



P0B2C

Hybrid/EV Battery C Voltage Unstable

P0B2C indicates that the hybrid or electric vehicle battery control module has detected unstable voltage on battery cell group C, meaning the voltage readings for that section are fluctuating beyond the expected range. The computer monitors cell group voltages during key-on, charging, and driving events, and it sets this code when the variation exceeds calibrated limits for a defined period.

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
- Reduced electric-only range or the engine starting more frequently than usual
- A sudden drop in state of charge or erratic battery gauge behavior
- Often no symptoms besides the warning light, especially if the instability is brief
- Possible reduced power or limp-home mode if the fault escalates
- In some cases, a no-start condition if the battery management system disables the high-voltage system

Common causes, most likely first

- 1 A failing or degraded cell group C within the high-voltage battery pack
- 2 Poor electrical connection at the cell group voltage sensing harness or connector
- 3 Corrosion or damage to the voltage sense wiring for cell group C
- 4 A faulty battery management system (BMS) voltage sensing circuit or module
- 5 Extreme temperature exposure causing temporary voltage instability in the pack
- 6 Software calibration issues in the battery control module requiring an update
- 7 Internal short or imbalance in the cell group that worsens under load



How to diagnose and fix it

- 1 Retrieve all stored codes and freeze-frame data using a scan tool capable of hybrid battery diagnostics
- 2 Inspect the cell group C voltage sensing harness and connectors for corrosion, looseness, or damage
- 3 Perform a battery pack voltage measurement with a high-voltage-rated meter to compare actual cell group voltages
- 4 Check for technical service bulletins (TSBs) or software updates for the battery control module
- 5 Run a battery capacity and balance test as specified by the manufacturer to assess cell group health
- 6 If voltage instability is confirmed within the pack, replace the affected cell group or battery module per OEM procedures
- 7 Clear codes and perform a road test to verify the repair and ensure the code does not return

What a voltage instability code really means

- A loose or corroded voltage sense connector often mimics a failing cell group, so always inspect the harness before condemning the battery pack.
Temperature extremes can cause temporary voltage fluctuations that set this code without any permanent cell damage, so check for recent weather events.
- The code can be set by a software glitch in the battery control module, and a simple reflash may resolve it without hardware replacement.
- Cell group C is a defined section of the pack, but its exact location varies by manufacturer, so consult the specific service information for the vehicle.
Driving with this code may cause the battery management system to limit charging or discharging, leading to reduced performance and potential further damage if ignored.

Can I keep driving with P0B2C?

It is not advisable to continue driving with this code because unstable battery voltage can lead to sudden power loss or further damage to the high-voltage battery. Have the vehicle inspected by a qualified hybrid technician as soon as possible, and avoid aggressive driving or heavy electrical loads until repaired.

Tools that help

- Hybrid-capable scan tool with battery diagnostic functions
- High-voltage-rated digital multimeter
- Insulation tester for high-voltage cables
- Battery pack load tester or capacity tester
- OEM service information and wiring diagrams



Reading P0B2C

- P** Powertrain: engine, transmission and emissions.
- 0** Generic (SAE) code: it means the same thing on every OBD-II vehicle.
- B** Hybrid propulsion.
- 2C** The exact fault within that area.

Often seen with

P0A7F Hybrid/EV Battery Pack Deterioration · **P0AFA** Hybrid/EV Battery System Voltage Low · **P0B24** Hybrid/EV Battery A Voltage Unstable · **P0B2B** Hybrid/EV Battery C Voltage · **P0B2D** Hybrid/EV Battery C Voltage 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/p0b2c/>

