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WHAT YOU'LL NEED

1) Laptop with VF Tuner

- 2) WiFlash Device or Legacy Device connected to the laptop
- 3) Internet connection
- 4) The vehicle whose ECU ID you need to identify and its car key(s)

ECU ID IDENTIFICATION MANUAL

PROCEDURES

1) Connect the following together:

- a) WiFlash/Legacy Device to the cable
- b) The cable to the USB port on your laptop*
- c) The WiFlash/Legacy Device to the vehicle's OBD2 port**

*In step 1-B), you should see the WiFlash/Legacy device light up. If none, check your connections carefully, and/or try other USB ports on your laptop.

**In step 1-C), if you want to test if the car is giving power to the WiFlash/Legacy device, you can disconnect the cable that attaches it to the laptop. If the light stays on, then there's 12V power coming from the car to power the WiFlash/Legacy device. Make sure to reconnect the cable after testing.

VF TUNER

2) Run/Open VF Tuner. Right click on the VF Tuner icon and click on "Run as administrator"



If your VF Tuner is on the taskbar:

your vi runeri				
C ₽ >	This PC > OS (C:) >	Program Files (x86) > VF Tun	er >
	💶 Open	Enter		
Û Ū	🖄 Share		w ~ •••	
Name	🕞 Run as administrator			Date modified
Guides an	🔗 Pin to Start			12/1/2023 8:21 /
Supporte	Add to Equarities			12/1/2023 8:21 #
BinDefs.ei				12/1/2023 6:28 A
👸 Driver	Compress to ZIP file			2/22/2021 7:50 A
DTCdefs.e	Conv as nath	Ctrl+Shift+C		12/1/2023 6:28 A
ecuedit_ic		Curronnere		3/12/2020 10:01
sp32.dll	ア Properties	Alt+Enter		11/3/2023 11:11
License ac				1/31/2023 8:20 P
Logger.er	👯 WinRAR	>		12/1/2023 6:28 A
unins000.				12/1/2023 8:21 A
💓 unins000	Show more options			12/1/2023 8:20 #
№ F vF Tuner				12/1/2023 6:32 A
(P) Wif				7/23/2023 5:31 P

If your VF Tuner is on the installation folder.

If your VF Tuner is on the desktop:



If your VF Tuner is on the start menu programs:

NE

,			
Q Sea	rch for apps, settings, and docum	nents	
All ap	ps		< Back
>_	Terminal		
6	Thunderbolt™ Control Center		
\bigcirc	Ti ps System		
U			
6	Uninstall OpenPort 2.0 J2534 Driver	S	
V			
NF	VF Tuner		
	Sin to Start Viber		
~	More >	🔆 Unpin from taskbar	
	Viber(Comp 🔟 Uninstall	🕞 Run as administrator	
	Video Editor	Open file location	
	Visual Studio 2022		~
*	Visual Studio 2022		
N	Visual Studio Installer		

3-A) If you have the WiFlash device, click on the WiFlash Icon. From here on out, please follow the -A instructions.

G if Tuner PRO	_@×
File Edit Window Help Custom Options Diagnostics	
E A R C R C Cick on this WiFlasher Icon	serial:
Maps DTC 080 Logger Log Viewer	
WElader	

4-A) The WiFlash Vehicle Programming Utility window will pop up.

Make sure that the "Log Connection to File" is checked. > this saves a log file on the VF Tuner install folder, which we may ask you to send if there are concerns that arises.

And that there is a text on the "Device" dropdown. > if the dropdown is empty, then the WiFlash device cannot be detected

(4) WiFlash Vehicle Program	nming Utility	
Prepare ECU	Calibration	Calibration File
	Flash EC	VF Tuner WiFlash Programming Utility. Please Select your vehicle from the drop down menu before beginning. Do Not attempt to flash your vehicle if you have low battery voltage.
	Read EC	
G	hetto Test 1	
INT	ERNET ACCESS IS REQUIRED TO FLASH A VEHI	E
Rescan Ports COM4 -	VF Tuner WiFlash USB	•
Log Connection to File Connection:	Flash Pro	ess:

5-A) Click on the dropdown menu and select the appropriate template for your vehicle.

