

GENERIC · POWERTRAIN

P071F

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P071F

Transmission Mode Switch B Circuit High

P071F means the transmission control module (TCM) has detected an abnormally high voltage on the circuit for Transmission Mode Switch B, which is a driver-selectable input such as a sport, tow/haul, or manual shift mode button. The TCM expects the signal voltage to stay within a calibrated range, and a reading above that range indicates an open circuit, a short to voltage, or a faulty switch.

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

Symptoms you may notice

- The check engine light or transmission warning light illuminates on the dashboard.
- Often no symptoms besides the warning light, with normal shifting and driveability.
- The selected driving mode (sport, tow/haul, or manual) may not engage or may default to normal mode.
- The mode indicator lamp on the switch or instrument cluster may fail to light or stay lit incorrectly.
- In some vehicles, the transmission may default to a limp-home mode with firm or delayed shifts.
- Other mode-related features, such as grade braking or manual gear holding, may become unavailable.

Common causes, most likely first

- 1 A faulty transmission mode switch B that internally shorts to voltage or has excessive resistance.
- 2 An open or damaged wire in the mode switch B signal circuit, often from chafing or a broken connector pin.
- 3 A short to voltage on the signal circuit, such as from a rubbed wire touching a power wire.
- 4 Corrosion or water intrusion at the switch connector or at the TCM harness connector.
- 5 A poor ground connection for the switch or for the TCM, causing reference voltage to float high.
- 6 A failed TCM that incorrectly reads the switch input voltage.
- 7 Aftermarket accessories or wiring repairs that backfeed voltage onto the mode switch circuit.



How to diagnose and fix it

- 1 Connect a scan tool and read all transmission control module codes and live data to confirm P071F is current and see what voltage the TCM reports for mode switch B.
- 2 Inspect the mode switch connector and the TCM connector for corrosion, loose pins, or water intrusion, and clean or repair as needed.
- 3 Check the switch ground circuit for excessive resistance using a multimeter, and repair any bad ground.
- 4 Measure voltage on the mode switch B signal circuit at the switch with the key on, comparing it to the manufacturer's specification for each switch position.
- 5 Disconnect the switch and check for an open or short to voltage on the signal wire between the switch and the TCM, repairing the harness as required.
- 6 Test the mode switch itself with a multimeter for continuity or resistance in each position, and replace it if it does not match specifications.
- 7 Clear the codes and road test the vehicle through all mode selections to verify the repair and confirm the code does not return.

What a high voltage reading really means

- A high voltage on a switch input circuit usually points to an open circuit or a short to voltage rather than a failed switch, so testing the wiring before replacing parts saves time and money.
- Many mode switches are simple momentary buttons that share a common return wire, so a fault in one switch can affect the voltage seen on another mode circuit and set related codes.
- The TCM may set P071F intermittently if the switch is only faulty when cold or when the steering column or console is moved, so wiggle-testing the harness while watching live data is a valuable step.
- Aftermarket remote starters, alarms, or phone chargers plugged into the accessory socket can backfeed voltage onto shared circuits and cause false high-voltage readings on switch inputs.
- Some vehicles use a single wire with different resistor values for multiple mode functions, so a poor connection can shift the voltage high and set this code even though the switch contacts are clean.

Can I keep driving with P071F?

The vehicle is generally safe to drive with P071F because the transmission usually defaults to a normal mode, but avoid relying on sport, tow/haul, or manual mode features until the fault is repaired. If the transmission enters a limp-home mode with harsh shifting, have it diagnosed promptly to prevent further driveability issues.

Tools that help

- OBD-II scan tool with transmission control module live data capability
- Digital multimeter
- Back probe pins or breakout box for connector testing
- Vehicle-specific wiring diagram
- Basic hand tools for trim and connector removal



Reading P071F

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

Often seen with

P0700 Transmission Control System Malfunction · **P0715** Input/Turbine Speed Sensor Circuit Malfunction · **P071E** Transmission Mode Switch B Circuit Low · **P0720** Output Speed Sensor Circuit Malfunction · **U0100** Lost Communication With ECM/PCM A

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/p071f/>

