GM LM2 DURAMAX ECM & TCM TUNING INSTRUCTIONS

Pre-flash and ECM and TCM Read

1) **ENSURE** YOU ARE RUNNING HP TUNERS LATEST BETA. If you are not, download it here: https://www.hptuners.com/downloads/
2) **Open** the VCM Editor (Beta)
3) Connect your MPVI3 to the OBDII port and run the USB cable to your laptop
4) Place the truck in the ON position
   a. Key Start | turn the key to the accessory position
   b. Push Button | press the start button with your foot off the brake for 8-10 seconds
5) **Select** the blue info button, then again in the smaller window to update the MPVI3 firmware
6) **Go** to the help tab, then down to resync interface
7) Select the **Read Vehicle** Icon
   a. Select Do Not Read for the T93 TCM
8) **Save** the file as ECM Read on your desktop
9) **Repeat** Steps 7 and 8 for the TCM and label as such
   a. **Select** Do Not Read for the E46 ECM
10) **Email** the read/s to info@runvse.com
   a. Include your order number in the title of your email

Tuning the ECM

1) **Save** the tune file emailed to you by VSE
2) **Open** the VCM Editor (Beta)
3) **Open** your VSE tune file
   a. If you ordered more than one power level, only one file may be loaded.
4) Connect your MPVI3 to the OBDII port and run the USB cable to your laptop
5) Place the truck in the ON position
   a. Key Start | turn the key to the accessory position
   b. Push Button | press the start button with your foot off the brake for 8-10 seconds
6) Select the **Write Vehicle** icon
7) A Licensing window will appear, **Select Show License Options**
8) **Select Specific** and click OK.
9) **Select YES** to license the ECM
10) **Before clicking Write**, make sure the drop-down arrow says WRITE ENTIRE, then select write
11) The Write process will take 8-9 minutes, once completed select close and turn the truck off
12) **You may now start the vehicle!**
13) To change power levels, open the file and repeat these steps.

T93 Duramax TCM Flash Instructions

The TCMs have a different licensing protocol than the ECM, make sure to follow these instructions to properly license the TCM. VSE will not be responsible for incorrect licensing and 4 additional credits will need to be purchased

!! **Important note** – DO NOT Drive your truck with the modified TCM installed unless you KNOW FOR SURE we have flashed the ECM or YOU have flashed our modified tune file into the TCM – VSE will not be held liable for damages that result from failure to follow these instructions !!

!! **Critical Step -** The relearn sequence after installing this tuned and modified TCM **must** be completed prior to driving your truck how you normally would - VSE will not be held liable for damages that result from failure to follow these instructions!!

<p align="center">**Pre-Install Instructions**</p>

1. **ENSURE** YOU ARE RUNNING HP TUNERS LATEST BETA. If you are not, download it here: https://www.hptuners.com/downloads/
2. **Open** the VCM Scanner Beta.
3. With the MPVI plugged in, **Connect** to the Vehicle.
4. **Select** Vehicle Controls & Special Functions >> General.
5. **Select Replace TCM** and follow the on-screen instructions. This MUST be done with the STOCK TCM in the vehicle. **(Do NOT skip this step!! Valve body error codes WILL result)**
6. When you have swapped in the modified TCM, select **Replace TCM** once more.
7. **NO** for Stock TCM window.
8. **YES** for new/replacement TCM
9. Once completed **install** new (MODIFIED) TCM
10. **Select** Replace TCM and follow the on-screen instructions. This MUST be done with the MODIFIED TCM in the vehicle. **(Do NOT Skip this Step!! valve body error codes WILL result)**
11. **IF** TCM has already been pre-flashed (ex. TCM was purchased with a new MPVI3) you may skip to **step 22**
12. **Go to** the Help tab, then **select** Resync Interface
13. Turn the ignition to the **ON** position.
14. **Select** the Read Vehicle button.
15. **Select Read**
16. Once the Read is completed, **save** the file (this file is NEEDED for recovery of the TCM if something were to go wrong)
    a. E-mail the READ file to info@runvse.com with VIN or Order Number for safe keeping.
17. After the file is saved, **open** the modified TCM tune sent by VSE.
18. **Select** Write Vehicle
19. **Select** Show License Options

20. **Select** the Specific option for 4 Credits.
21. Once Licensed, Write Entire in the dropdown menu, then **WRITE** (2-3 minute flash process)
22. **IF** you have access to a GM tool (GM MDI) or SNAP ON Modus enter the transmission section of the tool hit "reset adaptive pressure" then hit enable fast learn. This is the best practice. Then perform step 19.

!! This following process MUST BE FOLLOWED to the best of your ability!! During the relearn sequence the transmission WILL experience out of normal shift behaviour including transitioning into and out of reverse and drive. This is normal during relearn.

23. **Start** the truck and to the best of your ability get the operating temp to 167F minimum by idling the engine.
    a. If this is not feasible, then ensure transmission temp is above 70F.
24. **Place** the truck into drive, then into park, then into reverse, then into park.
25. **Place** the truck back into drive and accelerate up to 60-70mph at light (1/4 throttle) until in 10th gear. Perform this operation 2 times.
26. **Accelerate** up to 60-70 MPH at 1/2 throttle until in 10th gear. Perform this operation 2 times.
27. **Accelerate** up to 60-70 MPH at Full throttle until in 10th gear. Perform this operation 2 times. Use the lower power setting if you have SOTF tuning from us, or lowest power available.
28. **Exit** fast learn procedure if used in step 18. You can now drive the truck normally. It may take 200-300 miles of normal driving for transmission relearning (adaptive relearn) to complete fully. Expect the transmission to exhibit more pronounced shifting and a lighter overall feel when driving.