

JAGUAR · POWERTRAIN

P1798

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1798 · Jaguar

CAN TCM INST Circuit Malfunction

P1798 on a Jaguar means the Transmission Control Module (TCM) has detected a fault on the Controller Area Network (CAN) communication circuit that links it to other control modules. The TCM monitors the CAN bus for expected messages and sets this code when the circuit is open, shorted, or corrupted, preventing reliable data exchange.

SYSTEM

Powertrain

CODE TYPE

Jaguar specific

SEVERITY

Medium

FIX DIFFICULTY

Professional

AREA

Transmission

Symptoms you may notice

- Transmission may default to limp mode with harsh or delayed shifts
- Instrument cluster warning light for transmission fault or reduced performance
- Intermittent loss of communication with other modules, causing multiple unrelated warning lights
- Engine may idle poorly or stall if CAN data affects engine management
- Often no symptoms besides the warning light if the fault is intermittent
- Gear position indicator may flash or show incorrect selection

Common causes, most likely first

- 1 Damaged or corroded CAN wiring between the TCM and the main harness
- 2 Faulty TCM connector pins or water intrusion at the TCM plug
- 3 Failed TCM internal CAN transceiver
- 4 Poor ground connection for the TCM or related modules
- 5 CAN bus termination resistor failure in another module on the network
- 6 Aftermarket electronics improperly tapped into the CAN wiring
- 7 Low battery voltage or charging system fault causing erratic CAN signals

How to diagnose and fix it

- 1 Verify battery voltage and charging system output; low voltage can set false CAN codes
- 2 Inspect TCM connectors and harness for corrosion, water damage, or loose pins
- 3 Check CAN bus resistance at the diagnostic connector to confirm termination integrity
- 4 Perform a voltage drop test on TCM power and ground circuits
- 5 Use an oscilloscope to examine CAN high and CAN low signal waveforms for distortion
- 6 Disconnect modules one at a time to isolate a shorted CAN transceiver
- 7 If wiring and other modules are good, replace and reprogram the TCM as last step



CAN circuit faults often misdiagnosed as TCM failure

- A single shorted module on the CAN bus can pull down the entire network and set P1798 in the TCM even though the TCM is healthy.
- Water ingress into the TCM connector or nearby harness is a common Jaguar-specific issue that mimics internal TCM failure.
- Aftermarket alarms, audio equipment, or phone chargers tapped into CAN wiring frequently corrupt signals and trigger this code.
- The code can be stored intermittently by a marginal battery or poor ground without any permanent wiring fault.
- Always check for other communication codes (U-codes) across modules; P1798 alone rarely points to a single failed component.

Can I keep driving with P1798?

If the transmission is in limp mode or shifting harshly, avoid highway driving and seek service promptly. If only the warning light is on and the car drives normally, you may drive cautiously to a workshop, but do not ignore intermittent communication faults.

Tools that help

- Jaguar-specific diagnostic scanner with CAN bus monitoring
- Digital multimeter with resistance and voltage drop capability
- Oscilloscope for CAN waveform analysis
- Wiring diagram and connector pinout for the TCM circuit
- Breakout box for CAN bus testing
- Battery load tester and charging system analyzer

Reading P1798

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

Often seen with

P1799 Output Speed Sensor 2 Circuit RPM Too High · **P1799** Hold Switch Circuit · **P1799** Hold Switch Circuit · **P0700** Transmission Control System Malfunction · **U0101** Lost Communication with TCM · **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 Regenerative Braking Works in Electric Cars](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/jaguar-p1798/>

