VF TUNER

# Installation Guide

Version 1.3.0

Support: <u>Support@ovtune.zendesk.com</u>

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# **1.0. INTRODUCTION**

### **1.1.** Convention

VF tuner is a Toyota calibration tools developed by Ovtune. The software supports calibrations for the following Toyota models:

✓	Camry 2018	✓	Land Cruiser	✓	Tacoma
✓	GS200T	✓	Lexus ISF	✓	Tacoma 2.7L
✓	GSF	✓	NX200T 2015	✓	Tundra
✓	GX	✓	Prado	✓	Tundra 4.6
✓	IS200T 2015	✓	RC200T 2015	✓	Tundra 07-17
✓	IS350 2018	✓	RCF	✓	Tundra 2019
✓	Kluger Highlander	✓	Scion TC	✓	VellFire 3.5 2018+

This manual covers the installation and configuration for VF Tune software. The information in this manual supersedes any software installation information in the previous releases.

## **1.2.** Copyright and trademarks

This software is the property of OVTUNE LLC copyright 2019-2021

## 2.0. GETTING STARTED

## 2.1. Operating Systems

This software may be installed on Windows 7, Windows 8, Windows 10 systems. Any or all versions of the software may be installed on Windows 7, 8 or 10 systems including 32 bit and 64 bit Windows distributions.

## **3.0. INSTALLATION GUIDE**

## **3.1.** Installation from web

The software must be downloaded from our main website <u>https://vftuner.com/</u>.



Downloading the software from other sources is not advisable as those untrusted sources may contain malicious program that may harm your computer.

 Navigate to our website <u>https://vftuner.com/</u>, scroll to the centre of the page and click on the "<u>DOWNLOAD HERE</u>" link as shown below

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CUSTOMERSER	NCE - SUPPORTIROVTUNE ZENDESK.COM	
VF at write	۹ 🛍 🔳	
Produze « Resources » Forum Pro-Tuner De	aler Acasela Furure	
SOF	TWARE VERSION: 1.2.9.9	
	DOWNLOAD HERE	
	FFATURED PRODUCT	
ant -	vForest Tuner Software Bundle	
. A COL	\$ 349.00	

The software will be downloaded and saved into your computer download directory in .exe format.

i

Pronounced dot e-x-e, this is the standard extension for installation files on Windows computers

- 2. After download in complete, navigate to the downloads directory
- 3. Locate the .exe file named "vF+Tuner+Installer"

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	📄 Blank Dia	agram (3)		13/03/2021 1	3:07	JP
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	🛋 monlib_	conceptual (6)		12/03/2021 1	6:57	JP
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— New Volume (F:)	🛋 monlib_	conceptual (3)		12/03/2021 1	3:32	JP
	🔳 monlib_	conceptual (2)		12/03/2021 1	3:27	JP
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215 items 1 item selected 275 MB						

4. Double click on the installer to being the installation process



5. On the next popup window, click on the "I accept the agreement" and then the "Next" button.

Setup - vF Tuner version 1.2.9.9 -		×
License Agreement Please read the following important information before continuing.	61	R
Please read the following License Agreement. You must accept the terms of this agreement before continuing with the installation.		
OVTune LLC vF Tuning software	^	
License agreement Â This is a legal agreement between you, the "END USER", and OVTUNE IIC ("AUTHOR"). Use of this software (the "SOFTWARE") written by AUTHOR indicates your acceptance of these terms. Â 1. GRANT OF LICENSE. AUTHOR hereby grants you the right to use the SOFTWARE on a single computer. The SOFTWARE is considered in use on a computer when it is loaded into temporary memory or installed into permanent memory. Â 2. PROPRIETARY RIGHTS. The SOFTWARE is owned exclusively by AUTHOR, and this license does no transfer any ownership of the SOFTWARE to you. Â 3. NON PERMITTED USES. You may not translate, reverse program, disassemble, decompile or otherwise reverse engineer the SOFTWARE. You may not share any information related to tables.	~	
<ul> <li>I accept the agreement</li> <li>I do not accept the agreement</li> </ul>		
Next >	Cancel	

6. Read through the software license and then click "Next" button

Setup - vF Tuner version 1.2.9.9 —	×
Information Please read the following important information before continuing.	
When you are ready to continue with Setup, click Next.	
DVTune LLC vF Tuning software	^
License agreement Â This is a legal agreement between you, the "END USER", and OVTUNE IIC ("AUTHOR"). Use of this software (the "SOFTWARE") written by AUTHOR indicates your acceptance of these terms. Â 1. GRANT OF LICENSE. AUTHOR hereby grants you the right to use the SOFTWARE on a single computer. The SOFTWARE is considered in use on a computer when it is loaded into temporary memory or installed into permanent memory. Â 2. PROPRIETARY RIGHTS. The SOFTWARE is owned exclusively by AUTHOR, and this license does not transfer any ownership of the SOFTWARE to you. Â 3. NON PERMITTED USES. You may not translate, reverse program, disassemble, decompile or otherwise reverse engineer the SOFTWARE. You may not share any information related to tables, IDs, mapping, etc outside of other users of the software. 4. NO WARRANTY. THIS SOFTWARE IS LICENSED TO YOU "AS IS," AND WITHOUT ANY WARRANTY OF ANY KIND, WHETHER ORAL, WRITTEN, EXPRESS, IMPLIED OR STATUTORY, INCLUDING BUT NOT	~
< Back Next > C	Cancel

 On the next page, we recommend you to retain the current installation path (C:\Program Files (x86)\vF Tuner)

Setup - vF Tuner version 1.2.9.9	_		×
Select Destination Location Where should vF Tuner be installed?			ð
Setup will install vF Tuner into the following folder.			
To continue, click Next. If you would like to select a different folder, click Browse.			
C:\Program Files (x86)\vF Tuner	Br	rowse	
At least 293.9 MB of free disk space is required.			
< Back Nex	ct >	Ca	ncel

**8.** On the next page, select and check "Create a desktop shortcut" for quick access on your desktop. You can also leave the check box blank to skip creating a desktop shortcut

Setup - vF Tuner version 1.2.9.9	_		×
Select Additional Tasks Which additional tasks should be performed?			
Select the additional tasks you would like Setup to perform while installing vF Tune	r, then click Ne	xt.	
Additional shortcuts:			
Create a desktop shortcut			
< Back	Next >	Ca	ancel

9. Click on "Install" button

Please wait for a few seconds as the software is installed on your computer

10. Finish the installation by clicking on "Finish" button. This will automatically launch the VF tuner program



## 3.2. VF tuner Registration

1. After a successful installation, the software must be registered. Launching the program for the first time will prompt you to do so.



