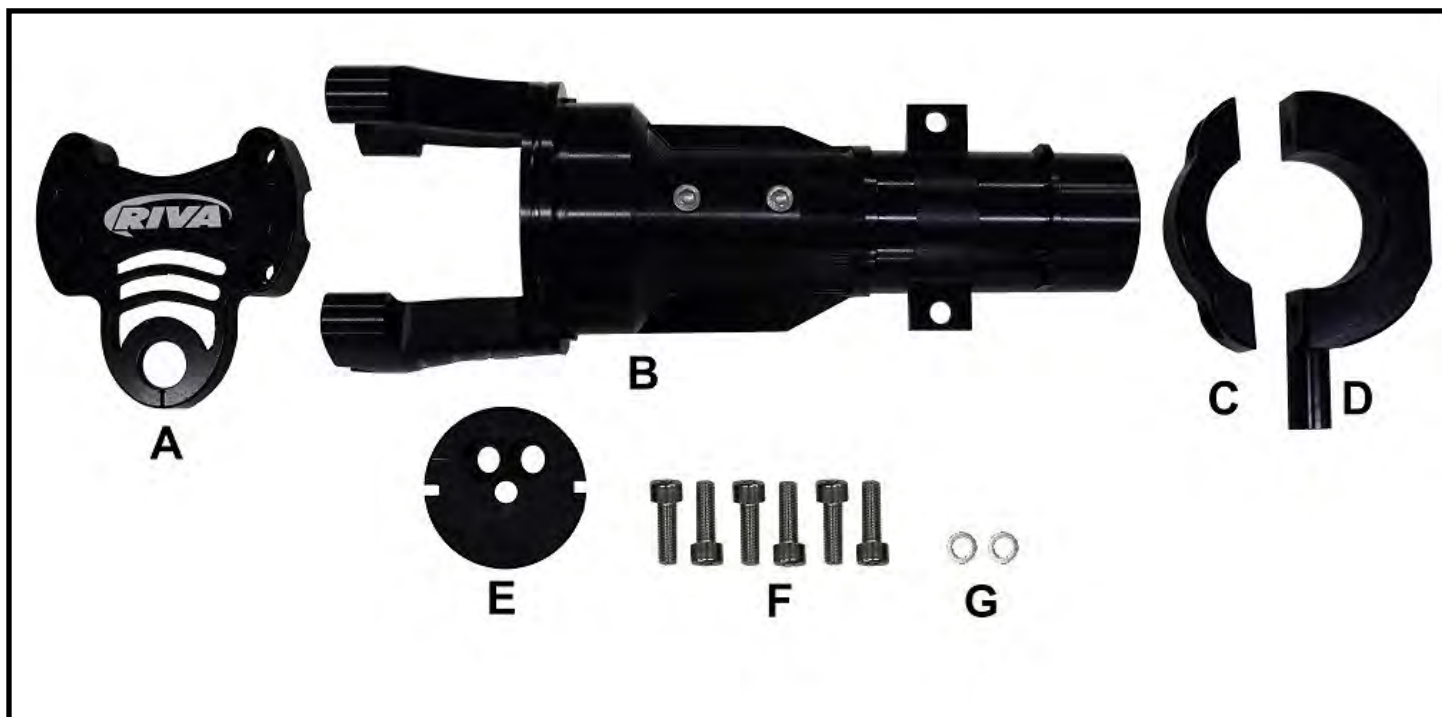




RIVA RACING
PERFORMANCE PRODUCTS & ACCESSORIES

Sea-Doo Pro-Series Steering System

PART# - RS20120



Applications: Sea-Doo 2018+ RXT/GTX/Wake Pro/Fish Pro/Explorer Pro (ST3)

Approximate Installation Time:

3 hours

Recommended Specialty Tools:

Part #

Required Materials:

Blue Loctite
RIVA 'PRO-BAR' Aluminum Handlebars (30")
RIVA Control Housing Kit
ODI Grips

Part #

N/A
RS207BK-BAR-2
RS24120-CHS
L31RGB-S (Rogue) or L31RFB-S (Ruffian)

GET THE LATEST UPDATES!

