

GENERIC · POWERTRAIN

P3464

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P3464

Cylinder 8 Exhaust Valve Control Circuit High

P3464 indicates that the powertrain control module (PCM) has detected an abnormally high voltage on the control circuit for cylinder 8's exhaust valve, 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 high reading tells it the circuit is open, shorted to power, or the actuator has failed.

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-like shaking, especially when the engine is cold or under light load
- Reduced engine power or a limp-home mode in some vehicles
- Poor fuel economy or increased emissions
- Audible ticking or tapping from the valve cover area on the affected bank
- Intermittent driveability problems that come and go with temperature or vibration

Common causes, most likely first

- 1 Failed exhaust valve control solenoid or actuator on cylinder 8
- 2 Open or damaged wiring in the control circuit between the PCM and the solenoid
- 3 Corroded, loose, or pushed-back terminal at the solenoid or PCM connector
- 4 Short to voltage on the control wire, often from chafed insulation
- 5 Internal PCM driver failure for that specific circuit
- 6 Oil sludge or debris blocking the solenoid, causing it to draw abnormal current and set a high-voltage code
- 7 Aftermarket or incorrect solenoid installed previously



How to diagnose and fix it

- 1 Scan all modules and record freeze-frame data to confirm the code is current and not history
- 2 Inspect the solenoid connector and wiring harness for corrosion, chafing, or loose pins
- 3 Measure resistance of the cylinder 8 exhaust valve control solenoid and compare to the manufacturer's specification
- 4 Back-probe the control circuit at the PCM and check for voltage with the key on and engine off, looking for a short to power
- 5 Perform a wiggle test on the harness while monitoring the circuit with a scan tool or multimeter
- 6 If wiring and solenoid test good, check for oil sludge or mechanical binding in the valve control mechanism
- 7 Replace the faulty solenoid or repair the wiring, clear the code, and verify the repair with a road test

What a high-voltage valve code really means

- A high-voltage code on a valve control circuit often points to an open circuit rather than a short, because the PCM pulls the circuit up and sees full voltage when the solenoid is disconnected.
Technicians sometimes replace the solenoid only to find a corroded ground or a chafed wire a few inches away, so always inspect the entire circuit before condemning the part.
 - This code can be set by a weak battery or charging system fault that causes the PCM to misread circuit voltage during cranking.
 - On engines with cylinder deactivation, a failed exhaust valve solenoid can cause the affected cylinder to stay on an exhaust lobe, leading to misfire codes that mask the real problem.
- A generic P3464 does not tell you which bank or engine configuration; always confirm cylinder 8 location and valve control strategy in the service information for the specific vehicle.

Can I keep driving with P3464?

You can usually drive short distances to a repair shop, but avoid heavy acceleration or towing because a stuck exhaust valve can cause misfires and overheating. If the engine runs rough or loses power, stop driving and have it towed.

Tools that help

- OBD-II scan tool with live data and bidirectional controls
- Digital multimeter with back-probe pins
- Wiring diagram and service information for the vehicle
- Socket set and Torx or hex drivers for valve cover and solenoid access
- Electrical contact cleaner and dielectric grease



Reading P3464

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

Often seen with

P0011 'A' Camshaft Position - Timing Over-Advanced or System Perfo · **P0300** Random/Multiple Cylinder Misfire Detected · **P0308** Cylinder 8 Misfire Detected · **P3463** Cylinder 8 Exhaust Valve Control Circuit Low · **P3465** Cylinder 9 Deactivation/Intake Valve Control Circuit/Open

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/p3464/>

