

GENERIC · POWERTRAIN

P0796

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P0796

Pressure Control Solenoid 'C' Performance or Stuck off

P0796 indicates that the transmission control module has detected a performance fault or a stuck-off condition in pressure control solenoid 'C', which is responsible for regulating hydraulic pressure inside the automatic transmission. The computer monitors the solenoid's electrical circuit and the resulting hydraulic pressure, and it sets this code when the commanded pressure does not match the actual pressure or when the solenoid fails to respond to commands.

SYSTEM

Powertrain

CODE TYPE

Generic (all makes)

SEVERITY

Medium

FIX DIFFICULTY

Professional

AREA

Transmission

Symptoms you may notice

- Illumination of the check engine light or transmission warning light, often with no other noticeable symptoms
- Harsh or delayed gear shifts, especially when the transmission is cold or under load
- Slipping between gears or a reluctance to engage certain gears
- The transmission may enter limp mode, limiting vehicle speed and gear selection
- A noticeable clunk or jolt when shifting from park to drive or reverse
- Poor fuel economy or increased engine RPM at highway speeds due to improper shift points

Common causes, most likely first

- 1 Degraded or contaminated automatic transmission fluid (ATF) causing solenoid sticking or poor hydraulic response
- 2 A faulty pressure control solenoid 'C' with an internal electrical failure or mechanical sticking
- 3 Damaged or corroded wiring and connectors at the solenoid or transmission control module
- 4 Blocked or restricted hydraulic passages in the valve body or solenoid body
- 5 A failing transmission control module (TCM) or internal driver circuit for the solenoid
- 6 Low transmission fluid level due to a leak, leading to inadequate pressure
- 7 Wear in the transmission's internal components, such as the valve body or pump, affecting pressure regulation



How to diagnose and fix it

- 1 Check the transmission fluid level and condition; top off or replace fluid if it is low or contaminated
- 2 Inspect the solenoid 'C' electrical connector and wiring for damage, corrosion, or loose pins
- 3 Use a scan tool to command the solenoid on and off and observe pressure changes to verify operation
- 4 Measure the resistance of solenoid 'C' and compare it to the manufacturer's specification
- 5 Perform a pressure test at the solenoid port to confirm actual hydraulic pressure matches commanded pressure
- 6 Remove and clean or replace the solenoid 'C' and inspect the valve body for debris or wear
- 7 If all else fails, diagnose the TCM and its control circuit for internal faults

Before you replace the solenoid

- A low or dirty transmission fluid condition is a frequent culprit that mimics a failed solenoid, so always verify fluid level and quality before condemning the part.
- The code can be set by a momentary electrical glitch or a loose connector, so check for intermittent faults and stored freeze-frame data before replacing components.
- On some vehicles, a faulty transmission range sensor or a misadjusted manual valve can cause pressure control solenoid codes, so do not overlook related sensors.
- After replacing the solenoid, the transmission adaptive learning values must be reset and a relearn drive cycle performed, or the code may return immediately.
- A stuck-off solenoid 'C' may not produce any drivability symptoms until the transmission is under load, so a road test with a scan tool monitoring pressure is essential.

Can I keep driving with P0796?

It is generally safe to drive the vehicle to a repair shop, but avoid heavy acceleration, towing, or long trips because the transmission may enter limp mode or suffer further damage if the solenoid is stuck off. If the transmission slips severely or refuses to shift, stop driving and seek professional assistance.

Tools that help

- OBD-II scan tool with transmission diagnostic capability
- Digital multimeter for electrical testing
- Transmission pressure gauge set
- Factory service information for solenoid resistance and pressure specifications
- Fluid pump or funnel for topping off transmission fluid
- Basic hand tools for accessing the solenoid and connectors



Reading P0796

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

Often seen with

P0715 Input/Turbine Speed Sensor Circuit Malfunction · **P0740** Torque Converter Clutch Circuit Malfunction · **P0795** Pressure Control Solenoid 'C' · **P0797** Pressure Control Solenoid 'C' Stuck On · **P0798** Pressure Control Solenoid 'C' Electrical

See it working

Watch the animated explainer [How ABS Works: Anti-Lock Brakes in X-Ray](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p0796/>

