

GENERIC · POWERTRAIN

P07F8

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P07F8

Stuck in Gear 9

P07F8 is a generic transmission code indicating that the transmission control module (TCM) has detected a stuck condition in gear 9, meaning the transmission cannot disengage or properly engage ninth gear as commanded. The TCM monitors gear ratio and shift timing, and when the ratio does not match the expected value for ninth gear within a calibrated window, it sets this code and typically illuminates the malfunction indicator lamp (MIL).

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

Symptoms you may notice

- The malfunction indicator lamp (MIL) illuminates, often with no other noticeable symptoms.
- The transmission may fail to shift into or out of ninth gear, causing harsh or delayed shifts.
- The vehicle may enter limp mode, limiting speed and gear selection to protect the transmission.
- Poor fuel economy and increased engine RPM at highway speeds due to improper gear engagement.
- Unusual transmission noises or vibrations during acceleration or deceleration.
- In some cases, the transmission may slip or hesitate when attempting to engage ninth gear.

Common causes, most likely first

- Low or contaminated transmission fluid, leading to inadequate hydraulic pressure and sticking valves.
- Faulty shift solenoid or solenoid pack responsible for controlling ninth gear engagement.
- Sticking or worn valve body components, such as shift valves or accumulators, preventing proper fluid routing.
- Internal transmission mechanical damage, including worn clutch packs, bands, or gears associated with ninth gear.
- Electrical issues in the transmission wiring harness or connectors, such as chafed wires or corroded pins, disrupting solenoid signals.
- Malfunctioning transmission control module (TCM) software or hardware, though this is less common.
- Debris or sludge in the transmission fluid circuit causing intermittent sticking of hydraulic components.



How to diagnose and fix it

- 1 Check transmission fluid level and condition; top off or replace fluid if low or contaminated.
- 2 Perform a visual inspection of the transmission wiring harness and connectors for damage or corrosion; repair as needed.
- 3 Use a scan tool to command the ninth gear shift solenoid and observe transmission response to isolate electrical versus hydraulic issues.
- 4 Test the shift solenoid resistance and compare to manufacturer specifications; replace if out of range.
- 5 Remove and inspect the valve body for sticking valves or debris; clean or replace as necessary.
- 6 If internal damage is suspected, perform a transmission pressure test and, if needed, remove the transmission for overhaul or replacement.
- 7 After repairs, clear the code and perform a relearn or adaptive reset procedure as required by the manufacturer, then test-drive to verify the fix.

Common Misdiagnosis Traps for Stuck Gear 9

- A stuck gear 9 code is often caused by low fluid level or a clogged filter rather than a failed solenoid, so always verify fluid condition before replacing parts.
- The TCM may set P07F8 due to a faulty wheel speed sensor or vehicle speed signal, as it uses these inputs to calculate expected gear ratios; check for related codes.
- In some vehicles, a software calibration issue in the TCM can cause false stuck gear detection, and a reflash may be required after mechanical checks.
- Intermittent wiring faults at the transmission connector can mimic a stuck solenoid, so wiggle-test the harness while monitoring solenoid operation.
- A stuck gear 9 code does not always mean the transmission is mechanically failed; many cases are resolved with fluid service and solenoid replacement.

Can I keep driving with P07F8?

It is generally safe to drive with P07F8 if the vehicle is not in limp mode and shifts reasonably, but avoid aggressive acceleration and highway speeds until diagnosed. If the transmission is stuck in gear or slipping, limit driving to a short distance to a repair shop to prevent further damage.

Tools that help

- OBD-II scan tool with transmission diagnostic capability
- Digital multimeter for electrical testing
- Transmission fluid level dipstick or scan tool for fluid level check
- Socket set and wrenches for valve body and solenoid access
- Transmission pressure gauge for hydraulic testing
- Manufacturer service information for specifications and procedures



Reading P07F8

- P** Powertrain: engine, transmission and emissions.
- 0** Generic (SAE) code: it means the same thing on every OBD-II vehicle.
- 7** Transmission.
- F8** The exact fault within that area.

Often seen with

P0700 Transmission Control System Malfunction · **P0715** Input/Turbine Speed Sensor Circuit Malfunction · **P0720** Output Speed Sensor Circuit Malfunction · **P07F7** Gear 10 Incorrect Ratio · **P07F9** Unable to Engage Gear 9

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/p07f8/>

