



P0B9C

Hybrid/EV Battery Voltage Sense T Circuit Low

P0B9C indicates that the hybrid or electric vehicle battery pack's voltage sensing circuit for the 'T' module is reporting a voltage that is lower than the manufacturer's expected range. The battery energy control module compares the sensed voltage against the actual pack voltage and sets this code when the signal on the T circuit falls below the calibrated threshold, indicating a short to ground, an open circuit, or a faulty sensing line.

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 electric-only range or the vehicle refusing to enter EV mode
- Powertrain derangement with limited power output or a forced limp-home mode
- Inconsistent state-of-charge readings on the dashboard gauge
- Possible failure to start or engage the high-voltage system

Common causes, most likely first

- 1 Damaged or chafed voltage sense wire between the battery module and the control unit
- 2 Corroded or loose connector pins at the battery module or control module harness
- 3 Internal failure of the voltage sensing circuit board within the battery pack
- 4 Faulty battery energy control module or hybrid control module
- 5 High-voltage battery module degradation causing abnormal voltage readings
- 6 Water intrusion or contamination in the battery pack connector area
- 7 Aftermarket accessories or improper previous repairs disturbing the sensing harness



How to diagnose and fix it

- 1 Retrieve all stored codes and freeze-frame data with a scan tool capable of accessing hybrid battery modules
- 2 Inspect the voltage sense harness and connectors for chafing, corrosion, or loose pins at the T circuit
- 3 Measure resistance and voltage drop on the T circuit sense wire from the module to the control unit
- 4 Compare the T circuit voltage reading live against the actual module voltage using a multimeter
- 5 Perform a battery pack voltage measurement at the module terminals to rule out a true low-voltage condition
- 6 Check for technical service bulletins or software updates for the battery control module
- 7 Replace the faulty sense harness, module, or control unit as indicated by the diagnostic results

What the T circuit code really means

- A low voltage sense code often results from a poor connection rather than a failed battery module, so inspect connectors before condemning the pack.
- The T circuit designation refers to a specific voltage sensing line within the battery pack, and the same physical fault can set different codes depending on which module is affected.
- Intermittent codes that appear only under vibration or temperature extremes frequently trace to a chafed wire that looks fine during a static inspection.
- A weak 12-volt auxiliary battery can cause erratic hybrid control module behavior and mimic a voltage sense fault, so always verify system voltage first.
- Replacing a battery module without addressing a corroded connector will often cause the code to return shortly after the repair.

Can I keep driving with P0B9C?

Do not continue driving with this code if the hybrid system warning is active or the vehicle has entered limp mode, because the high-voltage battery may be operating outside safe parameters. If the only symptom is a warning light and the car drives normally, limit driving to a short trip to a qualified repair facility and avoid heavy acceleration or high-speed operation.

Tools that help

- Hybrid-capable OBD-II scan tool with live data and module access
- Digital multimeter with high-voltage safety rating
- Insulated hand tools and personal protective equipment for high-voltage work
- Wiring diagram and connector pinout for the specific vehicle
- Battery module voltage measurement adapter or breakout box



Reading P0B9C

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

Often seen with

P0A1F Battery Energy Control Module A Performance · **P0AFA** Hybrid/EV Battery System Voltage Low · **P0B9A** Hybrid/EV Battery Voltage Sense T Circuit · **P0B9B** Hybrid/EV Battery Voltage Sense T Circuit Range/Performance · **P0B9D** Hybrid/EV Battery Voltage Sense T Circuit High

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/p0b9c/>

