

GENERIC · POWERTRAIN

P092D

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P092D

Gear Shift Lock Solenoid/Actuator Control Circuit B High

P092D indicates that the powertrain control module (PCM) has detected an abnormally high voltage on the control circuit for the gear shift lock solenoid or actuator, specifically on circuit B. This circuit is responsible for locking the gear selector in Park until the brake pedal is pressed, and a high voltage reading typically means the circuit is open, shorted to power, or the solenoid has failed.

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 depressed.
- The shift lock may release without the brake pedal being pressed, allowing unintended gear engagement.
- A warning light on the dashboard, often the check engine light or a transmission fault indicator.
- The interlock may work intermittently, sometimes locking and sometimes not.
- Often no symptoms besides the warning light, especially if the fault is in a redundant circuit.

Common causes, most likely first

- 1 Open or broken wire in the shift lock solenoid control circuit B.
- 2 Short to power in the wiring between the PCM and the solenoid.
- 3 Failed gear shift lock solenoid or actuator.
- 4 Corroded or damaged electrical connector at the solenoid or PCM.
- 5 Faulty brake pedal position sensor or switch, which can affect shift lock operation.
- 6 Internal PCM driver failure for the solenoid control circuit.



How to diagnose and fix it

- 1 Verify the code with a scan tool and check for any related codes in the transmission and body control modules.
- 2 Inspect the wiring harness and connectors at the shift lock solenoid and PCM for damage, corrosion, or loose pins.
- 3 Measure resistance of the shift lock solenoid and compare to manufacturer specifications.
- 4 Check for voltage on the control circuit B with the key on and brake pedal pressed; compare to expected values.
- 5 Test the brake pedal position sensor and its wiring, as it directly influences shift lock operation.
- 6 If the circuit and solenoid test good, suspect an internal PCM fault and perform further diagnostics before replacement.
- 7 Clear the code and test drive to confirm the repair, ensuring the shift lock functions correctly in all gear positions.

Shift Lock Circuit B High Voltage Traps

- A high voltage code on circuit B often results from an open circuit rather than a short, because the PCM sees a pulled-up voltage when the solenoid is disconnected.
- The brake pedal switch is a common culprit that is overlooked; a faulty switch can cause the PCM to set this code even when the solenoid itself is fine.
- Some vehicles use a shift lock actuator that is part of the shifter assembly, and a mechanical binding can mimic an electrical fault by causing the solenoid to overheat and fail.
- Aftermarket alarm or remote start systems that tap into the shift lock circuit can introduce high voltage or open circuits, leading to this code.
- The code may set intermittently if the wiring harness rubs against a sharp edge, so a wiggle test while monitoring live data is essential.

Can I keep driving with P092D?

If the gear selector cannot be moved out of Park, the vehicle is not driveable and should not be forced. If the vehicle can be driven but the shift lock behaves erratically, avoid parking on inclines and have the fault diagnosed promptly, as unintended gear engagement is a safety risk.

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 P092D

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

Often seen with

P0700 Transmission Control System Malfunction · **P092C** Gear Shift Lock Solenoid/Actuator Control Circuit B Low · **P0930** Gear Shift Lock Solenoid Control Circuit Low

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/p092d/>

