

FORD · POWERTRAIN

P1184

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1184 · Ford

Engine Oil Temperature Out Of Self Test Range

P1184 on Ford vehicles means the powertrain control module (PCM) ran its engine oil temperature self-test and found the oil temperature signal outside the expected range for the conditions. The PCM is not reporting a sensor failure directly; it is flagging that the oil temperature reading did not fall within the calibrated window during the key-on or running self-test.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Powertrain	Ford specific	Low	Intermediate	Fuel and air metering

Symptoms you may notice

- Illumination of the check engine light, often with no other symptoms noticed by the driver
- Rough running or poor driveability if the oil temperature signal is skewed enough to affect fuel and timing calculations
- Reduced fuel economy or altered shift quality on vehicles that use oil temperature for torque management
- A temperature gauge or oil temperature display that reads abnormally high or low, if equipped
- Hard starting or stalling in extreme cases where the PCM substitutes a default oil temperature value
- Often no symptoms besides the warning light, especially when the fault is intermittent or only sets during the self-test

Common causes, most likely first

- 1 Engine oil temperature sensor (EOTS) signal circuit open, shorted to ground, or shorted to voltage
- 2 Failed engine oil temperature sensor, reading out of range or drifting with temperature
- 3 Corroded, loose, or damaged connector at the oil temperature sensor or PCM harness
- 4 Low or incorrect engine oil level, or the wrong oil viscosity causing actual oil temperature to fall outside the expected range
- 5 PCM calibration or software issue that misinterprets the oil temperature signal during the self-test
- 6 A faulty thermostat or cooling system problem that keeps oil temperature from reaching the expected range
- 7 Harness chafing or routing damage that intermittently shorts the sensor signal, often after engine movement or vibration



How to diagnose and fix it

- 1 Check engine oil level and condition, and confirm the correct viscosity is installed for the climate and engine
- 2 Scan all modules for stored and pending codes, and record freeze-frame data for P1184 to see the conditions when it set
- 3 Inspect the oil temperature sensor connector and harness for corrosion, pushed pins, or chafing, and repair as needed
- 4 Measure the oil temperature sensor resistance with a multimeter and compare it to the Ford specification for the current oil temperature
- 5 Back-probe the sensor signal circuit at the PCM and verify voltage changes smoothly as the engine warms, checking for opens or shorts
- 6 If the sensor and wiring test good, check for a Ford technical service bulletin or PCM calibration update that addresses the self-test range
- 7 Replace the engine oil temperature sensor only after electrical testing confirms it is out of specification, then clear codes and verify the self-test passes

Why the oil temperature self-test fails

- This code often sets during a key-on self-test before the engine has warmed, so a sensor that reads plausibly at operating temperature can still fail the cold-range check.
- A weak or failing battery or low charging voltage during cranking can drop the sensor reference voltage and falsely trigger P1184 without any sensor fault.
- Technicians commonly replace the oil temperature sensor when the real problem is a chafed signal wire near the exhaust or bellhousing that only shorts when the engine moves.
- On some Ford engines the oil temperature sensor shares a reference or ground circuit with other sensors, so a fault in a neighbouring sensor can skew the oil temperature reading.
- The code does not always mean the sensor is bad; incorrect oil viscosity or a stuck-open thermostat can keep actual oil temperature outside the self-test window.

Can I keep driving with P1184?

P1184 is a low-severity code and the vehicle is generally safe to drive, but avoid heavy towing or sustained high-load operation until the fault is diagnosed. If the engine oil temperature gauge reads abnormally high or the engine runs poorly, stop driving and have it inspected promptly.

Tools that help

- OBD-II scan tool with Ford-specific software and freeze-frame capability
- Digital multimeter with back-probe pins
- Ford service information for oil temperature sensor resistance specifications
- Basic hand tools for connector and sensor access
- Infrared thermometer to compare actual oil pan temperature with the sensor reading



Reading P1184

- P** Powertrain: engine, transmission and emissions.
- 1** Manufacturer-specific code (Ford): its meaning depends on the make.
- 1** Fuel and air metering.
- 84** The exact fault within that area.

Often seen with

P1183 Linear Oxygen Sensor Reference Voltage Short To B+ · **P1185** Linear Oxygen Sensor Common Ground Wire Short To Ground · **P1185** O2 Sensor Heater Circuit Open, Hardware Fault · **P1185** Engine Temperature Sensor Circuit · **P1183** Engine Oil Temperature Circuit Malfunction · **P1185** FTS High Fuel Pump Temperature Sensor High · **P1185** Engine Oil Temperature Circuit · **P1183** O2 Sensor Bank 2 Sensor 2 Open Circuit During Coast Down Fuel · **P0116** Engine Coolant Temperature Circuit Range/Performance · **P0117** Engine Coolant Temperature Circuit Low Input · **P0118** Engine Coolant Temperature Circuit High Input

See it working

Watch the animated explainer [V6 Engine Explained: 60° Bank and Firing Order](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/ford-p1184/>

