

# TUNER DEPOT



## L5P Unlock Tool Kit (2017 - 2023)

### Custom File Write and Tuning.

ENSURE your vehicle is in a safe location before proceeding, preferably in your garage or somewhere out of the way.

The entire process may take up to 20 mins.

**YOU WILL NEED INTERNET ACCESS FOR THE ENTIRE PROCESS.**

# THIS PROCESS IS FOR WRITING A NEW TUNE FILE TO AN UNLOCKED ECM ON AN L5P GM DURAMAX TRUCK. IF YOUR ECM IS NOT UNLOCKED, PLEASE REFER TO THE UNLOCK ECM DOCUMENT FROM TUNER DEPOT FIRST BEFORE PROCEEDING WITH THIS PROCESS.

## NOTE:

- **DO NOT UNDER ANY CIRCUMSTANCES disrupt** the programming session.
- **DO NOT open vehicle doors or use vehicle accessories.**
- **DO NOT attempt to program vehicles whose battery voltage is lower than 11.5 Volts.**
- **DO NOT attempt to use the vehicle to power or charge the laptop.** If it is necessary to provide additional battery power to the laptop, use an external battery that is not connected to the vehicle.
- **DO NOT make any modifications to the truck if it has any emissions-related codes or messages. These codes cannot be cleared after tuning. You must clear them before the ECM is tuned or the emissions are removed!**
- Start with all emissions parts installed and functioning **without codes or error messages.**
- Be sure the **DEF level is ATLEAST 1/4<sup>th</sup> Full before you start the process.** If it is below this level, just add water to bring the level up.
- **On 2017-19 model years you must make sure the soot levels are below 70% before proceeding**

## Stage 1– Software SETUP

1. Download and install **.Net Windows Runtime 6** [by clicking HERE](#). Always verify you have the latest version whenever you open the software as it updates regularly.
2. Download and install the **latest VCM Suite (BETA) software** [by clicking HERE](#)

## Stage 2 – BATTERY CHECK and SETUP

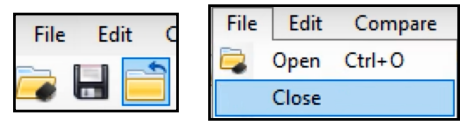
Before you begin the write process, ensure:

1. The vehicle has a fully charged battery. Connecting the vehicle's battery to a battery charger before writing a tune is recommended.
2. Your laptop has a fully charged battery.
3. Plug your MPVI2+/MPVI3 device first into your laptop using the supplied USB cable and then into the vehicle's OBDII port.
4. Put the vehicle in the **KOEO or Key On Engine Off** position. In order to perform any programming or flashing the vehicle needs to be in the **"Run"** key position **with the engine not running** but all the lights on the dash must light up. **(FOR PUSH TO START VEHICLES, PUST THE START BUTTON TWICE WITHOUT PRESSING THE BRAKE.** The Dash will light up without the engine turning on.)
5. Make sure you download the NEW TUNE FILE sent to you by our tuning engineers. Save it in a convenient location (eg: Desktop) on your computer to be used in the writing process.

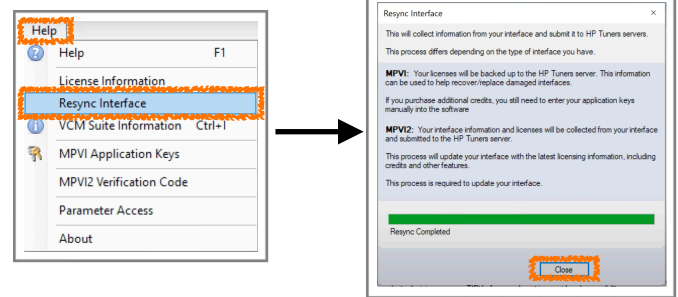
## Stage 3 – Resync your vehicle in VCM Editor.

1. Open the latest VCM Editor (BETA) software

**BEST PRACTICE** - Before you Continue, ensure to click **"File" > "Close"** - so no previous files get confused with the new file. You could also click on the **"Close File" Icon**.

