

GENERIC · POWERTRAIN

P0752

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P0752

Shift Solenoid 'A' Stuck On

P0752 means the transmission control module (TCM) has commanded shift solenoid 'A' to turn off, but the solenoid circuit remains electrically active, indicating the solenoid is stuck in the on position. The TCM detects this by comparing its command to the actual current or voltage feedback from the solenoid circuit, and it sets the code when the solenoid fails to de-energize as expected.

SYSTEM

Powertrain

CODE TYPE

Generic (all makes)

SEVERITY

Medium

FIX DIFFICULTY

Professional

AREA

Transmission

Symptoms you may notice

- The check engine light or transmission warning light illuminates on the dashboard.
- Harsh or delayed shifts, especially when the transmission tries to engage first or second gear.
- The transmission may stay in a single gear or enter limp mode, limiting vehicle speed.
- Engine RPM may flare between shifts or the transmission may slip when accelerating.
- Often no symptoms besides the warning light, particularly if the fault is intermittent.
- Poor fuel economy or unusual engine braking behavior during deceleration.

Common causes, most likely first

- 1 Shift solenoid 'A' mechanically stuck in the energized position due to wear, debris, or varnish buildup.
- 2 A short to power in the wiring harness between the TCM and the solenoid, keeping the circuit live.
- 3 Contaminated transmission fluid (ATF) with clutch material or metal particles causing the solenoid valve to jam.
- 4 A faulty TCM driver circuit that continuously supplies ground or power to the solenoid.
- 5 Internal transmission valve body wear or a stuck shift valve that prevents the solenoid from releasing pressure.
- 6 Corroded or damaged electrical connector pins at the solenoid or TCM, causing an intermittent short.



How to diagnose and fix it

- 1 Scan all modules for stored and pending codes, and record freeze-frame data to confirm when P0752 set.
- 2 Check the transmission fluid level and condition; look for dark, burnt, or contaminated fluid that could cause solenoid sticking.
- 3 Inspect the wiring harness and connectors at the shift solenoid and TCM for chafing, corrosion, or short-to-power conditions.
- 4 Measure resistance and voltage at the shift solenoid 'A' connector and compare to the manufacturer's specification.
- 5 Command the solenoid on and off with a bidirectional scan tool while monitoring current or voltage feedback to verify it releases.
- 6 If electrical checks pass, remove the valve body and inspect the solenoid and shift valves for mechanical sticking or debris.
- 7 Replace the faulty shift solenoid 'A' or repair the shorted wiring, then clear codes and perform a relearn or adaptation drive cycle.

What P0752 does not always mean

- A short to power in the harness can mimic a stuck solenoid, so always perform a voltage drop test on the control circuit before condemning the solenoid itself.
- Contaminated transmission fluid is a frequent hidden cause; if the fluid smells burnt or contains debris, the solenoid may have stuck due to varnish rather than an electrical failure.
- Some vehicles use a single solenoid for multiple shift functions, so a stuck solenoid 'A' can produce symptoms that resemble other shift solenoid codes.
- Intermittent P0752 codes often appear after cold starts or during specific temperature ranges, pointing to a marginal electrical connection rather than a fully failed solenoid.
- Replacing the solenoid without addressing a worn valve body or contaminated fluid can lead to a repeat failure within a short time.

Can I keep driving with P0752?

You can usually drive the vehicle to a repair shop, but avoid aggressive acceleration and highway speeds because the transmission may be in limp mode or shift harshly. Prolonged driving with a stuck solenoid can cause internal transmission damage, so schedule diagnosis soon.

Tools that help

- OBD-II scan tool with bidirectional control and transmission data streaming
- Digital multimeter with min/max and resistance measurement
- Transmission fluid level gauge and fluid condition checker
- Factory service information for wiring diagrams and solenoid specifications
- Socket set and torque wrench for valve body removal if needed



Reading P0752

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

Often seen with

P0750 Shift Solenoid 'A' · **P0751** Shift Solenoid 'A' Performance or Stuck Off · **P0753** Shift Solenoid 'A' Electrical · **P0755** Shift Solenoid 'B' · **P0760** Shift Solenoid 'C'

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/p0752/>

