

GENERIC · POWERTRAIN

P07DE

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P07DE

Incorrect Shift from Gear 3

P07DE indicates that the transmission control module detected an incorrect shift sequence involving third gear, meaning the transmission did not engage or disengage third gear as commanded within the expected time or under the expected conditions. The computer compares input and output shaft speeds, gear ratio calculations, and shift timing to determine that the actual gear state did not match the commanded state during a 3rd gear shift event.

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

Symptoms you may notice

- Illumination of the malfunction indicator lamp (MIL) on the dashboard
- Harsh or delayed engagement when shifting into or out of third gear
- Transmission may slip or flare during the 2-3 or 3-4 shift
- Unexpected downshift or upshift feeling, or the transmission may enter limp mode
- Often no symptoms besides the warning light, especially if the fault is intermittent

Common causes, most likely first

- 1 Low or degraded transmission fluid level or condition
- 2 Faulty shift solenoid or solenoid pack affecting third gear engagement
- 3 Sticking or worn valve body components controlling third gear hydraulic circuits
- 4 Internal transmission mechanical wear, such as clutch pack or band wear for third gear
- 5 Faulty transmission speed sensor (input or output) providing erratic signals
- 6 Wiring or connector issues in the transmission control circuit
- 7 Transmission control module (TCM) software calibration or internal fault

How to diagnose and fix it

- 1 Check transmission fluid level and condition; top off or replace fluid if contaminated
- 2 Perform a visual inspection of transmission wiring and connectors for damage or corrosion
- 3 Use a scan tool to read live data and compare commanded gear versus actual gear ratio
- 4 Test the shift solenoid(s) associated with third gear for resistance and function
- 5 Inspect the valve body for sticking valves or debris, cleaning or rebuilding as needed
- 6 Perform a transmission pressure test to verify hydraulic pressures during third gear operation
- 7 Reprogram or replace the TCM if all mechanical and electrical checks pass



Third gear shift faults often misdiagnosed

- A P07DE code can be set by a momentary glitch in the speed sensor signal without any mechanical damage, so always check for intermittent electrical faults before condemning the transmission.
- Many technicians replace the transmission when the real culprit is a sticking valve body or a faulty solenoid, which are far less expensive to repair.
- The code may appear after a transmission fluid change if the wrong fluid type is used or if debris is stirred up and blocks a solenoid screen.
- In some vehicles, a weak battery or charging system can cause the TCM to log false shift errors, so verify battery and ground integrity first.
- P07DE can be stored alongside codes for other gears, indicating a widespread issue like low line pressure rather than a third-gear-specific problem.

Can I keep driving with P07DE?

If the vehicle drives normally and the light is steady, you can drive cautiously to a repair shop, but avoid aggressive acceleration or heavy loads. If the transmission is slipping, flaring, or stuck in limp mode, stop driving and seek professional diagnosis to prevent further damage.

Tools that help

- OBD-II scan tool with live data and transmission capabilities
- Digital multimeter for electrical testing
- Transmission pressure gauge
- Factory service information for shift solenoid and valve body specifications
- Fluid level dipstick or extraction pump

Reading P07DE

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

Often seen with

P0700 Transmission Control System Malfunction · **P0733** Gear 3 Incorrect Ratio · **P0734** Gear 4 Incorrect Ratio
 · **P07DD** Incorrect Shift from Gear 2 · **P07DF** Incorrect Shift from Gear 4



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/p07de/>

