



## HP TUNER MPVI-3/4 INSTALLATION MANUAL

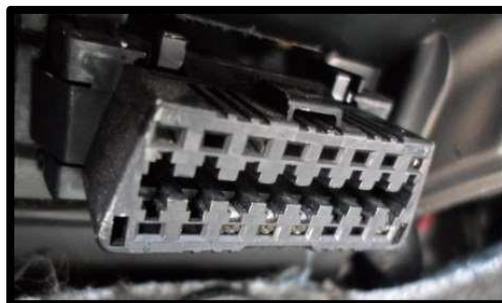
FORD 2.3L, 2.7L, 3.0L, 3.5L, 5.0, 5.4, 5.8, 6.2, 7.3L ENGINES

### IMPORTANT NOTES

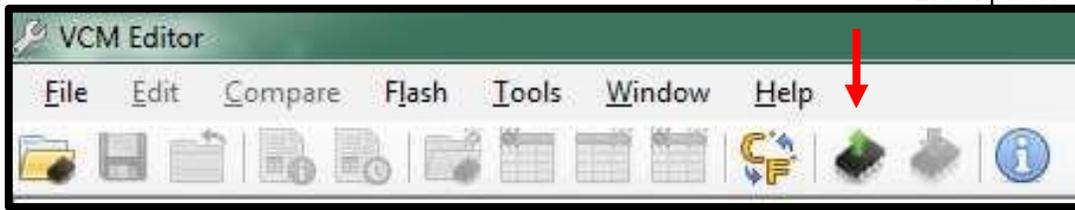
- Read through instructions prior to installation.
  - Never start installing supercharger or performance parts without requesting and receiving your Whipple calibration. Calibrations generally take 24-48 business hours but can be longer if there are updates or support issues.
  - Having the latest OEM PCM and TCM calibration is highly recommended to eliminate potential OEM issues in calibration.
  - Whipple calibrations are for stock engines, changes such as long tubes, cold air intakes, cams and big throttle bodies are not supported in anyway. Making any changes to the calibration is strictly prohibited. Any change will void all warranties and will make the vehicle non-emissions legal.
  - IT IS THE RESPONSIBILITY OF THE INSTALLER AND/OR USER OF THIS PRODUCT TO ENSURE THAT IT IS USED IN COMPLIANCE WITH ALL APPLICABLE LAWS AND REGULATIONS.
1. Go to the HP Tuner website: <https://www.hptuners.com/downloads/>. Download the latest VCM Suite BETA. If you run into any issues installing the software, email [support@hptuners.com](mailto:support@hptuners.com) for resolution. Issues with calibration or data logging, please contact us @ [support@whipplesuperchargers.com](mailto:support@whipplesuperchargers.com)
  2. Open VCM Editor program by clicking the wrench icon.



3. Connect to the OBDII port with the MPVI flash tool.



4. With the vehicle ignition in RUN position, engine not running, click the **green arrow** icon to READ the file in the PCM.



- Click the "Gather Info" icon to populate the PCM data. If it doesn't auto recognize the PCM and TCM (when applicable), scroll down the list.



Vehicle	Model Year	Engine	Engine	TCM	PCM #	TCM #
Bronco	2021-2025	2.3L/2.7L	READ	N/A	MG1CS055	N/A
Bronco Raptor	2022-2025	3.0L	READ	N/A	MG1CS055	N/A
Expedition	2018-2021	3.5L	READ	N/A	TC-277	TC-277 D
Expedition	2022-2026	3.5L	READ	N/A	MG1CS055	N/A
Explorer	2020-2024	3.0L	READ	N/A	TC-298 B	N/A
Explorer	2025-2026	3.0L	READ	N/A	MG1CS055	N/A
F150	2015-2016	2.7L/3.5L	READ	N/A	TC-1797	N/A
F150	2015-2017	5.0L	READ	N/A	TC-1791	N/A
F150	2018-2020	5.0L	READ	N/A	TC-298	N/A
F150	2021-2023	5.0L	READ	N/A	MG1CS036	N/A
F150	2024-2026	5.0L	READ	N/A	MG1CS055	N/A
F150/Raptor	2017	2.7L/3.5L	READ	READ	TC-277	TC-277 B
F150/Raptor	2018-2020	2.7L/3.5L	READ	READ	TC-277	TC-277 D
F150/Raptor	2021-2026	2.7L/3.5L	READ	N/A	MG1CS055	N/A
F150 Raptor R	2023-2026	5.2L	READ	N/A	MG1CS055	N/A
F250/F350	2020-2022	7.3L	READ	N/A	TC-298 B	N/A
F250/F350	2023-2026	7.3L	READ	N/A	MG1CS060	N/A
Mustang	2011-2014	5.0L	READ	N/A	Copperhead 2048K	N/A

