



P0B17

Hybrid/EV Battery Pack Voltage Sense B Circuit High

P0B17 indicates that the hybrid or electric vehicle battery pack voltage sense circuit B is reporting a voltage higher than the expected range to the battery energy control module. The computer detects this when the signal from the voltage sensing circuit exceeds the calibrated threshold for a set time, indicating a fault in the sensing circuit or the battery pack itself.

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 light
- Often no symptoms besides the warning light
- Reduced power or limp mode due to battery management system limiting output
- Inability to start the vehicle or engage the hybrid system
- Inaccurate state of charge or range display
- Possible charging system faults or failure to accept a charge

Common causes, most likely first

- 1 Faulty voltage sense circuit wiring (open, short, or high resistance)
- 2 Poor electrical connection at the battery pack voltage sense connector
- 3 Failed battery pack voltage sensor or sensing module
- 4 Internal battery pack fault causing abnormal voltage readings
- 5 Faulty battery energy control module (BECM) or hybrid control module
- 6 Corrosion or damage to the voltage sense harness
- 7 Software calibration issue in the BECM requiring update



How to diagnose and fix it

- 1 Perform a visual inspection of the voltage sense circuit wiring and connectors for damage or corrosion
- 2 Check for technical service bulletins (TSBs) related to the code and vehicle
- 3 Measure resistance and voltage on the voltage sense circuit B to verify signal integrity
- 4 Compare voltage sense B reading with actual battery pack voltage using a scan tool
- 5 Inspect and test the battery pack voltage sensor and replace if faulty
- 6 Check for loose or damaged pins at the BECM connector
- 7 If all else fails, diagnose the battery pack internal components or BECM

Voltage sense B circuit high: often a wiring issue

- A high voltage sense reading can be caused by a simple loose connector or chafed wire, so always check the harness before condemning the battery pack.
- The code may set intermittently due to vibration or temperature changes, so a wiggle test on the harness while monitoring live data can reveal the fault.
- Replacing the battery pack voltage sensor without verifying the circuit can lead to repeat failures if the underlying wiring problem is not addressed.
- Some vehicles require a battery pack voltage sensor calibration or BECM software update after repairs, which is often overlooked.
- This code can be set by a weak 12-volt auxiliary battery causing unstable reference voltage to the BECM, so check the 12V system first.

Can I keep driving with P0B17?

It is not safe to continue driving with this code because the hybrid system may enter a reduced power mode or shut down unexpectedly, increasing the risk of a crash. Have the vehicle inspected by a qualified technician as soon as possible and avoid high-speed driving or heavy loads.

Tools that help

- OBD-II scan tool with hybrid/EV capability
- Digital multimeter (DMM)
- Wiring diagram and service information
- Insulation tester (megohmmeter)
- Breakout box and test leads



Reading P0B17

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

Often seen with

P0A0D High Voltage System Interlock Circuit A High · **P0AFA** Hybrid/EV Battery System Voltage Low · **P0B15** Hybrid/EV Battery Pack Voltage Sense B Circuit Range/Perform · **P0B16** Hybrid/EV Battery Pack Voltage Sense B Circuit Low · **P0B18** Hybrid/EV Battery Pack Voltage Sense B Circuit Intermittent/

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/p0b17/>

