

GENERIC · POWERTRAIN

P0700

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P0700

Transmission Control System Malfunction

P0700 is a generic powertrain code that tells you the transmission control module (TCM) has detected a fault and is requesting that the engine control module (ECM) illuminate the malfunction indicator lamp (MIL). The ECM itself has not necessarily found a problem; it is simply reporting that the transmission computer has stored one or more trouble codes of its own.

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

Symptoms you may notice

- Illumination of the malfunction indicator lamp (MIL), often with no other noticeable symptoms
- Harsh or delayed shifting, or the transmission may fail to shift at all
- The transmission may enter limp mode, holding a single gear to protect itself
- Slipping, flaring, or shuddering during gear changes
- The vehicle may refuse to engage drive or reverse, or may stall when coming to a stop
- A message such as 'Transmission Fault' or 'Service Transmission' may appear on the dashboard

Common causes, most likely first

- 1 A stored trouble code in the transmission control module (TCM) that has not yet been retrieved, often due to a sensor or solenoid issue
- 2 Low or contaminated automatic transmission fluid (ATF) causing erratic pressure and sensor readings
- 3 A faulty transmission range sensor (TRS) or neutral safety switch sending incorrect gear position data
- 4 Damaged or corroded wiring or connectors between the TCM and the transmission, or between the TCM and the ECM
- 5 A failing transmission solenoid pack or internal pressure switch
- 6 A software glitch or corrupted adaptive learning values in the TCM that can be resolved with a reflash or relearn
- 7 Internal mechanical wear in the transmission, such as a failing clutch pack or valve body, that sets a TCM code



How to diagnose and fix it

- 1 Connect a scan tool capable of reading transmission control module (TCM) codes, not just engine codes, and record all stored and pending codes
- 2 Check the automatic transmission fluid (ATF) level and condition according to the manufacturer's procedure, looking for low level, burnt smell, or contamination
- 3 Inspect the wiring harness and connectors at the TCM, transmission, and ECM for chafing, corrosion, or loose pins
- 4 Test the transmission range sensor (TRS) and related switches for proper continuity and alignment
- 5 Perform a resistance and voltage check on the solenoid pack and internal pressure switches if the TCM code points to them
- 6 Clear the codes after any repair and perform a relearn or adaptive drive cycle as specified for the vehicle
- 7 If the TCM code persists after electrical and fluid checks, follow the manufacturer's diagnostic flow for the specific TCM code to avoid unnecessary parts replacement

What the transmission computer is really telling you

- P0700 is a 'request for MIL illumination' from the TCM to the ECM, so the real fault is always stored in the TCM as a separate code that must be retrieved with a capable scan tool.
- Many vehicles set P0700 simply because the transmission fluid is low or dirty, and a fluid service and code clear resolves the issue without any hard parts replacement.
- A weak or failing battery or a poor ground connection can cause the TCM to set P0700 intermittently, so always check battery voltage and grounds before condemning the transmission.
- After a repair, some TCMs require a adaptive learning reset or a specific drive cycle to clear P0700 permanently, and skipping this step leads to a false comeback.
- P0700 does not always mean the transmission is mechanically failing; it can be triggered by a simple sensor glitch or a communication error on the controller area network (CAN) bus.

Can I keep driving with P0700?

You can usually drive the vehicle to a repair shop if the transmission still shifts and the vehicle does not enter limp mode, but avoid heavy acceleration, towing, or long trips until the underlying TCM code is diagnosed. If the transmission slips severely, refuses to shift, or the vehicle enters limp mode, stop driving and have it towed to prevent further damage.

Tools that help

- Scan tool capable of reading transmission control module (TCM) codes
- Digital multimeter for electrical checks
- Transmission fluid level dipstick or manufacturer-specific fluid level tool
- Socket set and basic hand tools for connector and sensor access
- Manufacturer service information for diagnostic flow and relearn procedures



Reading P0700

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

Often seen with

P0701 Transmission Control System Range/Performance · **P0702** Transmission Control System Electrical · **P0703** Torque Converter/Brake Switch B Circuit Malfunction · **P0705** Transmission Range Sensor Circuit Malfunction · **P0715** Input/Turbine Speed Sensor Circuit Malfunction

See it working

Watch the animated explainer [How an Automatic Transmission Works, Gear by Gear](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p0700/>

