

JAGUAR · POWERTRAIN

P1189

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

## P1189 · Jaguar

# O2 Sensor Heater Circuit Low Resistance Fault 1

P1189 on a Jaguar means the engine control module has measured resistance in the upstream oxygen sensor heater circuit that is lower than the expected range for that circuit. The heater is the small element inside the oxygen sensor that brings it up to operating temperature quickly, and a low-resistance reading tells the module the circuit is drawing too much current or is shorted internally.

| SYSTEM     | CODE TYPE       | SEVERITY | FIX DIFFICULTY | AREA                  |
|------------|-----------------|----------|----------------|-----------------------|
| Powertrain | Jaguar specific | Low      | Intermediate   | Fuel and air metering |

## Symptoms you may notice

- Illumination of the check engine light, often with no other symptoms besides the warning light
- Slightly higher fuel consumption as the sensor takes longer to reach closed-loop operation
- A pending or stored P1189 with no drivability complaint in many cases
- Occasional rough idle or hesitation during cold start warm-up
- In rare cases, a blown heater circuit fuse that also disables other circuits on the same supply

## Common causes, most likely first

- 1 Failed oxygen sensor heater element with an internal short, which is the most common cause on Jaguar engines
- 2 Chafed or pinched heater wiring shorting to ground or to another wire in the harness
- 3 Corroded or contaminated oxygen sensor connector allowing a low-resistance path between pins
- 4 Water intrusion into the sensor connector or harness loom causing a partial short
- 5 Engine control module heater driver circuit fault, which is uncommon but possible after other causes are ruled out
- 6 Aftermarket oxygen sensor with an incorrect heater resistance fitted previously



## How to diagnose and fix it

- 1 Scan all modules and record freeze-frame data for P1189 before clearing anything
- 2 Inspect the oxygen sensor connector and harness for corrosion, chafing, or water ingress
- 3 Measure heater circuit resistance at the sensor connector and compare with the Jaguar specification
- 4 Check the heater supply fuse and verify voltage and ground at the sensor connector with the key on
- 5 Isolate the harness from the sensor and recheck resistance to confirm whether the fault is in the sensor or the wiring
- 6 Replace the upstream oxygen sensor if its heater resistance is out of specification
- 7 Clear the code and verify the heater circuit passes a full monitor drive cycle

## Low resistance does not always mean a bad sensor

- A low-resistance reading is frequently caused by a short in the harness rather than the sensor itself, so resistance must be measured with the sensor disconnected to separate the two.
- Jaguar oxygen sensor heaters are supplied through a fused circuit, and a shorted heater can blow that fuse, which then sets additional codes that distract from the original fault.
- Aftermarket oxygen sensors with incorrect heater resistance are a common cause of repeat P1189 on Jaguars that have already had a sensor replaced.
- Water ingress into the connector behind the engine can create a low-resistance path that only appears after rain or a car wash, so the fault may be intermittent.
- The engine control module heater driver can be damaged by a shorted sensor, so the sensor and wiring should be repaired before fitting a new module.

## Can I keep driving with P1189?

The car remains safe to drive because the heater fault does not affect engine safety systems, but avoid long periods of short cold-start journeys until it is repaired. Have the circuit checked soon so the oxygen sensor reaches operating temperature properly and fuel economy does not suffer.

## Tools that help

- OBD-II scan tool with Jaguar manufacturer-specific capability
- Digital multimeter
- Back probe pins or breakout leads
- Wiring diagram for the specific Jaguar model
- Sensor socket or appropriate oxygen sensor wrench



## Reading P1189

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

## Often seen with

**P1188** Linear Oxygen Sensor Compensation Resistor Short To Ground · **P1190** Linear Oxygen Sensor Reference Voltage Incorrect Signal · **P1190** Calibration Resistor Out Of Range · **P1188** O2 Sensor Heater Circuit Resistance · **P1190** O2 Sensor Heater Circuit Low Resistance Fault 2 · **P1188** Engine Oil Pressure Sensor Circuit High Voltage · **P1190** Vacuum Leak · **P1188** Calibration Memory Fault · **P1190** Calibration Resistor Out Of Range · **P1188** EOT Sensor Circuit High Voltage · **P1190** Engine Vacuum Leak · **P1188** Fuel Control Bank 1 Sensor 1 · **P1190** Pre-Catalyst Fuel Trim System Bank 1 · **P0130** O2 Sensor Circuit Malfunction (Bank 1 Sensor 1) · **P0135** O2 Sensor Heater Circuit Malfunction (Bank 1 Sensor 1) · **P0141** O2 Sensor Heater Circuit Malfunction (Bank 1 Sensor 2)

## See it working

Watch the animated explainer [Helicopter Simulator: Take Off, Hover and Land](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/jaguar-p1189/>

