

GENERIC · POWERTRAIN

P2769

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P2769

Torque Converter Clutch Circuit Low

P2769 indicates that the powertrain control module (PCM) has detected a low voltage condition on the torque converter clutch (TCC) solenoid control circuit, which prevents the clutch from engaging as commanded. The PCM monitors the circuit and sets this code when the voltage on the control wire falls below the expected threshold, typically indicating a short to ground or an open circuit.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Powertrain	Generic (all makes)	Medium	Intermediate	Transmission

Symptoms you may notice

- The check engine light illuminates, often with no other noticeable symptoms.
- The torque converter clutch may fail to engage, causing higher engine RPM at highway speeds and reduced fuel economy.
- Some drivers notice a shudder or vibration during light acceleration or at steady cruising speeds.
- In rare cases, the transmission may enter limp mode or exhibit harsh shifting.
- The engine may stall when coming to a stop if the TCC remains engaged due to a shorted circuit.

Common causes, most likely first

- A short to ground in the TCC solenoid control wire, often due to chafed insulation or pinched harness.
- A faulty TCC solenoid with an internal short or open winding.
- Corroded or loose electrical connectors at the transmission or PCM.
- A defective PCM driver circuit for the TCC solenoid.
- Damaged wiring inside the transmission from heat or fluid contamination.
- Aftermarket electrical accessories improperly tapped into the circuit.



How to diagnose and fix it

- 1 Inspect the TCC solenoid circuit wiring for obvious damage, corrosion, or loose connectors, and repair as needed.
- 2 Use a scan tool to command the TCC solenoid on and off while monitoring circuit voltage to confirm the fault.
- 3 Disconnect the TCC solenoid and measure its resistance; compare to the manufacturer's specification to rule out a failed solenoid.
- 4 Check for continuity and short-to-ground on the control wire between the PCM and the solenoid, repairing any harness faults.
- 5 If the circuit and solenoid test good, test the PCM output with a scope or substitute a known-good PCM to verify driver failure.
- 6 Replace the TCC solenoid or PCM as diagnosed, clear the code, and perform a road test to confirm the repair.

Before you replace the TCC solenoid

- A shorted TCC solenoid can cause the engine to stall when stopping because the clutch stays engaged, mimicking an idle problem rather than a transmission fault.
- Many P2769 codes are caused by chafed wiring near the transmission bell housing or exhaust heat, so a thorough visual inspection often finds the issue before any parts are replaced.
- The PCM may set P2769 intermittently if the solenoid connector is loose or corroded, so wiggle-testing the harness while monitoring live data can reveal the fault.
- Replacing the TCC solenoid without checking the circuit resistance and wiring can lead to a repeat failure if the root cause is a shorted harness.
- Some vehicles use a pulse-width-modulated (PWM) signal for the TCC solenoid, and a failing solenoid can cause drivability symptoms that are misdiagnosed as engine misfires.

Can I keep driving with P2769?

It is generally safe to drive with P2769, but avoid sustained highway speeds or heavy towing because the torque converter clutch may not engage, leading to increased transmission fluid temperatures. If the engine stalls when stopping or the transmission shifts harshly, seek service promptly to prevent further damage.

Tools that help

- OBD-II scan tool with live data and bidirectional control
- Digital multimeter
- Wiring diagram for the specific vehicle
- Socket set and trim removal tools
- Oscilloscope (optional for PCM output testing)



Reading P2769

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

Often seen with

P0700 Transmission Control System Malfunction · **P0740** Torque Converter Clutch Circuit Malfunction · **P0741** Torque Converter Clutch Circuit Performance or Stuck Off · **P2767** Input/Turbine Speed Sensor 'B' Circuit No Signal · **P2768** Input/Turbine Speed Sensor 'B' Circuit Intermittent

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/p2769/>

