

E9688 County Road B \* Sauk City, WI \* 53583 (608) 643-0200 ext: 2

# ELECTRIC WATER INJECTION INSTALLATION TIPS

## • PLUMBING:

- Tank: Must be installed above pump (gravity water flow) and ventilated to atmosphere.
- O Suction Line (tank to pump): Minimum 5/8" ID hose and 1/2" NPT fittings.
- O Strainer: Install between tank and pump.
- O High Pressure Line (pump to water manifold): 3/8" ID hose and 3/8" NPT fittings.
- High Pressure Line (water manifold to nozzle)
  - Disc/Spinner nozzle: 1/4" ID hose and 1/4" NPT fittings.
  - Enderle nozzle: 1/8" ID hose and 1/8" NPT fittings.
- o Pressure Gauge: Install in water manifold.
- o Drill a 3/4" hole and massage open for nozzle nut (51/64" drill bit is exact size).
- O Solder, tig weld, or mig weld bung to pipe. Brass body must be installed during welding process to prevent distortion and warpage.

## • WIRING:

- Boost Activated Pressure Switch:
  - Operating Range: 8.5 to 50 PSI.
  - Remotely mount with tubing (recommended) or install in engine intake manifold
  - (C) Common wire: Connect to battery 12V power.
  - (NO) Normal open wire: Connect and wire to electric motor solenoid.
  - (NC) Normal closed wire: Not used
- Electric Motor:
  - Large (open) Solenoid Terminal: Connect and wire directly to battery.
  - Use a minimum of 2 gauge wire
- Pump:
  - Large Port (Inlet): 1/2" NPT
  - Small Port: (Outlet): 3/8" NPT
  - Pressure adjustment screw: 5/32 allen screw under cap nut (1/2" wrench).

## • WATER:

• Use clean distilled water with water soluble lube (e.g., FVP p/n: WIL100). Mixture ration: 4 oz per gallon.

## • TEST & ADJUSTMENT:

- Boost Activated Switch: Preset to 25 psi. Connect to air pressure regulator. Adjust air pressure to desired "system on" pressure. Adjust switch to desired setting by rotating knurled portion of switch.
- O Pressure and Flow: Fill system with water. Assemble water nozzle and connect to plumbing. Install nozzle into measuring container. Electrically activate system, monitor and adjust to desired pressure (refer to instructions above). Operate for 15 seconds, refer to attached chart, install spinner and orifice combination to achieve desired flow volume.

## • OFF SEASON STORAGE:

Drain water. Clean tank, strainer, and water nozzle assy. Cycle engine oil through pump.