

GENERIC · POWERTRAIN

P07A2

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P07A2

Transmission Friction Element A Performance/Stuck Off

P07A2 indicates that the transmission control module has detected a performance problem with friction element A, meaning the clutch or band that should apply or release on command is not responding as expected. The computer typically compares engine speed, input shaft speed, and output shaft speed during a commanded shift or engagement and finds that the ratio does not match the expected value, or that the element is stuck in the off (disengaged) state when it should be on.

SYSTEM

Powertrain

CODE TYPE

Generic (all makes)

SEVERITY

High

FIX DIFFICULTY

Professional

AREA

Transmission

Symptoms you may notice

- Illuminated check engine light or transmission warning light, often with no other noticeable symptoms
- Harsh or delayed engagement when shifting from park to drive or reverse
- Slipping during acceleration, where engine speed rises without a corresponding increase in vehicle speed
- Missing or erratic shifts, such as a gear that engages late or not at all
- Transmission may enter limp mode, limiting vehicle speed and gear selection
- Shuddering or juddering during light-throttle acceleration or during a specific shift

Common causes, most likely first

- 1 Low or degraded transmission fluid, often due to a leak or overdue service
- 2 Sticking or faulty solenoid that controls hydraulic pressure to friction element A
- 3 Worn or damaged friction element A itself, such as burnt clutch plates or a broken band
- 4 Valve body wear or contamination causing incorrect hydraulic pressure routing
- 5 Internal transmission seal failure leading to pressure loss at the apply circuit
- 6 Wiring or connector issues at the transmission control module or solenoid pack
- 7 Transmission control module software calibration that does not match the current hardware



How to diagnose and fix it

- 1 Check transmission fluid level and condition; top off or replace fluid if it is low or burnt
- 2 Inspect the transmission wiring harness and connectors for chafing, corrosion, or loose pins
- 3 Use a scan tool to command the solenoid for friction element A and observe pressure and engagement behavior
- 4 Perform a transmission line pressure test to verify hydraulic pressure is within specification
- 5 Remove the transmission pan to inspect for debris, burnt fluid, or a clogged filter, and replace the filter if needed
- 6 Test the solenoid that controls friction element A for resistance and proper operation, replacing it if faulty
- 7 If external checks pass, remove and disassemble the transmission to inspect friction element A and the valve body for wear or damage

What P07A2 does not always mean

- A sticking solenoid can mimic a worn friction element, so always test solenoid function before condemning internal transmission parts.
- Low fluid level from a slow leak is a common cause that many drivers overlook because there is no visible puddle under the car.
- The code can set intermittently due to a poor electrical connection at the solenoid pack, which may not show up during a simple resistance test.
- Some vehicles require a transmission control module relearn or adaptive reset after repairs, and skipping this step can cause the code to return.
- A faulty engine coolant temperature sensor or throttle position sensor can send incorrect signals that affect shift scheduling and set a false P07A2.

Can I keep driving with P07A2?

If the transmission is slipping or the vehicle has entered limp mode, avoid driving further than necessary to reach a repair shop, as continued driving can cause additional internal damage. If the only symptom is the warning light and the transmission shifts normally, you may drive cautiously to a service center, but avoid heavy acceleration or towing.

Tools that help

- OBD-II scan tool with transmission diagnostic capability
- Transmission pressure gauge
- Digital multimeter
- Factory service information for the specific vehicle
- Transmission fluid level dipstick or scan tool with fluid level monitoring
- Basic hand tools for pan removal and solenoid access



Reading P07A2

- P** Powertrain: engine, transmission and emissions.
- 0** Generic (SAE) code: it means the same thing on every OBD-II vehicle.
- 7** Transmission.
- A2** The exact fault within that area.

Often seen with

P0700 Transmission Control System Malfunction · **P0730** Incorrect Gear Ratio · **P07A0** Transmission Friction Element G Slip Detected · **P07A1** Transmission Friction Element H Slip Detected · **P07A3** Transmission Friction Element A Stuck On

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/p07a2/>