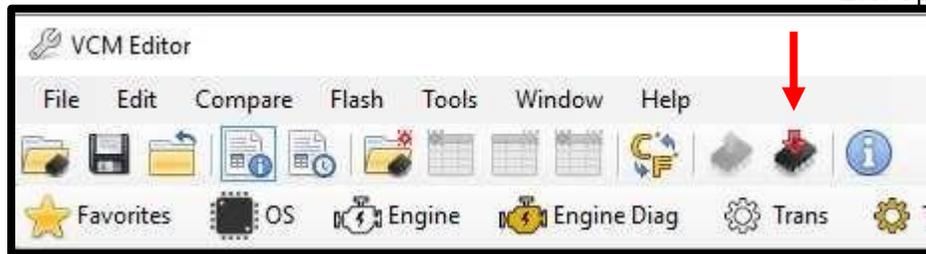
Last Updated: March 10<sup>th</sup>, 2026

Mustang	2015-2017	5.0L	READ	N/A	TC-1791	N/A
Mustang	2018-2023/2018-2020	2.3L/5.0L	READ	N/A	TC-298	N/A
Mustang	2024-2026	5.0L	READ	N/A	MG1CS055	N/A
Navigator	2018-2021	3.5L	READ	READ	TC-277	TC-277 D
Navigator	2022-2026	3.5L	READ	N/A	MG1CS055	N/A
Ranger	2019-2023	2.3L	READ	N/A	TC-298 B	N/A

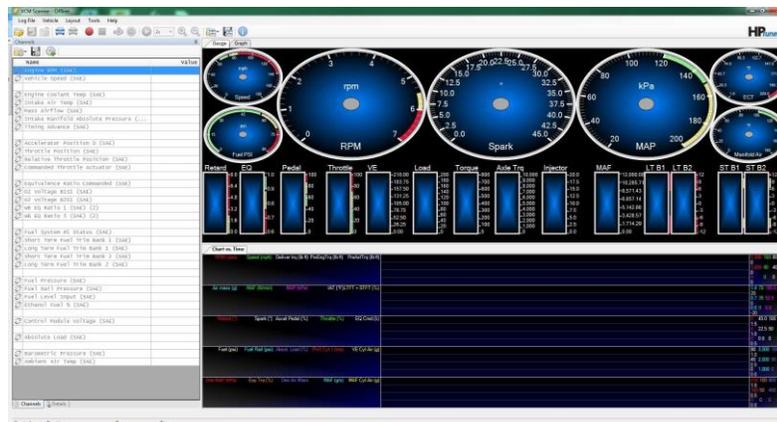
6. Once the info is gathered by HP Tuners, click the "Read" icon.



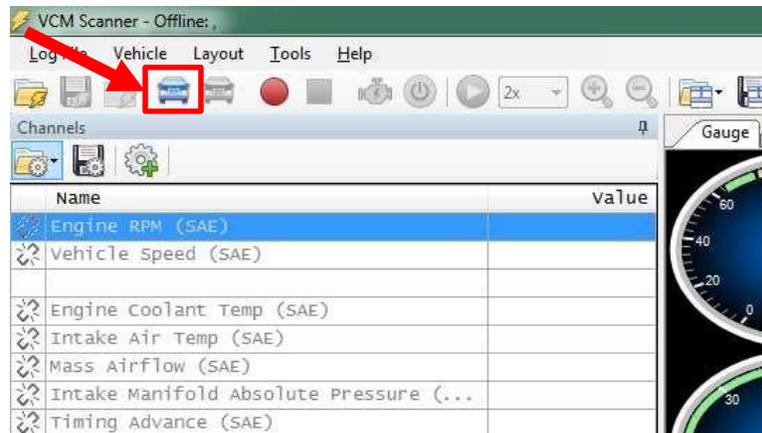
7. Once the file is uploaded, save this file in an easy to find location (example: mydocuments/HP Tuners/cals and logs). Create a file name with VIN number, Customer name and engine size. Example: 2C3CDXCT1FH737913\_John Smith\_5.2L\_Stock. If you want to keep the file name shorter, use only the last 4 digits of the VIN but keep the same information. We will supply a similar name but with SC in the file to help distinguish between them. NOTE: Always keep the stock file. If you are a dealer/installer, email the file to the customer for future access. Whipple does not store stock files.
8. Go to the Whipple website, click the Calibration Request tab and follow the instructions on sending file. This may take 24-48 hours for your calibration so this is important to do before you start the supercharger installation. Each calibration is locked to the supplied MPVI serial #. If you use a different tool, you will not be able to use the file.
- a. Include the following with the calibration:
    - i. Octane fuel being run (91, 92, 93, 94).
    - ii. List any modifications to the stock engine such as air intake, exhaust, etc.
    - iii. MPVI serial #
      - Located on a sticker on the back of MPVI unit, typically 10 digit number
9. Once calibration is supplied, save to your PC in the same location as the stock file. Open VCM Editor. Open the calibration by clicking file, connect to vehicle, turnkey to engine run (do not start engine) and follow the on-screen commands.