- 2. Click the "Ok" button to continue to the registration
- 3. On the next screen, if you are registering the program for the first time,
  - i. Make sure you are connected to the internet
  - ii. Have sure you have a valid email address

- iii. Make sure you have access to the email address in 3.(ii) above
- **4.** Fill in the email, your preferred password and a username. You will receive your Master Key information by email. We will send the information to the email you used to make the order. Please be sure to check your spam folder

<u>NOTE:</u> .
----------------

You CANNOT change the username or the password that you create.

You MUST use the same username and password if you want to install the software onto a different machine.

DO NOT FORGET YOUR USERNAME AND PASSWORD.

vF ECU calibrat	tion suite on-line registration		$\times$		
If this is your first time installation a new account will be automatically created for you based on the provided User Name and Password. Please remember the Password as it will be needed later to work with Credit Server (to request more credits, unlock BIN IDs, etc).					
Master key	(Serial key)				
EJ3R4-HT	EJ3R4-HT5KK-N0BW7-8QHY5-UKþ6				
Email		Password			
example@	Demail.com	vftuner			
User Name					
HP		Register Cancel			

5. Press "Register" button to complete the registration.

# 4.0. DRIVERS INSTALLATION

After installation, the next step is to install the program drivers. Make sure you have internet connection on your computer.

Drivers are software component that lets the operating system and a device communicate with each other.

4.1. Open the software by double clicking on the software shortcut icon "vF Tuner" on your computer desktop.



4.2. On the software menu, Click Help $\rightarrow$ Driver installer



When you press "Driver Installer" menu, a popup will show asking for permission to install the drivers. Press "Yes" to continue with the installation.



4.3. After 1 second, a software installation wizard pops up. The wizard will guide you through the installation of OpenPort 2.0 J2534 Drivers.



- 4.4. Click "Next" button
- 4.5. Go through the driver's license agreement and then Click on "I Agree" to continue

in 50 Weber Hey art ∎ Sitt is mitter mitte		
	CoperFord 7.5/2533 Drivers Strug     CoperFord 7.5/2533 Drivers     CoperFord 7.5/253 Drivers Drivers Drivers Drivers Drivers Drivers Drivers Drivers Dri	
Open files		

4.6. The next screen prompts you to choose the driver's installation directory.
PLEASE leave the installation path as is. i.e. C:\Program Files

(x86)\OpenECU\OpenPort 2.0

P Lager e definition		
	Operation 2.0.12314 Drivers Senae - II X     Operation Install Jaccation     Oncome the fidder in which to install OperPort 2.0.1253+ Drivers.	
	Settas will natial Caer/Fart 3.0.32014 Onverson for following fables. To install in a different fable , dick throas and setect another fables. Only fact to continue.	
	Destination Polite With Table 10 00 00 00 00 00 00 00 00 00 00 00 00	
	Spece required: 7.596 Spece conductor: 2.108 Address for an address of the st	
	< Deck Next > Canol	

4.7. On the next screen, Click on the "Install" button to initiate drivers installation process

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	Fin Edd Window Hulp		
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	CORTINUE		

4.8. After a few seconds, you will be promoted with a message "Would you like to install this device software?" Please select Install

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Per Lage	Preserved 12 (Clarificities Senal         Natiding         Preserved 12 (Clarificities Senal         Windows Senardy         X         Would yoou like to install this device software?         Marine Technic Inc.         Patienter Technic Inc.         Patienter Technic Inc.         Patienter Technic Inc.         Patient Technic In	

4.9. After a short while, the installation is complete. Click "Next" button

	- D ×
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	Operifient 2.012534 Drivers Setur.         Betav ons completel successfulle.         Completel         Despiration         Extent submit kines statut.         Distant submit kines statut.         Distant:         Distant:

4.10. Finish the installation by pressing "Finish" button



Now you are ready to connect to your vehicle.

## **5.0. PREPARE ECU**

The following steps require you to connect your vehicle to the laptop through the OBDII Port using a serial cable. You <u>MUST</u> also have internet connection on your laptop.



## 5.1. Licensing the Vehicle using OBDII Port

## **CAUTION!**



- ✓ Make sure your laptop has internet connection
- $\checkmark$  Make sure you are connected to the vehicle through the OBDII Port as

shown above.

5.0.1.1.Turn on the vehicle **BUT** do not start the engine

5.0.1.2.Open the VF tuner software

5.0.1.3. Click on the "Flash ECU" icon as shown bellow

Nora:			
	vi icu Reiw	×	
	Celorators Tile:		
	REMOLECT In Select Calibratian File	604.00C	
	<u> </u>		
	4		
	Communication program:	DRUGHET WOODSHOP	

## 5.0.1.4.On the popup, press "PREPARE ECU" button

This will gather the basic information about your vehicle as shown below.



