## D Jetronic worksheet.

Wiring for the Pump relay:

Term 30 = N = Brown = Battery Live.

Term 85 = O = Orange = Earth via the ECU Pump control circuit.

Term 86 = KB = Pink/Blue = 2 wires. One goes to Term 16 of the ECU. One goes to Term 87 of the Main Relay.

Term 87 = NS = Brown/Slate = Fuel Pump, and Cold Start Relay Term 30.

Terminal 86 of the Pump Relay is the SWITCH ON terminal. Meaning the wire FROM the Main Relay "powers up" the pump relay. The KB to ECU Term 16 is a "signal" TO the ECU that the Main Relay has "turned on" the Pump Relay. Since the Main Relay is active as long as the Ignition Switch is in the ON position, the wire FROM the Main to the PUMP is also active, and the 2<sup>nd</sup> KB is a feed signal TO the ECU Pump Circuit, not the other way around.

The Orange wire from the Pump Relay is the Earth of that Relay, and controlled by the Fuel Pump Circuit of the ECU Term 16 of the ECU. Hence the 2 Second timer operation.

When the engine rotates (Cranks) the Trigger Board transmits a signal TO the ECU that there is activity, so best we start up the Injectors, AND Earth that Orange wire so the Pump Relay operates the Pump.

Bear in mind the Main Relay has "turned on" all sorts of items to do with running the engine, ECU, Amp, Coil, etc etc, but I am dealing with the Pump circuit here.

As long as the ECU "sees" a trigger signal from that Trigger Board, the Orange wire stays EARTHED.

Main Relay Wiring:

Term 30 = N = Brown = Battery Live.

Term 85 = Black = Earth.

Term 86 = W = White from the Ignition Switch.

Term 87 = KB = Pink/Blue. 4 wires in total.

One goes TO Term 24 of the ECU

One goes to Term 86 of the Pump Relay

One goes to Term 10 of the EFI Amp, top of radiator.

One goes to EGR system, IF fitted.

There is a Starter Relay ECU Input via a WR wire to Term 18 of the ECU

A few tests need to be done for an INOP fuel pump.

Remove the Orange wire from Term 85 of the Pump Relay. I want to keep the ECU right out of Pump Control for now. Fit a generic wire from that 85 Term to Earth. This SHOULD now have that Relay Live whenever the Ign is ON.

## Ign ON:

Terminal 87 of the Main Relay, located adjacent to the MAP Sensor, should have 12V available.

Terminal 86 of the Pump Relay should read the same.

Terminal 87 of the Pump Relay should also read 12V.

My reasoning:

The Main Relay is Ignition Switch activated, so, as long as the Ign is ON, that relay is live at Term 87.

This "live" at Term 87 of the Main Relay activates the Pump Relay, and since you have Earthed that relay with YOUR wire instead of that Orange wire, that Pump Relay SHOULD also be live as long as the Ign is ON.

This will then have 12V in the wire on Term 87 of the Pump Relay. Pump SHOULD run.

This where the schematics gets lost, and my memory kicks in, and that is 20+ years since I had any playing with one of these cars.

On the Series cars, that Pump 87 wire goes to the Fuel Changeover Switch, then off via the Inertia Switch to the Pump. Any silly jarring of the car (accident etc) and that Inertia Switch trips, the Pump stops dead, no continuous fuel flowing to catch fire. This will still be the case with that Hotwire in place.

The dash Fuel Changeover switches can cause issues, rare, but hell they be OLD now, so work that switch a few times, carefully, and maybe that can re-activate that pump.