

GENERIC · POWERTRAIN

P0750

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P0750

Shift Solenoid 'A'

P0750 is a generic transmission code indicating that the powertrain control module has detected an electrical fault in shift solenoid 'A', which is the solenoid responsible for controlling one of the hydraulic shift valves inside the transmission. The computer monitors the solenoid circuit for expected current flow and voltage drop, and when the readings fall outside the programmed range, it commands the transmission into a default or limp mode and stores this code.

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

Symptoms you may notice

- The check engine light or transmission warning light illuminates on the dashboard.
- The transmission may enter limp mode and stay stuck in a single gear, often second or third, with harsh or delayed engagement.
- Shift quality becomes erratic, with slipping, flaring, or harsh shifts between gears.
- The vehicle may refuse to downshift or upshift at the normal speeds and throttle positions.
- Often no symptoms besides the warning light, especially if the fault is intermittent and the transmission still operates normally.
- Reduced fuel economy and elevated engine RPM at highway speeds due to incorrect gear selection.

Common causes, most likely first

- Failed shift solenoid 'A' itself, typically from internal coil winding failure, contamination, or mechanical sticking.
- Damaged, chafed, or corroded wiring in the solenoid circuit between the transmission and the powertrain control module.
- Loose, corroded, or water-intruded electrical connector at the transmission case or solenoid body.
- Transmission fluid contamination, varnish, or debris blocking the solenoid valve and causing incorrect hydraulic response.
- A faulty powertrain control module driver circuit, though this is far less common than solenoid or wiring faults.
- Low or degraded transmission fluid level and condition affecting solenoid hydraulic performance.
- Internal transmission mechanical wear causing the solenoid to work outside its expected electrical load range.



How to diagnose and fix it

- 1 Scan all modules and record freeze-frame data to confirm P0750 is active and not a history code from a previous repair.
- 2 Check transmission fluid level, color, and smell; service the fluid and filter if contaminated or overdue.
- 3 Inspect the solenoid circuit wiring and connectors for chafing, corrosion, and water intrusion, and perform a wiggle test while monitoring solenoid current.
- 4 Measure the resistance of shift solenoid 'A' at the transmission connector and compare it to the manufacturer's specification for the specific transmission.
- 5 Command the solenoid on and off with a scan tool and listen or feel for the corresponding click to verify mechanical and electrical operation.
- 6 If resistance is out of specification or the solenoid fails the command test, remove the transmission pan or valve body and replace shift solenoid 'A'.
- 7 Clear the codes, road test through all gears, and verify the code does not return before releasing the vehicle.

What P0750 does not always mean

- A P0750 does not automatically condemn the solenoid; a chafed wire or corroded connector in the circuit can produce the exact same electrical signature and is far cheaper to fix.
- Many vehicles set this code intermittently from contaminated transmission fluid, and a fluid and filter service resolves the fault without any parts replacement.
- Technicians sometimes replace the solenoid only to find the replacement fails the same way because the real problem is a worn valve body bore or a failing internal harness inside the transmission.
- On some transmissions, shift solenoid 'A' is part of a solenoid body assembly, and the manufacturer may require replacing the entire assembly rather than the individual solenoid.
- A weak battery or charging system fault can cause the powertrain control module to misread solenoid current and set this code, so always verify system voltage before condemning transmission components.

Can I keep driving with P0750?

You can usually drive the vehicle to a repair shop, but expect limp mode with reduced power and poor shift quality, and avoid highway speeds or heavy loads until the fault is repaired. If the transmission slips severely or refuses to engage a gear, stop driving and arrange a tow to prevent internal damage.

Tools that help

- OBD-II scan tool with bidirectional control and transmission data capabilities
- Digital multimeter for resistance and voltage measurements
- Transmission fluid level dipstick or scan tool fluid temperature reading
- Factory service information for solenoid resistance specifications and torque values
- Basic hand tools and a drain pan for fluid service and pan removal
- Wire repair kit with crimp connectors and heat shrink for circuit repairs



Reading P0750

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

Often seen with

P0751 Shift Solenoid 'A' Performance or Stuck Off · **P0752** Shift Solenoid 'A' Stuck On · **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/p0750/>

