

VOLKSWAGEN · POWERTRAIN

P1815

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1815 · Volkswagen

Pressure Control Solenoid 1 Short To B+

P1815 on Volkswagen vehicles means the transmission control module (TCM) has detected a short to battery positive voltage on the circuit for Pressure Control Solenoid 1, which is a valve inside the automatic transmission valve body that regulates hydraulic pressure. The TCM monitors the solenoid's electrical circuit and flags this code when the control wire shows voltage that should not be present, indicating a short to power rather than a normal ground-controlled signal.

SYSTEM

Powertrain

CODE TYPE

**Volkswagen
specific**

SEVERITY

Medium

FIX DIFFICULTY

Professional

AREA

Transmission

Symptoms you may notice

- Illumination of the transmission warning light or check engine light, often with no other noticeable symptoms
- Harsh or delayed gear shifts, especially when the transmission is cold
- The transmission may enter limp mode, sticking in a single gear or refusing to shift
- Slipping or flaring during acceleration as line pressure control is compromised
- Rough engagement when selecting Drive or Reverse from a stop

Common causes, most likely first

- 1 Chafed or damaged wiring harness between the TCM and the transmission solenoid, shorting the control wire to a power source
- 2 Internal short to power within Pressure Control Solenoid 1 itself, often due to heat and fluid contamination
- 3 Corroded or fluid-contaminated electrical connector at the transmission case pass-through or solenoid body
- 4 Faulty transmission control module (TCM) with an internal short on the solenoid driver circuit
- 5 Aftermarket electrical accessories or poor previous repairs that tapped into the solenoid circuit
- 6 Damaged valve body circuit board or internal harness where the solenoid connects



How to diagnose and fix it

- 1 Scan all modules for stored and pending codes, then clear codes and test-drive to confirm P1815 returns before proceeding
- 2 Visually inspect the transmission wiring harness and connector for chafing, corrosion, or fluid intrusion, repairing any damage found
- 3 Disconnect the TCM and solenoid connector, then use a multimeter to check for voltage on the solenoid control wire with the key on to confirm a short to B+
- 4 Measure solenoid resistance and compare to the manufacturer's specification, replacing the solenoid if it is out of range or internally shorted
- 5 Check for continuity between the solenoid control wire and known power sources to isolate whether the short is in the harness or the solenoid
- 6 If the harness and solenoid test good, substitute a known-good TCM or perform a module swap to rule out an internal TCM fault
- 7 After repair, clear codes, perform a transmission adaptation reset if required, and verify proper operation on a road test

What P1815 Really Points To

- A short to B+ on a solenoid control circuit often originates in the harness where it rubs against the battery cable or other power wires, not inside the transmission itself.
- Technicians frequently replace the solenoid only to find the code returns because the real fault is a chafed wire hidden behind the battery tray or near the starter.
- Fluid contamination at the solenoid connector can create a conductive path that mimics a short to power, so always inspect the connector before condemning the solenoid.
- A failing TCM can command the solenoid driver to stay on, creating a short-to-B+ condition that looks like a wiring fault but disappears when a known-good module is fitted.
- This code can set intermittently due to vibration or heat, so a wiggle test of the harness while monitoring live data is more reliable than a static resistance check alone.

Can I keep driving with P1815?

You can drive the vehicle cautiously to a repair shop if the transmission still shifts and the warning light is steady, but avoid heavy acceleration or towing. If the transmission enters limp mode or slips severely, stop driving and arrange a tow to prevent internal damage.



Tools that help

- OBD-II scan tool with Volkswagen-specific software for transmission codes and live data
- Digital multimeter with back-probing pins and voltage measurement capability
- Wiring diagram for the specific Volkswagen model and transmission
- Transmission fluid drain pan and hand tools for connector access
- Test light or load probe for verifying power and ground circuits

Reading P1815

P Powertrain: engine, transmission and emissions.

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

8 Transmission.

15 The exact fault within that area.

Often seen with

P1814 Pressure Control Solenoid 1 Open Short To Ground · **P1814** Torque Converter Clutch Overstress · **P1816** TFP Valve Position Switch Park Neutral With Drive Ratio · **P0730** Incorrect Gear Ratio · **P0747** Pressure Control Solenoid 'A' Stuck On · **P0748** Pressure Control Solenoid 'A' Electrical

See it working

Watch the animated explainer [Car Relay Test Bench: Test 4-Pin and 5-Pin Relays](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/volkswagen-p1815/>

