

GENERIC · POWERTRAIN

P255E

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P255E

PTO Speed Selector Sensor/Switch 2 Circuit Intermittent/Erratic

P255E indicates that the powertrain control module (PCM) has detected an intermittent or erratic signal from the power take-off (PTO) speed selector sensor or switch circuit number 2. This sensor or switch is responsible for reporting the selected PTO speed or mode to the PCM, and the circuit's signal is not stable or consistent, causing the PCM to set this code.

SYSTEM

Powertrain

CODE TYPE

Generic (all makes)

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

Vehicle speed, idle control and auxiliary inputs

Symptoms you may notice

- The malfunction indicator lamp (MIL) illuminates on the dashboard.
- The PTO system may fail to engage or may disengage unexpectedly.
- Erratic or inconsistent PTO operation, such as speed surging or dropping out.
- The PTO speed may not match the selected setting.
- Often no symptoms besides the warning light, especially if the fault is intermittent.

Common causes, most likely first

- 1 Faulty PTO speed selector sensor or switch number 2.
- 2 Damaged or corroded wiring or connectors in the sensor/switch 2 circuit.
- 3 Loose or poor electrical connections at the sensor or PCM.
- 4 Water intrusion or contamination in the connector or sensor.
- 5 Mechanical wear or misalignment of the PTO selector mechanism.
- 6 PCM software issue or internal fault (less common).



How to diagnose and fix it

- 1 Verify the code with a scan tool and check for any related codes in the PTO system.
- 2 Inspect the PTO speed selector sensor/switch 2 and its connector for physical damage, corrosion, or loose pins.
- 3 Perform a wiggle test on the wiring harness and connectors while monitoring live data to identify intermittent faults.
- 4 Check the sensor/switch resistance or voltage output according to the manufacturer's specifications.
- 5 Repair or replace any damaged wiring, connectors, or the sensor/switch as needed.
- 6 Clear the code and test-drive the vehicle to confirm the repair.
- 7 If the code persists, consult the factory service information for further diagnostics, including PCM testing.

PTO Speed Selector Circuit Quirks

- Intermittent codes like P255E are often caused by poor electrical connections rather than a failed sensor, so always check connectors and grounds first.
The PTO speed selector switch may be part of a multifunction switch assembly, and replacing the entire assembly is sometimes more cost-effective than repairing individual components.
- This code can be set by a momentary glitch, so clearing it and seeing if it returns is a valid first step before extensive diagnostics.
- Aftermarket accessories or modifications to the PTO system can introduce signal interference and cause erratic readings.
The PCM may set this code if the signal from switch 2 is inconsistent with the expected pattern, even if the switch itself is functional.

Can I keep driving with P255E?

If the vehicle drives normally without the PTO engaged, it is generally safe to continue driving, but avoid using the PTO system until the fault is repaired. If the PTO is essential for your work, have the issue diagnosed promptly to prevent operational disruptions.

Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Wiring diagram for the PTO circuit
- Basic hand tools (screwdrivers, pliers, wire crimpers)



Reading P255E

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

Often seen with

P255D PTO Speed Selector Sensor/Switch 2 Circuit High · **P255F** A/C Request A Circuit Range/Performance · **P2560** Engine Coolant Level Low · **P2561** A/C Control Module Requested MIL Illumination · **P2562** Turbocharger Boost Control Position Sensor Circuit

See it working

Watch the animated explainer [How a Boxer Engine Works: Flat Engine Cutaway](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p255e/>

