

VOLKSWAGEN · POWERTRAIN

P1132

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1132 · Volkswagen

Oxygen Sensor Heating Circuit Bank 1 + 2 Sensor 1 Short To B+

P1132 on Volkswagen vehicles means the engine control module has detected a short to battery positive voltage in the oxygen sensor heating circuit for bank 1 sensor 1, which is the upstream sensor before the catalytic converter. The heater element inside the sensor is not receiving the pulsed ground control it expects, so the circuit is seeing full battery voltage when it should be switching. This prevents the sensor from reaching operating temperature quickly, which compromises fuel control and emissions.

SYSTEM

Powertrain

CODE TYPE

**Volkswagen
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
- Slightly rough idle or hesitation during the first minute of cold operation
- Increased fuel consumption as the engine runs richer while the sensor is cold
- A pending or stored P1132 code accompanied by a P0135 heater circuit code in some cases
- Occasional stumble on light acceleration when the engine is warming up
- Failed emissions test due to incomplete oxygen sensor readiness monitors

Common causes, most likely first

- 1 Chafed or shorted heater circuit wiring between the oxygen sensor and the engine control module, often against the exhaust heat shield or engine block
- 2 A failed oxygen sensor heater element that has internally shorted to the sensor casing or signal wire
- 3 Corroded or water-intruded connector pins at the oxygen sensor or at the engine control module harness
- 4 A short to battery voltage in the harness where it rubs through near the battery tray or starter cable
- 5 A faulty engine control module driver for the heater circuit, though this is far less common than wiring faults
- 6 Aftermarket oxygen sensor with incorrect internal resistance or pinout
- 7 Rodent damage to the heater circuit wiring insulation



How to diagnose and fix it

- 1 Connect a scan tool and verify P1132 is active, then check freeze-frame data for engine temperature and heater circuit status
- 2 Visually inspect the oxygen sensor harness from the sensor connector up to the engine control module for chafing, burns, or rodent damage
- 3 Disconnect the oxygen sensor and measure resistance across the heater terminals; compare to the manufacturer specification for the exact engine code
- 4 With the sensor disconnected and key on, measure voltage on the heater control wire at the sensor connector to confirm whether battery voltage is present when it should not be
- 5 Check for continuity between the heater control wire and battery positive at the engine control module connector to isolate a short in the harness
- 6 Repair or replace the damaged section of harness, then clear the code and run the oxygen sensor heater monitor to confirm the repair
- 7 If wiring and connector checks pass, replace the upstream oxygen sensor with an OEM-quality unit and recheck heater circuit operation

Why P1132 is rarely the sensor itself

- Volkswagen oxygen sensor heaters are controlled by a pulsed ground from the engine control module, so a short to battery positive on the control wire will set P1132 even when the sensor heater element tests good on the bench.
- The harness section behind the engine, near the exhaust downpipe and heat shield, is the most common place for the heater wire to rub through and short to battery voltage on transverse-engine Volkswagen models.
- A P1132 can be stored intermittently by water ingress into the oxygen sensor connector after steam cleaning or heavy rain, leaving no permanent fault and misleading a parts-swapping diagnosis.
- Technicians who replace the oxygen sensor first without checking the control wire often find the new sensor sets the same code within one drive cycle because the harness short remains.
- The engine control module heater driver can be damaged by a persistent short to battery voltage, so repairing the harness before installing a new sensor protects the replacement and the module.

Can I keep driving with P1132?

You can drive the vehicle short distances to a repair shop, but avoid extended driving because the cold oxygen sensor forces the engine into open-loop fuel control, which wastes fuel and can eventually damage the catalytic converter. Do not tow a trailer or drive at sustained high speed until the fault is repaired.



Tools that help

- OBD-II scan tool with live data and oxygen sensor monitor capability
- Digital multimeter with resistance and voltage measurement
- Back probe pins or breakout leads for connector testing
- Vehicle-specific wiring diagram for the oxygen sensor heater circuit
- Heat-resistant wire loom and electrical tape for harness repair
- Oxygen sensor socket

Reading P1132

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

Often seen with

P1128 Long Term Fuel Trim Bank 1 System Too Lean · **P1114** Bank 1 Sensor 2 Resistance Too High · **P1116** Oxygen Sensor Heater Circuit Open Bank 1 Sensor 1 · **P1128** Throttle Control Motor Lock · **P1116** Engine Torque Control Cut Signal Circuit Low Input · **P1128** MAP Lower Than Expected · **P1128** HO2S Bank 1 Sensor 1 Signals Swapped In Key On Engine Runnin · **P1114** Intake Air Temperature Sensor Circuit Low Input · **P1116** ECT Sensor Circuit Out Of Self Test Range · **P1128** Long Term Fuel Trim Multiplicative Air System High · **P1128** MAP Lower Than Expected · **P1116** Engine Coolant Temperature Sensor Erratic · **P1114** Engine Coolant Temperature Sensor Intermittent · **P1116** Engine Coolant Temperature Sensor is Out of Self-Test Range · **P1128** Upstream Heated Oxygen Sensor Signals Reversed · **P1114** Intake Air Temperature B (IAT2) Circuit Low Input · **P1116** ECT Signal Unstable Or Intermittent · **P1114** Engine Coolant Temperature (ECT) Sensor Circuit Intermittent · **P1116** Mass Or Volume Air Flow Circuit Range Performance Problem Ba · **P0135** O2 Sensor Heater Circuit Malfunction (Bank 1 Sensor 1) · **P0141** O2 Sensor Heater Circuit Malfunction (Bank 1 Sensor 2)

See it working

Watch the animated explainer [How Airbags Work: A 50 km/h Crash in Slow Motion](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/volkswagen-p1132/>

