

JAGUAR · POWERTRAIN

P1198

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1198 · Jaguar

Fuel Level Input Circuit High

P1198 on a Jaguar means the engine control module (ECM) has detected an abnormally high voltage on the fuel level input circuit, which usually indicates an open circuit or a sensor signal that is stuck above the expected range. The ECM expects a variable voltage from the fuel level sender that rises and falls with the amount of fuel in the tank, and a high reading tells the module that the circuit is broken or the sender is not reporting correctly.

SYSTEM

Powertrain

CODE TYPE

Jaguar specific

SEVERITY

Low

FIX DIFFICULTY

Intermediate

AREA

**Fuel and air
metering**

Symptoms you may notice

- The check engine light illuminates on the instrument cluster, often with no other noticeable symptoms.
- The fuel gauge may read empty, full, or fluctuate erratically regardless of the actual fuel level.
- The low fuel warning light may stay on continuously or fail to come on when the tank is genuinely low.
- The trip computer may show incorrect distance-to-empty or average fuel economy figures.
- In some cases the engine may run poorly or stall if the ECM uses fuel level as part of its load calculation, though this is less common.

Common causes, most likely first

- 1 A failed fuel level sender unit in the fuel tank, where the variable resistor wears out or the float arm sticks.
- 2 An open circuit in the wiring between the fuel level sender and the ECM, often due to a broken wire or corroded connector.
- 3 A poor ground connection at the fuel tank sender or chassis ground point, causing the reference voltage to float high.
- 4 A short to voltage on the signal wire, which can occur if the harness rubs against a power wire or a connector fills with water.
- 5 A faulty ECM, though this is rare and should only be considered after all other possibilities are ruled out.
- 6 Corrosion or water intrusion at the fuel pump module connector, which is common on older Jaguars with age-related seal degradation.



How to diagnose and fix it

- 1 Connect a scan tool and read live data for the fuel level sensor voltage to confirm the high reading and check for any related codes.
- 2 Visually inspect the fuel tank sender connector and wiring for corrosion, water intrusion, or physical damage, especially at the tank module.
- 3 Measure the resistance of the fuel level sender with a multimeter and compare it to the Jaguar specification for empty and full positions.
- 4 Check for continuity and voltage drop on the signal wire between the sender and the ECM, looking for opens or shorts to power.
- 5 Verify the ground circuit at the sender and at the ECM, cleaning and tightening any suspect connections.
- 6 If the sender is faulty, replace the fuel pump module or sender unit as required, following Jaguar procedures for tank access.
- 7 Clear the code and perform a road test to confirm the fuel gauge reads correctly and the code does not return.

Fuel Level Sender Diagnostics You Should Not Skip

- A high voltage on the fuel level circuit often means the sender is unplugged or the wire is broken, not that the sender itself has failed, so always check continuity before replacing parts.
- On many Jaguars the fuel level sender is part of the fuel pump module, and replacing just the sender is not always possible, so confirm the part strategy before quoting a repair.
- The ECM may set P1198 intermittently if the fuel level signal drops out only when the tank is near empty or full, so test the sender through its full sweep range.
- Water ingress into the fuel pump module connector is a common cause on Jaguars driven in wet climates, and the corrosion can mimic a failed sender.
- Do not overlook the ground circuit; a poor ground at the tank can cause the ECM to see a high voltage on the signal wire even when the sender is good.

Can I keep driving with P1198?

The vehicle remains safe to drive because this fault affects only the fuel level indication and does not impair engine operation, but you should refuel based on mileage rather than the gauge until it is repaired. Avoid relying on the distance-to-empty display and keep the tank above a quarter full to prevent running out of fuel unexpectedly.

Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Jaguar-specific wiring diagram
- Fuel tank sender removal tool or fuel pump module wrench
- Basic hand tools and socket set



Reading P1198

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

Often seen with

P1199 Oxygen Sensor Heater Circuit Bank 2 Sensor 2 Electrical Malf · **P1199** Fuel Level Input Circuit Low · **P1199** Radiator Temperature Sensor Voltage Too Low · **P1199** Radiator Temperature Sensor Voltage Too Low · **P0460** Fuel Level Sensor Circuit Malfunction · **P0461** Fuel Level Sensor Circuit Range/Performance · **P0462** Fuel Level Sensor Circuit Low Input · **P0463** Fuel Level Sensor Circuit High Input

See it working

Watch the animated explainer [How a Supercharger Works: Roots Blower in X-Ray](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/jaguar-p1198/>

