

GENERIC · POWERTRAIN

P0330

OBD-II TROUBLE CODE

P0330

Knock Sensor 2 Circuit

P0330 means the powertrain control module (PCM) has detected an abnormal signal on the knock sensor circuit for the second sensor, which on V6 and V8 engines is typically the bank 2 sensor. The PCM monitors the knock sensor's voltage or resistance and flags this code when the signal falls outside the expected range for a calibrated period, indicating the circuit is open, shorted, or electrically noisy.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Powertrain	Generic (all makes)	Medium	Intermediate	Ignition system and misfire

Symptoms you may notice

- Illumination of the check engine light, often with no other symptoms besides the warning light.
- Reduced engine power or sluggish acceleration because the PCM may default to a conservative ignition timing map.
- Audible engine knock or pinging under load if the PCM can no longer retard timing based on knock sensor feedback.
- Poor fuel economy as the PCM enriches the mixture or retards timing to protect the engine.
- Rough idle or hesitation on acceleration in some cases, especially if the fault is intermittent.
- A stored pending code or freeze-frame data showing the fault occurred under specific load and temperature conditions.

Common causes, most likely first

- 1 Failed knock sensor 2 itself, often due to internal element failure or damage from heat and vibration.
- 2 Damaged or corroded wiring harness and connector at the knock sensor, including chafed insulation or broken pins.
- 3 Open or shorted knock sensor circuit, such as a broken wire between the sensor and PCM or a short to ground or voltage.
- 4 Poor electrical connection at the PCM connector, including loose terminals or corrosion.
- 5 Engine mechanical noise or vibration that mimics knock and confuses the sensor signal, such as a loose accessory bracket or exhaust heat shield.
- 6 Failed PCM driver circuit for the knock sensor, though this is less common than sensor or wiring faults.



How to diagnose and fix it

- 1 Inspect the knock sensor 2 connector and wiring for corrosion, damage, or loose pins, and repair as needed.
- 2 Check the knock sensor circuit for continuity and shorts using a digital multimeter, following the manufacturer's resistance or voltage specifications.
- 3 Swap the knock sensor with a known-good unit or perform a resistance check to confirm sensor failure before replacement.
- 4 Verify the sensor mounting surface is clean and torqued to specification, as improper installation can cause false signals.
- 5 Check for engine mechanical noises or loose components that could create vibration mimicking knock, and repair any found.
- 6 Clear the code and perform a road test with a scan tool to confirm the repair and ensure the monitor runs to completion.
- 7 If the circuit and sensor test good, diagnose the PCM and its connectors for faults, and reprogram or replace only if confirmed defective.

Knock sensor 2 circuit pitfalls to avoid

- A common misdiagnosis is replacing the knock sensor when the real fault is a chafed wire hidden behind the intake manifold or near the starter, so always perform a wiggle test on the harness while watching live data.
- Engine noise from a failing timing chain tensioner or a loose torque converter bolt can set a knock sensor code because the sensor cannot distinguish mechanical rattle from detonation, so rule out mechanical sources before condemning the sensor.
- On many engines, knock sensor 2 is located on the bank 2 side, which may be the rear bank in a transverse V6, making access difficult and increasing the chance of harness damage during unrelated repairs.
- The PCM may set P0330 intermittently if the sensor signal is only lost at certain RPM or temperature, so a static resistance check at room temperature can pass while the sensor still fails when hot.
- A poor ground connection at the engine block or chassis can elevate resistance in the knock sensor return circuit and trigger this code, so check ground straps and battery terminals as part of the diagnosis.

Can I keep driving with P0330?

You can usually drive the vehicle with P0330, but avoid heavy acceleration and towing because the PCM may not retard ignition timing properly, which can lead to engine damage from detonation. Have the fault diagnosed soon to prevent long-term wear and restore full performance.



Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Wiring diagram and service information for the specific vehicle
- Socket set and torque wrench for sensor removal
- Oscilloscope for advanced signal analysis

Reading P0330

P	Powertrain: engine, transmission and emissions.
0	Generic (SAE) code: it means the same thing on every OBD-II vehicle.
3	Ignition system and misfire.
30	The exact fault within that area.

Often seen with

P0325 Knock Sensor 1 Circuit Malfunction (Bank 1) · **P0327** Knock Sensor 1 Circuit Low Input (Bank 1) · **P0328** Knock Sensor 1 Circuit High Input (Bank 1) · **P0332** Knock Sensor 2 Circuit Low · **P0333** Knock Sensor 2 Circuit High

See it working

Watch the animated explainer [Engine Cooling System Trainer: How Engines Stay Cool](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p0330/>