Prior to installation, go to the RIVA Racing online Instruction Library to download the latest version of these instructions:

<https://rivaracing.com/instructions>



Sea-Doo Pro-Series Steering System

PART# - RS20120

COMPONENT LIST

<u>ITEM</u>	<u>DESCRIPTION</u>	<u>RIVA PART #</u>	<u>QTY</u>	<u>NOTES</u>
A	Handlebar Clamp	N/A	1	
B	Steering Column	QCA-RS20120	1	
C	Steering Arm Clamp	N/A	1	
D	Steering Arm	N/A	1	
E	Grommet	293720086	1	
F	Bolt, 8MM X 25MM, SHCS	538114SS	6	
G	Washer, Flat, 8MM S.S.	369023SS	2	

Your kit was inspected and verified before being carefully packaged by our staff. Please check package contents before beginning assembly. If you have a question about missing or damaged items please contact RIVA Technical Support directly at (954) 247-0705 or by e-mail at tech_support@rivaracing.com.

We strongly recommend the use of a service manual to familiarize yourself with the various components and procedures involved with this installation. Please note that some of the original hardware removed in the disassembly process will be used in the installation process. These instructions have been written in step-by-step format and refer to illustrations. Read through instructions entirely before performing installation. Please follow these step-by-step instructions and illustrations carefully.

***** ALLOW ENGINE TO COOL COMPLETELY BEFORE PERFORMING INSTALLATION *****

***** NO SMOKING *** NO SMOKING *** NO SMOKING *****

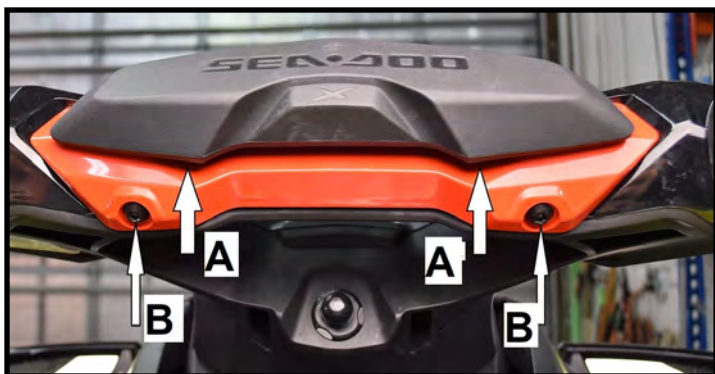
Caution: Whenever using electric or battery operated tools inside the hull be sure it is well ventilated and no fumes are present. Failure to do so could result in a fire, or explosion and serious personal injury or death.

- INSTALLATION INSTRUCTIONS -

Note: The OEM steering of your Sea-Doo is largely held together with plastic clips. Many of these clips are hidden and difficult to access. These instructions are written to help you try to preserve these plastic parts. None of the parts on the actual steering column except the electrical parts, and the brake and throttle levers will be reused after the RIVA Steering system is installed.

Squeeze Handle Bar Pad at points A and lift rear of pad to remove from OEM steering. (Figure 1) Remove screws (2) retaining top cover (Figure 1) Remove top cover. Discard cover and pad.

Figure 1



Remove hex head screws (2) and discard. (Figure 2)

Figure 2



Insert a flat bladed screwdriver under the front lip of the right and left control housing covers and pry outward and up. Lift off control housing covers and discard. (Figure 3)

Figure 3



Insert a flat bladed screwdriver through the two openings in the rear of the steering column. While pushing forward on the top of the front cover, release the two tabs. (Figure 4)

Figure 4

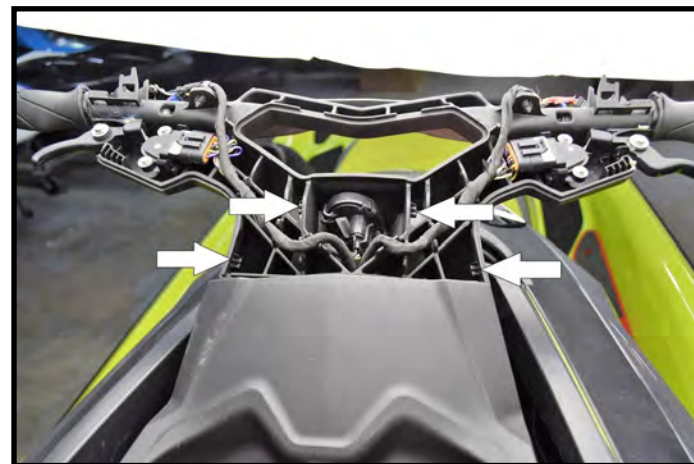


Insert a long thin bladed screwdriver down behind the front cover and release the two lower side tabs. Remove the front cover and discard. (Figure 5)

Figure 5



Figure 6 (Showing locations of tabs with cover removed.)



