

CHRYSLER · POWERTRAIN

P1138

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1138 · Chrysler

HO2S Bank 1 Sensor 2 Rich Or High Voltage

P1138 on a Chrysler vehicle means the downstream heated oxygen sensor (HO2S) in bank 1, sensor 2, is reporting a rich exhaust condition or a voltage signal that stays higher than the powertrain control module expects. The computer has detected that the sensor's output remains above its calibrated rich threshold for longer than the programmed time window, indicating either a genuinely rich 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 symptoms besides the warning light
- A noticeable drop in fuel economy as the engine runs richer than necessary
- Black, sooty exhaust smoke or a strong fuel odor from the tailpipe
- Rough idle or engine surging when the mixture becomes excessively rich
- Failed emissions inspection due to high carbon monoxide or hydrocarbon readings
- Occasional hesitation or stumble during acceleration if the rich condition worsens

Common causes, most likely first

- 1 A failed downstream heated oxygen sensor (HO2S) that is stuck at a high voltage or has an internal short
- 2 A short to voltage in the sensor signal wire between the HO2S and the powertrain control module
- 3 A leaking or stuck-open fuel injector on bank 1 that is flooding the cylinder with fuel
- 4 Excessive fuel pressure caused by a faulty fuel pressure regulator or a restricted fuel return line
- 5 A contaminated sensor from coolant, oil, or silicone poisoning that skews its voltage output
- 6 A restricted air intake or a dirty mass airflow sensor causing an overly rich mixture that the downstream sensor correctly reports
- 7 An exhaust leak upstream of the sensor that allows outside air to be misinterpreted, though this more often causes a lean code



How to diagnose and fix it

- 1 Connect a scan tool and record freeze-frame data for P1138, then check for any stored or pending codes that could indicate a related rich condition
- 2 Inspect the HO2S Bank 1 Sensor 2 wiring harness for chafing, corrosion, or a short to voltage, and repair any damaged wires
- 3 Measure the sensor's signal voltage with a digital multimeter while the engine is running; a reading that stays above 0.9 volts confirms a rich signal or a shorted sensor
- 4 Perform a fuel injector balance test or inspect the spark plugs on bank 1 for black soot, which points to a leaking injector
- 5 Check fuel pressure with a gauge and compare it to the manufacturer's specification to rule out excessive pressure
- 6 Replace the downstream HO2S only after confirming the wiring and fuel system are sound, using an OEM-quality sensor
- 7 Clear the codes and complete a drive cycle to verify the repair, then recheck for pending codes

Don't blame the sensor before checking these

- A leaking fuel injector on bank 1 is a common cause that is often missed because the downstream sensor is replaced first and the code returns within a few days.
- The downstream oxygen sensor's only job is to monitor catalytic converter efficiency, so a rich signal can be a true reading of a rich exhaust rather than a sensor failure.
- A short to voltage in the signal wire can mimic a rich sensor signal, so always wiggle-test the harness while watching live data before condemning the sensor.
- Silicone contamination from improper sealants or coolant leaks can poison the sensor and drive its voltage high, which is why the sensor's appearance should be inspected after removal.
- On some Chrysler models, a dirty mass airflow sensor skews the fuel trim rich enough to set P1138 without ever setting a mass airflow code, so check fuel trims before replacing parts.

Can I keep driving with P1138?

You can usually drive the vehicle short distances to a repair shop, but avoid heavy acceleration or long trips because a persistent rich condition can overheat and damage the catalytic converter. If the check engine light begins flashing or you notice strong fuel smells, stop driving and have the vehicle towed.

Tools that help

- OBD-II scan tool with live data and freeze-frame capability
- Digital multimeter with back-probing pins
- Fuel pressure test gauge
- Socket set and oxygen sensor wrench
- Wiring diagram for the HO2S circuit



Reading P1138

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

Often seen with

P0132 O2 Sensor Circuit High Voltage (Bank 1 Sensor 1) · **P0133** O2 Sensor Circuit Slow Response (Bank 1 Sensor 1) · **P0172** System Too Rich (Bank 1) · **P0175** System Too Rich (Bank 2) · **P0420** Catalyst System Efficiency Below Threshold (Bank 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/chrysler-p1138/>

