

GENERIC · POWERTRAIN

P08C2

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P08C2

Pressure Control Solenoid L Control Circuit High

P08C2 indicates that the transmission control module (TCM) has detected an abnormally high voltage on the control circuit for pressure control solenoid L, which is one of the hydraulic pressure regulators inside the transmission valve body. The TCM expects a specific voltage range on the solenoid's control wire, and a reading above that range tells the module the circuit is open, shorted to power, or the solenoid coil is not drawing the expected current.

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

Symptoms you may notice

- Illumination of the check engine light or transmission warning light, often with no other noticeable symptoms
- Harsh or delayed shifts, especially when the transmission is cold or under light throttle
- The transmission may enter limp mode, sticking in a single gear or refusing to downshift
- Slipping or flaring during gear changes as line pressure control is compromised
- Rough engagement when shifting from park or neutral into drive or reverse
- Reduced fuel economy or unusual engine rpm fluctuations at steady speed

Common causes, most likely first

- 1 Damaged or corroded wiring harness connector at the transmission solenoid pack, often due to heat, vibration, or fluid intrusion
- 2 Open circuit in the control wire between the TCM and solenoid L, frequently caused by a broken wire inside the loom or a rubbed-through insulation
- 3 Failed pressure control solenoid L itself, where the internal coil has gone open circuit or the valve body bore is worn
- 4 Short to voltage on the control circuit, sometimes from a chafed wire touching a power feed or a faulty TCM driver
- 5 Contaminated transmission fluid or a clogged solenoid screen restricting flow and causing the solenoid to overheat and fail
- 6 Loose or damaged ground connection for the solenoid pack or TCM, leading to reference voltage errors
- 7 Internal TCM fault, though this is less common and should only be suspected after circuit and solenoid testing



How to diagnose and fix it

- 1 Scan all modules for stored and pending codes, then record freeze-frame data to see the conditions when P08C2 set
- 2 Visually inspect the transmission wiring harness and solenoid pack connector for corrosion, chafing, or loose pins, and repair as needed
- 3 Measure resistance across solenoid L at the connector and compare to the manufacturer's specification to check for an open coil
- 4 Backprobe the control circuit at the TCM and solenoid to check for a short to voltage or an open circuit while wiggling the harness
- 5 Check transmission fluid level and condition, and service the fluid if it is dark or contaminated, following the manufacturer's procedure
- 6 If the circuit and solenoid test good, perform a bidirectional test of solenoid L with a capable scan tool to confirm TCM command and solenoid response
- 7 Replace the faulty solenoid or solenoid pack, clear codes, and perform the required adaptive learning or relearn drive cycle

What the voltage reading really tells you

- A high voltage code on a solenoid control circuit often means the circuit is open rather than shorted, because the TCM pulls the low side down and an open coil lets the voltage float high.
- Many technicians replace the solenoid pack only to find the real fault is a chafed wire inside the transmission bellhousing area or near a sharp bracket, so always ohm the circuit end to end.
- A weak or failing transmission ground can mimic a solenoid circuit fault by raising the reference voltage, so check ground straps and TCM ground pins before condemning parts.
- After replacing a solenoid, some vehicles require a transmission adaptive relearn or a specific drive cycle, and skipping it can leave the code pending or cause harsh shifts that look like a new fault.
- P08C2 can set intermittently from heat-soak in the solenoid pack, so a cold-only or hot-only complaint should prompt a wiggle test and a resistance check at both temperature extremes.

Can I keep driving with P08C2?

You can usually drive the vehicle to a repair shop if the transmission is not in limp mode, but avoid heavy throttle, towing, and long highway trips because pressure control faults can cause harsh shifts and internal wear. If the transmission slips badly or refuses to engage a gear, stop driving and have it towed to prevent further damage.



Tools that help

- OBD-II scan tool with bidirectional control and transmission module access
- Digital multimeter with backprobe pins and resistance measurement
- Manufacturer-specific wiring diagram for the transmission control circuit
- Transmission fluid level gauge and drain pan
- Socket set and trim removal tools for harness access

Reading P08C2

P	Powertrain: engine, transmission and emissions.
0	Generic (SAE) code: it means the same thing on every OBD-II vehicle.
8	Transmission.
C2	The exact fault within that area.

Often seen with

P0700 Transmission Control System Malfunction · **P07BF** Input/Turbine Shaft Speed Sensor A Circuit Low · **P07C0** Input/Turbine Shaft Speed Sensor A Circuit High · **P08C1** Pressure Control Solenoid L Control Circuit Low · **P08C3** Pressure Control Solenoid M

See it working

Watch the animated explainer [How a Helicopter Flies: Rotor and Tail in X-Ray](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p08c2/>

