

GENERIC · POWERTRAIN

P0C98

OBD-II TROUBLE CODE

P0C98

Hybrid/EV Battery Temperature Sensor L Range/Performance

P0C98 indicates that the hybrid or electric vehicle battery pack's temperature sensor 'L' is reporting a signal that falls outside the expected range or performance criteria, so the battery energy control module cannot trust that sensor's reading. The computer has detected either an implausible voltage, an out-of-range resistance, or a correlation error between sensor L and the other battery temperature sensors.

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 forced engine operation in a plug-in hybrid
- A noticeable drop in available battery power or acceleration
- The battery cooling fan running constantly or not at all
- Often no symptoms besides the warning light, especially in mild weather
- In rare cases, the vehicle may refuse to start or shift into gear

Common causes, most likely first

- 1 Faulty battery temperature sensor L itself, due to age, vibration, or thermal cycling
- 2 Damaged or corroded wiring or connector at sensor L or along its harness
- 3 Open or short circuit in the sensor signal or return circuit
- 4 High-voltage battery pack overheating from a failed cooling fan or blocked duct
- 5 Battery energy control module software needing an update or recalibration
- 6 Internal fault in the battery energy control module affecting sensor reference voltage
- 7 Moisture intrusion into the battery pack causing intermittent sensor readings



How to diagnose and fix it

- 1 Connect a scan tool and record all battery temperature sensor readings to see if sensor L is stuck, erratic, or offset from the others
- 2 Visually inspect sensor L, its connector, and the harness for damage, corrosion, or loose pins
- 3 Measure the resistance of sensor L and compare it to the expected value for the ambient temperature
- 4 Check the sensor signal circuit for shorts to ground or power and for excessive resistance
- 5 Verify the battery cooling system operates correctly and that the pack is not genuinely overheating
- 6 If wiring and cooling are good, replace sensor L and clear the code
- 7 After repair, perform a battery pack temperature sensor learn or calibration procedure if required by the manufacturer

Why sensor L often is not the real culprit

- A weak or failing 12-volt auxiliary battery can cause erratic sensor readings and set this code without any fault in the high-voltage pack.
Corrosion inside the battery pack connector is a common cause that a simple wiggle test will not reveal; the pins must be inspected under good light.
- The code can be set by a genuine overheating event from a blocked cooling duct or failed fan, so always verify pack temperature before condemning the sensor.
- Some vehicles require a battery energy control module software update to correct a false sensor L range error before any parts are replaced.

Sensor L is one of several pack temperature sensors, and a single skewed sensor can make the whole pack appear to have a temperature correlation fault.

Can I keep driving with P0C98?

You can usually drive the vehicle short distances at moderate speed to a repair shop, but avoid heavy acceleration, sustained high speeds, and DC fast charging until the fault is diagnosed. If the hybrid system warning is accompanied by a red battery temperature message or reduced power, stop driving and have the vehicle towed.

Tools that help

- OBD-II scan tool with hybrid battery data capability
- Digital multimeter with temperature probe
- Manufacturer service information for sensor resistance values
- Insulated hand tools for high-voltage safety
- Battery pack cooling system inspection mirror and flashlight



Reading P0C98

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

Often seen with

P0A9C Hybrid/EV Battery Temperature Sensor A Circuit Range/Perform · **P0AC4** Hybrid/EV Powertrain Control Module Requested MIL Illuminati · **P0AFA** Hybrid/EV Battery System Voltage Low · **P0C97** Hybrid/EV Battery Temperature Sensor L Circuit · **P0C99** Hybrid/EV Battery Temperature Sensor L 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/p0c98/>

