2. PCM AND PROM

Since the PCM can have a failure which may affect only one circuit, following the Diagnostic Procedures in this section will determine which circuit has a problem and where it is.

If a diagnostic chart indicates that the PCM connections or PCM is the cause of a problem, and the PCM is replaced, but does not correct the problem, one of the following may be the reason:

There is a problem with the PCM terminal connections. The diagnostic chart will say "PCM connections or PCM." The terminals may have to be removed from the connector in order to check them properly.

The PCM or PROM is not correct for the application. The incorrect PCM or PROM may cause a malfunction and may or may not set a code.

The problem is intermittent. This means that the problem is not present at the time the system is being checked. In this case, refer to the "Symptoms" Charts and make a careful physical inspection of all components of the system involved.

Shorted solenoid, relay coil, or harness. Solenoids and relays are turned "ON" and "OFF" by the PCM, using internal electronic switches called "Drivers." Each "driver" is part of a group of four (called "Quad drivers"). Failure of one driver may cause other drivers in the set to malfunction. Solenoid and relay coil resistance must measure more than 20 ohms, in most cases. Less resistance may cause early failure of the PCM "driver."

Before replacing an PCM, be sure to check the coil resistance of all solenoids and relays controlled by the PCM. See PCM wiring diagram for the solenoid(s) and relay(s) and the coil terminal identification.

The PROM may be faulty. Although these rarely fail, they operate as part of the PCM. Therefore, it could be the cause of the problem. Substitute a known good PROM.

The replacement PCM may be faulty. After the PCM is replaced, the system should be rechecked for proper operation. If the diagnostic chart again indicates the PCM is the problem, substitute a known good PCM. Although this is an extremely rare condition, it could happen.