

FORD · POWERTRAIN

P1185

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1185 · Ford

FTS High Fuel Pump Temperature Sensor High

P1185 on Ford vehicles means the powertrain control module has detected an abnormally high temperature signal from the Fuel Temperature Sensor (FTS) that is mounted on the high-pressure fuel pump. The sensor's voltage or resistance reading has moved beyond the calibrated range for a hot fuel system, so the computer flags the circuit as reporting excessive heat rather than a normal operating temperature.

SYSTEM

Powertrain

CODE TYPE

Ford specific

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

Fuel and air metering

Symptoms you may notice

- Illuminated check engine light, often with no other noticeable symptoms
- Reduced engine power or limp mode when fuel temperature is perceived as critically high
- Hard starting or rough running after a hot soak, especially on diesel applications
- Poor fuel economy or altered injection timing as the PCM protects the fuel system
- In rare cases, a fuel smell or visible seepage near the high-pressure pump area

Common causes, most likely first

- 1 Faulty Fuel Temperature Sensor (FTS) reading high resistance or shorting internally
- 2 Damaged or chafed wiring between the FTS and the PCM, including a short to voltage
- 3 Corroded or loose connector pins at the sensor or PCM harness
- 4 Restricted fuel return line causing genuine fuel overheating
- 5 Low fuel level or a failing in-tank lift pump reducing fuel cooling flow
- 6 Failed high-pressure fuel pump generating excess heat and transferring it to the sensor
- 7 PCM calibration or internal driver fault misinterpreting a valid sensor signal

How to diagnose and fix it

- 1 Scan all modules for stored and pending codes, then record freeze-frame data for P1185
- 2 Inspect the FTS connector and harness for corrosion, chafing, or a short to voltage
- 3 Measure FTS resistance or voltage with a meter and compare against Ford's temperature chart
- 4 Check fuel level, lift pump operation, and return line flow for restrictions
- 5 Substitute a known-good FTS or simulate the signal with a resistor box to verify the PCM response
- 6 Repair or replace the faulty sensor, connector, or wiring section as indicated by testing
- 7 Clear codes and perform a road test with live fuel temperature data to confirm the repair



Why fuel temperature codes mislead

- A P1185 is frequently set by a chafed harness near the high-pressure pump rather than by the sensor itself, so wiggle-testing the loom while watching live data is a fast way to catch an intermittent fault.
- Genuine fuel overheating from a restricted return line or a weak lift pump can trigger this code even when the sensor and wiring test perfectly, so always verify fuel flow before condemning electrical parts.
- On some Ford diesel applications, the FTS shares a reference or ground circuit with other sensors, and a fault elsewhere on that circuit can pull the fuel temperature reading high.
- Replacing the high-pressure fuel pump because of P1185 without first checking the sensor signal is an expensive misdiagnosis trap that technicians see regularly.
- A disconnected or unplugged FTS can default the PCM to a high-temperature strategy, setting P1185 alongside drivability complaints that disappear once the connector is resealed.

Can I keep driving with P1185?

You can usually drive short distances to a workshop, but avoid heavy loads, towing, or sustained high-speed running until the fault is diagnosed. If the engine enters limp mode or you smell fuel, stop driving and arrange a tow.

Tools that help

- OBD-II scan tool with live data and freeze-frame capability
- Digital multimeter with temperature probe or resistance chart
- Wiring diagram for the specific Ford model and engine
- Resistor box or sensor simulator for signal substitution
- Basic hand tools for connector and harness access

Reading P1185

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

Often seen with

P1184 Linear Oxygen Sensor Common Ground Wire Open · **P1184** Engine Oil Temperature Out Of Self Test Range · **P0087** Fuel Rail/System Pressure - Too Low · **P0180** Fuel Temperature Sensor A Circuit Malfunction · **P0181** Fuel Temperature Sensor A Circuit Range/Performance · **P0190** Fuel Rail Pressure Sensor Circuit Malfunction



See it working

Watch the animated explainer [Disc Brake Trainer: How Car Brakes Stop a Wheel](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/ford-p1185/>

