HP TUNER RTD MANUAL

FORD VEHICLES

Before beginning installation, we encourage you to read this manual thoroughly before you begin any portion of the installation:

1. Making any changes to the calibration is strictly prohibited. Any change will void all warranties and will make the vehicle non-emissions legal.
2. **Whipple calibrations are for stock engines, changes such as long tubes, cold air intakes, cams and big throttle bodies are not supported.**
3. Having the latest OEM PCM and TCM calibration is highly recommended to eliminate potential OEM issues in calibration.
4. **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.**

Make sure you are connected to the internet for the first time you are reading one of the applications listed below. This is required to work with the Ford PCM's.
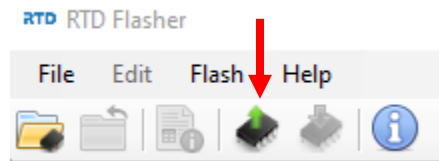
Go to the Whipple website **CAL REQUEST** to find the **RTD** software link or go to:
https://files.hptuners.com/rtd%20flasher/rtd%20flasher.msi. If you run into any issues installing the HP Tuner software, email **support@hptuners.com** for resolution.
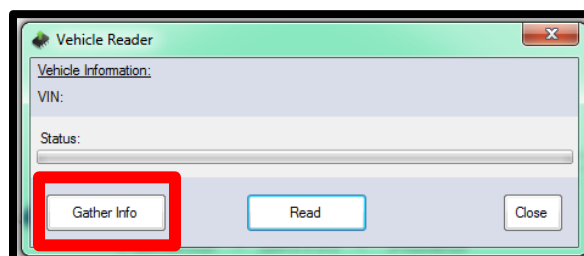
1. Connect RDT to OBD 2 port, under dash. Connect, turn key to engine run (do not start engine). Open RTD Flasher software.

2. Turn ignition to ON position, motor not running. Click the **green arrow** icon to **READ** the file in the PCM.
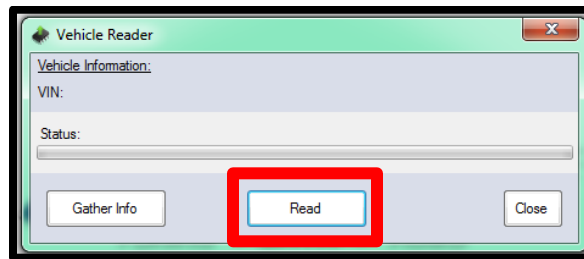

3. Click the "Gather Info" icon to populate the PCM data. If the data doesn't populate, use the drop-down menu at next step to select proper PCM and in some cases, TCM.
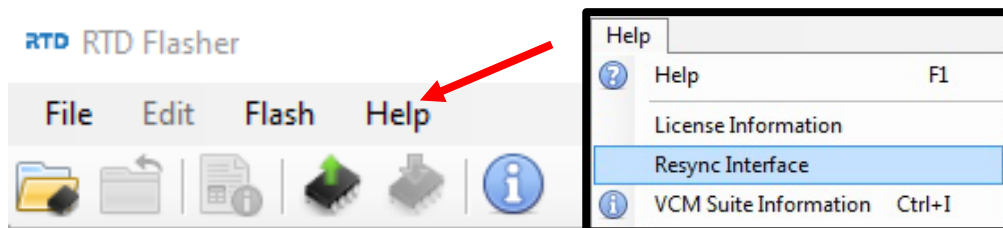
4. If gather info doesn't populate, use below list to select correct PCM/TCM.

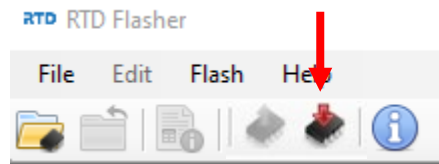| Vehicle	Model Year	Engine	Engine	TCM	PCM #	TCM #
Mustang	2011-2014	5.0L	READ	N/A	Copperhead 2048K	N/A
Mustang/F150	2015-2017	5.0L	READ	N/A	TC-1791	N/A
Mustang/F150	2018-2023/2018-2020	2.3L/5.0L	READ	N/A	TC-298	N/A
F150	2015-2016	2.7L/3.5L	READ	N/A	TC-1797	N/A
F150/Raptor	2017	2.7L/3.5L	READ	READ	TC-277	TC-277 B
F150/Raptor	2018-2020	2.7L/3.5L	READ	READ	TC-277	TC-277 D
Explorer	2020-2023	3.0L	READ	N/A	TC-298 B	N/A
Ranger	2019-2023	2.3L	READ	N/A	TC-298 B	N/A
Expedition	2018-2021	3.5L	READ	N/A	TC-298	N/A
Navigator	2018-2021	3.5L	READ	READ	TC-277	TC-277 D

5. 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:** Reads could take 20+ minutes.

6. Once 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_Mustang_2018_AT_5.0L_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.

7. Go to 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 installation. Each calibration is locked to the supplied RTD tool serial #. **NOTE: Whipple builds the files and locks them to the supplied tool. The files are not compatible with other tools.**

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

9.   Once calibration is supplied, save to your PC in the same location as the stock file. Open RTD Flasher. 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.

10.   Once the vehicle is flashed, follow the on-screen instructions for key off/on. The vehicle is now ready to start and operate.

11.   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 from support@whipplesuperchargers.com. To change tire/axle size, open VCM scanner, click the green "power icon" (vehicle controls and special functions) and use the on-screen menu to change. If nothing shows, it's not available for that vehicle.

12.   If tire/axle needs to be changed, using VCM Editor, go to Edit, then Tire/Axle Wizard. Make the changes required and follow the on-screen menu to update the PCM. If not available, email support@whipplesuperchargers.com and we can make this change to your file when available.

13.   **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.

14.   All HP Tuner files are locked and do not allow customer adjustment due to emission regulations.

15.   If your vehicle is not stock, Whipple will not make custom calibrations. Example, long tubes, high flow cats, different air intakes, grille and fascia mods, 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-VCM-Suite-FAQ