

Handheld OBD Programmer and

ECU Upgrade Instructions

P/N MYGENKIT



Thank you for purchasing our ECU tune and Handheld OBD Programmer. The basic installation steps are as follows:

- Plug the USB stick into the USB port (only runs on Windows computers), select the USB drive and run the setup file to install the MyGenius software on your PC laptop (please note that this software only runs on Windows).
- Connect your MyGenius device to your PC using the USB cable provided.
- Perform an update of your MyGenius device.
- Plug the MyGenius Device into your car's OBD port and follow on screen instructions for saving an "ID" file of your ECU. *Please note that if your device cannot recognize your car automatically, please select the manual procedure and select the car model closest to your car.*
- Connect your MyGenius device to your PC and email us your ID file
- We will email you the required tuned files. Download these into your device using the MyGenius Client software.
- Connect your MyGenius device to your OBD port and follow on screen instructions for writing the selected file to your ECU.

Detailed Instructions:

- (1) Using the USB stick provided, download and install the MyGenius software on your PC or laptop. The applicable file on the USB stick is "MyGeniusClient_setup.zip"
- (2) Once you download and install the MyGeniusClient_Setup.exe file, you will be prompted to update the software, click yes (you must be connected to the internet):

G MyGenius Client	×
File Update ?	
Download from MyGenius	Connect your MyGenius device to access this feature.
MyGenius ClientUpdate	×
New updates are pr Close the program	esent. and proceed with the update?
<u>Y</u> es	<u>N</u> o Cancel
Concerne and a second	procedure for your MyGenius device.
	11.

(3) Now plug in your MyGenius device to the USB port on your PC or laptop and click the lower "Update" button.

6 MyGenius Client	×
File Update ?	
Download from MyGenius	Connect your MyGenius device to access this feature.
Upload to MyGenius	Connect your MyGenius device to access this feature.
Info	Connect your MyGenius device to access this feature.
Ugdate	Click here to start the 'Update' procedure for your MyGenius device.
	-
	11.

VERY IMPORTANT!

- Before any operation is performed on the car, please check that the vehicle is properly serviced and no warning lights are lit on the dashboard. If anything is wrong with the car, it MUST be serviced and repaired prior to performing this operation.
- ✓ The car battery MUST BE FULLY CHARGED, and during all the MyGenius operations we strongly suggest to connect a stabilizer car battery charger.
- ✓ During the reading/programming operations do not unplug the OBD II wire or perform any operation with dashboard. To avoid any communication troubles do not switch on AC, radio or any other devices that require car battery power.
- ✓ Follow the MyGenius instructions carefully.
- (4) Once your device is updated, unplug it from your PC or laptop, and using the OBD cable provided, plug the device into your OBD port located underneath the steering column. Select the "WORK" option, then select the "Lexus" option, then "IS (E2)" option, and finally "F 5.0L V8 311kW/..." or for the IS350 "350 3.5L V6..." (same selection for GS350 and IS300).



Please note that when the device instructs to switch on the dashboard, you should press the ignition button twice without pressing the brake pedal.

- (5) Once you have selected the correct protocol configuration in Step 4, Select "WORK" again, and select "ID." Follow the on screen instructions in order to "ID" your ECU
- (6) Now connect your MyGenius device to your PC and start the MyGenius Client Software. Select the upper button "Download from MyGenius." Follow the on-screen instructions, select the destination folder, and email us the "ID" File to <u>Service@RR-Racing.com</u>. The file will be named "MYGFile.fpf". *Please also write your order number and the serial number of the device (sticker on the back of the device).*



(7) Once you receive the tuned file(s) from us, connect your MyGenius device and click on the "Upload to MyGenius" button in the MyGenius Client software.

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- ✓ Follow the MyGenius instructions carefully.

STOP: In order to make sure you have sufficient voltage for programming, you must turn off the A/C, fan, interior and exterior lights, and the Navigation screen.

(8) Writing: You are now ready to write the new file to your ECU. Connect the MyGenius device to your OBD port, and follow the on screen instructions:



ECU Learning

Your **ISF ECU** uses 4 knock sensors to continually monitor for engine knock (detonation) and increase ignition timing over time to make more power. Your ECU has a learning correction factor that ranges from 15 – 25 (note, this parameter can only be dataloged using Toyota Techstream software). When you reset your ECU (by removing the ground cable from the battery), ECU learning correction drops to 15. As you drive, that number goes up.

In order to optimize power, the learning correction factor needs to be in the range of 20-23. The most effective way to get this number to go up as quickly as possible is to do long pulls from 3000-6800 rpm, in 4th gear. Doing so can bring your correction factor up within 50 miles of driving. Otherwise, it will take longer. Please note, RR-Racing does not condone exceeding the speed limit on public roads, all testing should be performed on a race track.

For 3XX models, the car needs to be driven normally between half and an hour to facilitate ECU learning.

Recommendations on Dyno Testing Your Car

We recommend going to a facility with a DynoJet. Please specify that you want "SAE Correction" and "Smoothing level 5." We recommend DynoJets because they do not require the operator to input calibration data for wheel speed and RPM. Other dynos such as Mustang, Dynapack, and DynoDynamics depend on the dyno operator determining the relationship between wheels speed and engine RPM, and this often leads to error and variability in results.

When performing a dyno test, we recommend dynoing the car in 4th gear. Although theoretically 6th gear will give the best results, due to the high load and duration of the pulls, doing pulls in 6th results in unrealistically high coolant and intake temps not representative of what the car will actually see on the road at high speeds.

We recommend having a basic OBD datalogger during the dyno session. There are many such devices that connect to your car's OBD port and to your smart phone via wifi or Bluetooth. Monitor the following basic parameters:

- Coolant Temperature: Make sure coolant temps drop below 190F before each run.
- Intake Air Temperature: Monitor intake air temperature. If intake air temperature is more than 10-15 degrees above the room's temperature, you need to direct a fan at the intake box. In the real world, the ISF intake air temps at high RPMS are almost never more than 10-15 degrees the ambient outside air temperature.

Often times it takes 8-10 runs to determine the wheel HP. Every time you do a dyno pull, your ECU will tend to increase ignition timing and power usually tends to go up.

Have any questions?

Please call us at 484-756-1777 or email at Service@RR-Racing.com