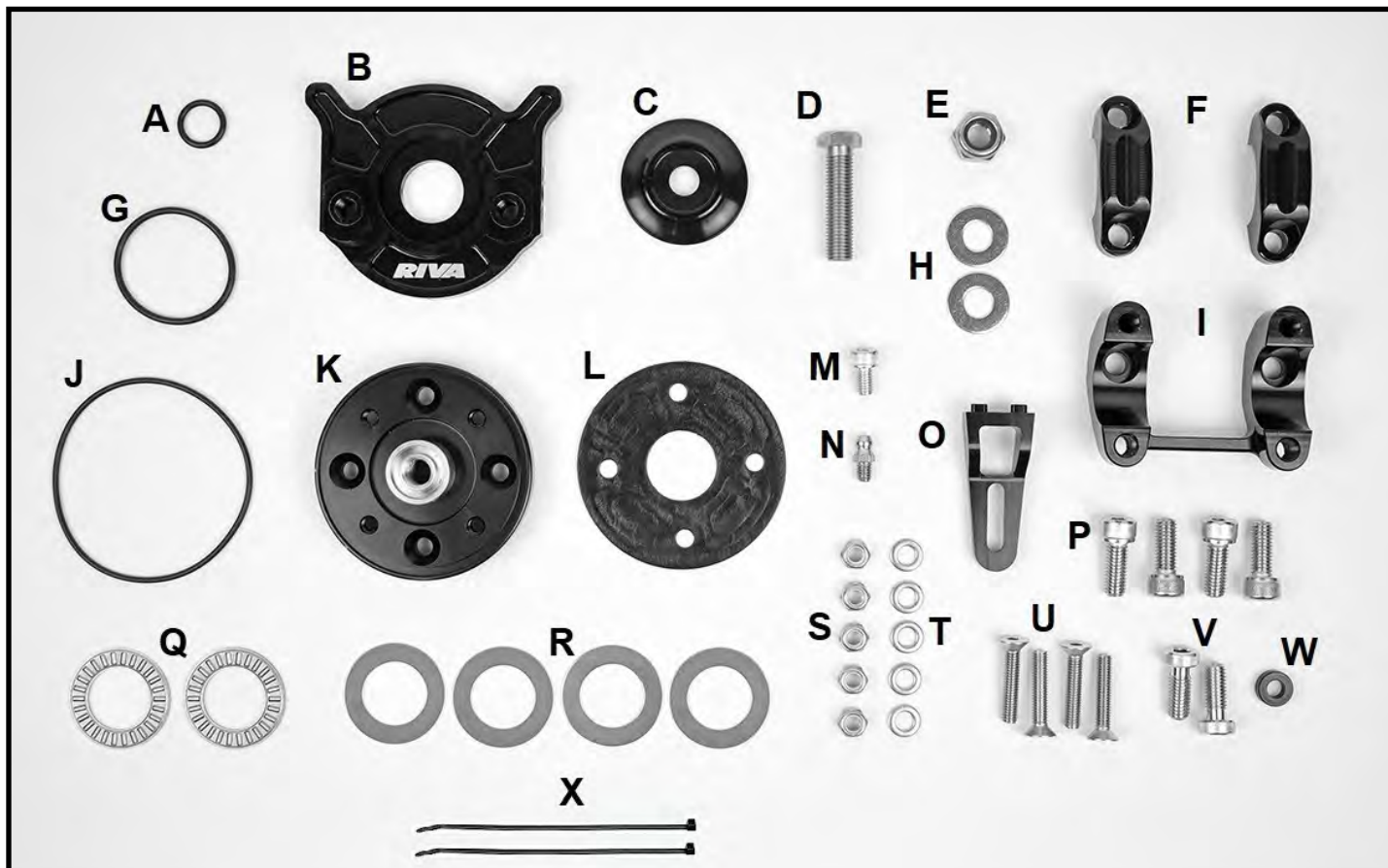




**RIVA RACING**  
PERFORMANCE PRODUCTS & ACCESSORIES

## RIVA Pro-Lite Steering System

RY20130



**Applications:** Yamaha SuperJet ALL; Kawasaki SX-R ALL; Other standup watercraft equipped with RRP or Blows-ion handlepole systems.

