



P0B0F

Hybrid/EV Battery Pack Current Sensor B Circuit Range/Performance

P0B0F indicates that the hybrid or electric vehicle battery pack current sensor B circuit is reporting a range or performance problem, meaning the voltage signal from that sensor falls outside the expected limits or behaves erratically. The battery energy control module monitors this sensor to calculate pack current for state-of-charge and power-limit strategies, and it sets the code when the signal is implausible compared with other current sensors or operating conditions.

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 electric-only range or the vehicle refusing to enter EV mode
- A sudden drop in available power or limp-home mode under acceleration
- Inaccurate or fluctuating state-of-charge display on the dashboard
- Often no symptoms besides the warning light, especially if the fault is intermittent

Common causes, most likely first

- 1 Faulty battery pack current sensor B itself, such as an internal short or drift
- 2 Damaged or corroded wiring or connector at the current sensor B harness
- 3 Poor electrical ground connection for the battery current sensor circuit
- 4 High-voltage battery pack degradation causing abnormal current signatures
- 5 Software or calibration issue in the battery energy control module
- 6 Loose or improper installation of the current sensor around the battery cable



How to diagnose and fix it

- 1 Connect a scan tool and record all stored and pending codes, then clear codes and test-drive to see if P0B0F returns
- 2 Visually inspect the current sensor B connector and wiring for corrosion, chafing, or loose pins
- 3 Measure reference voltage and ground at the sensor connector with a multimeter and compare with manufacturer specifications
- 4 Check the sensor mounting and ensure the cable passes cleanly through the sensor core without interference
- 5 Perform a voltage drop test on the sensor ground circuit to rule out high resistance
- 6 If the signal is out of range with good wiring, replace the current sensor B and clear codes
- 7 After repair, verify live data shows plausible current readings and confirm the code does not reset

Before you replace the current sensor

- A weak or failing 12-volt auxiliary battery can cause erratic sensor readings and set this code, so always load-test the battery first.
The current sensor B circuit often shares a ground with other battery-pack sensors, and a single corroded ground point can trigger multiple related codes.
- Intermittent P0B0F codes that appear only under heavy acceleration or regenerative braking often point to a loose sensor mounting rather than a failed sensor.
- Some vehicles require a battery energy control module calibration or software update after sensor replacement, and skipping this step can cause the code to return.
The code does not always mean the sensor is bad; a high-voltage battery with mismatched cell blocks can produce current signatures that the module interprets as a sensor range fault.

Can I keep driving with P0B0F?

You can usually drive the vehicle short distances at reduced power, but avoid aggressive acceleration, heavy regenerative braking, and long trips until the fault is repaired. If the hybrid system warning light flashes or the vehicle enters limp mode, stop safely and arrange a diagnostic scan.

Tools that help

- OBD-II scan tool with hybrid/EV live data capability
- Digital multimeter with min/max recording
- Battery load tester
- Insulated hand tools for high-voltage safety
- Manufacturer service information for wiring diagrams and sensor specifications



Reading P0B0F

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

Often seen with

P0A0D High Voltage System Interlock Circuit A High · **P0AFA** Hybrid/EV Battery System Voltage Low · **P0B0D** Electric/Auxiliary Transmission Fluid Pump Motor Control Mod · **P0B0E** Hybrid/EV Battery Pack Current Sensor B Circuit · **P0B10** Hybrid/EV Battery Pack Current Sensor B Circuit 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/p0b0f/>

