

GENERIC · POWERTRAIN

P3432

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P3432

Cylinder 4 Exhaust Valve Control Circuit High

P3432 indicates that the powertrain control module (PCM) has detected an abnormally high voltage on the control circuit for the cylinder 4 exhaust valve actuator, which is part of a variable valve timing or cylinder deactivation system. The PCM expects the circuit to pull to a specific voltage when commanded, and a reading above the expected threshold signals an open circuit, short to power, or a failed actuator.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Powertrain	Generic (all makes)	Medium	Intermediate	Auxiliary emission controls

Symptoms you may notice

- Illuminated check engine light, often with no other noticeable symptoms
- Rough idle or misfire sensation, particularly when the engine is cold or under light load
- Reduced engine power or limp mode if the fault triggers protective strategies
- Slightly higher fuel consumption due to improper valve timing
- Intermittent hesitation during acceleration when the exhaust valve control is commanded

Common causes, most likely first

- 1 Open or damaged wiring in the exhaust valve control circuit, such as a broken wire or corroded connector
- 2 Short to voltage on the control circuit, often from chafed insulation against a power wire
- 3 Failed cylinder 4 exhaust valve actuator or solenoid
- 4 Faulty powertrain control module (PCM) driver for that circuit, though rare
- 5 Poor electrical connection at the actuator or PCM connector, including loose pins or water intrusion
- 6 Aftermarket electrical accessories tapped into the circuit causing interference



How to diagnose and fix it

- 1 Perform a visual inspection of the cylinder 4 exhaust valve actuator connector and wiring for damage, corrosion, or loose pins
- 2 Use a digital multimeter to check for battery voltage on the control circuit with the key on and engine off, comparing to the service manual specification
- 3 Disconnect the actuator and measure resistance across its terminals to verify it is within the manufacturer's specified range
- 4 Check for continuity between the actuator connector and the PCM connector to rule out an open circuit
- 5 Inspect for a short to voltage by measuring the control wire to ground with the PCM disconnected; any voltage indicates a short
- 6 If wiring and actuator test good, substitute a known-good actuator or perform a bidirectional scan tool test to command the valve and observe circuit response
- 7 Clear the code and verify repair with a test drive that includes the enabling conditions for the exhaust valve control system

What the high-voltage reading really means

- A high voltage on the control circuit often indicates an open circuit rather than a short to power, because the PCM pull-up resistor raises the voltage when the actuator is disconnected.
- The exhaust valve control system may be part of a variable valve timing or cylinder deactivation strategy, so a fault can cause drivability issues that seem unrelated to the exhaust valve itself.
- Technicians sometimes replace the actuator unnecessarily when the real problem is a chafed wire harness near the exhaust manifold, where heat and vibration damage insulation.
- A weak battery or poor ground can cause the PCM to misread circuit voltage, setting this code without any actual circuit fault.
- This code can be set by a failed PCM driver, but that is rare; always rule out wiring and actuator faults before condemning the computer.

Can I keep driving with P3432?

You can usually drive the vehicle with this code, but avoid heavy acceleration and prolonged high-speed driving because the exhaust valve may not be controlled correctly, which can lead to overheating or catalytic converter damage over time. Have the fault diagnosed soon to prevent secondary damage.

Tools that help

- OBD-II scan tool with bidirectional control capability
- Digital multimeter (DMM)
- Wiring diagram and service manual for the specific vehicle
- Test light
- Socket set and trim removal tools for access



Reading P3432

- P** Powertrain: engine, transmission and emissions.
- 3** Generic (SAE) code: it means the same thing on every OBD-II vehicle.
- 4** Auxiliary emission controls.
- 32** The exact fault within that area.

Often seen with

P0011 'A' Camshaft Position - Timing Over-Advanced or System Perfo · **P0304** Cylinder 4 Misfire Detected · **P3431** Cylinder 4 Exhaust Valve Control Circuit Low · **P3433** Cylinder 5 Deactivation/Intake Valve Control Circuit/Open · **P3434** Cylinder 5 Deactivation/Intake Valve Control Performance

See it working

Watch the animated explainer [Four-Stroke Engine Cutaway: Intake to Exhaust](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p3432/>

