

CHRYSLER · POWERTRAIN

P1157

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1157 · Chrysler

HO2S Bank 2 Sensor 2 Lean System Or Low Voltage

P1157 on Chrysler vehicles indicates that the downstream heated oxygen sensor (HO2S) for bank 2, sensor 2, is reporting a lean condition or low voltage to the powertrain control module (PCM). The PCM monitors this sensor's signal after the catalytic converter to verify catalyst efficiency and fuel control, and it sets the code when the voltage stays below a calibrated threshold for a set time, signaling excess oxygen in the exhaust or a faulty sensor circuit.

SYSTEM

Powertrain

CODE TYPE

Chrysler specific

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

Fuel and air metering

Symptoms you may notice

- Illumination of the check engine light, often with no other noticeable symptoms.
- A slight decrease in fuel economy as the PCM may add fuel based on the lean signal.
- Occasional rough idle or hesitation during acceleration if the lean condition is severe.
- Possible failed emissions test due to the stored trouble code.
- In rare cases, a sulfur or rotten egg smell from the exhaust if the catalytic converter is overheating from excess fuel.
- Intermittent driveability issues if the sensor wiring is damaged and the signal fluctuates.

Common causes, most likely first

- 1 Failed downstream heated oxygen sensor (bank 2, sensor 2) due to contamination or age.
- 2 Wiring damage or corrosion in the HO2S circuit, including open or shorted wires.
- 3 Exhaust leak upstream of the sensor, allowing outside air to enter and skew the reading.
- 4 Low fuel pressure or a clogged fuel filter causing a genuine lean condition.
- 5 Vacuum leak in the intake system, introducing unmetered air.
- 6 Faulty PCM driver for the HO2S heater circuit, though this is less common.
- 7 Contaminated fuel or fuel injector issues leading to lean operation on bank 2.



How to diagnose and fix it

- 1 Connect a scan tool and verify the code is current, then check freeze-frame data for engine load, RPM, and fuel trims.
- 2 Visually inspect the bank 2 sensor 2 HO2S and its wiring for damage, corrosion, or loose connections.
- 3 Perform a propane enrichment test or use a scan tool to watch the HO2S voltage respond to changes in fuel mixture.
- 4 Check for exhaust leaks between the exhaust manifold and the sensor using a smoke machine or by listening for ticking sounds.
- 5 Measure fuel pressure with a gauge and compare to specification; replace the fuel filter if pressure is low.
- 6 Smoke test the intake system to locate vacuum leaks and repair as needed.
- 7 If all else checks out, replace the bank 2 sensor 2 HO2S with a quality part and clear the code to verify the repair.

Don't overlook exhaust leaks and wiring

- A common misdiagnosis is replacing the oxygen sensor when the real cause is a small exhaust leak upstream of the sensor, which lets air in and creates a false lean reading.
- The code can be set by a lazy sensor that responds slowly rather than a completely dead one, so a scan tool graph of the sensor voltage is more revealing than a simple pass/fail test.
- Chrysler vehicles often use a dedicated heater circuit for the HO2S, and a shorted heater can blow a fuse that also powers other sensors, leading to multiple codes.
- Fuel trim data is critical: if long-term fuel trims are significantly positive on bank 2 only, a vacuum leak or injector issue specific to that bank is more likely than a sensor fault.
- After replacing the sensor, the PCM may need to relearn the sensor's characteristics; a drive cycle with steady speeds is required before the code will clear from history.

Can I keep driving with P1157?

You can generally continue driving with P1157, but avoid heavy acceleration or towing until the fault is repaired, as a persistent lean condition can overheat the catalytic converter and cause costly damage. Have the vehicle diagnosed promptly to prevent worsening fuel economy and emissions failures.

Tools that help

- OBD-II scan tool with live data and graphing capability
- Digital multimeter for checking sensor voltage and circuit continuity
- Fuel pressure gauge
- Smoke machine for intake and exhaust leak detection
- Socket set and oxygen sensor wrench
- Propane enrichment tool or carburetor cleaner for mixture testing



Reading P1157

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

Often seen with

P1158 Manifold Absolute Pressure Sensor Circuit Range Performance · **P1158** Lack Of HO2S22 Switches Sensor Indicates Rich · **P1158** HO2S Bank 2 Sensor 2 Rich Or High Voltage · **P1158** Lack of Downstream Heated Oxygen Sensor Switch Sensor Indica · **P1158** HO2S Bank 2 Sensor 2 Rich Or High Voltage · **P1158** Fuel Trim Adaptation Additive Bank 1 Low · **P0136** O2 Sensor Circuit Malfunction (Bank 1 Sensor 2) · **P0156** O2 Sensor Circuit Malfunction (Bank 2 Sensor 2) · **P0171** System Too Lean (Bank 1) · **P0174** System Too Lean (Bank 2)

See it working

Watch the animated explainer [How a CVT Works: Belt and Pulley Transmission](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/chrysler-p1157/>

