



P032C

Knock/Combustion Vibration Sensor C Circuit Low

P032C indicates that the powertrain control module (PCM) has detected a low voltage condition on the signal circuit for Knock/Combustion Vibration Sensor C. This sensor monitors engine vibrations to detect knock, and the PCM uses that signal to adjust ignition timing and protect the engine from damaging detonation.

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 power or sluggish acceleration due to the PCM retarding timing as a precaution
- Audible engine knock or pinging, especially under load, if the sensor signal is lost
- Poor fuel economy because the PCM may default to a rich fuel mixture or conservative timing
- Intermittent misfire or rough running if the low signal is caused by a wiring fault that also affects other sensors
- Failed emissions test due to the check engine light being on

Common causes, most likely first

- 1 Damaged or chafed signal wire between the knock sensor C and the PCM, causing a short to ground
- 2 Corroded or loose electrical connector at the knock sensor C or at the PCM
- 3 Failed knock sensor C, internally shorted or open, producing a low voltage signal
- 4 Poor ground connection for the sensor or the PCM, leading to reference voltage drop
- 5 Faulty PCM driver circuit for the knock sensor signal, though this is less common
- 6 Engine mechanical noise or vibration that mimics a low signal, such as a loose accessory bracket or worn belt tensioner
- 7 Aftermarket electrical accessories improperly wired into the sensor circuit, causing voltage interference



How to diagnose and fix it

- 1 Inspect the knock sensor C and its connector for physical damage, corrosion, or loose pins, and repair as needed
- 2 Check the signal wire from the sensor to the PCM for continuity and shorts to ground using a digital multimeter
- 3 Verify the sensor's ground circuit and the PCM ground connections are clean and tight
- 4 Test the knock sensor C with a multimeter or oscilloscope to confirm it produces a proper AC voltage signal when tapped
- 5 If the sensor fails testing, replace it with a quality OEM-equivalent part and clear the code
- 6 If wiring and sensor are good, check for excessive engine mechanical noise or vibration that could be misinterpreted
- 7 After repairs, clear the code and perform a road test to verify the code does not return

Don't overlook the ground circuit

- A low voltage code on a knock sensor is more often caused by a bad ground or chafed wire than by a failed sensor, so always check the ground circuit before replacing parts.
- The PCM may set P032C intermittently if the sensor connector gets wet or contaminated with oil, which can happen after an engine wash or a valve cover gasket leak.
- Some vehicles use a knock sensor that is also responsible for combustion vibration detection, and a failing sensor can cause the PCM to disable adaptive timing, leading to reduced performance without triggering a misfire code.
- A loose alternator bracket or worn engine mount can create vibrations that the sensor interprets as knock, causing the PCM to set a low signal code even though the sensor itself is fine.
- Do not confuse P032C with P0325 (knock sensor circuit malfunction) or P0330 (knock sensor circuit malfunction bank 2); P032C is specific to sensor C and indicates a low voltage condition, not a general circuit failure.

Can I keep driving with P032C?

You can usually drive the vehicle with P032C set, but avoid heavy acceleration or towing until the fault is repaired, because the PCM may not be able to protect the engine from knock. Prolonged driving with a faulty knock sensor can lead to engine damage from undetected detonation.

Tools that help

- OBD-II scanner
- Digital multimeter
- Oscilloscope (optional but helpful)
- Socket and ratchet set
- Wire repair kit with crimp connectors and heat shrink



Reading P032C

- 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.
- 2C** 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) · **P0330** Knock Sensor 2 Circuit · **P0332** Knock Sensor 2 Circuit Low

See it working

Watch the animated explainer [How a Car Clutch Works: Diaphragm Clutch Cutaway](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p032c/>

