## **Instructions for Diaphragm Pump Rebuild**

# Remove oil before starting this procedure!!!

### **Diaphragms**

- 1) Remove oil either through drain plug or by removing the bottom diaphragm. Have oil pan ready in case diaphragm peels open when removing the manifold.
- 2) Remove bolts that hold the other valve chambers (heads) to crankcase.
- 3) Remove bolt in the center of the diaphragm.
- 4) Replace diaphragm.

## **O-Rings**

- 1) Replace two orings underneath valve chamber (one on chemical inlet and one on chemical outlet).
- 2) Replace oring on suction fitting.

#### **Valves**

- 1) Remove bolts in the side of valve chambers that are holding plug in place.
- 2) Remove valves from inside valve chamber (remember which direction they are facing).
- 3) Replace valves and orings in the same direction they were originally in.
- 4) Replace plug and bolts.
- 5) Replace valve chamber and bolts.

#### Oil

- 1) Refill oil level to "full" line on the oil sight glass.
- 2) With the cap still off, turn the shaft of the pump slowly by hand to remove air bubbles from oil. As air escapes, you will need to refill.
- 3) Continuing to turn the shaft by hand, tilt the pump slowly from side to side to remove any remaining air bubbles and refill.

Note that it may be enough to tilt a twin diaphragm pump side to side to remove air bubbles. Pumps with more diaphragms will require complete removal of the pump in order to tilt it 180 degrees and ensure that air is removed from all chambers. Once you are sure that all air bubbles have been removed, replace the oil cap and resume usage of the pump.