MAPTUNER X
SEA-DOO Quick Start Guide

READ ALL PAGES BEFORE STARTING TO TUNE!

MaptunerX can be used with vehicles that were previously added to Maptuner 1
Once your vehicle is added to the MaptunerX, do not attempt to use Maptuner1 on the same vehicle.

The screenshots in this manual might differ from the actual screens on your MaptunerX. We are constantly adding new functions and features. Some functions are not included with your tuning license and must be purchased separately
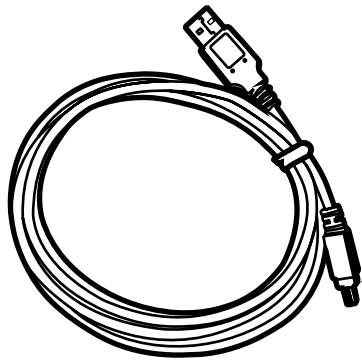
These instructions cover:

SEA-DOO | **2004+**

SEA·DOO MAPTUNER

Parts Required

A. RIVA Maptuner X

Quickly and easily load performance tunes into your watercraft, ATV or UTV eliminating the need to ship out your ECU for programming. Features a slick, full color, touch screen display. There is no limit to the number of vehicles or tunes you can reflash with the MaptunerX.

B. Micro USB Cable

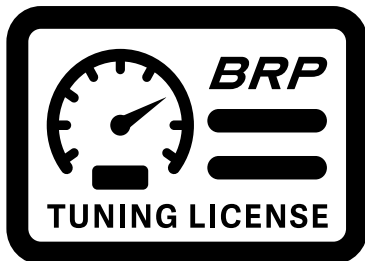Micro USB Cable allows connection from MaptunerX to computer system. Included with all MaptunerX unit.
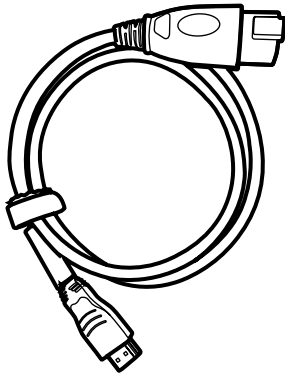
C. RIVA MaptunerX BRP Cable

Programming cable for all BRP products including Sea-Doo & Can-Am vehicles. Connects MaptunerX directly to vehicles OBD communication port.

BRP Cable   Part # 01-MT013/3
Expansion Cable   Part # 01-MT019

D. RIVA MaptunerX BRP Tuning License

Purchase one tuning license for each BRP Sea-Doo or Can-Am vehicle that you are flashing with the MaptunerX programmer. This license gives you access to RIVA's world famous tuning library along with unmatched technical support. Easily switch between performance tunes and then back to stock settings if you wish. Tuning licenses are VIN specific once they are activated and cannot be used on another vehicle. Tuning Licenses are emailed directly to purchaser and are non refundable once activated.

⚠️ Note: Separate license required for Sea-Doo SPARK

SEA·DOO MAPTUNER

Icon Definitions

Programming
Use the programming button to select the files that have been downloaded onto a Riva Maptuner device in order to add to a watercraft's ECU. Will be able to see all downloaded maps, as well as the watercraft requirements for each particular map. Download as many tunes as you want. Connect your RIVA Maptuner to the vehicle you've elected to upgrade and press the Programming button. You can upgrade as many vehicles as you have licenses for and do it as often as you like.
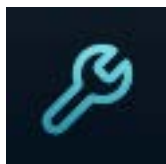
Service
Press the Service button to access the Service functions menu. Perform service functions that formerly were limited to dealers only. Your RIVA Maptuner makes it possible for you to perform many critical service functions at home. Diagnose check engine warnings, reset maintenance interval warnings, program Sea-Doo DESS keys, reset the TPS when installing a new throttle body, and more.
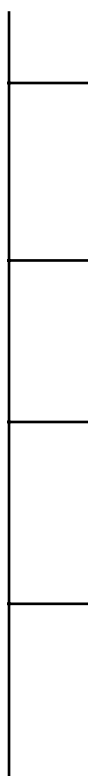
Fault Codes*
Have a Check Engine Warning light? Press the Fault Codes Button to read your ECU's record of stored diagnostic trouble codes. This button also provides valuable information about what the codes mean and how to repair your vehicle. Use the Fault Codes button to see what parts on a watercraft are causing issues with the ECU maps.
Standard with BRP Tuning Liscense

Reset Throttle*
Put a new throttle body on your pwc? Press the Reset Throttle button to calibrate the new TPS. Use the Reset Throttle button to reset the throttle on a watercraft.

Standard with BRP Tuning License

Reset History+
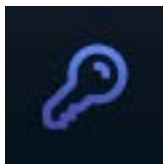Use the Reset History button to erase stored trouble codes.

+Optional Service Upgrade

Reset Service+
Do your own oil change, and supercharger maintenance? Use the Reset Service button to turn off the Service light and reset the reminder for the next scheduled interval.
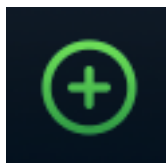
+Optional Service Upgrade

DESS Key+
Bought a new key for your Sea-Doo? Avoid an expensive trip to the dealer for key programming and do it yourself with the DESS Key Button.

