

Form # D50gas

## Operator's Instructions

### Gas engine driven Hypro D50 Diaphragm Pump System

**Read the pump and engine manufacturer's owners manuals prior to using your PBM Sprayer.**

Check the filter prior to loading chemical and/or beginning a spray session. If the filter becomes clogged when the tank is loaded, close the valve between the tank outlet and the filter. This will reduce the amount of chemical loss and spillage. Remove the bottom of the filter housing by turning counterclockwise. Rinse the filter element until clean and reassemble the filter. *The pump will not operate properly if the filter bowl is loose or the o-ring is missing or damaged.* **Always use protective clothing and refer to the chemical manufacturer's recommendations when handling chemicals.**

**Important Note:** When setting up your sprayer always test with clean water only. Always check for flammable debris, fuel spillage on or around the engine and/or exhaust prior to starting.

#### **Starting up your sprayer**

Check engine, gearbox and pump oil levels prior to starting the engine. Using an automotive air pressure gauge check the air pressure in the pulsation dampener. *(The red dome on the top of the pump.)* Set the pressure at 20% of your desired operating pressure. The minimum charge pressure recommended is 10 PSI. Reduce the pressure by turning the "T" handle on the brass pressure relief valve counterclockwise. *This will reduce the load on the engine making the engine easier to start and will extend pump and engine life.* Before you start the engine make sure that any valves for booms, handguns or other accessories are in the closed positions. Refer to the engine manufacturer's owners manual for recommended starting and shut down procedures. Allow the engine to warm up thoroughly before the next step. Turn the "T" handle clockwise to the desired spray pressure. *Keep in mind the gauge pressure will be higher than the pressure at the nozzle. The amount of pressure differential depends on hose lengths and restrictions from fittings. A general rule of thumb is to set the pressure at the gauge between 5 and 10 PSI higher than your target PSI. For best results check the pressure at the nozzle. Your local dealer or the PBM sales staff can help you put a testing device together.*