

GENERIC · POWERTRAIN

P3482

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P3482

Cylinder 11 Deactivation/Intake Valve Control Performance

P3482 indicates that the powertrain control module (PCM) has detected a performance fault in the cylinder 11 deactivation or intake valve control circuit, meaning the valve did not respond as commanded during a self-test. The PCM monitors the circuit and valve motion, and when the expected change in manifold pressure or valve position does not occur, it stores this code.

SYSTEM

Powertrain

CODE TYPE

Generic (all makes)

SEVERITY

Medium

FIX DIFFICULTY

Professional

AREA

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 cylinder deactivation activates
- Reduced engine power or a stumble during light-throttle cruising
- Poor fuel economy if the affected cylinder fails to deactivate properly
- Audible ticking or tapping from the valvetrain area when the fault is active
- In rare cases, the engine may enter limp mode to protect the valvetrain

Common causes, most likely first

- 1 Faulty oil control solenoid or its wiring on the cylinder 11 deactivation oil gallery
- 2 Clogged or restricted oil passage feeding the deactivation mechanism
- 3 Sticking or failed deactivation rocker arm or intake valve actuator
- 4 Damaged or corroded electrical connector at the solenoid or valve control module
- 5 Low engine oil level or degraded oil causing insufficient hydraulic pressure
- 6 PCM software calibration issue or internal driver fault for that cylinder



How to diagnose and fix it

- 1 Verify engine oil level and condition; top off or change oil if it is low or heavily contaminated
- 2 Inspect the wiring harness and connector at the cylinder 11 deactivation solenoid for chafing, corrosion, or loose pins
- 3 Use a scan tool to command the cylinder deactivation on and off while watching live data for valve response and manifold pressure changes
- 4 Measure resistance and supply voltage at the solenoid; compare with the manufacturer's specification
- 5 Remove and inspect the deactivation solenoid for debris or blockage, and clean or replace if faulty
- 6 Perform a mechanical inspection of the rocker arm and intake valve actuator for sticking or excessive wear
- 7 If all mechanical and electrical checks pass, reprogram the PCM with the latest calibration and re-test

Oil quality and hidden solenoid faults

- A dirty or restricted oil passage often causes this code without any electrical fault, so flushing the oil gallery may be necessary after solenoid replacement.
The code can set intermittently if the solenoid coil is failing only when hot, so a cold resistance check may pass while the fault is still present.
- Technicians sometimes replace the rocker arm unnecessarily when the real problem is a weak solenoid or low oil pressure at idle.
- Cylinder deactivation faults can be misdiagnosed as ignition misfires because the symptoms overlap, so always check for stored pending codes before replacing spark plugs or coils.
After repairs, a relearn or adaptation reset may be required for the PCM to accept the new valve control commands.

Can I keep driving with P3482?

You can usually drive the vehicle to a repair shop, but avoid heavy acceleration and sustained high speeds because the affected cylinder may not deactivate properly, which can lead to overheating or further valvetrain damage. If the engine runs very rough or enters limp mode, stop driving and have it towed.

Tools that help

- OBD-II scan tool with bidirectional controls and live data
- Digital multimeter
- Oil pressure gauge
- Mechanic's stethoscope
- Factory service information for cylinder deactivation diagnostics



Reading P3482

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

Often seen with

P3400 Cylinder Deactivation System (Bank 1) · **P3480** Cylinder 10 Exhaust Valve Control Circuit High · **P3481** Cylinder 11 Deactivation/Intake Valve Control Circuit/Open · **P3483** Cylinder 11 Deactivation/Intake Valve Control Circuit Low · **P3490** Cylinder 12 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/p3482/>