+Optional Service Upgrade

Add Vehicle
Use the Add Vehicle button to connect vehicles to the Riva Maptuner device. Each vehicle must be added in order to use a tuning map. Upgrade multiple vehicles with the RIVA Maptuner. Simply connect a vehicle to the RIVA Maptuner and press the Add Vehicle button.
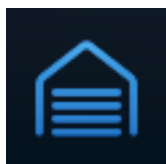
My Vehicles
Got more than one vehicle on your RIVA Maptuner? Maybe you've got a fleet of rental units or a lot of friends who want to go faster? Use the My Vehicles button to see the list and select the unit you want to upgrade today. Use the My Vehicles button to see all vehicles installed on the RIVA Maptuner device. Vehicle type, brand, and serials will be displayed. Users may also select which vehicle to activate and work on from this section.
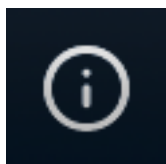
Information
Do you have the latest firmware update? Find out with the information button. Get version information. Current active vehicle information and status reports.With your RIVA Maptuner as new functions become available you can upgrade your system to even greater functionality. Use the Information button to see specific information based on what vehicle is live from the My Vehicles section. Specifics such as VIN, Maptuner version, and last calibration will be displayed.
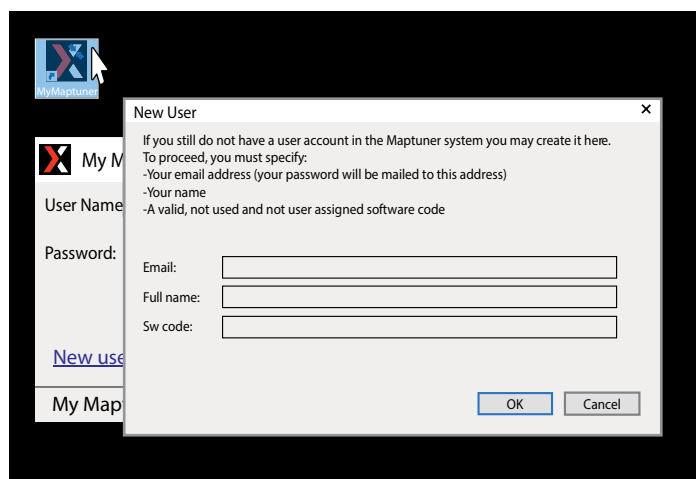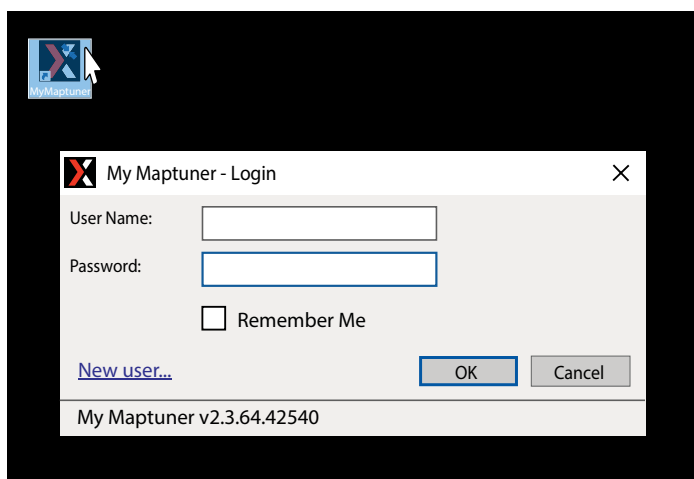
Step 1

Download and install My Maptuner software according to your Windows OS version.
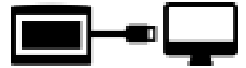https://maptuner.se/download/Default.aspx

Step 2

Open My Maptuner software. Then click New User. Enter your Email, Full Name, and Software Code that you received when purchasing your license.Your screen should look like this:

Your Login details will be emailed to you upon completion of the New User form.

Step 3

Plug MaptunerX in to your computer and click the Synchronize button. MaptunerX will now go online and update firmware.

To update MaptunerX press the Synchronise button

Step 4
⚠ Important when tuning 2016-2017 300 HP models only

When programming to the ECU of 300 HP models its very important that you remove the fuses for the **IBR and IBR monitor systems** or else the programming might fail and you will need to recover the ECU. (Fig. 1)
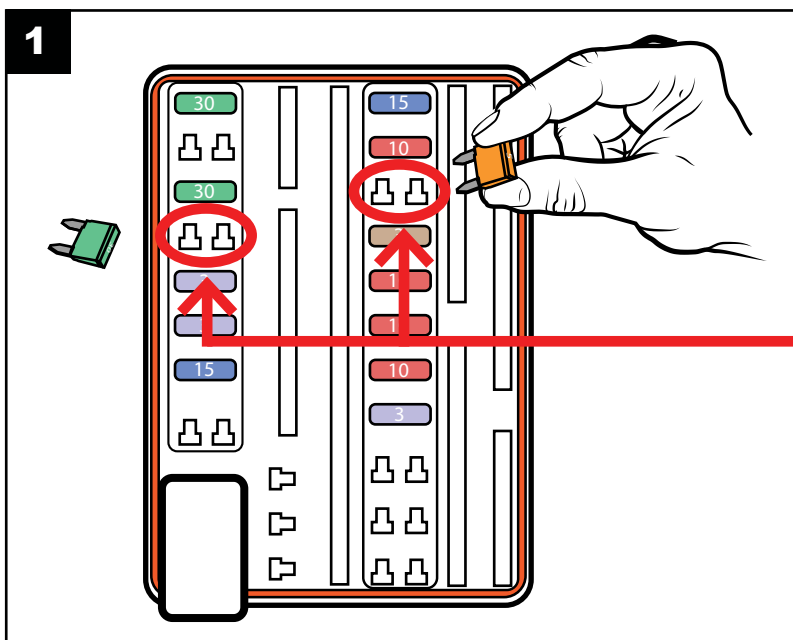
Remove the marked fuses during progrmaming. Remember to reconnect them after flashing is complete. See (Fig. 2-3 for location)

