

GENERIC · POWERTRAIN

P0118

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P0118

Engine Coolant Temperature Circuit High Input

P0118 means the engine computer has seen a voltage from the engine coolant temperature (ECT) sensor that is higher than the normal range for the current conditions, which it interprets as an excessively high coolant temperature signal. The computer compares the sensor's voltage to expected values and flags the circuit as a high input fault when the signal stays above the calibrated threshold.

SYSTEM

Powertrain

CODE TYPE

Generic (all makes)

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

Fuel and air metering

Symptoms you may notice

- Illuminated check engine light, often with no other noticeable symptoms
- Temperature gauge reading hotter than normal or pegged at the top
- Cooling fan running constantly or not engaging at all, depending on the failure mode
- Poor fuel economy or rich-running smell from the exhaust
- Hard starting or rough idle when the engine is cold
- Reduced engine performance or limp-home mode in some vehicles

Common causes, most likely first

- 1 Faulty engine coolant temperature sensor reading high resistance
- 2 Damaged or corroded sensor connector or terminals
- 3 Open or high-resistance wire in the sensor signal circuit
- 4 Poor ground connection at the sensor or engine block
- 5 Corroded or damaged engine computer connector pins
- 6 Internal fault in the engine control module (rare)

How to diagnose and fix it

- 1 Scan all modules and record freeze-frame data to confirm the code and see when it set
- 2 Inspect the ECT sensor connector and wiring for corrosion, looseness, or damage
- 3 Measure sensor resistance with a multimeter and compare to the manufacturer's temperature-resistance chart
- 4 Check the signal circuit for excessive resistance or an open circuit with a multimeter
- 5 Verify the sensor ground circuit has low resistance to the engine block
- 6 Replace the ECT sensor if resistance is out of specification or the connector is damaged
- 7 Clear codes and perform a road test to confirm the repair and that the code does not return



Why a high ECT signal is not always a hot engine

- A P0118 can set when the engine is actually cold if the sensor circuit develops high resistance, so do not assume the engine is overheating based on the code alone.
- Corroded terminals at the ECT sensor connector are a frequent cause that is often overlooked when the sensor itself tests good.
- On some vehicles, a faulty thermostat that sticks open can cause the engine to run cold and set a high-input code because the sensor signal stays in an unexpected range.
- The ECT sensor shares its reference voltage and ground with other sensors on many engines, so a fault in a shared circuit can set P0118 along with other sensor codes.
- Replacing the sensor without checking the wiring harness often leads to a repeat code when the real problem is an open signal wire.

Can I keep driving with P0118?

You can usually drive the vehicle short distances to a repair shop, but avoid long trips or heavy loads because the computer may be using incorrect temperature data for fuel and fan control. If the temperature gauge shows overheating or you see steam, stop driving immediately to prevent engine damage.

Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Temperature-resistance chart for the ECT sensor
- Socket set and wire terminal tools
- Infrared thermometer

Reading P0118

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

Often seen with

P0115 Engine Coolant Temperature Circuit Malfunction · **P0116** Engine Coolant Temperature Circuit Range/Performance · **P0117** Engine Coolant Temperature Circuit Low Input · **P0128** Coolant Thermostat (Coolant Temperature Below Thermostat Reg · **P2182** Engine Coolant Temperature Sensor 2 Circuit



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/p0118/>

