

GENERIC · POWERTRAIN

P2626

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P2626

O2 Sensor Pumping Current Trim Circuit/Open (Bank 1 Sensor 1)

P2626 indicates that the engine control module has detected an open circuit in the pumping current trim circuit for the upstream oxygen sensor on bank 1. This circuit is part of the sensor's internal ion pump that adjusts the air-fuel mixture reading, and an open means the computer cannot accurately trim the sensor's output.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Powertrain	Generic (all makes)	Medium	Intermediate	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
- Poor fuel economy due to inaccurate air-fuel ratio control
- Failed emissions test because the oxygen sensor circuit is not ready
- In rare cases, a lean or rich running condition if the sensor defaults to a fixed value

Common causes, most likely first

- 1 Broken or chafed wire in the oxygen sensor pumping current trim circuit
- 2 Corroded or loose electrical connector at the oxygen sensor or ECM
- 3 Failed oxygen sensor with an internal open in the pumping current circuit
- 4 Open circuit inside the ECM driver for the pumping current trim
- 5 Damage to the wiring harness from heat, rodents, or mechanical wear
- 6 Poor ground connection affecting the sensor reference voltage

How to diagnose and fix it

- 1 Inspect the oxygen sensor wiring and connector for visible damage, corrosion, or looseness
- 2 Check continuity and resistance of the pumping current trim circuit between the sensor and ECM
- 3 Test the oxygen sensor heater circuit and sensor response with a scan tool to confirm the sensor is faulty
- 4 Repair any open or shorted wires, and clean or replace corroded connectors
- 5 Replace the bank 1 sensor 1 oxygen sensor if the circuit tests good but the code persists
- 6 Clear the code and perform a road test to verify the repair, monitoring oxygen sensor data
- 7 If the code returns, diagnose the ECM driver circuit or replace the ECM as a last resort



Why this code is often misdiagnosed

- A P2626 can be set by a simple loose connector that causes an intermittent open, so always wiggle-test the harness while watching live data before condemning the sensor.
- Many technicians replace the oxygen sensor only to find the real problem is a chafed wire near the exhaust manifold where heat and vibration damage the insulation.
- The pumping current trim circuit is internal to the wideband oxygen sensor, so a generic oxygen sensor test may not catch an open in this specific circuit.
- This code can be stored alongside misfire or fuel trim codes, but those may be secondary symptoms of the same wiring fault rather than separate issues.
- On some vehicles, a weak battery or poor ground can cause false oxygen sensor codes, so check charging system and grounds before replacing parts.

Can I keep driving with P2626?

You can usually drive with this code, but avoid aggressive acceleration or heavy loads because the engine may run with a less accurate air-fuel ratio. Have it diagnosed soon to prevent potential catalytic converter damage from prolonged rich or lean operation.

Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Wiring diagram for the specific vehicle
- Socket set and oxygen sensor wrench
- Electrical contact cleaner and dielectric grease

Reading P2626

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.
26	The exact fault within that area.

Often seen with

P0130 O2 Sensor Circuit Malfunction (Bank 1 Sensor 1) · **P0131** O2 Sensor Circuit Low Voltage (Bank 1 Sensor 1) · **P0132** O2 Sensor Circuit High Voltage (Bank 1 Sensor 1) · **P0133** O2 Sensor Circuit Slow Response (Bank 1 Sensor 1) · **P0171** System Too Lean (Bank 1)



See it working

Watch the animated explainer [How a Padlock Works: Pin Tumbler Lock in X-Ray](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p2626/>

