

GENERIC · POWERTRAIN

P2764

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P2764

Torque Converter Clutch Pressure Control Solenoid Control Circuit Low

P2764 indicates that the powertrain control module has detected an abnormally low voltage or current on the control circuit for the torque converter clutch pressure control solenoid. This solenoid regulates hydraulic pressure to engage and disengage the torque converter clutch, and a low circuit condition prevents reliable clutch operation.

SYSTEM

Powertrain

CODE TYPE

Generic (all makes)

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

Transmission

Symptoms you may notice

- Illumination of the check engine light, often with no other noticeable symptoms
- Harsh or delayed engagement of the torque converter clutch, felt as a shudder or jerk during light acceleration
- Transmission may fail to enter lockup mode, causing higher engine RPM at highway speeds and reduced fuel economy
- Intermittent or complete loss of torque converter clutch operation, leading to poor acceleration or stalling when coming to a stop
- Transmission may default to a limp-home mode with firm or delayed shifts

Common causes, most likely first

- 1 Damaged or chafed wiring in the solenoid control circuit, often near the transmission connector or along the harness
- 2 Corroded, loose, or contaminated electrical connector at the torque converter clutch solenoid or transmission case pass-through
- 3 Faulty torque converter clutch pressure control solenoid with an internal short or open winding
- 4 Poor ground connection for the solenoid circuit or transmission case
- 5 Failed powertrain control module driver for the solenoid circuit, though rare
- 6 Transmission fluid contamination or debris blocking solenoid operation, indirectly causing a low circuit condition



How to diagnose and fix it

- 1 Scan all modules for stored and pending codes, and record freeze-frame data to confirm the fault conditions
- 2 Inspect the solenoid circuit wiring and connectors for damage, corrosion, or loose pins, and repair as needed
- 3 Measure resistance of the torque converter clutch pressure control solenoid and compare to manufacturer specifications
- 4 Check for short to ground or open circuit in the control wire between the powertrain control module and solenoid
- 5 Verify power and ground supplies to the solenoid circuit under load using a test light or multimeter
- 6 If electrical checks pass, replace the torque converter clutch pressure control solenoid and clear codes
- 7 After repair, clear adaptive learning and perform a road test to confirm proper torque converter clutch operation

What a low circuit code really means

- A low circuit code can be set by a short to ground in the wiring, not just a failed solenoid, so always inspect the harness before replacing parts.
- Contaminated transmission fluid can cause solenoid sticking that mimics an electrical fault, so check fluid condition and service history first.
- Some vehicles set P2764 when the ignition is left on with the engine off for extended periods, causing a false low-voltage condition.
- The torque converter clutch solenoid shares power or ground with other solenoids on many transmissions, so a fault in a shared circuit can trigger this code.
- A failing powertrain control module driver is rare but possible; confirm all other possibilities before condemning the module.

Can I keep driving with P2764?

You can usually drive the vehicle with this code, but avoid heavy acceleration and highway speeds that demand torque converter clutch engagement. Prolonged driving may cause transmission overheating or further damage, so schedule diagnosis soon.

Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Test light
- Wire repair kit with crimpers and heat shrink
- Transmission fluid level and condition checker



Reading P2764

- P** Powertrain: engine, transmission and emissions.
- 2** Generic (SAE) code: it means the same thing on every OBD-II vehicle.
- 7** Transmission.
- 64** The exact fault within that area.

Often seen with

P0740 Torque Converter Clutch Circuit Malfunction · **P0741** Torque Converter Clutch Circuit Performance or Stuck Off · **P0742** Torque Converter Clutch Circuit Stuck On · **P2763** Torque Converter Clutch Pressure Control Solenoid Control Ci · **P2765** Input/Turbine Speed Sensor 'B' Circuit

See it working

Watch the animated explainer [Manual Car Driving Simulator: Learn Clutch Control](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p2764/>