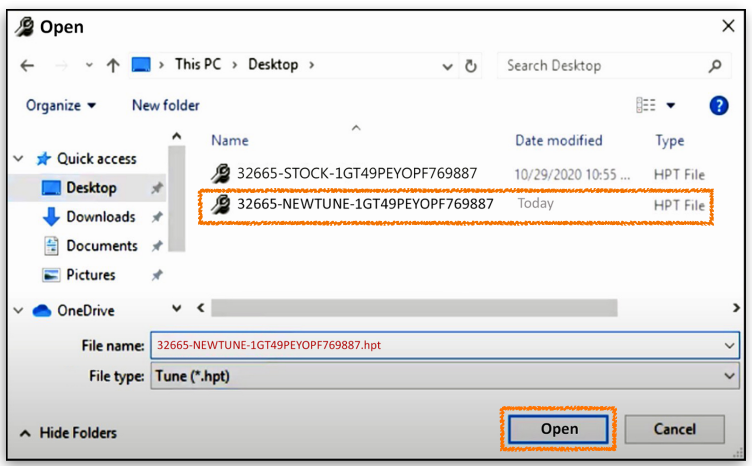
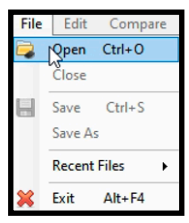


2. Click on the HELP Tab and Resync your MPVI3 Interface  
Click **"HELP" > "RESYNC INTERFACE"**



Once the program runs through and completes click **"CLOSE"**

3. click **"File" > "Open"** and navigate to the **New Tuning File** sent to you by Tuner Depot Tuning Engineers.

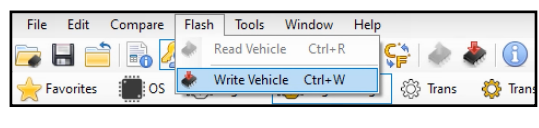
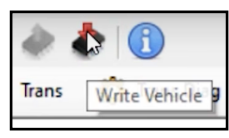


**Make Sure you choose the NEW TUNE file and not the stock file.**

## Stage 4 – Write the NEW TUNING File to the UNLOCKED ECU.

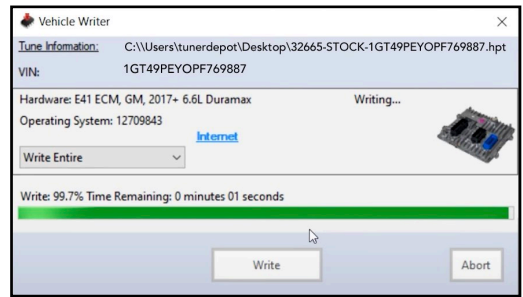
1. **Without closing or disconnecting anything: Start the Write Process** by going to the **"Flash"** menu and selecting **WRITE VEHICLE. (Ctrl+W)**

You could also click on the **"Write Vehicle" Icon**.



2. Confirm the dropdown is selected to **"Write Entire."**

3. VCM Editor will now perform a second **"Write Entire"** of the currently loaded tune file to the ECM.



4. Once this write finishes, you will receive the message: **"Write complete!"** As soon as it says write completed then you are good to go.
5. Shut the Software.

**THEN TURN THE CAR KEY TO THE OFF POSITION.**

6. UNPLUG your **MPVi3 device** from your **Truck first** and then your LAPTOP.
7. Wait three seconds before you cycle the ignition and you are finished writing the tune.
8. **Without moving the truck**, let the engine run for a couple minutes to ensure no Check Engine Lights or Error show up on the dashboard. Once confirmed, shut the engine and Proceed to **REMOVE THE EMISSIONS SYSTEMS AT THIS POINT.**

## INCASE ANY ERROR SHOWS UP

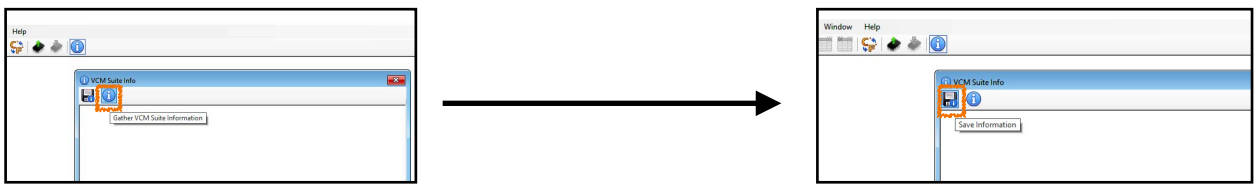
Incase any error show up or the write does not complete, First close the file and shut everything down. Then try the ENTIRE process again. Sometimes the write process might take a couple passes to completely write the file to the ECM.

