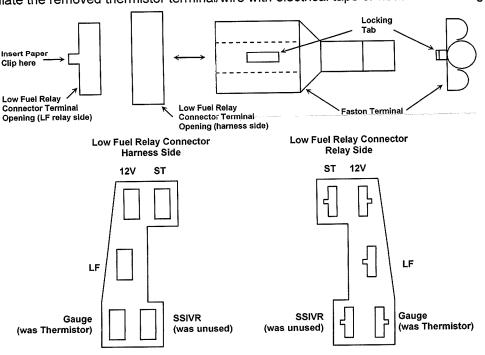
Electronic Low Fuel Indicator (ELFI) and Solid State Instrument Voltage Regulator (SSIVR) installation instructions

1969 and 1970 vehicles:

- 1. Remove dash pad and instrument cluster.
- 2. Behind and to the left of the instrument cluster mounting location, you will see a bracket mounted to the body of the car. The low fuel relay is mounted to this bracket. On 1970 vehicles, the relay may be located behind/in the area of the radio. Unplug the low fuel relay and remove the two mounting screws. The relay will no longer be required. Route the low fuel relay connector and harness so that it protrudes from the instrument cluster-mounting opening.
- 3. Note: If prior to beginning this installation your low fuel lamp illuminated when the ignition was in the start position, you may skip this step. Temporarily reconnect the instrument cluster. Test the low fuel lamp by momentarily jumping the 12V terminal to the LF terminal of the low fuel relay connector (Use supplied paper clip or a piece of wire and see LF relay connector illustrations). Do this test with the ignition in the On (run) position. The low fuel lamp must illuminate under these conditions. If it does not, check the lamp and/or wiring. Disconnect instrument cluster.
- 4. Remove Instrument Voltage Regulator (IVR) from the rear of the instrument cluster. The terminals of the mylar printed circuit are 9V battery style terminals. Carefully pry them from the mating IVR terminals using a small screwdriver. The IVR is held to the cluster by one ½" hex head screw. Once removed, the IVR can be saved or discarded.
- 5. Mount the SSIVR in the IVR's place. A locating hole is not provided in the SSIVR because of other SSIVR applications. Position the SSIVR to sit in the same orientation as the IVR did and such that the mylar printed circuit will dress properly when plugged onto the SSIVR. Tighten the mounting screw.
- 6. Plug the mylar printed circuit terminals onto the SSIVR. Temporarily set the instrument cluster aside.
- 7. Using the supplied paper clip, push the clip wire into the small notch of the low fuel relay connector thermistor terminal opening until it stops (See illustrations below). While holding the paper clip against the stop, pull the thermistor terminal from the connector. Insulate the removed thermistor terminal/wire with electrical tape or heat shrink tubing.



- 8. With the Faston terminal locking tab facing the low fuel relay connector terminal opening small notch, plug the Faston terminal of the Black wire from the supplied harness into the location in the connector the thermistor wire was just removed from. In the ELFI application, this will now be the Gauge terminal.
- 9. With the Faston terminal locking tab facing the low fuel relay connector terminal opening small notch, plug the Faston terminal of the Red wire from the supplied harness into the empty spot in the connector (to the right and next to the Gauge terminal). This is the SSIVR terminal of the ELFI.
- 10. Plug the low fuel relay connector onto the ELFI board. Return the low fuel relay connector and harness to its original location (with ELFI). Mount the ELFI in the low fuel relay mounting location in the same way the low fuel relay was mounted. Route the end of the supplied harness so that it protrudes from the instrument cluster-mounting opening.
- 11. Plug the Red wire tubular disconnect from the supplied harness onto the fuel gauge terminal/mounting stud closest to the center of the cluster.
- 12. Reconnect the instrument cluster to the vehicle wiring harness.
- 13. Turn the ignition switch to the On (run) position. Using the supplied paper clip or piece of wire, test the ELFI low fuel function by momentarily jumping the Black wire tubular disconnect from the supplied harness (currently unconnected) to the fuel gauge terminal closest to the edge of the cluster (and which the Red wire was just connected to). The low fuel lamp in the cluster should illuminate while the wire is connected. Momentarily touch the Black wire tubular disconnect of the supplied harness to the instrument cluster housing. The low fuel lamp should be extinguished while the wire is connected.

WITH IN 1-2 MINUTE

- 14. Plug the Black wire tubular disconnect onto the remaining fuel gauge terminal (closest to the edge of the cluster).
- 15. Reinstall the instrument cluster and dash pad.
- 16. Test the ELFI lamp prove out function by starting the car. The low fuel lamp should illuminate while the ignition is in the Start position. For low fuel function, the low fuel lamp should come on and stay on when the fuel gauge reading reaches the red area on the scale. This also indicates approximately 4.5 gallons of fuel remaining in the tank. The lamp will not extinguish until approximately 1 gallon of fuel has been replaced.

Note: If the ELFI ever needs to be removed/unplugged, first remove the two ELFI mounting screws and then carefully pull the ELFI from the connector by grasping the board edges. **Do not** use a screwdriver or any tool between the ELFI and its mating connector to facilitate removal. There are surface mounted electronic components on the ELFI that are easily damaged. The printed circuit board may be damaged if the connector is unplugged while the ELFI is mounted because of the force required to remove the ELFI from the connector Faston pins.