**Approximate Installation Time:** 2 Hrs.

**Additional parts required:**

28 mm (1-1/8") handlebar

**Part #**

RY202BK-FAT or RY201BK-FAT

**Recommended Specialty Tools:**

Large C-Clamp or quick clamp

Dremmel, Roto Zip or similar rotary tool

**Part #**

N/A

N/A

**Required Materials:**

Waterproof grease

**Part #**

N/A



## **RIVA Pro-Lite Steering System**

*RY20130*

### **COMPONENT LIST**

Item	Description	Part Number	Qty.	Notes
A	Small O-Ring		1	
B	Steering Plate		1	Red, Blue, Or Black
C	Bearing Cover		1	Red, Blue, Or Black
D	M10 x 35 HHCS		1	
E	M10 Nyloc Nut		1	
F	Upper Handlebar Clamp		2	Red, Blue, Or Black
G	Medium O-Ring		1	
H	M10 Flat Washer	406.10	2	
I	Lower Handlebar Clamp		1	Red, Blue, Or Black
J	Large O-Ring		1	
K	Mounting Base		1	Red, Blue, Or Black
L	Rubber Gasket		1	
M	6 x 10 SHCS	.6C10SHCS	1	
N	Grease Fitting		1	
O	Steering Arm		1	Red, Blue, Or Black
P	M8 X 20 SHCS	.8C20SHCS	4	
Q	Thrust bearing		2	
R	Thrust Washers		4	
S	M6 Nyloc Nut	.6CNNES	5	
T	M6 Flat Washer	.6NWTFS	5	
U	M6 x 30 FHCS	.6C30SFCS	4	
V	M8 x 20 Reduced Head Bolt		2	
W	Nylon Spacer	QCA-RS12050-S	1	
X	Medium Zip Tie	TY24MX	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](mailto:tech_support@rivaracing.com)

### **Notes and Precautions**

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.**

## Disassembly 2021+ SuperJet

Installation instructions for 2021+ SuperJet with OEM handlepole begin here. For after-market handlepoles begin at Installation, OEM and Aftermarket Handlepoles (page 5).

Remove screws (3) securing steering cover to handlepole. (Figure 1)

Remove steering cover. Retain screws.



Figure 1

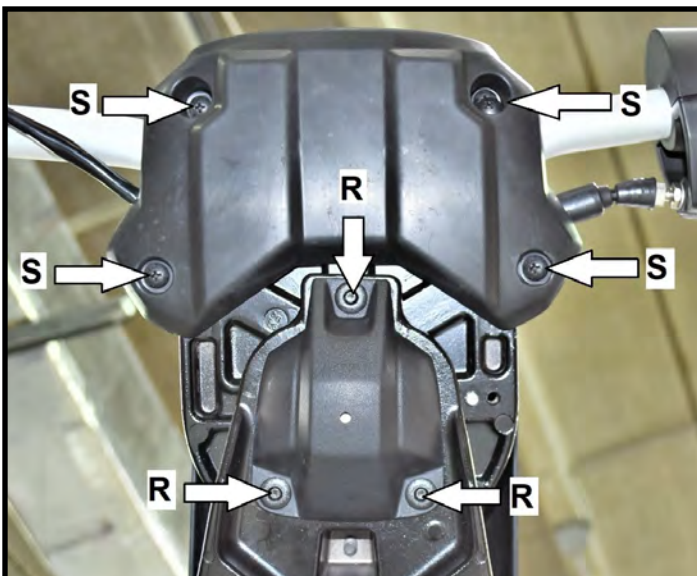
Remove screws (4) securing steering lower pad to upper steering pad. (S in Figure 2.)

Remove upper and lower steering pads.

Remove plastic rivets (3) securing lower steering cover to handlepole. (R in Figure 2.) **Note: Push in center pin on rivet heads with a screwdriver tip to release.**

Remove lower steering cover.

Figure 2



Remove screw in nylon clip retaining throttle cable and harness. (Figure 3)

Remove nylon clip.

Figure 3



Remove phillips head screws (2) in switch housing. (Figure 4)

Remove switch housing from handlebar. Retain screws.

Figure 4



Remove allen head screws (2) in throttle housing. (Figure 5) Retain screws.

Remove throttle housing from handlebar.

