

BMW · POWERTRAIN

P1179

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1179 · BMW

O2 Sensor Signal Circuit Slow Switching From Rich to Lean Bank 2 Sensor 1

P1179 on BMW vehicles means the engine control module (ECM) has detected that the upstream oxygen sensor on bank 2 is switching too slowly between rich and lean readings. The ECM monitors how quickly the sensor voltage crosses its midpoint threshold, and when the response lags beyond a calibrated time window, it logs this code and turns on the check engine light.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Powertrain	BMW specific	Medium	Intermediate	Fuel and air metering

Symptoms you may notice

- Check engine light illuminated, often with no other noticeable symptoms
- Slightly rough idle or intermittent hesitation during light acceleration
- Reduced fuel economy over time as the ECM struggles to correct the mixture
- Occasional surging or uneven power delivery under steady cruise
- A faint sulfur or rotten egg smell from the exhaust in severe cases
- Failed emissions test due to high hydrocarbon or carbon monoxide readings

Common causes, most likely first

- 1 Aged or contaminated bank 2 upstream oxygen sensor that responds sluggishly
- 2 Exhaust leak upstream of the sensor, allowing outside air to skew readings
- 3 Wiring damage or corroded connector pins in the sensor signal circuit
- 4 Oil or coolant contamination from internal engine wear coating the sensor element
- 5 A failing mass air flow (MAF) sensor or vacuum leak causing mixture swings the sensor cannot track
- 6 Excessive crankcase pressure or a stuck-open PCV valve pushing oil vapor into the intake



How to diagnose and fix it

- 1 Scan all modules for stored and pending codes, then record freeze-frame data for P1179
- 2 Inspect the bank 2 upstream sensor wiring and connector for chafing, corrosion, or loose pins
- 3 Perform a smoke test on the exhaust system ahead of the sensor to rule out leaks
- 4 Graph the bank 2 sensor 1 voltage on a scan tool and compare its switching rate to bank 1 sensor 1
- 5 Check fuel trims and MAF readings to confirm whether the slow switching is sensor-caused or mixture-caused
- 6 Replace the bank 2 upstream oxygen sensor if its switching rate remains slow after wiring and leak checks
- 7 Clear adaptations and codes, then road-test to verify the sensor now switches normally and the code does not return

Why bank 2 sensor 1 fools many technicians

- A slow-switching oxygen sensor often has no driveability symptom at all, so the code is frequently the only clue that the sensor is degrading.
- Technicians who replace the sensor without graphing its voltage first sometimes find the new sensor switches slowly too, because the real cause is an exhaust leak or a mixture problem upstream.
- BMW's wideband sensors on later models can set a slow-switching code when the reference chamber is contaminated, even though the sensor still produces a plausible-looking voltage.
- A lazy bank 2 upstream sensor can drag fuel trims far enough that the ECM eventually sets mixture codes for both banks, making the original P1179 look like a different fault.
- Oil contamination from a failing turbocharger seal or worn valve guides is a common hidden cause on BMW engines, and a new sensor will fail again quickly if the oil source is not fixed.

Can I keep driving with P1179?

You can usually continue driving to a workshop, but avoid heavy acceleration and long trips because the slow sensor response can worsen fuel economy and eventually damage the catalytic converter. If the check engine light starts flashing or the engine runs rough, stop driving and arrange a diagnostic scan.

Tools that help

- OBD-II scan tool with live data graphing capability
- Digital multimeter for checking sensor signal and heater circuits
- Smoke machine for exhaust leak testing
- Oxygen sensor socket and ratchet set
- Wiring diagram for the bank 2 sensor 1 circuit



Reading P1179

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

Often seen with

P1178 Linear Oxygen Sensor Pump Current Open · **P1178** Long Term Fuel Trim Too Lean Banks 1 And 2 (AMFR) · **P1178** O2 Sensor Signal Circuit Slow Switching From Rich to Lean Ba · **P0150** O2 Sensor Circuit Malfunction (Bank 2 Sensor 1) · **P0153** O2 Sensor Circuit Slow Response (Bank 2 Sensor 1) · **P0171** System Too Lean (Bank 1) · **P0174** System Too Lean (Bank 2)

See it working

Watch the animated explainer [How Airbags Work: A 50 km/h Crash in Slow Motion](#) on Auto Veteran to see the parts involved moving.

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

