

GENERIC · POWERTRAIN

P0D8F

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P0D8F

Battery Charger A Cooling System Performance

P0D8F indicates that the powertrain control module has detected a performance fault in the cooling system dedicated to battery charger A, which is typically the onboard charging module on electrified vehicles. The computer monitors temperature sensors and cooling circuit operation, and it sets this code when the charger's cooling system fails to maintain expected temperatures or respond as commanded.

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 a dedicated charging system warning light
- Reduced charging speed or the vehicle refusing to charge at full rate
- Charger overheating, sometimes accompanied by a burning smell or hot component
- In extreme cases, the vehicle may disable charging entirely to protect the charger
- Often no symptoms besides the warning light, especially if the fault is intermittent

Common causes, most likely first

- 1 Low coolant level or trapped air in the charger cooling circuit
- 2 Faulty coolant pump dedicated to the charger loop
- 3 Blocked or restricted coolant passages in the charger cooling jacket or hoses
- 4 Failed coolant temperature sensor or its wiring
- 5 Sticking or failed thermostat in the charger cooling circuit
- 6 Debris or scale buildup inside the charger cooling system
- 7 Software fault in the charging control module causing false monitoring

How to diagnose and fix it

- 1 Check coolant level and condition in the charger cooling reservoir and top up if low
- 2 Inspect the charger coolant pump for operation and verify it runs when commanded
- 3 Scan live data for charger coolant temperature sensors and compare readings to actual temperatures
- 4 Pressure-test the charger cooling circuit to rule out leaks or air ingress
- 5 Flush and bleed the charger cooling system to remove air pockets and debris
- 6 Test the coolant temperature sensor and its wiring for resistance and continuity
- 7 If all hardware checks pass, check for software updates or reprogram the charging control module

Charger cooling faults often misdiagnosed

- A common oversight is assuming the engine cooling system also serves the charger; many electrified vehicles have a separate low-temperature loop that needs its own bleeding procedure.
- The code can be set by a simple low coolant level that never causes an overtemperature event, so always verify level before condemning the pump.
- Intermittent faults often trace to a failing coolant pump that works when cold but seizes when hot, which static tests may miss.
- Some vehicles use a shared coolant reservoir between the charger and other systems, so a leak elsewhere can trigger this code without any charger component being faulty.
- After repairs, the cooling circuit must be vacuum-filled or bled according to the manufacturer's procedure; trapped air will re-trigger the code even with new parts.

Can I keep driving with P0D8F?

You can usually drive the vehicle, but avoid high-power charging and long trips until the fault is repaired, because continued operation may cause charger overheating and eventual charging failure. If the vehicle displays a stop-driving warning or smells hot, pull over and shut it down.

Tools that help

- OBD-II scan tool with live data capability
- Coolant refractometer or hydrometer
- Vacuum coolant refill kit
- Digital multimeter
- Pressure tester for cooling systems
- Infrared thermometer

Reading P0D8F

P	Powertrain: engine, transmission and emissions.
0	Generic (SAE) code: it means the same thing on every OBD-II vehicle.
D	Hybrid propulsion.
8F	The exact fault within that area.

Often seen with

P0A0F Engine Failed to Start · **P0C00** Drive Motor A Current Low · **P0D8E** Battery Charger Coupler Status Indicator Control Circuit C H · **P0D90** Battery Charger Input Frequency Incorrect · **P0D91** Battery Charger Coupler Lock Control Circuit/Open



See it working

Watch the animated explainer [How a Boxer Engine Works: Flat Engine Cutaway](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p0d8f/>

