

GENERIC · POWERTRAIN

P0D24

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P0D24

Battery Charger A Temperature Too High

P0D24 indicates that the vehicle's control module has detected an excessively high temperature in the battery charger designated as 'A', which is typically the onboard charging system for the high-voltage battery in hybrid and electric vehicles. The computer sets this code when the charger's internal temperature sensor reports a value above the safe operating threshold, often due to a cooling problem, overloading, or a faulty sensor.

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 a dedicated charging system warning light
- Reduced charging speed or the vehicle refusing to charge altogether
- A message on the dashboard indicating the charger is too hot or charging is unavailable
- Audible cooling fan running excessively or not at all after a charging session
- Often no symptoms besides the warning light, especially if the fault is intermittent
- Possible smell of overheating electronics or a hot surface near the charge port

Common causes, most likely first

- Blocked or failed cooling fan or coolant pump for the charger assembly
- Low coolant level or air pockets in the charger cooling circuit
- Faulty temperature sensor inside the charger unit reporting false high readings
- Restricted airflow around the charger due to debris, mud, or damaged ducting
- Charger operating under excessive load for extended periods, such as repeated fast charging
- Internal fault in the charger module causing abnormal heat generation
- Damaged wiring or connector at the temperature sensor or charger control circuit



How to diagnose and fix it

- 1 Inspect the charger cooling system for obvious blockages, debris, or disconnected ducts and clean as needed
- 2 Check coolant level and condition in the charger cooling loop, topping up or bleeding air if low
- 3 Test the charger cooling fan and pump for proper operation, including power and ground circuits
- 4 Measure the resistance of the charger temperature sensor and compare to specifications to rule out a false reading
- 5 Inspect the charger wiring harness and connectors for corrosion, chafing, or loose pins
- 6 Use a scan tool to monitor charger temperature live data during a charging session to confirm overheating
- 7 If all external checks pass, follow the manufacturer's diagnostic flow for internal charger faults, which may require module replacement

Charger overheating is not always the charger's fault

- A common oversight is assuming the charger itself is defective when the real problem is a clogged cooling fan or a failed coolant pump that is easy to replace.
The temperature sensor can fail in a way that reports high temperatures even when the charger is cool, leading to unnecessary charger replacement if live data is not compared to actual measured temperatures.
- Repeated fast charging in hot weather can trigger this code temporarily, and the code may clear after the charger cools down without any repair needed.
- Some vehicles share the charger cooling circuit with the inverter or motor cooling loop, so a fault elsewhere in that circuit can cause the charger to overheat.
A weak 12-volt battery or poor ground connection can cause erratic sensor readings that mimic a high-temperature condition, so always verify power and ground integrity first.

Can I keep driving with P0D24?

You can usually continue driving the vehicle because the high-voltage battery is not being charged when the code is active, but avoid attempting to charge until the fault is addressed. Do not ignore the warning, as continued charging with an overheating charger can lead to further damage or a safety hazard.

Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Infrared thermometer
- Coolant refractometer or hydrometer
- Basic hand tools for inspecting cooling system components



Reading P0D24

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

Often seen with

P0C1A Drive Motor B Torque Delivered Performance · **P0C1B** Electric/Auxiliary Transmission Fluid Pump Control Module In · **P0D23** Battery Charger A Output Shorted · **P0D25** Battery Charger System Precharge Time Too Short · **P0D26** Battery Charger System Precharge Time Too Long

See it working

Watch the animated explainer [How Variable Valve Timing Works: Cam Phaser and VVT Solenoid](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p0d24/>