Step 5

Unplug MaptunerX from computer and plug the MaptunerX in to the OBD connector on your vehicle (See Fig. 2-3 for location).
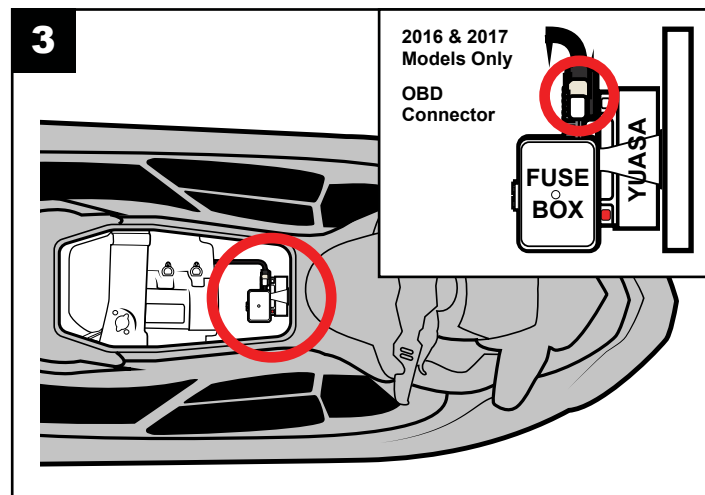
RXP300

Fuses & OBD Connector Location

Open the front compartment and remove the plastic bulkhead so you can access this area.

2016 & 2017 Models Only
YUASA
FUSE BOX
OBD Connector
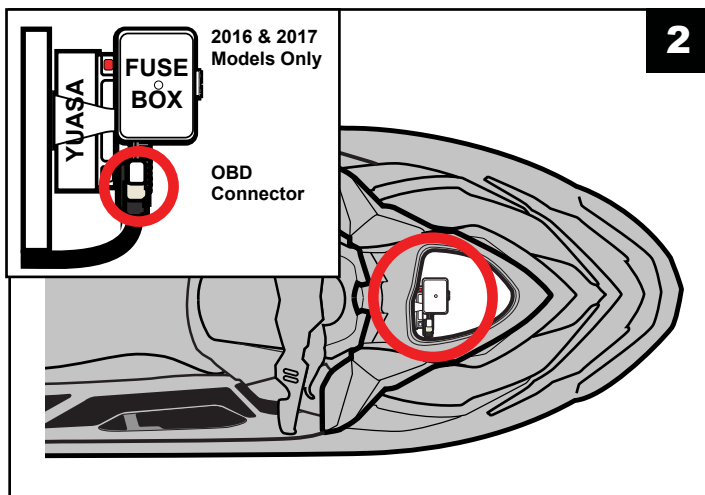
RXT300

Fuses & OBD Connector Location

Open the seat and you will see the connector close to the fuel tank.

2016 & 2017 Models Only
OBD Connector
YUASA
FUSE BOX

RXP260

OBD Connector Location

Open the front compartment and remove the plastic bulkhead so you can access this area.

YUASA
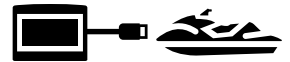FUSE BOX
OBD Connector
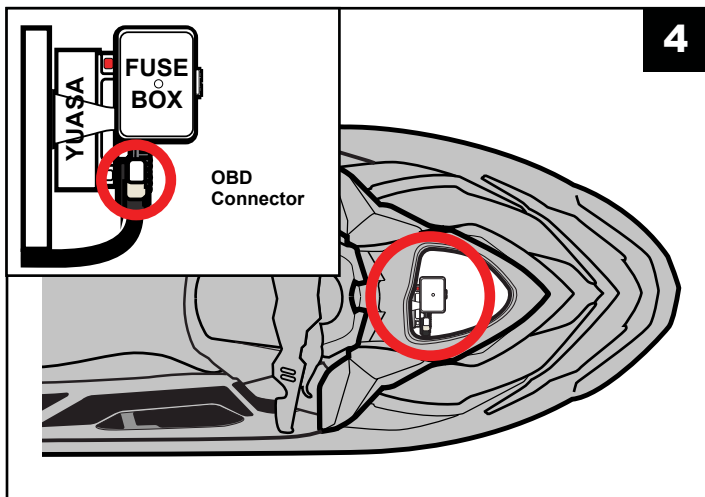
RXT260

OBD Connector Location

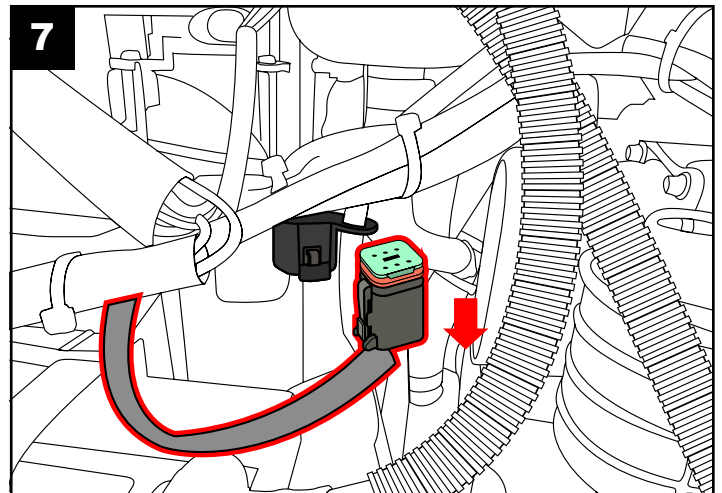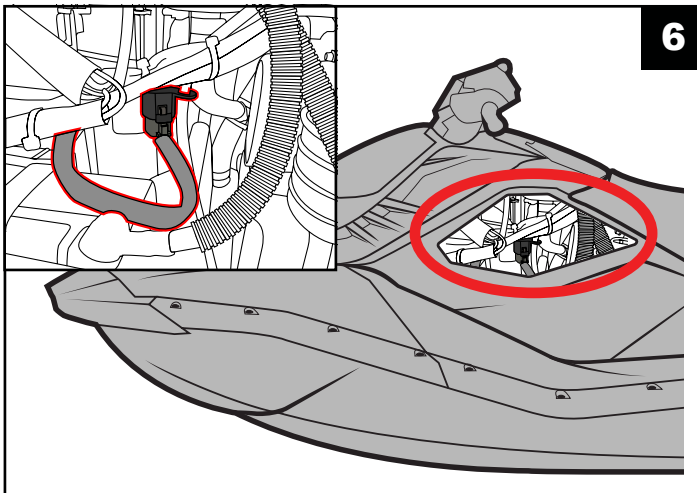Open the right side rear access panel to find the fuse box & OBD connector.

