

89-89-99-065 Rev.P

NOTES

*It is the responsibility of the customers/installer to make sure the vehicle is on the latest stock calibration from Toyota.

A laptop computer running Windows 7, 8 or 10 with an Internet connection is required.

Go to MagnusonSuperchargers.com

- Identify the VF Tuner flash tool that you have. The two types this manual deals with are shown here. Each tool has its own software link that will be described in the next step.
- 2. Go to <u>https://www.</u> <u>magnusonsuperchargers.</u> <u>com/</u> and click on the "Support" tab at the top of the page. Please download the correct link for the tool you have in the kit.
- Once you have downloaded the correct version of software for the device you have you will Click on "Run".





- 0 0 Pante	arter with addings		0.0

 If you get a "Windows protected your PC" message, click on more info.



5. Click on "Run Anyway".



6. Select "I accept the agreement" then click "Next".



7. Click on "Next".

lease read the following important information before continuing.	¢
when you are ready to continue with Setup, click Next.	
6. You may not claim any feature developed by vF Tuner as a feature provided by your company, ather this feature is provided by vF Tuner to you, the customer.	^
7. Additional, custom features may be provided through exclusive and unique calibration IDs, which nust be unlocked through the purchase of credits. The customer does not automatically obtain the ight to use any feature, the customer must purchase license credits to use features when pplicable.	
Ipdate: 1.0.08:	
Table sizing, structure	
tables for lexus RC-F ECM, TCU	
Controls for Hashing - Hash Capability	
other fixes	
Ipdate: 1.0.09	
Table structure fix - Cylinder AFR correction 12, 34, 56	
Tables Release : Rev limits, Dash Control, Oil Control limits, ECT Limits	
Feature Release - Irst Gear lock out files / Burn Out Mode	
Other minor fixes	~

8. Click on "Next".

9. Select "Create a desktop shortcut. Click on "Next".

10. Click on "Finish".



11. The following instructions starting on the next page will have specific steps for the device you have. Before each step it will indicate if the step is for the "WiFlash device" or "Legacy Flash device". Steps without any device identifier need to be followed for either device.

Driver install: WiFlash device ONLY

12. Find the installation folder of your VF Tuner. Look for the "Driver" installer and double click on it to run the driver installer. NOTE: Microsoft may delete the driver and you will need to go to our website and download the wi-flash drivers.

WiFlash device ONLY 13. Click yes.



14. Click "Next" and follow the steps.







WiFlash device ONLY 15. Click "Finish"



Driver install: Legacy flash device ONLY

16. Find the installation folder of your VF Tuner. Look for the "Driver" installer and double click on it to run the driver installer.



Legacy flash device ONLY

17. Click "Yes".



Legacy flash device ONLY

18. Click "Next"



Legacy flash device ONLY

19. Click "I agree".

🗑 OpenPort 2.0 J2534 Drivers Setup				×
License Agreement				
Please review the license terms before insta	lling OpenPort 2.0	J2534 Drivers.		
Press Page Down to see the rest of the agr	eement.			
Copyright © 2004-2016 Tactrix Inc.				
This software is provided "as +d", without an reads and modifies code and data for engin software or errors within the software itsel vehicle's ECU ron-operational. Many ECUs times before the flash memory is no longer ECU's software will most likely void your dri violate emission control regulations in some contributors be held lable for any damages	y express or implie the computers (ECU) f can cause engine can only be reflash functional. Addition vetrain warranty fr regions. In no eve arising from the us	d warranty. This e c). Improper use of damage and/or n ed a limited numb hally, modification om the manufactur nt will Tactrix or of e of this software	software of this ender the er of of your urer and other e.	-
I				
If you accept the terms of the agreement, o agreement to install OpenPort 2.0 J2534 Dri Nullsoft Install System v3.0rc1	dick I Agree to con ivers.	tinue. You must a	ccept the	
	< Back	I Agree	Cano	el

20. Click "Next".

Destination Folder C:\Program Files (x86)\OpenECU\OpenPort 2.0 Browse... Space required: 7.5M8 Space available: 1403.2G8 Nullsoft Instal System v3.0rc1 <Back Next >

Choose a Start Menu folder for the OpenPort 2.0 J2534 Drivers shortcuts.

Select the Start Menu folder in which you would like to create the program's shortcuts. You can also enter a name to create a new folder.

Choose the folder in which to install OpenPort 2.0 J2534 Drivers.

Setup will install OpenPort 2.0 J2534 Drivers in the following folder. To install in a different folder, click Browse and select another folder. Click Next to continue.

