

SEAL INSTALLATIONS AND REMOVAL

MECHANICAL SEAL INSTALLATION



e-SV Bellows design is standard seal for 1-22SV*

*Available options for 33-125SV



e-SV Pusher design Standard Seal (33-125SV)*

- 1) Lubricate the shaft or sleeve lightly. Use a water-based lubricant (Pac-Ease recommended). If Pac-Ease is not available use a solution of liquid dish soap in water as lubricant. **Note:** Never use grease or oil as an installation lubricant. Oil used to lubricate the elastomer bellows/cup gasket will significantly reduce the friction drive or anti-rotation capability of the component.
- 2) Lubricate the outer diameter (OD) of the stationary elastomer cup gasket or O-ring with Pac-Ease.
- 3) Press the stationary seal seat firmly into counter bore ensuring it is bottomed out and squared to the shaft. This can be hand-pressed or machine-pressed into place taking care to protect the sealing face from direct contact with any metal object. Use a piece of plastic between the face and the press or a plastic installation tool when using a press to install the seat. Additional care must be taken during the stationary seat assembly to assure the O-ring or cup gasket is not cut.
- 4) Lubricate inner diameter (ID) of the rotating seal head elastomer bellows with Pac-Ease. **Note:** Any oil, Grease, assembly lubricant fingerprints, or other residue from the installation process can cause the seal to leak.

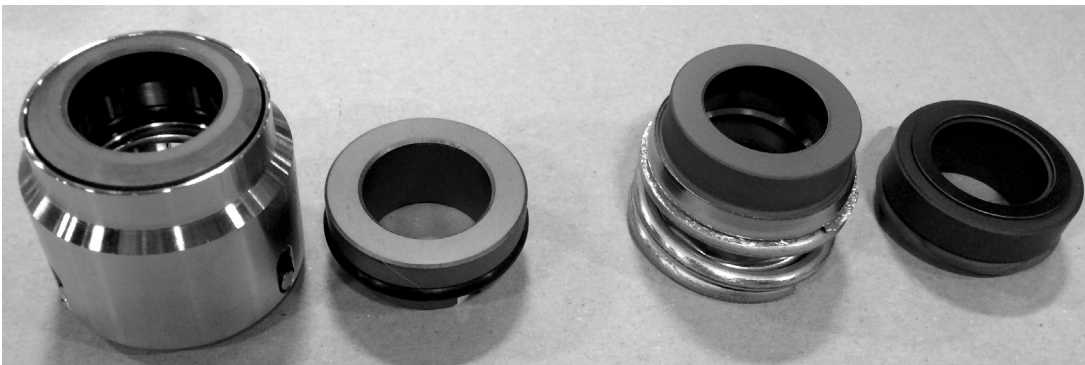
5) Clean both rotating and stationary seal faces with a lint free rag and isopropyl alcohol.

Note: Any oil, grease, assembly lubricant, fingerprints, or other residue from the installation process can cause the seal to leak.

6) Slide the rotating seal assembly by hand along the shaft to a completely parallel contact with the stationary seat. Apply pressure to the back of the metal shell and elastomer bellows. Applying pressure to both the back of the metal shell and elastomer bellows is important to minimize stretching of bellows on the shaft relative to rotating seal head. Avoid extreme installation pressure or hammering of the seal.

6.1) For back-first installations apply pressure to the outer diameter of the seal. Whenever possible even pressure should be applied to the outer diameter of the seal face, bellows, and outer shell to provide proper installation. Care should be taken not to apply pressure directly to the sealing surface of the seal face to avoid any possible damage. Press the assembly until the back side of the elastomer bellows is flush and parallel to the equipment. Clean both rotating and stationary seal faces with a lint free rag and isopropyl alcohol.

Note: Any oil or grease on the seal faces may cause the seal to leak.



Left to Right: Pusher style seal (33-125 eSV versions only), ARB style seal (1-22 eSV versions and available for 33-125 eSV).

ARB SEAL: STEP BY STEP INSTRUCTIONS FOR REMOVAL

Step 1

Cover area below the seal



Step 2

Apply penetrant lubricant (like WD-40) between the shaft and the inner part of the rotary face of the seal and wait to soak for 2 minutes before attempting to remove seal



Step 3

Use two slot head screwdrivers as removal tools. Position screwdrivers' heads below the rotary face and push against adapter to remove seal



Step 4

Clean shaft and follow procedure to install new seal



ARB SEAL: STEP BY STEP INSTRUCTIONS FOR INSTALLATION

Step 1

Lubricate the shaft or sleeve lightly. Use a water-based lubricant (Pac-Ease recommended). If Pac-Ease is not available use a solution of liquid dish soap in water as lubricant.



Step 2

Lubricate the outer diameter (OD) of the stationary elastomer cup gasket or O-ring with Pac-Ease.

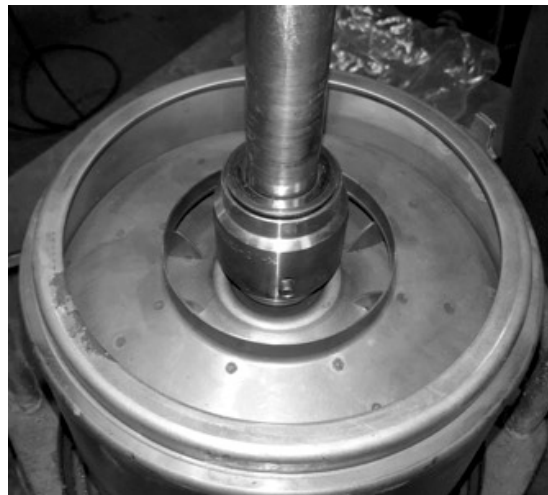


Step 3

Press the stationary seal seat firmly into counter bore ensuring it is bottomed out and squared to the shaft. This can be hand-pressed or machine-pressed into place taking care to protect the sealing face from direct contact with any metal object. Use a piece of plastic between the face and the press or a plastic installation tool when using a press to install the seat. Additional care must be taken during the stationary seat assembly to assure the O-ring or cup gasket is not cut.

Pusher design seal (33-125 eSV only)

Image of pusher style seal on shaft:



For more information go to:

www.goulds.com > eSV Series > Videos

<http://goulds.com/centrifugal-pumps-boosters/multi-stage-pumps/esv-series/#product-tab-video>

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