

GENERIC · POWERTRAIN

P07FB

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P07FB

Stuck in Gear 10

P07FB is a generic transmission code indicating that the transmission control module (TCM) has detected a stuck condition in gear 10, meaning the transmission is commanded into tenth gear but the actual gear ratio or mechanical state does not match the commanded gear. The TCM monitors input and output shaft speeds and compares the calculated ratio to the expected ratio for tenth gear; when the ratio remains outside the acceptable window for a calibrated time, it sets this code and typically illuminates the malfunction indicator lamp (MIL).

SYSTEM

Powertrain

CODE TYPE

Generic (all makes)

SEVERITY

Medium

FIX DIFFICULTY

Professional

AREA

Transmission

Symptoms you may notice

- Malfunction indicator lamp (MIL) illuminated on the dashboard, often with no other noticeable symptoms
- Transmission may remain in tenth gear and refuse to downshift when coming to a stop or accelerating
- Harsh or delayed engagement when shifting into drive or reverse
- Reduced fuel economy and elevated engine RPM at highway speeds due to improper gear selection
- Transmission may enter limp mode, limiting vehicle speed and available gears
- Unusual noises or shuddering during acceleration if the stuck gear causes clutch slippage

Common causes, most likely first

- 1 Low or degraded transmission fluid level, which affects hydraulic pressure and shift actuator response
- 2 Faulty transmission control module (TCM) software or calibration that misinterprets gear ratio signals
- 3 Sticking or failed shift solenoid responsible for engaging tenth gear
- 4 Internal transmission mechanical failure, such as a stuck valve body spool valve or damaged clutch pack
- 5 Wiring harness damage or poor electrical connection between the TCM and transmission solenoids
- 6 Contaminated transmission fluid causing valve body blockage and erratic shift behavior



How to diagnose and fix it

- 1 Check transmission fluid level and condition; top off or replace fluid if low or contaminated
- 2 Scan all modules for stored and pending codes, and record freeze-frame data to understand when the fault occurred
- 3 Inspect the transmission wiring harness and connectors for chafing, corrosion, or loose pins
- 4 Test the shift solenoid associated with tenth gear for resistance and proper operation according to the manufacturer's specification
- 5 Verify TCM software is up to date and reflash or reprogram if a known calibration update exists
- 6 Perform a transmission pressure test to confirm hydraulic integrity and identify internal leaks or stuck valves
- 7 If electrical and hydraulic checks pass, remove the valve body for inspection and rebuild or replace internal components as needed

What a stuck tenth gear really tells you

- A P07FB code often appears after a transmission fluid service where the wrong fluid type was used, causing clutch friction modifiers to break down and shift solenoids to stick.
- Many technicians replace the TCM or valve body prematurely; always verify the actual gear ratio with a scan tool during a road test before condemning internal parts.
- On some vehicles, a weak battery or charging system fault can cause the TCM to log false stuck-gear codes because low voltage disrupts solenoid control signals.
- The code can be set by a mechanical binding in the tenth gear clutch pack that only occurs when the transmission is at operating temperature, so cold-shop diagnostics may miss it.
- A stuck tenth gear may be a symptom of a broader adaptive learning issue; clearing the code without resetting transmission adaptations can cause the code to return immediately.

Can I keep driving with P07FB?

You can usually drive the vehicle to a repair shop if the transmission still shifts through other gears, but avoid highway speeds and heavy acceleration because the transmission may be stuck in tenth gear and unable to downshift safely. If the vehicle enters limp mode or you notice slipping or shuddering, stop driving and have it towed to prevent further internal damage.

Tools that help

- OBD-II scan tool with transmission module capability and live data graphing
- Digital multimeter for testing solenoid resistance and wiring continuity
- Transmission fluid level dipstick or fluid inspection kit
- Manufacturer-specific diagnostic software for TCM reflash and adaptation reset
- Transmission pressure gauge kit for hydraulic testing



Reading P07FB

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

Often seen with

P0700 Transmission Control System Malfunction · **P07F9** Unable to Engage Gear 9 · **P07FA** Incorrect Shift from Gear 9 · **P07FC** Unable to Engage Gear 10 · **P07FD** Incorrect Shift from Gear 10

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/p07fb/>

