

GENERIC · POWERTRAIN

P092A

OBD-II TROUBLE CODE

P092A

Gear Shift Lock Solenoid/Actuator Control Circuit B/Open

P092A indicates that the powertrain control module (PCM) has detected an open circuit or excessive resistance in the 'B' control circuit for the gear shift lock solenoid or actuator, which prevents the shifter from moving out of Park when the brake is not applied. The PCM monitors the circuit and sets this code when the expected voltage or current is outside the normal range, indicating a break in the wiring or a failed component.

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

Symptoms you may notice

- The shifter cannot be moved out of Park even with the brake pedal pressed.
- The shift lock solenoid does not click or actuate when the brake is applied.
- The brake-shift interlock override may be needed to move the vehicle.
- A warning light on the dashboard, often the check engine light or a transmission fault indicator.
- In some vehicles, the engine may not start because the shifter is not recognized in Park.
- Often no symptoms besides the warning light if the fault is intermittent or only affects a secondary circuit.

Common causes, most likely first

- Open or damaged wire in the shift lock solenoid control circuit B, such as a broken conductor or corroded connector.
- Failed gear shift lock solenoid or actuator, especially a burned-out coil or stuck plunger.
- Poor electrical connection at the solenoid harness or the PCM connector, including loose pins or water intrusion.
- Blown fuse or faulty relay that supplies power to the shift lock system.
- Faulty brake pedal position sensor or switch not sending the correct signal to release the lock.
- Internal PCM fault on the control circuit driver, 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 and body control modules.
- 2 Inspect the shift lock solenoid harness and connectors for damage, corrosion, or loose pins, and repair as needed.
- 3 Test the shift lock solenoid for resistance and function using a multimeter and apply power directly to confirm operation.
- 4 Check the brake pedal position sensor signal to ensure it is functioning correctly and sending the release command.
- 5 Check fuses and relays related to the shift lock system and replace any that are faulty.
- 6 If the solenoid and wiring are good, test the control circuit from the PCM to the solenoid for continuity and short to ground or power.
- 7 If all external circuits test good, suspect an internal PCM fault and perform further diagnostics or replacement as required.

Shift lock circuit diagnostics you might overlook

- A common oversight is assuming the solenoid itself is faulty when the real problem is a corroded connector at the shifter assembly, which can cause an open circuit without visible damage.
- The brake pedal position sensor often shares data with other systems, so a failing sensor may not set a brake code but can still prevent the shift lock from releasing.
- In some vehicles, the shift lock solenoid is part of the shifter assembly and cannot be replaced separately, leading to unnecessary replacement of the entire shifter if proper testing is not done.
- An open circuit in circuit B can be caused by a chafed wire under the center console, often missed during visual inspection because the damage is hidden.
- The PCM may set P092A even if the solenoid works intermittently, so a wiggle test of the harness while monitoring live data can reveal the fault.

Can I keep driving with P092A?

If the shifter cannot be moved out of Park, do not force it; use the manual override to move the vehicle to a safe location. Driving with this code is possible if the override is used, but the shift lock system will not function correctly, so repair should be done promptly to avoid being stranded.

Tools that help

- OBD-II scan tool
- Digital multimeter
- Test light
- Wire repair kit
- Trim removal tools



Reading P092A

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

Often seen with

P092B Gear Shift Lock Solenoid/Actuator Control Circuit B Range/Pe · **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/p092a/>

