

## WATER INJECTION FOR TURBO-CHARGED ENGINES.

This water-injection system is built to work with the 45 DCOE Weber carburetor as its delivery-tube-fastening points located in the air cleaner base. It adapts to carburetor-air cleaner arrangement by: mounting the delivery jet and the tank vent tube in the same general location and pointed in the same directions so they are subjected to the same pressures. The tubes may be cut off short, put in the cover of the stock air cleaner and pointed at the carburetor inlet. When resolder the jet, make sure the hole is sealed. The tank-plug assembly supplied with the Crown's stainless-steel tank or the small 1-gallon beer kegs.

When mounting the tank, make it lower than the carburetor to avoid water coming out of the jets. Keep the small check valve away from heat. Route the hose from the tank so the plastic valve is held against the inside side of the tank from the engine and carburetor.

More power is available by mixing up to 10% methanol with the water. When you do this you may desire to increase the size of the jet. The basic jet size is .032-.035 inch. Soft solder may be used to plug hole for re-drilling.

This system will work inside any air cleaner, but test any element for "wet strength" before using, or the water will be spilled. Filter foam can be used to make your own elements and this material is waterproof.

## DETAILS OF DICK GRIFFIN'S WATER INJECTION SCHEME

For road and drag purposes it is much more practical to use a self-regulated water/50% methyl alcohol injection system and use intercooling. It is very reliable and easy to install and maintain. This system has proved to be very effective using 100% fuel or premium gas from any reliable gas station. It enables the use of manifold pressures of 90 in. Hg absolute (30 psi) for periods of 20 or 30 seconds on Dick Griffin's Corvair 150 CID Olds and Camaro. The system has run without fail for a total of 50,000 miles, winning many drag races. Using this system, Corvair turned drag times of 12.33 seconds at 155 MPH in the quarter mile.

It is best to use a 2-gallon tank which can stand 30 psi or more pressures. A "tapper keg" is ideal. Mount the tank low to the level of the carburetor and turbo. The tank must seal air tight after filling. One quart anti-detonate fluid will last for normal driving of 1200 miles or about 20 all-out drag runs using a 0.038-inch jet size in inlet at turbo (see side). It regulates itself automatically by manifold pressure. To save fluid, a pressure switch can operate a solenoid valve in the injection line. Adjust switch to open the valve at about 40 in. Hg (5 psi boost).

Use any clean water with methyl alcohol. Distilled water is not needed. "Alky" can be bought at chemical stores or speed shops. If the tank runs dry you will hear detonation. Lift accelerator foot until detonation stops.

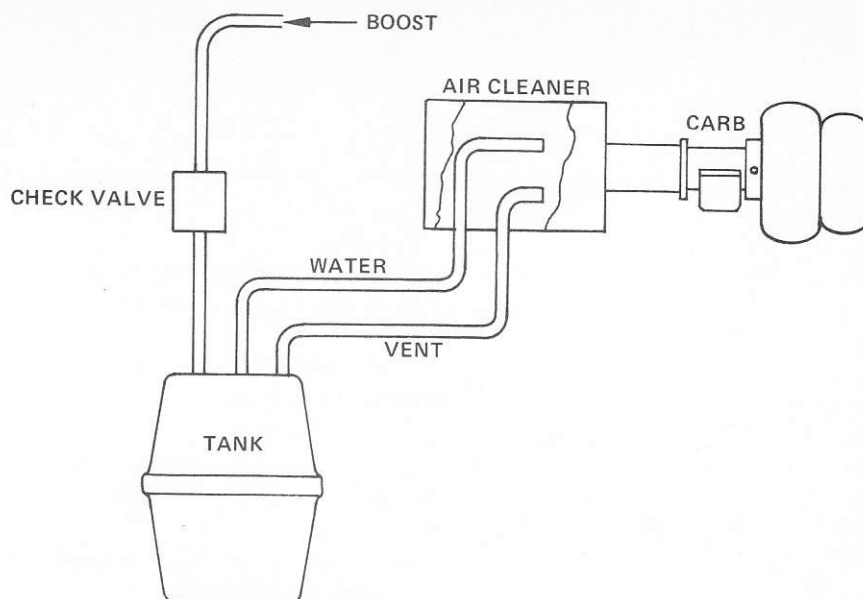


Figure 68 - Crown water-injection system

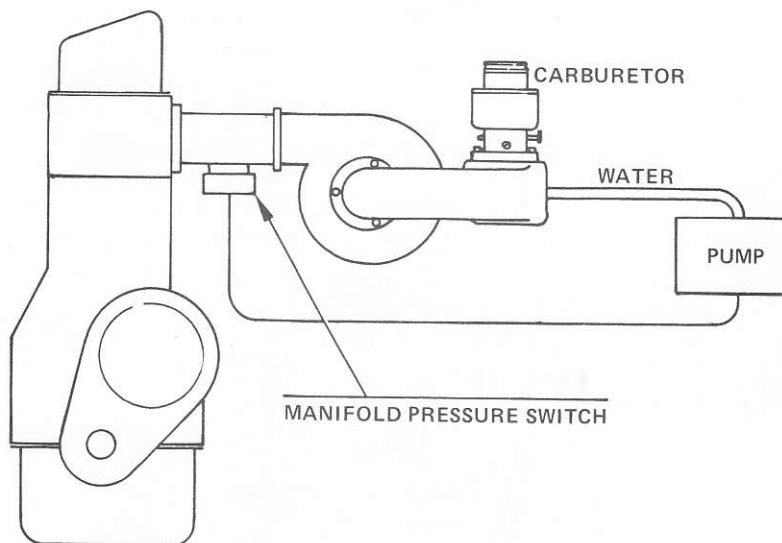
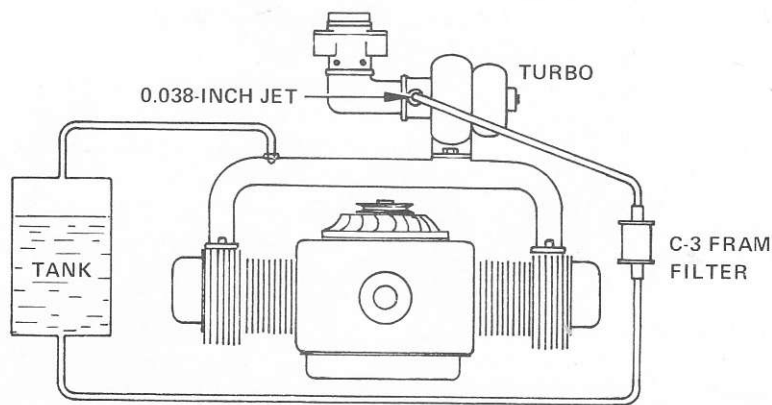


Figure 69 - Ak Miller water-injection system



REAR VIEW - CORVAIR INSTALLATION

Figure 70 - Dick Griffin water-injection system