

ASSEMBLY INSTRUCTIONS (Cont.)

11. Join the gauge feeder line to the gauge tee (Ref. 1).
12. Connect the electrical wires to the solenoid and regulating valves as shown. A 15 Ft. extension may be used if necessary.
13. Bolts are provided in the electric control assembly, to mount the switch control box to the tractor if it is so desired.

OPERATION

Centrifugal pumps in most cases are high volume, low pressure pumps. The pump works the hardest at the lowest pressures because it is producing maximum gallonage; therefore it has a light load at maximum pressure because it is producing the minimum in gallonage.

The discharge line from a centrifugal pump can be completely shut off while the pump is running without harming the pump. The solution will just recirculate within the pump volute. It should be noted however, that prolonged circulation produces heat to the solution, and high temperatures can cause damage to the pump.

These pumps generally are not self-priming. Therefore one of two things must be accomplished before starting the pump. Either be sure that the liquid in the supply tank is higher than the pump, (so the pump volute will be flooded) or prime the pump before starting. Once the pump has been primed, it will lift the solution in so much as it is capable.

Air in the line will prevent the pump from building pressure. The air must be worked out of the line by the flow before the pump will obtain any pressure.

Never run the pump dry for more than 30 seconds as the bearings need solution for lubrication. The bearings can be damaged by the heat produced when they are not lubricated.

In these pumping systems the pressure is regulated by means of a nylon regulator valve. In this case it is used as a bypass valve. When the valve is wide open the minimum pressure is being exerted. Closing the valve slightly will increase the pressure.

A nylon ball valve is also included with this kit. The valve may be closed when cleaning the strainer. In case the regulating valve does not cover the range of pressure desired, the ball valve may be closed slightly to decrease pressure. This is called throttling. Pressure can be set with this valve and then adjusted with the regulating valve by jogging the toggle switch.

The solenoid valve is the "on-off" control which allows the operator to control (on-off) each of the separate sections of the boom. This is accomplished with the switches in the control console.

A jet agitation kit is optional and is not included with this pump kit. It can be added very easily if it is needed to keep the chemical solutions in suspension.

AFTER SPRAYING

After use fill the sprayer part way with water, start the sprayer and allow clear water to be pumped through the plumbing system and out through the boom.

Refill the tank about half full with plain water and use a chemical neutralizer such as Nutra-Sol or equivalent and repeat cleaning instructions above. Flush the entire sprayer with the neutralizing agent. Follow the chemical manufacturers disposal instructions of all wash and rinsing water.

WINTER STORAGE

Drain all water out of sprayer, paying special attention to pump and valves. These items are especially prone to damage from chemicals and freezing weather.

The sprayer should be winterized before storage by pumping a 50-50 solution of water and antifreeze through the entire plumbing. Proper care and maintenance will prolong the life of the sprayer.