

GENERIC · POWERTRAIN

P0122

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P0122

Throttle Position Sensor A Circuit Low Input

P0122 means the engine computer has detected that the signal voltage from throttle position sensor A is lower than it should be for the current throttle position. The computer expects the sensor's output to rise as the throttle opens, and a sustained low reading indicates an open circuit, a short to ground, or a failed sensor.

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

Symptoms you may notice

- The check engine light is illuminated, often with no other noticeable symptoms.
- The engine may idle poorly, stumble, or stall when you come to a stop.
- Acceleration may feel flat or delayed because the computer is not receiving an accurate throttle opening signal.
- An automatic transmission may shift harshly or at the wrong time due to incorrect throttle position data.
- The vehicle may enter limp mode, limiting engine speed and power to protect the drivetrain.

Common causes, most likely first

- A faulty throttle position sensor (TPS) that has worn out internally and no longer produces the correct voltage sweep.
- Damaged or corroded wiring between the TPS and the engine computer, including a broken wire or a poor ground connection.
- A short to ground on the signal circuit, often caused by chafed insulation where the harness rubs against a metal bracket.
- Loose or dirty electrical connectors at the TPS or at the computer, leading to intermittent low signal voltage.
- A misadjusted or improperly installed TPS that is not sitting at the correct angle on the throttle shaft.
- Rarely, a failed engine computer driver circuit that cannot read the sensor signal correctly.



How to diagnose and fix it

- 1 Connect an OBD-II scan tool and read live throttle position data while slowly opening the throttle by hand to confirm the signal stays low or drops out.
- 2 Visually inspect the TPS connector and wiring for corrosion, loose pins, or chafed insulation, and repair any damage found.
- 3 Back-probe the TPS signal wire with a multimeter and measure voltage with the key on and throttle closed, then compare to the manufacturer's specification.
- 4 Check the sensor's ground circuit for excessive resistance using a voltage drop test rather than a simple continuity check.
- 5 If the wiring and ground are good but the signal voltage does not change smoothly, replace the throttle position sensor and clear the code.
- 6 After any repair, clear the adaptive memory and perform a throttle relearn procedure if the manufacturer requires it, then verify the code does not return.

What a low TPS signal really tells you

- A P0122 can be set by a perfectly good TPS if the reference voltage feed to the sensor is low, so always check the 5-volt reference circuit before condemning the sensor.
- Many technicians replace the TPS only to find the real fault is a worn spot in the harness where it passes near the exhaust or a sharp bracket, so a wiggle test while watching live data is essential.
- On some vehicles, a low TPS signal can be caused by a failing accelerator pedal position sensor on drive-by-wire systems, even though the code names the throttle position sensor.
- The code does not always mean the sensor is dead; a loose battery ground or a poor engine ground can pull the signal voltage down and set P0122 intermittently.
- If the TPS signal is low only when the engine is hot, suspect a failing sensor that breaks down with heat rather than a wiring fault, and test it cold and hot.

Can I keep driving with P0122?

You can usually drive the vehicle to a repair shop, but avoid heavy acceleration and towing because the computer may be using a default throttle value that limits power. If the engine stalls repeatedly or enters limp mode, stop driving and have it towed.

Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter with back-probe pins
- Wire piercing probes or breakout leads
- Service information for throttle position sensor voltage specifications
- Basic hand tools for connector and sensor removal



Reading P0122

- P** Powertrain: engine, transmission and emissions.
- 0** 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

P0107 MAP/Barometric Pressure Circuit Low Input · **P0121** Throttle Position Sensor A Circuit Range/Performance · **P0123** Throttle Position Sensor A Circuit High Input · **P0222** Throttle Position Sensor B Circuit Low Input · **P2135** Throttle/Pedal Position Sensor A/B Voltage Correlation

See it working

Watch the animated explainer [How an EGR Valve Works: Exhaust Gas Recirculation](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p0122/>

