

GENERIC · POWERTRAIN

P0E95

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P0E95

Drive Motor B Inverter Voltage Sensor B Circuit Range/Performance

P0E95 indicates that the inverter responsible for converting high-voltage direct current to three-phase alternating current for drive motor B has detected an abnormal voltage reading from its internal sensor B circuit. The powertrain control module sets this code when the sensor signal falls outside the expected range or does not correlate with other voltage measurements during a self-test, pointing to a fault in the sensing circuit rather than a confirmed inverter failure.

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 service vehicle soon message, often with no other noticeable symptoms
- Reduced power output or limp-home mode as the vehicle limits motor B operation to protect the inverter
- Intermittent hesitation or shudder during acceleration when the faulty sensor signal causes erratic torque delivery
- A warning message on the instrument cluster indicating a hybrid or electric system fault
- Possible inability to restart after a key-off cycle if the fault is severe enough to disable the motor

Common causes, most likely first

- 1 Faulty voltage sensor B inside the motor B inverter, such as a drifted or open sensing element
- 2 Damaged or chafed wiring in the sensor circuit, often at a connector or where the harness passes near a heat source
- 3 Corroded or loose electrical connector pins at the inverter or sensor interface
- 4 Internal inverter circuit board fault affecting the sensor reference voltage or signal processing
- 5 Low or unstable 12-volt auxiliary battery voltage causing the inverter's internal self-test to misread sensor values
- 6 Software calibration issue in the inverter control module that misinterprets a valid sensor signal



How to diagnose and fix it

- 1 Connect a scan tool and record all stored and pending codes, then check for any related communication or voltage codes that could indicate a shared circuit fault
- 2 Inspect the inverter harness and connectors for chafing, corrosion, or loose pins, and perform a wiggle test while monitoring sensor B voltage on live data
- 3 Measure the sensor B signal voltage and reference voltage at the inverter connector with a multimeter and compare against the manufacturer's specification
- 4 Check the 12-volt auxiliary battery condition and charging system output, as low voltage can trigger false range or performance codes
- 5 If the sensor circuit checks out, follow the manufacturer's diagnostic flow for the inverter, which may include a resistance check of the sensor or a software update
- 6 Replace the faulty voltage sensor or the complete inverter assembly only after confirming the sensor signal is out of range under load
- 7 Clear the codes and perform a road test with live data monitoring to verify the repair and ensure the code does not return

What the inverter voltage sensor code hides

- A weak 12-volt battery is a common cause of this code on hybrid and electric vehicles because the inverter's internal low-voltage supply can dip during self-test, making a healthy sensor appear out of range.
- Technicians often replace the entire inverter when only the sensor pigtail or connector is corroded, so always inspect the harness before condemning the expensive assembly.
- The code can set intermittently from a poor ground connection at the inverter housing, which shifts the sensor reference voltage without any visible wiring damage.
- A software calibration update from the manufacturer may resolve the code if the inverter logic misinterprets a valid sensor signal under certain temperature conditions.
- This code does not always mean the motor or inverter has failed; it specifically flags the sensor circuit, and the vehicle may continue to operate normally with only the warning light on.

Can I keep driving with P0E95?

You can usually continue driving to a repair shop if the vehicle is not in limp mode, but avoid aggressive acceleration or high-load conditions that could stress the inverter further. If the vehicle enters reduced power mode or refuses to restart, stop driving and arrange a tow to prevent damage to the high-voltage system.



Tools that help

- OBD-II scan tool with live data and hybrid/EV capability
- Digital multimeter with high-voltage safety rating
- Manufacturer service information for inverter sensor specifications
- Insulated hand tools and personal protective equipment for high-voltage work
- Wiring diagram and connector pinout for the inverter circuit

Reading P0E95

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

Often seen with

P0A0A High Voltage System Interlock Circuit A · **P0A1F** Battery Energy Control Module A Performance · **P0C00** Drive Motor A Current Low · **P0E94** Drive Motor B Inverter Voltage Sensor B Circuit · **P0E96** Drive Motor B Inverter Voltage Sensor B Circuit Low

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/p0e95/>

