



P0CFF

Hybrid/EV Battery Pack Coolant Pump A Stuck/Stalled

P0CFF means the hybrid or electric vehicle battery pack coolant pump A has been commanded to run but the control module sees no expected response, indicating the pump is stuck or stalled. The computer typically detects this by comparing the pump's commanded speed or current draw against feedback from the pump or a lack of expected temperature change in the battery coolant loop.

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

Symptoms you may notice

- Illuminated check engine light or hybrid system warning light, often with no other noticeable symptoms
- Reduced electric-only range or forced engine operation due to battery temperature management
- A warning message on the dash indicating battery cooling or hybrid system fault
- Possible reduced charging rate or charging disabled in some vehicles
- Overheating of the high-voltage battery pack in severe cases, leading to power reduction
- Audible pump noise or lack of pump noise when the vehicle is in ready mode

Common causes, most likely first

- 1 Coolant pump A electrical connector damaged, corroded, or disconnected
- 2 Coolant pump A motor seized or internally shorted, causing a stall condition
- 3 Blown fuse or damaged wiring in the pump power or ground circuit
- 4 Low or contaminated battery coolant level causing pump cavitation and stall
- 5 Failed pump control module or driver circuit inside the hybrid control unit
- 6 Air lock in the battery coolant loop preventing proper pump priming
- 7 Debris or foreign material lodged in the pump impeller



How to diagnose and fix it

- 1 Check battery coolant level and condition; top off or flush if contaminated
- 2 Inspect the coolant pump A electrical connector and harness for damage or corrosion
- 3 Test the pump power and ground circuits with a multimeter and verify fuse integrity
- 4 Command the pump on with a scan tool and listen for operation; compare commanded versus actual pump speed if data is available
- 5 Perform a voltage drop test on the pump feed and ground circuits under load
- 6 If electrical checks pass, remove the pump and inspect the impeller for binding or debris
- 7 Replace the coolant pump A if it fails electrical or mechanical testing, then bleed the cooling system and clear codes

What a stuck coolant pump really means

- A pump can be electrically healthy but mechanically stuck due to debris or corrosion, so resistance checks alone may not reveal the fault.
Low coolant level is a common cause that mimics a failed pump; always verify the reservoir is at the correct level before condemning the pump.
- Some vehicles set this code when the pump runs but the battery coolant temperature does not drop as expected, pointing to a flow restriction rather than a dead pump.
- Air trapped in the battery coolant loop after a repair can cause the pump to stall and set P0CFF even when all components are good.
The code can be stored intermittently if the pump only stalls under certain temperature or load conditions, so a road test with live data is often necessary.

Can I keep driving with P0CFF?

Do not continue driving with this code if the hybrid or EV battery temperature warning is active, as overheating can damage the high-voltage battery. If only the check engine light is on and the vehicle drives normally, limit driving to a short distance to a repair facility and avoid heavy acceleration or fast charging.

Tools that help

- Scan tool with hybrid/EV capability and bidirectional pump control
- Digital multimeter with voltage drop and resistance measurement
- Coolant refractometer or tester
- Basic hand tools for connector and pump access
- Vacuum coolant refill tool to bleed the system



Reading P0CFF

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

Often seen with

P0A0D High Voltage System Interlock Circuit A High · **P0A93** Inverter A Cooling System Performance · **P0C00** Drive Motor A Current Low · **P0C01** Drive Motor A Current High

See it working

Watch the animated explainer [Engine Cooling System Trainer: How Engines Stay Cool](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p0cff/>

