

GENERIC · POWERTRAIN

P074E

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P074E

Unable to Engage Gear 6

P074E indicates that the transmission control module (TCM) commanded sixth gear but the transmission did not engage it within the expected time or detected an incorrect gear ratio. The TCM monitors input and output shaft speeds and compares them to the commanded gear; when the ratio does not match sixth gear, it sets this code and may illuminate 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, often with no other noticeable symptoms
- Transmission fails to shift into sixth gear or slips when sixth gear is commanded
- Harsh or delayed shifts, especially during highway cruising
- Reduced fuel economy due to the transmission staying in a lower gear
- Transmission may enter limp mode, limiting vehicle speed and gear selection
- Unusual noises or vibrations from the transmission during attempted sixth-gear engagement

Common causes, most likely first

- 1 Low or degraded transmission fluid, causing insufficient hydraulic pressure
- 2 Faulty shift solenoid or solenoid pack responsible for sixth gear
- 3 Sticking or worn valve body components, such as the sixth-gear shift valve
- 4 Internal transmission mechanical failure, such as a worn clutch pack or band
- 5 Damaged wiring or connectors between the TCM and transmission solenoids
- 6 Faulty transmission control module (TCM) or software calibration issue
- 7 Contaminated transmission fluid or a clogged transmission filter

How to diagnose and fix it

- 1 Check transmission fluid level and condition; top off or replace fluid if degraded
- 2 Perform a visual inspection of transmission wiring and connectors for damage or corrosion
- 3 Use a scan tool to command sixth gear and monitor solenoid operation and gear ratio
- 4 Test the shift solenoid for sixth gear with a multimeter and compare to specifications
- 5 Inspect the valve body for sticking valves or debris; clean or replace as needed
- 6 Replace the transmission filter and perform a fluid flush if contamination is suspected
- 7 If internal mechanical damage is found, remove and rebuild or replace the transmission



Before you replace the transmission

- A low fluid level or a clogged filter can mimic a failed solenoid, so always verify fluid condition and level before condemning hard parts.
- The TCM may set P074E due to a faulty input or output speed sensor, not just a transmission internal problem, so check sensor signals first.
- On some vehicles, a software update for the TCM can correct false sixth-gear engagement codes without any hardware replacement.
- Wiring harness chafing near the transmission connector is a common hidden cause that can be missed during a quick visual inspection.
- P074E can be stored alongside other gear-specific codes, indicating a broader solenoid or valve body issue rather than an isolated sixth-gear fault.

Can I keep driving with P074E?

You can usually drive the vehicle short distances to a repair shop, but avoid sustained highway speeds or heavy loads that demand sixth gear. If the transmission enters limp mode or shifts harshly, stop driving and seek professional diagnosis to prevent further damage.

Tools that help

- OBD-II scan tool with live data and bidirectional control
- Digital multimeter
- Transmission fluid level dipstick or inspection tool
- Socket and wrench set
- Transmission pressure gauge

Reading P074E

P	Powertrain: engine, transmission and emissions.
0	Generic (SAE) code: it means the same thing on every OBD-II vehicle.
7	Transmission.
4E	The exact fault within that area.

Often seen with

P0715 Input/Turbine Speed Sensor Circuit Malfunction · **P0740** Torque Converter Clutch Circuit Malfunction · **P0741** Torque Converter Clutch Circuit Performance or Stuck Off · **P0742** Torque Converter Clutch Circuit Stuck On · **P0750** Shift Solenoid 'A'



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/p074e/>