(ip) WiFlash Vehicle Programming Utility			
Prepare ECU	Calibration File	Calibration File	
	•		
Mazda Skyactiv Denso (2014-2018) Mazda Skyactiv Mitsu (2014-2018) Subaru BRZ GR86 2.4I. Gen 2 Toyota Gen 1 512K/736K/992K Toyota Gen 2 1.5/2.0MB Aston Martin Visteon - 4.3 / 4.7 Aston Martin Bosch - V12 Dual ECU Aston Martin Visteon - V12 Dual ECU Rescan Ports COM4 - VF Tuner Wirlash USB	• • •	VF Tuner WiFlash Programming Utility. Please Select your vehicle from the drop down menu before beginning. Do Not attempt to flash your vehicle if you have low battery voltage.	
✓ Log Connection to File Connection:	Flash Progress:		•

Mazda Skyactiv Denso (2014-2018) Mazda Skyactiv Mitsu (2014-2018) > For 2014-2018 Mazda vehicles, except MX-5

> You can choose either

Subaru BRZ GR86 2.4L Gen 2 > For 2022+ BRZ/GR86 FA24 vehicles

Toyota Gen 1 512K/736K/992K Toyota Gen 2 1.5/2.0MB > For Toyota/Lexus/Scion vehicles > You can choose either

Aston Martin Visteon - 4.3 / 4.7 Aston Martin Bosch - V12 Dual ECU Aston Martin Visteon - V12 Dual ECU > For Aston Martin vehicles

6-A) 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.

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

(ዋ) WiFlash Vehic	le Programming Utility		\odot	
Prepare ECU		Calibration File	Calibration File	
Subaru BRZ GR8	6 2.4L Gen 2	•		
		Flash ECU	VF Tuner WiFlash Programming Utility. Please Select your vehicle from the drop down menu before beginning.D Do Not attempt to flash your vehicle if you have low battery voltage.	•
	Ghetto Test 1	Read ECU O FLASH A VEHICLE		l
Rescan Ports	COM4 - VF Tuner WiFlash USB	•		
Log Connection:	on to File	Flash Progress:	ESP32.DLL 🛞	-
			ESP32.DLL Logging started: C:\UsersRAFAEL\Desktop\VF TUNER !!!!!\vF Tuner.exe API Log will be written into: C:\UsersRAFAEL\Desktop\VF TUNER !!!!!\vF Tuner_3AEBFCAB7B0024F0_API_Log.txt OK	<u>li</u>

8-A) When the ECU prep is finished, a small window will pop-up, please click "Ok".

(ም) WiFlash Vehicle Programming Utility					_
Prepare ECU	Calibration File	Calibration File			
Subaru BRZ GR86 2.4L Gen 2	•				
Ghetto Test 1	Flash ECU Read ECU	WiFlash Adapter Serial: VFT9552118406 VIN: ID: ZF2L100M00G ECM Part Number: Drivetrain:			•
INTERNET ACCESS IS REQUIRED T Rescan Ports COM4 - VF Tuner WiFlash USB	TO FLASH A VEHICLE	VF-CVN-ID: 1F595ADB00000000 Connection to ECU is reliable. DO NOT ATTE VOLTS!	MPT TO FLASH YOUR VEHIC	CLE IF BATTERY	VOLTAGE IS UNDER 12.0
Connection:	Flash Progress:		(
			ESP32.DLL	× _	li
			ESP32.DLL Logging finish	ed	
			ок		

9-A) Your ECU's details will be displayed. Please select your ECU's information, right click on it and select "Copy".

۹۶ WiFlash Vehicle Programming Utility				
Prepare ECU	Calibration File	Calibration File		
Subaru BRZ GR86 2.4L Gen 2	-			
Ghetto Test 1 INTERNET ACCESS IS REQUIRED Rescan Parte COMA VE Tungs WEElach USP	Flash ECU Read ECU TO FLASH A VEHICLE	WiFlach Adaptor Sorial: VFT05531 VIN: ID: ZF2L100M00G ECM Part Number: Drivetrain: VF-CVN-ID: 1F595ADB00000000 Connection to ECU is reliable. DC VOLTS!	8406 Undo Cut	ERY VOLTAGE IS UNDER 12.0
COIVIA - VF Tuner Wirlash OSB	•		Сору	
✓ Log Connection to File Connection:	Flash Progress:		Paste Delete Select All	
		-	Bight to left Reading order Show Unicode control characters Insert Unicode control character Qpen IME Beconversion	•

The "ID" is your ECU ID. This is very important information.