Remove screws (2) holding storage compartment top cover and remove top cover from ski. (Figure 7) Retain top cover for re-installation later.

- INSTALLATION INSTRUCTIONS -

Figure 7



Disconnect LCD gauge wire harness connector. (Figures 8 and 9)

Figure 8



Figure 9 (Gauge removed for clarity.) Slide connector lock out as shown.



Remove two plastic rivets under cluster support housing. (Figure 10)

Figure 10



Insert a flat bladed screwdriver between the upper edge of the cluster support housing and the storage cover and pry while rotating the housing up and forward. (Figure 11) Remove cluster support housing with LCD gauge. Retain assembly for re-installation later.

Figure 11



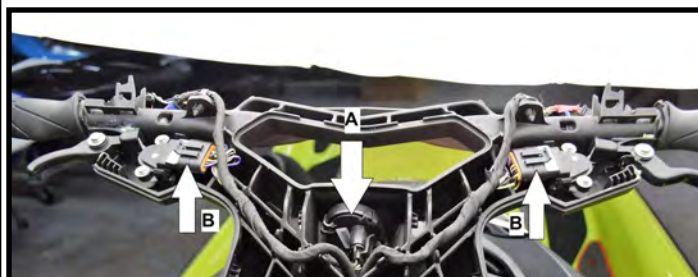
Cut the zip ties (2) retaining the wires to the right and left controls. (A in Figure 12) Unplug harness connectors from control switches but do not remove switches from steering. Unscrew nut retaining DESS post. (B in Figure 12) Retain nut for reuse.

Figure 12



On front of steering column disconnect harness from lever switches (B). Push DESS post (A) out of steering column and disconnect from harness. (Figure 13)

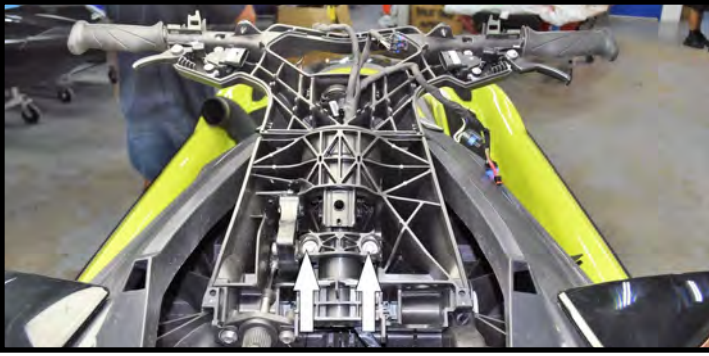
Figure 13



Remove bolts (2) holding steering arm onto steering column. (Figure 14) Pull steering column up and out of craft. **Note: Use care to guide wire harness through steering column to prevent damage to harness and connectors.** If lower steering bushing comes out of support return it to position.

- INSTALLATION INSTRUCTIONS -

Figure 14



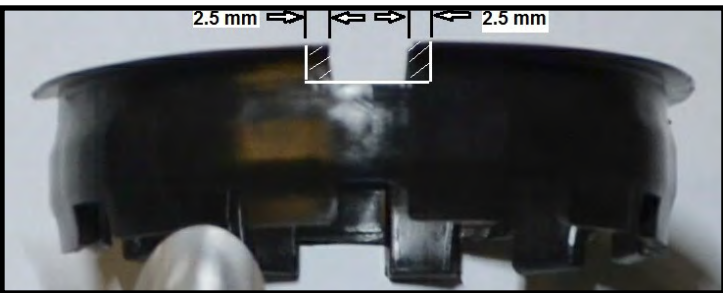
Remove handlebar clamp, harness grommet, steering arm and steering arm clamp from supplied steering column.

