

JAGUAR · POWERTRAIN

P1789

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1789 · Jaguar

Ignition Supply Malfunction

P1789 on a Jaguar indicates that the engine control module (ECM) has detected a fault in the ignition supply circuit, which provides power to the ignition coils or ignition module. The ECM monitors voltage and current on this circuit and sets the code when the signal is outside the expected range, often due to a wiring or component failure.

SYSTEM

Powertrain

CODE TYPE

Jaguar specific

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

Transmission

Symptoms you may notice

- Engine misfire or rough running, especially under load
- Difficulty starting or no-start condition
- Illuminated check engine light (malfunction indicator lamp)
- Reduced engine performance or power loss
- Often no symptoms besides the warning light, particularly if the fault is intermittent

Common causes, most likely first

- 1 Faulty ignition coil or ignition module drawing excessive current
- 2 Damaged or corroded wiring in the ignition supply circuit
- 3 Blown fuse or faulty relay supplying power to the ignition system
- 4 Poor ground connection for the ignition circuit
- 5 Failed engine control module (ECM) driver for the ignition supply
- 6 Aftermarket alarm or remote start system interfering with ignition wiring

How to diagnose and fix it

- 1 Check for any stored freeze-frame data and note the conditions when the code set
- 2 Inspect the ignition supply fuse and relay, testing for power and continuity
- 3 Visually inspect the ignition coil harness and connectors for damage or corrosion
- 4 Measure resistance and voltage drop across the ignition supply wiring to locate high resistance
- 5 Test the ignition coils or module for primary and secondary resistance according to Jaguar specifications
- 6 Check and clean the engine and chassis ground points related to the ignition system
- 7 If all external circuits test good, suspect the ECM and perform pin-out and signal tests before replacement



Don't overlook ignition supply circuit grounds

- A common oversight is a corroded ground connection on the engine block that causes voltage drops only under load, setting P1789 without obvious misfire at idle.
- Aftermarket accessories wired into the ignition circuit, such as alarms or remote starters, often introduce resistance or intermittent shorts that trigger this code.
- The code can be set by a failing ignition coil that only breaks down when hot, so testing components cold may not reveal the fault.
- P1789 does not always mean the ECM is faulty; the majority of cases trace back to wiring or coil issues, so avoid replacing the ECM prematurely.
- On some Jaguar models, a weak battery or charging system fault can cause voltage spikes that the ECM interprets as an ignition supply malfunction.

Can I keep driving with P1789?

If the engine runs smoothly and the light is steady, you can drive cautiously to a repair shop, but avoid heavy acceleration or long trips. If the engine misfires, lacks power, or the light flashes, stop driving and seek immediate professional diagnosis to prevent catalytic converter damage.

Tools that help

- OBD-II scan tool with Jaguar-specific software
- Digital multimeter
- Test light
- Wiring diagram for the specific Jaguar model
- Socket set and trim removal tools

Reading P1789

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

Often seen with

P0351 Ignition Coil A Primary/Secondary Circuit Malfunction · **P0352** Ignition Coil B Primary/Secondary Circuit Malfunction · **P0353** Ignition Coil C Primary/Secondary Circuit Malfunction · **P0354** Ignition Coil D Primary/Secondary Circuit Malfunction · **P0355** Ignition Coil 'E' Primary/Secondary Circuit



See it working

Watch the animated explainer **Four-Stroke Engine Cutaway: Intake to Exhaust** on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/jaguar-p1789/>

