

# TUNER DEPOT



## L5P Unlock Tool Kit (2017 - 2023)

### Cable Installation Instructions & File Preparation.

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 a couple of hours.

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

**NOTE:**

- The Unlock Tool is used to upgrade the E41 ECM in the vehicle. Once the UNLOCK is completed, VCM Editor will instruct you to uninstall the cable.
- **DO NOT drive the vehicle with the cable installed!**
- **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

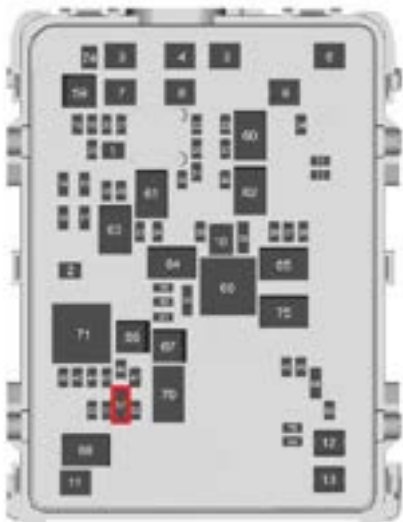
1. Download and install **.Net Windows Runtime 6** by [clicking HERE](#). Always verify you have the latest version whenever you open the software as it updates regularly.
2. Download and install the **latest VCM Suite (BETA) software** by [clicking HERE](#)

## Stage 2 – Install the Unlock Tool

1. Open the hood, using a 10 millimeter wrench disconnect the negative terminals of both batteries.
2. Locate the under hood fuse box on the driver's side of the engine bay and remove the lid to access the fuses.
3. Based on your Model Year, **find and remove the ECM power fuse**. Please reference the fuse location below.

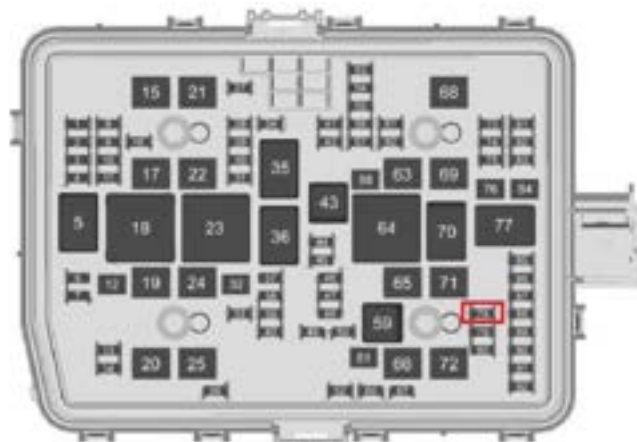
**2017-2019 L5P**

it is a shared 15A ECM/TCM – **FUSE #57**

**2020-2023 L5P,**

it is a 15A ECM-only – **FUSE #78.**

**NOTE:** For 2020-2023, there is an additional JOA ECM-only fuse (fuse #86J is **NOT** the fuse you need to remove.)



4. Connect the **HPTNet cable** (this is the gray cable with M8 connectors) to your MPVI3 device on one end and the Unlock Tool on the other.

5. Install the upgrade cable fuse plug into the fuse slot where you removed the original fuse in the previous step (#3). Please make sure to install the cable with the proper polarity as described below:
  - **For 2017-2019 models**, the fuse you removed is a 3-blade fuse that powers both the Engine Control Module (ECM) and Transmission Control Module (TCM). The upgrade cable fuse plug from the kit is **only a 2-blade plug**. When installing the upgrade cable fuse plug, install the cable so that the blade with the **RED** wire is **in the middle slot** of the fuse cavity and the **WHITE** wire is in the slot closest to the **engine-bay firewall**.  
**NOTE: The 3<sup>rd</sup> fuse slot (furthest from the engine-bay firewall) should be empty.**
  - **For 2020-2023 models**, when installing the upgrade cable fuse plug, the blade with the **RED** wire should be inserted in the slot **closest to the engine**. The blade with the **WHITE** wire should be installed in the slot nearest the **driver-side front tire** (furthest from the engine).
6. Using a 10 millimeter wrench Reconnect the vehicle's battery.
7. Feed the wire attached to the upgrade cable fuse plug through the driver-side window and connect it to the Unlock Tool.
8. Plug your MPVI2+/MPVI3 device into the vehicle's OBDII port.
9. 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.)**