### A. Save an InfoLog.

1. **With the NEW TUNE file open:** Click the VCM Suite Info button or the **"Information Icon"** in the tool bar in VCM Editor.
2. A VCM SUITE info dialogue box will open. Click the blue circle "i" icon to poll the software and the vehicle. It will gather the VCM suite data.
3. When the **InfoLog has completed generating**, Click on the **Save** icon. Save it with the naming format: **[ORDER NUMBER]-INFOLOG-[VIN]**.



**Pro Tip:** Save the file in a accessible place like the Desktop so it is easy to locate.



### B. Send us the Infolog.

Send the Infolog back to the engineers at Tuner Depot so they can Diagnose the problem and suggest the remedy for the issue.

## Notes

- ALWAYS use a battery charger capable of supplying a STEADY 10 AMPs or more
- When opening VCM software, it may open the last file used, always close the file when opening VCM software (top left Folder icon)
- Sometimes the VIN does not register properly, if you are finished tuning and your VIN is not showing up you can use VCM Scanner to change the VIN, USE ALL CAPS. (Vehicle > Controls and special functions > System > Change VIN). If this still fails go back to VCM Scanner, select "Vehicle" from the top menu bar then "Diagnostics" then "Clear DTCs", and clear them even if there aren't any.
- The current VCM Suite Beta software requires a certain version of .NET, if you get errors when working with the software, check your .NET version or update it from the [HP Tuners Downloads section](#) (under the link to the BETA software)
- Always connect the MPV device to the computer before the truck
- Due to our current tuning demand, it will take 3-10 business days from receiving your base files to the time we send you the modified file back. Be prepared for this, if you are a shop installing this for a customer we highly recommend you book two appointments, one to perform the ECM UNLOCK & retrieve the info log and read the file needed for tuning.— Then another one to load the tune and carry out the rest of the parts installation.
- If emissions were unplugged before tuning, you will likely get a Service Emissions message on the dash. If the DEF tank was low when you started, you will likely get Low DEF light on the dash after tuned, to avoid this make sure the DEF tank is at least 1/4 full. On 17-19 model years make sure the soot levels are below 70%, if soot levels are above 70% you will need to do a force regen before tuning.
- Our Tuning price does not cover any revisions needed due to customers sending the wrong files. Be sure you follow these instructions exactly, if you've made a mistake reach out to us before sending any files.

## **MISSING CREDIT TROUBLESHOOTING SECTION:**

Sometimes, there is a delay or “lag” in communication between the MPVi3 and ECU.

**If there are no credits Showing in your InfoLog, complete the following troubleshooting steps -**

1. Close VCM Editor.
2. Disconnect the MPVi3 from the PC and vehicle.
3. Turn the car key to the OFF position, and wait 10 seconds.
4. Open VCM Editor.
5. Plug MPVi3 into PC via USB cable.
6. Wait 10 seconds (**Power light should be on**).
7. Resync Interface – Click “**HELP**” > “**RESYNC INTERFACE.**”
8. If the Power light is now off, unplug the device and restart Editor.
9. With VCM Editor opened again, plug in the device and wait **10 seconds**.
10. Click the VCM Suite Info button or the “**Information Icon**” in the tool bar in VCM Editor.
11. A VCM SUITE info dialogue box will open. Click the blue circle “**i**” icon to poll the software and the vehicle. It will gather the VCM suite data.
12. When the InfoLog has completed generating, CONFIRM that “**Available Credits**” shows **atleast 8 Credits**.
13. If no credits are showing, repeat the process from step 1.

**If After 4 attempts, no credits show up, contact [HPT@tunerdepot.com](mailto:HPT@tunerdepot.com) with your order number and MPVi3 serial number.**