

## 'Cold Vapor' Fuel System

Fuel flow schematic of the 'cold vapor' system nearly complete on the Onan generator (removed from a 1974 Winnebago) that I bought on eBay and that I'm installing into my 2003 RV.

To keep the HyCO 2A fuel mixture consistent, one fuel pump brings fuel from the RV fuel tank and the other fuel pump pumps the fuel back into the RV fuel tank. The fuel pumps and HyCO 2A liquid level is controlled by a float switch/relay system. Fuel flow to/from HyCO 2A is controlled by restriction valves.

**There is no throttle plate.** The original carburetor has been entirely removed. The AFR is controlled by a 'restriction' valve in the 'direct' air duct. When I restrict the 'direct' air, some of the air takes the 'less direct' route through the HyCO 2A, bubbling through the gasoline and picking up fuel vapors. This 'cold vapor' system has been tested and works well. The engine develops full power and runs smoothly.

The RPM of the engine is to be tightly controlled by a 60 Hz feedback circuit. If the frequency drops to 59 Hz, more air is 'directed' through the HyCO 2A. If the frequency goes to 61 Hz, less air is directed through the HyCO 2A. The automatic control circuit is in the process of being built.

