Electrical Body Control Module (EBCM)

This document is for 2001-2004 Corvette owners whom had ABS and their shop has recommended the issue can be fixed via replacement of EBCM ($800+) and labor costs to remove and replace EBCM (800+.) Be aware a very common EBCM issue causing ABS codes such as C1214 is caused by a solder issue on the EBCM circuit board. Depending on your skill level you may be able to remove the EBCM and have it repaired for under $150 or repair it yourself. This document is meant to assist you. It is a compilation of information & images found online in forum posts, websites, forum posts by various individuals below describing how to remove a EBCM from 2001-2004 Corvette, where to send it for repair, or how to repair ECBM yourself.

Notes

- Source of Information
  Corvette Forum Thread
  Corvette Forum Thread
  https://www.absfixer.com/how_do_i_remove.php
  Dave68 (Corvette Forum) PDF in this link
• Typical warning messages which may be related to issues with EBCM
  Service Active Handling
  Service ABS
  Service Traction Control

You will see each message displayed on the D.I.C. for a second or so. In addition, codes will be displayed and warning light images in the dash instrument area will be illuminated.
• Error Code C1214 is typical for EBCM issues
• Most of this repair will require you to lean on and place a majority of your body weight on the passenger fender and reach across vehicle to EBCM. Make sure to not wear buckles or pants with snaps and place protection on fender.
• Just prior to repair read this entire document as reading later steps and viewing later images might provide some insight into performing earlier steps. Also consider reading links provided above to see additional images and get additional tips.
• By following the instructions in this document you assume all risk/responsibility for repairs outlined in this document.

Electronic Body Control Module (EBCM) Removal & Installation

1. Remove the air bridge and throttle body coupler to provide easier access to the EBCM from passenger side of vehicle.
2. Remove the EBCM wiring harness safety strap by sliding it towards the front of the vehicle. This can be done from above on driver side of vehicle.

3. From passenger side of vehicle pull up on the EBCM gray connector handle which will push the wiring harness away from the EBCM. Pull wiring harness towards passenger side of vehicle to remove.
4. Remove the second wiring connector from the bottom of the EBCM by gently pulling the wiring connector retainer clip (A) towards the passenger side of vehicle while also pulling down on the wiring retainer (B).

5. Remove the six T-20 Torx screws connecting the EBCM (see image below for location). There is one screw on each corner and one screw in the middle of each side. Removal of the three screws on the engine side may require a flexible screwdriver extension. Note there will be limited visibility and lack of space. You may want to use magnetized screwdriver to prevent screws from dropping when removed.
6. Once the six screws are removed use a flat blade screwdriver to pry and twist in the locations shown on top of EBCM until seal is broken and EBCM is loose. **Warning:** Do NOT jam the screwdriver tip in more than 1/16 inch or you may damage the integrated EBCM sealing gasket. See additional images in step 7. During this step you will end up with nicks in the EBCM housing.

7. Image (A) illustrates the location of the seal in the EBCM housing which you must avoid damaging. If you keep screwdriver in the corners it will reduce the chances of damaging the seal. Once the EBCM is loose as shown in image (B) move over to passenger side of vehicle and remove the EBCM by pulling it towards passenger side of vehicle.
Electronic Body Control Module (EBCM) Repair/Replace Options

After the EBCM has been removed from vehicle here are some options for repair/replacement:

a. Go to www.absfixers.com and arrange to send EBCM to following person for repair
   Brandon Hite
   Attn: ABS Module
   900 Country Meadows
   Highandville, MO 65669
   Cost: $150

b. Go to ASI website to arrange repair service for $129

c. Search ebay for repair service.

d. Buy a new EBCM from your dealer or online.

e. Open the EBCM and repair as described below

Electronic Body Control Module (EBCM) Self Repair

The EBCM is held together by four T15 Torx screws and RTV silicon sealant. It is almost impossible after remove the screws to separate the cover from the EBCM housing due to the sealant. Instructions below are meant to aid in the separation.

1. Remove the four T15 Torx screws from cover.
2. Locate hole in EBCM and determine which of the following methods you will use:

**Tap Method:** Use a tap to create threads in the hole shown in image. Image illustrates use of 10/32 tap to create threads. Obtain a screw with the correct threads created by tap which is long enough to reach the lid on the opposite side of EBCM enclosure and push it away from enclosure.

**No Tap Method:** Find a steel rod or screw which will easily fit in the hole. The rod/screw must be long enough to reach to the lid on opposite side of EBCM enclosure.

![Image of tap and screw](image1.png)

3. Heat EBCM enclosure with heat gun to aid in the separation of the silicone/RTV sealant which is adhering cover to the enclosure. Due to heat be sure to wear gloves. If you do not have heat source it may be more difficult to separate the housing in later steps.

![Image of heat gun](image2.png)
4. **Tap Method:** Insert threaded screw into the hole you tapped and thread it into housing until it causes lid to separate from the enclosure.

**No Tap Method:** Place a steel rod in the hole and tap rod with a hammer until it causes lid to separate from the enclosure. Be careful not to apply any pressure which may damage the EBCM electrical harness.

**Both Methods**
Start inserting the straight screwdriver in the corner nearest the hole and twist screwdriver to create separation. As gap increases between cover and enclosure move screwdriver further way from hole and twist. Repeat twisting action until entire cover is loose. If needed add additional heat until cover is completely loose. Due to silicon inside device it may take some gently wiggling, pulling and additional heat before the cover and circuit board will slide completely out of enclosure.

5. Image of the EBCM Cover and circuit board removed from the enclosure.
6. Closely inspect all solder points with special focus on the four solder points for the relay shown in image below

![Image of a circuit board with solder points highlighted]

7. If any of the pins from components are separated from solder/circuit board as shown in image below you have likely found the source of your ABS issue. Use a soldering gun, flux, and solder to repair the connections.

![Image of a close-up of a soldered component]
8. Spend a few minutes removing excess RTV/Silicone from the EBCM enclosure and from the EBCM cover. After removing any loose RTV/Silicone apply a new bead of RTV/Silicone around the enclosure and into the hole where you tapped threads to keep water from entering into the enclosure.

9. Attach the EBCM cover back into the ECBM enclosure, tighten the four T15 Torx Screws, and wipe off any excess RTV/Silicone sealant.
Electronic Body Control Module (EBCM) Installation

1. Once the EBCM has been repaired inspect seal to ensure it is not damaged. If dirty clean with alcohol. If damaged – find a solution to prevent moisture from entering.
2. Attach EBCM back to the vehicle.
3. Attach the six T20 Torx screws.
4. Reconnected the lower wire connector to the EBCM
5. Reconnect the main wiring harness to the ECBM and latch in place.
6. Reconnect the safety retainer to the EBCM wiring harness.
7. Reconnect the air bridge and throttle body coupler.
8. Review codes and clear them as follows (if you do not have Scan Tool)
   a. Turn on the ignition (do NOT start the car)
   b. Press the reset button to turn off any warning messages.
   c. Press and hold the options button while pressing the fuel button 4 times within 10 seconds.
   d. When your display reads "manual diagnostics", press the options button to scroll codes forward or the trip button to scroll back.
   e. To clear a code, press the reset button.
   f. To exit, press the E/M button.
9. Turn off the ignition
10. Turn on the ignition (do NOT start the car.)
11. Confirm the Check engine, Active Handling, and ABS dash lights are illuminated.
12. Start vehicle and confirm the Check Engine, Active Handling and ABS dash lights are no longer illuminated