

P060C: INTERNAL CONTROL MODULE MAIN PROCESSOR PERFORMANCE

OVERVIEW

Severity	:	High
DIY Difficulty Level	:	Advanced
Repair Cost	:	\$300-\$900
Can I Still Drive?	:	No

What Does The P060C Code Mean?

When a code P060C is stored, it means that the powertrain control module (PCM) has detected a main processor performance error. Other on-board controllers may also detect a PCM main processor performance error and cause a code of this type to be stored.

The internal control module monitoring processors are responsible for various controller self-test duties and overall internal control module accountability. Internal controller (especially PCM) temperature, as well as multiple input and output signals are constantly monitored by specific controller processors.

Whenever the ignition is on and the PCM is energized, numerous internal controller processing self-tests are initiated. In addition to running internal controller self-tests, the controller area network (CAN) also compares signals from each individual module to ensure that each controller is functioning properly. These tests are performed simultaneously.

If the PCM detects a discrepancy between any of the on-board controllers, which would indicate an internal processor error, a code P060C will be stored and a malfunction indicator lamp (MIL) may be illuminated. Multiple failure cycles may be necessary for MIL illumination, depending upon the perceived severity of the malfunction.

What Are The Symptoms Of The P060C Code?

Symptoms of a P060C trouble code may include:

- Multiple drivability issues
- Harsh or erratic automatic transmission shifting
- Reduction in fuel efficiency
- Rough idle or stall
- Hesitation upon acceleration

What Are The Potential Causes Of The P060C Code?

Causes for this code may include:

- Defective controller or programming error
- Bad controller fuse or power supply relay
- Open or shorted circuit or connectors in the CAN harness
- Insufficient control module ground

How Can You Fix The P060C Code?

Even to the most experienced and well-equipped professional technician diagnosing a code P060C can prove to be quite a challenge. There is also the issue of reprogramming. Without the necessary reprogramming equipment, it will be impossible to replace a defective controller and complete a successful repair.

If there are ECM/PCM power supply codes present, they will obviously need to be rectified before attempting to diagnose a P060C.

There are several preliminary tests that can be performed prior to declaring an individual controller defective. A diagnostic scanner, a digital volt/ohmmeter (DVOM), and a source of reliable vehicle information will be required.

Connect the scanner to the vehicle diagnostic port and retrieve all stored codes and freeze frame data. You will want to write this information down, just in case the code proves to be an intermittent one. After recording all pertinent information, clear the codes and test drive the vehicle until the code is reset or the PCM enters readiness mode.

If the PCM enters readiness mode, the code is intermittent and will be more difficult to diagnose. The condition, which caused the P060C to be stored, may even need to worsen before a diagnosis can be made. If the code is reset, continue with this short list of preliminary tests.

When attempting to diagnose a P060C, information may be your greatest tool. Search your vehicle information source for technical service bulletins (TSB) that parallel the code stored, vehicle (year,

make, model, and engine), and symptoms exhibited. If you find the right TSB, it may yield diagnostic information that will aid you in a major way.

Use your source of vehicle information to obtain connector face views, connector pin-out charts, component locators, wiring diagrams, and diagnostic flow charts related to the code and vehicle in question.

Use the DVOM to test controller power supply fuses and relays. Test and replace blown fuses as required. Fuses should be tested with the circuit loaded.

If all fuses and relays appear to be functioning as intended, a visual inspection of controller related wiring and harnesses is in order. You will also want to check chassis and engine ground junctions. Use your vehicle information source to obtain ground locations for related circuits. Use the DVOM to test ground integrity.

Visually inspect system controllers for signs of water, heat, or collision damage. Any controller that is damaged, especially by water, should be considered defective.

If controller power and ground circuits are intact, suspect a defective controller or a controller programming error. Controller replacement will require reprogramming. In some cases, you may purchase reprogrammed controllers through aftermarket sources. Other vehicles/controllers will require on-board reprogramming that may only be done through a dealership or other qualified source.

- Unlike most other codes, the P060C is likely caused by a defective controller or a controller programming error
- Test system ground integrity by connecting the negative test lead of the DVOM to ground and the positive test lead to battery voltage

Severity Description

Internal control module processor codes should be categorized as severe. A stored code P060C could result in a no-start condition or serious drivability issues, suddenly and without warning.

Reference Sources

[Diagnostic Trouble Code \(DTC\) Charts and Descriptions for P060C](#) - Page 92.