

GENERIC · POWERTRAIN

**P092B**

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

## P092B

# Gear Shift Lock Solenoid/Actuator Control Circuit B Range/Performance

P092B indicates that the powertrain control module (PCM) has detected an out-of-range or performance fault in the control circuit for the gear shift lock solenoid or actuator, specifically on circuit B. The PCM monitors the electrical current and voltage on this circuit and sets the code when the signal does not match expected values for the commanded state, which can prevent the shift lock from releasing or engaging properly.

SYSTEM

Powertrain

CODE TYPE

Generic (all makes)

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

Transmission

## Symptoms you may notice

- The gear selector may not move out of Park even with the brake pedal pressed.
- The shift lock may release without the brake pedal being applied, allowing unintended gear engagement.
- A warning light on the instrument cluster, often the check engine light or a transmission fault indicator.
- The ignition key may not release from the ignition cylinder on vehicles with a shift-lock interlock.
- In some cases, no symptoms besides the warning light, especially if the fault is intermittent.
- The transmission may feel stuck in a particular gear or exhibit delayed engagement.

## Common causes, most likely first

- 1 A faulty gear shift lock solenoid or actuator that has failed electrically or mechanically.
- 2 Damaged, corroded, or disconnected wiring in the control circuit B, including open or short circuits.
- 3 A blown fuse or poor ground connection supplying power to the shift lock circuit.
- 4 A malfunctioning brake pedal position sensor or switch that provides input to the shift lock system.
- 5 A defective PCM or transmission control module (TCM) driver circuit for the solenoid.
- 6 Contamination or mechanical binding in the shift lock mechanism, causing the solenoid to draw abnormal current.



## How to diagnose and fix it

- 1 Verify the battery voltage and check all fuses related to the shift lock system, replacing any blown fuses.
- 2 Inspect the wiring harness and connectors at the shift lock solenoid and PCM for damage, corrosion, or loose pins.
- 3 Test the shift lock solenoid with a multimeter for resistance and compare to manufacturer specifications.
- 4 Check the brake pedal position sensor operation and ensure it sends the correct signal to the PCM.
- 5 Perform a voltage drop test on the ground circuit for the shift lock solenoid to rule out high resistance.
- 6 If the solenoid tests good, use a scan tool to command the solenoid on and off and observe circuit performance.
- 7 Replace the shift lock solenoid or actuator if faulty, and clear the code to verify the repair.

## Shift Lock Circuit B Diagnostic Traps

- A common oversight is assuming the solenoid itself is defective when the real problem is a worn brake pedal switch that fails to send the release signal.  
The code can be set by a mechanical bind in the shift lock mechanism that increases solenoid current draw, which is often missed during electrical-only diagnosis.
- Intermittent faults may only appear when the vehicle is cold or after prolonged sitting, so a wiggle test of the harness while monitoring live data is essential.
- Some vehicles use a shared ground for multiple solenoids, and a poor ground on one circuit can set codes for several unrelated systems including P092B.  
The PCM may set this code even if the shift lock still functions normally, because the performance range is exceeded only briefly during certain conditions.

## Can I keep driving with P092B?

If the shift lock fails to release, you may be unable to move the gear selector out of Park, making the vehicle undrivable; if it releases without the brake, there is a risk of unintended movement. Avoid driving until the fault is diagnosed, especially if the shift lock does not engage properly when parked.

## Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Test light
- Wiring diagram for the shift lock circuit
- Basic hand tools for trim and connector removal



## Reading P092B

- P** Powertrain: engine, transmission and emissions.
- 0** Generic (SAE) code: it means the same thing on every OBD-II vehicle.
- 9** Transmission.
- 2B** The exact fault within that area.

## Often seen with

**P0700** Transmission Control System Malfunction · **P0850** Park/Neutral Switch Input Circuit · **P092A** Gear Shift Lock Solenoid/Actuator Control Circuit B/Open · **P092C** Gear Shift Lock Solenoid/Actuator Control Circuit B Low · **P092D** Gear Shift Lock Solenoid/Actuator Control Circuit B High

## 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/p092b/>

