

PRHM SEAL KIT MAINTENANCE INSTRUCTION

DISASSEMBLY

- 1. Relieve all spring pressure by turning the adjusting screw in the counter clockwise direction. (for PRHM050 remove the adjusting screw assembly)
- 2. Unscrew and remove the assembly screws. (for PRHM050 remove the union nuts)
- 3. Remove the spring housing, adjusting screw, spring guide, springs, and base plate. Note: for PRHM075-200 there is an o-ring between the adjusting screw and spring guide that will need to be replaced.
- 4. Hold the seat & shaft assembly and unscrew the piston bolt which is threaded into the shaft. (for PRHM050 lift up on the rolling diaphragm and unscrew the piston and diaphragm retainer.)
- 5. Pull the shaft and seat assembly through the bottom of the valve body. Since the seat retainer is welded to the shaft, these parts must be replaced in order to change the seat gasket.
- 6. Disassemble and discard u-cups and o-rings. Clean out grooves with a clean, soft cloth, then replace u-cups & o-rings. Use a ball end probe to position the u-cups if needed. Lubricate if allowed.

ROLLING DIAPHRAGM INSTALLATION

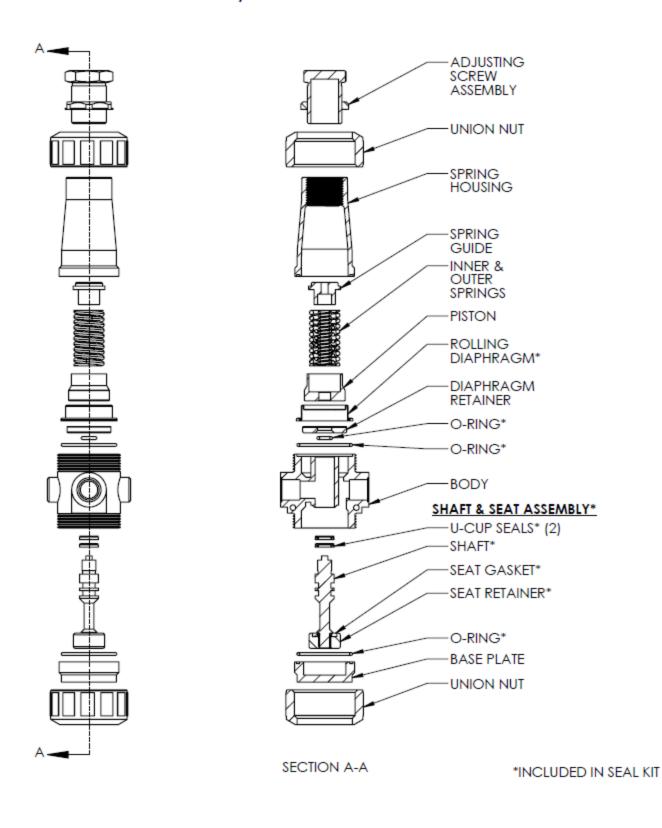
- 1. Turn the diaphragm inside out so the wetted side is visible (the rubberized side out, cloth in.)
- 2. Fit the piston into the diaphragm (small end first).
- 3. Insert the piston bolt and pull the diaphragm over the piston to remove any wrinkles. Make sure the holes are centered.
- 4. Insert the diaphragm retainer, and o-rings where required, into the opposite side of the diaphragm.
- 5. Screw the piston bolt into the shaft.

