

GENERIC · POWERTRAIN

P255B

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P255B

PTO Speed Selector Sensor/Switch 2 Range/Performance

P255B indicates that the powertrain control module (PCM) has detected an out-of-range or erratic signal from the Power Take-Off (PTO) Speed Selector Sensor/Switch 2 circuit. This switch is used on vehicles equipped with a PTO system to select a specific engine or vehicle speed for auxiliary equipment operation, and the PCM expects a predictable voltage or resistance pattern when the switch is moved between positions.

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 disengage unexpectedly.
- The auxiliary equipment driven by the PTO may not maintain the selected speed.
- The driver may notice a rough idle or hesitation when the PTO is activated.
- Often no symptoms besides the warning light, especially if the PTO is not in use.

Common causes, most likely first

- Faulty PTO speed selector switch 2 (internal contact wear or contamination).
- Damaged or corroded wiring in the PTO speed selector circuit (open, short, or high resistance).
- Loose or corroded electrical connector at the switch or PCM.
- Water intrusion or debris in the switch or connector causing intermittent signals.
- PCM software glitch or internal fault misinterpreting the switch signal.
- Aftermarket PTO equipment improperly installed or incompatible with the vehicle's system.



How to diagnose and fix it

- 1 Verify the code with a scan tool and check for any related PTO or communication codes.
- 2 Inspect the PTO speed selector switch and its connector for physical damage, corrosion, or loose pins.
- 3 Test the switch operation with a multimeter to confirm it produces the correct resistance or voltage in each position.
- 4 Check the wiring harness between the switch and PCM for continuity, shorts to ground, and shorts to power.
- 5 If the switch tests bad, replace it and clear the code to see if it returns.
- 6 If wiring is faulty, repair or replace the affected section of the harness.
- 7 If all electrical checks pass, consult the manufacturer's diagnostic flow for PCM software updates or replacement.

PTO Switch Codes Often Misdiagnosed

- A P255B code can be set by a momentary glitch in the switch signal that does not affect PTO operation, so always check for stored freeze-frame data before replacing parts.
The PTO speed selector switch is sometimes part of a multi-function stalk or panel, and the entire assembly may need replacement if individual switch contacts are not serviceable.
- Corrosion in the connector is a frequent cause on vehicles that operate in wet or dusty environments, and it can mimic a failed switch.
- Aftermarket PTO installations that tap into the factory wiring can introduce resistance or interference that triggers this code even when the factory switch is good.
The PCM may set P255B if the battery voltage is low during cranking, so check the charging system and battery condition before condemning the switch.

Can I keep driving with P255B?

The vehicle can generally be driven without immediate risk, but the PTO system may not function correctly, which could affect auxiliary equipment operation. Avoid using the PTO under load until the fault is repaired, and address the code promptly to prevent secondary issues.

Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Wiring diagram for the PTO circuit
- Contact cleaner and dielectric grease
- Basic hand tools for trim and connector removal



Reading P255B

- 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.
- 5B** The exact fault within that area.

Often seen with

P255A PTO Speed Selector Sensor/Switch 2 Circuit/Open · **P255C** PTO Speed Selector Sensor/Switch 2 Circuit Low · **P255D** PTO Speed Selector Sensor/Switch 2 Circuit High · **P2560** Engine Coolant Level Low · **P2561** A/C Control Module Requested MIL Illumination

See it working

Watch the animated explainer [Engine Cooling System Trainer: How Engines Stay Cool](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p255b/>

