

JAGUAR · POWERTRAIN

P1104

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1104 · Jaguar

Mass Air Flow Sensor Circuit Ground

P1104 on a Jaguar indicates that the engine control module (ECM) has detected an abnormally low voltage on the ground circuit of the mass air flow (MAF) sensor. This means the ECM is seeing a ground reference that is outside its expected range, which can corrupt the MAF sensor's signal and affect fuel delivery and engine performance.

SYSTEM

Powertrain

CODE TYPE

Jaguar specific

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

Fuel and air metering

Symptoms you may notice

- Illumination of the check engine light, often with no other noticeable symptoms
- Rough idle or stumbling, especially when the engine is cold
- Hesitation or flat spots during acceleration
- Reduced fuel economy due to incorrect air mass measurement
- Intermittent engine stalling or difficulty starting
- Possible black smoke from the exhaust if the mixture becomes excessively rich

Common causes, most likely first

- 1 Corroded, loose, or damaged ground wire between the MAF sensor and the chassis or engine block
- 2 Faulty MAF sensor connector with poor pin tension or water intrusion
- 3 Damaged MAF sensor internal ground circuit
- 4 Open or high-resistance ground circuit in the engine wiring harness
- 5 Poor engine ground connection affecting multiple sensors
- 6 ECM ground reference circuit fault (less common)

How to diagnose and fix it

- 1 Inspect the MAF sensor connector for corrosion, water, or loose pins and clean or repair as needed
- 2 Check the MAF sensor ground wire for continuity to a known good ground using a multimeter
- 3 Verify the engine ground straps and battery negative cable are clean and tight
- 4 Measure resistance of the ground circuit from the MAF sensor connector to the ECM connector; repair any excessive resistance
- 5 If the ground circuit is intact, test the MAF sensor with a known-good unit or scope the signal wire for proper waveform
- 6 Clear the code and perform a road test to confirm the repair; recheck for pending codes



Ground Faults That Mimic MAF Failure

- A poor engine ground can cause P1104 even when the MAF sensor itself is perfectly functional, so always verify ground integrity before replacing the sensor.
- The MAF sensor ground is often shared with other sensors; a fault in that shared ground can set multiple codes, but P1104 may be the first to appear.
- Water intrusion into the MAF connector is a common cause on Jaguars, especially after engine washing or in damp climates, and can create intermittent ground faults.
- Some technicians mistakenly replace the MAF sensor when the real issue is a corroded ground wire, leading to repeat failures and unnecessary expense.
- P1104 can be set by a voltage drop in the ground circuit that only occurs under certain conditions (e.g., vibration or temperature), so intermittent diagnosis may require wiggle testing while monitoring live data.

Can I keep driving with P1104?

You can usually drive the vehicle with P1104, but avoid aggressive acceleration or heavy loads until the fault is repaired, as incorrect air mass readings can cause poor performance and increased emissions. If the engine runs rough or stalls, seek repair promptly.

Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Wire piercing probes or back-probe kit
- Contact cleaner and dielectric grease
- Factory service information for wiring diagrams

Reading P1104

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

Often seen with

P1105 Oxygen Sensor Heating Circuit Bank 1 Sensor 2 Short To B+ · **P1105** MAP BARO Pressure Switch Solenoid Valve · **P1105** Fuel Pressure Solenoid · **P1105** Atmospheric Pressure Sensor In Control Module · **P1105** HO2S12 Heater Circuit High Voltage · **P1105** Secondary Vacuum Sensor Circuit · **P1105** Dual Alternator Upper Fault · **P1105** Open Or Shorted Condition Detected In The Baro Read Solenoid · **P0100** Mass/Volume Air Flow Circuit Malfunction · **P0101** Mass/Volume Air Flow Circuit Range/Performance · **P0102** Mass/Volume Air Flow Circuit Low Input · **P0103** Mass/Volume Air Flow Circuit High Input



See it working

Watch the animated explainer [How a Turbocharger Works, Step by Step](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/jaguar-p1104/>

