

## GPEC 5 HP TUNER RAM E-TORQUE 5.7L INSTRUCTIONS MODEL YEAR 2022-2024



## **IMPORTANT NOTES**

- **GPEC 5** based PCM's must be unlocked by HP Tuners before they can be flashed. Follow the instructions to perform the Unlock. Whipple supplies unlock code (**MOD NUMBER**) to be used on HP Tuner website, you're only responsible for shipping to/from.
- 2018 and UP Vehicles require a security bypass (supplied) to enable flashing (supplied with kit).
- Read through instructions prior to installation.
- **Never** install supercharger prior to having PCM unlocked. Always get your PCM unlocked, reinstall into vehicle and validate function prior to starting SC install to avoid any potential issues or delays.
- **Never** start installing supercharger 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.
- Dodge Ram PCM's should ALWAYS be unlocked vs replaced. The PCM is sync'd to the CAN network, if replaced, the vehicle will have to go to the dealer to get synchronized.
- Internet connection is required to perform read/write and sync of flash tool.
- 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. **GPEC 5 PCM UNLOCK** service is included with the SC system using a MOD number on the HP Website. The MOD number comes from Whipple Superchargers. To get MOD number, go to <u>www.whipplesuperchargers.com</u> website or email <u>support@whipplesuperchargers.com</u>. You MUST provide the following information:
  - a. Contact Name and shop name (if applicable).
  - b. Vehicle type, model year and engine type.
  - c. Supercharger serial number (located on packing slip, invoice and top of supercharger).
  - d. MPVI3 serial number.
- 2. After receiving MOD number from Whipple Superchargers, go to the HP Tuner website to start the unlock service (Products/Upgrades/GPEC5) <u>https://www.hptuners.com/product/dodge-pcm-service-gpec5/</u>.

- 3. Follow the HP Tuner instructions for documentation and sending PCM in, fill out the form under shipping tab to send with PCM. Failure to do so may result in delays. If PCM comes in with no paperwork, they will not be able to process the unlock.
- 4. Once unlock is done, reinstall PCM, start vehicle to validate everything is working correctly.
- 5. Follow the security bypass instructions to install bypass, failure to do so will limit read/write ability.
- Go to the HP Tuner website: <u>https://www.hptuners.com/downloads/</u>. Download the latest VCM Suite **BETA**. If you run into any issues installing the software, email **support@hptuners.com** for resolution. Issues with calibration or data logging, please contact us @ <u>support@whipplesuperchargers.com</u>
- 7. Open VCM Editor program by clicking the wrench icon.



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



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



10. Click the "Gather Info" icon to populate the PCM data. If it doesn't auto recognize the **PCM** and **TCM**, scroll down the list for the **PCM = GPEC 5** and **TCM = ZF8HP2**.

ſ	🗼 Vehicle Reader		×
	Vehicle Information:		
l	VIN:		
	Status:		
	L		
	Gather Info	Read	Close

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

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Vehicle Informati	on:			
Statue:				
Gather Info	,	Read	Cla	se

- 12. 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\_6.2L\_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.
- 13. 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.
- 14. 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.



- 15. 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.
- 16. 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.
- 17. Once the vehicle is flashed, turnkey off for 10 seconds (follow on screen instructions). The vehicle is now ready to start and operate.
- 18. 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 <a href="mailto:support@whipplesuperchargers.com">support@whipplesuperchargers.com</a>.

19. Vehicles that require Tire/Axle changes for speedometer correction. Open VCM Scanner program.



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

🕖 VCM Scanner - Offline: ,	
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Channels	무 Gauge
Name	Value
🔅 Engine RPM (SAE)	E.
🔀 Vehicle Speed (SAE)	E <sup>40</sup>
	=20
🔀 Engine Coolant Temp (SAE)	
💸 Intake Air Temp (SAE)	
💸 Mass Airflow (SAE)	
🔀 Intake Manifold Absolute Pressure (	30
🔀 Timing Advance (SAE)	

21. Select Tools the Green Icon, Special Functions.

🕖 VCM Scanner - Connected: 2020 Jeep, 3.6 L, 6 Cyl,	
Log File Vehicle Layout Tools Help	
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Channels	4 Gau
🖻 • 🛃   🏟	Vehicle Controls & Special Functions
Name	Value 🔨 🎍 🙇
් Engine RPM (SAE)	
C? Trans Shift Mode	16
Crans Current Gear	07
C? Trans Selected Gear	
📣 Injector Pulse Width Cyl 1	KAEMA
Vabiala Grand (CAE)	

22. Select Tools the Green Icon, Vehicle Controls & Special Functions. Select Speedometer tab, then select Gear/Tire Adjustment.



23. Enter your axle size and tire height, if no change, enter the original number. Once entered, follow on screen commands to complete the process. NOTE: Tire height is real world height, on the vehicle, not advertised height. Use a tape measure to measure from the ground to top of tire to get the actual height. Adjustments may be needed if speedo is off.

äear/Tire Adjus	stment			
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Y	four current tire height is 31.7(	) inches. Please enter you	ur new tire height (in ir	nches).
34	ОК	Ca	ncel	