

JAGUAR · POWERTRAIN

P1609

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1609 · Jaguar

Internal Control Module CPU To CPU Communication Failure

P1609 on a Jaguar means the engine control module (ECM) has detected a failure in the high-speed communication link between its own internal central processing units (CPUs). The module's self-test routines monitor data exchange between the main processor and a secondary processor, and this code sets when that handshake fails or becomes corrupted.

SYSTEM

Powertrain

CODE TYPE

Jaguar specific

SEVERITY

High

FIX DIFFICULTY

Professional

AREA

Computer and output circuits

Symptoms you may notice

- Illuminated check engine light, often with no other noticeable symptoms
- Intermittent no-start or crank-no-start condition
- Rough running or reduced engine power due to corrupted control data
- Erratic dashboard warning lights or instrument cluster behavior
- Transmission may enter limp mode or shift harshly
- Multiple unrelated fault codes stored in other modules

Common causes, most likely first

- 1 Internal failure of the engine control module (ECM) itself, such as a cracked solder joint or failed CPU
- 2 Corroded or loose pins in the ECM connector, disrupting internal bus signals
- 3 Water intrusion into the ECM housing or connector, causing signal shorts
- 4 Voltage supply irregularities to the ECM, including a weak battery or faulty ground
- 5 Electromagnetic interference from aftermarket accessories wired near the ECM
- 6 Software corruption in the ECM flash memory affecting CPU communication

How to diagnose and fix it

- 1 Verify battery voltage and perform a charging system test; low voltage can trigger false communication codes
- 2 Inspect the ECM connectors for corrosion, water damage, or loose pins and clean or repair as needed
- 3 Check all ECM ground points for tightness and continuity to the chassis
- 4 Clear the code and test-drive to see if P1609 returns immediately or only under specific conditions
- 5 Perform a wiggle test on the ECM harness while monitoring live data for communication dropouts
- 6 If the code persists with good power and grounds, replace or reflash the ECM as the internal fault is confirmed
- 7 After ECM replacement, perform any required immobilizer or configuration programming with a Jaguar-compatible scan tool



When P1609 is not the ECM's fault

- A weak or failing battery is a common cause of phantom P1609 codes on Jaguars because the ECM's internal CPUs require stable voltage to communicate reliably.
- Aftermarket alarm systems or audio equipment tapped into the CAN (Controller Area Network) wiring near the ECM can introduce interference that mimics an internal CPU failure.
- Water ingress into the ECM plenum area, often from clogged drain tubes, corrodes connector pins and sets P1609 without any obvious driveability complaint.
- Technicians sometimes replace the ECM only to find the fault was a chafed harness section shorting the internal communication bus to ground.
- P1609 can be stored alongside transmission or ABS codes that are collateral effects of the ECM's communication dropout, so always diagnose the root cause before replacing other modules.

Can I keep driving with P1609?

Do not continue driving with P1609 active because the ECM may lose control of critical engine functions without warning. Have the vehicle towed to a qualified Jaguar specialist for diagnosis, especially if any drivability symptoms are present.

Tools that help

- Jaguar-compatible diagnostic scan tool with live data and module programming capability
- Digital multimeter for voltage and continuity checks
- Battery load tester and charging system analyzer
- Electrical contact cleaner and dielectric grease
- Wiring diagram and connector pinout reference for the specific Jaguar model

Reading P1609

P	Powertrain: engine, transmission and emissions.
1	Manufacturer-specific code (Jaguar): its meaning depends on the make.
6	Computer and output circuits.
09	The exact fault within that area.

Often seen with

P0600 Serial Communication Link Malfunction · **P0601** Internal Control Module Memory Checksum Error · **P0606** PCM Processor Fault · **U0100** Lost Communication With ECM/PCM A · **U0121** Lost Communication With Anti-Lock Brake System (ABS) Control



See it working

Watch the animated explainer [How Variable Valve Timing Works: Cam Phaser and VVT Solenoid](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/jaguar-p1609/>

