

CHART A-1 V6 PCM

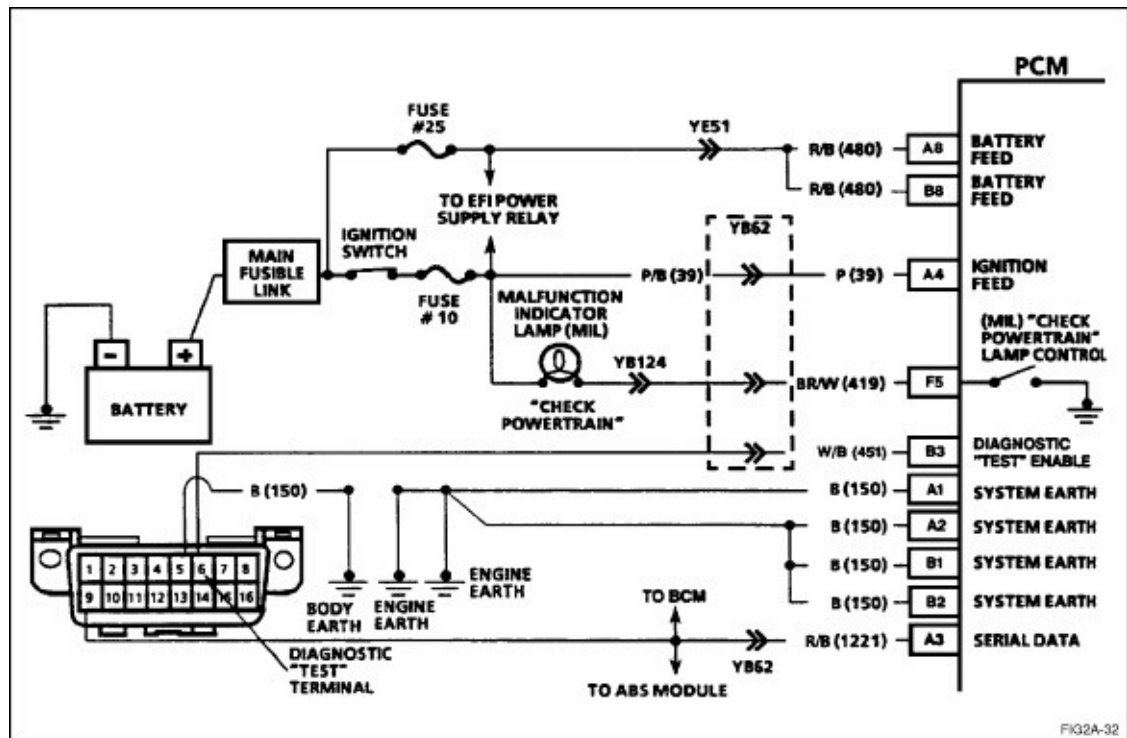


FIG2A-32

NO "CHECK POWERTRAIN" LAMP

Circuit Description:

There should always be a steady (MIL) "Check Powertrain" lamp with the ignition "ON" and engine stopped. Battery voltage is supplied directly to the "Check Powertrain" lamp bulb. The Powertrain Control Module (PCM) will control the lamp. The PCM will turn it "ON" by providing an earth path through circuit 419 in the PCM.

Test Description: Number(s) below refer to step number(s) on the diagnostic chart.

3. Using a test connected to earth, this test will determine whether or not voltage through the vehicle's harness is reaching the PCM. If the test light is "ON," then voltage is reaching the PCM. The PCM is not supplying the earth path. Before replacing the PCM check both the PCM pin and vehicle harness for proper fit. If the new PCM is installed and the same condition exists the harness connector may be damaged.
6. If Fuse F10 or Fuse F25 are "OPEN" or the main fusible link is blown the PCM will not have the ability to turn "ON" the "Check Powertrain" lamp. If fuse is blown, refer to Section 12P, WIRING DIAGRAMS in [Volume 5](#) of this Service Manual Supplement for complete circuit.
9. Using a test light connected to 12 volts, probe each of the system earth circuits to be sure a good earth is present. Refer wiring diagram on this page and [PCM Connector End View](#) in the front of this Section for the PCM terminal locations of earth circuits.

Diagnostic Aids:

If the engine runs OK, check:

Faulty (MIL) "Check Powertrain" lamp bulb.

If the engine cranks but will not run, check:

Main fusible link open.

Fuse F 10 open.

Battery circuit 480 to PCM open.

Ignition circuit 39 to PCM open.

Poor connection to PCM.

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STEP	VALUE	YES	NO
1. Was the "On-Board Diagnostic" (OBD) System Check performed?		Go to Step 2.	Go to OBD System Check in this Section
2. Does the engine start?		Go to Step 3	Go to Step 6
3. 1. Ignition "OFF". 2. Disconnect PCM connectors. 3. Ignition "ON". 4. Probe circuit 419 with test light connected to earth. 5. Is the (Malfunction Indicator Lamp) "Check Powertrain" lamp "ON"?		Go to Step 4	Go to Step 11
4. Check for faulty connection at PCM. If a poor connection is found, replace terminals. Was a poor connection found ?		Verify Repair	Go to Step 5
5. Replace PCM. Is action complete?		Verify Repair	
6. Is the main fusible link OK ?		Go to Step 7	Go to Step 15
7. Are fuses F10 and F25 OK ?		Go to Step 8	Go to Step 16
8. 1. Ignition "OFF". 2. Disconnect PCM connectors. 3. Ignition "ON". 4. Probe circuit 480 and circuit 39 with test light connected to earth. 5. Is the test light "ON" on both circuits?		Go to Step 9	Go to Step 17
9. Check for poor PCM earth connection. If a faulty circuit is found, repair circuit. Was a faulty circuit found?.		Verify Repair	Go to step 10
10. Replace PCM. Is action complete?		Verify Repair	
11. Check faulty (Malfunction Indicator lamp) "Check Powertrain" lamp bulb. Is bulb OK?		Go to step 12	Verify Repair
12. Check for open circuit 419. Is circuit 419 open?		Verify Repair	Go to step 13
13. Check for short to voltage on circuit 419. Is circuit 419 shorted to voltage?		Verify Repair	Go to step 14
14. Check for open ignition feed to (Malfunction Indicator Lamp) "Check Powertrain" lamp bulb. Is ignition feed open?		Verify Repair	
15. Repair faulty main fusible link or locate and repair short to earth in circuit that had blown main fusible link. Is action complete ?		Verify Repair	

16. Repair faulty fuse or locate and repair short to earth in circuit that had blown fuse.
Is action complete ?
17. Repair open in circuit that did not light the test light.
Is action complete ?

Verify Repair

Verify Repair