The software will then ask you if you would like to license the vehicle (4 credits

are required)



## **CAUTION:**

PLEASE VERIFY THAT YOUR ECU ID IS SUPPORTED BEFORE ACCEPTING TO LICENSE THE VEHICLE. IF YOU LICENSE THE VEHICLE IT WILL COST 4 CREDITS. SO PLEASE ENSURE THAT YOUR VEHICLES ID IS SUPPORTED

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numerous allibration File:	internet access is require
Prepare ECO	
Select Calibration File	
Calibrativ EDM	
Sattery Voltage: 12.983	
D: 896630480300	
Connection to ECU is reliable	
Connection to ECU is reliable	
Connection to ECU is reliable	*
Connection to ECU is reliable	8

Stock data for al C:\Program Files	l vehicles is included in th s (x86)\vF Tuner	e vF Tuner installatior	n Folder	
	Manage vF Tuner			
File Home Share View Ap	oplication Tools			
← → ∽ ↑ 📙 > This PC > Local Dis	:k (C:) → Program Files (x86) → vF Tuner			
💻 This PC	^ Name	Date modified	Туре	Size
🧊 3D Objects	4Runnner 09+	16/03/2021 07:15	File folder	
Esktop	Camry 2018+	16/03/2021 07:14	File folder	
Documents	GS200T	16/03/2021 07:14	File folder	
👆 Downloads	GSF	16/03/2021 07:14	File folder	
Music	GX	16/03/2021 07:15	File folder	
Pictures	IS200T 2015+	16/03/2021 07:14	File folder	
Videor	IS350 2018+	16/03/2021 07:15	File folder	
Nideos	Kluger Highlander	16/03/2021 07:15	File folder	
Local Disk (C:)	Land Cruiser	16/03/2021 07:15	File folder	
DVD RW Drive (D:)	Lexus ISF	16/03/2021 07:15	File folder	
👝 New Volume (E:)	NX200T 2015+	16/03/2021 07:14	File folder	
👝 New Volume (F:)	Prado	16/03/2021 07:15	File folder	
🐂 Libraries	RC200T 2015+	16/03/2021 07:14	File folder	
-	RCF	16/03/2021 07-14	File folder	

## 5.1. Read ECU

# NOTICE:

SOME ECUS CAN BE READ THROUGH THE OBDII PORT. SOME CANNOT. IF THE SOFTWARE TELLS YOU THAT YOUR ECU CANNOT BE READ THROUGH THE OBDII PORT THAT DOES NOT NECESSARILY MEAN IT IS NOT SUPPORTED. PLEASE CHECK THE INSTALLATION FOLDER C/PROGRAM FILES X86 / VF TUNER / (CAR FOLDER) TO SEE IF YOUR CALIBRATION IS PROVIDED

If your ECU is new or not supported, please try to read the ECU AND THE TCU. If you can read them, please submit the files to <u>support@ovtune.zendesk.com</u> so we can build support for it

**5.2.** Licensing the Vehicle VIN Remotely

<u>CAUTION!</u> ONLY USE THIS METHOD IF YOU CANNOT CONNECT TO YOUR CAR!

This option is available if you're not near your vehicle. You MUST

- ✓ Have your vehicle VIN with you. YOU MUST MAKE SURE TO ENTER YOUR VIN CORRECTLY! NO TYPOS ,
- ✓ Have internet connection
  - 5.2.1.1. Open VF Tuner program
  - 5.2.1.2. On the menu, click "File"  $\rightarrow$  "Credit Vin.."



5.2.1.3. A popup will show asking you to enter the vehicle VIN. YOU MUST MAKE SURE TO ENTER YOUR VIN CORRECTLY! NO TYPOS. DOUBLE CHECK, IF

# THERE ARE TYPOS YOU WILL USE YOUR CREDITS AND WILL NOT BE ABLE TO FLASH.

Input the VIN in CAPS and press "OK" button (<u>NOTE:</u> Internet connection is require)

## 6.0. TUNE PACKS

Tune packs are a package (zip / rar / compressed folder) that includes multiple Tune options for an individual vehicle. The package contains multiple files that a user

- ✓ Can select from to start as a base calibration to edit further,
- $\checkmark$  Can use the calibration as-is.

If you purchased a Tune pack from our store, (<u>https://vftuner.com/collections/tune-packs</u>) you will need to email us your vehicles information to request your tune pack.

- 6.1. Make sure your vehicle is connected to your computer as show in Step 5.0. above
- 6.2.Open VF Tuner program
- 6.3.Press "Prepare ECU"

Prepare ECU	calibration File:	Internet access is require
Select Calibration File		
Calibrata EDM		
attery Voltage: 12.983	152	1
D: 896630480300		
Connection to ECU is re	liable	
onnection to ECU is re	liable	
onnection to ECU is re	liable	*
onnection to ECU is re	liable	5

6.4.Copy the information (calibration ID, VIN, etc.) and email that information with your order number to <a href="mailto:Support@ovtune.zendesk.com">Support@ovtune.zendesk.com</a>. We will email you a link to your tune

package as soon as possible once receiving your information. This may take 1-3 days depending upon how busy our support email is.

## 7.0. FLASHING YOUR ECM

After passing steps 1-6 without any error:

- 7.1. Open VF Tuner program
- 7.2. Click on the "Flash ECU" icon as shown below

VECO Radow Ka	ndera)		
VECU Redue N			
		vF.ECG Flades	×
		Califration File:	
		ABAG BELL	
		Select Calibration His	pecker.1011
			-
a			
Ceremanitation program: DMTEMOT ACCESS-HEQUIED		4. Generalization programs	partement scorest-imparent
		4-	

- 7.3. Press "Select Calibration File" button
- 7.4. Select the location of the (tune file) (.vft, .vfc file) as show below depending on your vehicle model

Logger					
definitions.	- PERFudur	O Open			×
		ALC: N A BUNC		of all waters as	02511
		F 4 - 4 - 1 - 1 - 10	formities (visit) > vir runer >	A D > 2002441	UPPER .
	Prepare ECU CW	Organize . New failer		1	
	Select Calibration File	Decision of the	a a a a a a a a a a a a a a a a a a a	This would be	
	Destrom R/W	Titure day	Land Course	16/02/021 07/15	File folder
	- Law Plant and the	· Vicinei	Leight SF	water of the second second	File folder
	-	- msrc r	N020012015-	16/03/2021 07:14	Rile folder
		- New Volume #	Preda	19001/0021-01115	File folder
		eðie	RC200T2015+	36/05/2021/07/14	Fieldste
		ing ing	RCF	16/03/3021 07:14	File folder
		Matrimonials	Scion tC	16/01/2021 07/15	File folder
		UPWORK:	Tacoma	16/03/3021 07/15	File falder
		In Particu	Tacorna 2.7L	\$600/2021.07/14	File fabbe
		Desetop	Turidite	16/00/0021.07/15	file fabber
		OneDrive	Tundte 4.8	16/03/2021 07:15	File felder
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	Programming progress:			wheel	Pares.
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	-				4.5
	2.1				
n fles					

7.5. Once you are ready to flash, and have selected the file. Press "calibrate ECM" button. <u>NOTE:</u> THIS PROCESS CANNOT BE INTERRUPTED.

