



P0C7B

Generator Inverter Voltage Too High

P0C7B indicates that the generator inverter, which converts DC power from the high-voltage battery to AC for the motor-generator, has reported an excessively high voltage condition to the control module. The computer detects this when the inverter's internal voltage sensor reads above a calibrated threshold for a set time, often due to a fault in the inverter itself, the battery pack, or the wiring between them.

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

Symptoms you may notice

- Illumination of the hybrid system warning light or service vehicle soon message
- Often no symptoms besides the warning light, especially if the fault is intermittent
- Reduced power or limp mode as the vehicle limits hybrid operation to protect components
- The engine may run continuously or the vehicle may refuse to enter electric-only mode
- Possible shutdown of the hybrid system while driving, leading to loss of motive power
- A noticeable decrease in fuel economy due to increased engine reliance

Common causes, most likely first

- 1 Faulty generator inverter assembly, such as internal short or failed voltage sensor
- 2 High-voltage battery pack degradation or cell imbalance causing overvoltage
- 3 Damaged or corroded high-voltage wiring harness between the battery and inverter
- 4 Poor connection at the inverter or battery terminals, leading to voltage spikes
- 5 Malfunctioning hybrid control module (HCM) or powertrain control module (PCM) software
- 6 Cooling system issues causing the inverter to overheat and misreport voltage
- 7 Aftermarket accessories or improper previous repairs affecting high-voltage circuits

How to diagnose and fix it

- 1 Perform a thorough visual inspection of high-voltage cables and connectors for damage or corrosion
- 2 Use a scan tool to retrieve all hybrid system codes and freeze-frame data to confirm the condition
- 3 Check for technical service bulletins (TSBs) or software updates for the hybrid control module
- 4 Measure high-voltage battery pack voltage and compare to inverter reported values using a multimeter
- 5 Test the inverter's voltage sensor circuit and wiring for shorts or opens
- 6 If voltage readings are inconsistent, replace the generator inverter assembly
- 7 Clear codes and perform a road test to verify the repair, ensuring no pending codes return



Before you replace the inverter assembly

- A weak or unbalanced high-voltage battery can cause the inverter to see excessive voltage under load, so always load-test the battery pack before condemning the inverter.
- Corroded or loose high-voltage connectors often create resistance that leads to voltage spikes, and a simple cleaning and tightening can resolve the issue.
- The code may be set by a faulty voltage sensor inside the inverter rather than an actual overvoltage condition, so compare live data with a known-good meter.
- Software glitches in the hybrid control module can trigger false overvoltage codes, and a reflash may be required before any parts replacement.
- Overheating of the inverter due to a clogged cooling fan or low coolant can cause temporary voltage misreads, so check cooling system operation first.

Can I keep driving with P0C7B?

If the warning light is on, avoid driving the vehicle until the fault is diagnosed, as a high-voltage inverter fault can lead to sudden loss of power or further damage. If you must drive, proceed directly to a service center at low speed and avoid heavy acceleration or high loads.

Tools that help

- Hybrid/EV-capable scan tool
- Digital multimeter with high-voltage rating
- Insulation tester (megohmmeter)
- High-voltage safety gloves and insulated tools
- Service information for the specific vehicle

Reading P0C7B

P	Powertrain: engine, transmission and emissions.
0	Generic (SAE) code: it means the same thing on every OBD-II vehicle.
C	Hybrid propulsion.
7B	The exact fault within that area.

Often seen with

P0A7F Hybrid/EV Battery Pack Deterioration · **P0AFA** Hybrid/EV Battery System Voltage Low · **P0C7A** Drive Motor B Inverter Voltage Too High · **P0C7C** Hybrid/EV Battery Temperature Sensor G Circuit



See it working

Watch the animated explainer [How a Manual Transmission Works: Four-Speed Cutaway](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p0c7b/>