FUSE BOX
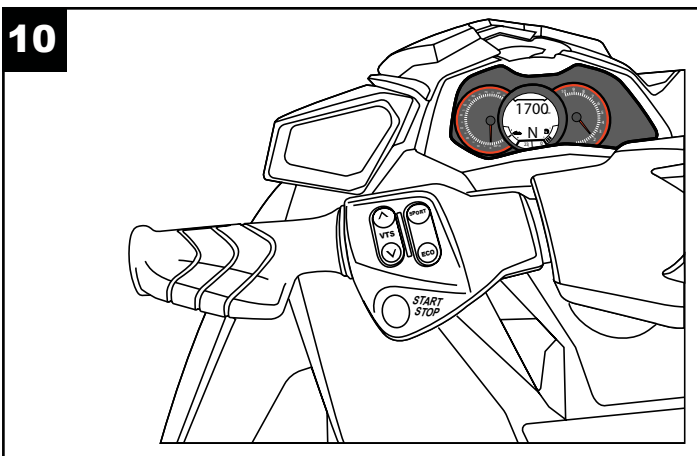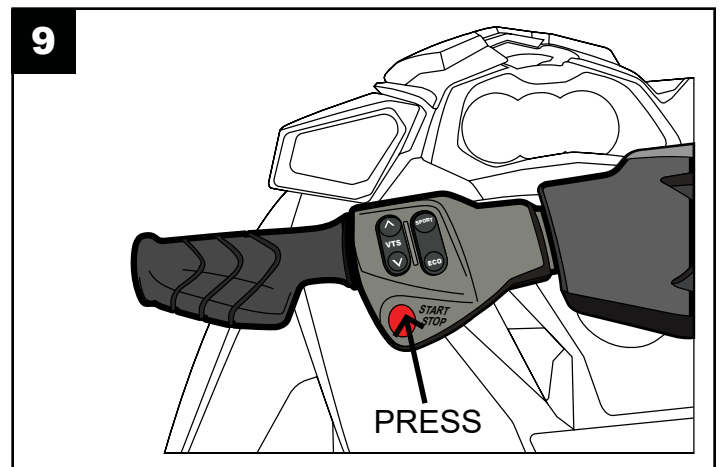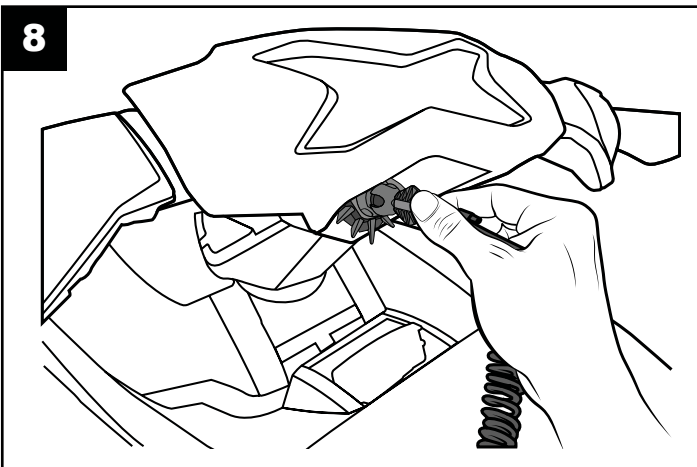OBD Connector
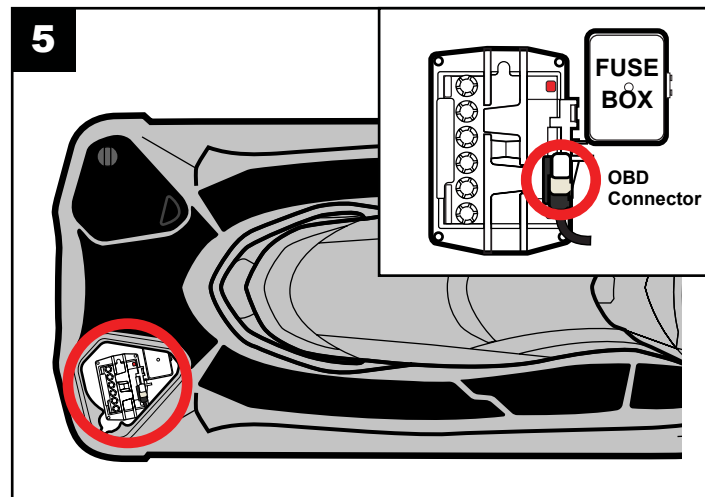
spark OBD connector location:

Open the left side panel so that you can access this area (Fig. 6 & 7).

Step 6

When connected, power your craft by:

1. **Insert the DESS key/lanyard** (Fig. 8)**.**
2. **Press RED start/stop button on handlebar switch** (Fig. 9)**.**
3. **Be sure the gauge cluster is ON** (Fig. 10)**.**

PRESS

Step 7

Now press Add Vehicle button.

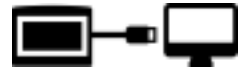*Press the Add Vehicle Button to begin.*

Your craft will now be identified and stored on the MaptunerX. This may take several minutes depending on the ECU.