REASSEMBLY

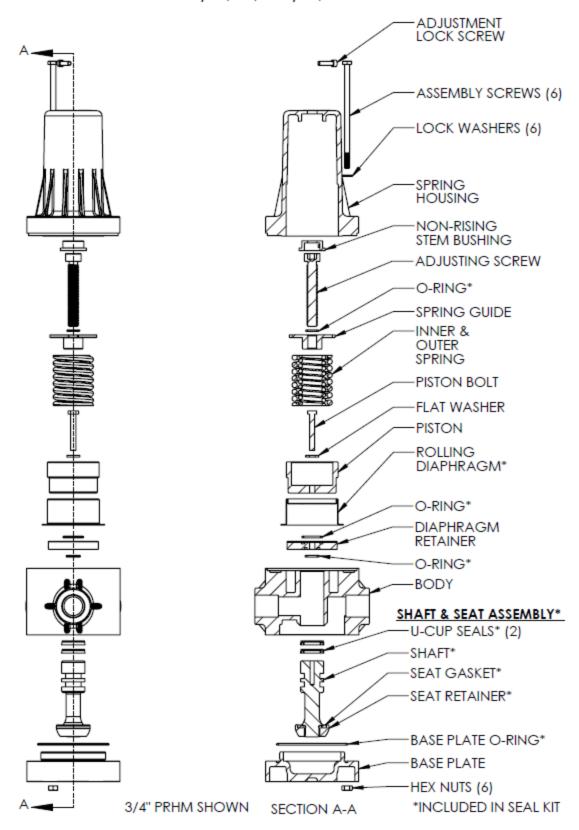
NOTE: Inspect all parts for dirt, scratches or damage. Rubber parts should be smooth and not twisted, wrinkled or creased. Make sure u-cups are installed in the direction shown in the figure, lip seal facing toward seat retainer.

- 1. Push the shaft and seat assembly into the bottom of the valve body. Use a probe to compress u-cups if needed. Use great care to avoid scratching or denting the soft plastic parts.
- 2. Check the motion of the shaft: push down alternately on the piston and seat. If the shaft moves smoothly up and down, continue.
- 3. Pull down on the outer edge of the diaphragm to touch the body. MAKE SURE THAT THE RUBBER SIDE OF THE ROLLING DIAPHRAGM IS DOWN, AND THE CLOTH SIDE IS VISABLE.
- 4. Hold the seat assembly and tighten the piston bolt. Refer to torque table.
- 5. Install the springs onto the piston
- 6. For PRHM075-200 only: Install the adjusting screw and spring guide into the spring housing, ensuring the cut outs on the spring guide line up with the ribs on the inside of the spring housing. With the adjusting spring and spring guide fully seated in the spring housing, tighten the adjustment lock screw to prevent the screw and guide from falling out during assembly.
- 7. Install the spring housing assembly. Be careful that the diaphragm rim is smooth between the spring housing and body.
- 8. For PRHM050 only: Install the adjusting screw assembly
- 9. Install the baseplate and new o-ring.
- 10. Install the assembly screws and nuts. Tighten all screws in opposing pairs. Refer to the torque table. (For PRHM050 install union nuts) .
- 11. Unscrew the adjustment lock screw and set the adjusting screw to approximately the original position. With the adjusting screw set, the lock screw can be tightened to prevent the adjustment screw from turning.

THIS DRAWING IS FOR 1/2" PRHM PRESSURE REGULATOR ONLY



THIS DRAWING IS FOR 3/4", 1", 1-1/2", 2" PRHM PRESSURE REGULATORS



SUGGESTED FASTENER TORQUE (INCH POUNDS)						
PRHM	MATERIAL	PISTON BOLT	TOP ASSEMBLY	BOTTOM ASSEMBLY		
1/2"	ALL MATERIALS	HT + 1/4	HT + 1/4	HT + 1/4		
³4" & 1"	PV, CP, PF	40-45	40-45	N/A		
3/4" & 1"	PP	40-45	40-45	N/A		
1-1/2" & 2"	PV, CP, PF	70-75	40-45	40-45		
1-1/2" & 2"	PP	70-75	25-28	25-28		

 $HT + \frac{1}{4}$ = Hand tight plus $\frac{1}{4}$ turn. For Nm (newton-meters) divide by 9.

TOOL REQUIREMENT						
PRHM	PISTON BOLT	SHAFT & SEAT ASSEMBLY	TOP ASSEMBLY	BOTTOM ASSEMBLY		
1/2"	HAND	SW	HAND	HAND		
34" & 1"	7/16" H	SW	7/16" H	N/A		
1-1/2" & 2"	3/4" H	SW	7/16" H	7/16" H		

H = WRENCH, SOCKET, OR NUT DRIVER (HEX SIZE GIVEN)

SW = SPANNER WRENCH (STRAP WRENCH MAY ALSO BE USED IN MANY CASES)

