

GENERIC · POWERTRAIN

P2630

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P2630

O2 Sensor Pumping Current Trim Circuit Low (Bank 2 Sensor 1)

P2630 means the engine control module (ECM) has detected that the electrical current trim signal from the bank 2 sensor 1 oxygen sensor's pumping circuit is lower than expected. This sensor is a wideband air-fuel ratio sensor that uses a pump cell to maintain a reference voltage, and the ECM monitors the current needed to do that. A low trim circuit indicates the ECM is seeing a current value below the normal operating range, which can affect fuel control.

SYSTEM

Powertrain

CODE TYPE

Generic (all makes)

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

Computer and output circuits

Symptoms you may notice

- Illumination of the check engine light, often with no other noticeable symptoms
- Slightly rough idle or hesitation during acceleration
- Reduced fuel economy as the ECM may default to a richer air-fuel mixture
- Occasional engine surging or stumbling under light throttle
- Failed emissions test due to incorrect air-fuel ratio

Common causes, most likely first

- 1 Faulty bank 2 sensor 1 wideband oxygen sensor (internal pump cell degradation)
- 2 Damaged or corroded wiring or connector at the sensor or ECM
- 3 Exhaust leak upstream of the sensor introducing false air
- 4 Contaminated sensor from oil, coolant, or excessive silicone from sealants
- 5 ECM internal fault in the pump current control circuit (rare)
- 6 Low fuel pressure or a vacuum leak causing the sensor to read outside its normal trim range

How to diagnose and fix it

- 1 Inspect the sensor wiring and connector for damage, corrosion, or loose pins; repair as needed
- 2 Check for exhaust leaks between the engine and the sensor using a smoke test or visual inspection
- 3 Measure the sensor heater resistance and compare to manufacturer specifications
- 4 Perform a live data scan of the bank 2 sensor 1 pump current trim to see if it is stuck low or erratic
- 5 Test the sensor's response to a known air-fuel change (e.g., propane enrichment) to confirm it is lazy or dead
- 6 Replace the bank 2 sensor 1 wideband oxygen sensor if diagnostics point to internal failure
- 7 Clear codes and verify the repair with a test drive and re-scan



What P2630 really tells you about the sensor

- A low pump current trim often means the sensor is reading leaner than actual, so the ECM richens the mixture, which can mask a vacuum leak or fuel delivery issue.
- Many technicians replace the sensor without checking for exhaust leaks or wiring issues, which are common causes of this code on higher-mileage vehicles.
- The code can be set by a sensor that is simply aged and slow to respond, even if it still switches and does not set a heater circuit code.
- On some vehicles, a weak battery or charging system can cause voltage drops that affect the pump current circuit and trigger P2630 intermittently.
- P2630 is bank 2 sensor 1, so on V6 and V8 engines it refers to the sensor on the bank that does not include cylinder 1; misidentifying the bank is a frequent mistake.

Can I keep driving with P2630?

You can usually drive the vehicle with P2630 set, but avoid heavy acceleration or towing until it is diagnosed, because the ECM may be running a richer mixture that can damage the catalytic converter over time. If the check engine light starts flashing or you notice severe misfiring, stop driving and seek professional help.

Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Smoke machine for exhaust leak testing
- Propane enrichment tool or carburetor cleaner for sensor response test
- Socket set and oxygen sensor wrench

Reading P2630

P	Powertrain: engine, transmission and emissions.
2	Generic (SAE) code: it means the same thing on every OBD-II vehicle.
6	Computer and output circuits.
30	The exact fault within that area.

Often seen with

P0172 System Too Rich (Bank 1) · **P2195** O2 Sensor Signal Stuck Lean (Bank 1 Sensor 1) · **P2196** O2 Sensor Signal Stuck Rich (Bank 1 Sensor 1) · **P2629** O2 Sensor Pumping Current Trim Circuit/Open (Bank 2 Sensor 1) · **P2631** O2 Sensor Pumping Current Trim Circuit High (Bank 2 Sensor 1)



See it working

Watch the animated explainer [How a Starter Motor Works: Pre-Engaged Starter](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p2630/>

