

GENERIC · POWERTRAIN

P0D1E

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P0D1E

Hybrid/EV Battery Pack Coolant Control Valve B Control Circuit High

P0D1E indicates that the powertrain control module has detected an abnormally high voltage on the control circuit for the hybrid or electric vehicle battery pack coolant control valve B. This valve regulates coolant flow through the high-voltage battery pack, and a high voltage on its control circuit typically points to an open circuit, a short to voltage, or a faulty valve actuator.

SYSTEM

Powertrain

CODE TYPE

Generic (all makes)

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

Hybrid propulsion

Symptoms you may notice

- Illumination of the check engine light or service vehicle soon message
- Often no symptoms besides the warning light
- Reduced hybrid/EV system performance or power output
- Battery pack overheating warning or reduced charging rate
- Cooling fan running excessively or not at all
- Possible entry into limp mode or limited electric-only operation

Common causes, most likely first

- 1 Open circuit or high resistance in the control circuit wiring or connector
- 2 Short to voltage on the control circuit
- 3 Faulty coolant control valve B actuator or solenoid
- 4 Corroded or damaged electrical connector at the valve
- 5 Failed powertrain control module driver for the valve circuit
- 6 Poor ground connection for the valve or module



How to diagnose and fix it

- 1 Connect a scan tool and verify P0D1E is current, then record freeze-frame data and check for related codes
- 2 Inspect the valve connector and harness for corrosion, chafing, or loose pins, and repair as needed
- 3 Measure resistance of the valve control circuit and compare to manufacturer specifications
- 4 Check for short to voltage on the control circuit with the key on and valve disconnected
- 5 Test the coolant control valve B actuator with a bidirectional scan tool or apply voltage directly to confirm operation
- 6 If the circuit and valve test good, check the powertrain control module driver and ground circuits
- 7 Replace the faulty coolant control valve B or repair the wiring, then clear codes and verify the repair

What a high voltage code really means

- A high voltage on a control circuit often indicates an open circuit rather than a short, because the module pulls the line up when no load is present.
- The coolant control valve may be mechanically stuck or clogged with debris, causing the actuator to draw abnormal current and set a circuit code.
- Some vehicles use a shared power supply for multiple coolant valves, so a fault in one valve can affect the circuit of another.
- A weak or failing 12-volt battery can cause erratic module behavior and set false circuit codes, so always check battery health first.
- After repairs, the coolant system may need to be bled and the valve calibrated with a scan tool to prevent repeat codes.

Can I keep driving with P0D1E?

It is generally safe to drive short distances to a repair shop, but avoid heavy acceleration, prolonged driving, or high ambient temperatures because the battery pack may not cool properly. If the vehicle enters limp mode or shows a battery temperature warning, stop driving and seek service immediately.

Tools that help

- OBD-II scan tool with bidirectional control capability
- Digital multimeter
- Wiring diagram for the specific vehicle
- Socket and ratchet set
- Terminal pick and electrical contact cleaner



Reading P0D1E

- P** Powertrain: engine, transmission and emissions.
- 0** Generic (SAE) code: it means the same thing on every OBD-II vehicle.
- D** Hybrid propulsion.
- 1E** The exact fault within that area.

Often seen with

P0A0D High Voltage System Interlock Circuit A High · **P0C73** Hybrid Battery Pack Cooling Pump Performance
 · **P0D1D** Hybrid/EV Battery Pack Coolant Control Valve B Control Circu · **P0D1F** Control Module Date/Time Synchronization Error · **P0D20** Battery Charger A Output Voltage Performance

See it working

Watch the animated explainer [Four-Stroke Engine Cutaway: Intake to Exhaust](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p0d1e/>

