

GENERIC · POWERTRAIN

P07A7

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P07A7

Transmission Friction Element C Stuck On

P07A7 indicates that the transmission control module has detected a hydraulic or mechanical fault where friction element C is applied when it should be released, meaning the clutch or brake pack is stuck on. The computer typically identifies this by comparing engine speed, turbine speed, and output speed against the expected gear ratio and finding a mismatch that persists beyond a calibrated threshold.

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

Symptoms you may notice

- Illuminated check engine light or transmission warning lamp, often with no other noticeable symptoms
- Harsh or delayed shifts, especially when the affected element should be released during a gear change
- Transmission stuck in a single gear or failing to upshift or downshift normally
- Engine flare or binding sensation during acceleration as two elements fight each other
- Reduced fuel economy and elevated transmission fluid temperature from continuous slip or drag
- Limp-home mode with reduced power and fixed gear operation

Common causes, most likely first

- 1 Sticking or contaminated shift solenoid valve controlling friction element C
- 2 Internal hydraulic leak or blocked passage in the valve body preventing element C from releasing
- 3 Worn or warped clutch/brake pack plates causing mechanical binding of element C
- 4 Failed return spring or piston seal in the affected friction element assembly
- 5 Valve body wear or debris causing cross-leakage between apply circuits
- 6 Transmission control module software calibration error or faulty pressure control solenoid
- 7 Degraded transmission fluid with varnish or debris interfering with valve movement



How to diagnose and fix it

- 1 Scan all modules and record freeze-frame data for P07A7, then verify fluid level and condition per the manufacturer's procedure
- 2 Perform a road test with a scan tool logging turbine speed, output speed, and commanded gear to confirm the ratio error
- 3 Check solenoid resistance and perform a functional test of the shift solenoid for element C
- 4 Inspect the valve body for sticking valves, debris, and worn bores; clean or replace as needed
- 5 Pressure-test the apply circuit for element C to rule out internal leaks or a failed piston seal
- 6 If hydraulic checks pass, remove and inspect the friction element C clutch/brake pack for warped plates or broken return springs
- 7 After repair, clear codes, adapt the transmission, and verify correct ratio and shift quality on a extended road test

What a stuck friction element really means

- A P07A7 can be set by a simple solenoid that sticks only when hot, so a cold-vehicle test may show no fault and lead to a missed diagnosis.
- Many technicians replace the transmission when the actual fault is a \$40 shift solenoid or a clogged valve body passage, so always verify hydraulic control before condemning hard parts.
- The code does not always mean the friction element itself is mechanically failed; electrical faults, low fluid, or a faulty pressure sensor can create the same ratio error.
- Some vehicles set P07A7 after a battery replacement or low voltage event because the transmission adaptives are lost, and a relearn procedure clears the code without any repair.
- A stuck-on element C can overheat the transmission fluid rapidly, so even a short drive with this code can turn a minor solenoid issue into a full rebuild.

Can I keep driving with P07A7?

Limit driving to a short distance to a repair facility and avoid heavy acceleration or highway speeds, because a stuck friction element can overheat and destroy the transmission quickly. If the vehicle enters limp mode or shifts harshly, stop driving and arrange a tow.

Tools that help

- OBD-II scan tool with transmission data logging capability
- Transmission fluid pressure gauge set
- Digital multimeter for solenoid resistance checks
- Valve body cleaning and rebuild tools
- Transmission jack and support stand for pan removal



Reading P07A7

- P** Powertrain: engine, transmission and emissions.
- 0** Generic (SAE) code: it means the same thing on every OBD-II vehicle.
- 7** Transmission.
- A7** The exact fault within that area.

Often seen with

P0730 Incorrect Gear Ratio · **P0741** Torque Converter Clutch Circuit Performance or Stuck Off · **P07A5** Transmission Friction Element B Stuck On · **P07A6** Transmission Friction Element C Performance/Stuck Off · **P07A8** Transmission Friction Element D Performance/Stuck Off

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/p07a7/>

