

GENERIC · POWERTRAIN

P071B

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P071B

Transmission Mode Switch A Circuit Low

P071B indicates that the transmission control module (TCM) has detected a low-voltage condition on the circuit for Transmission Mode Switch A, which is typically a driver-selectable switch for sport, economy, or winter driving modes. The TCM expects a specific voltage range on the signal circuit and sets this code when the voltage falls below the calibrated threshold, indicating a short to ground or an open circuit.

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

Symptoms you may notice

- The check engine light or transmission warning light illuminates on the dashboard.
- The transmission may remain in a single default mode and not respond to mode selection changes.
- The driver may notice that pressing the mode switch produces no change in shift feel or throttle response.
- In some vehicles, the transmission may enter limp mode with harsh or delayed shifts.
- Often no symptoms besides the warning light, especially if the default mode is still driveable.

Common causes, most likely first

- A faulty transmission mode switch that internally shorts to ground or has excessive resistance.
- Damaged or chafed wiring between the mode switch and the TCM, often at a flex point or near a connector.
- Corroded or loose electrical connectors at the switch or TCM, causing high resistance or intermittent contact.
- Water intrusion into the switch or connector, leading to a short to ground.
- A poor ground connection for the switch circuit, causing the signal voltage to drop below the expected range.
- A malfunctioning TCM that incorrectly interprets a normal signal as low voltage, though this is less common.



How to diagnose and fix it

- 1 Verify the code with a scan tool and check for any related codes in the transmission control module.
- 2 Inspect the transmission mode switch and its connector for physical damage, corrosion, or water intrusion.
- 3 Disconnect the switch and measure resistance across its terminals in each mode position, comparing to the manufacturer's specification.
- 4 Check the wiring harness between the switch and TCM for continuity, shorts to ground, and chafing, repairing as needed.
- 5 Measure the signal voltage at the TCM connector while operating the switch to confirm the TCM is receiving the correct inputs.
- 6 If the switch and wiring test good, substitute a known-good TCM to rule out an internal fault, then replace if necessary.
- 7 Clear the code and perform a road test to verify the repair and ensure the mode switch functions correctly.

Mode switch faults that mimic TCM failure

- A low-voltage code on the mode switch circuit is frequently caused by a chafed wire behind the dashboard or near the shifter, not by a failed switch or TCM.
- Technicians sometimes replace the TCM when the real problem is a corroded connector pin that adds resistance and drops the signal voltage below the threshold.
- The mode switch may share a ground with other dashboard components, so a bad ground elsewhere can set this code without any fault in the switch itself.
- On some vehicles, the mode switch is integrated into the shifter assembly, making it easy to overlook a faulty shifter harness as the root cause.
- A scan tool that can read live data for the mode switch input is essential; guessing without verifying the signal voltage often leads to unnecessary parts replacement.

Can I keep driving with P071B?

You can generally continue driving if the vehicle remains in a default mode and shifts normally, but avoid aggressive driving or towing until the fault is repaired. If the transmission enters limp mode or shifts harshly, seek professional diagnosis promptly to prevent further damage.

Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Wiring diagram for the specific vehicle
- Test light
- Socket set and trim removal tools



Reading P071B

- P** Powertrain: engine, transmission and emissions.
- 0** Generic (SAE) code: it means the same thing on every OBD-II vehicle.
- 7** Transmission.
- 1B** The exact fault within that area.

Often seen with

P0700 Transmission Control System Malfunction · **P0705** Transmission Range Sensor Circuit Malfunction · **P071A** Transmission Mode Switch A Circuit · **P071C** Transmission Mode Switch A Circuit High · **P071D** Transmission Mode Switch B 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/p071b/>

