

GENERIC · POWERTRAIN

P0332

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P0332

Knock Sensor 2 Circuit Low

P0332 means the engine computer has detected a low voltage signal on the circuit for knock sensor number two, which is the sensor monitoring the bank of cylinders that does not include cylinder one. The computer expects the sensor to return a resting voltage within a specific range, and a reading below that threshold for a set time triggers this code.

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

Symptoms you may notice

- Illuminated check engine light, often with no other noticeable symptoms
- Reduced engine power or sluggish acceleration because the computer retards ignition timing to protect the engine
- Audible engine knock or pinging under load if the system defaults to a safe timing strategy
- Poor fuel economy as the computer runs a richer, less efficient calibration
- Rough running or hesitation during acceleration in some vehicles
- In rare cases, a no-start condition if the fault is severe and the computer disables the engine

Common causes, most likely first

- 1 Damaged or corroded knock sensor connector, especially at the sensor end where heat and vibration take a toll
- 2 Open or shorted knock sensor wiring harness, often from chafing, rodent damage, or heat brittleness
- 3 Failed knock sensor number two itself, typically from internal failure or contamination
- 4 Poor ground connection at the sensor mounting boss or engine block, which skews the voltage reference
- 5 Faulty engine control module (ECM) driver circuit, though this is less common than wiring or sensor faults
- 6 Loose knock sensor mounting bolt allowing the sensor to lose its acoustic coupling and produce an erratic signal



How to diagnose and fix it

- 1 Inspect the knock sensor connector and wiring for corrosion, looseness, or physical damage, and clean or repair as needed
- 2 Check the sensor mounting bolt torque and the cleanliness of the mounting surface, since a poor ground path can set this code
- 3 Measure resistance and voltage on the knock sensor circuit with a digital multimeter and compare to the manufacturer's specification
- 4 Perform a wiggle test on the harness while watching live data to catch intermittent opens or shorts
- 5 Swap the knock sensor with a known-good unit or the opposite bank sensor to see if the code follows the sensor
- 6 Verify the repair by clearing the code and running the engine through the manufacturer's knock sensor monitor with a scan tool
- 7 If all else checks out, diagnose the ECM driver circuit or replace the ECM as a last resort

What a low knock sensor signal really means

- A low voltage reading does not automatically mean the sensor is dead; a poor ground at the mounting boss can pull the signal low and mimic a failed sensor.
- Many technicians replace the knock sensor only to find the connector pigtail was heat-damaged and intermittent, so always inspect the harness before condemning the sensor.
- On some engines, a loose knock sensor bolt causes the sensor to pick up false noise and report a low signal, so torque specification matters more than people realize.
- This code can set after engine work if the sensor was disturbed or the block threads were not cleaned, so check recent repair history before diving into diagnostics.
- A failing alternator or bad engine ground can introduce electrical noise that corrupts the knock sensor signal and set this code alongside charging system codes.

Can I keep driving with P0332?

You can usually drive with this code, but avoid heavy acceleration and towing until it is repaired because the computer may retard timing and reduce power. Prolonged driving with a failed knock sensor can lead to engine damage if the computer cannot detect knock and defaults to a safe but inefficient calibration.

Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Torque wrench
- Socket set and extensions
- Electrical contact cleaner
- Wiring diagram for the knock sensor circuit



Reading P0332

- 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.
- 32** The exact fault within that area.

Often seen with

P0300 Random/Multiple Cylinder Misfire Detected · **P0325** Knock Sensor 1 Circuit Malfunction (Bank 1) · **P0327** Knock Sensor 1 Circuit Low Input (Bank 1) · **P0331** Knock Sensor 2 Circuit Range/Performance · **P0333** Knock Sensor 2 Circuit High

See it working

Watch the animated explainer [How an Oxygen Sensor Works: Live 3D Cutaway](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p0332/>

