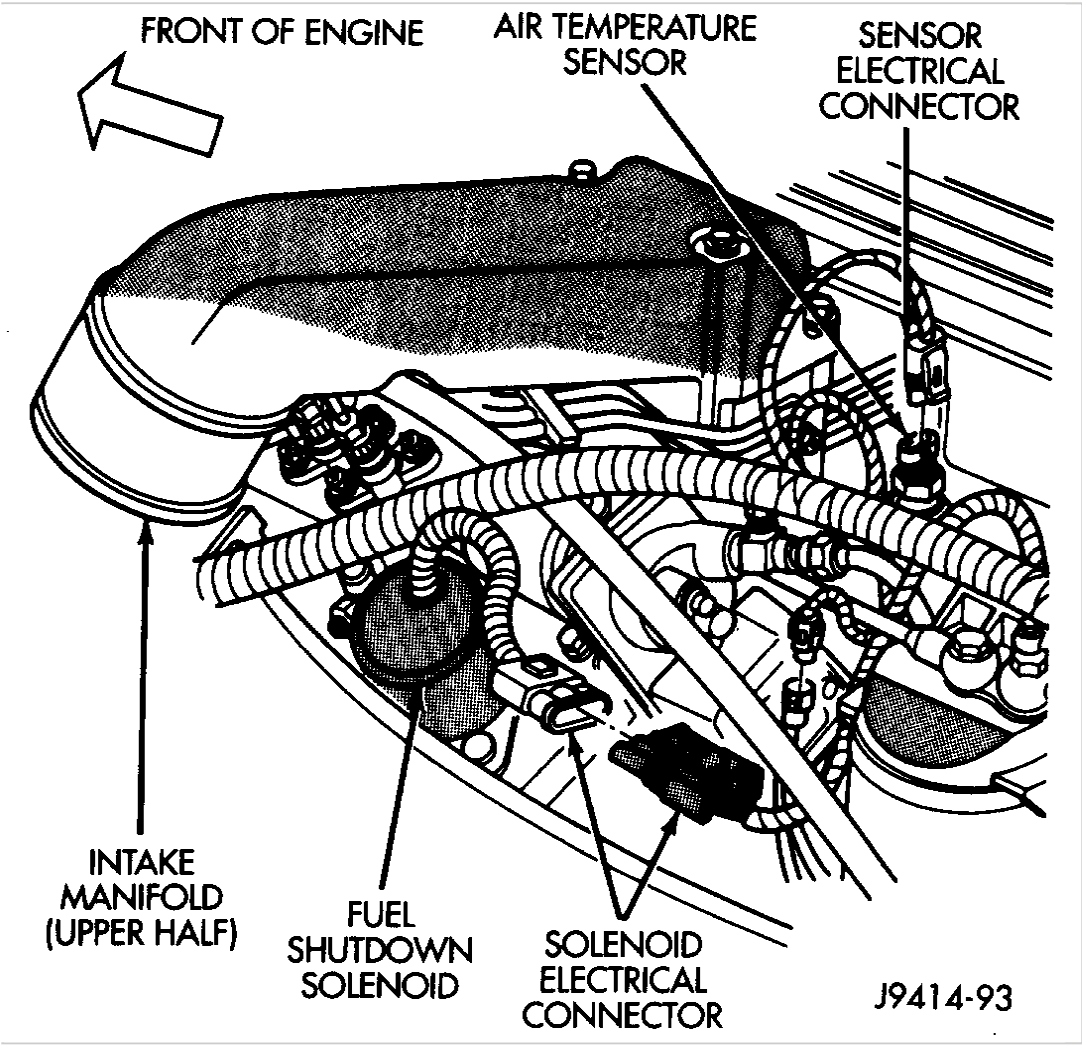
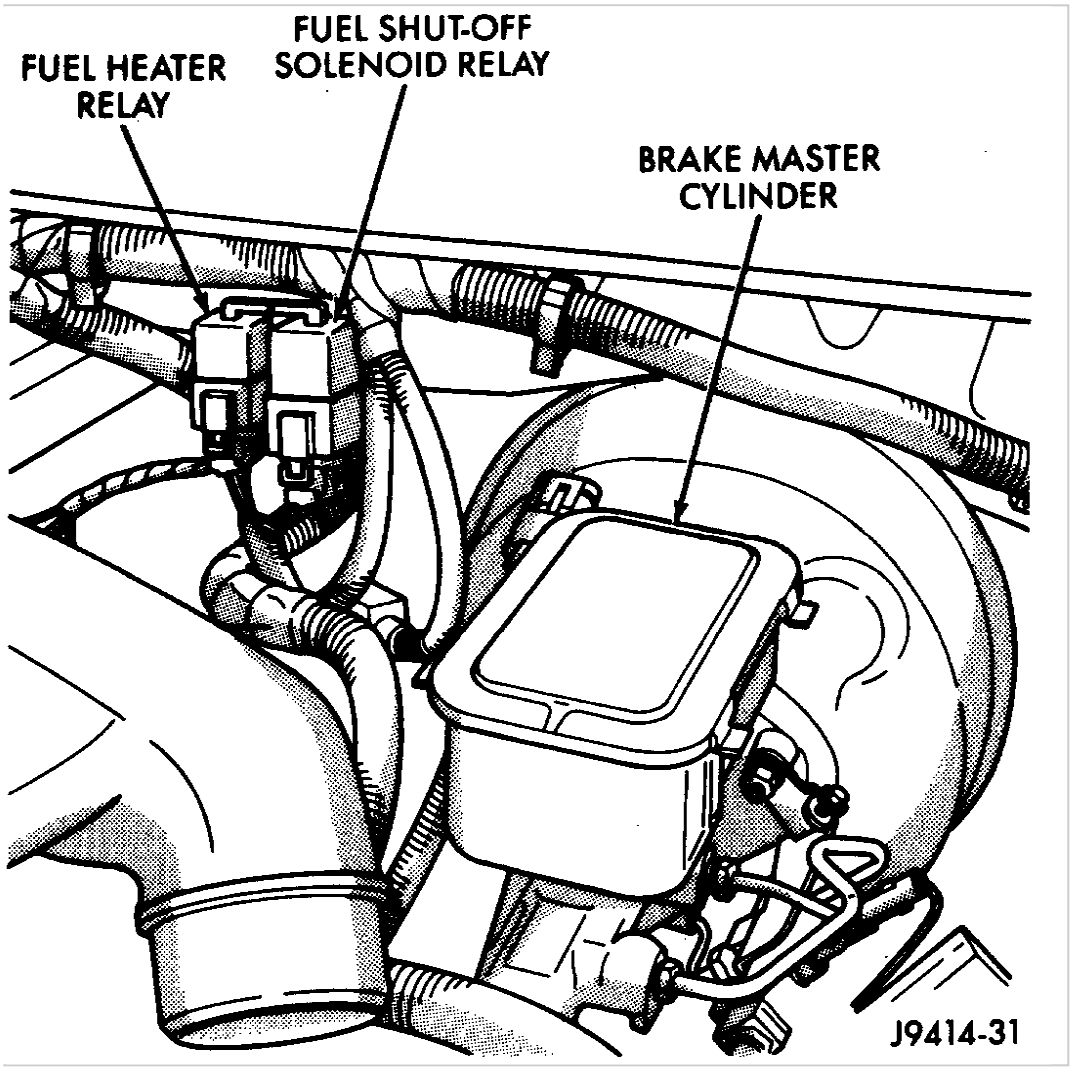
COMPONENT TESTS AND GENERAL DIAGNOSTICS