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

1. Open the VCM Editor (BETA) software
2. Click on the HELP Tab and Resync your MPVI3 Interface  
 Click **"HELP" > "RESYNC INTERFACE"**



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

**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**.




4. **Read the vehicle** by going to the **"Flash"** menu and selecting **READ VEHICLE**. (**Ctrl+R**)  
 You could also click on the **"Read Vehicle" Icon**.



5. On the two following windows click **"READ"** Again. On the Second Screen make sure under the **ECM Hardware** section **"READ ENTIRE"** is selected. **THE TCM should be "DO NOT READ"**

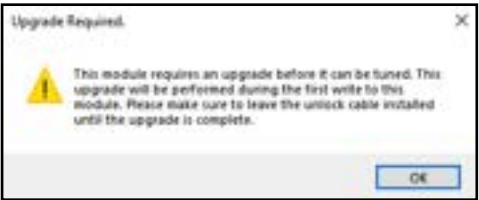
**PLEASE NOTE:** you must read the **ECM only**. If you are doing a TCM tune as well, you will still need to do ECM only first **and then** TCM only. **They should not be done together.**



6. **Note: If the upgrade cable is NOT installed CORRECTLY, you will receive the following window and the read will exit.**  
 At this time, you must retrace all the steps from Stage 1 and then recheck all the connections for bent pins, dust deposits etc. Ensure the engine is in the correct KOEO position and the software is the latest **BETA** version.

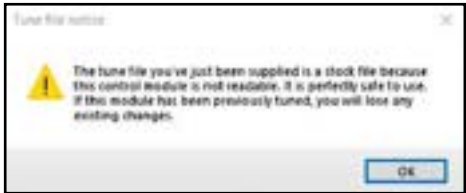


If the cable is **CORRECTLY** installed and the module has not been upgraded yet, you will receive a window with the following message  
**"This module requires an upgrade before it can be tuned. This upgrade will be performed during the first write to this module. Please make sure to leave the unlock cable installed until the upgrade is complete."**



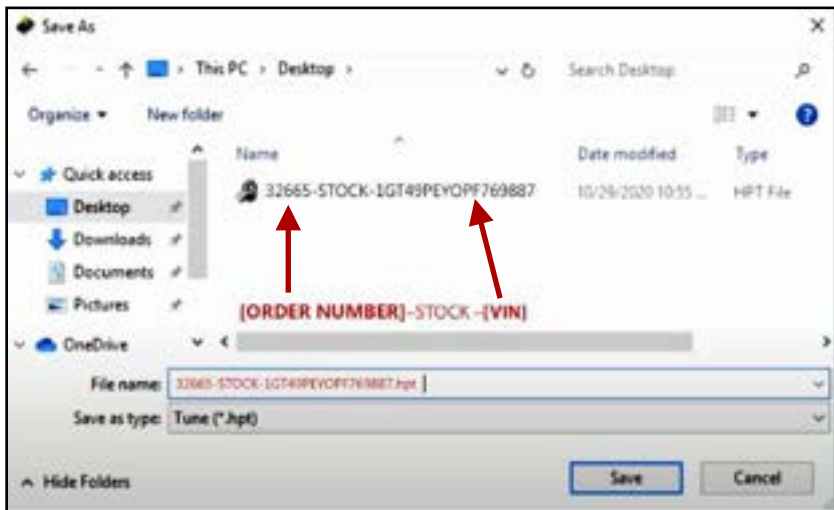
Note: If you do not receive this message and you are not provided with a stock file to tune the vehicle, check the cable installation. If you do not receive this message and are provided with a stock file to tune the vehicle, then the ECM is already upgraded. Please uninstall the cable and tune the vehicle as normal.