Cancel

 (\mathbf{J})

OpenPort 2.0 J2534 Drivers Setup

OpenPort 2.0 J2534 Drivers Setup Choose Start Menu Folder

OpenPort 2.0 J2534 Drivers

ninistrative Tools

7-Zip Accessibility Accessories

Choose Install Location

Legacy flash device ONLY

21. Click "install".

Legacy flash device ONLY

22. Let the install finish and then click "Next".



Legacy flash device ONLY

23. Click "Finish".



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



25. An error window will appear. Please select the code and right click copy. This code will be pasted into a form.



*It is the responsibility of the customers/installer to make sure the vehicle is on the latest stock calibration from Toyota.

A laptop computer running Windows 7, 8 or 10 with an Internet connection is required.

Go to MagnusonSuperchargers.com

26a. For Tacoma: Under Superchargers
→ Toyota → Tacoma
→ Toyota Tacoma
2GR-FKS 3.5L V6
Superchargers System
→ Manuals, Documents and Calibration. Click on
"Toyota Tacoma 3.5L
Calibration File Form 1".



26b. For Tundra:

Under Superchargers \rightarrow Toyota \rightarrow Tundra \rightarrow 2019 Toyota Tundra 3UR-FE 5.7L V8 Superchargers System \rightarrow Manuals, Documents and Calibration. Click on "Toyota Tundra 2019+ Calibration File Form 1".

- 26c. For 4Runner: Under Superchargers
 → Toyota → 4Runner → TVS1320 4Runner 4.0L
 Supercharger System
 → Manuals, Documents and Calibration. Click on
 "Toyota 4Runner 4.0L
 Calibration File Form 1".
- 27. Fill out the Calibration File Form 1. Please use accurate information in order to get a faster response. Tool will be licensed within 24 hours (Monday-Friday excluding holidays). Paste the code in the box that asks for the tool serial number. NOTE: We will email you back when the tool is registered.
- 28. Connect your vehicle's battery to a battery charger to ensure that you have at least 12V at all times while following these instructions.









29. Gather the supplied VF Tuner flash device.



Identify the ECU

30. The following steps require you to connect your vehicle to a laptop through the OBDII Port using the flash device. You **MUST** also have internet connection on your laptop.



Legacy flash device ONLY

31. If you have the Legacy device, click on the "File" menu, and select "Flash ECU – Legacy Flasher".

(Continue on Next Page)

Divi faite (18)					(0.0)
a at make May Can	on Century Disprovio				
Cam.	ten big i ala	a			Taxa and
(number)	(96-5)				
Der Ch.	100.0				
(Daw					
t lastin					
April Charling					
See (8)					
1000					
and the second s					
Laparente Call					
Long Long Th					
Restanted .					
and and a second					
The lot have been					
THE CO. DRIVE WAR					
for the second s					
1100.000					
, ter					

- 32. Turn on your car's ignition. Make sure that:
- a. All your electrical loads (like air conditioning, headlights, indoor lights, radio, etc) are completely off (or as much as you can turn off)
- b. Your ignition must be on, but your engine is OFF/NOT idling.
- c. Place your car keys as near as you can to the start/stop button.
- d. Make sure you have at least 12V of power from your battery and can maintain that voltage for the duration of the flash.
- e. Check the connections of your WiFlash/Legacy device to the laptop and to the OBD2 port.
- f. Do not move the laptop or the WiFlash/Legacy device to prevent connection loss.
- g. Wait 15-20 seconds before proceeding to the next step.

Legacy flash device ONLY

"Prepare 33. Click on ECM" the ID number is your calibration ID. Do not license the vehicle at this point Calibration ID should vet. look something like ex: 8966304B3100

FECU Programming U	ilty			3
Darray D'M	-	Coloraton File:		
Select Calibration File	Celtons TOI			
See and the second second				
Read PS EOM	Reset EON	Geni Force Flech		
Read PS TCM	Clear TCU	Gen2 Force Flash		
Rend VOS ECH	Clear (ITC	Gen2 TON Force Flash		
Reed UES TOM	Read DTC			
Upate ECM/TON Cal	bratos		Ū.	
			v	
Read ECU BKI	fixed ECU 38	Raad ECU 1.6T		
Read (CJ N2		Read RCI/1.3T		
			8	

WiFlash device ONLY

34. Click on the WiFlash Icon.

er DE mingernetter	Constant and we can be a set of the set of t	and the second

WiFlash device ONLY

35. The WiFlash Vehicle Programming Utility window will pop up. Make sure that the "Log Connection to File" is **NOT checked**. Verify that there is a text on the "Device" dropdown. > if the dropdown is empty, then the WiFlash device cannot be detected.

