Changing The Diaphragms Of The Model 2500

Rule 1. Change only one side at a time.

Step 1. Remove the 2" Flange V Clamps and Gaskets on the suction and discharge Tee only on the side of the diaphragm being changed.

Step 2. Remove the Pump Base V Clamp by unscrewing theTee Handle all the way

Step 3. Remove the Pump Base and Valves Assemby. Lay out all these parts for reassembly.

Step 4. Use a 1/2" drive or a cresent wrench to unscrew the diaphragm retaining nut, lower standard and diaphragm from the piston.

Rule 2. Before installing the new diaphragm, run the pump to center the piston in the fully withdrawn position back into the pump frame.

Step 5. Use a little teflon grease to hold the gaskets in place while you align the Pump Base & Valves Assembly. Hold the Pump Base tight to the diaphragm with your body while you fit and tighten the large pump base V Clamp. Re-install the 2" Flange V Clamps on the suction and discharge Tee before starting to change the other diaphragm.

Changing A Check Valve

Rule 1. **If changing both suction and discharge check valve(s), complete the suction side before beginning the discharge side.**

Step 1. Loosen both pump base v-clamps (do not remove) and rotate the suction, discharge and base assembly until the suction port is clear of the front support legs. Tighten the v-clamps.

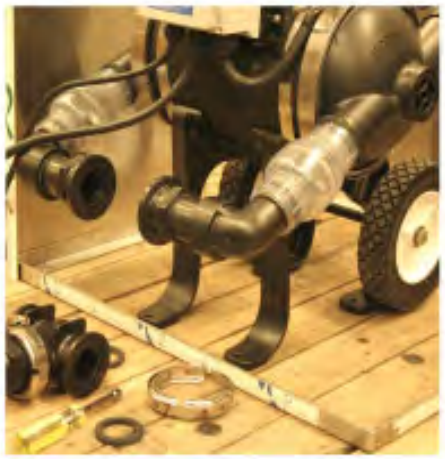
Step 2. Remove the suction flange tee and washers by removing the 2” flange v-clamps. You may have to spread the tee and elbow flanges on one side of the tee and then the other while working the flange tee and washers free.

Step 3. Unscrew the check valve-flange elbow assembly(ies) from the pump base(s). If the sealing washer and 1 1/2” close nipple remains in the pump base, leave it. If it comes off with the check valve, it and the flange elbow must be removed from the check valve being replaced. They will be used with the new check valve.

Changing A Check Valve

Rule 2. **Orient the check valve so the suction flapper opens towards the pump base. When installed on the discharge side, it must be oriented so the flapper opens away from the pump base.**

Step 4. Screw the check valve, sealing washer and 1 1/2" close nipple into the pump base after coating the close nipple threads with a light coating of a non-petroleum based, teflon grease. By hand, tighten the valve to the pump base until the sealing washer is pressed tight between the two surfaces. Using a pipe wrench if necessary, continue to screw in the new valve until the flapper hinge is at the top.



Step 5. Using sealing paste on the threads of the flange elbow, screw it into the check valve. Screw it in until it is aligned with the opposing assembly. Use the flange tee to check the alignment and then go ahead and change the opposing check valve if necessary following the same procedures

Step 6. Install the flange tee and sealing washers, then install and tighten the flange tee v-clamps.
If required follow the same procedures to change the discharge check valves.
When completed loosen the pump base v-clamps and rotate the suction and discharge and base assemblies to their original position and make sure all v-clamps are tight.