Figure 5

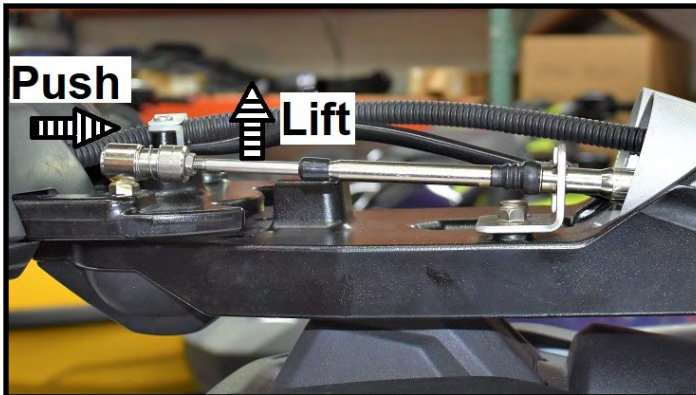




## Disassembly 2021+ SuperJet

Push end cover of steering cable in to release. Lift cable off ball stud. (Figure 6)

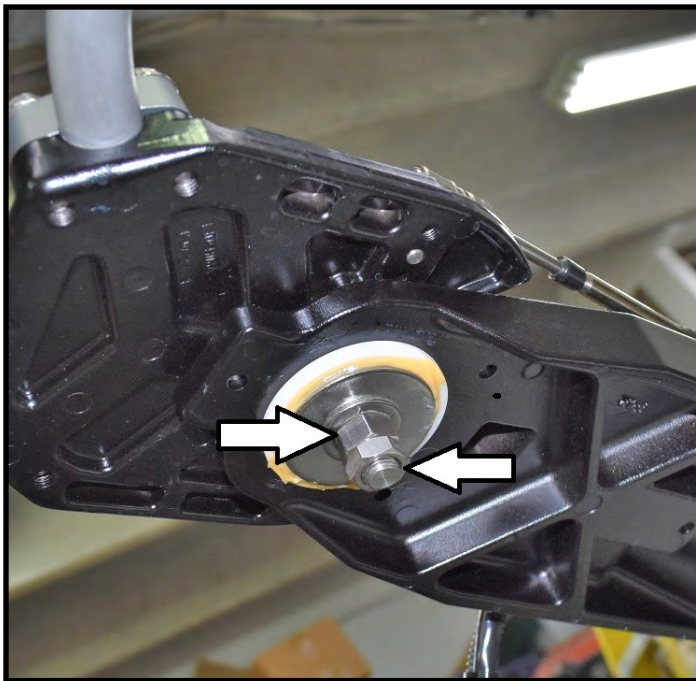
Figure 6



Remove Lock nut, retainer nut, small metal washer, large metal washer, and nylon bushing from bottom of steering. (Figure 7)

Remove steering assembly and nylon bushing from top of handlepole.

Figure 7



Disassembly of OEM steering is complete.

**Proceed to Handlepole Prep 2021+ SuperJet (this page).**

## Handlepole Prep 2021+ Super Jet

If craft is equipped with an aftermarket handlepole spring, it will be helpful to restrain the handlepole with a tie down strap. (Figure 8)

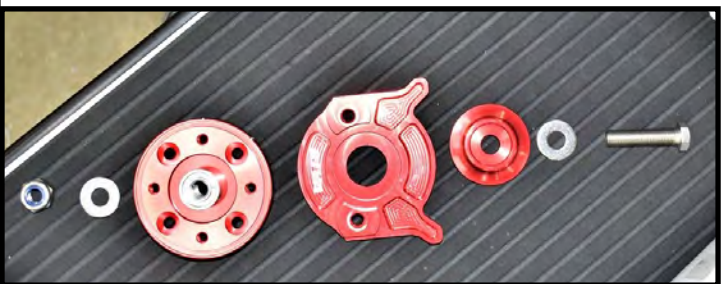
Figure 8



Remove nut from bottom of supplied steering assembly.

Separate steering into component parts. (Figure 9)

Figure 9



Locate supplied mounting base on handlepole with bottom boss centered in bushing hole. Mounting base has two indicator marks on outside face. Align indicator mark for countersunk holes with center of rivet hole in handlepole. (Figure 10)

Clamp mounting base in place with quick clamp or c clamp. (Figure 10)

Figure 10



Mark for countersunk holes aligned with center of rivet hole in handlepole.