If you get any ERRORS, please provide the ERROR CODE, Vehicle information (Make, Model, Year, Engine) to <u>Support@ovtune.zendesk.com</u>. Please include the Error ER code (Example ER3233)

## CAUTION!

- ✓ FLASHING ECM process cannot be interrupted.
- ✓ Ensure you have adequate battery voltage before trying to flash.
- ✓ Do not attempt to flash your ECU if your battery voltage is under 12.0 volts!
- ✓ Ensure you have a stable connection.
- ✓ Errors, interruptions, low battery voltage disconnects, etc. can brick your ECM!
- $\checkmark$  In some cases, you may have to send us the ECM for repair.

# <b># %</b> X & <b>%</b> 8 E D	
Logger definitions:	
	VF ECU Flasher X
	Internet access is required
	Prepare ECU Calibration File:
	Select Calibration File C:\Users\OVTUNE\Desktop\Pro Version\Tacoma 3.5 ROMs\Tacoma\2016 - 2017\89663 04B03 STOCK Calibration ID: 89663-04B03-
	Step 3 passed ECU is in diagnostic reprogramming mode Step 4 passed KEY sent Step 5 passed KEY sent 2nd time Step 5 passed Step 7 passed Step 10 passed Step 10 passed Step 11 passed Step 11 passed Step 12 passed Step 12 passed Step 12 passed
	Programming progress:

- 7.6. Once the process is complete, the VF Tuner program will prompt you "Flashing Complete"
- 7.7. Turn the vehicle OFF, and then ON and start it to confirm flashing is done successfully.

<u>NOTE:</u> Some Toyotas will start, and immediately die after the first start up after a flash. This is completely NORMAL. Simply start it again.

## 8.0. LICENSING ECU FOR EDITING

#### 8.1. Basic hot keys for editing

- **CRTL + F = Editing a value**
- CRTL + I = Interpolation of a selected area
- CRTL + C = Copy
- $\clubsuit \quad CRTL + P = Paste$
- \* "\*" (star) button on numpad = Multiply value by percent

#### NOTES:

 $\checkmark$  When multiplying a value, 100% = 1.0 multiplier (no change)

#### Back to the top

- ✓ 80 % = Value x 0.8
- ✓ 180 = Value x 1.8

### 8.2. VF Tuner program menu

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Contract, Contr	Col-O Ch+O Dol-P Ch+I Ch+I	*==)	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Сц Сэру Рале	inat Un-c Driet	]*=∞	Constant Constant	y a	Han Serie Serie	Assue Leane Internation . Divalisatio
RaceECU. ContRVNL Die										

#### 8.2.1. KEY MENU OPTIONS

i. Key Locked Menu

When this menu is selected as shown in fig 8.2.1 b, then you SAVE a file or EXPORT a file, that file is locked to your key, and nobody else can access it with VF Tuner program.

🕲 v	VF Tuner				💿 vF Tuner			
File	Edit Window	Help		File	Edit Window	Help		
2	Open	Ctrl+0	<b>是</b>	2	Open	Ctrl+0	一星	
	Download	Ctrl+D			Download	Ctrl+D		
2	Open CSV	Ctrl+P		<b>2</b>	Open CSV	Ctrl+P		
	Close				Close			
	Save Map	Ctrl+S			Save Map	Ctrl+S		
	Save File				Save File			
	Save All				Save All			
<u>h</u>	Export	Ctrl+X			Export	Ctrl+X		
	Key Locked	)		~	Key Locked			
<u> </u>	Flash ECU			~	Flash ECU			
	Credit VIN				Credit VIN			
_	Exit				Exit			

Fig 8.2.1 (a) showing Key Locked menu



ii. Credit VIN – License a VIN for flashing

## 8.3. **Basic Functions**

## 1. Opening your ECU file and licensing your ECU ID

## NOTES:

- When opening your ECU for the first time you will need to license access to the file. This will cost 4 credits.
- Please be sure you are licensing the file that MATCHES your ECU ID. If you license the wrong file, additional credits will not be provided to you.
- If you do not know your CALIBRATION ID, Click "prepare ECU" the "ID" has your calibration ID. Example 0304b0400 = 89663-**04B04** The last 5 digits matching
- The software will prompt you that you must use credits to license the file. This process
  only needs to be done one time, and you will have permanent access to that ECU version.
  You do not have to license additional files of the same ECU version.

Licensing an Upgrade or Modified ECM File

- Some files provided by vF Tuner are modified files for specific vehicle model years.
   These files are modified in order to work with your vehicle. Sometimes ECU unlocks are required, and other times ECU services may be required (sending your ECM to us).
- Certain models and ECUs have files modified from original code in order to work with your application.

It is important to know that when using vF Tuner with these files, once you flash the ECU it is <u>IMPOSSIBLE</u> to go back to 100% stock calibration configuration under normal circumstances this does not affect the usage of the vehicle.

Examples of some vehicles with modified ECM files are

- ✓ 2018-2019 Tundra 5.7L
- ✓ 2016-2017 Tacoma 2.7L
- ✓ certain model Lexus RCF and GSF vehicles,
- ✓ Etc.

