**SEAL INSTALLATION - CYLINDER APPLICATION**

- Clean the equipment thoroughly; remove sharp edges and burrs before installing sealing components.
- Protective fixtures, materials or devices should be used whenever the seal has to pass over threads, sharp edges, grooves or similar surface profiles.
- Installation tools should be soft metal, wood or plastic also free of sharp edges. The use of screwdrivers and other similar tools should be avoided.
- Lubricants are acceptable and in most cases desirable to ease installation. The hydraulic medium used in the system can often be used to lubricate the seal.

**ROD SEAL**

1. Rod / Gland Seal Orientation

2. Locate the seal into the groove.

3. Push seal down and towards center of the gland. Release force and allow seal to snap into groove.

**PISTON SEAL**

1. Bi-directional Piston Seal Orientation

2. Hold piston securely, locate seal into groove and use finger pressure to begin stretching over piston head.

3. Use a non-metallic tool to assist stretching the seal fully over the piston.
Mount seal over main ram being careful to ensure ID lip does not fold back on itself.

Apply a force perpendicular to the main ram at the point at which the lip flares over the opening to the stuffing box. This reduces the interference of the lip and allows the seal to enter the box.

Slide the seal down the ram and line the lip up with the stuffing box opening.

Using non-metallic tools tap down on the heel, whilst simultaneously tapping in at the tip of the lip. Each application and equipment configuration is different and this step may require 2 or more personnel.