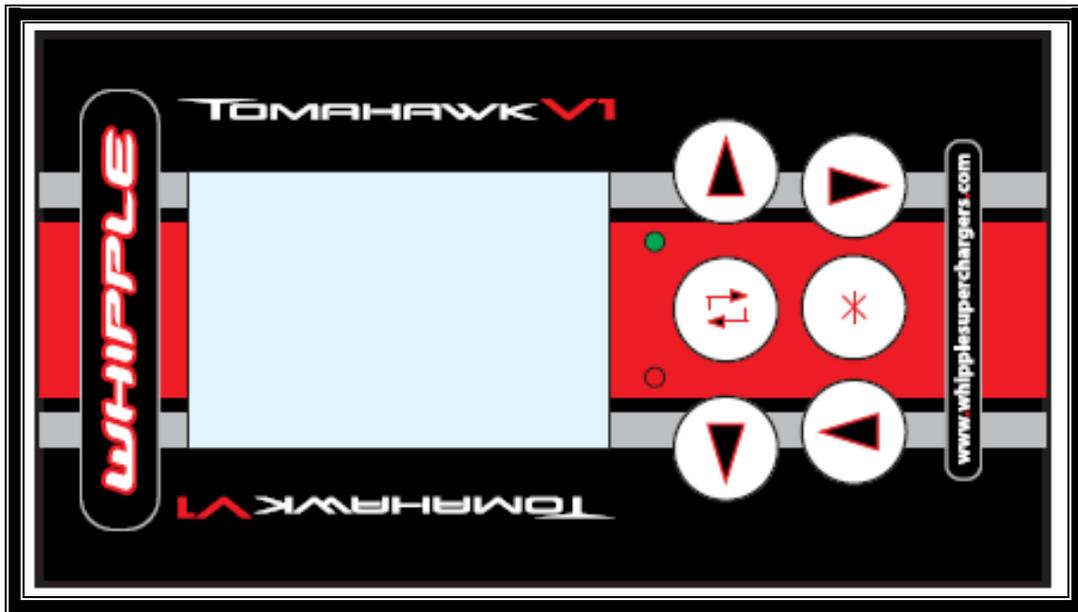# WHIPPLE TOMAHAWK INSTRUCTION MANUAL

2017 AND UP FORD F150/GT350
2018 AND UP FORD MUSTANG

# INTERNET ACCESS REQUIRED
SD MEMORY CARD READER REQUIRED

The Whipple calibration procedure is based off factory calibration files. If you have an aftermarket calibration, put the calibration back to STOCK. The TOMAHAWK will not upload and backup your file. Stock files are available upon request.

WHIPPLE SUPERCHARGERS
3292 NORTH WEBER AVE
FRESNO, CA 93722
TEL 559.442.1261
FAX 559.442.4153
www.whipplesuperchargers.com
A color PDF of this manual is available, email
tech@whipplesuperchargers.com *for a copy*
tuning@whipplesuperchargers.com *for calibrations*

PREMIUM FUEL ONLY (91 OCTANE OR BETTER ALWAYS) RON+MON/2
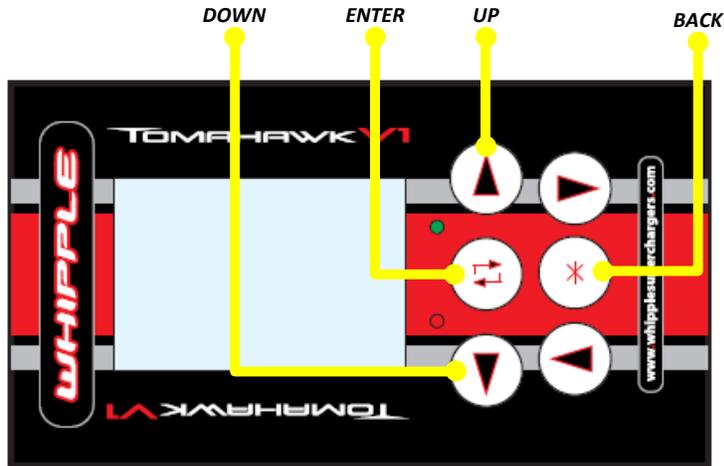
1. Connect the serial to OBD2 cable to the Tomahawk tool.

2. Connect the Tomahawk tool to the factory OBD2 port and turn the ignition to the **ON/RUN** position, engine not running (with foot OFF brake if push button).

3. Using the toggle buttons, select **Request Cal File**. Hit enter buttom. The tool will auto ping the factory PCM and create a TOMAHAWK.REQ file to the supplied SD card.

4. Remove the SD card from the Tomahawk tool by pressing it in until it springs out. Install the SD card in a memory card reader on your PC/Laptop and locate the REQ file.

5. Email tuning@whipplesuperchargers.com the TOMAHAWK.REQ file, along with the following information. Note: Typical response time is up to 24 hours from request time during normal business hours.

VIN NUMBER	MICROPROCESSOR SERAIL NUMBER	TOMAHAWK SERAIL NUMBER	VEHCILE TYPE	ENGINE SIZE	MODEL YEAR

SUPERCHARGED APPLICATIONS ADDITONAL DATA REQUIRED

STAGE 1 OR 2	THROTTLE BODY (STOCK, 132, 150)

6. Whipple Superchargers will email your calibration file which will be named **TOMAHAWK.BIN** and firmware file named **APP.LDR**. Save these files for future access. Drag/drop or save these files to the supplied SD card using a laptop/PC. ***Only 1 BIN and LDR file can be stored at a time. Never change the file names, this will cause a conflict with the tool.**

7. Connect the Tomahawk tool to the factory OBD2 port and click the push button one time (with foot OFF brake) or turn the key to the **run/accessory position**. The new firmware will install automatically when the tool is powered on.

8. With the ignition key set to the ON/RUN position, use the arrow options to select "**Programming**" tab and click the enter button. Follow the onscreen menu for flashing the vehicle. Once you're done flashing, cycle the key off for 5 seconds, then back on.

9. Once you're done flashing, cycle the key off for 5 seconds, then back on. Select the "**Diagnostic**" tab, read all the DTC (trouble codes). Erase all codes. Note: De-energizing relay code is common after flashing and will go off after a few driving cycles or if you hit clear DTC 5-6 times. The vehicle will run proper even if this code is on.

10. After flashing the PCM, a crank/profile relearn is required. If you get a random misfire code or hard starting issues, a crank relearn will need to be done. To perform a profile relearn, start the engine, leave the vehicle in **PARK**. Select the "**Diagnostics**" option. Scroll to the Profile Relearn and click enter. Follow the onscreen instructions. Note that the engine must be at normal operating temp (160deg F+) to perform this test. If you begin the test, but leave it unfinished, it will set a crank learn DTC as it erases the original data. Therefore, to run properly, this procedure needs to be finished to remove this DTC.

11. After flashing PCM, if the axle ratio and/or tire size is not stock. Turn the ignition key to the "**ON**" position (no foot on brake). Click the "**Diagnostic**" tab. Scroll to the **Tire/Axle Change** and hit **Enter**. Using the on-screen instructions and arrow keys, change the axle ratio to desired ratio (ex. 3.55, 3.73, etc). For tire size changes, tire size is the tire circumference in millimeters. Measure the rollout of the tire, to convert from inches to MM, multiply by 25.4. Example (97.48" x 25.4 = 2476mm). Another, less exact method, measure the height of the tire, multiply by 3.14 to get the circumference. Hit enter when done and follow the on-screen menu to complete the tire/axle changes. You may do the tire and axle at the same time, or just one.