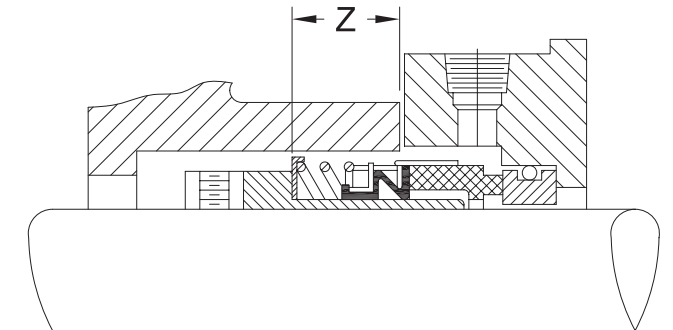


Fig. 3

Be sure the sealing washer is in the proper position. The notches on the outside edge of the sealing washer should mate with the lugs in the retainer. This washer has been properly installed, and cemented, at the factory. Under NO circumstances should this washer be removed and turned over. The smaller diameter is the sealing face.

Slip spring (and spring holder, when required) over shaft and up against seal collar, then slide the bellows assembly over the shaft or shaft sleeve, compressing spring against seal collar, and seating spring against bellows assembly.

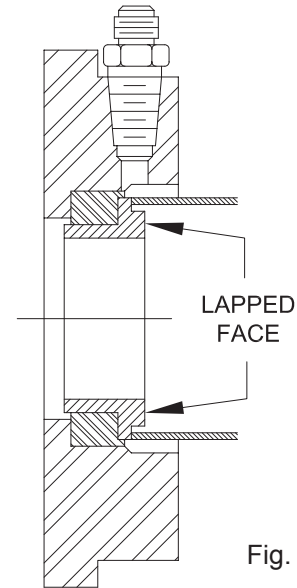


Fig. 4

If it is not possible to slide this assembly into place with the fingers, use tubing slightly larger in diameter than the face of the sealing washer. Care should be taken NOT to press on the lapped face of the washer.

Gently release pressure. Bellows assembly should NOT move. If the bellows assembly slips on the sleeve, too much oil has been used. Carefully remove the assembly, and wipe off the excess oil with a clean cloth, then repeat the above procedure.

#### Reassembling Pump

Seal caps and gaskets must be put on the shaft before the assembly of the sleeve lock nuts (when used).

Reassemble rotating element and replace in the pump. Replace the top half casing and bolt securely before installing the seal cap. Slide seal cap on the shaft and press it in as far as it will go. Do not allow it to spring out. Tighten bolts uniformly to keep the face of the seal at right angles to the shaft. Tightening of the seal cap automatically sets the seal in the proper position.

**DO NOT ATTEMPT TO REINSTALL ANY USED PARTS OF THE SEAL, EXCEPT THE SPRING AND COLLAR.**

This shaft seal is a precision product. Treat it with care. In handling, do not let the carbon sealing washer or ceramic floating seat drop or fall. Take particular care not to scratch the lapped faces on the sealing washer and floating seat.