

VOLKSWAGEN · POWERTRAIN

P1752

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1752 · Volkswagen

Power Supply Malfunction

P1752 on Volkswagen vehicles indicates a malfunction in the power supply circuit for the transmission control module (TCM) or its associated sensors and solenoids. The TCM monitors voltage at its power input and sets this code when the supply falls outside the expected range, which can be caused by a weak battery, faulty relay, corroded wiring, or a failing TCM.

SYSTEM

Powertrain

CODE TYPE

Volkswagen
specific

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

Transmission

Symptoms you may notice

- Illuminated check engine light or transmission warning light
- Transmission may enter limp mode with harsh or delayed shifts
- Intermittent loss of power to the transmission, causing momentary hesitation
- Erratic shifting or failure to shift gears
- No symptoms besides the warning light in some cases

Common causes, most likely first

- 1 Weak or failing battery not holding sufficient charge
- 2 Corroded or loose battery terminals and ground connections
- 3 Faulty transmission power supply relay
- 4 Blown fuse in the TCM power circuit
- 5 Damaged or chafed wiring in the TCM power supply circuit
- 6 Failing transmission control module (TCM) internal power supply
- 7 Voltage drop due to high resistance in the power feed circuit

How to diagnose and fix it

- 1 Perform a battery load test and recharge or replace if below specification
- 2 Inspect and clean battery terminals, grounds, and TCM connectors
- 3 Check all fuses related to the transmission control module and replace if blown
- 4 Test the transmission power supply relay and replace if faulty
- 5 Measure voltage at the TCM power input under load and compare to battery voltage
- 6 Perform a voltage drop test on the power feed and ground circuits to locate high resistance
- 7 If all external circuits are good, test or replace the TCM as the last step



Don't overlook the simple power supply checks

- A weak battery that still starts the engine can cause P1752 because the TCM is sensitive to voltage dips during cranking or under load.
- Corroded ground connections on the transmission or chassis are a frequent hidden cause that many technicians miss when focusing only on the TCM.
- The code can be set intermittently by a failing relay that tests fine when cold but drops out when hot, so a relay swap with a known-good unit is a quick diagnostic step.
- After repairing the power supply, the TCM may need to relearn adaptive shift values, so a scan tool with transmission adaptation reset capability is often required.
- P1752 does not always mean the TCM is defective; in many cases the module is fine and the fault lies in the external power supply circuit.

Can I keep driving with P1752?

If the transmission is shifting normally and the light is steady, you can drive cautiously to a repair shop, but avoid heavy acceleration or towing. If the transmission is in limp mode or shifting harshly, stop driving and have the vehicle towed to prevent further damage.

Tools that help

- OBD-II scan tool with Volkswagen-specific software
- Digital multimeter
- Battery load tester
- Fuse puller and test light
- Relay puller and jumper wires
- Wiring diagram for the TCM power circuit

Reading P1752

P	Powertrain: engine, transmission and emissions.
1	Manufacturer-specific code (Volkswagen): its meaning depends on the make.
7	Transmission.
52	The exact fault within that area.



Often seen with

P1750 Power Supply Voltage Low · **P1751** Power Supply Voltage High · **P1753** TCM A/T Lockup Solenoid Valve "A" Fault · **P1750** Solenoid Assembly · **P1751** A/T Control Relay · **P1751** Transmission Shift Solenoid A Mechanical Fault · **P1754** Transmission Coast Clutch Solenoid Electrical Fault · **P1753** TCM A/T ECT Sensor Circuit Fault · **P1751** Shift Solenoid A Performance · **P1754** Coast Clutch Solenoid Circuit Malfunction · **P1750** Secondary Pressure Solenoid Circuit Range Performance · **P1751** Secondary Pressure Solenoid Open Circuit · **P0562** System Voltage Low

See it working

Watch the animated explainer [How Crank and Cam Position Sensors Work](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/volkswagen-p1752/>

