

GENERIC · POWERTRAIN

P0C9C

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P0C9C

14 Volt Power Module Current Sensor B Circuit

P0C9C indicates that the 14-volt power module has detected an abnormal current reading on the circuit for current sensor B, which is typically used to monitor current flow in a specific branch of the 14-volt power system. The module compares the sensor signal against expected values and sets this code when the signal is out of range, erratic, or missing entirely.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Powertrain	Generic (all makes)	Medium	Intermediate	Hybrid propulsion

Symptoms you may notice

- Illumination of the check engine light or a dedicated power system warning light.
- Often no symptoms besides the warning light, especially if the fault is intermittent.
- Electrical accessories may behave erratically, such as dimming lights or slow-acting power windows.
- The vehicle may enter a reduced power mode or disable certain non-essential electrical features.
- In some cases, the 14-volt power module may fail to maintain proper charging voltage, leading to a battery that runs down.
- A message may appear on the driver information center indicating a power system fault.

Common causes, most likely first

- 1 A faulty current sensor B itself, which can fail internally and produce an incorrect signal.
- 2 Damaged or corroded wiring or connectors in the sensor B circuit, including open circuits, short circuits, or high resistance.
- 3 A poor ground connection for the current sensor or the 14-volt power module.
- 4 Internal failure within the 14-volt power module, such as a faulty signal processing circuit.
- 5 Water intrusion or contamination in the connector or sensor, leading to signal corruption.
- 6 Aftermarket electrical accessories improperly installed, causing interference or overload on the circuit.



How to diagnose and fix it

- 1 Perform a visual inspection of the current sensor B, its connector, and the associated wiring for damage, corrosion, or loose pins.
- 2 Use a scan tool to retrieve all stored codes and freeze-frame data, and check for technical service bulletins (TSBs) related to this code for the specific vehicle.
- 3 Measure the resistance and continuity of the sensor B circuit wiring between the sensor and the 14-volt power module, repairing any opens or shorts.
- 4 Backprobe the sensor connector and check the reference voltage and signal voltage with a digital multimeter, comparing to manufacturer specifications.
- 5 Test the current sensor B by monitoring its signal output with an oscilloscope or scan tool live data while varying electrical load, replacing the sensor if the signal is erratic or absent.
- 6 If the sensor and wiring test good, check the power and ground supplies to the 14-volt power module and verify the module's internal current sensing function.
- 7 Clear the code after repairs and perform a road test with electrical accessories cycling to confirm the code does not return.

When the sensor is not the culprit

- A common misdiagnosis is replacing the current sensor B without first checking the connector for water intrusion, which can mimic a failed sensor and cause the new part to fail as well.
- The 14-volt power module often shares ground points with other systems, so a corroded ground stud can set this code even though the sensor circuit itself tests perfectly.
- Intermittent code P0C9C may be caused by a loose aftermarket accessory connection at the battery or power distribution block, which introduces electrical noise that the sensor interprets as a fault.
- Some vehicles use the current sensor B signal for load management, so a fault can cause the module to disable the alternator's variable voltage control, leading to a steady 14-volt output and reduced fuel economy.
- The code can be set by a low battery or charging system issue that causes the module to see implausible current readings during engine start, so always verify battery health and charging voltage before condemning the sensor.

Can I keep driving with P0C9C?

You can usually continue driving with this code, but avoid relying on high-current electrical accessories and have the fault diagnosed soon to prevent a possible no-start condition from a depleted battery. If the vehicle enters a reduced power mode or the charging system warning light is also on, limit driving to reach a repair shop.



Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Oscilloscope (optional but helpful for signal analysis)
- Wire repair kit with crimpers and heat shrink
- Electrical contact cleaner
- Manufacturer service information for wiring diagrams and specifications

Reading P0C9C

P	Powertrain: engine, transmission and emissions.
0	Generic (SAE) code: it means the same thing on every OBD-II vehicle.
C	Hybrid propulsion.
9C	The exact fault within that area.

Often seen with

P0562 System Voltage Low · **P0563** System Voltage High · **P0C9A** Hybrid/EV Battery Temperature Sensor L Circuit High · **P0C9B** Hybrid/EV Battery Temperature Sensor L Circuit Intermittent/ · **P0C9D** 14 Volt Power Module Current Sensor B Circuit Range/Performa

See it working

Watch the animated explainer [How a CVT Works: Belt and Pulley Transmission](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p0c9c/>

