



P0AC6

Hybrid/EV Battery Temperature Sensor B Circuit Range/Performance

P0AC6 indicates that the hybrid or electric vehicle battery temperature sensor B circuit is reporting a range or performance fault, meaning the voltage signal from that sensor is outside the expected range for the current conditions or is not changing as the battery temperature changes. The computer has detected that the sensor's output does not correlate with other temperature sensors or with the battery's operating state, which can affect battery management and charging strategy.

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

Symptoms you may notice

- Illumination of the check engine light or hybrid system warning light
- Reduced hybrid system power or forced limp mode
- Battery cooling fan running excessively or not at all
- Inaccurate battery temperature display on the dash or energy monitor
- Often no symptoms besides the warning light
- Possible reduced electric-only range or charging issues

Common causes, most likely first

- 1 Faulty battery temperature sensor B (internal open or short)
- 2 Damaged or corroded wiring harness to the sensor
- 3 Loose or contaminated sensor connector
- 4 High-voltage battery pack overheating or cooling system malfunction
- 5 Failed battery energy control module (BECM) or hybrid control module
- 6 Software calibration issue in the battery management system



How to diagnose and fix it

- 1 Use a scan tool to read live data from all battery temperature sensors and compare readings
- 2 Visually inspect sensor B wiring and connector for damage, corrosion, or loose pins
- 3 Perform a resistance test on the sensor and compare to manufacturer specifications
- 4 Check the battery cooling system operation, including fans and ducts
- 5 Verify reference voltage and ground at the sensor connector
- 6 If wiring and sensor test good, follow the manufacturer's diagnostic flow for the BECM or hybrid control module
- 7 Replace the faulty sensor or repair wiring as needed, then clear codes and verify repair

Before you replace the battery temperature sensor

- A common mistake is replacing the sensor when the real problem is a chafed wire in the harness near the battery pack, so always perform a wiggle test and continuity check first.
- The code can be set by a cooling system fault that causes the battery to overheat, making sensor B read out of range even though the sensor itself is fine.
- On many hybrids, battery temperature sensor B is part of a harness that also carries other sensor signals, so a single damaged wire can trigger multiple temperature codes.
- Incorrect battery temperature readings can cause the hybrid system to disable fast charging or limit power, but the car may still drive normally in some cases.
- Always check for technical service bulletins (TSBs) for your specific model, as some manufacturers have software updates that address false temperature sensor codes.

Can I keep driving with P0AC6?

It is generally safe to drive with this code as long as the hybrid system is not in limp mode and the battery temperature gauge is not showing extreme overheating. Avoid aggressive driving or heavy electrical loads, and have the vehicle diagnosed promptly to prevent potential battery damage.

Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Wire repair kit
- Manufacturer service information for sensor specifications
- Infrared thermometer (optional for verifying battery temperature)



Reading P0AC6

- P** Powertrain: engine, transmission and emissions.
- 0** Generic (SAE) code: it means the same thing on every OBD-II vehicle.
- A** Hybrid propulsion.
- C6** The exact fault within that area.

Often seen with

P0A9C Hybrid/EV Battery Temperature Sensor A Circuit Range/Perform · **P0AC5** Hybrid/EV Battery Temperature Sensor B Circuit · **P0AC7** Hybrid/EV Battery Temperature Sensor B Circuit Low · **P0AC8** Hybrid/EV Battery Temperature Sensor B Circuit High · **P0AFA** Hybrid/EV Battery System Voltage 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/p0ac6/>

