

GENERIC · POWERTRAIN

P2C65

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P2C65

O2 Sensor Out of Range During Deceleration Bank 1 Sensor 3

P2C65 means the powertrain control module (PCM) saw the downstream oxygen sensor on bank 1, sensor 3 report a voltage outside its expected range during deceleration fuel cut-off. The PCM commands a lean condition when you lift off the throttle, and this sensor's signal did not respond as the computer expected.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Powertrain	Generic (all makes)	Low	Intermediate	Hybrid propulsion

Symptoms you may notice

- Illuminated check engine light, often with no other noticeable symptoms
- A brief stumble or rough running right after lifting off the throttle
- Slightly reduced fuel economy over time if the fault persists
- Intermittent warning light that comes and goes with driving conditions
- Failed emissions inspection due to the stored code
- Rarely, a slight hesitation when re-applying the throttle after coasting

Common causes, most likely first

- 1 Faulty bank 1 sensor 3 oxygen sensor (slow or lazy response, contamination, or internal damage)
- 2 Wiring damage or poor connection at the sensor, including chafed harness or corroded pins
- 3 Exhaust leak upstream of the sensor letting outside air into the exhaust stream
- 4 Contaminated sensor from oil or coolant consumption, or from silicone-based sealants
- 5 PCM software calibration issue or a rare internal PCM driver fault
- 6 Restricted exhaust or a failing catalytic converter affecting sensor 3's readings
- 7 Engine mechanical issue such as a vacuum leak or misfire altering exhaust oxygen content



How to diagnose and fix it

- 1 Scan all modules and record freeze-frame data to confirm the code set during deceleration fuel cut-off
- 2 Inspect the bank 1 sensor 3 wiring, connector, and exhaust for leaks or physical damage
- 3 Graph the sensor 3 voltage during a deceleration event and compare it with the other oxygen sensors
- 4 Check for intake vacuum leaks and perform a fuel trim analysis to rule out engine-side causes
- 5 Test the sensor's heater circuit and signal response with a multimeter or oscilloscope
- 6 Replace the bank 1 sensor 3 oxygen sensor if testing confirms a lazy or out-of-range signal
- 7 Clear the code and complete a drive cycle to verify the repair and confirm the monitor passes

What sensor 3 really monitors on bank 1

- Sensor 3 is not always the post-catalyst sensor; on some engines it is a dedicated deceleration sensor or a third sensor in a multi-bank exhaust layout, so confirm its location in the service information before testing.
- A perfectly healthy sensor can set this code if the exhaust has a small leak that only shows up under the high vacuum of deceleration, pulling outside air past a tired gasket.
- Technicians often replace the sensor without graphing its signal first, missing a wiring fault or a PCM calibration issue that will set the code again on the new part.
- Oil or coolant contamination from a failing head gasket or worn valve guides can coat the sensor and skew its readings without ever setting a misfire code.
- This code can appear after a battery replacement or PCM reflash because the deceleration monitor relearns its thresholds, so clear it and complete a full drive cycle before condemning parts.

Can I keep driving with P2C65?

The vehicle is generally safe to drive because this fault affects emissions monitoring more than immediate drivability, but avoid ignoring it if the check engine light flashes or if you notice a stumble. Have it diagnosed before an emissions test, and avoid prolonged coasting in gear until the fault is repaired.

Tools that help

- OBD-II scan tool with live data and graphing capability
- Digital multimeter
- Oscilloscope for oxygen sensor signal analysis
- Exhaust leak detector or smoke machine
- Socket set and oxygen sensor wrench



Reading P2C65

- P** Powertrain: engine, transmission and emissions.
- 2** Generic (SAE) code: it means the same thing on every OBD-II vehicle.
- C** Hybrid propulsion.
- 65** The exact fault within that area.

Often seen with

P0130 O2 Sensor Circuit Malfunction (Bank 1 Sensor 1) · **P0136** O2 Sensor Circuit Malfunction (Bank 1 Sensor 2) · **P2270** O2 Sensor Signal Stuck Lean (Bank 1 Sensor 2) · **P2C64** O2 Sensor Pumping Current Trim Circuit High Bank 1 Sensor 3 · **P2C66** Hybrid/EV Electronics Coolant Pump A Underspeed

See it working

Watch the animated explainer [How a Boxer Engine Works: Flat Engine Cutaway](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p2c65/>

