

1500 E

SINGLE CARTRIDGE SEAL

(ALSO FOR 1500EV & 1500EVF)

INSTALLATION INSTRUCTIONS

PREPARE PUMP

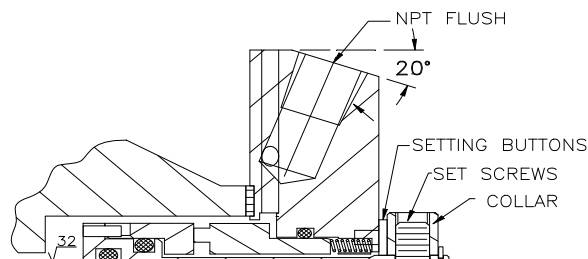
1. Clean and inspect pump parts.
2. Replace shaft or shaft sleeve if worn in secondary sealing areas under o-rings.
3. Check for good starting bevel and remove all burrs that would cut secondary seal o-rings or cause misalignment.
4. Check shaft run out (to be within .001" TIR per inch of shaft dia.), shaft end play (not to exceed .005"), stuffing box face alignment (must be square to shaft within .003" TIR and have good sealing surface, 125 RMS min.), and condition of the pump bearings. Replace if necessary.

INSTALLING SEAL

1. Lubricate shaft or sleeve.
2. Slide the cartridge seal on to the equipment shaft or sleeve. Rotate cartridge until barrier fluid ports are facing desired location.
3. Install and bolt back plate to pump frame.
4. Install and tighten impeller.
5. Make all necessary impeller adjustments as required. The impeller can be reset at anytime, as long as the setting buttons are in place and the seal set screws are loosened while the shaft is being moved.
6. Insert seal into stuffing box.
7. Thread gland bolts into back plate and tighten the gland bolts evenly.
8. Push on the seal collar, not the gland, so that the setting buttons are bottomed out.
9. Tighten the set screws in the collar.
10. There are no setting clips or spacers to remove. The seal has self-centering, pre-set buttons.
11. Turn shaft by hand to make sure there is no metal-to-metal rubbing between rotating and stationary parts. Resistance from the spring-loaded seal faces should be expected.

GLAND BOLT TORQUE

<u>Seal Size</u>	<u>Torque Value</u>
1 to 1-3/8"	15 – 20 ft-lbs.
1-1/2 to 2"	25 – 30 ft-lbs.
2-1/8 to 3-1/4"	30 – 35 ft-lbs.
3-3/8" to 5"	40 – 45 ft-lbs.



12. Make all necessary pump connections and alignments.
13. Clean out flush lines and hook up appropriate tangential flush port depending on shaft rotation. Plug other flush port. (Connect flush in the direction of shaft rotation. If the shaft rotation is clockwise, then connect flush line to the port marked with clockwise arrow).