Phase5 Gen2 ECUs are normally not affected by these modified ECM files.

i. Open VF Tuner program

Back to the top

ii. Click "File" then "Open" or press CRTL + O on the keyboard, or press the folder icon on the upper left corner of the program

Fin Edd Wandow Help T III Pal J In III III III Pall Lagger Neg defectors:	(equal to be a second s	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	
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	Cogaesa * Have holde cytten docs * Have default default default efte efte Fiels	Date         Date         Date           10/08/2019/10/02         File funder           10/08/2019/10/2010/02/44         File funder           00/09/2010/02/44         File funder           01/09/2010/2010/02/44         File funder           01/09/2010/2010/02/44         File funder           01/09/2010/2010/02/44         File funder	
Cpert Nec	File name	Plash files > Open Cancel	

iii. Browse the location of the file as shown below

iii. Select the file you wish to edit and click on the "Open" button located on the lower right side of the "Open" window above.



4 1 4	6. • [ 5. E 0 ]		
ation factors:	Copert	×	
	+ This PC > DATA (D) > Download	<ul> <li>♥</li> <li>♥</li> <li>Search Drawload</li> </ul>	
	Organize - New folder	<b>Ⅲ・□</b>	
	OneDrive     Marrie	Date modified Type Size	
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	5, OS (C)		
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	File name	w BIN files (*.bin) w	
		Open Cancei	
	1		
-			

 When you have selected and opened your file, you will be notified that doing so will consume some of your credits. Click on the "Yes" button to proceed opening that file and deduct the credits from your account.

- L ×
Ele Est Wedow Holp
##書稿(1) 10 10 10 10 10 10 10 10 10 10 10 10 10
Chern files:
inen a file

v. A confirmation of your request will be show on the next dialog. Click the "Ok" button to proceed.

## **CAUTION!**

VERIFY THAT THE CALIBRATION YOU ARE OPENING MATCHES YOUR VEHICLE! THIS PROCESS CANNOT BE UNDONE

EcuEdit			- E ×
Elle Edit Window Help	C(Program Files (486)/ecuEditIOC402.bin X Vitu are about to send the inquest to Credit Server to spend 4 realits and unick 15665.0C402: Whould you like to continue? Note: the operation cannot be unisore Tot Cancel		
● # ■ N N R N N N N N N N N N N N N N N N N			
Map definitions:			
· · · · · · · · · · · · · · · · · · ·			
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	OK Cancel		
Open Res:			
Open a file			

vi. There will be another confirmation that you now have access to that file. Click the "Ok" button to proceed



<b>—</b> п ×						- II ×
Fie Edit Window Help						
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Map demisions:						
		C:\Program Files (x861).e	cuEdit\0CA02.bin X	1		
		Congratulations! Now	you have access to '89663-OCA02-			
			OK			
~						
Open files:						
One of Ele						

vii. Your file will be loaded and another confirmation dialog will appear. Click the "Ok" button to finish loading the BIN file.

R EcuEdit			- II ×
Eile Edit Window Help			
Map detrusions:			
	EcuEdit BIN file '89663-0CA02-' loaded.	×	
		ĸ	
Open Res: Isses3-oc4025(0c402.6H)			
Open a file			

- 2. Requesting for more Credits
- 2.1. Go to <u>https://vftuner.com/collections/creditds</u> and PURCHASE the credits you want

**NOTE:** You must go to <u>https://vftuner.com/collections/creditds</u> before requesting the credits using the VF Tune programs

2.2. Open VF Tune program

2.3. Click on "Help" menu and then click on "License Information..." sub menu



2.4. Click on "Request more" button

	License Information Main info Debugging		×	
	Registration Information User Name: Rufael e-mail: test@test.com Master key: 0190H-006Q3-806C7-P4FKV-760A3 Credits Available credits: 1 Request more	Unlocked IDs 89663-0CA02-		
Hes: Collaz- (colonzae)		OK		

On this window, you can also view the unlocked IDs for your account, and how many credits you have.

2.5. On the next popup dialog, enter the credit amount you wish to spend. NOTE, this

process is not "instant" in all cases so do not send multiple requests

o definitions:		
	Lander Hermannen (1)	
	Registration Information User Hame: H# e mail: crampled small.com Naster key: E13R4-krTSKK-HOBW7-8 Credit: Xvslable credit: 5	
	OK	
	· · · · · · · · · · · · · · · · · · ·	

Back to the top



## **CAUTION!**

- Please be sure to request the same amount you purchased in order to expedite your credit purchase
- > Please do not request the same credits multiple times
- Please do not request credits if you have not made any purchases

2.6. Once your purchase and request for more credits is sent, you'll get a confirmation as pictured below. Click the "Ok" button to proceed.

ile Eat Window Help State definitions:				
	Scene Information Main Info Debugging		×	
	Registration Information User Name: Rafael	Unlocked IDs 89663-0CA02-		
	e-mail: test@test.com Master key: 0199H-026Q2-BIGCZ-	nase credits. X		
	Credits Available credits: 1 Request more			
	-	ОК		
Spen files: Refis dictarz. (pilukazz.en)				

2.7. Once we have added more credits to your account, you will get a notification like the one pictured below. You will also notice your available credits increase. Click the "Ok" button to proceed.
EcuEdit				-	пх
Ele Edit Window Help					
2 C = 1 × 2 2 5 5 5 5 5 5					
Map definitions:					
	r				
	License Information		× .		
	Main info Debugging				
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	User Name:	89663-0CA02-			
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	have 6 credits	o buy more credits has been satisfied. Now you			
	and a start and				
	Credits	OK			
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	6 Request more				
		OK			
×					
Open files:					
10000000000000000000000000000000000000					
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- 2.8.You can now open a new ECU ID again (check the above instructions on opening an ECU)
- 3. Checking credit balance
- 3.1. Open VF Tuner program
- 3.2. Click on "Help" menu and then "License Information..."

