

DTC P0601, P0602, P0603, P0604, P0606, P0607, P060D, P062F, or P2610

Diagnostic Instructions

- Perform the [Diagnostic System Check - Vehicle](#) prior to using this diagnostic procedure.
- Review [Strategy Based Diagnosis](#) for an overview of the diagnostic approach.
- [Diagnostic Procedure Instructions](#) provides an overview of each diagnostic category.

DTC Descriptors

DTC P0601: Control Module Read Only Memory (ROM)

DTC P0602: Control Module Not Programmed

DTC P0603: Control Module Long Term Memory Reset

DTC P0604: Control Module Random Access Memory (RAM)

DTC P0606: Control Module Internal Performance

DTC P0607: Control Module Performance

DTC P060D: Control Module Accelerator Pedal Position (APP) System Performance

DTC P062F: Control Module Long Term Memory Performance

DTC P2610: Control Module Ignition Off Timer Performance

Description

This diagnostic applies to internal microprocessor integrity conditions within the engine control module (ECM) and the throttle actuator control (TAC) system. This diagnostic also addresses if the ECM is not programmed.

The ECM monitors its ability to read and write to the memory. It also monitors a timing function. The ECM and the TAC processors are used to monitor the TAC system data. Both processors monitor the other processors data to verify that the indicated accelerator pedal position (APP) calculation is correct. The ECM performs an intrusive test in order to confirm that the APP signals are not shorted together. The ECM accomplishes this by pulling the APP sensor 2 low momentarily and looking for sensor 1 to also be pulled low.

Conditions for Running the DTCs

P0601

- The ignition switch is in Run or Crank.
- DTC P0601 runs continuously when the above condition is met.

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P0602

- The ignition switch is in Run or Crank.
- DTC P0602 runs once per ignition cycle.

P0603

- The ignition switch is in Run or Crank.
- DTC P0603 runs once per ignition cycle.

P0604

- The ignition switch is in Run or Crank.
- DTC P0604 runs continuously when the above condition is met.

P0606

- The ignition switch is in the Unlock/Accessory, Run, or Crank positions.
- The system voltage is more than 5.23 volts.
- DTC P0606 runs continuously when the above conditions are met.

P0607

- The ignition switch is in Unlock, Accessory, Run or Crank.
- The system voltage is more than 5.23 volts.
- DTCs P0601, P0602, P0603, P0604, P0606, P062F, P0641, P0651, P2610 are not set.
- DTC P0607 runs continuously when the above conditions are met.

P060D

- DTC P0606 is not set.
- The ignition switch is in the Unlock, Accessory, Run, or Crank position.
- The system voltage is more than 5.23 volts.
- DTC P060D runs continuously when the above conditions are met.

P062F

- The ignition is ON.
- DTC P062F runs once per ignition cycle.

P2610

- The ECM is powered down.
- The intake air temperature is between -40 to +125°C (-40 to +257°F).

- DTC P2610 runs once per ignition cycle.

Conditions for Setting the DTCs

The ECM detects an internal failure or incomplete programming for more than 10 seconds.

Actions Taken When the DTC Sets

- DTCs P0601, P0602, P0603, P0604, P0606, P060D, and P062F are Type A DTCs.
- DTC P0607 is a Type C DTC.
- DTC P2610 is a Type B DTC.

Conditions for Clearing the MIL/DTC

- DTCs P0601, P0602, P0603, P0604, P0606, P060D, and P062F are Type A DTCs.
- DTC P0607 is a Type C DTC.
- DTC P2610 is a Type B DTC.

Reference Information

DTC Type Reference

[Powertrain Diagnostic Trouble Code \(DTC\) Type Definitions](#)

Circuit/System Verification

1. Ignition ON, observe the DTC information with a scan tool. DTC P0602 or P0606 should not set.
 - If DTC P0602 is set, program the ECM. If the DTC resets, replace the ECM.
 - If DTC P0606 is set along with one or more of the following DTCs: P0122, P0123, P0222, P0223, P1516, P1682, P2101, P2119, P2122, P2123, P2127, P2128, P2135, or P2138, refer to [Diagnostic Trouble Code \(DTC\) List - Vehicle](#) for further diagnosis.
 - If DTC P0606 failed this ignition cycle, clear the DTCs and verify DTC P0606 does not reset. If DTC P0606 resets, replace the ECM.
2. Observe the DTC information with a scan tool. DTC P0601, P0603, P0604, or P2610 should not set.
 - If a DTC failed this ignition cycle, replace the ECM.
3. Operate the vehicle within the Conditions for Running the DTC. You may also operate the vehicle within the conditions that you observed in the Freeze Frame/Failure Records data.

Repair Instructions

Perform the [Diagnostic Repair Verification](#) after completing the diagnostic procedure.

[Control Module References](#) for ECM replacement, setup, and programming