

GENERIC · POWERTRAIN

P0AC8

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P0AC8

Hybrid/EV Battery Temperature Sensor B Circuit High

P0AC8 indicates that the hybrid or electric vehicle battery temperature sensor B circuit is reporting a voltage higher than the manufacturer's expected range, which the battery energy control module interprets as an open circuit or a sensor signal that is out of bounds. The computer has detected a high signal voltage on the sensor B circuit, meaning the sensor is not properly reporting battery temperature.

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

Symptoms you may notice

- Illumination of the check engine light or hybrid system warning light, often with no other noticeable symptoms
- Reduced hybrid system performance or a forced limp mode that limits power output
- The vehicle may refuse to enter electric-only mode or may disable the hybrid system entirely
- Inaccurate battery temperature readings on a scan tool, often showing a fixed high or low value
- In some cases, the cooling fan for the high-voltage battery may run continuously or not at all

Common causes, most likely first

- 1 Open or high-resistance wiring in the sensor B circuit, such as a broken wire or corroded connector
- 2 Failed battery temperature sensor B itself, often due to internal open circuit
- 3 Poor electrical connection at the sensor or at the battery energy control module harness
- 4 Damaged or shorted harness due to chafing, rodent damage, or heat exposure
- 5 Faulty battery energy control module, though this is less common
- 6 High-voltage battery pack overheating or a related cooling system fault that affects sensor readings



How to diagnose and fix it

- 1 Use a scan tool to read the battery temperature sensor B voltage and compare it to ambient temperature and other sensor readings to confirm the fault
- 2 Visually inspect the sensor B wiring and connector for damage, corrosion, or loose pins, and repair as needed
- 3 Disconnect the sensor and measure its resistance with a multimeter, comparing to the manufacturer's specification for the current temperature
- 4 Check for continuity and short circuits in the wiring between the sensor and the battery energy control module, repairing any opens or shorts
- 5 If the sensor is faulty, replace it according to the service procedure, which may require high-voltage battery pack disassembly on some models
- 6 Clear the diagnostic trouble codes and perform a road test to verify the repair, ensuring the sensor B reading matches expected values
- 7 If the fault persists after sensor and wiring checks, diagnose the battery energy control module and replace if necessary

When the sensor is not the culprit

- A common misdiagnosis is replacing the battery temperature sensor when the real problem is a corroded connector or a chafed wire in the harness, so always perform a voltage drop test on the circuit before condemning the sensor.
- The code can be set by a high-voltage battery that is genuinely overheating due to a failed cooling fan or blocked cooling ducts, so check the battery cooling system operation before assuming an electrical fault.
- On some vehicles, the battery temperature sensor is part of a combined harness that also includes voltage sensing wires, and a fault in that shared harness can trigger multiple codes including P0AC8.
- Intermittent high circuit codes often occur only when the vehicle is cold or after a long drive, so a wiggle test of the harness while monitoring sensor voltage can reveal a loose connection that a static test misses.
- The battery energy control module may set this code if the sensor signal is within range but implausible compared to other temperature sensors, so comparing all sensor readings is essential before replacing parts.

Can I keep driving with P0AC8?

You can usually continue driving to a repair shop, but avoid heavy acceleration or long trips because the hybrid system may enter a reduced-power mode and battery cooling could be compromised. If the hybrid system warning light is on or the vehicle feels sluggish, schedule service soon to prevent further battery damage.



Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Wiring diagram for the specific vehicle
- Insulation piercing probes or back probe pins
- Heat gun or hair dryer for temperature simulation (optional)

Reading P0AC8

P	Powertrain: engine, transmission and emissions.
0	Generic (SAE) code: it means the same thing on every OBD-II vehicle.
A	Hybrid propulsion.
C8	The exact fault within that area.

Often seen with

P0A0D High Voltage System Interlock Circuit A High · **P0AC6** Hybrid/EV Battery Temperature Sensor B Circuit Range/Perform · **P0AC7** Hybrid/EV Battery Temperature Sensor B Circuit Low · **P0AC9** Hybrid/EV Battery Temperature Sensor B Circuit Intermittent/ · **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/p0ac8/>