Press **YES** to add this vehicle to your collection of vehicles. After vehicle is loaded, disconnect MaptunerX from your vehicle. You will now have an added icon for My Vehicles which looks like this:
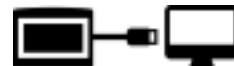
Step 8

Plug MaptunerX in to your computer and click the Synchronize button. MaptunerX will now go online and update firmware.

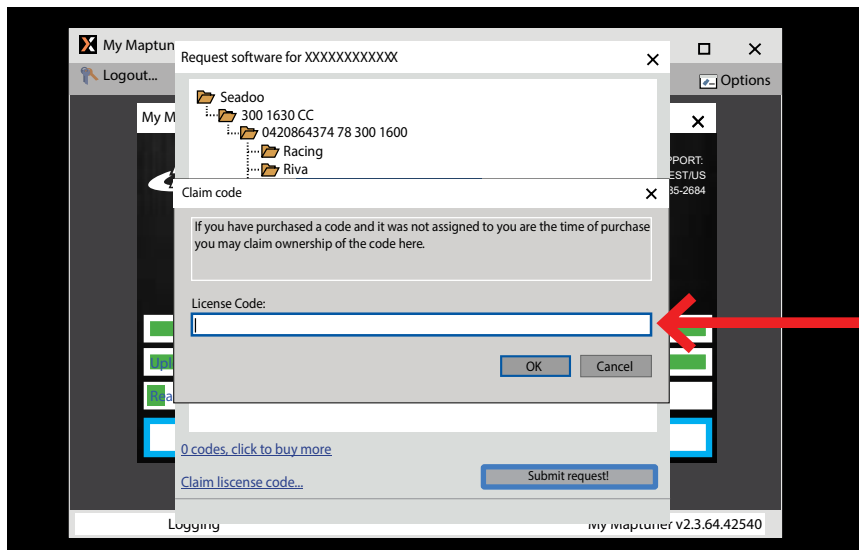*To update MaptunerX press the Synchronise button*

Step 9

You will now need to choose your device. Your screen should look like this:

Select MaptunerX

Step 10

You will now need a license code.This can be bought from rivaracing.com or an authorized RIVA Racing dealer.
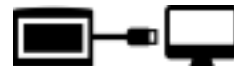

Enter your license code and a license will be added to your account.

1. **Claim License.**
2. **Copy and paste License.**
3. **Click the boxes for the tunes you want and then press Submit request.**
4. **You will now have a license available.**

Choose the tune files that you wish to download into your account and click Submit Request again.
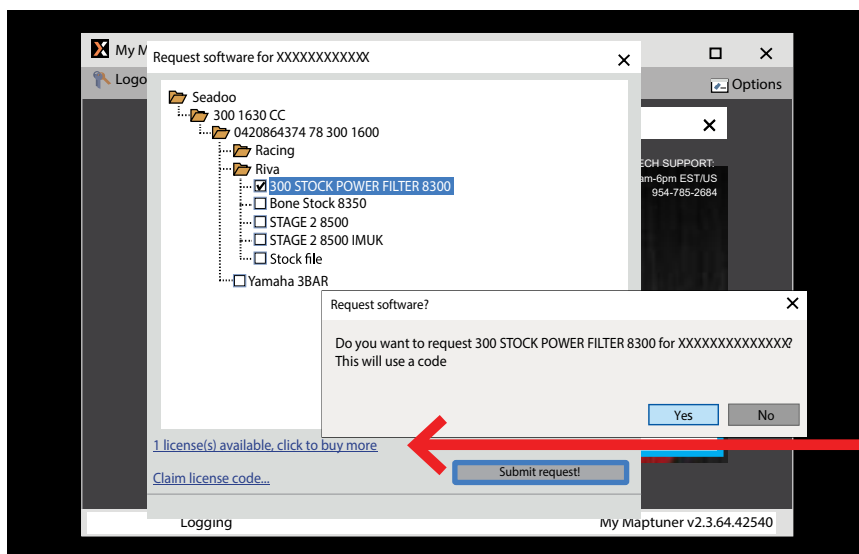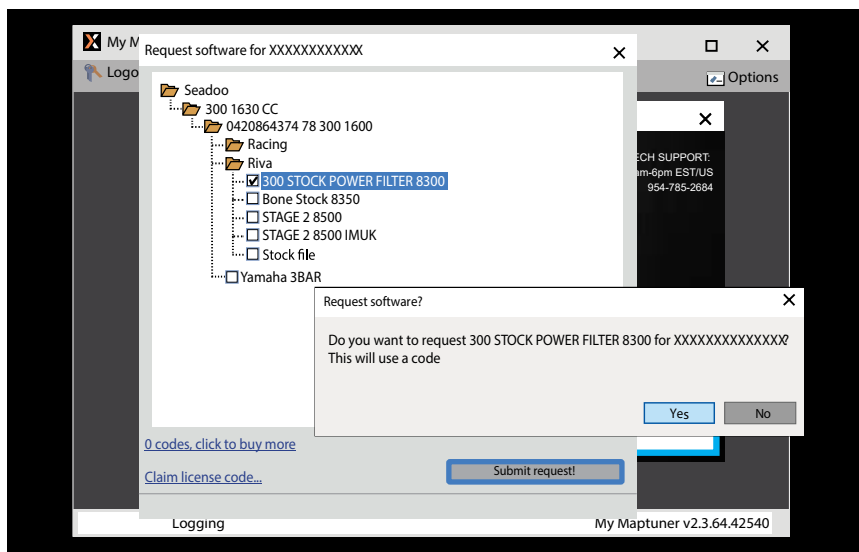

*You will now have a license available.*

You will be prompted to confirm your request. Double check that you selected the right craft and click
YES

Choose the tune files that you wish to download into your account and press OK. The system will take a few minutes to transfer the tune files to your account.

