

GENERIC · POWERTRAIN

P255C

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P255C

PTO Speed Selector Sensor/Switch 2 Circuit Low

P255C indicates that the powertrain control module (PCM) has detected a low-voltage condition on the signal circuit for the Power Take-Off (PTO) Speed Selector Sensor or Switch 2. This sensor or switch is used on vehicles equipped with a PTO system to select a specific engine or vehicle speed for auxiliary equipment operation, and the low signal suggests a short to ground, a faulty switch, or a wiring issue.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Powertrain	Generic (all makes)	Low	Intermediate	Vehicle speed, idle control and auxiliary inputs

Symptoms you may notice

- The Check Engine Light or Service Engine Soon light is illuminated.
- The PTO system may fail to engage or may not hold the selected speed.
- The auxiliary equipment driven by the PTO may operate erratically or not at all.
- The driver may notice no symptoms besides the warning light, especially if the PTO is not in use.
- The engine may idle or run at an incorrect speed when the PTO is activated.
- Other PTO-related functions or indicators may not work as expected.

Common causes, most likely first

- A faulty PTO speed selector switch or sensor (internal short to ground).
- Damaged or chafed wiring in the sensor signal circuit, causing a short to ground.
- Corroded or loose electrical connectors at the sensor or PCM.
- Water intrusion into the switch or connector, leading to a low-resistance path to ground.
- A defective PCM (rare, but possible if all other causes are ruled out).



How to diagnose and fix it

- 1 Use a scan tool to verify the code and check for any related codes in the PTO system.
- 2 Visually inspect the PTO speed selector sensor and its wiring for obvious damage, corrosion, or loose connections.
- 3 Disconnect the sensor and check the signal circuit for a short to ground using a digital multimeter; repair any wiring faults found.
- 4 Test the sensor or switch with a multimeter to verify its resistance or voltage output matches the manufacturer's specification.
- 5 If the sensor tests out of specification, replace it with a known-good unit.
- 6 Clear the code and test-drive the vehicle with the PTO engaged to confirm the repair.
- 7 If the code persists after all other checks, consult the factory service information for PCM diagnostics and consider PCM replacement as a last resort.

PTO Switch Circuit Low: Common Oversights

- A low signal code often results from a simple short to ground in the wiring harness, especially where it rubs against sharp metal edges or passes through tight grommets.
- The PTO speed selector switch may be part of a multi-function stalk or panel, and a failure in a shared ground circuit can set this code along with others.
- Aftermarket accessories or improper wiring for PTO equipment are frequent culprits, as they can introduce unintended ground paths.
- The PCM may set this code intermittently if the switch is only faulty under certain conditions, such as vibration or temperature extremes, so a wiggle test can be valuable.
- Do not assume the sensor is bad; the code indicates a low signal, which could be caused by a shorted wire rather than the component itself.

Can I keep driving with P255C?

The vehicle can generally be driven without immediate risk, but the PTO system may not function correctly. Avoid using the PTO until the fault is repaired, as improper operation could affect auxiliary equipment or cause further electrical issues.

Tools that help

- OBD-II scan tool
- Digital multimeter
- Wiring diagram for the specific vehicle
- Basic hand tools (screwdrivers, socket set)
- Electrical contact cleaner
- Wire repair kit (splices, heat shrink, electrical tape)



Reading P255C

- P** Powertrain: engine, transmission and emissions.
- 2** Generic (SAE) code: it means the same thing on every OBD-II vehicle.
- 5** Vehicle speed, idle control and auxiliary inputs.
- 5C** The exact fault within that area.

Often seen with

P255B PTO Speed Selector Sensor/Switch 2 Range/Performance · **P255D** PTO Speed Selector Sensor/Switch 2 Circuit High · **P255E** PTO Speed Selector Sensor/Switch 2 Circuit Intermittent/Erra · **P255F** A/C Request A Circuit Range/Performance · **P2560** Engine Coolant Level Low

See it working

Watch the animated explainer [How an Elevator Works: Traction Lift in X-Ray](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p255c/>