10. HP Tuners supplies a free data logging program, VCM Scanner BETA. With foot off brake, hold the push button ignition for 10 seconds until the green light turns on, this is Diagnostic mode. Using VCM scanner, click the check engine icon, then "READ CODES". Once it populates, click CLEAR CODES. Once done, turnkey off, open door to power vehicle off, from here you're ready to run.
11. If required, you may use VCM Scanner Suite for diagnostic purposes, to check codes, read monitors and data log important parameters. Whipple has pre-made channel list for proper data logging. If logging, please request a data log channel list.
12. Once the vehicle is flashed, turnkey off for 10 seconds (follow on screen instructions). The vehicle is now ready to start and operate.
13. With your HP Tuners installation, you get the free data logging program, VCM Scanner. If required, you may use this for diagnostic purposes. Whipple has pre-made channel list for proper data logging. If logging, please request a data log channel list from [support@whipplesuperchargers.com](mailto:support@whipplesuperchargers.com).
14. Vehicles that require Tire/Axle changes for speedometer correction. Open VCM Scanner program.



15. With the ignition on, engine not running, click the Blue Car Icon on VCM Scanner to connect to the vehicle.



16. Once the info is self-gathered by HP Tuners, click the "Read" icon. 2018+ will ask to change the calibration ID once all done, in this case, click OK. NOTE: Could take 20+ minutes.



17. Once the file is uploaded, save this file in an easy to find location (example: mydocuments/HP Tuners/cals and logs). Create a file name with VIN number, Customer name and engine size. Example: 2C3CDXCT1FH737913\_John Smith\_5.2L\_Stock. If you want to keep the file name shorter, use only the last 4 digits of the VIN but keep the same information. We will supply a similar name but with SC in the file to help distinguish between them. NOTE: Always keep the stock file. If you are a dealer/installer, email the file to the customer or install on the HP Tuner thumb drive supplied. Whipple does not store stock files.

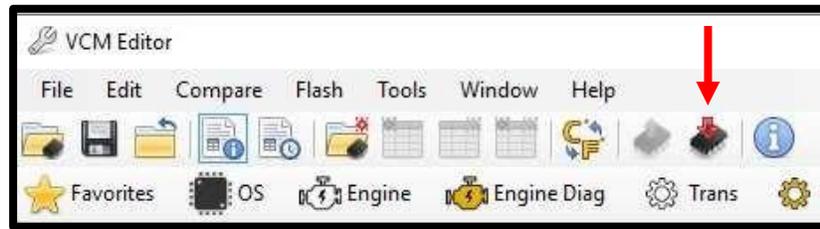
18. Go to the Whipple website and go to calibration request tab, or follow the link: [Whipple Superchargers Calibration Request](#). Calibrations may take 1-2 business days to build your unique calibration so this is important to do BEFORE you start the supercharger installation. Each calibration is locked to the supplied HP Tuner serial #. NOTE: Whipple builds the files and locks them to the supplied HP Tuner tool. If you are using a different tool, you must notify Whipple, if not, your calibration will not open in your software.

19. Once calibration is supplied, save to your PC in the same location as the stock file. Open VCM Editor. Go to the help tab, with internet access and the MPVI2 connected to PC, click RESYNC INTERFACE which will add credits to the tool.