Next, press the synchronize button again to transfer tune files from your PC to MaptunerX.
After syncing, you'll now see these additional icons on your device:
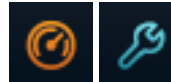
IMPORTANT- Installing the wrong tune for your performance package may lead to poor performance and/or engine damage. RIVA Racing is not responsible for any substitution in parts or other modifications that lead to poor performance or engine damage.

Step 11
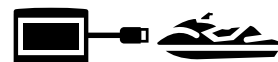
Unplug MaptunerX from computer and plug the MaptunerX in to the OBD connector on your vehicle (See Fig. 2 - 7).

MaptunerX Cable

OBD Connector
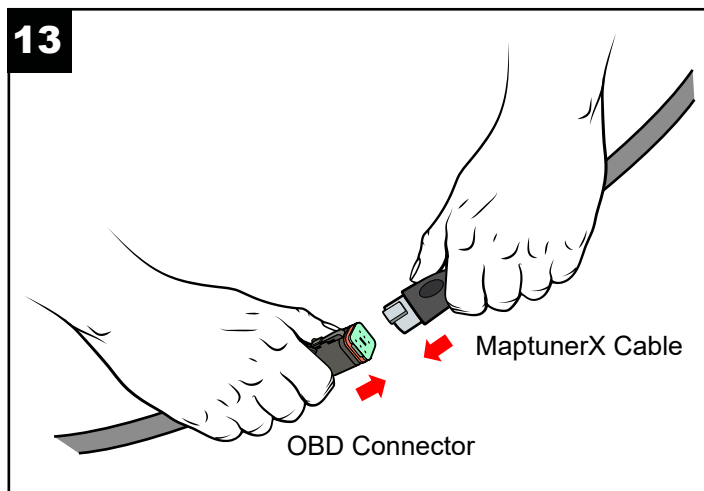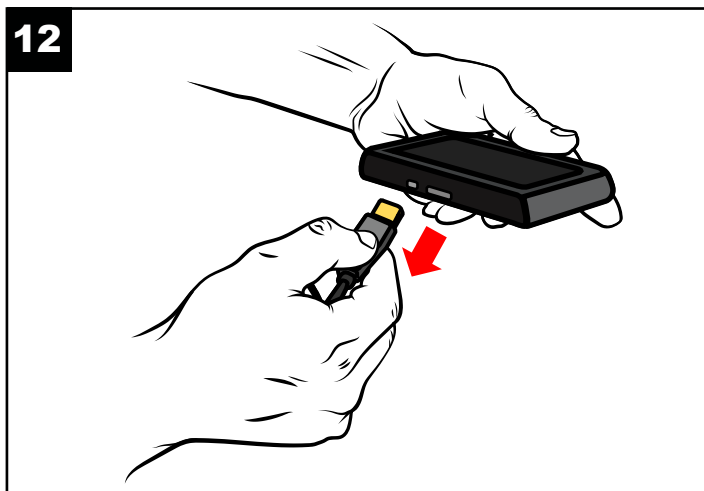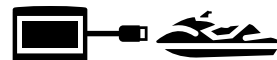
Step 12

1. **Insert the DESS key/lanyard** (Fig. 14)**.**
2. **Press RED start/stop button on handlebar switch** (Fig. 15)**.**
3. **Be sure the gauge cluster is ON** (Fig. 10)**.**

PRESS

Step 13

Press the 🏠 My Vehicles button to confirm that your craft's ID or VIN is active.

Press the My Vehicles Button to confirm ID or VIN is active.

Step 14

Press the [icon] programming button on the MaptunerX display.

Press the Programming Button to begin.

Step 15

Select the Tune you want to flash to the ECU, then press [Next >] . Confirm that you have all parts necessary for the tune, then select [Download] .


⚠ **IMPORTANT-** Installing the wrong tune for your performance package may lead to poor performance and/or engine damage. RIVA Racing is not responsible for any substitution in parts or other modifications that lead to poor performance or engine damage.
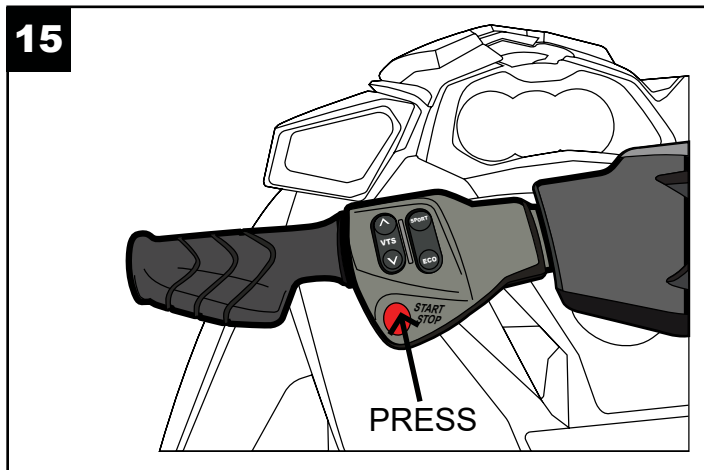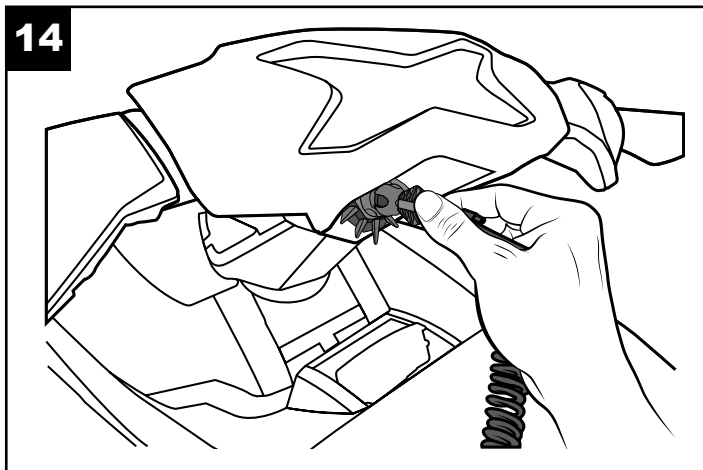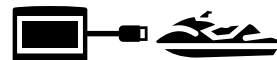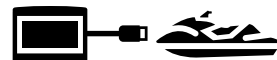
Step 16