O of Taxes				- 13
File Toll Wirelow Help				
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	S Request more			
		OK		
101				
Open Rest				
110000				

#### 4. Credit usage

- ✓ Credits are used to unlock access the ECM/TCU Files (permanent access once licensed
- ✓ Credits are used / required to license a vehicles ECM for flashing

#### 9.0. EDITING – BASICS

#### 9.1. Navigating the User Interface / EDITING FILES

There are four (4) basic areas that are mainly referred while editing

- The Editing window
- The Map Definition window
- The Menu items
- The Shortcut items
- The Open File window



## 9.2. Adjusting the Map Definition Window Size

Hover your cursor in between the "Map Definition" window and the "Editing" windows until your cursor changes appearance. You can then click and drag your mouse to change the "Map Definition" window to your desired size.



#### Changed window size:



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# 9.3. Opening a Map/Table

Select on a map/table you want to edit



Double click that map and it will open the map/table in the "Editing" window



### 9.4. Navigating the Map Window

### 9.4.1. Minimizing the Map Window

Click on the minimize button



#### Results



### 9.4.2. Restoring a Minimized Map Window

Click on the maximize button on the now minimized screen



Results: The window is maximized to its original size



#### 9.4.3. Maximizing the Map Window

Click on the maximize button



Results: The screen stretches and fills in the editing window



Back to the top

## 9.4.4. Restoring a Maximized Map Window

Click on the minimize button



Results:



#### 9.4.5. Adjusting the Size of the Map Window

When you hover your cursor along an edge or corner of the map window, the cursor icon will change, and you click and drag your mouse to adjust the size accordingly.



### 9.4.6. Moving the Map Window

When you hover your cursor along the Title/Name of the map window, you can click and drag your mouse to move the window accordingly.



### 9.4.7. Panning 3D Maps (not possible with 1D and 2D maps)

When you hover your cursor over the 3D Map, your cursor will change its icon; you can then click and drag your mouse to pan the map accordingly



### 9.4.8. Opening Multiple Windows

You can open multiple windows by selecting other maps that are not yet open and follow the instructions on how to open a map above.



## 9.4.9. Cascading Multiple Windows

Click on the "Cascade" icon on the menu shortcut items



Results: Multiple open windows are placed on top of each other



### 9.4.10. Horizontal Tiling Multiple Windows

Click on the "Tile Horizontally" icon on the menu shortcuts



Results: Open windows are placed horizontally in the Edit Window



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## 9.4.11. Vertical Tiling Multiple Windows

Click on "Tile Vertically" icon on the menu shortcut



Results: Open windows are placed vertically in the edit window



### 9.4.12. Closing the Map Window

Click on the "Close" button



Results: The edit window is left blank



## 9.5. Editing values on a map / table

VF Tuner software can edit the values and the axis data of available tables and controls

#### Back to the top

#### 9.5.1. 3D Map

### 9.5.1.1. OPTION 1: Editing one cell at a time

- i. Select and double-click on a value/cell in the map you want to edit,
- ii. Type in your desired value.
- iii. Click the "Enter" key on your keyboard to finish editing
- iv. The value changes to the value you typed



### 9.5.1.2. OPTION 2: Editing multiple cells at once

You can select a cell, or highlight an area of cells, and press CTRL+F to edit the value:

	Engine Load           0         \$15479         183295         27.991         56.992         56.997         7           9         900         900         55         900.7         200.21         1933.5         200.21         503.5         200.21         7 <t< th=""><th></th></t<>	
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9.5.2. 2D Map

### 9.5.2.1. OPTION 1: Editing one cell at a time

- i. Select and double-click on a value/cell in the map you want to edit,
- ii. Type in your desired value.
- iii. Click the "Enter" key on your keyboard to finish editing.
- iv. The value changes to the value you typed



#### 9.5.2.2. OPTION 2: Editing multiple cells at once

You can select a cell, or highlight an area of cells, and press CTRL+F to edit the value:



#### 9.5.3. 1D Map

i. Click on the Text Box and type in your desired value.

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Ele Edit Window Help	
RE LARSEN	
Map definitions:	
S 2D maps	
(2) Map 2d16 Data serve	
2 Mess Arribox Sensor Scaling	1/2/9
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<ul> <li>3D maps</li> </ul>	
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Open files:	
99661-0CM51-(36CH6100.0h)	

## 9.6. Navigating the 2D and 3D Map Functions

i. Show/Hide Plot

Click on "Show/Hide Plot" icon on the map windows. This hides the 3D or 2D graph and only displays the data and not the graphs



ii. Show Map Information

Click on the "Show Map Information" icon 🔍. This shows a detailed explanation of the open

#### map



iii. Change Table Color Mode

Click on the "Change Table Color Mode" icon . The table color changes from coloured to just white and black



iv. Highlight Changed Values

Click on the "Highlight Changed Values" icon . This highlights all edited values in the map table.

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Elle Edit Window Help			
Available Calibration Tables:	The second s		The second se
- Low Knock lipition Timing During Direct Injection	Managed - Communities a period of period both a point and they		a (m. 1971)
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<ul> <li>Meimal Ignition Tening</li> </ul>	Engine Load		Modified - Fuel Commanded For Power E.
<ul> <li>Transent Ignition Timing Compensation for Valve Angle</li> </ul>	10 15 20 30 40 50 60 70 80 90 100		- 0 đ
<ul> <li>Transient Ignition Timing Compensation for Valve Angle 2.</li> </ul>			Engine Speed
<ul> <li>- Agnition Terring Temperature Adder</li> </ul>	8 800 B B A A A A AS 83 B B A		1200 2000 2000 3600 4400 5200 6000 6800
<ul> <li>Base Fuel Additive for Catalyst Protection Method 1.</li> </ul>	0 900 B B B B B5 85 85 85 B B B B		THE REPORT OF A DESCRIPTION OF A DESCRIP
<ul> <li>Sale Fuel Additive for Catalyst Protection Method 2.</li> </ul>	S 1000 8 8 85 10 10 95 85 85 8 8		
- Fuel Erodinient compensation - Adder high RPH	A 1000 M 10 10 10 10 10 10 10 10 10 10 10 10		Enrichment PE
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- Device Injection FIRE AVICLE (1947) CVL 5	4800 8 8 8 8 8 8 8 8 8 12 18 18	1	o 8
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Construction for both had Compensation Cold	Valve Angle		
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B-Cimensional Tables			
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- Model - Puel Commanded for Power Erectment			
Open Calbrations:			
HING'S STATE (RING'S STATE bit)			
	24		

### 9.7. Value Interpolation

Interpolation means to alter the values by inserting new values for example from another table/source.