0,0 Williash Volsi	le Programming Utility			- ex
Prepare ECU		Calibration File	Calibration File	
		-		
		Flash ECU	VF Tuner WiFlash Programming Utility. Please Select your vehicle from the drop down menu before beginning 0 Do Not attempt to flash your vehicle if you have low battery voltage.	
		Read ECU		- 84
	Ghetto lest 1			- 11
	INTERNET ACCESS 15 REQUIRED	TO FLASH A VEHICLE		- 8
Rescan Ports	COM4 - VF Tuner WiFlash USB	-		
✓ Log Connecti Connection:	on to File	Flash Progress:		

WiFlash device ONLY

36. Click on the dropdown menu and select the Toyota Gen 2 1.5/2.0MB.

WFlash Vehicle Programming Utility			
Prepare ECU	Celibration File	Calibration File	
Masda Skysch/ Denso (2014-2018) Masda Skysch/ Denso (2014-2018) Subaru BRZ GR86 2.4L Gen 2 Toyota Gen 3 124/736X/992K Toyota Gen 3 124/736X/992K Toyota Gen 3 15/2/104B		VF Tuner Wiflash Programming Utility. Please Select your vehicle from the drop down menu before beginning [Do Not attempt to fligh your vehicle if you have low battery voltage.	
Acton Martin Visteon - 43 / 47 Acton Martin Sosch - V12 Dual ECU Acton Martin Visteon - V12 Dual ECU Hescan Rotts CUMA - VF Tunker WFISCH USB ✓ Log Connection to File Connection	Flash Progress:		

WiFlash device ONLY

- 37. Turn on your car's ignition. Make sure that:
- a. All your electrical loads (like air conditioning, headlights, indoor lights, radio, etc) are completely off (or as much as you can turn off)
- b. Your ignition must be on, but your engine is OFF/NOT idling.
- c. Place your car keys as near as you can to the start/stop button.
- d. Make sure you have at least 12V of power from your battery and can maintain that voltage for the duration of the flash.
- e. Check the connections of your WiFlash/Legacy device to the laptop and to the OBD2 port.
- f. Do not move the laptop or the WiFlash/Legacy device to prevent connection loss.
- g. Wait 15-20 seconds before proceeding to the next step.

WiFlash device ONLY

38. Click the "Prepare ECU" button. A small window will pop-up, please click "Ok".



WiFlash device ONLY

39. Locate your ID number that is number required for form2. Example: 8966304C2100.

Both Devices need to follow the instructions below.

Go to back to MagnusonSuperchargers.com

40a. For Tacoma: Under Superchargers → Toyota → Tacoma → Toyota Tacoma 2GR-FKS 3.5L V6 Superchargers System → Manuals, Documents and Calibration. Click on "Toyota Tacoma 3.5L Calibration File Form 2".

40b. For Tundra:

Under Superchargers \rightarrow Toyota \rightarrow Tundra \rightarrow 2019 Toyota Tundra 3UR-FE 5.7L V8 Superchargers System \rightarrow Manuals, Documents and Calibration. Click on **"Toyota Tundra 2019+** Calibration File Form 2".







- 40c. For 4Runner: Under Superchargers
 → Toyota → 4Runner → TVS1320 4Runner 4.0L Supercharger System
 → Manuals, Documents and Calibration. Click on
 "Toyota 4Runner 4.0L Calibration File Form 2".
- 41. Fill out the Calibration File Form 2. Please use accurate information in order to get a faster response.*Magnuson Superchargers will send back a calibration file within 24 hours (Monday-Friday excluding holidays).





Magnuson Superchargers will send you an email that contains the calibration file. Please save the file in a location you can find.

Legacy flash device ONLY

42. If you have the Legacy device, click on the "File" menu, and select "Flash ECU – Legacy Flasher".



- 43. Turn on your car's ignition. Make sure that:
- a. All your electrical loads (like air conditioning, headlights, indoor lights, radio, etc) are completely off (or as much as you can turn off)
- b. Your ignition must be on, but your engine is OFF/NOT idling.
- c. Place your car keys as near as you can to the start/stop button.
- d. Make sure you have at least 12V of power from your battery and can maintain that voltage for the duration of the flash.
- e. Check the connections of your WiFlash/Legacy device to the laptop and to the OBD2 port.
- f. Do not move the laptop or the WiFlash/Legacy device to prevent connection loss.
- g. Wait 15-20 seconds before proceeding to the next step.

