

GENERIC · POWERTRAIN

P095B

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P095B

Gear Shift Position Circuit C Range/Performance

P095B indicates that the transmission control module has detected an out-of-range or erratic signal from the gear shift position circuit C, which is typically the sensor or switch that reports the current gear or selector lever position. The computer compares this signal against expected values from other position sensors and sets the code when the voltage or rationality check fails.

SYSTEM

Powertrain

CODE TYPE

Generic (all makes)

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

Transmission

Symptoms you may notice

- Illuminated check engine light or transmission warning light
- Harsh or delayed gear shifts
- Transmission stuck in a single gear or limp mode
- Incorrect or flashing gear position indicator on the dashboard
- Failure to start because the computer cannot confirm Park or Neutral
- Often no symptoms besides the warning light

Common causes, most likely first

- 1 Faulty gear shift position sensor C or its internal circuitry
- 2 Damaged, chafed, or corroded wiring in the sensor circuit
- 3 Loose or contaminated electrical connector at the sensor or transmission
- 4 Transmission control module software needing recalibration or update
- 5 Internal transmission mechanical wear affecting selector lever alignment
- 6 Failed transmission control module (rare)

How to diagnose and fix it

- 1 Scan all modules and record freeze-frame data to confirm when the code sets
- 2 Inspect the gear shift position sensor C connector and wiring for damage or corrosion
- 3 Check sensor reference voltage and ground at the connector with a multimeter
- 4 Compare live sensor data against the selector lever position through its full range
- 5 Perform a relearn or calibration procedure for the transmission position sensors
- 6 Replace the gear shift position sensor C if resistance or voltage checks are out of specification
- 7 Repair or replace damaged wiring and clear codes to verify the fix



What the gear position sensor C really does

- Circuit C often refers to a secondary or redundant position signal, so a failure may not disable the vehicle but will set a code and may cause harsh engagement.
- A weak or failing battery can cause erratic sensor voltages that mimic a faulty gear position sensor, so always load-test the battery before replacing parts.
- After replacing the sensor, many vehicles require a transmission adaptive relearn or the code will return immediately.
- Debris or sludge on the selector lever mechanism can prevent the sensor from reaching its full travel, setting a range/performance code without an electrical fault.
- This code can be set by a faulty ignition switch or brake pedal switch on some vehicles because the computer cross-checks gear position against start and shift-lock inputs.

Can I keep driving with P095B?

You can usually drive the vehicle, but expect harsh shifts or limited gear selection, and avoid sustained high-speed driving or heavy loads until the fault is repaired. If the transmission is in limp mode or the engine will not start, have the vehicle towed to a repair shop.

Tools that help

- OBD-II scan tool with live data and transmission module access
- Digital multimeter
- Vehicle-specific service information for circuit testing
- Basic hand tools for connector and sensor access
- Battery load tester

Reading P095B

P	Powertrain: engine, transmission and emissions.
0	Generic (SAE) code: it means the same thing on every OBD-II vehicle.
9	Transmission.
5B	The exact fault within that area.

Often seen with

P0705 Transmission Range Sensor Circuit Malfunction · **P0706** Transmission Range Sensor Circuit Range/Performance · **P0707** Transmission Range Sensor Circuit Low · **P095A** Gear Shift Position Circuit C · **P095C** Gear Shift Position Circuit C 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/p095b/>

