

HONDA · POWERTRAIN

P1162

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1162 · Honda

HO2S11 Circuit Fault Bank 1 Sensor 1

P1162 on a Honda means the powertrain control module has detected an electrical fault in the circuit for the primary heated oxygen sensor (HO2S11) on bank 1, which is the sensor mounted ahead of the catalytic converter on the engine's number-one cylinder bank. The computer monitors the sensor's signal and heater circuit and flags this code when the voltage or current falls outside the expected range, so the fault is in the wiring, connector, heater element, or sensor itself rather than in the catalytic converter's efficiency.

SYSTEM

Powertrain

CODE TYPE

Honda specific

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

Fuel and air
metering

Symptoms you may notice

- Illuminated check engine light, often with no other noticeable symptoms besides the warning light
- Rough or unstable idle and occasional hesitation during acceleration
- Noticeably worse fuel economy as the computer reverts to a default fuel mixture
- Failed emissions test or a pending emissions monitor that will not complete
- In rare cases, a sulfur or raw-fuel smell from the exhaust when the mixture stays rich

Common causes, most likely first

- 1 Failed heater element inside the bank 1 sensor 1 heated oxygen sensor
- 2 Corroded, loose, or pushed-back pins in the sensor connector or the harness side
- 3 Open or shorted wiring between the sensor and the powertrain control module, often from chafing or rodent damage
- 4 Contamination of the sensor tip from coolant, oil, or silicone sealant that damages the element
- 5 Blown heater circuit fuse or a faulty oxygen sensor heater relay in the under-hood fuse box
- 6 Poor engine ground or corroded battery terminal connections that skew the heater circuit voltage
- 7 A rare internal driver fault in the powertrain control module, which should only be suspected after all wiring checks pass



How to diagnose and fix it

- 1 Scan all modules and record freeze-frame data for P1162, then inspect the bank 1 sensor 1 connector for corrosion, looseness, or pushed pins
- 2 Check the oxygen sensor heater fuse and relay in the under-hood fuse box and replace any blown fuse after finding the reason it blew
- 3 Measure heater circuit resistance at the sensor connector and compare it to the Honda specification for the engine in the vehicle
- 4 Back-probe the sensor signal and heater wires with the key on to confirm reference voltage and ground continuity to the powertrain control module
- 5 Inspect the harness routing for chafing, heat damage, or rodent chewing and repair any damaged wire with a proper splice and heat-shrink
- 6 Replace the bank 1 sensor 1 heated oxygen sensor with the correct Honda-specified part if the heater or element tests out of range
- 7 Clear the code, run the oxygen sensor monitor to completion, and verify the code does not return before releasing the vehicle

Why this code is often misdiagnosed

- A P1162 is an electrical circuit fault, so replacing the catalytic converter or the downstream sensor will not fix it and is a common and expensive misdiagnosis.
- Honda oxygen sensor heaters draw significant current, so a partially failed heater can test fine with a multimeter but still set the code once the engine bay heats up and resistance changes.
- Coolant or oil contamination from an internal engine leak can kill a new sensor quickly, so always check for contamination on the old sensor tip before fitting a replacement.
- A weak battery or corroded ground can cause the powertrain control module to misread the heater circuit, so load-test the battery and clean grounds before condemning the sensor.
- On some Honda engines the bank 1 sensor 1 connector sits close to the exhaust manifold and the plastic housing cracks from heat, letting moisture in and setting this code intermittently.

Can I keep driving with P1162?

You can usually drive the vehicle short distances to a repair shop, but avoid heavy acceleration, towing, or long highway trips because the engine runs on a default fuel mixture that can overwork the catalytic converter. If the check engine light starts flashing or the engine runs very rough, stop driving and have it towed.



Tools that help

- OBD-II scan tool with live data and freeze-frame capability
- Digital multimeter with back-probe pins
- Oxygen sensor socket and ratchet
- Wire repair kit with heat-shrink and crimp connectors
- Fuse puller and test light

Reading P1162

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

Often seen with

P0130 O2 Sensor Circuit Malfunction (Bank 1 Sensor 1) · **P0131** O2 Sensor Circuit Low Voltage (Bank 1 Sensor 1) · **P0132** O2 Sensor Circuit High Voltage (Bank 1 Sensor 1) · **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 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/honda-p1162/>

