

JAGUAR · POWERTRAIN

P1779

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1779 · Jaguar

Load Control

P1779 on Jaguar vehicles indicates that the engine control module (ECM) has detected a fault in the load control circuit, which manages the electrical load on the engine to maintain stable idle and prevent stalling. The ECM monitors the load control signal and sets this code when the actual load does not match the commanded value or when the circuit is out of expected range.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Powertrain	Jaguar specific	Medium	Intermediate	Transmission

Symptoms you may notice

- Illumination of the check engine light (malfunction indicator lamp) on the dashboard.
- Rough or unstable idle, especially when electrical accessories such as air conditioning or headlights are turned on.
- Engine may hesitate or stumble during acceleration from a stop.
- In some cases, the engine may stall when coming to a stop or when load is suddenly applied.
- Often no symptoms besides the warning light, as the ECM may compensate for the fault.
- Reduced fuel economy or slightly elevated idle speed as the ECM attempts to manage load.

Common causes, most likely first

- 1 Faulty load control valve or actuator (often a solenoid or vacuum-operated device) that fails to respond to ECM commands.
- 2 Damaged or corroded wiring in the load control circuit, including open or short circuits.
- 3 Poor electrical connections at the load control valve or ECM connectors.
- 4 Failed engine control module (ECM) output driver for the load control circuit.
- 5 Vacuum leaks or mechanical faults in the load control system (if vacuum-operated).
- 6 Sticking or carbon-fouled throttle body or idle air control passage affecting load compensation.
- 7 Aftermarket electrical accessories improperly installed, causing excessive load or interference.



How to diagnose and fix it

- 1 Connect a scan tool and verify P1779 is current; check for related codes and freeze-frame data to understand conditions when the fault set.
- 2 Inspect the load control valve and its connector for physical damage, corrosion, or loose pins; clean and secure as needed.
- 3 Perform a visual inspection of the wiring harness from the ECM to the load control valve, looking for chafing, breaks, or shorts.
- 4 Test the load control valve with a multimeter or bidirectional scan tool to confirm it responds to commands; replace if faulty.
- 5 Check for vacuum leaks and test vacuum supply to the load control system if applicable.
- 6 Measure resistance and voltage on the load control circuit at the ECM to rule out wiring or ECM driver failure.
- 7 Clear the code and perform a road test with accessories on to verify the repair; if the code returns, further diagnose the ECM or underlying mechanical issues.

Load control faults often misdiagnosed

- A dirty or failing mass airflow (MAF) sensor can cause load calculation errors that set P1779, even though the load control circuit itself is intact.
- The load control system on Jaguars often interacts with the idle air control (IAC) valve; a sticking IAC can mimic a load control fault and should be checked before replacing expensive modules.
- Intermittent P1779 codes are frequently caused by a poor ground connection at the engine block or chassis, which affects the load control valve's operation.
- Some technicians replace the ECM prematurely when the real issue is a shorted load control solenoid; always test the solenoid and wiring first.
- After replacing a load control component, the ECM may require a relearn procedure or adaptation reset to prevent the code from reappearing.

Can I keep driving with P1779?

You can generally drive with P1779, but avoid heavy electrical loads and prolonged idling to reduce the chance of stalling or rough running. If the engine stalls frequently or idles very poorly, have it diagnosed promptly to prevent safety issues.

Tools that help

- OBD-II scan tool with bidirectional control capability
- Digital multimeter
- Vacuum gauge
- Wiring diagram for the specific Jaguar model
- Basic hand tools (screwdrivers, socket set)



Reading P1779

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

Often seen with

P0171 System Too Lean (Bank 1) · **P0174** System Too Lean (Bank 2) · **P0505** Idle Control System Malfunction · **P0506** Idle Control System RPM Lower Than Expected · **P0507** Idle Control System RPM Higher Than Expected

See it working

Watch the animated explainer [How a Gyroscope Works: Gimbals and Precession](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/jaguar-p1779/>

