

#### What Does The U0112 Code Mean?

This code means that the Battery Energy Control Module "B" BECM and other control modules on the vehicle are not communicating with 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 BECM determines how hot or cold the batteries are getting and modifies the cooling system and heating system to insure the batteries do not overheat nor get too cold or even freeze. They do this by energizing coolant pumps and fans to cool or turning them off, which would allow heat to build.

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 U0112 Code?

Symptoms of a U0112 engine code may include:



- Malfunction Indicator Light (MIL) On
- Hybrid warning indicator On
- Vehicle may not start or run
- Vehicle may run but on gasoline engine only if hybrid

### What Are The Potential Causes Of The U0112 Code?

Typically the causes for this code to set are:

- Open power or ground to "B" BECM most common
- 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
- Rarely faulty control module

### How Can You Fix The U0112 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.

First, note if there are any other diagnostic fault codes. If any of them are bus communication related, or battery / hybrid related, diagnose them first. Misdiagnosis has been known to occur if you diagnose the U0112 code before any of the basic codes have been thoroughly diagnosed and dismissed.

If your scan tool can access fault codes and the only one you get from other modules is the U0112, try to communicate with the BECM module. If you can access codes from the BECM module, then the U0112 code is either intermittent or a memory code. If unable to communicate with the BECM module, then the U0112 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.

**Before going any further a word of caution**: This is a High Voltage system! If warnings are not heeded, and/or the manufacturer's steps to protect and diagnose are not adhered to, damage to the vehicle is VERY likely and can lead to injury/personal harm to yourself. If unsure of any step in diagnosis, it is highly recommended that you leave the diagnosis of this code on this system to someone who has received training on it.



## Check all fuses that power up the "B" BECM module

Check all fuses that power up the "B" BECM module on this vehicle. Check all grounds for the BECM 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 all the modules that set the code in memory, and see if the U0112 code returns or if you are able to communicate with the BECM module. If the code does not return or communication is re-established with the BECM module, then the fuses/connections were most likely your problem.

### Locate the CAN bus communication connections

If the code returns, locate the CAN bus communication connections on your particular vehicle, most importantly the BECM module connector.

Then disconnect the negative battery cable before unplugging the connector at the BECM 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 electric grease where the terminals contact. Reconnect all connectors. Clear all codes.

If communication is still not possible, or you were unable to clear the U0112 fault code, the only thing left that can be done is to seek assistance from a trained automotive diagnostician, as this could indicate a failed BECM module, or possible wiring issues with the CAN bus communication system. BECM modules must be programmed, or calibrated to the vehicle in order to be installed correctly.

### **Reference Sources**

<u>U0112 Lost Communication with Battery Energy Control Module B</u>, OBD-Codes.

