



P0B5E

Hybrid/EV Battery Voltage Sense H Circuit

P0B5E indicates that the hybrid or electric vehicle battery pack's voltage sensing circuit for the 'H' segment is reporting a voltage that falls outside the expected range or is inconsistent with other cell voltage readings. The battery energy control module (BECM) monitors this circuit to ensure accurate cell voltage data for safe battery management, and it sets this code when the signal is implausible or missing.

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

Symptoms you may notice

- Illumination of the hybrid/EV battery warning light or service vehicle soon message
- Reduced electric-only range or the vehicle refusing to enter EV mode
- A sudden drop in state of charge or inaccurate battery percentage display
- Possible limp-home mode or reduced power output
- Often no symptoms besides the warning light, especially if the fault is intermittent

Common causes, most likely first

- 1 Faulty voltage sensing wire or connector at the battery pack (open, short, or high resistance)
- 2 Poor terminal tension or corrosion at the BECM harness connector
- 3 Internal failure of the battery energy control module (BECM) voltage sensing circuit
- 4 A weak or failing battery module affecting the voltage sense reading
- 5 Water intrusion or contamination in the battery pack connector
- 6 Software glitch in the BECM requiring recalibration or update

How to diagnose and fix it

- 1 Perform a visual inspection of the battery pack wiring and connectors for damage, corrosion, or loose pins
- 2 Use a scan tool to read live voltage data for all cell groups and compare the 'H' circuit reading to adjacent groups
- 3 Check resistance and continuity of the voltage sense circuit from the battery module to the BECM
- 4 Inspect and clean the BECM connector terminals, then apply dielectric grease if recommended
- 5 If wiring and connectors are good, test the battery module associated with the 'H' circuit for internal faults
- 6 Replace the BECM only after confirming all external circuits are intact and the fault persists
- 7 Clear the code and perform a battery pack relearn or calibration drive cycle as required



What the voltage sense code hides

- A loose or corroded connector pin is far more common than a failed BECM, so always check terminal tension before condemning the module.
- This code can be set by a single weak cell in the 'H' group, which may not trigger a full pack failure but will cause inaccurate state-of-charge readings.
- Intermittent faults often appear only under vibration or temperature extremes, so a wiggle test of the harness while monitoring live data is essential.
- Some vehicles require a battery pack service plug disconnect and a specific reconnect procedure to avoid setting false voltage sense codes after repair.
- The 'H' circuit designation refers to a specific cell group in the pack, not a generic circuit, so wiring diagrams for the exact pack layout are necessary for accurate diagnosis.

Can I keep driving with P0B5E?

You can usually drive the vehicle with this code, but avoid aggressive acceleration or long trips until it is diagnosed, because inaccurate voltage sensing can lead to unexpected power reduction or battery management errors. If the vehicle enters limp mode or shows a significant loss of power, stop driving and seek professional service.

Tools that help

- OBD-II scan tool with hybrid/EV battery data capability
- Digital multimeter with high-resolution DC voltage measurement
- Wiring diagram and connector pinout for the specific vehicle
- Insulation resistance tester (megohmmeter) for high-voltage circuit checks
- Battery pack service plug removal tool (if applicable)

Reading P0B5E

P	Powertrain: engine, transmission and emissions.
0	Generic (SAE) code: it means the same thing on every OBD-II vehicle.
B	Hybrid propulsion.
5E	The exact fault within that area.

Often seen with

P0A9C Hybrid/EV Battery Temperature Sensor A Circuit Range/Perform · **P0AFA** Hybrid/EV Battery System Voltage Low · **P0B24** Hybrid/EV Battery A Voltage Unstable · **P0B5D** Hybrid/EV Battery Voltage Sense G Circuit Intermittent/Errat · **P0B5F** Hybrid/EV Battery Voltage Sense H Circuit Range/Performance



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/p0b5e/>

