

GENERIC · POWERTRAIN

P3462

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P3462

Cylinder 8 Exhaust Valve Control Performance

P3462 indicates that the powertrain control module (PCM) has detected a performance fault in the exhaust valve control system for cylinder 8, typically on engines equipped with variable valve timing or cylinder deactivation. The PCM monitors the exhaust valve's response to commanded changes and sets this code when the actual valve behavior does not match the expected profile within a calibrated time window.

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

Symptoms you may notice

- Illumination of the check engine light, often with no other noticeable symptoms
- Rough idle or misfire-like shudder, especially when the engine is cold or under light load
- Reduced engine power or sluggish acceleration due to improper exhaust valve timing
- Increased fuel consumption as the engine compensates for inefficient breathing
- Audible ticking or tapping from the affected cylinder bank, indicating valve train noise
- Intermittent stalling or hesitation during deceleration when the exhaust valve fails to return to its default position

Common causes, most likely first

- 1 Faulty exhaust valve control solenoid or actuator that fails to respond to PCM commands
- 2 Wiring damage, such as chafed insulation or corroded connectors, between the PCM and the exhaust valve control circuit
- 3 Sticking or seized exhaust valve due to carbon buildup or mechanical wear in the valve guide
- 4 Low engine oil pressure or sludge restricting oil flow to the variable valve timing phaser or control solenoid
- 5 Failed variable valve timing phaser or camshaft phaser that cannot adjust exhaust valve timing correctly
- 6 PCM software calibration issue or internal driver fault in the exhaust valve control circuit
- 7 Restricted oil passages in the cylinder head or solenoid screen causing intermittent actuator operation



How to diagnose and fix it

- 1 Connect a scan tool and verify P3462 is current, then check for related codes and freeze-frame data to confirm the fault conditions
- 2 Inspect the engine oil level and condition, and perform an oil and filter change if the oil is dirty or low, as clean oil is critical for valve control operation
- 3 Visually inspect the exhaust valve control solenoid connector and wiring for corrosion, chafing, or loose pins, and repair as needed
- 4 Test the exhaust valve control solenoid with a multimeter for resistance and compare to factory specifications, replacing it if out of range
- 5 Use a scan tool to command the exhaust valve actuator and observe whether the valve responds smoothly through its full range
- 6 Check oil pressure at the cylinder head and inspect the solenoid screen for sludge or debris, cleaning or replacing components as required
- 7 If electrical and oil flow checks pass, perform a mechanical inspection of the exhaust valve and phaser for sticking or wear, and replace faulty components

What Most Techs Miss on P3462

- A dirty oil control solenoid screen is a frequent culprit that mimics a failed solenoid, so cleaning the screen often resolves the code without parts replacement.
- The code can be set by a momentary glitch in the PCM's learned valve timing profile, and a relearn procedure after repairs may be necessary to prevent recurrence.
- Exhaust valve control performance faults are sometimes caused by a weak battery or charging system, as low voltage can disrupt solenoid operation and set false codes.
- On engines with cylinder deactivation, a failed exhaust valve control can cause the affected cylinder to remain active, leading to overheating and catalyst damage if ignored.
- Always verify that the correct viscosity and specification of engine oil is used, as incorrect oil can cause slow actuator response and trigger P3462 without any hard failure.

Can I keep driving with P3462?

Driving with P3462 is generally safe for short distances, but avoid heavy acceleration or towing until the fault is repaired. Prolonged driving with a faulty exhaust valve control can lead to catalyst damage or engine misfire, so schedule diagnosis promptly.



Tools that help

- OBD-II scan tool with bidirectional control and live data capability
- Digital multimeter for circuit and solenoid testing
- Oil pressure gauge for checking oil flow at the cylinder head
- Basic hand tools for connector and component access
- Factory service information for wiring diagrams and specifications

Reading P3462

- 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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- 62** 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 · **P3461** Cylinder 8 Exhaust Valve Control Circuit/Open · **P3463** Cylinder 8 Exhaust Valve Control Circuit Low

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/p3462/>