## Handlepole Prep 2021+ SuperJet

With a 1/4" drill bit, drill through the handlepole at the 4 countersunk hole locations in the mounting base. (Figures 11-12) **Note:** Place a piece of wood under the handlepole to prevent damage to the craft.

Figure 11

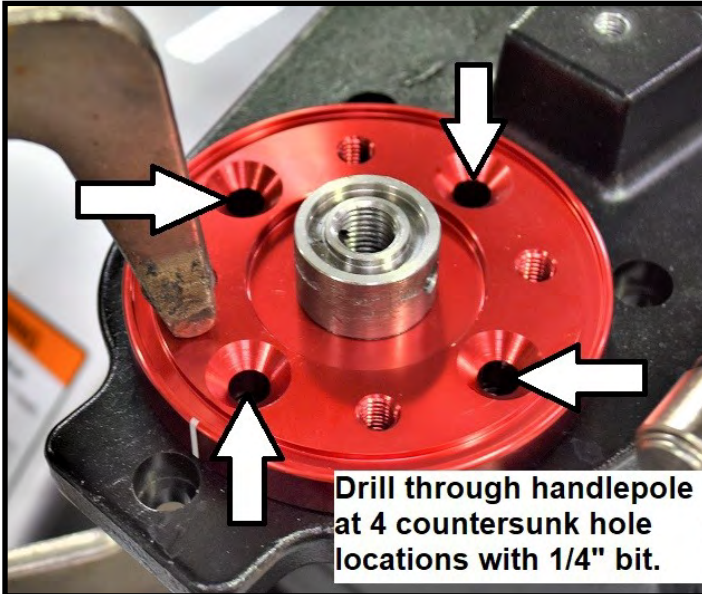


Figure 12



Remove clamp and mounting base from handlepole. Remove burrs from holes. Clean mounting base and handlepole.

**Proceed to Installation OEM and Aftermarket Handlepoles (this page).**

## Installation OEM and Aftermarket Handlepoles

### Gasket installation (For Aftermarket Handlepoles Only)

Install supplied rubber gasket onto bottom of supplied mounting base. (Figure 13)

Figure 13

**Do not use rubber gasket on OEM handlepole installations.**



### All Handlepoles

Place mounting base on handlepole. Align mounting base as shown in figure 10 (page 4).

Secure mounting base to handlepole with supplied M6 x 30 FHCS (4), inserted through countersunk holes from top, supplied M6 flat washers (4), and supplied M6 nyloc nuts (4) on bottom of handlepole. (Figure 14) **Note: Do not overtighten nuts.**

Figure 14



Install supplied grease fitting in supplied steering plate. (Figure 15, next page) **Notes: Apply red Loctite on fitting threads. Do not overtighten fitting.**



## Installation OEM and Aftermarket Handlepoles

Figure 15



Install supplied steering arm on steering plate using supplied M6 x 10 SHCS. (Figure 16) Projections on mounting face of arm fit into pockets in mounting face of plate.

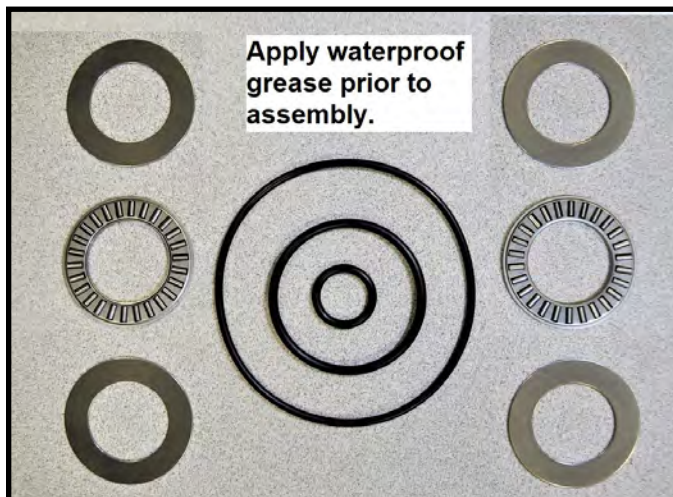
**Notes:** Orient arm as shown in figure 16. Put a light coat of waterproof grease on mating surfaces. Apply red Loctite to screw threads. Do not overtighten bolt.