Legacy flash device ONLY

a hattanı ahannan
a battery charger
connected. Click on
"Prepare ECM" Follow on
screen prompts.

Propere ECM Select Calibration File	Celbrate TOH Reset EON	Calibration Place	
	Reset EON	Card Dava Dava	
Read PS EOM R		Veril Purce mean	
Read PS TCM	Clear TCU	Gen2 Force Flash	
Rent VOS ECH	Clear (ITC	Gen2 TON Force Resh	
Reed UDS TON	Reed DTC		
Upode ECNITON Calibosco	04		
Nead ECU BA	Read ECU 38	Read ECU 1.67	
Read (ICU (Ik)		Read (CU 1.37	
			(
ton munication progress:			BITEMET ACCESS IS INQUIRED TO PLASH AT

Legacy flash device ONLY

45. Follow the prompt on screen and click "Select Calibration File".

		Addresing The	
Prepare EON	Calino ID	California:	
Select Calibrator He	-		
Read PS EON	Reset ECH	Genti Rocce Rado	
Read PS TCM	Ceer TCU	Gen2 Force Flash	
Read LOS ECH	Clear STC	Gen3 TOM Force Fleith	
Read LOS TOM	Read DTC		
Juprada ECIVITON Ca	ibretien	v	
Band C/D BH	Aut (COL)	V Institution	
NEW CAP MA	ACT CAL	New Port Lat	
Read ECU BA2		Rend ECU 1.3T	
		6	
			NUMBER ACCESS IN DESCRIPTION OF A REAL AND

46. Click on calibrate ECM and follow the prompts on the screen. Progress bar will be completely green when it is complete.



WiFlash device ONLY

47. Click on the WiFlash Icon.



WiFlash device ONLY

48. The WiFlash Vehicle Pramming Utility window will pop up. Make sure that the "Log Connection to File" is **NOT checked.** Verify that there is a text on the "Device" dropdown. > if the dropdown is empty, then the WiFlash device cannot be detected.

0,0 WiFlash Vahi	le Programming Utility		000
Prepare ECU		Calibration File	Calibration File
		-	
		Flash ECU	VF Tuner WiFlash Programming Utility. Please Select your vehicle from the drop down menu before beginning D A Do Not attempt to flack your vehicle if you have low battery voltage.
		Read ECU	
	Ghetto llest 1		
	INTERNET ACCESS 15 REQUIRED	TO FLASH A VEHICLE	
Rescan Ports	COM4 - VF Tuner WiFlash USB	•	
✓ Log Connecti Connection:	on to File	Flash Progress:	

WiFlash device ONLY 49. Click on the dropdown menu and select the Toyota Gen 2 1.5/2.0MB .



WiFlash device ONLY

50. Turn on your car's ignition. Make sure that:

- a. All your electrical loads (like air conditioning, headlights, indoor lights, radio, etc) are completely off (or as much as you can turn off)
- b. Your ignition must be on, but your engine is OFF/NOT idling.
- c. Place your car keys as near as you can to the start/stop button.
- d. Make sure you have at least 12V of power from your battery and can maintain that voltage for the duration of the flash.
- e. Check the connections of your WiFlash/Legacy device to the laptop and to the OBD2 port.
- f. Do not move the laptop or the WiFlash/Legacy device to prevent connection loss.
- g. Wait 15-20 seconds before proceeding to the next step.

WiFlash device ONLY

51. Click the "Prepare ECU" button."



WiFlash device ONLY 52.Click on calibration file. Select the file that was sent to you.

β∮ WiFlash Vehi	de Programming Utility	008	
Prepare ECU Calibration File		Calibration File	Calbration File
Subaru BRZ GR86 2.4L Gen 2		•	
		Flash ECU	WFlash Adapter Serial VFT9552118406
8		Read ECU	ID: ZF2I,100M00G FCM Part Number
	Ghetto Test 1		Drivetrain:
INTERNET ACCESS IS REQUIRED TO FLASH A VEHICLE			Connection to ECU is reliable, DO NOT ATTEMPT TO FLASH YOUR VEHICLE IF BATTERY VOLTAGE IS UNDER 12.0
Rescan Ports	COM4 - VF Tuner WiFlash US8	•	1013
✓ Log Connection to File Flash Progress		Flash Progress.	

WiFlash device ONLY 53. Click on Flash ECU. Follow the onscreen prompts.



NOTES

If you have any troubles with this process contact our technical support at support@magnusonsuperchargers.com or call 1-805-642-8833 (Press Option 3).





1990 Knoll Drive, Building A Ventura, CA, 93003 www.magnusonsuperchargers.com 1.805.642.8833