

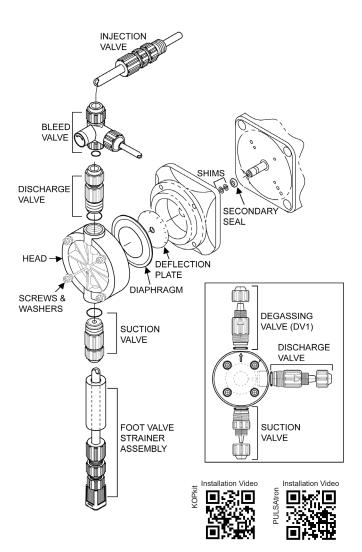
## A Unit of IDEX Corporation

## **PEPkit**

The **Pump Enhancement Parts kit PEPkit** includes all the wet end components to keep your Pulsatron electronic metering pump performing at its optimum at a reduced cost of purchasing these items individually.

PEPkit CONTENTS	QTY
INJECTION VALVE ASSEMBLY	1
BLEED VALVE ASSEMBLY (Not w/ Degas or H8 Models)	1
DEGASSING VALVE ASSEMBLY (Degas Models)	1
DISCHARGE VALVE ASSEMBLY	1
PUMP HEAD	1
PUMP HEAD SCREWS & WASHERS *	4
SUCTION VALVE ASSEMBLY	1
FOOT VALVE / STRAINER ASSEMBLY	1
DIAPHRAGM	1
DEFLECTION PLATE	1
SHIMS	2
SECONDARY SEAL	1
SUCTION TUBING	1 Reg
DISCHARGE TUBING	1 Reg./1 Hi Press
RETURN TUBING (Not on H8 Models)	1 Reg./1 Hi Press

<sup>\*</sup>H8 MODELS HAVE 6 - SCREWS/WASHERS



## PEPkit Instruction

Always adhere to local, state and national codes. Also be sure to use appropriate Personal protective equipment, such as gloves and eye protection to keep you safe in the event of contact with any chemical.

- Flush pump head and valve assemblies out by running water or other suitable neutralizing solution through pump. Wash outside of pump down if chemical dripped on pump.
- 2. Release system pressure
- 3. Set stroke length of pump to 50% and unplug pump.
- Disconnect tubing or piping from the pump. Remove the four pump head screws and then remove the pump head assembly.
- Remove the diaphragm by grasping it at the outer edges and turning it counterclockwise until it unscrews from the electronic power module (EPM). Note: The number of diaphragm shims which are behind the diaphragm. Shim quantity can be from 0 to 2.
- 6. Pull adapter off and remove the secondary seal.
- Install the new secondary seal onto the shaft and add a general purpose lubricant to the shaft.
- 8. Replace the adapter with weep hole pointing down.
- Slide the diaphragm deflection plate onto the back of the diaphragm stud, radius side towards the diaphragm.
- 10. Next slide the number of shims from step #5 onto the diaphragm threaded stud.
- Apply general purpose lubricant to areas of the diaphragm that contact the deflection plate or radius on the adaptor.
- 12. Screw the diaphragm into the EPM unit. Turn diaphragm clockwise until deflection plate and shims are tight against solenoid shaft, and diaphragm stops turning. If there is a gap between the adaptor and diaphragm, repeat the procedure removing one shim each time until the diaphragm just touches the adapter or is slightly recessed.
- 13. Place the pump head onto the adaptor with valve flow arrows pointing up and install washers and screws. Tighten pump head screws in a criss cross pattern until snug and pump head pulls up against adaptor.
- 14. Install Suction and Discharge valves (Confirm O-Rings are attached to the valves) with stamped letters reading from top to bottom, and the arrow pointing in the direction of flow. Hand-tighten only, do not use wrenches or pliers (Degas head comes with pre-assembled valves).
- 15. Slide the valve cap onto the length of clear PVC tubing and then force the tubing onto the suction valve nipple as far as you can push it by hand. Push up the suction valve cap to engage the threads of the suction valve and tighten the cap as firmly as you can by hand.

- 16. Cut the other end of the suction tube to allow the foot valve strainer assembly to hang within an inch of the bottom of the supply tank but do not allow enough length for it touch the bottom of the tank or to lie on its side on the bottom of the tank.
- 17. Attach the foot valve strainer assembly to the tube by sliding the weight, then the cap onto the tube, push the tube onto the nipple, and tighten the cap by hand.
- Place the small PTFE O-ring in the groove on top of the discharge valve and screw the bleed valve assembly down onto the discharge valve hand tight.
- 19. Connect the bleed tubing from the bleed valve to the chemical supply tank. Slide the cap on to the tubing and then press the tubing onto the bleed valve nipple as firmly as possible. Engage the cab and tighten by hand as firmly as possible. Cut the other end of the tubing to the appropriate length to allow it to pass into the chemical supply tank.
- 20. Connect discharge tubing by sliding the cap onto the tubing and press the tubing onto the discharge nipple as firmly as possible then tighten the cap by hand. Secure this tubing as best as possible to a rigid support leading from the pump to the injection point.
- 21. Wrap the thread on the injector with Teflon tape prior to insertion into the system and tighten moderately tight with a small wrench. Cut the discharge tubing to the appropriate length and slide in the cap onto the tube then pressing the tube onto the injector nipple and tighten the cap by hand as firmly as possible.
- 22. If the pump is feeding directly into a sump without a pipe connection the injector must still be used as it provides back pressure for the pump and is a barrier preventing the service fluid from mixing with the chemical in the discharge tubing.
- 23. Reinstall the pump.
- 24. Check for leaks around newly installed fittings.

