

VOLKSWAGEN · POWERTRAIN

P1814

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1814 · Volkswagen

Pressure Control Solenoid 1 Open Short To Ground

P1814 on a Volkswagen means the transmission control module (TCM) has detected an open circuit or a short to ground in the wiring for pressure control solenoid 1, which is the solenoid that regulates hydraulic pressure inside the automatic transmission. The TCM monitors the solenoid's electrical circuit and sets this code when the expected current or voltage is outside the normal range, indicating a break in the wire or an unintended path to ground.

SYSTEM

Powertrain

CODE TYPE

Volkswagen specific

SEVERITY

Medium

FIX DIFFICULTY

Professional

AREA

Transmission

Symptoms you may notice

- The transmission may enter limp mode, holding a single gear or refusing to shift
- Harsh or delayed gear engagements, especially when selecting Drive or Reverse
- A flashing or illuminated transmission warning light on the instrument cluster
- The engine may rev unusually high or low during acceleration as shift pressure is lost
- Often no symptoms besides the warning light if the fault is intermittent or only affects a redundant circuit

Common causes, most likely first

- 1 Damaged or chafed wiring harness between the TCM and the transmission solenoid pack, often near the bell housing or under the battery tray
- 2 Corroded or loose electrical connector at the transmission solenoid pack or the TCM
- 3 Failed pressure control solenoid 1 itself, with an open internal coil or a shorted winding
- 4 Internal short to ground within the solenoid pack or the transmission wiring harness
- 5 Water or oil intrusion into the transmission connector causing a short to ground
- 6 A faulty TCM driver circuit, though this is less common than wiring or solenoid failure



How to diagnose and fix it

- 1 Scan all modules for stored codes and check freeze-frame data to confirm P1814 is current and not a ghost code from a low battery
- 2 Visually inspect the transmission wiring harness and connectors for chafing, corrosion, or fluid intrusion, especially at the solenoid pack and TCM
- 3 Disconnect the solenoid pack connector and measure resistance of pressure control solenoid 1 against the manufacturer's specification to check for an open or shorted coil
- 4 Check for continuity to ground on the solenoid signal wire with the connector unplugged; a reading of near zero ohms indicates a short to ground in the harness
- 5 Perform a voltage drop test on the power and ground circuits to the solenoid pack to rule out high resistance connections
- 6 If the harness and solenoid check out, substitute a known-good TCM or solenoid pack to isolate the faulty component before replacement
- 7 After repair, clear the code and perform a transmission adaptation reset and road test to verify the fault does not return

Before you replace the solenoid pack

- A chafed wire behind the battery tray or near the bell housing is a far more common cause of P1814 than a failed solenoid, so always inspect the harness before condemning the transmission.
- The code can be set by a low or weak battery during cranking, so check battery health and clear the code to see if it returns before starting electrical diagnosis.
- Volkswagen TCMs sometimes log P1814 when the transmission connector is contaminated with oil or coolant, which wicks into the pins and creates a partial short to ground.
- Do not assume the solenoid is bad just because the code says 'open short to ground'; the TCM driver circuit can fail in a way that mimics a solenoid fault, so a resistance check at the solenoid is essential.
- After replacing a solenoid or repairing wiring, the transmission may still shift harshly until the adaptive learning values are reset with a scan tool, which many DIYers miss.

Can I keep driving with P1814?

You can usually drive the vehicle to a repair shop if the transmission is not in limp mode, but avoid heavy acceleration and highway speeds because pressure control loss can cause harsh shifts or slipping. If the transmission is stuck in limp mode or the warning light is flashing, stop driving and have the vehicle towed to prevent internal damage.



Tools that help

- OBD-II scan tool with Volkswagen-specific software for transmission codes and adaptations
- Digital multimeter for resistance and continuity checks
- Wiring diagram for the transmission control circuit
- Socket set and trim removal tools for accessing the TCM and solenoid pack
- Transmission fluid catch pan and funnel if the solenoid pack requires removal

Reading P1814

P Powertrain: engine, transmission and emissions.

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

8 Transmission.

14 The exact fault within that area.

Often seen with

P1813 Pressure Control Solenoid 1 Electrical · **P1815** Pressure Control Solenoid 1 Short To B+ · **P1813** Torque Control · **P1815** Transmission Range Switch Start In Wrong Range · **P1815** Transmission 4-Wheel Drive Mode Select Short Circuit To Grou · **P0706** Transmission Range Sensor Circuit Range/Performance · **P0740** Torque Converter Clutch Circuit Malfunction · **P0741** Torque Converter Clutch Circuit Performance or Stuck Off

See it working

Watch the animated explainer [EV Powertrain Trainer: How an Electric Car Drives](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/volkswagen-p1814/>

