

GENERIC · POWERTRAIN

P0E99

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P0E99

DC/DC Converter Voltage Sensor C Circuit

P0E99 indicates that the powertrain control module has detected an abnormal signal from the voltage sensor circuit associated with the DC/DC converter's phase C output. The DC/DC converter steps high-voltage battery power down to charge the 12-volt system, and the sensor reports the converter's output voltage so the module can regulate it; this code means the module sees a voltage reading outside the expected range or a circuit fault on that sensor's signal path.

SYSTEM

Powertrain

CODE TYPE

Generic (all makes)

SEVERITY

Medium

FIX DIFFICULTY

Professional

AREA

Hybrid propulsion

Symptoms you may notice

- Illumination of the check engine light or a dedicated service vehicle warning, often with no other symptoms besides the warning light
- A 12-volt battery that slowly discharges or goes flat because the converter is not charging properly
- Dimming headlights, flickering interior lights, or weak accessories at idle
- Reduced power or a limp-home mode if the vehicle limits high-voltage system operation to protect components
- A message on the dash advising that the hybrid or electric system needs service
- Intermittent electrical glitches in multiple modules because system voltage is unstable

Common causes, most likely first

- 1 A damaged, chafed, or corroded wire in the sensor C signal or return circuit
- 2 A loose or contaminated connector at the DC/DC converter or the control module
- 3 A failed voltage sensor internal to the DC/DC converter assembly
- 4 A faulty DC/DC converter that produces an erratic output the sensor correctly reports as abnormal
- 5 A poor ground connection shared by the converter and sensor circuit
- 6 A control module with an internal fault in its sensor input circuitry, though this is less common



How to diagnose and fix it

- 1 Retrieve all stored codes and freeze-frame data with a scan tool, then clear and road-test to see whether P0E99 returns immediately or only under load
- 2 Visually inspect the DC/DC converter connectors and the sensor C wiring for chafing, corrosion, or pushed-back pins, and repair as needed
- 3 Measure resistance and voltage drop on the sensor C signal and return wires between the converter and the control module, comparing against the manufacturer's specification
- 4 Check the converter's ground strap and mounting points for clean, tight connections, since a bad ground skews the sensor reading
- 5 Back-probe the sensor C signal circuit with a multimeter or oscilloscope while the system is active to confirm whether the sensor output is truly out of range
- 6 If wiring and grounds are good, substitute a known-good converter or sensor where the design allows, then recheck the code
- 7 After repair, clear codes and verify the converter output voltage and sensor reading match the commanded value during a test drive

What the sensor C code really means

- This code often sets because of a wiring or connector problem rather than a failed converter, so a thorough circuit check before parts replacement saves significant cost.
- A weak or aging 12-volt battery can drag the converter output down and trigger a sensor C voltage code even when the converter itself is healthy.
- The sensor C circuit is one of several phase voltage sensors, and a shared ground or reference fault can set multiple related codes at once, so diagnose the common circuit first.
- Some vehicles only run the DC/DC converter under specific conditions, so the code may not reappear during a short idle test and requires a loaded road test to confirm the repair.
- A converter that is overheating due to a cooling system fault can produce an erratic output that the sensor faithfully reports, making the sensor look guilty when the real problem is thermal.

Can I keep driving with P0E99?

You can usually drive a short distance to a repair shop, but avoid long trips and heavy electrical loads because the 12-volt battery may not be charging correctly. If the battery warning light is on or the vehicle enters limp mode, stop driving and arrange a tow to prevent a no-start or safety system failure.



Tools that help

- OBD-II scan tool with live data and freeze-frame capability
- Digital multimeter with voltage drop and resistance functions
- Oscilloscope for viewing the sensor C signal waveform
- Manufacturer service information with wiring diagrams and pinouts
- Insulated hand tools and terminal pick set for connector work
- Battery load tester or conductance tester

Reading P0E99

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

Often seen with

P0562 System Voltage Low · **P0A94** DC/DC Converter A Performance · **P0E97** Drive Motor B Inverter Voltage Sensor B Circuit High · **P0E98** Drive Motor B Inverter Voltage Sensor B Circuit Intermittent · **P0E9A** DC/DC Converter Voltage Sensor C Circuit Range/Performance

See it working

Watch the animated explainer [How the PCV System Works: Crankcase Ventilation](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p0e99/>

