

INSTALLATION INSTRUCTIONS

PISTON PUMP REPAIR KIT (# 0610407-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 the handle bolts, and set aside. Lay unit on its back with pump assembly facing you. See figure 1. Loosen hose clamp (E). Pull off sprayer hose. Caution: There may be liquid inside the hose and pressure cylinder even when the tank is empty. Wear protective gloves. Next, remove the nut and bolt from protective cap, and remove cap (C). Rotate the pump shaft to access the two lever bolts in the center (B). Using a 6mm allen head wrench, remove them. Pull the piston (F) out of the piston cylinder (D).

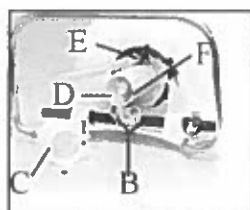


Figure 1.

2. To remove the piston cylinder assembly, turn the cylinder counter clockwise when viewing from the bottom. Figure 2. Caution: The piston cylinder has sharp edges.



Figure 2.

3. Check the inside of the piston and cylinder for scratches. If the piston or cylinder are scratched, replace. Figure 3.



Figure 3.

4. To remove connecting rods from the piston and lever, insert a flat tip screwdriver between the two connecting rods and twist. Figure 4.



Figure 4.

5. With the new piston, place the two connecting rods over the studs on the inside of the piston. Place the lever studs into the connecting rods and snap together with your fingers. Figure 5.



Figure 5.

6. To replace the Viton® collar, push it off the top of the piston with your thumb. Figure 6. Install the new collar on the piston onto the form fitted sides.



Figure 6.

7. Remove the valve plate and O-rings from the outside of the piston cylinder. Install the new valve plate and the two O-rings making sure the O-rings seat in the grooves. Finally, inside the piston cylinder you will find a second valve plate. Using needle nose pliers, pull out the red or orange pin and remove the valve



Figure 7.

plate. Figure 7. Install a new valve plate and firmly reseat the retaining pin using needle nose pliers. Figure 8.



Figure 8.

8. If necessary remove the pressure cylinder by unscrewing the pressure regulator control, if equipped. Remove the large clamp at the bottom of the cylinder. Use a block of wood and hit forcefully with a hammer, driving the assembly through the bottom of the tank. Figure 9.



Figure 9.

9. Next, assemble the piston cylinder. First grease the O-ring on the piston cylinder, being careful not to get any on the valve plate, and then place the piston cylinder into the pressure cylinder. Screw the piston cylinder clockwise until it is tight and the bottom O-ring is no longer seen. Figure 10. When properly seated the notch on the piston cylinder (G) will line up with the indent on the pressure cylinder (H). Figure 11.



Figure 10.

10. Apply a light coat of grease to the inside of the piston cylinder wall and on the Viton® collar, and then re-install the piston into the piston cylinder. Figure 12. To insert the piston, tilt at a slight angle with the leading edge of the Viton® collar placed over the slot. When seated, install the 6mm Allen Head bolts through lever base into shaft. Replace the protective cap and tighten the nut and bolt. Reinstall the handle. Replace the hose and black hose clamp making sure it is firmly secured.

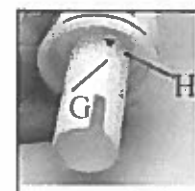


Figure 11.



Figure 12.

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.