

P068B: ECM/PCM POWER RELAY DE-ENERGIZED PERFORMANCE - TOO LATE

OVERVIEW

Severity	:	High
DIY Difficulty Level	:	Advanced
Repair Cost	:	\$50-\$150
Can I Still Drive?	:	No

What Does The P068B Code Mean?

When a code P068B is stored, it means that the engine/powertrain control module (ECM/PCM), has detected a defect in the de-energizing procedure for the relay which supplies it with voltage. In this case the PCM power relay fails to de-energize quickly enough.

The PCM power relay is used to apply battery voltage safely to the appropriate PCM circuits. It is a contact type relay that is activated with a signal wire from the ignition switch. This relay must be gradually de-energized in a controlled manner to avoid voltage spikes and possible controller damage. This type of relay typically uses a five-wire design. Constant battery voltage is applied on one wire; ground on another. A third circuit carries a signal from the ignition switch and a fourth supplies voltage to the PCM. The fifth wire is the power relay sense circuit. It is used by the PCM to monitor power relay voltage.

If the PCM detects a malfunction in de-energizing the ECM/PCM power relay, a code P068B will be stored and a malfunction indicator lamp (MIL) may be illuminated.

What Are The Symptoms Of The P068B Code?

Symptoms of a P068B trouble code may include:

- Delayed or no start

- Weak or dead battery issues

What Are The Potential Causes Of The P068B Code?

Causes for this code may include:

- Defective PCM power relay
- Blown fuse or fusible link
- Open or shorted circuit between the power relay and the PCM

How Can You Fix The P068B Code?

A diagnostic scanner and a digital volt/ohmmeter (DVOM) will be required to diagnose a code P068B.

A source of reliable vehicle information will also be necessary. From it you will glean diagnostic flow charts, wiring diagrams, connector face views, connector pin-out charts, and component locators. You will also find component and circuit testing procedures and specifications. All this information will be needed to successfully diagnose a code P068B.

Step 1

Connect the scanner to the vehicle diagnostic port and retrieve all stored codes and freeze frame data. Make a note of this information as it may prove useful if the code proves to be an intermittent one.

After recording all pertinent information, clear the codes and test drive the vehicle (if possible) until the code is reset or the PCM enters readiness mode.

If the PCM enters readiness mode, the code is intermittent and will be even more difficult to diagnose. The condition, which caused the P068B to be stored, may need to worsen before an accurate diagnosis can be reached. On the other hand, if the code fails to reset and there are no drivability symptoms exhibited, the vehicle can be operated normally.

Step 2

Consult your vehicle information source for technical service bulletins (TSB) that replicate the code stored, vehicle (year, make, model, and engine), and symptoms exhibited. If you find the appropriate TSB, it may yield helpful diagnostic information.

If the P068B code is immediately reset, proceed with a visual inspection of system related wiring and connectors. Harnesses that have been broken or unplugged should be repaired or replaced as required.

Step 3

If wiring and connectors appear functional, use your source of vehicle information to obtain the appropriate wiring diagrams, connector face views, connector pin-out charts, and diagnostic flow charts.

Once you have the relevant information, test all system fuses and relays to make sure the PCM power supply relay is being supplied with battery voltage.

Obtain PCM power relay de-energizing parameters and apply them to the following diagnostic steps.

Step 4

If constant (or switched) voltage is not present at the power relay connector, trace the appropriate circuit back to the fuse or relay from which it originates. Repair or replace defective fuses or fusible links as required.

If power relay supply input voltage and ground are present (on all appropriate terminals), use your DVOM to test relay output performance at the appropriate connector pins. If power supply relay output circuit voltage is not adequate, suspect that the relay is defective.

Step 5

If PCM power supply relay output voltage is within specifications (on all terminals), test the corresponding relay output circuits at the PCM.

If a relay output voltage signal is discovered at the PCM connector, suspect a defective PCM or a PCM programming error.

If there is not an appropriate PCM power relay output voltage signal discovered at the PCM connector, suspect an open or shorted circuit between the PCM power relay and the PCM.

Note: Fuses and fusible links should be tested with the circuit loaded to avoid a misdiagnosis

Severity Description

A P068B should be categorized as severe and addressed accordingly. It may result in a no start condition and/or a variety of drivability issues.

Reference Sources

[P068B ECM/PCM Power Relay De-Energized Performance - Too Late](#), OBD-Codes.