



# DARLEY

## CRANE SEAL WITH O-RING INSTALLATION CARE AND HANDLING INSTRUCTIONS

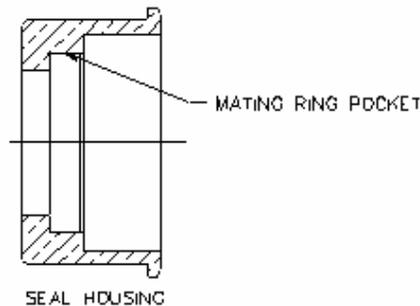
### SPECIAL HANDLING

Study the engineering layout before installing the seal. This shaft seal is a precision product and should be handled and treated with care. Take special care to prevent scratches on the lapped faces of the primary and mating ring. Provide a very clean work area where the assembly will take place and clean hands prior to assembly.

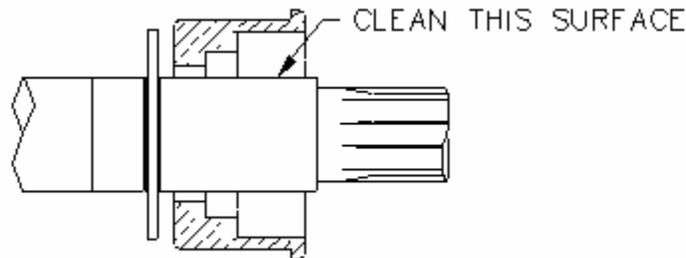
### INSTRUCTION STEPS:

#### Instructions for Installing a Mechanical Shaft Seal (Ref. John Crane Seals)

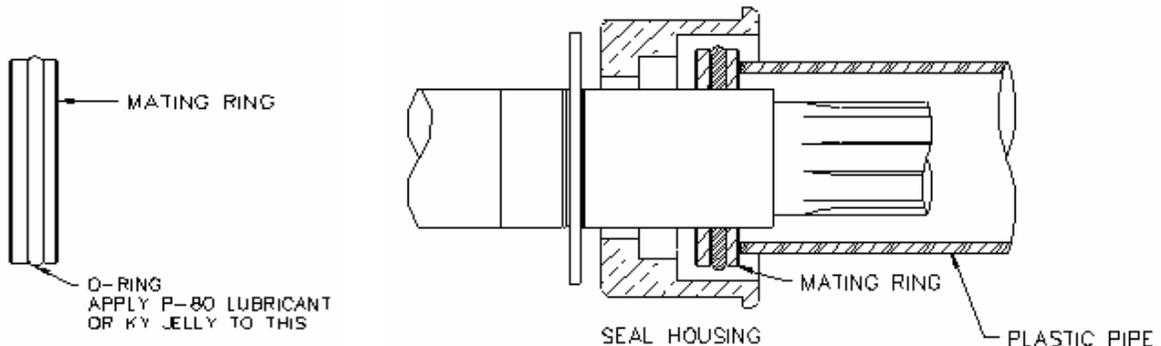
1. Inspect mating ring pocket in seal housing ensuring it is clean to provide a proper sealing surface. Isopropyl alcohol may be used to clean surface if required.



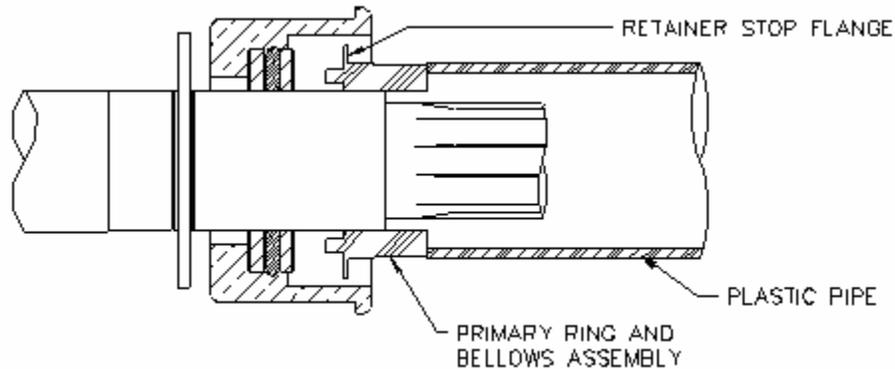
2. Inspect pump shaft surface under bellows ensuring it is clean to provide a proper sealing surface. Isopropyl alcohol may be used to clean surface if required.



3. Apply P-80 Rubber Lubricant, KY jelly or equivalent water-soluble lubricant (not soapy water) to the o-ring on the mating ring and push it into the cavity, seating it firmly and square. If it is not possible to insert stationary mating ring with your fingers, use a suitable plastic pipe free of contaminants. Press mating ring firmly and square into mating ring pocket.



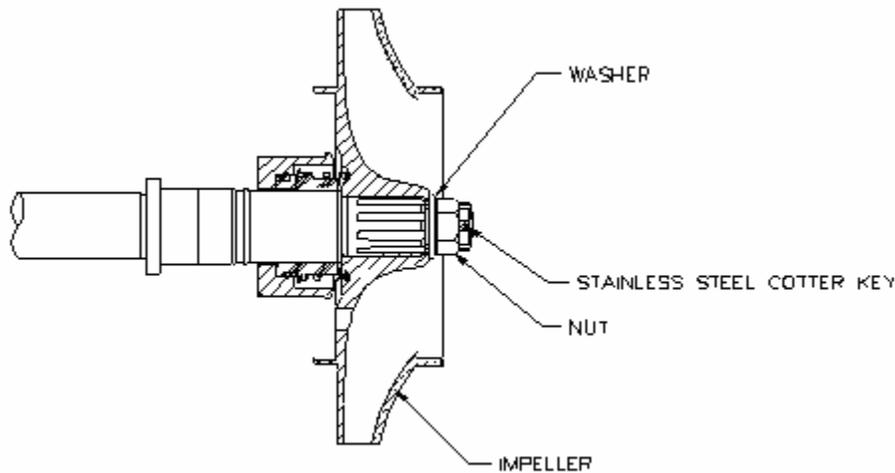
4. Clean mating ring surface with isopropyl alcohol to remove any fingerprints left on mating ring.
5. Apply P-80 Rubber Lubricant, KY jelly, or equivalent water-soluble lubricant (not soapy water) to the bellows assembly allowing it to be pushed easily into position.
6. Place the primary ring and bellows assembly on the shaft (but not the spring yet) and slide the assembly into position so that seal surfaces are in contact. If it is not possible to slide bellows assembly into place with your fingers, use plastic pipe from Step 3.



7. Put the spring in place, seated tight against retainer stop flange on primary ring.

**Note:** Spring holder is not present on all sizes of seals, if not shown on your individual pump's cross section discard spring holder.

8. Slide impeller onto impeller shaft, engage the spring into the groove of the impeller hub and install impeller washer, impeller nut, and stainless steel cotter key.



*\*\* Reference pump configuration for individual mechanical seal instructions.*

*\*\* Reference pump assembly drawings and pump assembly tips for further assembly.*

**Note:** If the seal leaks slightly after assembly, it may be necessary to run the pump for approximately 30 minutes at 50-60 psi to rinse out the lubricant and other contaminants.

IF FURTHER INFORMATION IS NEEDED, CALL **DARLEY** AT  
CHIPPEWA FALLS, WI. AT 800-634-7812 or 715-726-2650