

GENERIC · POWERTRAIN

P3463

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P3463

Cylinder 8 Exhaust Valve Control Circuit Low

P3463 indicates that the powertrain control module (PCM) has detected a low-voltage condition on the electrical circuit that controls the exhaust valve for cylinder 8. This circuit typically operates a solenoid or actuator that adjusts exhaust valve timing or lift to improve engine breathing and efficiency. The PCM monitors the circuit and sets this code when the voltage on the control wire falls below the expected threshold, indicating a short to ground, an open circuit, or a faulty component.

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

Symptoms you may notice

- Illumination of the check engine light (malfunction indicator lamp) on the dashboard.
- Often no noticeable symptoms besides the warning light, especially if the fault is intermittent.
- Rough idle or misfire under certain conditions, particularly at low engine speeds.
- Reduced engine performance or fuel economy due to improper exhaust valve operation.
- Audible ticking or tapping noise from the valve cover area if the actuator is stuck or malfunctioning.
- In rare cases, the engine may enter limp mode to protect the catalytic converter from damage.

Common causes, most likely first

- 1 Damaged or disconnected electrical connector at the cylinder 8 exhaust valve actuator or solenoid.
- 2 Chafed, broken, or shorted wiring in the exhaust valve control circuit, often due to heat or vibration.
- 3 Failed exhaust valve actuator or solenoid, causing an open or short circuit.
- 4 Corroded or loose ground connection for the actuator circuit.
- 5 Faulty powertrain control module (PCM) driver circuit, though this is less common.
- 6 Oil or debris contamination in the actuator connector, leading to poor electrical contact.



How to diagnose and fix it

- 1 Perform a visual inspection of the cylinder 8 exhaust valve actuator connector and wiring for damage, corrosion, or loose pins.
- 2 Use a digital multimeter to check for battery voltage at the actuator connector with the key on and engine off, verifying power supply.
- 3 Check the resistance of the exhaust valve actuator solenoid against the manufacturer's specification to rule out an open or shorted coil.
- 4 Inspect the ground circuit for the actuator, ensuring a clean and tight connection to the engine block or chassis.
- 5 If the actuator and wiring are intact, back-probe the PCM connector to check for a short to ground or an open circuit on the control wire.
- 6 Repair any damaged wiring or replace the faulty actuator as needed, then clear the code and verify the repair with a test drive.
- 7 If the code persists after all electrical checks, consult the factory service information for specific pinpoint tests for the PCM driver circuit.

Hidden causes of P3463 you might overlook

- A loose or corroded ground connection at the engine block can mimic a faulty actuator, so always verify ground integrity before replacing parts.
- Heat damage from the exhaust manifold often causes the actuator wiring to become brittle and short to ground, which is not always visible without removing the connector boot.
- The code can set intermittently due to vibration, so a wiggle test of the harness while monitoring live data can reveal a broken wire that a static resistance test misses.
- Some vehicles use a shared power or ground circuit for multiple exhaust valve actuators, so a fault in one cylinder's circuit can affect others and set related codes.
- After repairs, the PCM may require a relearn procedure for the exhaust valve actuator; failing to do so can cause the code to return even with a correct repair.

Can I keep driving with P3463?

You can usually drive the vehicle with this code, but avoid aggressive acceleration or heavy loads because the exhaust valve may not function correctly, potentially causing engine misfire or catalytic converter damage over time. Have the fault diagnosed soon to prevent secondary issues.



Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Test light
- Wire probe set
- Factory service information for pinpoint tests

Reading P3463

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

Often seen with

P0011 'A' Camshaft Position - Timing Over-Advanced or System Perfo · **P0021** 'A' Camshaft Position - Timing Over-Advanced or System Perfo · **P0308** Cylinder 8 Misfire Detected · **P3462** Cylinder 8 Exhaust Valve Control Performance · **P3464** Cylinder 8 Exhaust Valve Control Circuit High

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/p3463/>