7. **Click "OK".** You can perform the upgrade using the supplied stock file without any changes. Before the file saves, IT will give you the following notice: **"The tune file you've just been supplied is a stock file because this control module is not readable. It is perfectly safe to use. If this module has been previously tuned, you will lose any existing changes."**



Click **"OK"**


8. A **"File Save As"** Window will open up. Save the **".hpt"** file with the following naming structure: **[ORDER NUMBER]-Stock-[VIN].hpt.** (See Example)  
**Pro Tip: Save the file in a accessible place like the Desktop so it is easy to locate.**

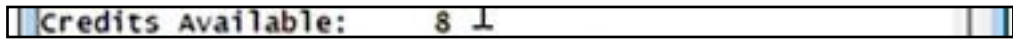


**ORDER NUMBER** can be found on your Purchase Invoice, or your Order Confirmation Email.

**VIN** is your **Vehicle Identification Number** which is in your **vehicle documentation** or in your **infolog** in your next stage. Make sure you write it in **ALL CAPS**.

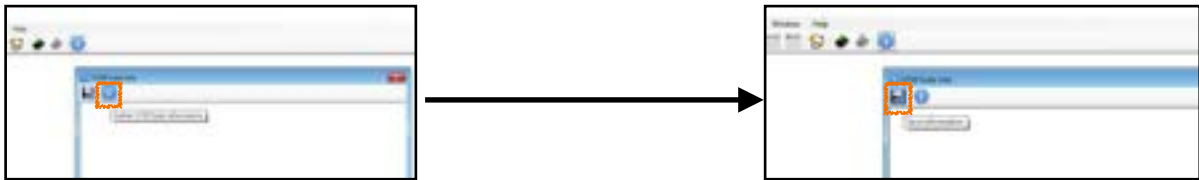
## Stage 4 – Save an InfoLog.

- Without closing or disconnecting anything:** Click the VCM Suite Info button or the “**Information Icon**” in the tool bar in VCM Editor. 
- 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.
- When the **InfoLog has completed generating**, CONFIRM that “Available Credits” shows **at least 8 Credits**.



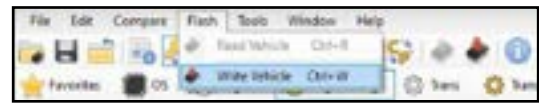
**! If you have No Credits loaded, please check the MISSING CREDIT TROUBLESHOOTING SECTION at the bottom of this document !**

- 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.**

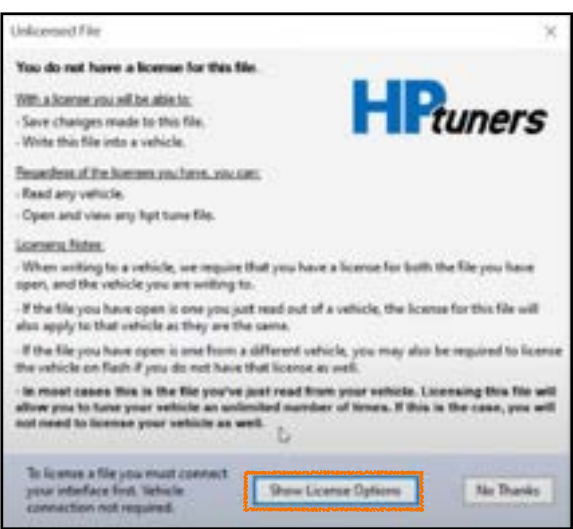


## Stage 5 – ReWrite the Stock File to UNLOCK the ECU.

- 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.



