



P032D

Knock/Combustion Vibration Sensor C Circuit High

P032D is a generic powertrain code indicating that the engine control module (ECM) has detected an abnormally high voltage on the signal circuit for Knock/Combustion Vibration Sensor C. This sensor monitors engine block vibrations to detect detonation, and a high voltage reading typically means the circuit is open, shorted to voltage, or the sensor itself has failed.

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 noticeable symptoms.
- Reduced engine performance or power, as the ECM may retard ignition timing to protect the engine.
- Audible engine knocking or pinging, especially under acceleration or load.
- Poor fuel economy due to inefficient combustion and timing adjustments.
- Rough idle or hesitation during acceleration in some cases.
- In rare instances, the engine may enter limp mode to prevent damage.

Common causes, most likely first

- 1 Faulty knock sensor C (internal short or open circuit).
- 2 Damaged or corroded wiring harness or connector at the sensor.
- 3 Open circuit in the signal circuit between the sensor and ECM.
- 4 Short to voltage on the signal circuit.
- 5 Poor ground connection for the sensor or ECM.
- 6 ECM internal fault (less common).
- 7 Engine mechanical issues causing excessive vibration that mimics sensor failure.



How to diagnose and fix it

- 1 Perform a visual inspection of the sensor, wiring, and connectors for damage, corrosion, or loose connections.
- 2 Use a scan tool to check for other codes and freeze-frame data to understand when the fault occurred.
- 3 Test the sensor's resistance and compare to manufacturer specifications; replace if out of range.
- 4 Check the signal circuit for continuity and shorts to voltage using a digital multimeter.
- 5 Verify the sensor's ground circuit and clean or repair grounds as needed.
- 6 If wiring and sensor are good, test the ECM's signal input with an oscilloscope to confirm proper operation.
- 7 Replace the knock sensor or repair wiring as diagnosed, then clear codes and verify the repair with a test drive.

Knock Sensor C High Voltage: Common Oversights

- A high voltage code often results from an open circuit rather than a failed sensor, so always check wiring continuity before replacing parts.
- Excessive engine noise or mechanical knocking can cause the sensor to produce a high voltage signal, leading to misdiagnosis of the sensor itself.
- Corrosion inside the connector can create high resistance, mimicking an open circuit and setting this code.
- Aftermarket sensors or incorrect installation torque can lead to improper signal output and recurring codes.
- The ECM may set this code intermittently if the fault occurs only under specific conditions like high engine load or temperature.

Can I keep driving with P032D?

It is generally safe to drive with this code, but avoid aggressive acceleration or heavy loads, as the ECM may not properly detect knock and could allow engine damage over time. Have the issue diagnosed promptly to prevent potential long-term harm.

Tools that help

- OBD-II scan tool
- Digital multimeter
- Oscilloscope (for advanced diagnostics)
- Socket set and torque wrench
- Wire repair kit
- Manufacturer service information



Reading P032D

- 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.
- 2D** The exact fault within that area.

Often seen with

P0325 Knock Sensor 1 Circuit Malfunction (Bank 1) · **P0326** Knock Sensor 1 Circuit Range/Performance (Bank 1) · **P0327** Knock Sensor 1 Circuit Low Input (Bank 1) · **P0328** Knock Sensor 1 Circuit High Input (Bank 1) · **P0330** Knock Sensor 2 Circuit

See it working

Watch the animated explainer [How a Rotary Engine Works: Wankel in X-Ray](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p032d/>