Electronic Components

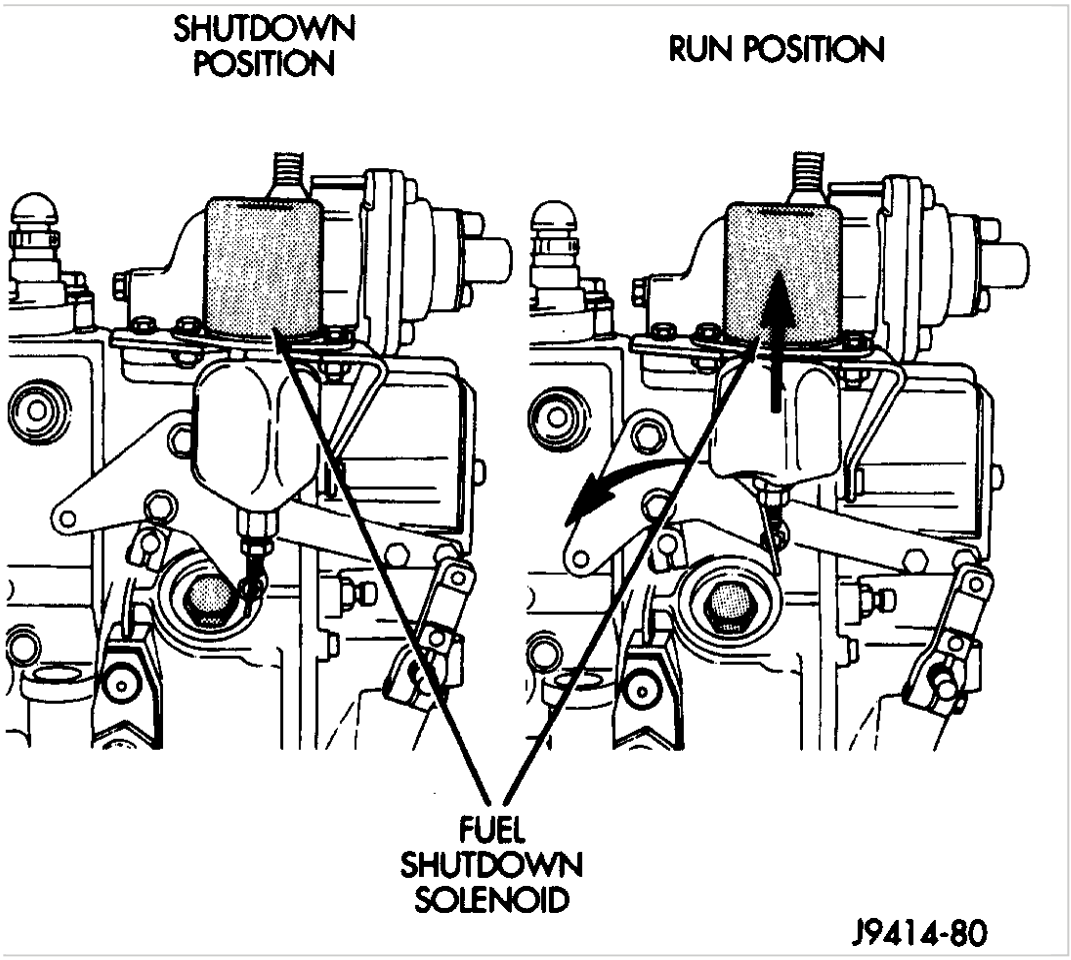


Fuel Heater Relay



The fuel shutdown (shut-off solenoid) and fuel shutdown solenoid relay are not controlled by the Powertrain Control Module **(PCM)**.

Fuel Shutdown Solenoid Positions



1. With the ignition switch OFF, the solenoid shaft should be down and the injection pump lever should be in the shutdown position (no fuel supply to injection pump).
2. Turn the ignition switch to the CRANK (starter engage) position and observe the solenoid shaft and injection pump lever. The shaft should pull up (shaft retracted into the solenoid) and the pump lever should be in the run position (fuel being supplied to injection pump).
3. Release the ignition key from the CRANK to the ON position. The shaft should remain in the up position and the pump lever should remain in the RUN position (fuel being supplied to injection pump). If the solenoid shaft is not moving, refer to the following:
4. Disconnect the solenoid three-wire pigtail wire harness from the main engine harness.
5. If the solenoid shaft did not move up when the ignition switch was in the CRANK position, check for 12 volts at the three-way connector. This will be the circuit coming from the fuel shutdown solenoid relay. If 12 volts is not present at this circuit when the key is in the CRANK position, check the fuel shutdown solenoid relay. Also check the wiring between the relay and the solenoid.
6. If the solenoid shaft moves up when the ignition switch is in the CRANK position, but moves down when the key is released from the CRANK to the ON position, check the circuit coming from the ignition switch for 12 volts.

If the shutdown solenoid is being replaced, its shaft length must be adjusted.