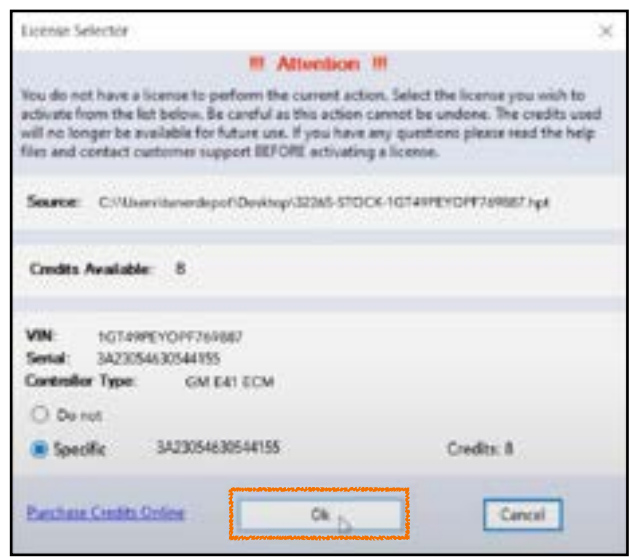
- A window will pop up stating that you do not have the license for this file. Click on “**SHOW LICENSE OPTIONS**”
- Confirm your **SOURCE**, **VIN Number** and **MPVi3 Serial Number** is correct and your Credits are selected to “**SPECIFIC**”. Click “**OK**”



**SOURCE:**  
 The HPT file you saved in STAGE 3  
 8 Credits Available

**Vehicle Identification Number**  
**MPVi3 Serial Number**

“**SPECIFIC**” is Selected

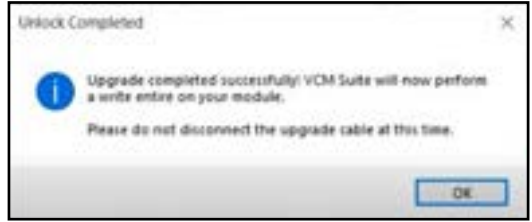




- 4. **The FIRST of TWO Write windows will open.** Let the first Write finish. The ECM Unlock The upgrade will take place during the first write of the module. Once the write begins, VCM Editor will perform the upgrade to the ECM first.  
**This process takes roughly 9 minutes.**



- 5. Once the upgrade is complete, you will receive a window with the following message: **"Upgrade completed successfully! VCM Suite will now perform a write entire on your module. Please do not disconnect the upgrade cable at this time."** Click "OK" and the Second write will begin.



- 6. VCM Editor will now perform a second "Write Entire" of the currently loaded tune file to the ECM. Once this write finishes, you will receive the message: **"Write complete. Please uninstall the upgrade cable and replace all removed fuses. Warning: Do not drive the vehicle with the upgrade cable installed in the vehicle."**



## Stage 6 – Send us the READ FILES.

- 1. Next you must send the files are saved on your Desktop via EMAIL to : [hpt@tunerdepot.com](mailto:hpt@tunerdepot.com). Ensure you attach the following -
  - 1. Attach the **STOCK tune File** you saved in **STAGE 3**
  - 2. Attach the **INFOLOG** you saved in **STAGE 4**  
**Make sure BOTH filenames** include your **order number** and your **VIN** in **ALL CAPS**
- 2. Shut the Software.

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

3. UNPLUG your **MPVi3 device** from your **Truck first** and then your LAPTOP.
4. Using a 10 millimeter wrench disconnect the negative terminals of both batteries under the hood.
5. You can now **Remove the Unlock Tool** and reconnect the fuse you removed.

**REMEMBER: DO NOT drive the vehicle with the cable installed!**

6. Reconnect the battery terminals and you can use your truck as stock while we work on your Custom Tune Files.
7. **DO NOT REMOVE ANY EMISSIONS SYSTEMS AT THIS POINT, DOING SO WILL RESULT IN PERMANENT ERROR MESSAGES**

**TUNER DEPOT's Engineers will receive your stock files and create a custom tune file for your Specific Device and Vehicle.**

**PLEASE BE ADVISED - The new file will be sent back to you via email and this will take time. Please anticipate a delay of 3-10 business days to allow for the Engineers to return the file back to you.**

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**Once you receive the NEW UPDATE TUNE file, you can return to the truck and begin the process of installing the tune file on the Truck's ECM.**

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## 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.**