⚠ For 2016 & 2017 300 HP Models Only:

Once the programming is finished, replace the fuses that you removed at the beginning of the flashing process. (Fig. 16)
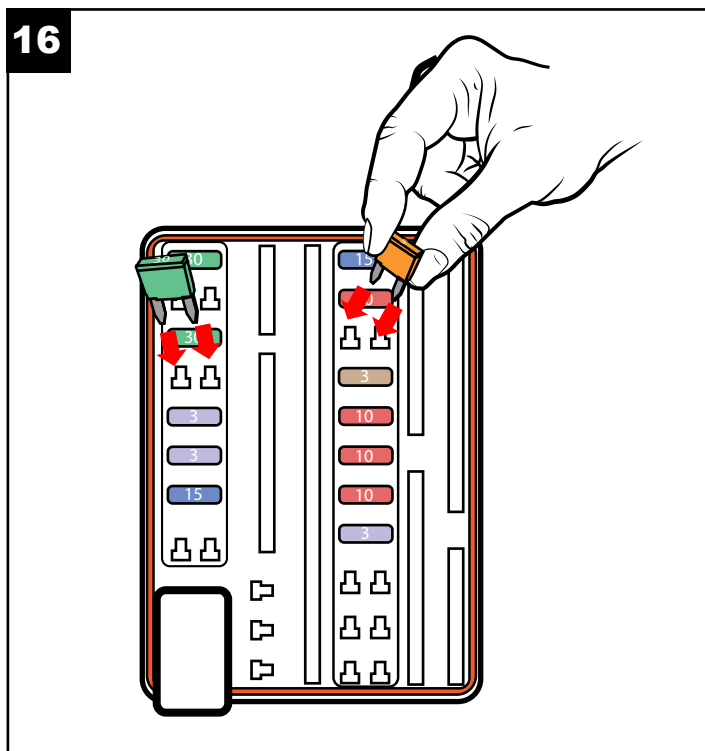
Step 17

You now need to remove Error Codes from the craft. Press the 🔧 Service Button to enter the Service Section.

Press the Service button to enter the Service Menu

Step 18

Press the 🔴 Fault Codes button to read and clear error codes on your watercraft.

Press the Fault Codes button to read and clear errors.

Step 19

Press the [Read] Read button to identify all fault codes, and then press the [Clear] Clear button to remove all the codes.

Press the Read button to find all Fault codes, and then press clear to remove them

Step 20

Once the Error codes are cleared, disconnect MaptunerX from vehicle (Fig. 18) and re-insert the OBD connector to it's original position (Fig. 19).

The tuning process is now complete!
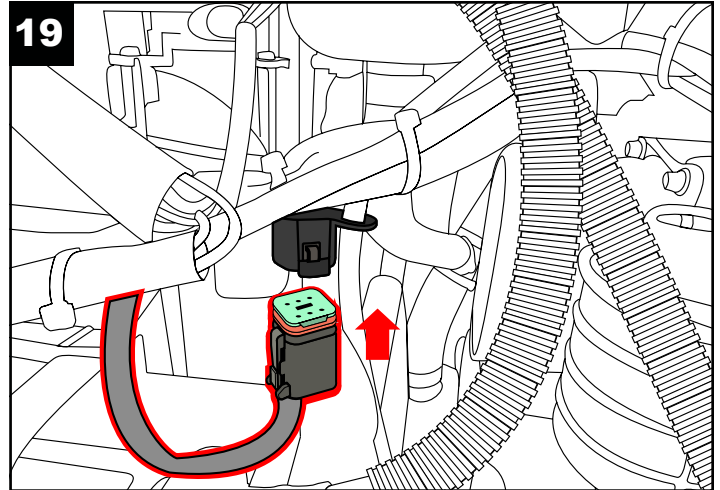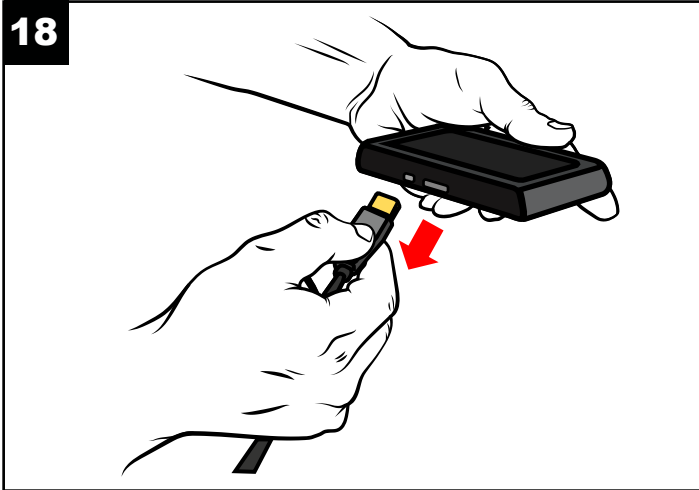
How to recover ECU if flash fails

MaptunerX has a recovery option built in, so you can always recover an ECU if a flash fails.
If a flash fails then you can try to download the same file again or the stock file.
If the flash has failed then the ECU needs to be powered manually, this is done by pressing the start button. It needs to be pressed down the whole time when doing the recovery (Fig. 20 & 21)!