Figure 16



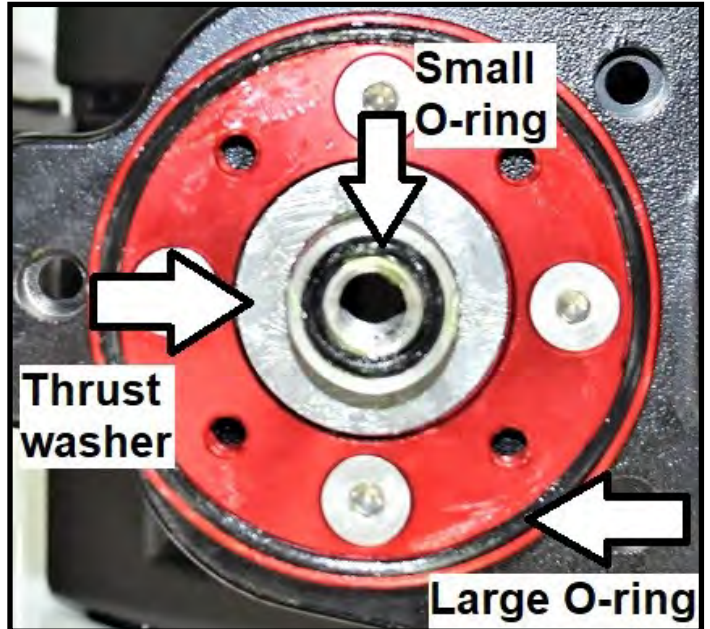
Apply waterproof grease to supplied o-rings (3), thrust bearings (2), and thrust washers (4). (Figure 17)

Figure 17



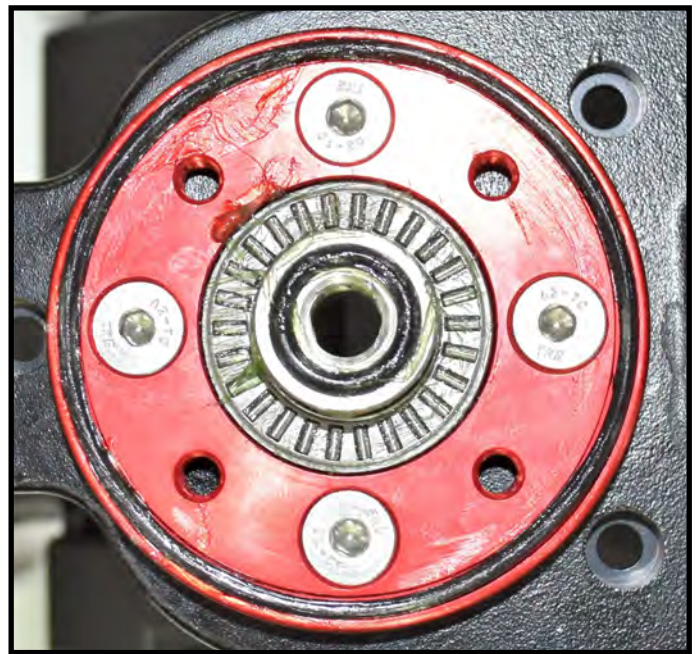
Install supplied large o-ring into outer groove in mounting base. Place supplied small o-ring in central groove in support base. Install one supplied thrust washer into pocket in mounting base. (Figure 18)

Figure 18



Place one of the supplied thrust bearings on top of the thrust washer in the mounting base. (Figure 19)

