

GENERIC · POWERTRAIN

P0B65

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P0B65

Hybrid/EV Battery Voltage Sense I Circuit Low

P0B65 indicates that the hybrid or electric vehicle battery pack's voltage sensing circuit for cell group 'I' is reporting a voltage lower than the manufacturer's expected range. The battery energy control module (BECM) monitors this circuit to ensure accurate cell voltage readings, and it sets this code when the signal falls below the calibrated threshold, which can affect battery management and state-of-charge calculations.

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
- Reduced electric-only range or the vehicle refusing to enter EV mode
- Often no symptoms besides the warning light, especially if the voltage discrepancy is small
- Inconsistent state-of-charge readings or sudden drops in indicated battery level
- Possible reduced power output or limp-home mode in some vehicles
- Charging system may stop charging or show a fault

Common causes, most likely first

- 1 Faulty voltage sensing harness or connector at the battery pack, such as corrosion or loose pins
- 2 Open or high-resistance wire in the voltage sense circuit for cell group I
- 3 Failed cell voltage sensor or sensing module integrated into the battery pack
- 4 Internal battery cell degradation causing a genuine low voltage in that group
- 5 Battery energy control module (BECM) software glitch or internal fault
- 6 Poor ground connection for the voltage sensing circuit
- 7 Damage to the battery pack from impact or fluid intrusion affecting the sensing circuit



How to diagnose and fix it

- 1 Inspect the voltage sensing harness and connectors at the battery pack for corrosion, looseness, or damage
- 2 Measure the actual voltage of cell group I with a multimeter and compare it to the BECM reported value
- 3 Check for continuity and resistance in the sense wire from the sensor to the BECM, looking for opens or high resistance
- 4 Verify the sensor ground circuit is clean and tight, and perform a voltage drop test if needed
- 5 If the wiring is good, swap the voltage sensor with a known-good unit (if accessible) to see if the code follows
- 6 Reprogram or update the BECM software if a known calibration issue exists
- 7 If the sensor and wiring are confirmed good, diagnose the battery pack for internal cell problems or replace the BECM as a last resort

Don't replace the battery pack yet

- A low voltage sense reading often comes from a corroded connector or chafed wire rather than a failing battery pack, so always perform a thorough visual and electrical inspection first.
The code can be set by a momentary glitch during extreme temperature swings, and a simple battery pack connector reseal may resolve it without parts replacement.
- Some vehicles require a battery pack service plug disconnect and specific safety procedures before testing the sense circuits, so never probe the high-voltage system without proper training.
- A weak 12-volt auxiliary battery can cause erratic module behavior and set false voltage sense codes, so check the 12V system before diving into the high-voltage pack.
After repairs, the BECM may need a learned value reset or a drive cycle to clear the code, and simply clearing codes without fixing the root cause will lead to a comeback.

Can I keep driving with P0B65?

It is generally safe to drive with this code if the vehicle drives normally, but avoid aggressive acceleration or long trips until diagnosed. If the hybrid system warning light is flashing or the vehicle enters limp mode, stop driving and seek professional service immediately.

Tools that help

- OBD-II scan tool with hybrid/EV capability
- Digital multimeter with high-voltage safety rating
- Insulation tester (megohmmeter) for high-voltage circuit checks
- Battery pack service plug removal tool (if applicable)
- Manufacturer-specific diagnostic software for BECM data



Reading P0B65

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

Often seen with

P0A0D High Voltage System Interlock Circuit A High · **P0AFA** Hybrid/EV Battery System Voltage Low · **P0B64** Hybrid/EV Battery Voltage Sense I Circuit Range/Performance · **P0B66** Hybrid/EV Battery Voltage Sense I Circuit High · **P0B67** Hybrid/EV Battery Voltage Sense I 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/p0b65/>

