

GENERIC · POWERTRAIN

P2124

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P2124

Throttle/Pedal Position Sensor/Switch 'D' Circuit Intermittent

P2124 indicates that the engine control module (ECM) has detected an intermittent signal from the throttle or pedal position sensor circuit designated as 'D'. This sensor is typically the second or redundant sensor in a drive-by-wire throttle system, and the ECM sets the code when the voltage signal momentarily drops out or becomes erratic.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Powertrain	Generic (all makes)	Medium	Intermediate	Fuel and air metering

Symptoms you may notice

- Illumination of the check engine light, often with no other noticeable symptoms
- Intermittent hesitation or stumble during acceleration
- Reduced engine power or limp mode, especially under load
- Unstable idle speed or surging
- Poor throttle response or delayed acceleration
- In rare cases, the engine may stall or refuse to start

Common causes, most likely first

- 1 Worn or corroded electrical connector at the throttle body or accelerator pedal sensor
- 2 Chafed or broken wiring in the sensor circuit due to vibration or heat
- 3 Faulty throttle position sensor or accelerator pedal position sensor
- 4 Internal intermittent fault in the sensor itself
- 5 Poor ground connection for the sensor circuit
- 6 Contamination or carbon buildup on the throttle plate or sensor contacts
- 7 ECM software glitch or internal fault (less common)



How to diagnose and fix it

- 1 Inspect the sensor connectors for corrosion, tightness, and proper seating; clean and apply dielectric grease if needed
- 2 Perform a wiggle test on the wiring harness while monitoring live data to identify intermittent opens or shorts
- 3 Check the sensor reference voltage and ground circuits with a multimeter to ensure they are stable
- 4 Remove and clean the throttle body and sensor contacts if contamination is evident
- 5 Replace the throttle position sensor or accelerator pedal position sensor if resistance or voltage output is erratic
- 6 Repair or replace any damaged wiring or connectors in the affected circuit
- 7 Clear the code and perform a throttle relearn procedure if required by the manufacturer

Intermittent faults demand patience and live data

- Intermittent codes like P2124 often leave no stored freeze-frame data, so a technician must rely on live data monitoring during a test drive to catch the glitch.
A common misdiagnosis is replacing the throttle body when the real problem is a worn connector or chafed wire that only acts up under vibration.
- The 'D' circuit is usually the redundant sensor in a dual-sensor design, so a failure may not cause immediate drivability issues but can trigger limp mode as a safety precaution.
- Aftermarket air intake systems or poor workmanship during previous repairs can disturb the sensor wiring, leading to intermittent faults.
Some vehicles require a throttle position sensor relearn after replacement, and skipping this step can cause the code to return even with new parts.

Can I keep driving with P2124?

If the check engine light is on but the vehicle drives normally, you can drive cautiously to a repair shop, but avoid aggressive acceleration or heavy loads. If the vehicle enters limp mode or hesitates severely, stop driving and have it towed to prevent unsafe situations.

Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Wiring diagram for the specific vehicle
- Basic hand tools (screwdrivers, socket set)
- Contact cleaner and dielectric grease



Reading P2124

- P** Powertrain: engine, transmission and emissions.
- 2** Generic (SAE) code: it means the same thing on every OBD-II vehicle.
- 1** Fuel and air metering.
- 24** The exact fault within that area.

Often seen with

P2120 Throttle/Pedal Position Sensor/Switch 'D' Circuit · **P2122** Accelerator Pedal Position Sensor D Circuit Low
 · **P2123** Accelerator Pedal Position Sensor D Circuit High · **P2125** Throttle/Pedal Position Sensor/Switch 'E' Circuit
 · **P2135** Throttle/Pedal Position Sensor A/B Voltage Correlation

See it working

Watch the animated explainer [How a Rotary Engine Works: Wankel in X-Ray](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p2124/>

