

GENERIC · POWERTRAIN

P2122

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P2122

Accelerator Pedal Position Sensor D Circuit Low

P2122 means the engine computer has detected an abnormally low voltage on the signal circuit for accelerator pedal position sensor D, which is one of the redundant tracking sensors inside the drive-by-wire pedal assembly. The computer expects a specific voltage range that rises and falls as you press and release the pedal, and a reading below the calibrated minimum triggers this code.

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

Symptoms you may notice

- The accelerator pedal may feel dead or unresponsive when you press it, with the engine failing to rev normally.
- The vehicle may enter limp mode, limiting engine speed to a fast idle or a low fixed RPM.
- The check engine light illuminates, often accompanied by a reduced power or electronic throttle warning message.
- The engine may hesitate, stumble, or cut power momentarily as the pedal is applied.
- In many cases there are no drivability symptoms at all, only the stored code and warning light.
- Cruise control or other pedal-dependent features may stop working.

Common causes, most likely first

- A worn or contaminated accelerator pedal position sensor D inside the pedal assembly, which is the most common cause on high-mileage vehicles.
- An open or high-resistance fault in the signal wire between sensor D and the engine control module, often from a chafed or broken conductor.
- Corroded or loose terminals at the pedal sensor connector or at the engine control module connector.
- A short to ground on the sensor D signal circuit, which pulls the voltage below the expected range.
- A faulty engine control module, which is rare but possible after all other circuits are ruled out.
- Water intrusion or debris in the pedal assembly causing intermittent low signal voltage.



How to diagnose and fix it

- 1 Scan all modules and record freeze-frame data for P2122, then clear the code and test-drive to confirm it returns.
- 2 Visually inspect the pedal assembly connector and wiring for corrosion, chafing, or loose pins, and repair as needed.
- 3 Back-probe the sensor D signal circuit at the pedal connector and compare voltage with the scan tool pedal position reading through the full sweep.
- 4 Check the sensor D ground and reference voltage circuits for opens or excessive resistance using a multimeter.
- 5 If the signal voltage stays low while the pedal is moved, disconnect the sensor and check for a short to ground on the signal wire.
- 6 Replace the accelerator pedal assembly if the sensor output is confirmed faulty and the wiring tests good.
- 7 After repair, clear codes, perform any required pedal relearn or throttle adaptation procedure, and verify the code does not return.

Why pedal D codes are often misdiagnosed

- Many technicians replace the pedal assembly immediately, but a chafed signal wire near the pedal bracket or a corroded connector pin is just as common and far cheaper to fix.
- P2122 can be set by a momentary glitch during cold starts or low battery voltage, so always check battery health and charging system operation before condemning the sensor.
- The four pedal position sensors are redundant and cross-checked, so a low signal on sensor D can also set companion codes for sensor C or the correlation between them, which helps confirm the fault.
- A dirty or sticking accelerator pedal mechanism can cause the sensor to sweep outside its expected range and set this code without any electrical fault at all.
- Aftermarket floor mats or pedal covers that restrict pedal travel can cause the sensor to read low at rest and trigger this code on some vehicles.

Can I keep driving with P2122?

You can usually drive the vehicle to a repair shop at reduced speed, but avoid highways and heavy traffic because the engine may enter limp mode without warning. If the pedal becomes completely unresponsive or the vehicle will not accelerate beyond idle, stop driving and arrange a tow.

Tools that help

- OBD-II scan tool with live data and freeze-frame capability
- Digital multimeter with back-probe pins
- Wiring diagram for the accelerator pedal circuit
- Basic hand tools for connector and pedal assembly access
- Battery load tester or charging system tester



Reading P2122

- 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.
- 22** The exact fault within that area.

Often seen with

P0222 Throttle Position Sensor B Circuit Low Input · **P2121** Throttle/Pedal Position Sensor/Switch 'D' Circuit Range/Perf · **P2123** Accelerator Pedal Position Sensor D Circuit High · **P2127** Accelerator Pedal Position Sensor E Circuit Low · **P2138** Throttle/Pedal Position Sensor D/E 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/p2122/>

