

GENERIC · POWERTRAIN

P2C72

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P2C72

Hybrid/EV Electronics Cooling System Performance

The hybrid or electric vehicle's electronics cooling system is not performing as expected, meaning the computer has detected that the coolant loop dedicated to power electronics is not maintaining the proper temperature or flow. This code is set when the system's monitored performance falls outside the expected range, often due to a failing pump, restricted flow, or sensor error.

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

Symptoms you may notice

- Illumination of the hybrid/EV system warning light or service vehicle soon message
- Reduced power output or limp mode to protect electronics from overheating
- Audible cooling fan running excessively or at high speed
- Overheating smell or steam from the electronics coolant reservoir
- Often no symptoms besides the warning light, especially in early stages

Common causes, most likely first

- 1 Low coolant level due to a leak in the electronics cooling loop
- 2 Failed electric coolant pump or its control circuit
- 3 Restricted coolant flow from a clogged radiator, hose, or heat exchanger
- 4 Faulty coolant temperature sensor or its wiring
- 5 Air trapped in the cooling system after service or repair
- 6 Degraded coolant or incorrect coolant mixture
- 7 Control module software issue or communication fault

How to diagnose and fix it

- 1 Check coolant level and inspect for leaks in the electronics cooling circuit
- 2 Scan all modules for related codes and verify live data from the coolant temperature sensor
- 3 Test the electric coolant pump operation and verify power and ground at the pump connector
- 4 Perform a coolant flow test to confirm circulation and check for restrictions
- 5 Bleed the cooling system to remove trapped air and refill with specified coolant
- 6 Replace the coolant pump if it fails functional testing
- 7 Reprogram or replace the control module if software or internal faults are confirmed



Before replacing the electronics coolant pump

- A low coolant level from a slow leak is the most common cause, yet many technicians replace the pump first without checking for leaks.
- The electronics cooling system is separate from the engine cooling system on many hybrids, so a problem here may not affect engine temperature.
- Trapped air after a coolant service can mimic a failed pump by causing poor flow and erratic temperature readings.
- A faulty temperature sensor can set this code even when the cooling system is working perfectly, so always verify sensor accuracy.
- Some vehicles require a specific bleed procedure using a scan tool to activate the pump and open valves, which is often overlooked.

Can I keep driving with P2C72?

If the warning light is on but the vehicle drives normally, you can drive short distances to a repair shop, but avoid heavy acceleration or long trips. If the vehicle enters limp mode or you see steam or smell coolant, stop driving and have it towed to prevent damage to expensive electronics.

Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Coolant pressure tester
- Hose clamp pliers
- Vacuum refill tool

Reading P2C72

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

Often seen with

P0A93 Inverter A Cooling System Performance · **P0C73** Hybrid Battery Pack Cooling Pump Performance · **P2C73** Active Grille Air Shutter C Stuck On · **P2C74** Active Grille Air Shutter C Control Circuit Range/Performance



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/p2c72/>

