U0129: LOST COMMUNICATION WITH BRAKE SYSTEM CONTROL MODULE (BSCM)

OVERVIEW

Severity	:	Medium
DIY Difficulty Level	:	Advanced
Repair Cost	:	**$75-$1000**
Can I Still Drive?	:	**Yes**

What Does The U0129 Code Mean?

This code means that the Brake System Control Module (BSCM) and other control modules on the vehicle are not talking to each other. The circuit most often used to communicate with is known as Controller Area Network bus communications, or simply put, CAN bus.

Without this CAN bus, control modules cannot exchange information, and your scan tool may not be able to get information from the vehicle, depending on which circuit is affected.

The BSCM receives input from a variety of sensors, some hardwired directly to it, some are sent over the bus communications system. These inputs allow the module to control when the base brakes are energized, but can also be used as a combination base brake/anti-brake system. Typically, this system is found on hybrid vehicles but can be utilized as the manufacturer sees fit for other alternative applications.

Troubleshooting steps may vary depending upon manufacturer, type of communications system, number of wires and wire colors in the communication system.

What Are The Symptoms Of The U0129 Code?

Symptoms of a U0129 engine code may include:

- Red Brake Warning Light On
- Degraded brake system operation

What Are The Potential Causes Of The U0129 Code?

Typically the causes for this code to set are:

- Open in the CAN bus + circuit
- Open in the CAN bus – circuit
- Short to power in either CAN bus circuit
- Short to ground in either CAN bus circuit
- Open power or ground to BSCM module – most common
- Rarely – faulty control module

How Can You Fix The U0129 Code?

Check for technical service bulletins (TSB)

A good starting point is always to check for technical service bulletins (TSB) for your particular vehicle. Your issue may be a known issue with a known fix put out by the manufacturer and can save you time and money during diagnosis.

If your scan tool can access fault codes and the only one you retrieve from other modules is the U0129, try to access the BSCM module. If you can access codes from the BSCM module, then the U0129 code is either intermittent or a memory code. If unable to access codes for the BSCM module, then the U0129 code that the other modules are setting is active, and the problem is there now.

The most common failure is loss of power or ground to the BSCM module.

Check all fuses that power up the BSCM module

Check all fuses that power up the BSCM module on this vehicle. Check all grounds for the BSCM module. Locate where the ground attaching points are on the vehicle and make sure that these connections are clean and tight. If you have to, take them off, get a small wire bristle brush and baking soda/water solution and clean each one, both the connector and where it connects.

If any repairs were made, clear the diagnostic trouble codes from memory, and see if the U0129 code returns or if you are able to communicate with the BSCM module. If the code does not return or communication is re-established, then the fuses/connections were most likely your problem.

Locate the CAN C bus communication connections

If the code returns, locate the CAN C bus communication connections on your particular vehicle,

most importantly the BSCM module connector. Disconnect the negative battery cable before unplugging the connector at the BSCM control module. Once located, visually inspect the connectors and wiring. Look for scraping, rubbing, bare wires, burn spots or melted plastic. Pull the connectors apart and carefully inspect the terminals (the metal parts) inside the connectors.

See if they look burned or have a green tint indicating corrosion. Use electrical contact cleaner and a plastic bristle brush if cleaning of the terminals is needed. Let dry and apply electrical grease where the terminals contact.

Before connecting the connectors back to the BSCM module, make these few voltage checks. You will need to have access to a digital volt-ohmmeter (DVOM). Verify that you have power and ground at the BSCM module. Gain access to a wiring diagram and determine where the main powers and grounds come into the BSCM module. Reconnect the battery before continuing, with the BSCM module still disconnected. Connect the red lead of your voltmeter to each B+ (battery voltage) supply coming into the BSCM module connector and the black lead of your voltmeter to a good ground (if not sure, battery negative always works). You see a reading of battery voltage. Verify that you have good grounds as well. Hook the red lead of your voltmeter to battery positive (B+) and the black lead to each ground circuit. Once again you should see battery voltage at each connection. If not, repair the power or ground circuit problem.

Check the two communication circuits

Next, check the two communication circuits. Locate the CAN C+ (or HSCAN + circuit) and CAN C- (or HSCAN – circuit). With the black lead of your voltmeter connected to a good ground, connect the red lead to CAN C+. With the Key On, Engine Off, you should see about 2.6 volts and fluctuating slightly. Next, connect the red voltmeter lead to the CAN C- circuit. You should see approximately 2.4 volts and fluctuating slightly. Other manufacturers show CAN C- at approximately .5 volts and fluctuating Key On Engine Off. Check the specifications for your manufacturer.

If all tests have passed and communication is still not possible, or you were unable to clear the U0129 fault code, the only thing left that can be done is to seek assistance from a trained automotive diagnostician, as this would indicate a failed BSCM module. Most of these BSCM modules must be programmed, or calibrated to the vehicle in order to be installed correctly.

Severity Description

Severity in this case depends upon the system. Usually in the event of a Brake System Control Module fault, the backup is base brakes only/no antilock brakes/no traction control/no advanced brake warning system.

Reference Sources

U0129 Lost Communication with Brake System Control Module (BSCM), OBD-Codes.