

GENERIC · POWERTRAIN

P0B43

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P0B43

Hybrid/EV Battery Voltage Sense B Circuit High

P0B43 indicates that the hybrid or electric vehicle battery pack's voltage sensing circuit B is reporting a voltage higher than the manufacturer's expected range to the battery energy control module. The computer detects this when the signal wire from the voltage sensor exceeds a calibrated threshold, often due to a wiring fault, sensor failure, or module issue.

SYSTEM

Powertrain

CODE TYPE

Generic (all makes)

SEVERITY

Medium

FIX DIFFICULTY

Professional

AREA

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 hybrid system power or forced limp mode in some vehicles
- Inaccurate state-of-charge or battery gauge readings
- Possible failure to enter or maintain electric-only drive mode

Common causes, most likely first

- 1 Faulty voltage sensing circuit B sensor or harness within the battery pack
- 2 Open or high-resistance connection in the voltage sense wiring
- 3 Short to voltage on the signal circuit
- 4 Failed battery energy control module (BECM) or hybrid control module
- 5 Corroded or damaged connector pins at the battery pack interface
- 6 Internal battery pack fault affecting the sensing circuit reference voltage

How to diagnose and fix it

- 1 Retrieve all stored codes and freeze-frame data using a scan tool capable of hybrid system diagnostics
- 2 Inspect the voltage sensing circuit B wiring and connectors for damage, corrosion, or loose pins
- 3 Measure resistance and voltage on the sense circuit and compare to manufacturer specifications
- 4 Check the sensor reference voltage and ground at the battery pack connector
- 5 Perform a continuity test on the signal wire between the sensor and the control module
- 6 If wiring and sensors test good, follow the manufacturer's diagnostic flow for module testing or replacement
- 7 Clear codes and verify repair with a test drive and live data monitoring of the voltage sense circuit



What most technicians miss on P0B43

- A high voltage reading on a sense circuit often results from a poor ground reference rather than a failed sensor, so check grounds before condemning parts.
- Intermittent codes can be caused by vibration-sensitive connector pins inside the battery pack, which may not show up during static testing.
- Some vehicles set this code when the 12-volt auxiliary battery is weak, causing the hybrid control module to misread sensor signals.
- The code does not always mean the high-voltage battery is failing; the sensing circuit itself is the primary suspect.
- Aftermarket scan tools may not access hybrid battery data properly, leading to misdiagnosis; use an OEM-level tool for accurate live data.

Can I keep driving with P0B43?

You can usually continue driving if the vehicle runs normally, but avoid aggressive acceleration or long trips until the fault is diagnosed. If the hybrid system warning light is accompanied by reduced power or a message to stop safely, pull over and seek professional service.

Tools that help

- Hybrid-capable scan tool with live data
- Digital multimeter with high-voltage safety rating
- Insulation tester (megohmmeter)
- Manufacturer service information and wiring diagrams
- Basic hand tools for connector and panel access

Reading P0B43

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

Often seen with

P0A1F Battery Energy Control Module A Performance · **P0AFA** Hybrid/EV Battery System Voltage Low · **P0B3F** Hybrid/EV Battery Voltage Sense A Circuit Intermittent/Errat · **P0B42** Hybrid/EV Battery Voltage Sense B Circuit Low · **P0B44** Hybrid/EV Battery Voltage Sense B Circuit Intermittent/Errat



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/p0b43/>

