



P0C72

Hybrid/EV Battery Temperature Sensor E/F Correlation

P0C72 indicates that the hybrid or electric vehicle battery pack's temperature sensors E and F are reporting values that do not correlate with each other, meaning the battery energy control module sees a disagreement between two sensors that should track closely. The computer compares the two readings under conditions where they should be nearly identical and flags the code when the difference exceeds a calibrated threshold for a set time.

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
- Often no symptoms besides the warning light, especially in mild ambient temperatures
- Reduced electric-only range or forced engine operation if the module limits battery power
- Inconsistent battery cooling fan operation or failure to enter full electric mode
- Possible charging interruption or refusal to start in extreme hot or cold conditions

Common causes, most likely first

- 1 Faulty battery temperature sensor E or F, or a sensor that has drifted out of calibration
- 2 Damaged or corroded wiring or connector terminals in the sensor circuit, often from heat or vibration
- 3 High-voltage battery pack cooling system problem causing uneven cell temperatures that the sensors correctly report
- 4 Battery energy control module software or internal fault misinterpreting valid sensor signals
- 5 Physical damage to the battery pack or sensor mounting from impact or debris
- 6 Moisture intrusion into the battery pack or sensor connector causing intermittent signal errors



How to diagnose and fix it

- 1 Use a scan tool to record freeze-frame data and compare live temperature readings from sensors E and F under the same conditions
- 2 Inspect the battery pack wiring harness and sensor connectors for corrosion, chafing, or loose pins, and repair as needed
- 3 Check the high-voltage battery cooling system operation, including fan and ducting, to rule out uneven pack temperatures
- 4 Perform a resistance and voltage-drop test on the sensor circuits to confirm sensor integrity and wiring continuity
- 5 If a sensor is out of range or skewed, replace the affected battery temperature sensor according to service information
- 6 Verify the repair by clearing codes and running a road test or battery conditioning cycle to confirm correlation returns
- 7 If the fault persists after sensor and wiring checks, update or reprogram the battery energy control module and re-evaluate

When sensors disagree but the battery is fine

- A common misdiagnosis is replacing the battery pack when only one temperature sensor has drifted, so always compare live sensor E and F readings before condemning the pack.
- Uneven battery cooling from a blocked duct or failing fan can set this correlation code even though both sensors are working correctly, so inspect the cooling system first.
- Intermittent connector fretting at the battery pack harness is a frequent hidden cause, and the code may only appear during temperature swings or after rough road driving.
- This code does not always mean a sensor has failed; a software calibration issue in the battery energy control module can cause valid sensors to appear out of correlation.
- Because the sensors are inside the high-voltage battery assembly, any diagnostic step beyond connector inspection requires high-voltage safety training and proper isolation procedures.

Can I keep driving with P0C72?

The vehicle is generally safe to drive to a service location because the fault affects battery temperature monitoring rather than immediate propulsion, but avoid aggressive driving, rapid charging, and extreme temperatures until it is repaired. If the hybrid system warning light flashes or the vehicle limits power, stop and have it towed to prevent further battery stress.



Tools that help

- OBD-II scan tool with hybrid battery live data capability
- Digital multimeter with temperature sensor testing functions
- Service information for battery pack connector and sensor locations
- Insulated high-voltage safety gloves and isolation equipment
- Battery cooling system inspection tools such as a infrared thermometer

Reading P0C72

P	Powertrain: engine, transmission and emissions.
0	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

P0A9C Hybrid/EV Battery Temperature Sensor A Circuit Range/Perform · **P0AFA** Hybrid/EV Battery System Voltage Low · **P0C70** Hybrid/EV Battery Temperature Sensor C/D Correlation · **P0C71** Hybrid/EV Battery Temperature Sensor D/E Correlation · **P0C73** Hybrid Battery Pack Cooling Pump 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/p0c72/>

