

GENERIC · POWERTRAIN

P0E94

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P0E94

Drive Motor B Inverter Voltage Sensor B Circuit

P0E94 indicates that the inverter for drive motor B has detected an abnormal voltage reading on its sensor B circuit, which typically monitors a specific phase or internal bus voltage. The computer compares this signal against expected values and sets the code when the voltage falls outside the calibrated range or the circuit integrity is compromised.

SYSTEM

Powertrain

CODE TYPE

Generic (all makes)

SEVERITY

High

FIX DIFFICULTY

Professional

AREA

Hybrid propulsion

Symptoms you may notice

- Illumination of the hybrid or electric vehicle warning light, often accompanied by a reduced power message.
- The vehicle may enter a fail-safe mode that limits motor output or prevents the use of drive motor B entirely.
- Intermittent loss of propulsion or a sudden drop in power while accelerating.
- Audible warning chimes or a message to pull over safely due to a high-voltage system fault.
- Often no symptoms besides the warning light, especially if the fault is stored but not currently active.

Common causes, most likely first

- 1 A damaged or chafed wire in the voltage sensor B circuit, often due to vibration or heat exposure.
- 2 Corrosion or poor pin tension at the inverter connector for the sensor B signal or ground circuit.
- 3 Failure of the voltage sensor B itself inside the inverter assembly, leading to erratic or out-of-range readings.
- 4 Internal inverter fault, such as a failed sensing circuit board or a problem with the motor B phase voltage measurement.
- 5 A weak or failing 12-volt auxiliary battery causing low reference voltage to the inverter electronics.
- 6 High-voltage cable or connector issues that introduce electrical noise or intermittent opens in the sensor circuit.



How to diagnose and fix it

- 1 Connect a scan tool and record all freeze-frame data and any related codes to understand the conditions when P0E94 set.
- 2 Visually inspect the inverter harness and connector for drive motor B, looking for chafing, corrosion, or loose pins.
- 3 Measure the sensor B signal voltage and ground reference at the inverter connector with a digital multimeter and compare to specifications.
- 4 Perform a wiggle test on the harness while monitoring the sensor voltage to reveal intermittent wiring faults.
- 5 Check the 12-volt battery condition and charging system, as low system voltage can corrupt sensor readings.
- 6 If the circuit and sensor check out, follow the manufacturer's diagnostic flow for internal inverter testing or replacement.
- 7 After repairs, clear the code and perform a road test to verify the fault does not return under load.

What the voltage sensor B circuit really monitors

- The voltage sensor B circuit often measures a specific phase voltage or a divided bus voltage, so a fault can be caused by a failing sense resistor rather than a simple wiring break.
- Technicians sometimes replace the entire inverter when the actual problem is a corroded connector pin that can be repaired with a terminal kit.
- A low or unstable 12-volt supply can set this code because the inverter's internal reference voltage drifts, so always load-test the auxiliary battery first.
- This code can be stored intermittently by electrical noise from a failing high-voltage cable or a poor chassis ground, which may not appear during a static test.
- P0E94 does not always mean the inverter is defective; a shorted sensor signal wire to ground or power can mimic an internal failure.

Can I keep driving with P0E94?

Do not continue driving with this code active, because the vehicle may lose propulsion without warning and high-voltage system faults can be hazardous. Have the vehicle towed to a qualified service facility for diagnosis and repair.

Tools that help

- OBD-II scan tool with hybrid/EV capability
- Digital multimeter with high-voltage safety rating
- Oscilloscope for signal analysis
- Terminal pick and connector repair kit
- Manufacturer service information for pinout and specifications



Reading P0E94

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

Often seen with

P0A0A High Voltage System Interlock Circuit A · **P0A3F** Drive Motor A Position Sensor Circuit · **P0C00** Drive Motor A Current Low · **P0E93** Drive Motor A Inverter Voltage Sensor B Circuit Intermittent · **P0E95** Drive Motor B Inverter Voltage Sensor B Circuit Range/Perfor

See it working

Watch the animated explainer [How Regenerative Braking Works in Electric Cars](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p0e94/>

