

GENERIC · POWERTRAIN

P0C69

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P0C69

Generator Position Sensor Circuit B Circuit

P0C69 indicates that the powertrain control module has detected an abnormal signal from the 'B' circuit of the generator position sensor, which is used to monitor the rotor position inside the alternator. The computer sets this code when the voltage or signal pattern on that circuit falls outside the expected range, which can prevent proper control of the generator's output.

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

Symptoms you may notice

- Illumination of the battery/charging system warning light on the dashboard
- The alternator may fail to charge the battery, leading to a dead battery and a no-start condition
- Dimming or flickering of the headlights and interior lights, especially at idle
- Electrical accessories such as the radio or climate control may behave erratically or shut off
- Often no symptoms besides the warning light, especially if the fault is intermittent

Common causes, most likely first

- 1 Damaged or corroded wiring or connector at the generator position sensor or its harness
- 2 Failed generator position sensor (internal to the alternator on many designs)
- 3 Open or short circuit in the 'B' signal circuit between the sensor and the PCM
- 4 Faulty powertrain control module (PCM) or generator control module, though rare
- 5 Mechanical damage to the alternator rotor or sensor target wheel
- 6 Poor ground connection for the generator or sensor circuit



How to diagnose and fix it

- 1 Inspect the generator position sensor connector and harness for corrosion, loose pins, or chafed wires, and repair as needed
- 2 Measure resistance and continuity of the 'B' circuit wiring between the sensor and PCM, comparing to manufacturer specifications
- 3 Check the sensor's output signal with an oscilloscope or scan tool live data to confirm whether the sensor is producing a proper waveform
- 4 Test the alternator's charging output and inspect the rotor and sensor target for mechanical damage
- 5 If the sensor is internal to the alternator and faulty, replace the alternator assembly or sensor per the manufacturer's procedure
- 6 Clear the diagnostic trouble codes and verify the repair by running the engine and monitoring live data for the generator position signal

Don't assume the alternator is bad

- A loose or corroded ground connection at the alternator can mimic a failed position sensor and set P0C69 without any sensor fault.
- On some vehicles, the generator position sensor is integrated into the alternator and cannot be serviced separately, so a wiring check is critical before replacing the entire unit.
- Intermittent faults often occur only when the engine is hot or vibrating, so a wiggle test of the harness while monitoring live data can reveal the problem.
- The code can be set by a low battery or charging system issue that causes voltage spikes, so always verify battery condition and charging voltage first.
- Related codes such as P0C68 or P0C6A may also be present, indicating a problem with the 'A' circuit or the sensor's overall range, which can help narrow down the fault.

Can I keep driving with P0C69?

If the battery/charging warning light is on, the alternator may not be charging, and continued driving will drain the battery and could leave you stranded. It is safe to drive a short distance to a repair shop or to a safe location, but avoid long trips and turn off unnecessary electrical loads.

Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Oscilloscope (for signal waveform analysis)
- Wire repair kit and electrical contact cleaner
- Basic hand tools (socket set, screwdrivers)



Reading P0C69

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

Often seen with

P0562 System Voltage Low · **P0563** System Voltage High · **P0620** Generator Control Circuit Malfunction · **P0C68** Generator Position Sensor Circuit A Circuit Intermittent/Err · **P0C6A** Generator Position Sensor Circuit B Range/Performance

See it working

Watch the animated explainer [Helicopter Simulator: Take Off, Hover and Land](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p0c69/>

