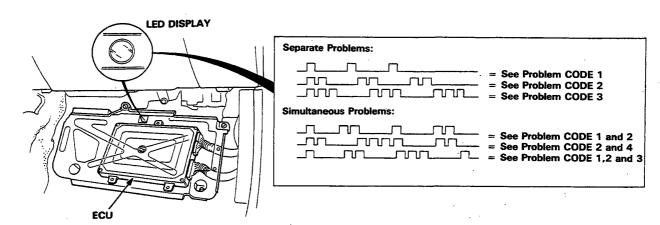
## **Troubleshooting Procedures**

When the PGM-FI warning light has been reported on, turn the ignition on, pull down the passenger's side carpet inspection flap from under the dashboard and observe the LED on the top of the ECU. The LED indicates a system failure code by blinking frequency.

The ECU LED can indicate any number of simultaneous component problems by blinking separate codes, one after another.



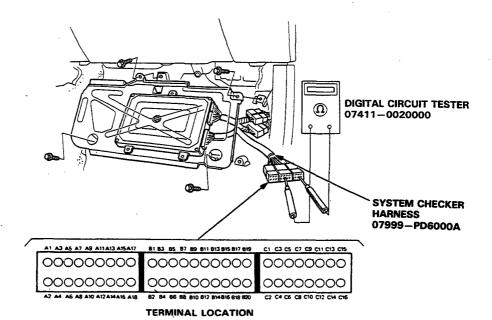
SELF-DIAGNOSIS INDICATOR BLINKS	SYSTEM INDICATED	PAGE
0	ECU	6-139
1	OXYGEN CONTENT A	6-142
2	OXYGEN CONTENT B	6-142
3	MANIFOLD ABSOLUTE PRESSURE	6-144, 148
5		6-146, 150
4	CRANK ANGLE	6-152
6	COOLANT TEMPERATURE	6-156
7	THROTTLE ANGLE	6-158
8	TDC POSITION	6-154
9	No.1 CYLINDER POSITION	6-160
10	INTAKE AIR TEMPERATURE	6-162
11	IMA	6-164
12	EXHAUST GAS RECIRCULATION SYSTEM	6-209
13	ATMOSPHERIC PRESSURE .	6-166
14	ELECTRONIC IDLE CONTROL	6-176
15	IGNITION OUTPUT SIGNAL	6-168
17	VEHICLE SPEED SENSOR	6-170

If CODE 16, or more than 17, count the number of blinks again. If the indicator is in fact blinking these codes, substitute a known-good ECU and recheck. If the indication goes away, replace the original ECU.

The PGM-FI dash warning light and ECU LED may come on, indicating a system problem, when, in fact, there is a poor or intermittent electrical connection. First, check the electrical connections, clean or repair connections if necessary.

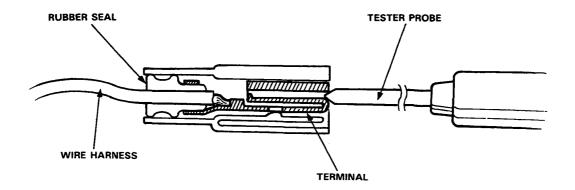


If the inspection for a particular failure code requires the system checker harness, remove the passenger's door sill molding, the small cover on the kick panel, and pull the carpet back to expose the ECU. Unbolt the ECU bracket. Connect the system checker harness. Then check the system according to the procedure described for the appropriate code(s) listed on the following pages.



## **CAUTION:**

- Puncturing the insulation on a wire can cause poor or intermittent electrical connections.
- For testing at connectors other than the system checker harness, bring the tester probe into contact with the terminal
  from the connector side of wire harness connectors in the engine compartment. For female connectors, just touch
  lightly with the tester probe and do not insert the probe.



(cont'd)

## **Troubleshooting Procedures**

A flow chart is designed to be used from start to final repair. It's like a map showing you the shortest distance. But beware; if you go off the "map" anywhere but a "stop" symbol, you can easily get lost.

(bold type)

Describes the conditions or situation to start a troubleshooting flow chart.

ACTION

Asks you to do something; perform a test, set up a condition, etc.

DECISION

Asks you about the result of an action by giving an "answer" and asking did you get the same answer: Yes or No.

STOP (bold type) The end of a series of actions and decisions, describes a final repair action and sometimes directs you to an earlier part of the flow to confirm your repair.

## NOTE:

• The term "Intermittent Failure" is used several times in these charts. It simply means a system may have had a failure, but is checks out OK through all your tests. You may need to road test the car to reproduce the failure or if the problem was a loosen connection, you may have unknowingly solved it while doing the tests.

"Open" and "Short" are common electrical terms. An open is a break in a wire or at a connection. A short is an
accidental connection of a wire to ground. In simple electronics, this usually means something won't work at all.
In complex electronics (like ECUs), this can sometimes mean something works, but not the way it's supposed to.

 If the electrical readings are not as specified when using the system checker harness, check the checker harness connections before proceeding.