

GENERIC · POWERTRAIN

P05DA

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

## P05DA

### PCV Regulator Valve Control Circuit High

P05DA indicates the powertrain control module (PCM) has detected an abnormally high voltage on the control circuit for the positive crankcase ventilation (PCV) regulator valve, which is typically a duty-cycle solenoid that meters crankcase vapors into the intake. The high voltage reading tells the PCM that the circuit is open, shorted to voltage, or that the valve's internal coil has failed in a way that prevents normal current flow.

| SYSTEM     | CODE TYPE           | SEVERITY | FIX DIFFICULTY | AREA                                             |
|------------|---------------------|----------|----------------|--------------------------------------------------|
| Powertrain | Generic (all makes) | Medium   | Intermediate   | Vehicle speed, idle control and auxiliary inputs |

### Symptoms you may notice

- Illumination of the check engine light, often with no other noticeable symptoms
- Rough or unstable idle quality, especially when the engine is cold
- Increased oil consumption or oil seepage from seals due to crankcase pressure buildup
- A slight hesitation or surge during light-throttle acceleration
- A faint fuel or oil vapor smell from the engine bay or exhaust
- In some vehicles, a stored lean or rich condition code may accompany P05DA

### Common causes, most likely first

- 1 Open or damaged wire in the PCV regulator valve control circuit, such as a broken conductor or corroded terminal
- 2 Failed PCV regulator valve solenoid with an open internal coil
- 3 Short to voltage on the control circuit, often from chafed insulation against a nearby power wire
- 4 Poor electrical connection at the valve connector or PCM connector, including loose pins or water intrusion
- 5 Faulty PCM driver for the PCV regulator circuit, though this is less common
- 6 Aftermarket or incorrect PCV valve installed that does not match the PCM's expected resistance



## How to diagnose and fix it

- 1 Connect a scan tool and confirm P05DA is active, then command the PCV regulator valve on and off while watching live data to see if the circuit responds
- 2 Visually inspect the PCV regulator valve connector and wiring for corrosion, chafing, or loose pins, and repair any obvious damage
- 3 Measure resistance across the PCV regulator valve solenoid terminals and compare to the manufacturer's specification to check for an open coil
- 4 With the key on and the valve disconnected, measure voltage on the control circuit at the valve connector to check for a short to voltage
- 5 Perform a voltage drop test on the ground side of the circuit and check the PCM connector pins for tightness and cleanliness
- 6 If the wiring and valve test good, substitute a known-good PCV regulator valve and clear the code to see if it returns
- 7 As a last step, check for a faulty PCM driver by back-probing the control circuit while commanding the valve, and replace the PCM only if all other possibilities are ruled out

## What a high-voltage PCV code really means

- A high-voltage code on a solenoid control circuit almost always points to an open circuit or a failed coil, not a stuck valve, so replacing the valve without testing the wiring often wastes money.
- Some vehicles use a PCV regulator valve that is normally closed and pulse-width modulated; a disconnected connector will set this code immediately, so always check that the connector is fully seated before condemning parts.
- A short to voltage on the control circuit can be intermittent and may only set the code when the engine harness flexes over bumps, so wiggle-testing the harness while watching live data is a valuable step.
- This code can be set by a poor ground connection at the valve body or engine block, which raises the circuit voltage above the expected range without any fault in the valve itself.
- On vehicles with a shared power supply to multiple solenoids, a fault in another component on the same circuit can sometimes pull the voltage high and set P05DA as a secondary code.

## Can I keep driving with P05DA?

You can usually continue driving with P05DA because the engine will default to a fixed PCV flow, but avoid extended idling and heavy loads until the fault is repaired to prevent oil seals from being stressed by crankcase pressure. If you notice rough running, oil leaks, or a strong fuel smell, have the vehicle checked promptly.



## Tools that help

- OBD-II scan tool with live data and bidirectional control capability
- Digital multimeter with resistance and voltage measurement
- Back-probe kit or pin probes for testing connectors without damage
- Service information for the specific vehicle's PCV regulator circuit and resistance specifications
- Basic hand tools for connector and component access

## Reading P05DA

|           |                                                                      |
|-----------|----------------------------------------------------------------------|
| <b>P</b>  | Powertrain: engine, transmission and emissions.                      |
| <b>0</b>  | Generic (SAE) code: it means the same thing on every OBD-II vehicle. |
| <b>5</b>  | Vehicle speed, idle control and auxiliary inputs.                    |
| <b>DA</b> | The exact fault within that area.                                    |

## Often seen with

**P0171** System Too Lean (Bank 1) · **P0172** System Too Rich (Bank 1) · **P0507** Idle Control System RPM Higher Than Expected · **P05DB** Brake Pedal Position Sensor B Circuit/Open · **P05DC** Brake Pedal Position Sensor B Circuit Range/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/p05da/>

