

GENERIC · POWERTRAIN

P0928

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P0928

Gear Shift Lock Solenoid Control Circuit/Open

P0928 indicates that the powertrain control module (PCM) has detected an open circuit or excessive resistance in the control circuit for the gear shift lock solenoid, which prevents the shifter from moving out of Park unless the brake is applied. The PCM monitors the solenoid's electrical path and sets this code when the expected voltage or current is outside the normal range, often due to a wiring fault, a failed solenoid, or a poor connection.

SYSTEM

Powertrain

CODE TYPE

Generic (all makes)

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

Transmission

Symptoms you may notice

- The shift lever cannot be moved out of Park even with the brake pedal pressed, or it moves only after using the manual override.
- The brake-shift interlock does not release, leaving the vehicle stuck in Park and unable to be driven normally.
- A yellow or red warning light on the dashboard, often the check engine light or a transmission-related icon.
- In some vehicles, the engine may start but the transmission remains locked in Park, preventing any movement.
- Often no symptoms besides the warning light, especially if the solenoid still functions intermittently or the fault is in a redundant circuit.

Common causes, most likely first

- 1 A failed gear shift lock solenoid, typically due to an open coil or worn internal contacts.
- 2 A broken, corroded, or disconnected wire in the control circuit between the PCM and the solenoid.
- 3 A poor electrical connection at the solenoid connector or the PCM connector, often from water intrusion or loose pins.
- 4 A blown fuse that supplies power to the shift lock solenoid circuit, though this may also affect other functions.
- 5 A faulty brake pedal position switch that prevents the PCM from commanding the solenoid, though this usually sets a different code.
- 6 A defective PCM driver for the solenoid circuit, which is rare but possible after other causes are ruled out.



How to diagnose and fix it

- 1 Check for any related technical service bulletins (TSBs) or recalls for the vehicle's make and model, as shift lock issues are sometimes covered.
- 2 Inspect the shift lock solenoid fuse and replace it if blown, then verify power and ground at the solenoid connector with a test light or multimeter.
- 3 Disconnect the solenoid and measure its resistance; compare to the manufacturer's specification to confirm whether the coil is open or shorted.
- 4 Perform a wiggle test on the wiring harness and connectors while monitoring solenoid operation to identify intermittent opens or poor connections.
- 5 Check the brake pedal position switch signal to the PCM, as a faulty switch can prevent solenoid activation and may set this code indirectly.
- 6 If the circuit and solenoid test good, suspect the PCM; perform a continuity test from the PCM connector to the solenoid to rule out an open wire before replacing the module.
- 7 Replace the gear shift lock solenoid if it fails electrical testing, clear the code, and verify the repair by cycling the ignition and checking that the shifter moves freely with the brake applied.

Before you replace the shift lock solenoid

- A common oversight is assuming the solenoid is bad when the real problem is a corroded connector or a chafed wire under the center console, so always perform a voltage drop test on both the power and ground sides of the circuit.
- Some vehicles use a shift lock control module separate from the PCM, and a fault in that module can set P0928 even though the solenoid itself is fine.
- The brake pedal position switch often shares a signal with the cruise control or brake lights, so a failing switch may cause other symptoms that point away from the shift lock circuit.
- Aftermarket alarm systems or remote start installations frequently tap into the shift lock circuit and can introduce opens or shorts that trigger this code.
- A weak or failing battery can cause the PCM to set spurious codes, including P0928, so verify battery voltage and charging system health before deep circuit testing.

Can I keep driving with P0928?

If the vehicle can be shifted out of Park using the manual override, you can drive it to a repair shop, but avoid parking on steep hills where the override may be difficult to use. If the shifter is completely locked, do not force it; have the vehicle towed to prevent damage to the shift mechanism.



Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Test light
- Wire probe set
- Vehicle-specific service information for circuit diagrams and resistance specifications

Reading P0928

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

Often seen with

P0700 Transmission Control System Malfunction · **P0850** Park/Neutral Switch Input Circuit · **P0929** Gear Shift Lock Solenoid Control Circuit Range/Performance · **P0930** Gear Shift Lock Solenoid Control Circuit Low · **P0931** Gear Shift Lock Solenoid Control Circuit 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/p0928/>

