

GENERIC · POWERTRAIN

P0862

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P0862

Gear Shift Module Communication Circuit High

P0862 indicates that the transmission control module (TCM) has detected an abnormally high voltage on the communication circuit that links it to the gear shift module, often the gear selector or shifter assembly. This high voltage condition suggests a short to power, an open circuit, or a faulty module, disrupting the signal that tells the transmission which gear the driver has selected.

SYSTEM

Powertrain

CODE TYPE

Generic (all makes)

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

Transmission

Symptoms you may notice

- The check engine light or transmission warning light is illuminated on the dashboard.
- The gear indicator on the instrument cluster may flash or show an incorrect gear selection.
- The transmission may enter limp mode, staying in a single gear or refusing to shift.
- The vehicle may not start or may not recognize the key fob if the shifter position is not detected.
- Shifting between gears may feel delayed, harsh, or may not engage at all.
- Often no symptoms besides the warning light, especially in early stages.

Common causes, most likely first

- 1 A short to power in the wiring harness between the gear shift module and the TCM, often due to chafed or damaged insulation.
- 2 A faulty gear shift module (also called the shifter assembly or transmission range sensor) sending an incorrect high voltage signal.
- 3 Corroded or loose electrical connectors at the gear shift module or TCM, causing intermittent high resistance or voltage spikes.
- 4 A defective transmission control module (TCM) that misinterprets the communication signal.
- 5 A poor ground connection for the gear shift module or TCM, leading to voltage reference errors.
- 6 Aftermarket accessories or improper wiring repairs that introduce voltage into the communication circuit.



How to diagnose and fix it

- 1 Use an OBD-II scanner to retrieve all stored codes and freeze-frame data, then clear the code and test-drive to see if it returns.
- 2 Visually inspect the wiring harness and connectors between the gear shift module and TCM for damage, corrosion, or loose pins.
- 3 Measure the voltage on the communication circuit at the gear shift module connector with the key on and compare to the manufacturer's specification.
- 4 Check the ground circuit for the gear shift module and TCM using a multimeter to ensure resistance is within spec.
- 5 If voltage is high at the module, disconnect the TCM and recheck the circuit to isolate whether the short is in the wiring or the module.
- 6 Substitute a known-good gear shift module or TCM (if possible) to confirm which component is faulty before replacement.
- 7 Repair or replace the faulty wiring, connector, or module as needed, then clear codes and verify the repair with a test drive.

Don't overlook the shifter module ground

- A poor ground at the gear shift module can cause the communication circuit to read high voltage, mimicking a short to power, so always check grounds before replacing parts.
- The code can be set by a low battery or charging system issue that causes voltage spikes, so verify battery and alternator health first.
- On some vehicles, the gear shift module is integrated with the transmission range sensor, and a faulty sensor can set P0862 without any wiring fault.
- Aftermarket remote starters or alarm systems tapped into the shifter wiring are a common cause of high voltage on this circuit that technicians often miss.
- P0862 does not always mean the TCM is bad; the TCM is rarely the culprit, so avoid replacing it until wiring and the shifter module are ruled out.

Can I keep driving with P0862?

If the vehicle drives normally and only the warning light is on, you can drive cautiously to a repair shop, but avoid aggressive acceleration or heavy loads. If the transmission is in limp mode or shifting erratically, stop driving and have the vehicle towed to prevent further damage.



Tools that help

- OBD-II scanner with live data capability
- Digital multimeter
- Wiring diagram for the specific vehicle
- Socket set and trim removal tools
- Test light or power probe

Reading P0862

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

Often seen with

P0700 Transmission Control System Malfunction · **P0705** Transmission Range Sensor Circuit Malfunction · **P0706** Transmission Range Sensor Circuit Range/Performance · **P0861** Gear Shift Module Communication Circuit Low · **P0863** TCM Communication Circuit

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/p0862/>