⚠️ **IMPORTANT**- Be ready to remove the clamp on the start button once the process is finished, or else the engine will start to crank and then start.
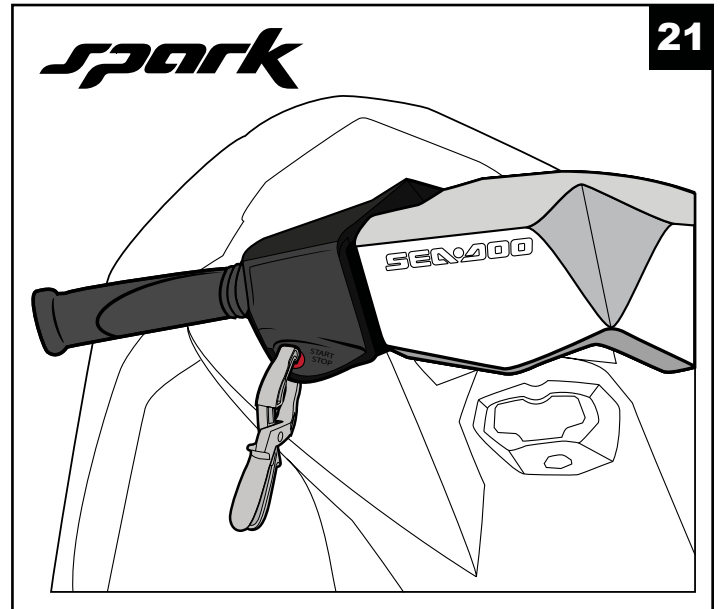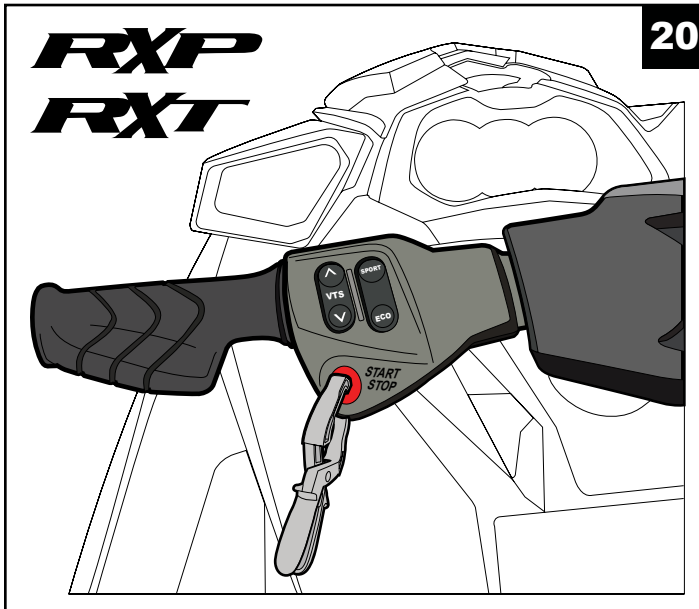
⚠️ Reasons for a failed flash could be:

- Forgot to remove Fuses from IBR systems
- Low voltage in the battery system (always connect a charger)
- Bad or incompatible file downloaded from server

SEA·DOO MAPTUNER

Technical Support & Warranty

Tech Support Hours: M-F 9am-6pm EST/US

Address: 3671 North Dixie Highway Pompano Beach, FL 33064

Phone: 954-247-0705

Email: tech_support@rivamotorsports.com

RIVA MaptunerX Limited Service Warranty Policy

1 year limited warranty on RIVA MaptunerX equipment. For 1 year from the date of original retail purchase, this RIVA product is warranted against defects in material or workmanship. Defective product will receive free repair.

- This warranty applies only to the original purchaser from an authorized RIVA dealer and may not be transferred. Authorized dealers are identified online at www.rivaracing.com.
- The warranty period for any RIVA MaptunerX product or part used for industrial, professional, or commercial purpose is one year.
- This warranty is void if the product has been used for rental purpose.
- This warranty does not cover damage resulting from modification, alteration, or unauthorized repair.
- This warranty only covers defects arising under normal usage and does not cover any malfunction, failure or defect resulting from misuse, abuse (including overloading of the product beyond capacity and immersion in water or other liquid), accidents, neglect, or lack of proper installation, and improper maintenance or storage.
- This warranty does not cover normal deterioration of the exterior finish, including but not limited to scratches, dents, paint chips, broken screen, or to any corrosion or discoloring by heat, abrasive and chemical cleaners.

How to Obtain Service

For warranty service, please contact RIVA Racing Customer Support toll-free at 954-247-0705 or by email at tech_support@rivaracing.com. When requesting warranty service, you must present the original dated sales receipt.

Additional Limitations

RIVA Racing agrees to repair or at RIVA's option, replace any defective unit without charge, if product is returned to RIVA Racing freight prepaid within the warranty period. Any equipment returned which, inRIVA's opinion, has been subjected to misuse, abuse, overheating or accident shall not be covered by this warranty.

RIVA Racing shall have no liability for special, incidental or consequential damages or injury to persons or property from any cause arising from the sale, installation or use ofthis product.

No other warranty, express or implied, including, but not limited to the implied warranties of merchantability and fitness for a particular purpose, applies. Various states do not allow for the limitation of incidental or consequential damages and therefore the above exclusion or limitation may not apply to you.

Warranty does not include the expenses related to freight or transportation of parts or compensation for any inconvenience or loss of use while being repaired. A copy of theoriginal invoice and a Return Authorization Number (RA#) must accompany all warranty claims.Warranted replacement parts will be returned freight collect.