

JAGUAR · POWERTRAIN

P1186

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1186 · Jaguar

O2 Sensor Heater Circuit Shorted, Hardware Fault

P1186 on a Jaguar indicates that the engine control module has detected a short or hardware fault within the oxygen sensor heater circuit, typically on the sensor's heating element or its wiring. The computer monitors the heater circuit for expected current flow and flags this code when the circuit is shorted to ground or power, or when the heater element itself has failed internally.

SYSTEM

Powertrain

CODE TYPE

Jaguar specific

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

Fuel and air metering

Symptoms you may notice

- Illumination of the check engine light, often with no other noticeable symptoms
- Rough idle or poor driveability during cold starts due to slow oxygen sensor response
- Increased fuel consumption as the engine runs in open-loop mode longer than normal
- Failed emissions test due to incomplete oxygen sensor readiness
- In rare cases, a blown fuse that also disables other circuits on the same feed

Common causes, most likely first

- 1 Failed oxygen sensor heater element (internal short)
- 2 Shorted or chafed wiring in the oxygen sensor heater circuit
- 3 Corroded or damaged oxygen sensor connector
- 4 Blown fuse supplying the oxygen sensor heater circuit
- 5 Faulty engine control module driver for the heater circuit (less common)

How to diagnose and fix it

- 1 Check the fuse for the oxygen sensor heater circuit and replace if blown
- 2 Inspect the oxygen sensor connector and wiring for corrosion, chafing, or short circuits
- 3 Measure the resistance of the oxygen sensor heater element and compare to specification
- 4 Disconnect the sensor and check for short to ground or power on the heater circuit wires
- 5 If wiring and fuse are good, replace the oxygen sensor
- 6 Clear the code and verify the heater circuit operates correctly with a scan tool
- 7 If the code persists after sensor replacement, diagnose the engine control module driver circuit



What most technicians overlook with P1186

- A shorted oxygen sensor heater can blow the same fuse that powers other engine management components, so always check related fuses before condemning the sensor.
- The heater element may test fine at room temperature but short internally when hot, so a resistance check alone is not definitive.
- Corrosion inside the oxygen sensor connector often mimics a heater short and is frequently missed during visual inspection.
- On some Jaguar models, the oxygen sensor heater circuit shares a ground with other sensors, so a bad ground can set P1186 without any fault in the sensor itself.
- Replacing the oxygen sensor without repairing a chafed wiring harness will cause the code to return quickly.

Can I keep driving with P1186?

You can usually continue driving with P1186, but avoid prolonged cold-start driving and heavy loads until repaired, as the engine may run richer and fuel economy will suffer. If the check engine light flashes or drivability worsens, stop driving and seek service immediately.

Tools that help

- OBD-II scan tool
- Digital multimeter
- Fuse puller
- Wiring diagram for the specific Jaguar model
- Socket set and oxygen sensor wrench

Reading P1186

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

Often seen with

P1185 Linear Oxygen Sensor Common Ground Wire Short To Ground · **P1185** O2 Sensor Heater Circuit Open, Hardware Fault · **P1185** Engine Temperature Sensor Circuit · **P1185** FTS High Fuel Pump Temperature Sensor High · **P1185** Engine Oil Temperature Circuit · **P0135** O2 Sensor Heater Circuit Malfunction (Bank 1 Sensor 1) · **P0141** O2 Sensor Heater Circuit Malfunction (Bank 1 Sensor 2) · **P0155** O2 Sensor Heater Circuit Malfunction (Bank 2 Sensor 1) · **P0161** O2 Sensor Heater Circuit Malfunction (Bank 2 Sensor 2)



See it working

Watch the animated explainer [How a CVT Works: Belt and Pulley Transmission](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/jaguar-p1186/>

