

GENERIC · POWERTRAIN

P0748

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P0748

Pressure Control Solenoid 'A' Electrical

P0748 indicates that the transmission control module (TCM) has detected an electrical fault in the circuit for pressure control solenoid 'A', which is responsible for regulating hydraulic line pressure inside the automatic transmission. The TCM monitors the solenoid's electrical current and voltage and sets this code when the readings fall outside the expected range, signaling an open, short, or excessive resistance in the wiring or the solenoid itself.

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 engaging drive or reverse
- Transmission may enter limp mode, limiting vehicle speed and gear selection
- Slipping gears or a feeling of lost power during acceleration
- Erratic shift points or failure to downshift when accelerating
- Poor fuel economy due to improper line pressure control

Common causes, most likely first

- 1 Faulty pressure control solenoid 'A' with an open or shorted internal coil
- 2 Damaged, chafed, or corroded wiring in the solenoid circuit
- 3 Loose or contaminated electrical connector at the solenoid or TCM
- 4 Transmission fluid contamination or varnish buildup affecting solenoid operation
- 5 Failed transmission control module (TCM) driver circuit
- 6 Internal transmission mechanical wear causing abnormal pressure demands



How to diagnose and fix it

- 1 Scan all modules for stored and pending codes, and record freeze-frame data to understand when the fault occurs
- 2 Inspect the solenoid connector and wiring harness for corrosion, chafing, or loose pins, and repair as needed
- 3 Measure the resistance of pressure control solenoid 'A' with a multimeter and compare to the manufacturer's specification
- 4 Check the solenoid circuit for short-to-ground and short-to-power faults using a multimeter or test light
- 5 If electrical integrity is confirmed, perform a transmission fluid service and inspect the pan for debris or varnish
- 6 Replace the pressure control solenoid 'A' if resistance or function tests indicate failure, following the manufacturer's procedure
- 7 Clear codes and perform a relearn or adaptive drive cycle to verify the repair and ensure the code does not return

Don't replace the solenoid before checking this

- A loose or corroded connector at the solenoid is a frequent cause of P0748 that is often overlooked because the solenoid itself tests good on the bench.
- The TCM may set P0748 due to a faulty driver circuit inside the module, so a solenoid replacement alone will not fix the issue if the TCM is at fault.
- Contaminated transmission fluid can cause solenoid sticking that mimics an electrical failure, so fluid condition should always be assessed before condemning the solenoid.
- P0748 can be intermittent, appearing only when the transmission is hot or after extended driving, which means a cold resistance test may not reveal the fault.
- Some vehicles use a pressure control solenoid that is part of the valve body assembly, making replacement more involved and requiring valve body removal.

Can I keep driving with P0748?

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 internal damage from incorrect line pressure. If the vehicle exhibits severe slipping or harsh engagement, stop driving and have it towed to prevent further damage.

Tools that help

- OBD-II scan tool with transmission module capability
- Digital multimeter
- Factory service information for resistance specifications and wiring diagrams
- Transmission fluid pressure gauge (if mechanical testing is needed)
- Basic hand tools for connector and solenoid access



Reading P0748

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

Often seen with

P0745 Pressure Control Solenoid Malfunction · **P0746** Pressure Control Solenoid 'A' Performance or Stuck Off · **P0747** Pressure Control Solenoid 'A' Stuck On · **P0749** Pressure Control Solenoid 'A' Intermittent · **P0750** Shift Solenoid 'A'

See it working

Watch the animated explainer [How a Supercharger Works: Roots Blower in X-Ray](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p0748/>

