

GENERIC · POWERTRAIN

P0CEE

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P0CEE

Hybrid/EV Electronics Coolant Temperature Sensor A Circuit

P0CEE indicates that the hybrid or electric vehicle's electronics coolant temperature sensor A circuit is reporting a value outside the expected range, which the control module uses to protect the power electronics from overheating. The computer has detected an abnormal voltage or signal from this sensor, meaning it cannot reliably monitor the coolant temperature that cools the inverter, converter, or other high-voltage electronics.

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 hybrid system warning light.
- Reduced power output or limp mode as the vehicle limits current to protect electronics.
- Overheating warnings on the dashboard, sometimes accompanied by a message to stop safely.
- The hybrid or EV system may refuse to start or engage, leaving the vehicle inoperable.
- Often no symptoms besides the warning light, especially if the fault is intermittent.
- Possible cooling fan running continuously or at high speed due to default strategies.

Common causes, most likely first

- 1 Faulty electronics coolant temperature sensor A, such as an open or shorted internal element.
- 2 Damaged or corroded wiring or connector at the sensor or control module.
- 3 Coolant level low or air pockets in the electronics cooling system causing erratic sensor readings.
- 4 Failed thermostat or coolant pump in the electronics cooling loop, leading to abnormal temperature behavior.
- 5 Control module software issue or internal fault in the sensor input circuit.
- 6 Contamination or degradation of the coolant affecting sensor accuracy.



How to diagnose and fix it

- 1 Perform a visual inspection of the sensor, connector, and wiring for damage, corrosion, or loose pins.
- 2 Check the electronics coolant level and condition, and pressure test the cooling system for leaks.
- 3 Use a scan tool to read live sensor data and compare it to actual coolant temperature with an infrared thermometer.
- 4 Measure the sensor's resistance and voltage according to the manufacturer's specifications to confirm its condition.
- 5 Inspect the cooling system for proper operation, including the coolant pump and thermostat, if the sensor checks out.
- 6 Repair or replace damaged wiring or connectors as needed, then clear the code and verify the repair.
- 7 If the sensor and wiring are good, follow the manufacturer's diagnostic flow for the control module, which may require reprogramming or replacement.

Coolant Sensor Faults That Mislead Technicians

- A low coolant level or trapped air in the electronics cooling system can cause the sensor to read erratically and set P0CEE, even when the sensor itself is fine.
- The sensor's signal is often shared with other systems, so a fault in the reference voltage or ground circuit can trigger this code without any issue in the sensor.
- In some vehicles, the electronics coolant temperature sensor is integrated into a larger assembly, such as the coolant pump or inverter, making replacement more involved than a simple sensor swap.
- Intermittent faults from vibration or heat can set P0CEE without leaving permanent symptoms, so always check for loose connectors and chafed wiring before condemning the sensor.
- The code does not always mean the sensor has failed; a cooling system performance issue that causes the temperature to rise faster than expected can also set this code.

Can I keep driving with P0CEE?

It is not advisable to continue driving with P0CEE because the vehicle may enter a reduced power mode or shut down to protect the electronics, potentially leaving you stranded. If the warning light is on, drive only to a safe location or a repair shop, and avoid heavy acceleration or long trips until the fault is diagnosed.

Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Infrared thermometer
- Coolant refractometer or test strips
- Basic hand tools for connector and sensor access



Reading P0CEE

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

Often seen with

P0CEA Hybrid/EV Electronics Coolant Pump A Performance · **P0CEB** Hybrid/EV Electronics Coolant Pump A Control Circuit Low · **P0CEC** Hybrid/EV Electronics Coolant Pump A Control Circuit High · **P0CED** Hybrid/EV Electronics Coolant Pump A Enable Circuit · **P0CEF** Hybrid/EV Electronics Coolant Temperature Sensor A Circuit R

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/p0cee/>

