

GENERIC · POWERTRAIN

P0783

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P0783

3-4 Shift

P0783 indicates that the transmission control module has detected a fault in the 3-4 shift circuit, meaning the electrical path that commands the shift solenoid or actuator for the 3-4 gear change is not performing as expected. The computer monitors the circuit for abnormal voltage or current and sets this code when the signal falls outside the manufacturer's specified range during a commanded 3-4 shift.

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

Symptoms you may notice

- The malfunction indicator lamp (check engine light) illuminates on the dashboard.
- The transmission may fail to shift from third to fourth gear, holding third gear longer than normal.
- Harsh or delayed engagement when the transmission attempts the 3-4 shift.
- The transmission may enter limp mode, limiting vehicle speed and gear selection.
- A noticeable drop in fuel economy due to the engine revving higher in third gear.
- Often no symptoms besides the warning light, especially if the fault is intermittent.

Common causes, most likely first

- Faulty 3-4 shift solenoid or actuator that has failed electrically or mechanically.
- Damaged, chafed, or corroded wiring in the 3-4 shift circuit, including the harness connector at the transmission.
- Poor electrical connection at the transmission pass-through connector or the transmission control module (TCM) connector.
- Internal transmission mechanical wear, such as a sticking valve body or worn shift valve, causing the solenoid to draw abnormal current.
- Low or contaminated transmission fluid leading to solenoid malfunction and erratic shift behavior.
- Failed transmission control module (TCM) or a software calibration issue affecting solenoid control.



How to diagnose and fix it

- 1 Check the transmission fluid level and condition; top off or replace fluid if it is low or burnt.
- 2 Inspect the wiring harness and connectors between the TCM and the transmission for damage, corrosion, or loose pins.
- 3 Use a scan tool to command the 3-4 shift solenoid on and off and listen for an audible click; no click indicates a faulty solenoid or circuit.
- 4 Measure resistance across the 3-4 shift solenoid terminals and compare to the manufacturer's specification to identify an open or shorted coil.
- 5 Perform a voltage drop test on the power and ground circuits to the solenoid to rule out excessive resistance in the wiring.
- 6 If electrical checks pass, remove the transmission pan and inspect the solenoid and valve body for debris or mechanical binding.
- 7 Replace the faulty solenoid or repair the wiring as needed, clear the code, and test-drive the vehicle through several 3-4 shifts to verify the repair.

Before you replace the transmission

- A P0783 code is often set by a simple wiring issue at the transmission connector rather than a failed solenoid, so always inspect the harness before condemning internal parts.
- Intermittent codes can be caused by fluid that is slightly low or aerated, which affects solenoid response without triggering a low-fluid warning.
- Some vehicles use a single shift solenoid for multiple gears, so a fault in the 3-4 circuit may also affect other shifts and set additional codes.
- A sticking valve body can mimic a failed solenoid by causing the solenoid to draw incorrect current, leading to unnecessary solenoid replacement.
- After repairs, the TCM may require a relearn or adaptive reset procedure to restore proper shift feel and prevent the code from returning.

Can I keep driving with P0783?

You can usually drive the vehicle to a repair shop, but avoid sustained highway speeds and heavy acceleration because the transmission may not shift into fourth gear, causing high engine RPM and potential overheating. If the transmission enters limp mode or shifts harshly, stop driving and seek professional service.

Tools that help

- OBD-II scan tool with bidirectional control capability
- Digital multimeter
- Transmission fluid level dipstick or scan tool for fluid temperature
- Socket and wrench set for connector and pan removal
- Factory service information for circuit specifications



Reading P0783

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

Often seen with

P0750 Shift Solenoid 'A' · **P0780** Shift Error · **P0781** 1-2 Shift · **P0782** 2-3 Shift · **P0784** 4-5 Shift

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/p0783/>

