

GM · POWERTRAIN

P1669

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1669 · GM

ABS Unit Expected

P1669 on GM vehicles means the powertrain control module (PCM) expected to receive a specific status message from the antilock brake system (ABS) module over the controller area network (CAN) bus, but the message never arrived or was invalid. The PCM sets this code when it cannot confirm that the ABS module is present and communicating, often due to a loss of power, ground, or data communication to that module.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Powertrain	GM specific	Medium	Intermediate	Computer and output circuits

Symptoms you may notice

- The antilock brake system (ABS) warning light is illuminated on the dashboard.
- The traction control system (TCS) or stability control (ESC) warning light may also be on.
- The brake warning light may illuminate if the ABS module also controls the brake force distribution.
- The vehicle may exhibit reduced engine power or a limp mode if the PCM deems the missing ABS data critical for torque management.
- Often no symptoms besides the warning light, and the vehicle drives normally with functioning brakes.
- The speedometer may fluctuate or stop working if the ABS module provides the vehicle speed signal to the PCM and other modules.

Common causes, most likely first

- Blown fuse or faulty relay supplying power to the ABS module.
- Corroded, loose, or damaged ground connection for the ABS module.
- Damaged or shorted wiring in the CAN bus circuit between the PCM and ABS module.
- Failed ABS module due to internal electronic fault or water intrusion.
- Poor connection at the ABS module harness connector, often from corrosion or loose pins.
- Low battery voltage or a weak battery that causes modules to drop offline intermittently.
- Aftermarket accessories or improper electrical repairs that disturb the CAN bus integrity.



How to diagnose and fix it

- 1 Check all fuses related to the ABS module and replace any that are blown, then verify power and ground at the ABS module connector.
- 2 Inspect the ABS module ground connections for tightness and corrosion, cleaning and tightening as needed.
- 3 Perform a visual inspection of the CAN bus wiring between the PCM and ABS module for chafing, pinching, or corrosion, and repair any damage.
- 4 Use a scan tool to check for communication with the ABS module; if it does not respond, perform a voltage drop test on the power and ground circuits.
- 5 If power, ground, and wiring are good, substitute a known-good ABS module or perform a module swap to see if communication is restored.
- 6 Check for technical service bulletins (TSBs) or software updates for the PCM and ABS module that address communication issues.
- 7 After repairs, clear the code and verify that the ABS module communicates properly and the code does not return.

When the ABS module is not the real culprit

- A weak or failing battery can cause the ABS module to drop offline intermittently, setting P1669 without any permanent fault in the module or wiring.
- Corrosion inside the ABS module connector is a common cause that is often overlooked because the outside looks clean; always inspect the pins closely.
- The code can be set by a communication issue on the CAN bus that affects multiple modules, so check for other communication codes before replacing the ABS module.
- Aftermarket electrical accessories, such as alarm systems or audio equipment, can introduce noise or draw power from the CAN bus and trigger this code.
- A faulty ignition switch can interrupt power to the ABS module momentarily, causing the PCM to lose communication and set P1669.

Can I keep driving with P1669?

You can usually drive the vehicle with P1669 set, but the ABS and traction control systems may be disabled, which reduces safety in emergency braking or slippery conditions. Avoid hard braking and slippery roads until the fault is repaired, and address the issue promptly to restore full brake system functionality.

Tools that help

- OBD-II scan tool with ABS and CAN bus capabilities
- Digital multimeter for voltage and resistance checks
- Test light for quick power and ground verification
- Wiring diagram for the specific GM vehicle
- Socket set and trim removal tools for accessing modules and connectors



Reading P1669

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

Often seen with

C0035 Left Front Wheel Speed Sensor Circuit Range/Performance · **C0040** Left Rear Wheel Speed Sensor Circuit · **P0500** Vehicle Speed Sensor Malfunction · **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 ABS Works: Anti-Lock Brakes in X-Ray](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/gm-p1669/>

