Mixing Venturi Inserts Setup

- 1. Remove the carburetor diaphragm but leave in place the throttle body for speed control. Sometimes it may be necessary to remove the entire carburetor to access the diaphragms. Replace the diaphragms with the mixing venturis and the supplied hardware.
- 2. You can leave the lean rich screw on the carburetor in the current position. Set the initial default pressure in the ECV 5 to 1 to 2" of water.
- 3. Once the engine is running, and the warm up timer in the ECV 5 has expired, run with the ECV 5('s) in O2 sensor control mode. With the engine fully loaded, adjust each of the lean rich power screws so that each bank runs between 0-2" of water pressure as measured on the ECV 5.
- 4. Place a portable analyzer in the exhaust stack and allow the ECV 5 to control closed loop on the input from the Oxygen sensor. Observe the control pressure when running at the desired set point to meet emissions requirements. If possible, vary the load to confirm that the pressure control stays near the same pressure at all loads.
- 5. Ensure that both banks run a flat fuel pressure profile (run at roughly the same pressure for running loaded or unloaded) and that both banks are at roughly the same pressure. The starting pressure will be a little more critical than it was with the standard carburetors.
- 6. The mixing venturis are now controlling the majority of the air/fuel ratio at all loads with the ECV 5 making corrections only for changes in BTU or ambient temperature changes.