

GENERIC · POWERTRAIN

P349D

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P349D

Cylinder 6 Deactivation/Intake Valve Performance

P349D indicates that the powertrain control module (PCM) has detected a performance fault in the cylinder 6 deactivation system or its associated intake valve control, meaning the engine cannot properly switch cylinder 6 between active and deactivated states. The computer monitors valve lift and timing via sensors and compares actual response to commanded action, setting the code when the expected change does not occur within a calibrated 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 vibration when the engine enters cylinder deactivation mode
- Reduced fuel economy because the engine stays in full-cylinder operation
- A slight hesitation or stumble during light-throttle cruising
- Audible ticking or tapping from the valve cover area on the affected bank
- In rare cases, a misfire code for cylinder 6 may accompany the deactivation fault

Common causes, most likely first

- 1 Faulty oil control solenoid or valve that regulates oil pressure to the cylinder 6 deactivation lifters
- 2 Sticking or collapsed hydraulic lash adjuster or deactivation lifter on cylinder 6
- 3 Wiring damage or corrosion at the oil control solenoid connector or PCM harness
- 4 Low engine oil level or degraded oil causing insufficient pressure to actuate the deactivation mechanism
- 5 Clogged oil passage or screen feeding the cylinder 6 deactivation circuit
- 6 Failed intake valve actuator or rocker arm assembly specific to the deactivation system
- 7 PCM software calibration issue or internal driver fault for the solenoid circuit



How to diagnose and fix it

- 1 Verify engine oil level and condition; top off or change oil if it is low or excessively dirty
- 2 Use a scan tool to command cylinder 6 deactivation on and off while watching live data for solenoid response and valve lift status
- 3 Inspect the oil control solenoid connector and harness for chafing, corrosion, or loose pins, and check solenoid resistance against specification
- 4 Perform a manual oil pressure test at the deactivation gallery port if accessible, comparing to manufacturer specifications
- 5 Remove the valve cover and inspect the cylinder 6 rocker arm, lifter, and pushrod for free movement and wear
- 6 Test the oil control solenoid with a known-good unit or apply direct battery voltage to confirm it clicks and flows oil
- 7 If mechanical components are worn, replace the affected lifter or rocker assembly and clear the code, then verify repair with a road test

Oil quality and solenoid screens matter most

- A dirty or restricted oil control solenoid screen is one of the most frequent causes of this code, and it often sets no other fault codes because the system only monitors valve response, not oil flow directly.
- Many technicians replace the deactivation lifter first, but the root cause is frequently a failing oil control solenoid or degraded oil that has clogged the feed passage, so always verify oil pressure and solenoid operation before tearing into the valvetrain.
- This code can be set by a simple low oil level after an oil change or a slow leak, so check the dipstick before assuming a mechanical failure inside the engine.
- On some engines, the same deactivation solenoid serves multiple cylinders, so a fault in the solenoid or its circuit can set P349D alongside deactivation codes for other cylinders, misleading you into thinking cylinder 6 itself is bad.
- A relearn or calibration update for the PCM may be required after replacing the solenoid or lifter, and skipping that step can cause the code to return even when the hardware is good.

Can I keep driving with P349D?

You can usually continue driving to a repair shop, but avoid heavy acceleration and prolonged high-speed driving because the engine may stay in full-cylinder mode and run less efficiently. If the check engine light begins flashing or you feel a pronounced misfire, stop driving and have the vehicle towed to prevent catalytic converter damage.



Tools that help

- OBD-II scan tool with bidirectional control and live data capability
- Digital multimeter for circuit and solenoid resistance testing
- Oil pressure gauge kit with appropriate adapters
- Basic hand tools including socket set and torque wrench
- Feeler gauges or dial indicator for valvetrain inspection
- Manufacturer service information for oil control solenoid specifications

Reading P349D

P	Powertrain: engine, transmission and emissions.
3	Generic (SAE) code: it means the same thing on every OBD-II vehicle.
4	Auxiliary emission controls.
9D	The exact fault within that area.

Often seen with

P0306 Cylinder 6 Misfire Detected · **P3400** Cylinder Deactivation System (Bank 1) · **P3401** Cylinder 1 Deactivation/Intake Valve Control Circuit/Open · **P349C** Cylinder 5 Deactivation/Intake Valve Performance · **P349E** Cylinder 7 Deactivation/Intake Valve 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/p349d/>

