PROCEDURE FOR TESTING GASEOUS INTERCOOLINGTM PUMP PRESSURE AND CAPACITY OUTPUT

- 1. "T" in a 0–100 psig gauge (or greater) into Gaseous Intercooling[™] hose at the nozzle holder.
- 2. Remove the nozzle holder from the air discharge tube.
- 3. Aim nozzle into a container to capture water for measuring purposes.
- 4. Connect red/yellow tracer enable wire to battery positive.
- 5. Connect Mityvac™ to 2-Bar MAP Sensor.
- 6. Apply positive pressure (not vacuum) signal and use enough pressure (typically 5 or more pounds) to get the system to go into high speed.
- 7. With a 12.6 volt battery (we are assuming engine is not running) delivery with a 15 gph nozzle should be approximately ¼ gallon per minute or 1 gallon in 4 minutes. Pump pressure at 12.6 volts should be at least 75 psig.
- 8. If delivery is slower but pressure is above 75 psig it is indicative of a clogged nozzle.
- 9. If pressure is below 75 psig check voltage at pump. If lower than 12.4 volts, please correct. If the voltage is 12.4 or greater then check inlet strainer to pump for possible clog.
- 10. Pump can be returned to factory for repair or capacity check.

TROUBLESHOOTING

Failure to Prime – Motor Operates, But No Pump Discharge

- (a) Restricted intake or discharge line. Check for "jammed" check valve and clean clogged lines.
- (b) Air leak in intake line.
- (c) Punctured pump diaphragm
- (d) Defective pump check valve.
- (e) Crack in pump housing.
- (f) Debris in check valves.

Motor Fails to Turn On

- (a) Pump or equipment not plugged in electrically. Loose wiring connection.
- (b) Defective motor.
- (c) Frozen cam/bearing.

Low Flow and Pressure

- (a) Air leak at pump intake.
- (b) Accumulation of debris inside pump and plumbing.
- (c) Worn pump bearing (excessive noise).
- (d) Punctured pump diaphragm.
- (e) Defective motor.
- (f) Insufficient voltage to pump.