

## **NOTE TO CUSTOMERS WITH MODIFIED VEHICLES:**

The Magnuson calibration included with this kit is intended to work on stock vehicle configurations, including stock trim levels and stock OEM vehicle options. Modifications to your stock vehicle including, but not limited to, engine, flywheel, clutch, torque converter, transmission, wheels, tires, axles, gears, driveshafts, induction system, exhaust system and additional weight (ie. bumpers, racks, etc.) can have a significant impact on your vehicle's calibration and may require modifications to our calibration as supplied.

While we attempt to minimize the need for modifications during our development process, it is impossible for our team to account for all possible build variations/combinations, and in some cases it may be necessary for you to supply an additional element of customization for your vehicle—custom calibration—and to work, at your own direction and expense, with a local service facility to address your unique combination of hardware and make calibration adjustments as necessary.

Please be aware that standard product warranties and governmental emissions certifications are predicated on stock vehicle configurations, and vehicle modifications and calibration changes may affect or even void powertrain warranty and emissions certification status (such as CARB emissions certification). It is the sole responsibility of the customer making a warranty claim to prove that any vehicle modifications and calibration changes were within warranty. It also is the sole responsibility of the customer to determine if the modifications and changes comply with all local, state and federal emissions standards.

## Toyota 4Runner and FJ Handheld Tuner Instructions

Note: If you already have an aftermarket programming device, you must return the vehicle to stock first with the old device before using the new tuner provided with our supercharger.

Also connect a battery charger to your vehicle's battery to maintain proper voltage.

- You must have a personal computer with the following minimum requirements. Windows 7/8/8.1/10(32-64bit) Minimum screen resolution: 1366 x 768 Maximum screen resolution: Full HD 1920 x 1080 1 standard USB Port Internet connection
- Go to the Magnuson Superchargers website and click on the support tab (green arrow). Scroll down and click on the "My Genius Client" link (red arrow).



 Run the "MyGenius Client" software setup following the on screen instructions step by step. Update the "MyGenius Client" software once you have it installed.



- 4. Plug in the provided handheld device to your computer with the provided USB cable, wait for Windows to recognize it, and update it with the "MyGenius Client" software you just installed.
- 5. Ensure that no warning lights are lit on the dashboard before flashing. Take your vehicle to a car dealer or repair shop for maintenance if you have any check engine lights or MIL lights.
- 6. The Vehicle battery must be connected to a battery charger to maintain over 12 Volts.







7. Connect the ODBII cable to the handheld.



 Connect the OBDII cable to the vehicle diagnostic socket under the dash.



- Do not unplug the handheld device during reading or programming. Do not switch on any electrical devices once the ODBII is connected. Follow all handheld device instructions shown on the screen.
- 10. On the device main menu select "Work". During the next few steps you will be selecting your vehicle to identify the correct serial protocol. An incorrect choice will not be detrimental to your vehicle, but will require the selection process to take place again.
- 11. Highlight Toyota, and click "SELECT".







12. Highlight 4Runner (N280) or FJ Cruiser depending on what vehicle you have, and click "SELECT".

- Highlight 200 kW/268 HP version of engine if you have a 4Runner or 194 kW/260 HP engine choice if you have an FJ Cruiser, and click "SELECT".
- 14. Switch on the dashboard (Do not start the engine), check the connections, and select "OK".

15. The handheld will identify your ECU at this time.



(N280)

Mk2

MODEL

4RUNNER (N210)

RUNNER

PHARD

AURIS (E150)





16. You will be prompted to switch off the dashboard. Once you have switched off the dashboard select "OK".

17. Once the correct serial protocol has been identified select "OK".

18. The "IDENTIFICATION" screen will display. Select "ID".

19. Ensure that your battery is still connected to a battery charger delivering over 12 Volts and select "OK".







Switch off the

dash-board to

continue

20. Switch on the dashboard (Do not start the engine), check connection, and select "OK".

21. The handheld device will read the ECU at this time.

22. Switch off the dashboard when prompted by the on screen instructions, and select "OK".

23. After "Task successfully completed" is displayed select "OK" and unplug the OBDII cable from the vehicle.







24. Use the USB cable to connect the handheld device to your personal computer to export the file.



- 25. Run the MyGenius Client software and click "Download from MyGenius". Follow the on screen instructions to download the file you just extracted with your handheld device.
- 26. Ensure that the My Genius Handheld Device is connected and click the "Next" button shown with an arrow.





27. Select your desktop as the destination folder where you want to save the file. You can click on the box shown with the arrow to browse to the correct location. Once you have chosen the destination folder click the "Next" button.



28. If the information you see on the screen is correct for the destination folder click the "Confirm" button shown with an arrow.



29. Once the process has completed successfully you will see the following screen. Click the "Close" button shown with an arrow.



