

JAGUAR · POWERTRAIN

P1123

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1123 · Jaguar

Pedal Position Sensor A Circuit High Input

P1123 on a Jaguar means the engine control module (ECM) has detected a high input voltage on the circuit for pedal position sensor A, which is one half of the accelerator pedal position (APP) sensor assembly. The ECM expects a voltage within a calibrated range as the pedal moves, and a sustained high reading tells it the signal wire is shorted to power or the sensor's internal track has failed.

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

Symptoms you may notice

- The engine warning light illuminates and the car may enter limp-home mode with severely reduced power.
- The accelerator pedal feels unresponsive or the engine idle hangs high because the ECM cannot trust the pedal signal.
- Intermittent surging or a sudden loss of throttle response while driving, often worse over bumps or in damp weather.
- A stored P1123 may be the only clue, with no noticeable change in driveability on some Jaguars.
- Cruise control may drop out or refuse to engage because the ECM needs valid pedal signals to allow it.
- On some models the transmission holds a gear or shifts harshly as the ECM limits torque for safety.

Common causes, most likely first

- 1 A failed accelerator pedal position sensor A, where the internal potentiometer track wears and sends a high voltage.
- 2 A short to voltage on the signal wire between the APP sensor and the ECM, often from chafed insulation in the pedal harness.
- 3 Corroded or pushed-back pins in the APP sensor connector or the ECM connector, adding resistance or bridging to a power feed.
- 4 A faulty ECM driver or reference voltage supply, though this is far less common than sensor or wiring faults.
- 5 Water ingress into the pedal connector area from a leaking windscreen scuttle or blocked drain, causing corrosion.
- 6 A poor ground for the APP sensor, which can make the signal voltage float high relative to the ECM's expected return.



How to diagnose and fix it

- 1 Read the live data for both APP sensor voltages with a scan tool and compare them as the pedal is slowly pressed to the floor; a high stuck reading on sensor A confirms the circuit fault.
- 2 Inspect the accelerator pedal connector and the harness for corrosion, chafing, or a short to a nearby power wire, repairing any damage found.
- 3 Back-probe the sensor A signal wire at the ECM and measure voltage with the key on; a reading near 5 volts with the pedal released points to a short or a failed sensor.
- 4 Check the sensor's ground circuit for excessive resistance with a voltmeter, cleaning or repairing the ground point if needed.
- 5 If wiring and grounds are good, substitute a known-good APP sensor and recheck live data before condemning the ECM.
- 6 Clear the code and perform a throttle adaptation or pedal learn procedure with the scan tool if the model requires it after repair.
- 7 Road test the car through several full pedal sweeps and confirm the code does not return and live data tracks smoothly.

What a high pedal voltage really tells you

- A high input on sensor A often comes from a short to the 5-volt reference wire in the same loom, not from the sensor itself, so inspect the harness before fitting parts.
- Jaguar APP assemblies contain two sensors that should mirror each other; if sensor B reads normally while A is high, the fault is almost certainly in A's circuit or track.
- Water damage from a leaking scuttle panel is a common hidden cause on older Jaguar saloons, and the connector can look fine until the pins are examined closely.
- A weak battery or low charging voltage can cause erratic APP readings on these cars, so verify supply voltage before chasing the pedal circuit.
- The code can set from a momentary glitch during cranking if the pedal is held down, so check freeze-frame data before replacing anything.

Can I keep driving with P1123?

You can drive the car cautiously to a workshop if the throttle still responds, but avoid heavy acceleration and motorway driving because limp-home mode can cut power without warning. If the pedal is dead or the engine idles uncontrollably, stop and arrange recovery rather than risk a stall in traffic.



Tools that help

- OBD-II scan tool with live data and Jaguar-specific software
- Digital multimeter with back-probe pins
- Wiring diagram for the APP sensor circuit
- Torx or socket set for pedal assembly removal
- Contact cleaner and dielectric grease for connector repairs

Reading P1123

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

Often seen with

P1122 Oxygen Sensor Heater Circuit Bank 2 Sensor 2 Open · **P1121** Oxygen Sensor Heater Circuit Bank 2 Sensor 2 Short To Ground · **P1121** Accelerator Pedal Position Sensor Range Performance Problem · **P1122** Pressure Sources Switching Valve Circuit High Input · **P1121** Neutral Position Switch Circuit Low Input AT Vehicles · **P1122** Throttle Position Higher Than Expected · **P1121** Throttle Position Lower Than Expected · **P1122** Throttle Position Stuck Closed · **P1121** Throttle Position Sensor Signal Not Consistent With Mass Air · **P1121** Pedal Position Sensor A Circuit Range Performance · **P1122** Pedal Position Sensor A Circuit Low Input · **P1121** Throttle Position Lower Than Expected · **P1122** Throttle Position Higher Than Expected · **P1121** Throttle Position Sensor Out of Range · **P1122** Throttle Position Sensor Out of Range · **P1121** Throttle Position Sensor Inconsistent with Mass Air Flow Sen · **P1122** Throttle Position TP Sensor Circuit Intermittent Low Voltage · **P1121** TP Sensor Circuit Intermittent High Voltage · **P1122** TP Sensor Circuit Intermittent Low Voltage · **P1122** Pedal Position Sensor 1 Low Input · **P1121** Pedal Position Sensor 1 Range Performance Problem · **P2135** Throttle/Pedal Position Sensor A/B Voltage Correlation · **P0121** Throttle Position Sensor A Circuit Range/Performance · **P0221** Throttle Position Sensor B Circuit Range/Performance

See it working

Watch the animated explainer [How an Oxygen Sensor Works: Live 3D Cutaway](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/jaguar-p1123/>

