VaporWorx

We Give You Gas

WARNING

Working with fuel is dangerous. If fuel is handled improperly it can lead to fires and death. It is imperative above anything else that all appropriate safety measures be used to control the fuel and any ignition sources, including static electricity, heat, sparks, and any other sources. Proper high-pressure fuel lines and connections must be used in accordance to the manufacturer's specifications and routed away from any potential sources of heat, ignition, and protected from mechanical damage. If you are unsure about your work or safety, stop work immediately and consult with a qualified automotive technician and/or safety official. Have a working ABC or BC rated fire extinguisher within reach at all times.

Instructions for Installing the VaporWorx LT engine series hardware and electrical parts.

The VaporWorx LT engine hardware and electrical kit is intended to be used to adapt the Gen5 Camaro ZL1 fuel module power, fuel level sensor (if needed), and fuel pressure sensor requirements into the GM LT series crate engine packages. This kit may be either loose terminals/seals/plug or a pre-terminated plug assembly. In any case, proper crimping techniques must be used to properly install the terminals and/or butt connectors. Heat shrink tubing provided must be used to insulate butt connections to reduce the chances of wire shorts, sparks, and fire.

In Diagram 1 the wiring layout for the fuel module plug can be seen.

1) 10-12ga Red = Pump +. This wire connects to the G8 14ga grey wire for pump power.
2) 10-12ga Black = Pump -. This wire connects to the G8 pump ground wire.
3) 18-20ga = Fuel level sensor ground/low reference.
4) 18-20ga = Fuel level sensor to dash gauge.

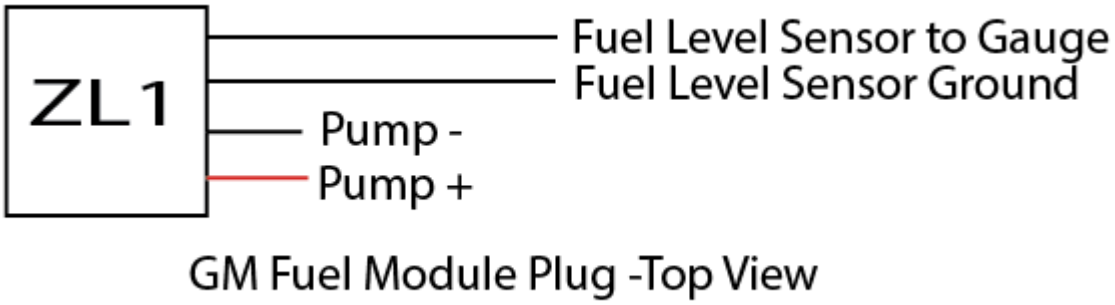

Diagram 1: Top view. The Gen5/6 ZL1 wiring schedule.

Step 1: For loose terminal installations strip the end of the wire approximately 1/8", enough to allow the terminal crimping wings to fully clamp on the exposed wire. Install the appropriate seal and crimp the terminal into place. Solder the terminal if needed avoiding excess solder which may cause brittleness and difficult installation

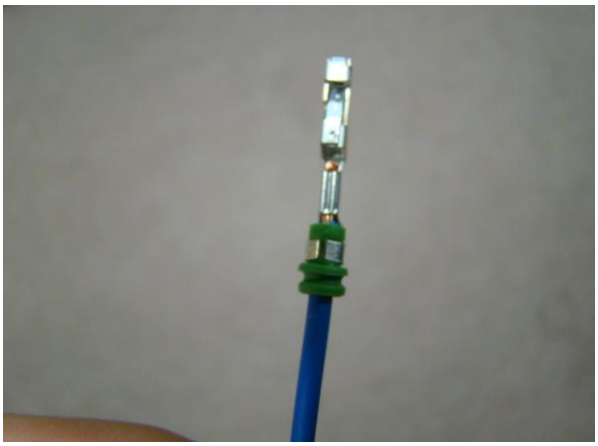

Photo 1. The terminal is fully crimped to the wire through the wings and the seal clamps.

Step 2: Insert the terminals into the plug body as shown in Diagram 1. If the fuel level sensor wiring is not needed, either seal the ends of the wires or install the white cavity plugs. Do not leave the cavities open or else long-term corrosion will cause poor connections and possible terminal overheating. For CTS-V2 fuel modules, the fuel level sensor cavities are used for pump power. To power both pumps, the outboard cavities are for pump +, the middle for pump -. Both positives are tied together as well as both negatives. Hence, the single output for pump + from the FSCM splits into two feeds to the module. The same applies for pump -.

Step 3: After connecting the wiring as noted above and insulating all connections, apply tape, split tubing, vinyl wrap, etc. to the wiring to protect them from rubbing damage.

Fuel Pressure Sensor Adapter Installation.

Step 1: Apply oil to the o-ring seal.

Step 2: Screw the adapter into the GM sensor and tighten securely.

Step 3: Following the GM instructions for sensor placement and orientation, screw the 1/8”-NPT male thread into a similar female thread. Use a small amount of PTFE thread sealer on just the threads. Excess sealer or tape may contaminate the fuel system and lodge in the forward high-pressure pump or injectors.