

CHRYSLER · POWERTRAIN

P1521

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1521 · Chrysler

Transmission Engaged At High Throttle Angle

P1521 on Chrysler vehicles means the powertrain control module (PCM) detected that the transmission was engaged while the throttle angle was unusually high for the operating conditions, often during a commanded shift or when the vehicle should have been in a lower-load state. The computer compares throttle position sensor (TPS) voltage against vehicle speed, engine load, and the transmission's current gear to flag this mismatch.

SYSTEM

Powertrain

CODE TYPE

Chrysler specific

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

Vehicle speed, idle control and auxiliary inputs

Symptoms you may notice

- Illuminated check engine light or transmission warning lamp, often with no other noticeable symptoms
- Harsh or delayed transmission shifts, especially when accelerating from a stop
- Unexpected downshift or refusal to upshift under light throttle
- Reduced engine power or limp-home mode in some Chrysler models
- Poor fuel economy or elevated engine rpm at cruising speed
- Intermittent shudder or clunk when the transmission engages

Common causes, most likely first

- 1 Faulty or misadjusted throttle position sensor (TPS) sending an incorrect high-throttle signal
- 2 Worn or contaminated transmission fluid causing erratic shift solenoid response
- 3 Sticking or failed shift solenoid pack inside the transmission valve body
- 4 Damaged wiring or corroded connector at the TPS or transmission control module (TCM)
- 5 Failed transmission control module (TCM) or PCM software calibration issue
- 6 Mechanical wear in the valve body or clutch packs causing unintended engagement
- 7 Loose or damaged ground connection affecting sensor reference voltage



How to diagnose and fix it

- 1 Scan all modules for stored and pending codes, and record freeze-frame data for P1521 to see throttle angle and vehicle speed at the time of the fault
- 2 Inspect the TPS connector and wiring for corrosion, chafing, or loose pins, and verify TPS voltage sweeps smoothly from closed to wide-open throttle with a scan tool
- 3 Check transmission fluid level, condition, and color; service the fluid and filter if contaminated or overdue
- 4 Test the shift solenoid pack resistance and function according to Chrysler service information, and replace if out of specification
- 5 Verify TCM and PCM grounds and power feeds, and check for technical service bulletins (TSBs) or software updates for the transmission calibration
- 6 Perform a transmission adaptive relearn or reset after any repair, then road-test to confirm the code does not return
- 7 If the fault persists, perform a valve body inspection or transmission internal diagnosis with a qualified transmission specialist

Throttle signal faults mimic transmission failure

- A dirty or failing TPS often sets P1521 without any transmission hardware problem, so always verify throttle voltage before condemning the transmission.
- Chrysler's 41TE and 42RLE transmissions are known to set this code when fluid degradation causes solenoid response lag, even though the solenoid itself tests good.
- The code can be stored intermittently by a loose battery ground or low system voltage, which corrupts the TCM's throttle angle calculation during cranking.
- After replacing the TPS or TCM, a throttle relearn and transmission adaptive reset are required or the code may reset immediately on the first test drive.
- P1521 does not always mean the transmission is mechanically damaged; many cases resolve with a fluid service and TPS replacement.

Can I keep driving with P1521?

You can usually drive the vehicle to a repair shop, but avoid hard acceleration and heavy towing until the fault is diagnosed, because the transmission may shift unpredictably or enter limp-home mode. If the vehicle enters limp-home or the warning lamp flashes, stop driving and have it towed.

Tools that help

- OBD-II scan tool with live data and freeze-frame capability
- Digital multimeter for TPS and solenoid resistance checks
- Transmission fluid level dipstick or service tool
- Socket set and Torx bits for connector and sensor access
- Chrysler-specific service information or TSB database



Reading P1521

- P** Powertrain: engine, transmission and emissions.
- 1** Manufacturer-specific code (Chrysler): its meaning depends on the make.
- 5** Vehicle speed, idle control and auxiliary inputs.
- 21** The exact fault within that area.

Often seen with

P0121 Throttle Position Sensor A Circuit Range/Performance · **P0122** Throttle Position Sensor A Circuit Low Input · **P0123** Throttle Position Sensor A Circuit High Input · **P0700** Transmission Control System Malfunction · **P0730** Incorrect Gear Ratio

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/chrysler-p1521/>