- i. 2D Map and 3D Map
  - a. Select the values you want to interpolate

ToyotaCal		-	o ×
Bile Edit Window Help			
*			
Available Calibration Tables:	15		
Tri-Dimensional Tables	Base Ignition Timing @ 89663-53A01- (89663-53A01.bin)		
- Sase lightion Timing			
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<ul> <li>Low Knock Ignition Timing During Direct Injection</li> </ul>			
- High Knock Ignition Timing During Deect Reerbon	800 185 18.75 15.75 11 8.75 5.25 4.75 3.75 1.75 1.75		
<ul> <li>Minimal Synkton Tening</li> </ul>	G 1000 210 31 18.75 15.75 13 9.25 7 5.75 4.75 3.75 2.75		
<ul> <li>Transent Ignitum Timing Compensation for Valve Angle</li> </ul>	E 1200 21 215 18 16 25 135 10 8 8 8 8 8		
<ul> <li>Transent Ignition Timing Compensation for Valve Angle 2.</li> </ul>			
<ul> <li>Agrition Timing Temperature Adder</li> </ul>	u 1990 and 24 philiteleticsushikisisilaansitikaan		
<ul> <li>Size File Autometer Catalyst Protection Method 1</li> </ul>	2000 20 21 26 27 22 1926 1176 13 1125 25 1.25 7.25		
<ul> <li>She has addre to Catalyst Print the Wether 2.</li> <li>Build address of Catalyst Print the Address of Part</li> </ul>	2400 123 223 275 24 213 174 15 10 2025 825		
- Part Provident Compression in Cardia	2000 200 215 28.71 2528 22 18.25 15.75 18.75 1.25 8.75 8.75		
- Total Contract Contract Sector Per Contract	3200 415 30 303 273 343 3125 4939 47 45 125 115		
- Direct Interting Diel Pump Despace Tarnet	3600 202 40 37 38 39 31 8 38 39 39 38 38 38 38 38 38 38 38 38 38 38 38 38		
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- Dent Injectori Tu Port Injectori-Ruter			
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<ul> <li>Direct bijectori Sase Fin Ange.</li> </ul>	4400 413 413 34 33123 203 22 3033 203 24,75 13 11.25	2000	
<ul> <li>Direct Injection FIRE ANGLE LIMIT CVL 1</li> </ul>	4800 413 418 30,5 26,75 21 18,75 16 13,75 12,75 12 11.5	10 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
<ul> <li>Overt Injector FIRE ANKAE LIMIT CYL 3</li> </ul>	5200 413 415 30 26.75 233 19 17.5 15.75 34.5 13.75 33	Forma Speed	
<ul> <li>Depict Depiction FBRE Malage LIMIT CYL 3</li> </ul>	5600 10 10 28.5 26 23.5 18.5 17.25 16 14.75 14.25 13.25	-2	
<ul> <li>Denit Injection THE AGGLE LIMIT CYL 4</li> </ul>	6000 415 415 26 25 21 25 20 25 12 25 15 25 14 25 24 5 14 13 5	3000	
<ul> <li>Deept Injection FIRE AVGLE LIMIT CVL 5</li> </ul>	6400 10 10 10 10 10 10 10 10 17 10 17 10 17 10 16 16 16 16 16 16	00 00 00 00	
- Dent Bijecton FillE AMARE LIMIT CYL 6		7000 20 Honey Land	
<ul> <li>Donit Injection FIRE AVGLE LIMET CVL 7</li> </ul>	6800 10 10 17/3 23 22.25 19.5 17/3 18.5 19.5 19.5		
- Constantion for Acces Constant of	72011 Were addressed the weston 8.5.0.2 Jan, 2020		
Direct injection free wrige rule Companies on CV1			
Deart Diactor For Ande Fuel Concension Cv13	Spark Degree Advance		
- Depart intertion free Aside Fuel Companyation Cul #			
<ul> <li>Direct Injection free Angle Fuel Compensation CV15</li> </ul>			
- Direct Systems The Angle Tool Compensation Cyl 5			
<ul> <li>Direct Injection Fire Angle Fuel Compensation Cyl 7</li> </ul>			
Open Calbrations:			
(1966)-53A01- ((19663-53A01394)			
	8.		

b. Press CTRL + I on your keyboard to interpolate



## 9.8. Select All, Copy, Paste

### 9.8.1. Select All

To select all the values in the active map, simultaneously

i. Press the "Ctrl" button and the "A" button on your keyboard. All the values in the active map should be highlighted like this example:



#### 9.8.2. Copy

To copy selected values from the active map, simultaneously

i. Press the "Ctrl" button and the "C" button on your keyboard.

**Note:** There is no visual confirmation for this action, but you should be able to verify that you were able to copy the values once you "Paste" the values over to another map.

#### 9.8.3. Paste

The last "copied" values are pasted on to the selected active map. To do this, simultaneously

i. Press the "Ctrl" button and the "V" button on your keyboard. The values you copied should be applied to the selected active map. A sample will look like the example below.

Before:



#### After:



### 9.9. Map Compare

You can compare two (2) tune files at a time. If you have three (3) tune files open, you must close one of the three to activate the Map Compare function. You cannot compare unsaved tunes. If you see the "Save" button is colored before Map Comparing, you'll get an error. Save your work first before comparing tunes.

