

CHRYSLER · POWERTRAIN

P1165

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1165 · Chrysler

HO2S Cross Counts Bank 2 Sensor 2

P1165 on Chrysler vehicles means the powertrain control module (PCM) has detected that the downstream heated oxygen sensor (HO2S) on bank 2 is not switching, or cross-counting, at the rate the PCM expects during its monitor. The PCM watches the sensor's voltage transitions and flags the code when the activity falls outside the calibrated window, indicating a lazy or stuck sensor or a circuit problem.

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 over time as the PCM loses confidence in downstream fuel trim feedback
- Occasional rough idle or hesitation if the sensor's slow response affects the PCM's catalyst efficiency strategy
- Failed emissions inspection due to the stored code and incomplete readiness monitors
- In rare cases, a sulfur or rotten-egg smell from the exhaust if the sensor's slow switching masks a rich condition

Common causes, most likely first

- 1 Aged or contaminated downstream oxygen sensor on bank 2 that has become lazy and no longer cross-counts properly
- 2 Exhaust leaks ahead of the sensor, such as a cracked pipe or failed gasket, allowing outside air to skew the reading
- 3 Wiring damage or corrosion in the sensor circuit, including chafed harnesses or poor connector pins
- 4 A failing catalytic converter that no longer stores and releases oxygen as designed, altering the downstream signal
- 5 An exhaust manifold leak or vacuum leak that affects bank 2 specifically and confuses the sensor's switching pattern
- 6 Oil or coolant contamination from an internal engine leak that coats the sensor element and slows its response



How to diagnose and fix it

- 1 Scan all modules and record freeze-frame data to confirm P1165 is active and not a history code from a past repair
- 2 Inspect the bank 2 downstream oxygen sensor wiring and connector for chafing, corrosion, or loose pins
- 3 Perform a visual and smoke test of the exhaust system ahead of the sensor to rule out leaks
- 4 Use a scan tool to graph the bank 2 sensor 2 voltage and compare its cross-counts to the bank 1 sensor 2 sensor
- 5 Check the sensor's heater circuit resistance and supply voltage to confirm the heater is functioning
- 6 If the sensor is slow or stuck, replace the bank 2 downstream oxygen sensor with the correct OEM part
- 7 Clear the code and run the oxygen sensor monitor to verify the repair and confirm no pending codes return

What cross counts really tell you

- Cross counts measure how often the downstream oxygen sensor voltage crosses the mid-point, and a lazy sensor can still produce a plausible-looking voltage on a static scan tool reading.
A common misdiagnosis is replacing the catalytic converter first; always verify the sensor's switching speed and check for exhaust leaks before condemning the converter.
- Chrysler's downstream sensor monitor is sensitive to exhaust leaks that occur between the sensor and the outside air, so a small crack in the Y-pipe can set P1165 without any audible exhaust noise.
- The bank 2 downstream sensor on V6 and V8 Chrysler engines is often exposed to road splash and heat, which accelerates connector corrosion and can mimic a failed sensor.
A contaminated sensor from coolant or oil burning may cross-count normally when cold but slow down once hot, so the fault may only appear during a specific drive cycle.

Can I keep driving with P1165?

You can usually continue driving with P1165 because the fault mainly affects emissions and fuel trim refinement, but avoid long trips or heavy loads until it is diagnosed. If the check engine light begins flashing or you notice rough running, stop driving and have the vehicle inspected promptly.

Tools that help

- OBD-II scan tool with graphing and live data capability
- Digital multimeter for circuit and heater resistance checks
- Smoke machine for exhaust leak detection
- Oxygen sensor socket and ratchet
- Wiring diagram and connector pinout for the Chrysler PCM



Reading P1165

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

Often seen with

P0136 O2 Sensor Circuit Malfunction (Bank 1 Sensor 2) · **P0137** O2 Sensor Circuit Low Voltage (Bank 1 Sensor 2) · **P0138** O2 Sensor Circuit High Voltage (Bank 1 Sensor 2) · **P0141** O2 Sensor Heater Circuit Malfunction (Bank 1 Sensor 2) · **P0420** Catalyst System Efficiency Below Threshold (Bank 1)

See it working

Watch the animated explainer [How Crank and Cam Position Sensors Work](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/chrysler-p1165/>

