

INSTALLATION INSTRUCTIONS

Diaphragm Pump Repair Kit (# 0610406-K)

Tools needed for kit installation: 6mm Allen Head Wrench, Flat Screwdriver, 11mm Wrench or Crescent Wrench, Long Nose Pliers, Hammer, 13mm Socket or Wrench, T-25 Torx Screwdriver, Grease or Petroleum Jelly, 2X4 Piece of wood 18" long

1. Using a 13mm socket wrench, remove handle bolts and loosen the stop plate (A) and remove the two allen head screws (B) that hold the connecting pieces to the pump rod. Figure 1.

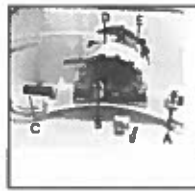


Figure 1.

2. With unit laying on its back with pump assembly facing you, remove the pump rod (C). Loosen hose clamp and remove pressure hose (D). Next, loosen the clamp at the base of the sprayer (E). Figure 2.



Figure 2.

3. Push the pressure cylinder approximately 1" out of the bottom of the tank. Then turn the pump assembly 180 degrees. Note: Wooden block may be used to tap the pump assembly through bottom of tank. Remove pressure regulating valve, if equipped before removal of cylinder. Figure 3.



Figure 3.

4. Next remove the 12 torx screws that hold the flange in place. The flange and diaphragm can then be removed. Figure 3. Note: For clarity the pressure cylinder is shown removed from the tank. Figure 4.

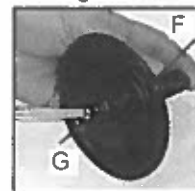


Figure 4.

5. To replace the diaphragm, remove the connecting rod retaining screw (G) from the plunger and lever (F). Replace the diaphragm and reassemble. See Figure 4. Figure 5.

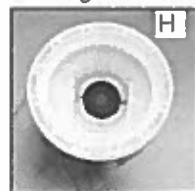


Figure 5.

6. The valve assembly (H) is removed using a locally made tool. Remove red valve plate retaining pin using needle nose pliers, then insert tool into slots. See Figure 5. Use a screwdriver to rotate tool counter clockwise. Figure 6.

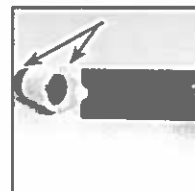


Figure 6.

7. Once the valve assembly is removed, the valve plates and O-rings can be replaced. The bottom valve plate is secured into place with a red retaining pin. Push pin into place using needle nose pliers. Figure 6. Figure 7.



Figure 7.

8. The pump housing (I) is separated from the pressure cylinder (J) by pulling it off. Figure 7. The O-ring can then be replaced.

9. When reassembling the pump housing to the pressure cylinder, be sure the square tab on the pump housing (K) is aligned in the notch. See arrows (L) on the pressure cylinder in Figure 8. Be careful not to pinch or nick the O-ring. Note: Grease O-rings for re-assembly. Screw the valve assembly into the cylinder. Figure 8.



Figure 8.

10. Place diaphragm assembly (O) onto the pump housing (M). Place the flange (N) over the diaphragm. Reinstall the 12 torx screws around the outside diameter of the flange. Figure 9.

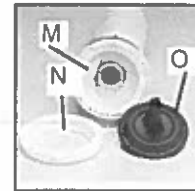


Figure 9.

11. Push pressure cylinder into the tank being careful not to pinch the large O-ring (P). Note: Wooden block may also be used for installation of the pressure cylinder. Figure 10.

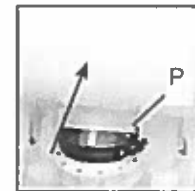


Figure 10.

12. Tighten pump clamp securely (E). Install pump rod (C). Reinstall the connecting pieces and allen head screws (B). Reinstall the stop plate (A) making sure that the bolt goes through the rear hole. Reinstall the hose and hose clamp making sure it is firmly secured (D). Figure 11.

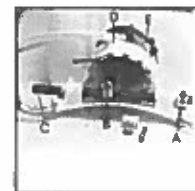
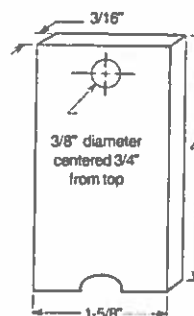


Figure 11.



Note: Always wear rubber gloves, safety goggles and appropriate protective clothing when repairing a sprayer. Work in a well ventilated area. Prior to repair, flush unit with water by filling, then spraying the water into an appropriate container or area. Ensure that all pressure is released by locking the shut-off valve in the open position. Once a repair is completed, fill the unit with clean water, pressurize, and check for leaks. If the sprayer leaks, DO NOT USE. Repair leaks and recheck.