Click on the save Icon on the menu shortcut or press "File" then "Save File" menu

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To use the Map Compare function,

- i. Open two (2) tune files.
  - We recommend that you only compare tunes that have the same ECU ID (e.g. 04B04 vs 04B04, 04B80 vs 04B80, etc.)



ii. Next, hover your mouse over to one of the two maps and press on the "Right Click" button of your mouse. A pop-up window will open



- iii. Click "Compare Files"
- A confirmatory window will open asking if you want to proceed with comparing the two (2) tune files opened. Click on the "Yes" button if you want to proceed with the Map Compare. Click on the "No" button if you do not want to proceed with the Map Compare.



v. If the program detects a difference in the maps, the title of the maps that are different from each other will be highlighted. If the program does not detect a difference in the maps, the title of the maps that are similar will not be highlighted.



vi. Double clicking on one of the different maps will open the same map for both tune files and showing the differences between the two



## 9.10. Opening a CSV (Datalog) File

- i. Open VF Tuner
- ii. Click on "File" menu, and select "Open CSV..." sub menu

#### Back to the top

8	vF Tuner	
File	Edit Window	Help
<b>2</b>	Open	Ctrl+O
	Download	Ctrl+D
<b>2</b>	Open CSV	Ctrl+P
	Close	
P	Save Map	Ctrl+S
	Save File	
	Save All	
	Export	Ctrl+X
	Key Locked	
	Flash ECU	
	Credit VIN	
	Exit	

iii. A window will open that will let you find the CSV file (datalog) from the folder where it's saved

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iv. Select the CSV file (datalog) and click on "Open"

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v. You can select the "parameters" by clicking on the small box in front of the parameters you want to view



## 9.10.1. Configuring the Colors Datalog to Highlight Values

After opening the CSV file

i. Click on the "Configure Chart" icon (1)

#### Back to the top



ii. Select which parameters you want to change the color



iii. Set the conditions of the color



#### iv. Set the color



### **NOTES:**

✓ You can click the "+" (plus) button to add more highlighting of values. Click on the "-" (minus) sign to remove a condition.



### 9.10.2. Cutting Part of the Datalog

After Opening the CSV file

i. Click on the "Select range to cut" icon (1). The highlighted (in pink) (2) are the data that can be cut.



ii. You can use your mouse to select (click and drag from left to right) a specific area you want to cut (it will zoom in on that area).



iii. Click on the "Cut selection" to cut the selected range.


9.11.	Saving	Your	Work
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🗢 vF Tuner				
File	Edit Window	Help		
<b>2</b>	Open	Ctrl+O		
	Download	Ctrl+D		
<b>2</b>	Open CSV	Ctrl+P		
	Close			
P	Save Map	Ctrl+S		
	Save File			
	Save All			
-	Export	Ctrl+X		
	Key Locked			
	Flash ECU			
	Credit VIN			
	Exit	,		

a. Saving Map

This saves the changes in the current active map

- 1. Click File then "Save Map" menu
- b. Save File

This saves the changes in the current active file

- 1. Click on "File" then "Save File" menu
- c. Save All

This saves the changes in all the opened files

1. Click "File" then "Save All" menu

#### 9.12. Exporting a File

- i. Saves the file as your chosen file name using the guides <u>above</u>
- ii. Click on "File" menu and choose "Export" sub menu



iii. Select the folder you want to save it in, type in a file name that you like, and press on "Save"



iv. Your file will be saved on your chosen folder

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# **10.0.** Logging – Basics



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- i. Open VF Tuner program
- ii. Under menu shortcuts, Click on "Logger" tab



- iii. Click any item on the list –these are PID (Proportional Integral Derivative)
- iv. If no port error, A new window will open
- v. Click "Connect" button

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- vi. You can then click record to record the log
- vii. Click save record to save the recorded log



# NOTES:

When you click on "WOP RECORD" button, the system will record and save a 20 second long log for you automatically

## **11.0.** Troubleshooting – Errors

### NOTES:

✓ All errors should be reported to <u>Support@ovtune.zendesk.com</u>

### 11.1. Reporting an error

- i. Please be as specific as possible
- ii. Include screenshots, or "ER" codes / ERROR codes

### NOTES:

- $\checkmark$  If the error comes from the flasher include:
  - Your vehicles stock calibration ID (ECU ID)
  - ID of file you are trying to flash
  - Version of software you are using

#### 11.1.1. Errors on map bugs, maps not opening

If you find any bugs (map bugs, maps not opening, etc) please also report these as an ERROR.

- a. Include the ECU ID (your calibration 89663-xxxx)
- b. The name of the Map
- c. The version of software you are using.

#### 11.1.2. Errors Relating to Registering

i. Master key / email not recognized

Please ensure you are inputting the information correctly. **Do not type it**, just **COPY/ PASTE** 

ii. Master key installation count exceeded

You are allowed to register VF Tuner software (3) times before your installation count has hit the maximum.

If you get this error but have not registered 3 times, this usually means you are trying to register with incorrect information. Usually the username or the password might be wrong.

The **FIRST** time you register, you set your username and password. That will be your username and password permanently. You must always use those same credentials in the future

## **GLOSSARY**

- BIN file  $\rightarrow$  BIN files are the compressed binary files that are used for varied purposes by many computer applications.
- Calibration  $\rightarrow$  the process of configuring an instrument to provide a result for a sample within an acceptable range
- ECU  $\rightarrow$  Engine Control Unit
- ECM →Engine Control Module
- OBD-II port → is an on-board computer that monitors emissions, mileage, speed, and other data about your car. It's connected to the Check Engine light, which illuminates when the computer detects a problem. The OBD-II on-board computer features a 16-pin port located under the driver's side dash
- PID  $\rightarrow$  Proportional Integral Derivative
- TCU  $\rightarrow$  Transmission Control Unit
- VIN  $\rightarrow$  Vehicle Identification Number