

GENERIC · POWERTRAIN

P0E18

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P0E18

Hybrid/EV Battery Pack Coolant Heater B Control Circuit High

P0E18 means the hybrid or electric vehicle battery pack coolant heater control circuit B is reporting a high-voltage condition, which the battery energy control module interprets as a short to power or an open control path. The computer has detected that the control wire for heater B is sitting at a voltage above the expected range when the heater should be off or modulated, so it sets this code and may disable the coolant heater to protect the pack.

SYSTEM

Powertrain

CODE TYPE

Generic (all makes)

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

Hybrid propulsion

Symptoms you may notice

- Illumination of the hybrid system warning light or service vehicle soon message on the dash
- Often no symptoms besides the warning light, especially in mild weather when the coolant heater is not needed
- Reduced or disabled cabin heating in cold ambient temperatures because the pack coolant heater is inhibited
- Possible reduced electric driving range or slower battery warm-up in freezing conditions
- In some vehicles, a message that the high-voltage battery is too cold to accept a charge or deliver full power
- Intermittent operation of the coolant heater that may work briefly then shut off as the module detects the fault

Common causes, most likely first

- 1 A short to voltage on the heater B control circuit, often from chafed wiring against a sharp bracket or heat shield
- 2 A failed coolant heater B element or internal control module that pulls the control line high
- 3 Corrosion or water intrusion at the heater B connector, causing a high-resistance or bridged terminal
- 4 A faulty battery energy control module or heater control driver internally shorted high
- 5 A poor ground connection for the heater B circuit that raises the reference voltage seen by the module
- 6 Aftermarket accessories or previous repairs that tapped into the heater control wiring incorrectly



How to diagnose and fix it

- 1 Scan all modules and record freeze-frame data for P0E18, then clear the code and verify whether it returns immediately or only under specific temperature conditions
- 2 Inspect the coolant heater B connector and harness for corrosion, water intrusion, chafing, and loose pins, repairing any damaged terminals
- 3 Measure voltage on the heater B control circuit with the key on and the heater commanded off, comparing against the manufacturer's expected value to confirm a short to power
- 4 Disconnect the heater B connector and recheck the control circuit voltage to isolate whether the short is in the harness or inside the heater assembly
- 5 Perform a resistance and continuity check on the heater B element and its ground circuit to rule out an open or shorted heater
- 6 If the harness and heater test good, substitute a known-good heater control module or battery energy control module only after confirming powers and grounds
- 7 After repair, clear codes, run the coolant heater through a commanded activation test, and verify the control circuit voltage stays within range with no recurring P0E18

What the coolant heater code hides

- A high control circuit code is frequently set by a heater that has failed internally and is back-feeding voltage onto the control line, so replacing the module first often wastes money.
- Water intrusion into the heater connector is a common cause on vehicles that see road spray or car washes, and the corrosion can be hidden inside the boot until the connector is opened.
- The coolant heater may only be commanded on below a specific ambient temperature, so a P0E18 can sit pending for months and appear only during the first cold snap.
- A weak or corroded ground for the heater circuit can raise the control voltage enough to set this code without any short to power existing at all.
- Some vehicles set P0E18 as a companion code when the high-voltage battery coolant level is low or the coolant pump has failed, so always check the coolant system before chasing wiring.

Can I keep driving with P0E18?

You can generally drive the vehicle with P0E18 because the module disables the coolant heater to protect the pack, but avoid long trips in freezing weather where the battery cannot warm properly. Do not ignore the light if you also see reduced power or charging warnings, and have the circuit inspected before the next cold season.



Tools that help

- OBD-II scan tool with hybrid module access and bidirectional control
- Digital multimeter with voltage and resistance ranges
- Back probe pins or breakout leads for connector testing
- Manufacturer service information for control circuit voltage specifications
- Insulated hand tools and terminal removal tools for connector repair

Reading P0E18

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

Often seen with

P0A0D High Voltage System Interlock Circuit A High · **P0C73** Hybrid Battery Pack Cooling Pump Performance
 · **P0E17** Hybrid/EV Battery Pack Coolant Heater B Control Circuit Low · **P0E19** Hybrid/EV Battery Pack Coolant Heater B Control Performance · **P0E1A** Hybrid/EV Battery Pack Coolant Pump B Control Circuit/Open

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/p0e18/>

