



Instruction Manual Clear ECU Setup & Installation



Step 1: Download & Install SFT tuner SW

<https://www.sofakingtuned.com/ecuinstall.html#/>

****Watch installation Video****

****Check which version of Microsoft Windows you have. One file will install, the other will not. Most new PC's are 64 bit****

1. Save to Desktop
2. Right Click on Icon
3. Run as Administrator

****DO NOT UPDATE USB OVER NETWORK IF PROMPTED****

Server Password Link:

<https://www.sofakingtuned.com/passwords.html#/>

****Ensure you have your battery connected to external charging (e.g. trickle charger or battery charger) to ensure your battery voltage does not drop below 12.1 volts. You cannot read or write ECU. If your battery is less than 12.1 volts, you can possibly damage your ECU****

****2018+ vehicles require a bypass cable below is the link on how to install the bypass****

https://www.youtube.com/watch?v=6oLBC_z9Zqw&feature=youtu.be

Protocol 107 - Send ECU Request

1. Connect to server 1 or 2 in USB over Network
2. Connect Clear SFT ECU device to vehicle and laptop
3. Turn ignition switch to run position (DO NOT START ENGINE)
4. Open Bit Box > "Select vehicle/ECU" button > select "FID 107", then press "OK".
5. Now press the "READ" button, it will say "No file found on the server, send to your master anyways?" Say "yes"
6. Include First/Last Name & Stage1 or 2 in the comments box
7. Press "Send" to Submit File
8. ****DISCONNECT FROM SERVER****

****That's it! The box closed and your request was sent. No further confirmation will be observed. ****

We will notify you via email when your file is ready

****It's normal to see, "FILE ON SERVER COULD NOT BE FOUND"****

****Allow 72 hours before asking "Did you get my ECU Request?"****

Protocol 124 - Read ECU Data

(ONLY perform if requested by SFT Technician)

1. Open USB over Network and connect to server 1 or 2
2. Connect clear SFT ECU device to vehicle and Laptop
3. Turn ignition switch to run position (**DO NOT START ENGINE**)
4. Bit Box > "Select vehicle/ECU" button > select "FID 124", then press "OK".
5. Press the "READ" button, follow key on-off prompts, and read your CURRENT ECU map file (this will take 10min).

Troubleshooting

Issue: Error while installing or trying to connect to the SFT software/bitbox

Solutions:

1. Verify you are using a Windows PC
2. Make sure you have selected the correct SFT software downloaded (32 or 64 bit)
3. Verify the computer is not running antivirus software; Norton, McAfee, Microsoft Security Essentials & Firewalls are disabled
4. Make sure the computer has all the Windows updates installed
5. Simply restart the computer
6. Forget and Re-Add servers to avoid Senslock error

HIRE A TECHNICIAN

Remote PC connection Via TeamViewer
In the event you want someone to handle
install

Have someone troubleshoot your issues
Expedited turnarounds on tuning

HOW DO I HIRE A TECHNICIAN

The cost for Hiring A Technician is \$75

Below is the link for hiring a Technician.

<https://www.sofakingtuned.com/store/p43/remotesupport.html#/>

FAQ

More FAQs at the link below!

<https://www.sofakingtuned.com/faq.html#/>

PLEASE review the FAQ page before contacting us

Q: WHY YOU MUST FLASH ECU TO ORIGINAL STOCK TUNE BEFORE DEALER VISIT?

A: The touchscreen is VIN and software locked to your vehicle's current software. If the dealer conducts an update to your vehicle's STOCK software it will be different from what the SFT device is locked to and must be reset. If you haven't flashed back to stock before the dealer update it will be a **\$150 fee** and **you must return the device to us at SFT**. If you flashed back to STOCK before the dealer update you must purchase an **AEM update for \$50** and send us your vehicle's new STOCK software version.

Q: ARE THE SFT ENGINE TUNES WITHIN SAFE EGT LIMITS?

A: YES! SFT keeps EGTs within factory EGT safety specs: Factory EGT limit is set for 1500F sustained & 1550F Max.

Q: HOW DO I RETURN TO STOCK AND THE SFT ECU/TCM TUNES?

Internet-based ECU method - Send us a 107 request and in the comments INCLUDE your name and "RETURN TO STOCK". This requires an active internet connection and Windows PC each time.

Q: HOW DO I ACTIVATE THE VGT TURBO BRAKE?

A: To activate you must meet the following conditions: 1. Foot off the accelerator with engine RPMs greater than 2,000 RPMs
If you're coasting downhill simply downshift to keep RPMs over 2k (limits are in place to prevent over-revving engine).

Q: HOW LONG DOES IT TAKE TO READ/WRITE MY ECU

A: Takes about:

- 1 Hour to set up the PC and read ECU. About 2 minutes to flash the calibrated ECU tune.
- 5 Minutes to read your TCM via the touchscreen device. Once you've received the file back from SFT only 30 seconds to flash the vehicle

Q: HOW CAN YOU TELL IF YOUR VEHICLE ACTUALLY PERFORMING A REGEN?

A: During regeneration of the DPF, the vehicle will rev high (stationary), 1300-2000 RPMs, and engine coolant/oil temps will be 210-220+.

***With our Torque template you can see if it's in regen mode 1 2 or 3. CTS simply stages "regen" which could be mode 1, "passive" (it happens when you drive and EGT temps go over 600-700) per the FCA literature.

Understanding how a DPF filter "fills up", the "%" percentage and it's value.

Understand this is ONLY a calculation of the engine and not a true "full" value.

For a more accurate way to determine filter percent full monitor the DPF differential pressure sensor instead

**Our Torque app template provides this custom PID.

If you're using something such as an Edge CTS etc. Then this is a moot point as it's ONLY programmed for a stock vehicle and bases its data off fuel table numbers, throttle values (all of which we change in the programming).

Please note that your DPF won't regenerate until the DPF is 72% or more full, and will display a message "Drive on the highway" if the DPF gets more than 80% full. SFT does NOT alter this stock setting.

Q: WHAT DO THE ECU PROTOCOLS 124 AND 107 MEAN?

A: 124 + read = Read ENTIRE ECU and upload to our server

107 + press read = request "hey SFT, where's my tune?"

107 + press write = select name in the list, press ok to flash ECU

Thank you - SFT