

GENERIC · POWERTRAIN

P0782

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P0782

2-3 Shift

P0782 indicates that the transmission control module has detected an abnormal condition during the commanded 2-3 upshift, typically by comparing engine speed to output shaft speed and finding that the ratio does not match the expected value for third gear. This code is stored when the transmission fails to engage third gear correctly or the shift timing falls outside the programmed parameters.

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

Symptoms you may notice

- The malfunction indicator lamp (MIL) illuminates on the dashboard.
- The transmission may slip or flare during the 2-3 shift, with engine speed rising abnormally before third gear engages.
- Harsh or delayed engagement of third gear may be felt during acceleration.
- The transmission may enter limp mode, staying in second gear or another default gear.
- Often no symptoms besides the warning light, especially if the fault is intermittent.

Common causes, most likely first

- Low or degraded automatic transmission fluid (ATF) level or condition.
- Faulty 2-3 shift solenoid or its wiring/connector.
- Sticking or worn 2-3 shift valve in the valve body.
- Internal transmission mechanical wear, such as a worn band or clutch pack for third gear.
- Faulty transmission control module (TCM) or a software calibration issue.
- Damaged transmission internal wiring harness or poor electrical connections.



How to diagnose and fix it

- 1 Check the transmission fluid level and condition; top off or replace fluid if contaminated.
- 2 Perform a visual inspection of the transmission wiring harness and connectors for the 2-3 shift solenoid; repair any damage.
- 3 Use a scan tool to command the 2-3 shift solenoid on and off and listen for an audible click; if no click, test the solenoid with a multimeter.
- 4 Measure the resistance of the 2-3 shift solenoid and compare to the manufacturer's specification; replace if out of range.
- 5 Inspect the valve body for sticking valves or debris; clean or replace the valve body if necessary.
- 6 If electrical and hydraulic checks pass, perform a transmission pressure test to identify internal mechanical issues.
- 7 Reprogram or replace the TCM if all other components test good and the code persists.

Before you replace the transmission

- A low fluid level or degraded fluid is a common cause of P0782 that is often overlooked because the transmission may not show obvious leaks.
- The code can be set by a faulty ignition switch or poor ground connection, causing intermittent power loss to the TCM.
- A sticking 2-3 shift valve in the valve body can mimic a failed solenoid, so always verify solenoid operation before replacement.
- P0782 may be stored alongside other shift solenoid codes, indicating a shared power or ground circuit issue rather than multiple failed solenoids.
- Some vehicles require a relearn procedure after solenoid or valve body replacement; failing to do so can cause the code to return.

Can I keep driving with P0782?

Driving with P0782 is possible but not recommended for extended periods, as the transmission may slip or fail to shift properly, leading to further damage. Avoid heavy acceleration and towing, and have the vehicle diagnosed promptly.

Tools that help

- OBD-II scan tool with transmission diagnostic capabilities
- Digital multimeter
- Transmission fluid level dipstick or scan tool for fluid level
- Factory service information for solenoid resistance specifications
- Transmission pressure gauge



Reading P0782

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

Often seen with

P0750 Shift Solenoid 'A' · **P0755** Shift Solenoid 'B' · **P0760** Shift Solenoid 'C' · **P0781** 1-2 Shift · **P0783** 3-4 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/p0782/>