## 30. Go to www.

magnusonsuperchargers. com and click on "Superchargers" and select "Toyota" followed by "4Runner" on the drop down menu. Click on the 4.0L Roller Rocker product.

31. Upload the .fpf file you just saved on your desktop using the link provided at the bottom of the "Technical Specs" tab. This file will be used by our Calibration Department to construct your vehicle calibration file. This can take up to 24 hours to complete.





32. You will receive an email from Magnuson Superchargers with the file extension of .myg. This is your modified file. Save this to your desktop as well.

÷	
	2012 FJ Crusier Calibration Index ×
90	Calibration to me *
	Here is the new file. Also after the vehicle is flashed I need you to plug the handheld back in the MyGen the log and send me the <u>Text Documents</u> labeled Comm0Uinfo, Comm0Uinfo, etc
	Regards
	10
	MYGFile_000_MOD

33. Run the MyGeniusClient software and click"Upload to MyGenius".

34. Make sure your handheld device is still connected. Then click the "Next" button shown with an arrow.





35. Click on the browse button shown with an arrow to select the file you just saved to your desktop.



36. Select the modified file with file extension .myg that you saved to your desktop and click the "Open" button shown with an arrow.

37. Once the file has been opened click the "Next" button shown with an arrow.

38. Double check that the file name is correct and click the "Confirm" button shown with an arrow.

39. Once you see the "Procedure completed successfully" you can click the "Close" button shown with an arrow. Now you can disconnect the handheld device from your PC.



Cancel





40. Return to your vehicle to write the new modified file to your ECU from the handheld device.



41. Connect the OBDII cable from the handheld device to your diagnostic socket under your dashboard.







43. Select "WORK" from the Main Menu.



44. Select "WRITING" from the PROTOCOL page.



45. Choose the file name that you just uploaded to your handheld device, select "OK".

46. Switch on the dashboard when prompted by the handheld device (Do not start the engine). Then select "OK".

47. The device will start its communication.







48. Then the ECU will be identified.





Identification ECU:

communication in

progress...

50. Writing preparation will take place.



51. The MOD file will be loaded.



52. Next you will be prompted to switch off the dashboard. Once you have switched off the dashboard select "OK".

53. Once the writing ECU completed screen shows select "OK".

54. Now the Log will be analyzed. Select "OK".

55. You will be returned to the Main Menu. Remove the handheld unit from the vehicle and return to your personal computer. Continue to the next step.









56. Again go to your personal computer, plug in the handheld to the usb port, and start the My Genius Client Software.



57. Click on the "File" dropdown button.



58. Select "Get Log Files" from the dropdown menu.



59. Select the most recent Log file from the list by placing a check mark in the "Sel" box and click "OK".



60. Select where you want to save your Log file.



Click here to start the

DK

QK Carcel

Log files exported conectly in CAUserSUseADocuments/MyGer

Committing LOG Fil

AG

Select I on Fil

1/15/2018 9:50

U/15/2018 10:03

3/12/2018 5:33 P
3/12/2018 11:05
1/12/2018 5:32 P

1/12/2018 5:05 P
1/12/2018 5:04 P
1/12/2018 5:04 P
1/12/2018 4:48 PM FLASH 0555

61. An "Info" window will display the location where your Log file was saved.





63. Copy the most recent "CommXXInfo" text file. (The XX area shown between the Comm and Info are variable numbers)



64. Paste the "CommXXInfo" text file into a new location.



08/01/2019 10:29.23

6.029 build 0002 C8316

13.22

M8316

1.038

16055649

ECU Write

Comm14Info.txt - Notepad

Time:

voltStart:

Device SN: GOS ver: ManagerCode: ClientCode:

Procedure:

Brand: Model: Type: Protocol:

ver:

FILE:

File Edit Format View Help Info file for log: ver 1.000 - 0 **X** 

- 65. Open the CommXXInfo file with Notepad or some other text document reader. Make sure under Procedure it says "ECU Write" as show here highlighted in green.
- 66. Ensure that the Filename is "MYGFile0.mod", the FileOpt is "MOD", and the Result is "OK" as shown here highlighted in green. Do Not run the vehicle if there are any other results present.
- Hardware: Software: 89663-35601-MYGFile0.mod Filename: 0x00100000 Filesize: FileOpt: MOD DECEE 52CE 3D930467AE FileMd5: Result: OK ErrorCode: ErrorDescr: VoltEnd: 12.33 4

FLASH\_0555 TOYOTA DENSO 76F00XX CAN

67. Once the previous two steps have been completed, and all results of the Log file are correct you are ready to install the supercharger.



If you have any troubles with this process contact our technical support at techsupport@magnusonproducts.com or call 1-805-642-8833 (press option 3).





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