

Installing the EFILive LBZ / LMM DSP2 & DSP5 Custom Operating Systems

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> First published October 03, 2009

V1.00 by Ross Myers October 03, 2009

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Important – Please Read First

The Custom Operating Systems supplied by EFILive are provided "as is" without warranty of any kind. Please take all reasonable caution when using the extended features of EFILive's Custom Operating Systems.

This tutorial assumes you are running the software and firmware releases (or later) listed below.

- EFILive Scan and Tune V7.5.6.99
- EFILive Black Box Logging and Reading V8.1.2.75
- FlashScan/AutoCal Firmware V2.06.16 (Oct 02, 2009)
- LBZ .calz file dates V7.23 (October 03, 2009)

Please ensure you are running the latest software & firmware. Free updates can be downloaded from <u>http://www.efilive.com/</u>

To obtain the version number of the tuning software, go to the Help > About menu option. You <u>must</u> have V7.5.6 build 99 or higher. Here you can also check the V2 firmware version under 'FlashScan V2 VIN licensing'.



What is EFILive DSP?

EFILive DSP (<u>D</u>uramax <u>S</u>witchable <u>P</u>erformance) ECM (Engine Control Module) operating systems are modified versions of the factory ECM operating systems that give users the ability to use the factory ECM to perform functions beyond what was offered from the factory.

DSP2 is a customized ECM operating system developed by EFILive for the entire Duramax Diesel engine range, this document only applies to the LBZ & LMM.

DSP2 lets you switch on the fly between two user programmable tunes; DSP2 does this by allowing you to create two versions of the main operating maps that control engine performance.

DSP5 is similar to DSP2 except we expanded the number of switchable tunes from two positions to five.

The LBZ / LMM DSP programs are currently only available to be switched via a hardwired switch, not via the V2 control unit as the LB7 / LLY DSP programs can.

Please follow the steps on the following pages to successfully upgrade your Duramax ECM to DSP.

You may return your ECM to its GM factory condition at any time, by reflashing a stock GM Operating System and calibration over the top of any EFILive Custom Operating System using the Full reflash option.

On the LMM ECM the CVN changes to the ECM's Operating System will be logged by the ECM and be will visible by the TechII diagnostic tool.

Time to upgrade the ECM to DSP

Using the EFILive Tune Tool program you can either open the file to be converted to DSP off your computer hard drive, or read the tune from the ECM (on the vehicle or using a bench harness).

Read ECM icon:



Select either LBZ or LMM ECM Type:



Once the file has been read from the ECM you should save this as the stock file in case you need to return the ECM back to standard.

With the tun file now in the editor, you need to click on the Tab that says - "Upgrade O.S". *An LBZ DSP5 upgrade will be the example used below.*

Calibration Comments History C			
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Vehicle Identifiers:	Calib	ration Identifiers:	
VIN: N/A		OS: <mark>12606128</mark>	OS ID: N/A
Engine: 6.6L Diesel Turbo		alibration: N/A	BCC: N/A
Transmission: Automatic	Calib	ration Definition File ((*.cal):-
PCM flash: 2.5Mb		Name: <mark>12606128</mark>	l.calz
		Version: 7.22	Date: September 10, 2009
Segment	ID	Checksum	Notes
✓ Operating System	12606128	\$2FE01B201553	
✓ Engine Operation	12610870	\$B9C2C627088	
🖌 Engine Diagnostics	12610872	\$1861EC249F13	
🖌 Engine	12610878	\$178D54035683	
Not used	N/A	N/A	Click This Tab
🖌 Fuel System	12610875	\$7869DB092C7B	
🖌 System	12606155	\$802030A636AB	
🖌 Speedometer	12606159	\$7071255085B5	
🖌 Boot Block	12606130	\$2FE01B207F07	
✓ CPU	12606129	\$2FE01B207283	

Select which operating system upgrade you wish to apply (only choose one), then click the "Apply Upgrade" button.

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Calibration VIN Comments History Out of Range Modifications Upgrade OS Conversions				
Select custom operating system:				
DSP2 Custom Operating System Apply Upgrade				
DSP5 Custom Operating System				
The DSP5 custom operating system allows you to create a five position switchable on the fly tune.				

VERY IMPORTANT: Only choose one DSP option and only click the Apply Upgrade button once.