

GENERIC · POWERTRAIN

P0328

OBD-II TROUBLE CODE

P0328

Knock Sensor 1 Circuit High Input (Bank 1)

P0328 means the engine computer has detected an abnormally high voltage signal on the knock sensor circuit for bank 1, which is the side of the engine containing cylinder one. The computer expects the knock sensor to produce a small fluctuating voltage in response to engine vibration, and a high input tells it the circuit is likely open, shorted to voltage, or the sensor has failed internally.

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 symptoms besides the warning light
- Reduced engine power or limp mode as the computer retards ignition timing to protect the engine
- Audible engine knocking or pinging under acceleration because the computer can no longer detect and correct detonation
- Poor fuel economy and sluggish acceleration due to conservative timing strategies
- Rough idle or hesitation in some vehicles when the fault affects the timing control strategy

Common causes, most likely first

- 1 Failed knock sensor with an internal open circuit or damaged piezoelectric element
- 2 Damaged, corroded, or disconnected knock sensor wiring harness connector
- 3 Open circuit in the signal wire between the knock sensor and the engine control module (ECM)
- 4 Short to voltage on the knock sensor signal wire, often from chafed insulation against a power wire
- 5 Poor ground connection at the sensor mounting bolt or engine block ground strap
- 6 Faulty ECM driver circuit, though this is the least common cause



How to diagnose and fix it

- 1 Inspect the knock sensor connector and wiring for corrosion, looseness, or physical damage, and repair as needed
- 2 Check the sensor mounting bolt torque and clean the mating surface to ensure a good ground
- 3 Measure resistance across the knock sensor terminals and compare to the manufacturer's specification
- 4 Backprobe the signal wire at the ECM and check for an open or short to voltage with a multimeter
- 5 Perform a wiggle test on the harness while monitoring live knock sensor voltage data to catch intermittent faults
- 6 Replace the knock sensor if it fails resistance or signal testing, using the correct torque specification
- 7 Clear the code and verify the repair with a road test under load to confirm the knock sensor signal returns to normal

What a high knock sensor reading really means

- A high voltage on the knock sensor circuit often indicates an open circuit rather than a sensor that is actively detecting knock, so replacing the sensor without checking the wiring can waste money.
- The knock sensor is a piezoelectric device that generates its own voltage from vibration, so a disconnected or broken signal wire will read high on the ECM input rather than low.
- Some vehicles set P0328 when the sensor is over-torqued or under-torqued during installation, because the mounting bolt torque directly affects the sensor's output signal.
- A failing alternator or ignition system can introduce electrical noise that the ECM misinterprets as a high knock signal, so check for AC ripple and secondary ignition faults before condemning the sensor.
- On engines with two knock sensors, bank 1 refers to the side with cylinder one, and swapping sensors side to side is a quick diagnostic step to see if the code follows the sensor or the wiring.

Can I keep driving with P0328?

You can usually drive the vehicle with P0328, but avoid heavy acceleration and towing because the computer may not be able to protect the engine from detonation. Prolonged driving with a failed knock sensor can lead to engine damage in severe cases, so schedule diagnosis soon.

Tools that help

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



Reading P0328

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

Often seen with

P0324 Knock Control System Error · **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) · **P0330** Knock Sensor 2 Circuit

See it working

Watch the animated explainer [How a Helicopter Flies: Rotor and Tail in X-Ray](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p0328/>

