

GENERIC · POWERTRAIN

P032E

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P032E

Knock/Combustion Vibration Sensor C Circuit Intermittent

P032E indicates that the engine control module (ECM) has detected an intermittent fault in the circuit for knock sensor C, which is also called a combustion vibration sensor. The ECM monitors the sensor's signal and electrical circuit for brief, irregular interruptions that fall outside expected operating parameters, often caused by a loose connection or damaged wiring rather than a failed sensor.

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.
- Intermittent engine misfire or rough running, especially under load or acceleration.
- Reduced engine power or sluggish acceleration due to the ECM retarding ignition timing as a precaution.
- Occasional knocking or pinging sounds from the engine if the sensor signal is lost and timing control is compromised.
- Poor fuel economy or increased fuel consumption in some cases.

Common causes, most likely first

- 1 Loose, corroded, or damaged electrical connector at the knock sensor C.
- 2 Chafed, broken, or intermittently shorted wiring in the sensor circuit, often due to heat or vibration.
- 3 Faulty knock sensor C itself, where internal components fail intermittently.
- 4 Poor ground connection for the sensor or ECM, causing signal instability.
- 5 ECM software glitch or internal fault that misinterprets sensor signals.
- 6 Aftermarket modifications or improper repairs that affect the sensor circuit.
- 7 Engine mechanical issues, such as excessive vibration or knock, that stress the sensor circuit.



How to diagnose and fix it

- 1 Inspect the knock sensor C connector and wiring for looseness, corrosion, or damage; clean and secure as needed.
- 2 Perform a wiggle test on the sensor harness while monitoring live data to reproduce the intermittent fault.
- 3 Check the sensor's resistance and compare to manufacturer specifications; replace if out of range.
- 4 Verify the integrity of the circuit with a multimeter, checking for continuity, shorts to ground, and shorts to power.
- 5 Inspect and clean ground connections for the sensor and ECM to ensure proper grounding.
- 6 If all electrical checks pass, consult factory service information for ECM reprogramming or replacement procedures.
- 7 Clear the code and perform a road test to confirm the repair, monitoring for recurrence.

Intermittent Knock Sensor Circuit Traps

- A loose connector or chafed wire is far more common than a failed knock sensor, so always inspect the harness before replacing parts.
- Intermittent faults often leave no pending code, making live data monitoring and wiggle tests essential for diagnosis.
- The ECM may default to a conservative ignition timing strategy when the signal is lost, which can mask the fault and reduce performance without triggering other codes.
- Aftermarket electrical accessories or poor previous repairs can introduce noise into the sensor circuit, causing false intermittent codes.
- On some vehicles, a failing knock sensor may not set a code until the fault occurs under specific conditions, such as during cold starts or high-load driving.

Can I keep driving with P032E?

It is generally safe to drive with P032E, but avoid aggressive acceleration or heavy loads until the fault is repaired, as the ECM may reduce power and fuel efficiency. If the check engine light begins flashing or you notice severe knocking, stop driving and seek professional diagnosis immediately.

Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Wiggle test tool or jumper wires
- Factory service information for wiring diagrams and specifications
- Basic hand tools for connector and sensor access



Reading P032E

- 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.
- 2E** 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 an Elevator Works: Traction Lift in X-Ray](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p032e/>

