

# Problem Flashing a Controller

EFILive Support - 2021-07-20 - Comments (0) - GM Help

General Trouble Shooting

Should users encounter problems with the EFILive software, FlashScan or AutoCal

hardware they should:

- 1. Confirm software, firmware and boot block versions are up to date. https://www.efilive.com/download-efilive
- 2. Check the stock file was read from your vehicle. Where the stock file is not read from the vehicle, vehicle specific information will be missing which may cause running issues or vehicle functions to stop working.
- 3. Check that checksums are valid.
- 4. Check to see if the NVRAM in the ECM is functional.
- 5. Remove/isolate all after-market devices including mobile phone adapters, aftermarket equipment (audio systems, security, remote start etc.) and any devices wired into the OBD port that may interfere with vehicle communications.
- 6. DO NOT operate any vehicle feature that may communicate on the data bus. This includes opening or closing of hood, doors, windows, as well as changing settings on radio, HVAC, connecting/removing charging devices etc.

Error message: \$0537 Controller is Locked with a Custom Key

Please refer to the <u>GM Controller Unlocking Help</u> to determine how to unlock the controller.

#### Error Codes

If an error occurs while using EFILive hardware or software, users can look up the error code description in the EFILive V8 Scan and Tune software.

The [F8: Tools] -> [F8: Error Codes] menu item provides an error code lookup function, and the "EFILive Error Codes.pdf" document accessed by selecting the Windows Start Icon and navigating to Program Files->EFILive->V8->Documents->EFILive Error Codes.pdf is also available. Both options provide error code descriptions, causes and actions.

Should the issue not be resolved after reviewing the Error code list, end users should contact their Tuner for support.

### Check Available Licenses

The first time a user flashes a controller using EFILive, licensing requirements must be met to facilitate a successful flash. The following licensing requirements must be met:

FlashScan V3 - The Tuning Licence Option must be valid, and there must be an available

VIN License.

**FlashScan V2** - The **Tuning License** option must be valid, and there must be an available **VIN License** or active **Stream License**.

AutoCal V3/AutoCal V2 - There must be an available VIN License.

#### **NVRAM STATUS**

Where the NVRAM area of the ECM is corrupted the vehicle may still run, however the tune file cannot be read or flashed. Typically where the VIN, Serial number, Hardware number and/or calibration ID do not contain valid data, the controller will need to be repaired to restore read and flash functionality. Please refer to the <a href="NVRAM Status">NVRAM Status</a> article for further information.

#### LB7 & LLY Controllers

Refer to the LB7 & LLY Tips and Tricks for more information.

New or Replacement Controllers

New GM controllers require flashing with factory programming tools to generate appropriate links between the ECM/TCM and other in-vehicle modules.

The EFILive software will not prevent flashing prior to factory programming for new controllers but doing so may result in a variety of vehicle related issues including vehicle no-start conditions and a range of vehicle based errors that can be corrected with factory programming.

## Test for Rogue Modules

For Customers with **FlashScan/AutoCal V3** a range of test modes to check the network for rogue modules that may cause read or flash operations to abort are available.

Navigate to the **Tune Tool -> F1: Tuning -> F4: Test OBD Network** menu. The following test options are available:

- 1. Test CAN J1979 option for CAN based controllers.
- 2. Test VPW 1x Speed option for VPW based controllers to test the network at normal speed, i.e. data logging speed.
- 3. Test VPW 4x Speed option for VPW based controllers to test the network at the speed used to read or flash a controller.

# Further Support

The Controller Recovery help file provides further assistance.

If all of the above have been attempted and issues still persist; please create a <u>Support Ticket</u> and include as much information as possible. Be sure to locate and attach your Trace Files.

#### Related Content

• V3 Flash & License a Controller

- FlashScan V2 Flash & License a Controller
- Pass-Thru Flash & License a Controller
- AutoCal V2 Flash & License a Controller
- LB7 & LLY Tips and Tricks
- Controller Recovery Process
- <u>V8 Trace Files</u>
- <u>V3 Trace Files</u>
- FlashScan V2 Trace Files
- AutoCal V2 Trace File
- VIN License Replacement Policy
- NVRAM Status GM Gas & Diesel