



P1121 · Jaguar

Pedal Position Sensor A Circuit Range Performance

P1121 on a Jaguar indicates that the engine control module (ECM) has detected an out-of-range performance from the accelerator pedal position sensor A circuit, which typically comprises two or more potentiometers that must agree. The ECM compares the sensor's voltage signals against expected values and each other, and when the correlation or range is outside the programmed limits, it stores this code and may restrict engine power.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Powertrain	Jaguar specific	Medium	Intermediate	Fuel and air metering

Symptoms you may notice

- Illumination of the check engine light or a specific message such as 'Engine System Fault' or 'Restricted Performance'.
- Reduced engine power or limp-home mode, often limiting throttle response and vehicle speed.
- Hesitation, stumble, or delayed acceleration when pressing the accelerator pedal.
- Inconsistent or surging engine speed at idle or during steady cruising.
- The engine may enter a default throttle strategy, causing poor fuel economy or rough running.
- Often no symptoms besides the warning light, especially if the fault is intermittent.

Common causes, most likely first

- 1 Worn or contaminated accelerator pedal position sensor tracks inside the pedal assembly.
- 2 Corroded, loose, or damaged electrical connectors at the pedal sensor or ECM.
- 3 Chafed, shorted, or open wiring in the pedal sensor harness, often near the pedal or bulkhead.
- 4 A faulty accelerator pedal assembly due to mechanical wear or sticking.
- 5 Poor electrical ground connection for the pedal sensor circuit.
- 6 Rarely, an internal fault in the ECM affecting the sensor reference voltage or signal processing.
- 7 Aftermarket floor mats or debris obstructing the pedal, causing inconsistent sensor readings.



How to diagnose and fix it

- 1 Check for any aftermarket floor mats or debris that may interfere with full pedal travel and remove them.
- 2 Inspect the accelerator pedal sensor connector for corrosion, tightness, and damaged pins; clean or repair as needed.
- 3 Perform a visual inspection of the wiring harness from the pedal to the ECM, looking for chafing, burns, or loose grounds.
- 4 Use a scan tool to read live accelerator pedal position sensor voltages and compare sensor A and B signals for correlation and smooth operation through the full pedal sweep.
- 5 Backprobe the sensor connector to measure reference voltage, ground, and signal voltages with a digital multimeter, checking against Jaguar specifications.
- 6 If the sensor signals are erratic or out of range, replace the accelerator pedal assembly with a genuine Jaguar part and perform any required calibration or adaptation reset.
- 7 Clear the code and road test the vehicle to verify the repair, ensuring the pedal sensor readings remain consistent and the code does not return.

Pedal Sensor Diagnostics Beyond the Code

- A common misdiagnosis is replacing the accelerator pedal assembly without first checking the wiring harness, as chafed wires near the pedal or ECM can mimic a failed sensor.
- The P1121 code can be set by a loose or corroded ground connection for the pedal sensor circuit, which is often overlooked during diagnosis.
- Intermittent P1121 codes may only appear during certain driving conditions, such as rapid pedal movements or temperature extremes, so a thorough road test with live data is essential.
- Jaguar models with electronic throttle control may also set P1121 if the battery voltage is low or unstable, so always verify battery and charging system health before condemning the pedal sensor.
- After replacing the accelerator pedal assembly, some Jaguar models require a pedal position sensor calibration or adaptation reset using a factory-level scan tool to prevent the code from returning.

Can I keep driving with P1121?

If the vehicle has entered limp-home mode with severely reduced power, avoid driving on highways or in traffic and seek repair promptly. If the check engine light is on but the car drives normally, you may drive cautiously to a workshop, but avoid aggressive acceleration or heavy loads until the fault is diagnosed.

Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Backprobe pins or breakout box
- Jaguar-specific diagnostic software (for calibration/adaptation)
- Socket set and trim removal tools



Reading P1121

- P** Powertrain: engine, transmission and emissions.
- 1** Manufacturer-specific code (Jaguar): its meaning depends on the make.
- 1** Fuel and air metering.
- 21** The exact fault within that area.

Often seen with

P1122 Oxygen Sensor Heater Circuit Bank 2 Sensor 2 Open · **P1122** Pressure Sources Switching Valve Circuit High Input · **P1122** Throttle Position Higher Than Expected · **P1122** Throttle Position Stuck Closed · **P1122** Pedal Position Sensor A Circuit Low Input · **P1122** Throttle Position Higher Than Expected · **P1122** Throttle Position Sensor Out of Range · **P1122** Throttle Position TP Sensor Circuit Intermittent Low Voltage · **P1122** TP Sensor Circuit Intermittent Low Voltage · **P1122** Pedal Position Sensor 1 Low Input · **P0120** Throttle Position Sensor A Circuit Malfunction · **P0121** Throttle Position Sensor A Circuit Range/Performance · **P0220** Throttle Position Sensor B Circuit Malfunction · **P2135** Throttle/Pedal Position Sensor A/B Voltage Correlation

See it working

Watch the animated explainer [How a MAF Sensor Works: Hot-Wire Airflow Explained](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/jaguar-p1121/>

