

The 10 ohm resistor, 1N4004 diode, 6.8 uf capacitor, and 16V zener provide protection and filtering for the circuit. The 2N2907 transistor and associated components filter and buffer the signal from the ignition and send a positive going signal to turn on one shot IC1A. The one shot output goes low and turns on the IRF9540 FET for 50 milliseconds, or if the next ignition pulse comes sooner than that, the one shot is re triggered and the FET stays on. Thus if the engine RPMs are at least above about 350 (for an eight cylinder) the fuel pump will stay on.

The CD 4538 has two one shots so the second one is used to trigger the FET for about 3 seconds each time the ignition is first turned on, to prime the carburetor.

