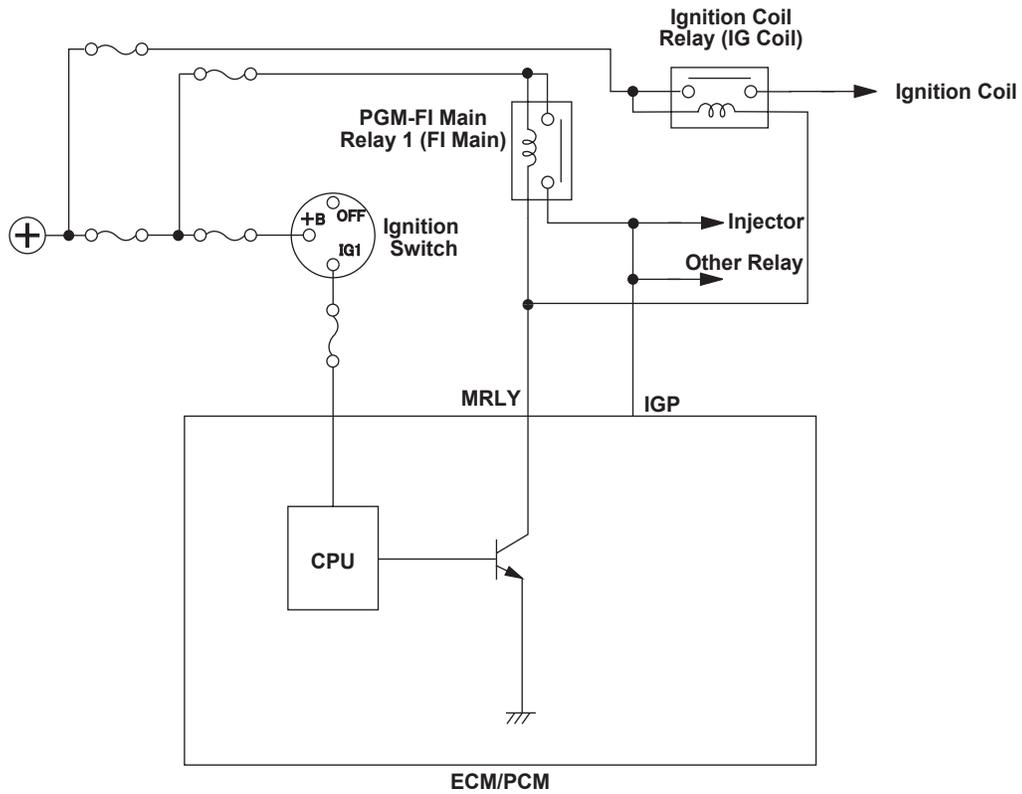


Advanced Diagnostics

DTC P0685: Engine Control Module (ECM)/Powertrain Control Module (PCM) Power Control Circuit/Internal Circuit Malfunction



P0685-0603

General Description

After the ignition switch is turned off, the engine control module (ECM)/powertrain control module (PCM) does not shut down immediately. After finishing a predetermined process according to the request of each device and system, the power supply is automatically disconnected (self shut-down function). The ECM/PCM power is disconnected by controlling PGM-FI main relay 1 (FI MAIN).

During a normal ECM/PCM shut down, the shut down process is executed by the CPU, PGM-FI main relay 1 (FI MAIN) is turned off, and the voltage to the ECM/PCM is turned off to shut down the ECM/PCM. When the voltage to the ECM/PCM is turned off and the ECM/PCM shuts down without the normal shut down procedure, a malfunction in the PGM-FI main relay 1 (FI MAIN) control circuit is detected and a DTC is stored.

Monitor Execution, Sequence, Duration, DTC Type, OBD Status

Execution	Continuous
Sequence	None
Duration	1 second or less
DTC Type	Two drive cycles, MIL ON
OBD Status	N/A

Enable Conditions

Condition	Minimum	Maximum
Engine speed	400 rpm	—

Malfunction Threshold

The ECM/PCM is shut down without the normal shut down procedure.

Diagnosis Details

Conditions for illuminating the MIL

When a malfunction is detected during the first drive cycle, a Temporary DTC is stored in the ECM/PCM memory. If the malfunction recurs during the next (second) drive cycle, the MIL comes on and the DTC and the freeze frame data are stored.

Conditions for clearing the MIL

The MIL will be cleared if the malfunction does not recur during three consecutive drive cycles in which the engine conditions are similar to the first time the malfunction was detected.

The MIL, the DTC, the Temporary DTC, and the freeze frame data can be cleared by using the scan tool Clear command or by disconnecting the battery.