

VOLKSWAGEN · POWERTRAIN

P1515

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1515 · Volkswagen

Intake Manifold Changeover Valve Circuit Short To Ground

P1515 on Volkswagen vehicles means the engine control module has detected a short to ground on the intake manifold changeover valve circuit, which controls a flap that alters intake runner length for better low-end torque and high-rpm power. The computer monitors the valve's electrical circuit and sets this code when the control wire is grounded when it should not be, either continuously or intermittently.

SYSTEM

Powertrain

CODE TYPE

Volkswagen specific

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

Vehicle speed, idle control and auxiliary inputs

Symptoms you may notice

- Illuminated check engine light, often with no other noticeable symptoms
- Slight hesitation or flat spot during light acceleration at lower engine speeds
- Reduced engine power or sluggish response when accelerating from a stop
- Rough idle quality or minor stumbling when the engine is cold
- In some cases, a faint clicking or buzzing from the intake manifold area after shutdown

Common causes, most likely first

- 1 Chafed or rubbed-through insulation on the changeover valve control wire grounding against the engine block or intake manifold
- 2 Failed intake manifold changeover valve solenoid with an internal short to ground
- 3 Corroded or water-intruded electrical connector at the changeover valve, allowing the control terminal to short
- 4 Damaged engine control module internal driver for the changeover valve circuit, often caused by a previous shorted solenoid
- 5 Rodent damage to the wiring harness near the intake manifold
- 6 Aftermarket alarm or remote start wiring improperly spliced into the harness near the intake manifold



How to diagnose and fix it

- 1 Scan all modules and record freeze-frame data to confirm P1515 is active and not a stored history code from a previous repair
- 2 Visually inspect the changeover valve connector and the harness routing for chafing, corrosion, or rodent damage
- 3 Disconnect the valve and measure resistance between its control terminal and ground to check for an internal short
- 4 With the valve disconnected and key on, measure voltage on the control wire from the engine control module to confirm the short to ground is in the harness or module
- 5 Isolate the circuit by wiggling the harness while watching a multimeter or scan tool live data to locate an intermittent short
- 6 Repair the damaged wire section with proper solder and heat-shrink, or replace the faulty changeover valve
- 7 Clear the code and perform a road test with the scan tool monitoring the changeover valve command to verify the repair

What a shorted changeover valve really means

- A shorted changeover valve solenoid can back-feed and damage the driver inside the engine control module, so always check valve resistance before installing a replacement module.
- The changeover valve often fails only when the engine bay is hot, so a cold-engine resistance test can pass while the fault reappears after a twenty-minute drive.
- Volkswagen intake manifold changeover flaps can seize mechanically, and the resulting high current can mimic a short to ground even when the wiring is intact.
- P1515 can be set by a poor ground connection at the engine block that raises current draw on the valve circuit, so check engine ground straps before condemning the valve.
- On some Volkswagen engines the changeover valve shares a fuse or relay with the secondary air pump, so a blown fuse can set P1515 alongside other circuit codes.

Can I keep driving with P1515?

The vehicle remains safe to drive because the changeover valve only affects intake tuning and does not cause a stall or loss of braking assist. Avoid heavy acceleration and prolonged high-speed driving until the circuit is repaired, since a shorted valve can overheat the wiring or damage the engine control module driver.

Tools that help

- OBD-II scan tool with live data and bidirectional control
- Digital multimeter with min/max recording
- Wire piercing probes or back-probe pins
- Soldering iron and heat-shrink tubing
- Factory wiring diagram for the specific Volkswagen model



Reading P1515

- P** Powertrain: engine, transmission and emissions.
- 1** Manufacturer-specific code (Volkswagen): its meaning depends on the make.
- 5** Vehicle speed, idle control and auxiliary inputs.
- 15** The exact fault within that area.

Often seen with

P1518 Main Relay Circuit Short To B+ · **P1516** Intake Manifold Changeover Valve Circuit Open · **P1517** Main Relay Circuit Electrical Malfunction · **P1518** Starter Switch Circuit Low Input · **P1516** Idle Air Control Solenoid Signal 4 Circuit Low Input · **P1517** Idle Air Control Solenoid Signal 4 Circuit High Input · **P1516** Gear Change Neutral Drive Fault · **P1517** Cranking Neutral Drive Fault · **P1516** Gear Change Neutral Drive Fault · **P1517** Cranking Neutral Drive Fault · **P1518** Throttle Actuator Control (TAC) Module Serial Data Circuit · **P1516** Throttle Actuator Control (TAC) Module Throttle Actuator Pos · **P1517** Throttle Actuator Control (TAC) Module Performance · **P1517** Intake Manifold Runner Control Input Error · **P1518** Intake Manifold Runner Control Fault Stuck Open · **P1516** Intake Manifold Runner Control Input Error · **P1518** Throttle Actuator Control (TAC) Module Serial Data Circuit · **P1517** Throttle Actuator Control (TAC) Module Performance · **P1516** Throttle Actuator Control (TAC) Module Throttle Actuator Pos · **P0411** Secondary Air Injection System Incorrect Flow · **P0441** EVAP System Incorrect Purge Flow

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/volkswagen-p1515/>

