



# ADVANCED SEALING TECHNOLOGY REBUILD INSTRUCTIONS

## AST 70 AND 71 SEALS

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### DISASSEMBLY

1. If centering blocks are installed, remove 3 button head cap screws and centering blocks. Remove 6 set screws. Lift lock ring off end of sleeve.
2. Lift gland off end of sleeve. Remove stationary seal ring and two O-rings from gland.
3. Pull rotary holder with seal ring from sleeve. Remove rotary seal ring, two O-rings and springs from holder. Remove O-ring from sleeve bore.
4. Discard all O-rings, seal rings, screws and springs.
5. Clean gland, sleeve, rotary holder and lock ring. Examine parts for wear, damage, or corrosion, checking O-ring contact surfaces and drive pins and notches. Replace any worn or damaged parts. If parts are bead blasted, polish O-ring contact surfaces and clean parts of all grit.
6. Lubricate O-ring (10) and slide it onto stationary seal ring. Align slots in seal ring with pins in gland and press seal ring straight into gland using finger pressure.
7. There are three sets of three tapped holes in the lock ring. Loosely attach centering blocks (Item 15) with button head cap screws (Item 16) in center hole of each set of holes.
8. Install a half-dog point set screw (Item 14) in the left hand hole of each set of holes and a cup point set screw (Item 11) in right hand hole of each set. Make sure that none of the six set screws extends into bore of lock ring.
9. Clean faces of both seal rings with denatured alcohol and a clean lint-free wiper.
10. Slide gland (with seal ring installed) over end of sleeve, being careful not to hit seal ring on end of sleeve. Push down on gland to move back of rotary holder even with end of sleeve as shown in seal cross section view. This insures that the drive pins are engaged in the sleeve slots.

### ASSEMBLY

1. Use the seal cross section drawing included in rebuild kit to select the correct O-ring for each location.
2. Install the smallest O-ring (Item 1) in groove in sleeve bore.
3. O-ring (Item 6) is slightly larger than O-ring (2). Lubricate each O-ring with supplied silicone lubricant or with other lubricant compatible with the O-rings and your machinery and product. Do not use petroleum lubricants on EP O-rings. Install these two O-rings in the holder.
4. Insert rotary seal ring into the rotary holder, aligning pins in holder with slots in seal ring. Insert springs in inboard rotary holder spring holes.
5. Hold sleeve with the screw holes down, and slide rotary holder with seal ring onto sleeve. Align drive pins in rotary holder with slots in sleeve and compress rotary assembly until flush with end of sleeve. Invert assembly and set on table with holes in sleeve up.
11. Slide lock ring onto end of sleeve. Rotate lock ring to align dog point set screws with small holes in sleeve. Press lock ring to contact end of sleeve. Screw in dog point set screws to engage holes in sleeve, but don't tighten them. Overtightening the screws will deform the sleeve. The ends of the screws should not extend into the sleeve bore.
12. Uniformly tighten the three button head cap screws on the centering blocks.
13. Install the largest O-ring (or gasket) (7) into groove in gland face. The seal rebuild is complete.

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