



P0E9B

DC/DC Converter Voltage Sensor C Circuit Low

P0E9B indicates that the powertrain control module has detected a low voltage signal on the dedicated sensor circuit for the DC/DC converter's phase C output. The converter, which steps high-voltage down to charge the 12-volt system in hybrid and electric vehicles, is monitored for proper voltage regulation, and this code sets when the sensor return voltage falls below the expected threshold.

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

Symptoms you may notice

- Illumination of the check engine light or service vehicle soon message, often with no other symptoms
- A low or fluctuating 12-volt battery charge that may cause dim lights or slow cranking
- The vehicle may enter a reduced power or limp mode to protect the high-voltage system
- Possible failure of the DC/DC converter to maintain accessory power, leading to battery drain
- In some cases, the hybrid or electric system may shut down and prevent the vehicle from starting

Common causes, most likely first

- 1 A faulty voltage sensor or its internal circuitry on the phase C output
- 2 Damaged or corroded wiring and connectors between the sensor and the control module
- 3 High resistance or an open circuit in the sensor ground or signal return path
- 4 A failing DC/DC converter assembly that produces an abnormally low output voltage
- 5 Corrosion or water intrusion at the converter connector, causing signal degradation
- 6 A software glitch or outdated calibration in the control module misinterpreting the sensor signal



How to diagnose and fix it

- 1 Inspect the DC/DC converter harness and connectors for signs of damage, corrosion, or loose pins
- 2 Measure the sensor reference voltage and ground at the converter connector with a digital multimeter
- 3 Check the sensor signal voltage while back-probing the connector and compare to the manufacturer's specification
- 4 Perform a voltage drop test on the ground circuit to rule out high resistance
- 5 If the sensor is integrated into the converter, verify the converter's output voltage and compare to commanded value
- 6 Repair or replace any damaged wiring or connectors found during inspection
- 7 If all circuits test good, replace the DC/DC converter or voltage sensor as applicable, then clear codes and verify the repair

Sensor circuit faults often mimic converter failure

- A low signal on the phase C sensor circuit frequently results from a poor ground connection rather than a failed converter, so always check grounds before condemning the unit.
- The code can set intermittently due to vibration or heat, making it important to wiggle-test the harness while monitoring live data.
- Some vehicles use a shared reference voltage for multiple sensors, so a short in another sensor's circuit can pull down the phase C signal and set this code.
- Replacing the DC/DC converter without first verifying the sensor circuit can lead to a repeat failure if the underlying wiring issue remains.
- On certain models, a weak 12-volt battery can cause the converter to operate outside its normal range and trigger this code, so load-test the battery first.

Can I keep driving with P0E9B?

It is generally safe to drive short distances to a repair facility, but avoid long trips or heavy electrical loads because the 12-volt battery may not be properly charged. If the vehicle enters limp mode or the battery warning light illuminates, stop driving and seek professional assistance.

Tools that help

- Digital multimeter
- OBD-II scan tool with live data capability
- Back-probe kit
- Wiring diagram for the specific vehicle
- Insulation resistance tester



Reading P0E9B

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

Often seen with

P0A0D High Voltage System Interlock Circuit A High · **P0A94** DC/DC Converter A Performance · **P0E9A** DC/DC Converter Voltage Sensor C Circuit Range/Performance · **P0E9C** DC/DC Converter Voltage Sensor C Circuit High · **P0E9D** DC/DC Converter Voltage Sensor C Circuit Intermittent/Erratic

See it working

Watch the animated explainer [Manual Car Driving Simulator: Learn Clutch Control](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p0e9b/>

