

GENERIC · POWERTRAIN

P2675

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P2675

Air Cleaner Inlet Control Circuit / Open

P2675 indicates that the powertrain control module (PCM) has detected an open circuit in the air cleaner inlet control circuit, which typically operates a vacuum or electric actuator that regulates intake air temperature or flow. The PCM monitors the circuit for expected voltage or continuity and sets the code when the signal falls outside the normal range, indicating a break in the wiring or a failed component.

SYSTEM

Powertrain

CODE TYPE

Generic (all makes)

SEVERITY

Low

FIX DIFFICULTY

Intermediate

AREA

Computer and output circuits

Symptoms you may notice

- Illumination of the check engine light, often with no other noticeable symptoms
- Rough idle or hesitation during acceleration if the inlet control affects air flow
- Reduced engine performance or fuel economy in some cases
- A faint hissing or whistling noise from the air intake area if a vacuum line is disconnected
- In rare instances, the engine may stall or run poorly when cold due to incorrect air routing

Common causes, most likely first

- 1 Broken or disconnected vacuum hose between the intake and the air cleaner inlet actuator
- 2 Failed air cleaner inlet control solenoid or actuator
- 3 Open or shorted wiring in the air cleaner inlet control circuit
- 4 Corroded or loose electrical connector at the solenoid or PCM
- 5 Faulty PCM driver for the circuit (less common)
- 6 Physical damage to the air cleaner assembly or inlet duct affecting the actuator linkage

How to diagnose and fix it

- 1 Inspect all vacuum hoses and electrical connectors at the air cleaner inlet control actuator for looseness, cracks, or corrosion
- 2 Use a scan tool to command the actuator on and off and listen for operation or observe movement
- 3 Measure resistance of the solenoid or actuator and compare to manufacturer specifications
- 4 Check for battery voltage and ground at the actuator connector with the key on, using a multimeter
- 5 Continuity-test the wiring between the actuator and the PCM to rule out an open circuit
- 6 If wiring and actuator test good, suspect the PCM and perform pinpoint tests before replacement
- 7 Clear the code and verify the repair by test-driving the vehicle and confirming the code does not return



Overlooked Causes of P2675

- A missing or disconnected vacuum hose at the air cleaner inlet is a frequent cause that is often overlooked during visual inspections.
- The code can be set by a faulty actuator that still moves but has incorrect internal resistance, which a simple visual check will not reveal.
- Some vehicles use an electric actuator instead of vacuum, so testing procedures differ and the presence of a vacuum hose should not be assumed.
- P2675 can be triggered by a poor ground connection at the actuator or PCM, which may also cause other unrelated codes to appear.
- Replacing the air cleaner assembly without testing the circuit first is a common misdiagnosis that fails to resolve the issue.

Can I keep driving with P2675?

The vehicle is generally safe to drive with P2675 because the fault mainly affects intake air routing and does not cause immediate safety risks. Avoid prolonged driving if you notice rough running or stalling, and have the circuit inspected soon to prevent potential fuel economy or emissions issues.

Tools that help

- OBD-II scan tool
- Digital multimeter
- Vacuum pump and gauge
- Hand tools for trim and hose removal
- Wiring diagram for the specific vehicle

Reading P2675

P	Powertrain: engine, transmission and emissions.
2	Generic (SAE) code: it means the same thing on every OBD-II vehicle.
6	Computer and output circuits.
75	The exact fault within that area.

Often seen with

P0102 Mass/Volume Air Flow Circuit Low Input · **P0103** Mass/Volume Air Flow Circuit High Input · **P0171** System Too Lean (Bank 1) · **P2676** Air Cleaner Inlet Control Circuit Low · **P2677** Air Cleaner Inlet Control Circuit High



See it working

Watch the animated explainer [Inline-Four Engine X-Ray: Firing Order 1-3-4-2](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p2675/>