Figure 19

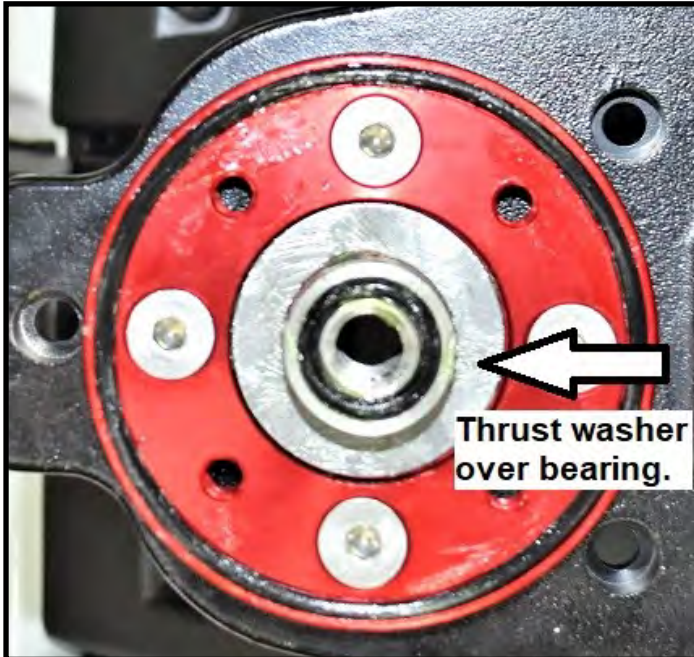


Place a second supplied thrust washer on top of the thrust bearing in the mounting base. (Figure 20, next page)



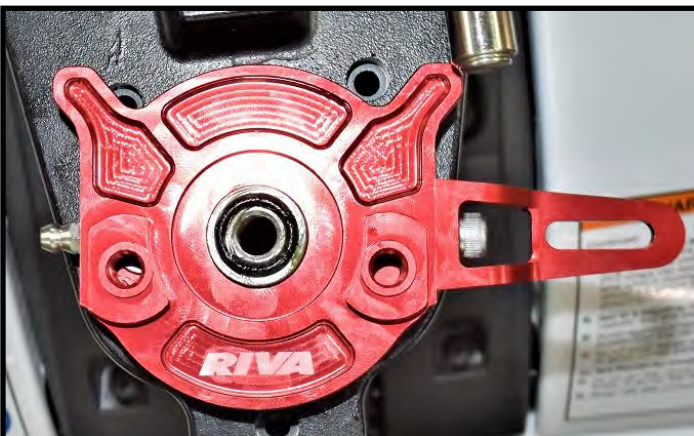
# Installation OEM and Aftermarket Handlepoles

Figure 19



Install steering plate assembly onto mounting base assembly. (Figure 21)

Figure 21



Assemble top bearing in recess in steering plate in the same manner as the bottom bearing; first one thrust washer, then thrust bearing, followed by remaining thrust washer. (Figure 22)

Figure 22



Install supplied medium o-ring into groove in underside supplied bearing cap. (Figure 23)

Figure 23



Install bearing cap with o-ring side down over top thrust washer in steering plate. Secure with supplied M10 X 35 HHCS and supplied M10 flat washer. (Figure 24)

Figure 24



Tighten bolt until steering rotates with desired "feel". **Note: Final adjustment will be made after installation is completed.**

Lock pivot bolt in place by installing remaining supplied M10 flat washer and supplied M10 nyloc nut onto bolt below steering mounting base. (Figure 25) **Notes: Hold bolt head with wrench while installing lock nut to prevent changing the "feel" of the steering. Do not overtighten nut.**

Figure 25





## Installation, OEM and Aftermarket Handlepoles

Separate supplied handle clamp assembly into separate components. (Figure 26)

Figure 26

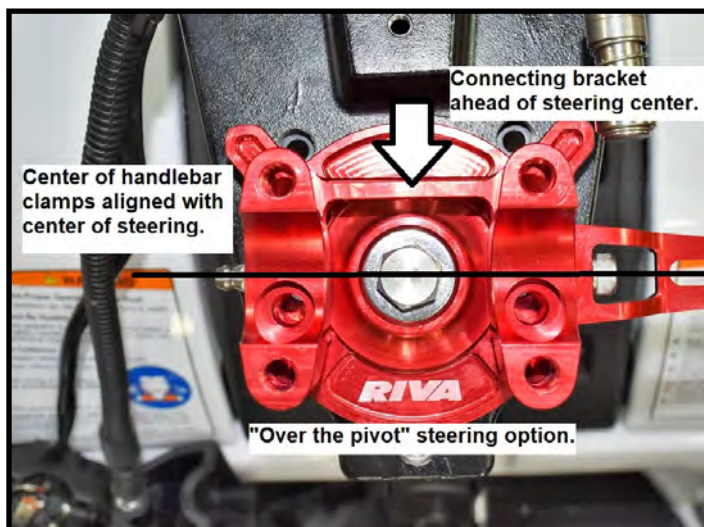


There are two options for installing the handlebar clamp assembly. Changing the installation option changes the feel of the steering.

