

GENERIC · POWERTRAIN

P255A

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P255A

PTO Speed Selector Sensor/Switch 2 Circuit/Open

P255A indicates that the powertrain control module (PCM) has detected an open circuit or abnormal voltage on the signal circuit for the Power Take-Off (PTO) Speed Selector Sensor/Switch 2. This switch is used in vehicles equipped with a PTO system to select a specific engine or vehicle speed for auxiliary equipment operation. The PCM expects a certain voltage on the signal circuit when the switch is in a given position, and an open circuit prevents that expected signal from being received.

SYSTEM

Powertrain

CODE TYPE

Generic (all makes)

SEVERITY

Low

FIX DIFFICULTY

Intermediate

AREA

Vehicle speed, idle control and auxiliary inputs

Symptoms you may notice

- The Check Engine Light (MIL) illuminates on the dashboard.
- The PTO system may fail to engage or may not hold the selected speed.
- Engine speed may be limited or erratic when the PTO is activated.
- The PTO indicator lamp may flash or stay off when it should be on.
- Often no symptoms besides the warning light, especially if the PTO is not in use.

Common causes, most likely first

- 1 Broken, chafed, or disconnected wire in the PTO speed selector switch 2 signal circuit.
- 2 Corroded or damaged electrical connector at the switch or PCM.
- 3 Faulty PTO speed selector switch 2 (internal open circuit).
- 4 Poor ground connection for the switch or PCM.
- 5 PCM internal fault (rare but possible).
- 6 Aftermarket accessories or wiring splices interfering with the circuit.



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 switch 2 and its connector for physical damage, corrosion, or loose pins.
- 3 Disconnect the switch and check resistance across the switch terminals in different positions; compare to specifications.
- 4 Check the signal circuit for continuity from the switch connector to the PCM; repair any open or short as needed.
- 5 Check the ground circuit for the switch and ensure it is clean and tight.
- 6 If the circuit and switch test good, suspect a faulty PCM; perform pinpoint tests before replacement.

PTO Switch Circuit Checks Before PCM Replacement

- A common oversight is assuming the switch itself is bad when the real problem is a broken wire inside the loom near a sharp bend or heat source.
- The PTO speed selector switch 2 is often confused with the main PTO switch; ensure you are testing the correct component for this code.
- Aftermarket wiring for PTO accessories can introduce opens or shorts that mimic a failed switch, so inspect any non-factory modifications first.
- On some vehicles, the PTO system is disabled by default and the code may set without any driver symptoms, leading to unnecessary repairs.
- A faulty ground for the PTO switch can cause an open circuit code even if the signal wire is intact, so always verify ground integrity.

Can I keep driving with P255A?

The vehicle can generally be driven safely without the PTO system, but avoid using the PTO until the fault is repaired because the selected speed may not be maintained. If the PTO is required for work, have the circuit diagnosed promptly to avoid equipment damage.

Tools that help

- OBD-II scan tool
- Digital multimeter
- Wiring diagram for the PTO circuit
- Electrical contact cleaner
- Basic hand tools



Reading P255A

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

Often seen with

P2559 Engine Coolant Level Sensor/Switch Circuit High · **P255B** PTO Speed Selector Sensor/Switch 2 Range/Performance · **P255C** PTO Speed Selector Sensor/Switch 2 Circuit Low · **P2560** Engine Coolant Level Low · **P2561** A/C Control Module Requested MIL Illumination

See it working

Watch the animated explainer [How the EVAP System Works: Fuel Vapour and Leak Test](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p255a/>

