

GENERIC · POWERTRAIN

P07CD

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P07CD

Transmission Mode Switch C Circuit High

P07CD indicates that the transmission control module (TCM) has detected an abnormally high voltage on the circuit for Transmission Mode Switch C, which is typically a driver-selectable mode button or a position within a multi-mode switch. The TCM expects the signal voltage to stay within a calibrated range, and a high reading usually means the circuit is open, shorted to power, or the switch contact is not closing as intended.

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

Symptoms you may notice

- Illumination of the malfunction indicator lamp (MIL) on the instrument cluster
- Transmission may remain in a default mode and refuse to switch between modes such as sport, economy, or winter
- Harsh or delayed shifting if the TCM substitutes a limp-home strategy
- No response when pressing the mode selection button, or the indicator for the selected mode does not change
- Often no symptoms besides the warning light, especially if the default mode still allows normal driving

Common causes, most likely first

- 1 Open circuit in the signal wire between the mode switch and the TCM, such as a broken wire or unplugged connector
- 2 Corroded, loose, or damaged electrical connector at the switch or TCM, causing high resistance or an open signal path
- 3 Faulty transmission mode switch C itself, where the internal contact fails to close and pull the signal low
- 4 Short to voltage on the signal circuit, often from chafed wiring rubbing against a power wire or a faulty TCM internal pull-up
- 5 Poor ground connection for the switch, which can cause the signal voltage to float high
- 6 Aftermarket accessories or improper wiring repairs that interfere with the switch circuit



How to diagnose and fix it

- 1 Connect a scan tool and record all stored and pending codes, then clear codes and verify whether P07CD returns immediately or only after cycling the mode switch
- 2 Visually inspect the mode switch, its connector, and the wiring harness for damage, corrosion, or loose pins, and repair any obvious faults
- 3 Use a digital multimeter to measure signal voltage at the switch connector with the key on and the switch in each position, comparing against the manufacturer's expected values
- 4 Check for continuity and resistance on the ground circuit for the switch, and repair any excessive resistance or open ground
- 5 Backprobe the TCM connector to measure the signal voltage the TCM actually sees, isolating whether the fault is in the harness or inside the TCM
- 6 If the switch and wiring test good but the TCM still reports a high signal, substitute a known-good switch or perform a wiggle test on the harness while monitoring live data
- 7 Replace the faulty mode switch or repair the affected wiring, then clear codes and verify the mode selection works correctly with no recurring fault

What a high mode switch signal really means

- A high voltage on a switch circuit usually indicates an open circuit rather than a short to power, because most mode switches pull the signal to ground when activated and rely on an internal pull-up resistor in the TCM.
- The mode switch may be part of a multi-function assembly such as a gear selector or a panel of buttons, so a single failed contact can set this code without affecting other functions.
- Water intrusion or spilled drinks around the center console can corrode switch contacts and cause intermittent high-voltage readings that do not appear during a quick inspection.
- A faulty TCM internal pull-up resistor can mimic a wiring open circuit, so always verify the harness before condemning the module.
- This code does not always mean the transmission is damaged; it often only affects mode selection and may not impact normal driving if the default mode is adequate.

Can I keep driving with P07CD?

You can usually continue driving if the vehicle shifts normally and only the warning light is on, but avoid relying on mode-dependent features such as sport or winter modes. If the transmission enters a limp-home mode or shifts harshly, have it diagnosed promptly to prevent further drivability issues.



Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Electrical wiring diagram for the specific vehicle
- Backprobe pins or breakout leads
- Basic hand tools for trim and connector removal

Reading P07CD

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

Often seen with

P0700 Transmission Control System Malfunction · **P07C9** Intermediate Shaft Speed Sensor C Circuit Low · **P07CB** Transmission Fluid Thermostat Performance · **P07CC** Transmission Mode Switch C Circuit Low · **P07CE** Transmission Mode Switch D Circuit

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/p07cd/>