Remove OEM steering arm from ski and replace with steering arm from supplied RIVA steering column.

Remove upper steering bushing from OEM Steering column.

Due to differences between columns and bushings on various models some bushings will not fit the supplied RIVA steering column without modification. Slip the bushing onto the supplied RIVA steering column and check the fit of the locating notches over the locating bosses on the column. On the steering bushing one of these notches is narrower than the others. If your bushing does not fit all three bosses, locate the narrow notch and using a sharp utility knife widen each side of the notch by 2.5mm (0.098"). (Figure 15). **Note: The material of the bushing is very soft so be careful not to cut too deeply.**

Figure 15

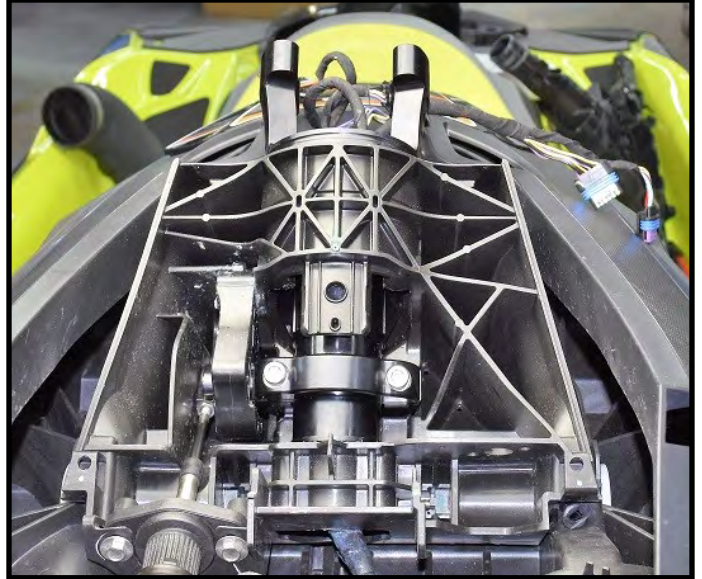


Install bushing onto supplied steering column.

Start supplied steering column into OEM steering support. Insert harness into lower end of steering column and guide wires up through column while lowering column into ski. **Tip: It may be helpful to use masking tape and a stiff wire to get harness up through column.**

Use supplied 8x25 mm SCHS (2) and 8 mm flat washers (2) to attach steering arm and steering arm clamp to column. (Figure 16) **Note: Use blue Loctite on bolts.**

Figure 16



Place harness wires into grommet and install grommet into hole in steering column.

Install RIVA Handlebar RS207BK-BAR-2 using supplied handlebar clamp and supplied 8x25 mm SCHS (4). (Figure 17) **Note: Use blue Loctite on bolts.**

Figure 17



Install OEM DESS post previously removed from OEM steering column into supplied handlebar clamp and secure with OEM DESS post nut. (Figure 18)

Figure 18



- INSTALLATION INSTRUCTIONS -

Reinstall cluster support housing with OEM plastic rivets. Reconnect LCD gauge harness. Reinstall storage compartment top cover.

Installation of handlebar controls is explained in the instructions for Control Switch Housing set RS24120-CHS. Please refer to those instructions to complete assembly.



***Remember, the water belongs to everyone.
Please ride responsibly and respect the environment!***

Technical Support

For answers to questions regarding installation or trouble shooting RIVA Performance Products contact:

RIVA Technical Support directly at (954) 247-0705 or by e-mail at tech_support@rivaracing.com.

Limited Warranty

RIVA Steering Systems carry a 1 year limited warranty to the original purchaser. They are warranted to be free of defects in materials and workmanship under normal use and service. Customer modified components will be void of warranty. This warranty is limited to defects in the primary components only. Finish and/or wear marks in or on primary components are not covered under this warranty.

RIVA Racing's liability is expressly limited to the repair or replacement of the components contained within or associated with this kit. 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, in RIVA'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 of this 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 the original invoice and a Return Authorization Number (RA#) must accompany all warranty claims.

Warranted replacement parts will be returned freight collect.