

GENERIC · POWERTRAIN

P071A

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P071A

Transmission Mode Switch A Circuit

P071A indicates that the powertrain control module (PCM) has detected an implausible or out-of-range signal from the transmission mode switch, also called the tow/haul or performance mode switch, on circuit A. The computer expects a specific voltage or state change when the driver selects a different transmission mode, but the signal it receives does not match the expected pattern, so it sets this code and may disable the mode selection feature.

SYSTEM

Powertrain

CODE TYPE

Generic (all makes)

SEVERITY

Low

FIX DIFFICULTY

Intermediate

AREA

Transmission

Symptoms you may notice

- The check engine light or transmission warning light illuminates on the dashboard.
- The tow/haul or performance mode button does not respond when pressed, and the indicator light on the button may not turn on or off.
- The transmission stays in the default driving mode and refuses to enter the selected mode, even though the button feels normal.
- The transmission may shift differently than expected, often holding gears longer or shifting earlier than usual, because the PCM defaults to a safe mode.
- In some vehicles, the driver may notice no change in drivability at all, with the warning light being the only clue.
- Rarely, the transmission may enter limp mode or limit engine power if the PCM cannot determine the correct mode.

Common causes, most likely first

- 1 A faulty transmission mode switch, where the internal contacts wear out or become contaminated and no longer produce a clean signal.
- 2 Damaged or corroded wiring in circuit A, including open circuits, short circuits to ground or power, or high resistance at connectors.
- 3 A loose or corroded electrical connector at the switch or at the PCM, causing intermittent signal loss.
- 4 Water intrusion or fluid contamination in the switch or connector, leading to erratic operation.
- 5 A failed or misconfigured PCM, though this is less common and should only be suspected after all other causes are ruled out.
- 6 Aftermarket accessories or improper electrical repairs that interfere with the mode switch circuit.
- 7 A mechanical problem in the switch actuator or button assembly that prevents the switch from changing state.



How to diagnose and fix it

- 1 Use a scan tool to read the live data for the transmission mode switch and verify that the PCM sees the correct state changes when the button is pressed.
- 2 Visually inspect the switch, its connector, and the wiring harness for obvious damage, corrosion, or loose pins, and repair any faults found.
- 3 Check the switch with a multimeter to confirm it opens and closes the circuit as designed, and replace the switch if it does not.
- 4 Perform a voltage drop test on circuit A and the ground circuit to rule out high resistance in the wiring, and repair any excessive resistance.
- 5 Clear the code and test-drive the vehicle in all transmission modes to confirm the fix, and recheck for pending codes.
- 6 If the code persists after all electrical checks, consult the factory service information for specific pinpoint tests for the mode switch circuit.
- 7 As a last resort, reprogram or replace the PCM only after confirming that the switch and wiring are in perfect working order.

Before you replace the transmission mode switch

- A common mistake is replacing the switch without checking the wiring harness, since a chafed wire or corroded connector often mimics a failed switch.
- The transmission mode switch is sometimes integrated into the gear selector assembly, so a problem with the selector mechanism can set this code even if the switch itself is good.
- On some vehicles, the mode switch shares a ground with other sensors, and a bad ground can cause multiple codes including P071A, so check grounds before condemning the switch.
- The PCM may set P071A if the battery voltage is low or unstable during cranking, so always verify battery and charging system health first.
- After replacing the switch, some vehicles require a relearn procedure or a scan tool reset to clear the code and restore normal mode operation.

Can I keep driving with P071A?

The vehicle is generally safe to drive because the transmission defaults to a normal driving mode and the fault rarely affects safety, but you should avoid towing or heavy loads until the issue is fixed. Have the code diagnosed soon to prevent potential drivability issues or more serious transmission problems.



Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Factory service information or wiring diagrams
- Basic hand tools for trim and connector removal
- Contact cleaner and dielectric grease

Reading P071A

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

Often seen with

P0700 Transmission Control System Malfunction · **P0705** Transmission Range Sensor Circuit Malfunction · **P071B** Transmission Mode Switch A Circuit Low · **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/p071a/>

