

MERCEDES-BENZ · POWERTRAIN

P1475

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1475 · Mercedes-Benz

Resonance Intake Line Switchover Valve Y227

P1475 on Mercedes-Benz vehicles indicates that the engine control module has detected an electrical fault in the circuit for the resonance intake line switchover valve Y227, which is the solenoid that changes the intake runner length for better low-end and high-end torque. The computer monitors the valve's commanded state versus expected current or feedback and sets the code when the circuit is open, shorted, or the valve does not respond as expected.

SYSTEM

Powertrain

CODE TYPE

Mercedes-Benz specific

SEVERITY

Low

FIX DIFFICULTY

Intermediate

AREA

Auxiliary emission controls

Symptoms you may notice

- Illumination of the check engine light, often with no other noticeable symptoms
- Slight hesitation or flat spot during light acceleration at lower engine speeds
- Reduced engine torque or power at certain RPM ranges due to the intake flap not changing position
- Occasionally a rough idle or unstable idle quality if the flap sticks partially open
- In rare cases, a faint rattle or clicking noise from the intake manifold area when the valve is commanded
- No drivability complaints at all in many instances, with the code being the only evidence

Common causes, most likely first

- 1 Failed resonance intake switchover valve Y227 solenoid, often due to a burned-out coil or stuck plunger
- 2 Damaged or disconnected electrical connector at the valve, including corroded pins or a loose plug
- 3 Broken, chafed, or shorted wiring in the harness between the valve and the engine control module
- 4 Vacuum line leak or blockage preventing the valve from actuating the intake flap, even if the solenoid is electrically sound
- 5 Mechanical binding or failure of the intake manifold resonance flap linkage that the valve controls
- 6 Engine control module internal driver fault, though this is less common and should be confirmed last
- 7 Contamination or oil ingress into the valve from the intake system causing erratic operation



How to diagnose and fix it

- 1 Connect a Mercedes-Benz compatible scan tool and read all stored codes and freeze-frame data to confirm P1475 is current and not a history code
- 2 Visually inspect the Y227 valve connector and wiring for corrosion, looseness, or obvious damage, and check that the valve is physically present and mounted correctly
- 3 Measure the resistance of the valve solenoid with a multimeter and compare to the manufacturer's specification to rule out an open or shorted coil
- 4 Check for battery voltage and ground at the valve connector with the key on and the engine off, using a test light or multimeter to verify the circuit integrity
- 5 Inspect all vacuum lines connected to the resonance valve and intake flap actuator for cracks, disconnections, or blockage, and repair as needed
- 6 Command the valve on and off with the scan tool and listen for a click or observe the intake flap movement to confirm mechanical function
- 7 If the valve and wiring test good but the code persists, perform a guided diagnostic for the circuit and consider replacement of the valve or further testing of the engine control module driver

Before replacing the resonance intake valve

- A common oversight is replacing the Y227 valve when the actual fault is a brittle vacuum line that has cracked underneath the intake manifold, which costs far less to fix.
- The intake resonance flap can seize from carbon buildup, causing the valve to appear electrically faulty because it cannot move the flap through its full travel.
- Some technicians misdiagnose P1475 as a mass airflow sensor problem because the drivability symptoms overlap, but the scan tool activation test for the valve will quickly isolate the circuit.
- On certain Mercedes-Benz engines, the wiring harness for the resonance valve runs near hot exhaust components and can suffer heat damage that is not visible until the loom is opened.
- The code can set intermittently if the valve connector is loose but still making partial contact, so always wiggle-test the harness while monitoring live data.

Can I keep driving with P1475?

You can generally continue driving with P1475 because the fault mainly affects intake tuning and does not cause a safety hazard, but you may notice slightly reduced performance or fuel economy. Avoid heavy acceleration or towing until the issue is repaired, and address the code promptly to prevent secondary intake flap damage.



Tools that help

- Mercedes-Benz compatible OBD-II scan tool with bidirectional control
- Digital multimeter
- Hand vacuum pump
- Socket and ratchet set
- Test light
- Wiring diagram for the specific model

Reading P1475

P Powertrain: engine, transmission and emissions.

1 Manufacturer-specific code (Mercedes-Benz): its meaning depends on the make.

4 Auxiliary emission controls.

75 The exact fault within that area.

Often seen with

P1476 EVAP Emission Control System LDP Malfunction Insufficient Va · **P1476** Resonance Intake Manifold Switchover Valve Y226 · **P1476** Fan Relay High Circuit · **P1476** Fan Relay High Circuit · **P1474** Low Fan Control Primary Circuit · **P1476** Too Little Secondary Air · **P1476** Leakage Diagnostic Pump Clamped Tube · **P0171** System Too Lean (Bank 1) · **P2004** Intake Manifold Runner Control Stuck Open (Bank 1) · **P2005** Intake Manifold Runner Control Stuck Open (Bank 2)

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/mercedes-benz-p1475/>

