

GENERIC · POWERTRAIN

P3426

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P3426

Cylinder 4 Deactivation/Intake Valve Control Performance

P3426 indicates that the powertrain control module (PCM) has detected a performance fault in the cylinder 4 deactivation or intake valve control circuit, meaning the valve did not respond as commanded within the expected time or position. The PCM monitors the circuit and valve response, and when the actual state does not match the commanded state, it stores this code and may disable the cylinder deactivation feature.

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, often with no other noticeable symptoms
- Rough idle or vibration when the engine transitions into cylinder deactivation mode
- Reduced fuel economy because the engine may stay in full-cylinder mode
- A slight hesitation or stumble during light-throttle cruising
- In some cases, a loud ticking or tapping noise from the affected cylinder bank
- The driver may notice the engine does not enter eco or fuel-saving mode as usual

Common causes, most likely first

- 1 Faulty cylinder deactivation solenoid or control valve on cylinder 4
- 2 Damaged or chafed wiring in the deactivation valve control circuit
- 3 Corroded or loose electrical connector at the deactivation solenoid
- 4 Sticking or mechanically failed intake valve control actuator
- 5 Low engine oil level or degraded oil causing poor hydraulic response
- 6 Failed oil control valve or lifter for the deactivation mechanism
- 7 PCM software calibration issue or internal driver fault (less common)



How to diagnose and fix it

- 1 Check engine oil level and condition; top off or change oil if degraded
- 2 Inspect the deactivation solenoid connector and wiring for damage or corrosion
- 3 Measure resistance of the deactivation solenoid and compare to specification
- 4 Test the control circuit for power and ground signals from the PCM
- 5 Remove and inspect the deactivation solenoid for debris or sticking
- 6 Perform an active test of the cylinder deactivation system with a scan tool
- 7 If all electrical and hydraulic checks pass, replace the faulty valve control actuator or lifter

Oil quality and hidden wiring faults

- A low oil level or heavily contaminated oil is a frequent cause of this code because the deactivation system relies on clean, pressurized oil to move the locking pins; always verify oil condition before replacing parts.
- The wiring harness to the deactivation solenoid often rubs against the valve cover or intake manifold, causing intermittent shorts that set P3426 only under certain engine movements.
- A stuck-open intake valve control actuator can mimic a failed solenoid, so testing the mechanical movement of the valve is as important as electrical checks.
- This code does not always mean the solenoid is defective; a clogged oil passage or a failing oil pump can reduce hydraulic pressure enough to trigger the performance fault.
- After repairs, the PCM may need a relearn or adaptation reset for the cylinder deactivation system to clear the code and restore normal operation.

Can I keep driving with P3426?

You can usually continue driving with P3426, but avoid heavy loads and sustained high speeds because the engine may remain in full-cylinder mode and consume more fuel. Have the fault diagnosed soon to prevent potential damage to the valve train or catalytic converter from unburned fuel.

Tools that help

- OBD-II scan tool with bidirectional control and live data
- Digital multimeter
- Oil pressure gauge
- Basic hand tools (socket set, screwdrivers, pliers)
- Service information for circuit specifications and torque values



Reading P3426

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

Often seen with

P0011 'A' Camshaft Position - Timing Over-Advanced or System Perfo · **P0304** Cylinder 4 Misfire Detected · **P3400** Cylinder Deactivation System (Bank 1) · **P3425** Cylinder 4 Deactivation/Intake Valve Control Circuit/Open · **P3427** Cylinder 4 Deactivation/Intake 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/p3426/>

