

JAGUAR · POWERTRAIN

P1696

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1696 · Jaguar

CAN Link Engine Control Module Cruise Control Module Circuit Network

P1696 on a Jaguar indicates that the Engine Control Module (ECM) has lost or cannot establish a reliable Controller Area Network (CAN) communication link with the Cruise Control Module. The ECM monitors the CAN bus for periodic messages from the cruise control module and sets this code when those messages are missing, corrupted, or delayed beyond a defined timeout.

SYSTEM

Powertrain

CODE TYPE

Jaguar specific

SEVERITY

Medium

FIX DIFFICULTY

Professional

AREA

Computer and output circuits

Symptoms you may notice

- Cruise control system completely inoperative with no response to steering wheel buttons
- Amber or red warning light illuminated on the instrument cluster, often accompanied by a chime
- Message center displaying a cruise control or powertrain fault notification
- Engine may enter a limited power mode or exhibit poor running if the CAN bus fault affects other modules
- Intermittent operation of cruise control, especially over bumps or in damp conditions
- Often no symptoms besides the warning light, with the vehicle driving normally

Common causes, most likely first

- 1 Damaged or corroded wiring in the CAN bus harness between the ECM and cruise control module, particularly at connectors or where the loom flexes
- 2 Failed cruise control module, often due to water ingress or internal circuit board faults
- 3 Poor ground connection for the cruise control module or ECM, causing reference voltage shifts
- 4 CAN bus termination resistor failure inside the cruise control module or ECM, disrupting signal integrity
- 5 Loose or backed-out pins in the CAN bus connector at either module
- 6 Aftermarket electronic accessories improperly tapped into the CAN wiring, introducing interference
- 7 Software corruption in the cruise control module requiring reflash or replacement



How to diagnose and fix it

- 1 Connect a Jaguar-compatible scan tool and read all module fault codes to confirm P1696 is current and identify any related CAN bus codes
- 2 Visually inspect the CAN bus wiring between the ECM and cruise control module for chafing, corrosion, or loose connectors, especially in the engine bay and behind the dashboard
- 3 Measure CAN bus resistance across the diagnostic connector with the battery disconnected; a reading outside 55–65 ohms indicates a termination or wiring fault
- 4 Perform a voltage drop test on the cruise control module's power and ground circuits to rule out supply issues
- 5 Check for water ingress at the cruise control module connector and inspect the module for signs of corrosion or damage
- 6 If wiring and power supplies are good, substitute a known-good cruise control module and clear the code to see if it returns
- 7 After any repair, clear the code and verify communication with the cruise control module using live data before road testing the cruise control system

CAN bus faults that mimic a dead cruise module

- A failed CAN bus termination resistor inside the ECM can set P1696 even when the cruise control module is fully functional, so always measure bus resistance before condemning the module.
- Water ingress into the cruise control module connector is a common Jaguar-specific issue, often caused by blocked scuttle drains allowing water to run down the harness.
- Aftermarket alarms, trackers, or dashcams tapped into the CAN wiring can corrupt signals and trigger P1696 without any hard fault in the factory components.
- The code can be stored intermittently by a low battery or poor charging system, because voltage dips cause modules to drop off the CAN bus momentarily.
- P1696 does not always mean the cruise control module is dead; a faulty ignition switch or body control module can interrupt power to the cruise module and set the same code.

Can I keep driving with P1696?

The vehicle remains safe to drive because the fault primarily disables cruise control, but avoid using cruise control until the fault is repaired. If the engine also runs poorly or enters limp mode, have the vehicle inspected promptly as the CAN bus fault may affect other systems.

Tools that help

- Jaguar-compatible diagnostic scan tool with CAN bus capability
- Digital multimeter with resistance and voltage drop functions
- Oscilloscope for CAN bus signal analysis
- Wiring diagram and connector pinout reference for the specific Jaguar model
- Trim removal tools for accessing modules and harnesses



Reading P1696

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

Often seen with

P1697 Traction Control Fuel Cut Signal High Input · **P1697** Cruise Control Distance Control Input Circuit · **P1697** Traction Control Fuel Cut Signal High Input · **P1697** PCM Failure SRI Mile Not Stored · **P1697** PCM Failure SRI Mile Not Stored · **P0562** System Voltage Low · **U0100** Lost Communication With ECM/PCM A · **U0121** Lost Communication With Anti-Lock Brake System (ABS) Control · **U0140** Lost Communication With Instrument Panel Cluster

See it working

Watch the animated explainer [How a Helicopter Flies: Rotor and Tail 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-p1696/>

