

GENERIC · POWERTRAIN

P092C

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P092C

Gear Shift Lock Solenoid/Actuator Control Circuit B Low

P092C indicates that the powertrain control module has detected an abnormally low voltage condition on the control circuit for the gear shift lock solenoid or actuator, specifically on circuit B. This solenoid is responsible for preventing the shifter from moving out of Park unless the brake pedal is pressed, and a low voltage reading means the circuit is likely shorted to ground or has excessive resistance.

SYSTEM

Powertrain

CODE TYPE

Generic (all makes)

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

Transmission

Symptoms you may notice

- The gear shifter cannot be moved out of Park even with the brake pedal depressed
- The shift lock release button or override may be required to move the shifter
- A noticeable click or lack of click from the shift lock actuator when pressing the brake
- The brake-shift interlock may work intermittently, especially in cold or damp conditions
- Often no symptoms besides the warning light, with the shifter operating normally

Common causes, most likely first

- 1 A short to ground in the control circuit wiring between the PCM and the shift lock solenoid
- 2 A faulty gear shift lock solenoid or actuator with an internally shorted coil
- 3 Corroded, loose, or damaged electrical connector at the solenoid or PCM
- 4 A chafed or pinched wire harness rubbing against metal components under the console
- 5 A failed brake pedal position sensor preventing proper signal to the shift lock circuit
- 6 A defective powertrain control module driver circuit, though this is less common

How to diagnose and fix it

- 1 Verify the battery is fully charged and check for any aftermarket accessories wired into the console area
- 2 Inspect the shift lock solenoid connector and wiring for corrosion, damage, or loose pins
- 3 Measure resistance across the solenoid coil and compare to the manufacturer's specification
- 4 Disconnect the PCM and check for a short to ground on the control circuit B wire using a multimeter
- 5 Check the brake pedal position sensor signal and ensure the brake lights operate correctly
- 6 Repair or replace any damaged wiring or connectors, then clear the code and retest the system
- 7 If the circuit tests good, substitute a known-good solenoid or PCM to isolate the faulty component



Shift lock circuit faults that fool technicians

- A brake pedal position sensor that is slightly out of adjustment can cause the PCM to set this code without any obvious brake light issue, so always verify the brake signal data stream.
- Aftermarket alarm systems or remote starters tapped into the shift lock circuit are a frequent cause of low voltage codes on circuit B that owners overlook.
- The code can set intermittently due to a wire that only shorts when the steering column or console is moved, so wiggle-test the harness while watching live data.
- A weak or failing battery can cause the PCM to misread solenoid voltage during cranking, setting a false P092C that disappears after a battery replacement.
- Do not replace the shift lock solenoid based solely on this code; a shorted wire two inches away from the connector will destroy a new solenoid in the same way.

Can I keep driving with P092C?

You can usually drive the vehicle by using the manual shift lock override to move the shifter out of Park, but the safety interlock is compromised and the shifter may not lock properly. Avoid parking on steep inclines until the fault is repaired, and do not rely on the shift lock to prevent accidental movement.

Tools that help

- Digital multimeter with resistance and voltage measurement
- Test light or automotive logic probe
- Trim removal tools for console and panel access
- OBD-II scan tool with live data capability
- Wiring diagram for the specific vehicle

Reading P092C

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

Often seen with

P0572 Brake Switch 'A' Circuit Low · **P0703** Torque Converter/Brake Switch B Circuit Malfunction · **P092B** Gear Shift Lock Solenoid/Actuator Control Circuit B Range/Pe · **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/p092c/>