10-A) Email us (support@ovtune.zendesk.com) the following information:

- a) Your vehicle's ECU Information (see Step 9-A)
- b) Your vehicle's details (Year, Make, Model, Variant)

Here's an example of how your email should look like:



11-A) Based on the information you send us; we will reply and

a) ask you to read the ECU (see instructions manual on reading the ECU)

or

b) inform you that you can start tuning your vehicle.

or

c) send you our pre-made/off-the-shelf (OTS) tune files/pack

3-B) If you have the Legacy device, click on the "File" menu, and select "Flash ECU - Legacy Flasher". From here on out, please follow the -B instructions.



4-B) 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.

5-B) The VF Toyota Programming Utility window will pop up.

Click the "Prepare ECM" button.

VF Toyota Programming Utility	×
Calbrate ECM Calbrate ECM Calbrate ECM Calbrate TCM Calbrate TCM	
R27E-Toyota Bench Flash Read UDS ECM Read UDS TCM Read ECU Bench Read P5 ECM Read P5 TCH	WF Turker Legacy Read Tool (Quarge OBGII Connector) Battery Vedwage sortical trooption to flashing IDo not flash if your battery voltage is under 12.0 Volts. To begin Press PREPARE ECM. DO NOT LICENSE YOUR VEHICLE (SPEND CREDITS) UNLESS YOU VERIFY YOUR ECU IS SUPPORTED. TO DO SO CHECK THE VF TUNER INSTALLATION FOLDER C/PROGRAM FILES X86/VF TUNER/SUPPORTED ECUS
Uprade ECM/TCM Calbration	2 2
Communication progress: INTERNET ACCESS IS REQUIRED	TO FLASH A VEHICLE

6-A) Your ECU's details will be displayed. Please select your ECU's information, right click on it and select "Copy".

VF Toyota Programming Utility			×
Prepare ECM Calbrate ECM Select Calbraton File Calbrate TCM	Calbration File:		
R/R-Toyota Bench Flash	Read UDS ECM Read UDS TCM Read PS ECM Read PS TCM	VF Tuner Legacy Flash Tool (Orange OBDII Connector) Battery Volzaye is ortically important to flashing Do not flash if your battery volzage is under 12.0 Vols. To begin Herse NRFMARE COM. DO NOT LICENSE YOUR VOILDE (SPEND CREDITS) UNLESS YOU VERIFY YOUR ECU IS SUPPORTED. TO DO SO CHECK THE VI Doto	*
Uprade ECM/TCM Calibration	• •	Discussion Copy Discussion Colific Discussion Colific Discussion Discussion Discussion Discussion Discussion Discussion Discussion Discussion Discussion Discussion Discussion Discussion	×
Communication progress:	INTERNET ACCESS IS REQUIRED TO FLASH A VEHICLE	port Unicole control duranter	

The "ID" is your ECU ID. This is very important information.

7-A) Email us (support@ovtune.zendesk.com) the following information:

- a) Your vehicle's ECU Information (see Step 6-A)
- b) Your vehicle's details (Year, Make, Model, Variant)

Here's an example of how your email should look like:

Draft saved	- ¥	×
support@ovtune.zendesk.com		
Order XXXXX - Vehicle Information		
Hello VF Tuner,		
Here's my vehicle's ECU Information: VIN: ID: ZF2L100M00G ECM Part Number: Drivetrain: VF-CVN-ID: 1F595ADB00000000 And, here's my Vehicle Details: 2023 Subaru BRZ FA24 2.4L M/T Thank you!		
5 ♂ Sans Serif • T • B I U A • ≣ • ≔ ≔	Ì	•
Send 🗸 🌡 🖙 😌 🛆 🖬 🔓 🌶 🔅		Ū

8-A) Based on the information you send us; we will reply and

a) ask you to read the ECU (see instructions manual on reading the ECU)

or

b) inform you that you can start tuning your vehicle.

or

c) send you our pre-made/off-the-shelf (OTS) tune files/pack