



Technical Service Information

MAZDA/PROBE GF4A-EL TROUBLE CODES 6, 25 AND 55

COMPLAINT: 1993 only vehicles with a 2.0L engine and a GF4A-EL transaxle may produce a code 6 for the VSS (Vehicle Speed Sensor), a code 25 for the FPCS (Fuel Pressure Control Solenoid) and a 55 for the PSG (Pulse Signal Generator) all at the same time placing the unit in failsafe.

CAUSE: It has been ATSG's experience that when these three codes have been stored together, the replacement of the Powertrain Control Module has corrected this complaint. ***It must be noted that each circuit has been checked and verified for proper operation before taking the action of computer replacement.***

CORRECTION: The PCM can be located below the front center of the console (See Figure 1). From here all three circuits can be verified for proper operation ***before*** changing the computer. If the following voltage checks are observed, change the PCM. Refer to Figure 2 for connector terminal identification.

Code 6 VSS - An approximate 5 DC volt pulse should be seen on the green wire with a red tracer going to terminal 1M as the wheels rotate slowly. An averages of 2.5 volts will be observed during driving conditions.

Code 25 FPCS - Unplug connector 3. With the key on and engine of, system voltage should be observed on the green wire going to terminal 3M.

Code 55 PSG - Plug connector three back into the PCM. Set meter to AC volts and probe the white wire at terminal 3F with the positive meter lead. Probe the red wire at terminal 3H with the negative lead. AC volts should be observed as soon as the vehicle is started and should increase proportionally with turbine shaft rotation.

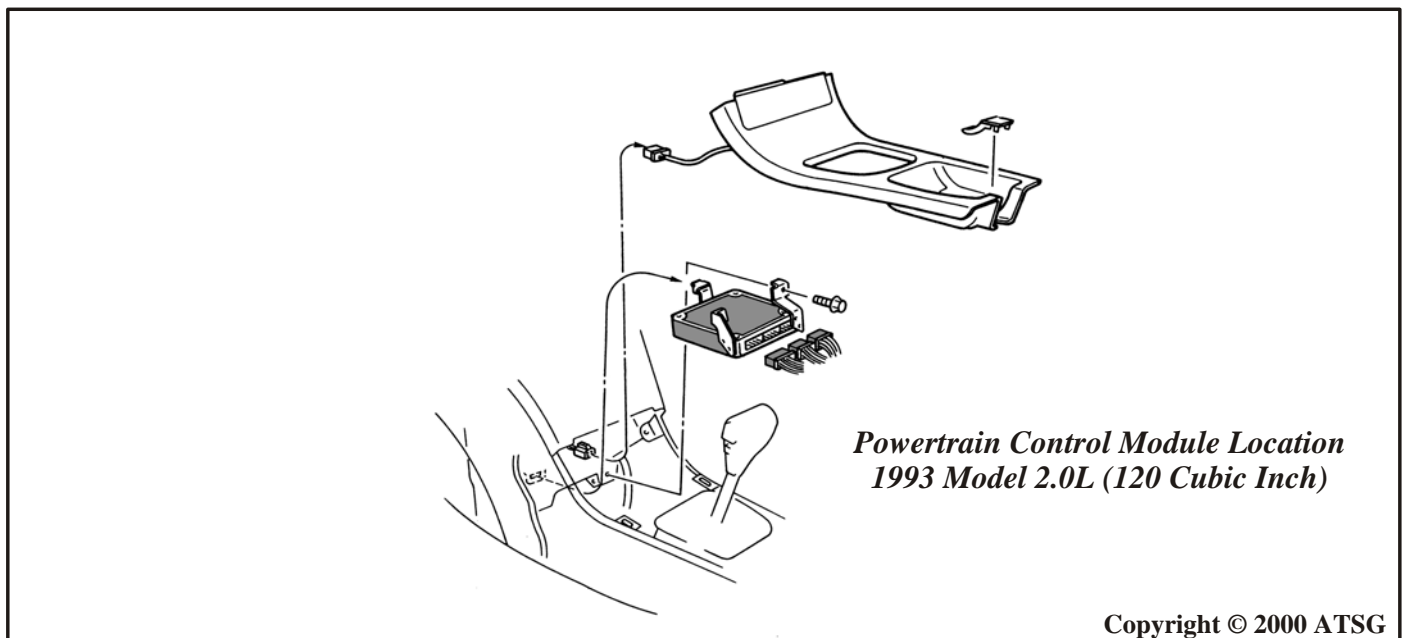
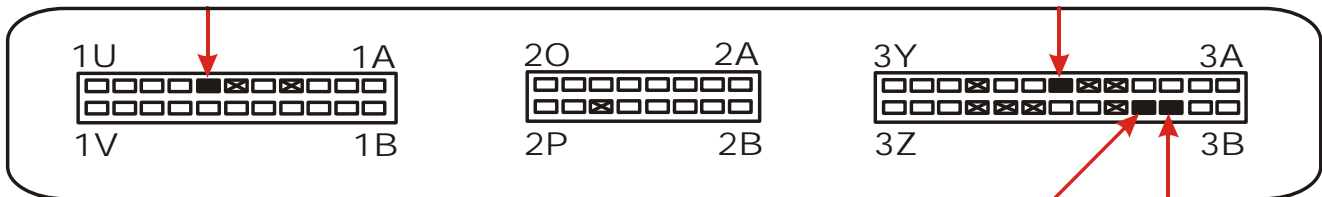


Figure 1

Code 6-VSS: *Approximate 5 volt pulse should be seen as the wheels are rotated slowly.*

1M
Green/Red



WIRE SIDE VIEW OF CONNECTORS

Code 25-FPCS: *System Voltage should be seen on this wire unplugged from the computer.*

3M
Green

3H
Red
PSG-
3F
White
PSG+

Code 55-PSG: *AC voltage should increase proportionally with turbine shaft speed rotation*

Powertrain Control Module
1993 Model 2.0L (KL System)

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Figure 2