

JAGUAR · POWERTRAIN

**P1179**

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

## P1179 · Jaguar

# Long Term Fuel Trim Too Rich Banks 1 And 2 (AMFR)

P1179 on Jaguar vehicles means the engine control module has detected that the long-term fuel trim on both banks has reached its rich limit, indicating the engine is running too rich and the computer can no longer lean it out. The adaptive fuel control has maxed out its negative correction, typically beyond -20 to -25 percent, which signals excess fuel or a measurement error.

SYSTEM

Powertrain

CODE TYPE

Jaguar specific

SEVERITY

Medium

FIX DIFFICULTY

Professional

AREA

Fuel and air metering

## Symptoms you may notice

- Often no symptoms besides the warning light, especially in early stages
- Noticeable drop in fuel economy and a strong fuel smell from the exhaust
- Black sooty smoke from the tailpipe under acceleration
- Rough idle or engine stumbling due to overly rich mixture
- Failed emissions test with high carbon monoxide readings
- Spark plugs fouling prematurely with black deposits

## Common causes, most likely first

- 1 Leaking or sticking fuel injectors delivering too much fuel
- 2 Faulty mass air flow sensor over-reporting air intake, causing excess fuel delivery
- 3 High fuel pressure from a failed fuel pressure regulator or restricted return line
- 4 Leaking evaporative emissions purge valve allowing fuel vapor into the intake
- 5 Contaminated engine oil with fuel dilution affecting crankcase ventilation
- 6 Worn or incorrectly gapped spark plugs causing incomplete combustion
- 7 Faulty oxygen sensors biased rich, misleading the fuel trim strategy



## How to diagnose and fix it

- 1 Connect a scan tool and record long-term fuel trim values on both banks to confirm the rich condition
- 2 Inspect spark plugs for black soot and replace if fouled, checking gap and heat range
- 3 Test fuel pressure with a gauge and compare to Jaguar specifications; replace regulator if high
- 4 Perform an injector balance test or remove injectors for professional cleaning and flow testing
- 5 Check the evaporative purge valve for sticking open by commanding it closed and monitoring fuel trim
- 6 Clean or replace the mass air flow sensor after verifying its live readings against expected values
- 7 Recheck fuel trim after repairs and clear the code, then road test to confirm the fix

## Rich fuel trim traps on Jaguar V8 engines

- A stuck-open purge valve is a frequent culprit that mimics injector problems and is often overlooked because it does not always set an EVAP code.
- Fuel dilution in the oil from repeated short trips can skew crankcase ventilation and cause rich trims without any faulty fuel system component.
- Aftermarket air filters that are over-oiled can contaminate the mass air flow sensor and cause it to over-report airflow, leading to rich fuel trim.
- The long-term fuel trim limit on many Jaguars is around -25 percent, so a reading near that value confirms the code but does not pinpoint the cause.
- Replacing oxygen sensors blindly is a common misdiagnosis; the sensors are usually reporting correctly when both banks are rich.

## Can I keep driving with P1179?

You can drive the car short distances to a repair shop, but avoid sustained high-speed driving or heavy loads because the rich mixture can overheat and damage the catalytic converters. Prolonged driving with P1179 will worsen fuel dilution and emissions, so schedule diagnosis promptly.

## Tools that help

- OBD-II scan tool with live data and fuel trim graphing
- Fuel pressure gauge
- Injector balance tester or flow bench
- Vacuum gauge
- Digital multimeter
- Spark plug socket and gap gauge



## Reading P1179

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

## Often seen with

**P1176** Rear Oxygen Sensor Correction · **P1178** Linear Oxygen Sensor Pump Current Open · **P1176** Long Term Fuel Trim Too Lean Banks 1 And 2 (FMFR) · **P1178** Long Term Fuel Trim Too Lean Banks 1 And 2 (AMFR) · **P1176** Cam Calibration Fault · **P1176** O2 Sensor Slow Response Bank 1 · **P1178** O2 Sensor Signal Circuit Slow Switching From Rich to Lean Ba · **P0172** System Too Rich (Bank 1) · **P0175** System Too Rich (Bank 2) · **P0300** Random/Multiple Cylinder Misfire Detected

## See it working

Watch the animated explainer [Fuel Trims Explained: Short-Term and Long-Term](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/jaguar-p1179/>