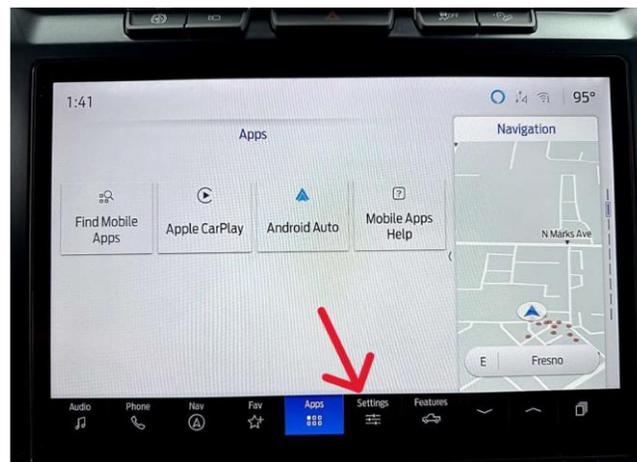


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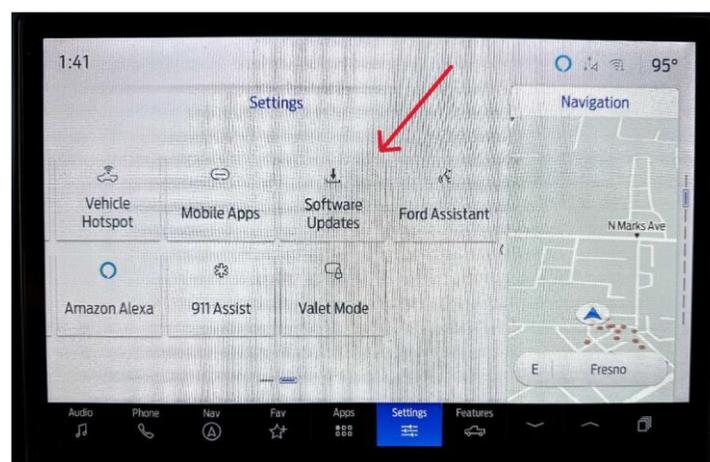
20. Once calibration is supplied, save to your PC in the same location as the stock file. Open VCM Editor. Open the calibration by clicking file, connect to vehicle, turn key to engine run (do not start engine), push button type ignitions, hold push button down for 10 seconds to activate diagnostic mode. Click the red arrow icon (WRITE VEHICLE) to write the new calibration to the vehicle.



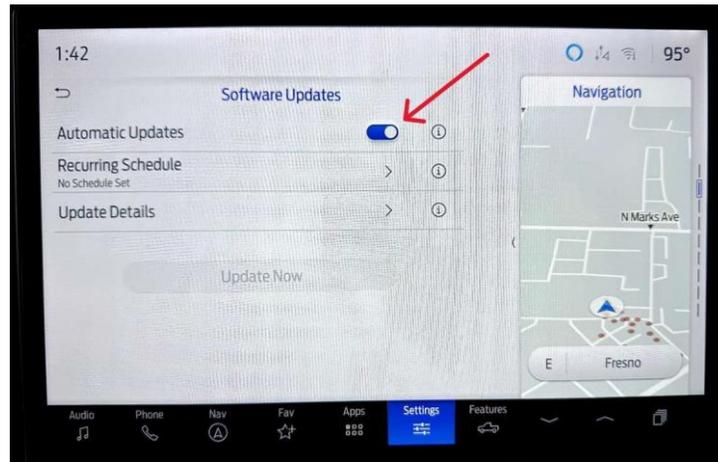
21. Once the vehicle is flashed, turn key off for 10 seconds.
22. On 2024 and newer models with Over The Air update capacity (OTA), you will need to toggle this option to OFF. With key in ON position, on your SYNC infotainment screen, select Settings from the main menu.



23. Scroll through the menu and choose Software Updates.



24. Disable Automatic Updates by toggling switch to OFF.



25. If the vehicle's PCM Module (not other modules) gets updated after it's been modified, you will need to re-read the file, send it in and get an updated file built.
26. The vehicle is now ready to start and operate.
27. HP Tuners supplies a free data logging program, VCM Scanner. If required, you may use this for diagnostic purposes. Whipple has pre-made channel list for proper data logging. If logging, please request a data log channel list so you can gather the proper data.
28. **NEVER MAKE CHANGES TO THE CALIBRATION.** The calibration is designed and tested by Whipple Superchargers. Any change will void any and all warranties, along with emissions compatibility.
29. All HP Tuner files are locked and do not allow customer adjustment due to emission regulations.
30. If your vehicle is not stock, Whipple will not make custom calibrations. Example, long tubes, high flow cats, different air intakes, etc.

For questions in regards to the software and installation, please visit HP Tuners FAQ section of their online forum as almost all answers are here: <https://www.hptuners.com/forum/forumdisplay.php?35-VCMSuite-FAQ>