

GENERIC · POWERTRAIN

P0B60

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P0B60

Hybrid/EV Battery Voltage Sense H Circuit Low

P0B60 indicates that the hybrid or electric vehicle battery pack's voltage sensing circuit for the 'H' section is reporting a voltage lower than the control module expects, which can be caused by a faulty sensor, damaged wiring, or a problem within the battery pack itself. The computer detects this when the signal from the voltage sense circuit falls below a calibrated threshold for a set period, often triggering the warning light and disabling hybrid functions.

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

Symptoms you may notice

- Illumination of the hybrid system warning light or service vehicle soon message
- Reduced hybrid performance or a switch to limp-home mode
- The vehicle may refuse to enter electric-only mode or may shut down the hybrid system entirely
- Often no symptoms besides the warning light, especially if the fault is intermittent
- Possible decrease in fuel economy due to reduced hybrid assistance
- In some cases, the vehicle may fail to start or run if the battery management system cannot safely monitor the pack

Common causes, most likely first

- 1 A faulty voltage sensing circuit or sensor within the battery pack, specifically for the 'H' section
- 2 Damaged or corroded wiring harness or connector at the battery pack or control module
- 3 High resistance in the voltage sense circuit due to loose terminals or poor splices
- 4 A failing battery management system module or hybrid control module
- 5 Internal battery pack issues such as a weak cell or module affecting the voltage reading
- 6 Water intrusion or contamination in the battery pack connector causing signal degradation
- 7 Software glitch or calibration error in the battery monitoring system



How to diagnose and fix it

- 1 Use a scan tool to retrieve all stored codes and freeze-frame data, then clear the code and test-drive to see if it returns immediately.
- 2 Visually inspect the battery pack connectors and wiring for the 'H' voltage sense circuit for corrosion, damage, or loose pins.
- 3 Measure resistance and voltage drop across the sense circuit from the battery pack to the control module to check for high resistance or open circuits.
- 4 Compare the voltage reading from the 'H' sense circuit with a known-good reference or adjacent sense circuits using a multimeter or oscilloscope.
- 5 If the circuit checks out, test the voltage sensor itself or the battery pack module for proper output according to manufacturer specifications.
- 6 Repair or replace any damaged wiring, connectors, or sensors found during testing, then clear codes and verify the repair.
- 7 If the fault persists, reprogram or replace the battery management system or hybrid control module as needed, following the manufacturer's diagnostic procedures.

Don't overlook the battery pack connector

- A common oversight is assuming the battery pack itself is failing when the actual problem is a corroded or loose connector pin in the voltage sense circuit, which can mimic a failing module.
- The 'H' circuit may refer to a specific section of the battery pack, so technicians should consult the manufacturer's wiring diagram to identify the exact pins and avoid misdiagnosing the wrong circuit.
- Intermittent faults often occur due to vibration or temperature changes affecting a marginal connection, so wiggle tests and freeze-frame data are valuable for reproducing the condition.
- This code can be set by a weak 12-volt auxiliary battery causing low system voltage, which affects the hybrid control module's ability to accurately read sensor inputs.
- After repairs, some vehicles require a battery pack voltage sensor relearn or calibration procedure to prevent the code from returning even when the hardware is fixed.

Can I keep driving with P0B60?

It is generally not safe to continue driving with this code because the hybrid system may disable or enter a reduced-power mode, and a faulty voltage sense circuit can lead to inaccurate battery management and potential safety risks. Have the vehicle diagnosed and repaired promptly, and avoid long trips or heavy loads until the issue is resolved.



Tools that help

- OBD-II scan tool with hybrid/EV capability
- Digital multimeter
- Oscilloscope for signal analysis
- Manufacturer-specific wiring diagrams and service information
- Insulation resistance tester (megohmmeter) for high-voltage circuit checks
- Terminal pick and electrical contact cleaner

Reading P0B60

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

Often seen with

P0A1F Battery Energy Control Module A Performance · **P0AFA** Hybrid/EV Battery System Voltage Low · **P0B5E** Hybrid/EV Battery Voltage Sense H Circuit · **P0B5F** Hybrid/EV Battery Voltage Sense H Circuit Range/Performance · **P0B61** Hybrid/EV Battery Voltage Sense H Circuit High

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/p0b60/>