### Steering Option One: Over The Pivot

If the handlebar clamp assembly is installed so that the centerline of the handlebar clamps is over the center of the pivot bolt the result will be that the bars pivot directly about the center of the steering system. This will give the feel of one hand pushing forward while the other pulls back to turn the craft. (Figure 27)

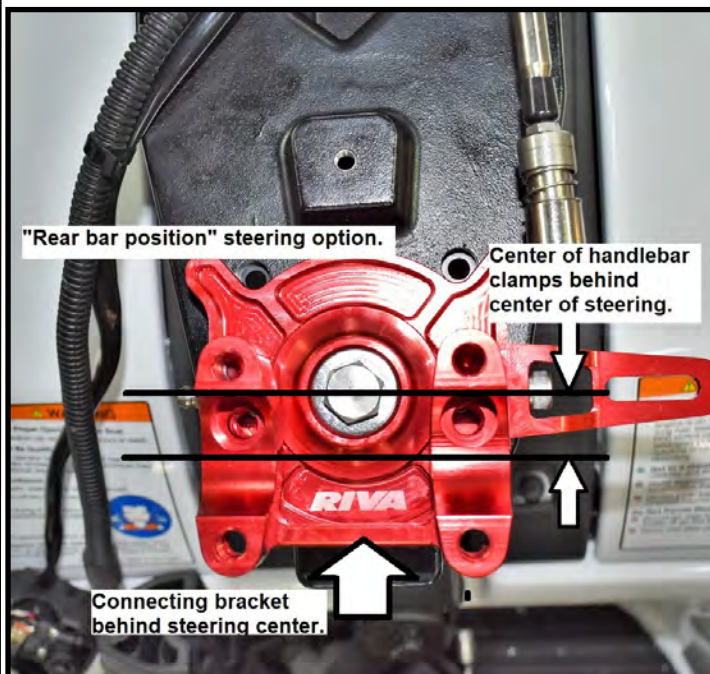
Figure 27



### Steering Option Two: Rear Bar Position

If the handlebar clamp assembly is installed so that the centerline of the handlebar clamps is behind the pivot bolt the bars will move in a sweeping motion when turning the craft. This is similar to the way the OEM steering system of the SuperJet operates. (Figure 28)

Figure 28



Choose the option that best suits your riding style and proceed. The following photos show only the Over The Pivot option. Other than clamp position the installation procedure is the same for both.

Install lower handlebar clamp on steering plate. Secure with supplied M8 x 20 reduced head bolts (2). (Figure 29)  
**Notes: Apply red Loctite to threads. Do not overtighten bolts.**

Figure 29

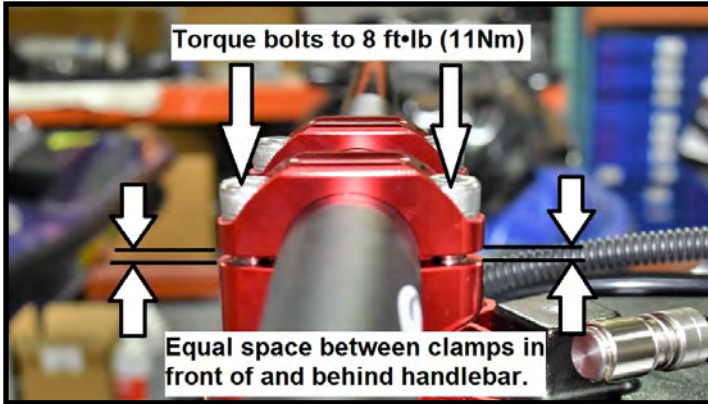


Install handlebar centered in lower clamps. Install upper clamp halves over handlebar. Secure with supplied M8 x 20 SHCS (4). (Figure 30, next page). **Notes: Apply red Loctite to bolt threads. Using a torque wrench tighten clamps evenly with the same gap between upper and lower clamps in front of and behind handlebar. Torque to 8 ft·lb (11Nm). Do not overtighten bolts.**



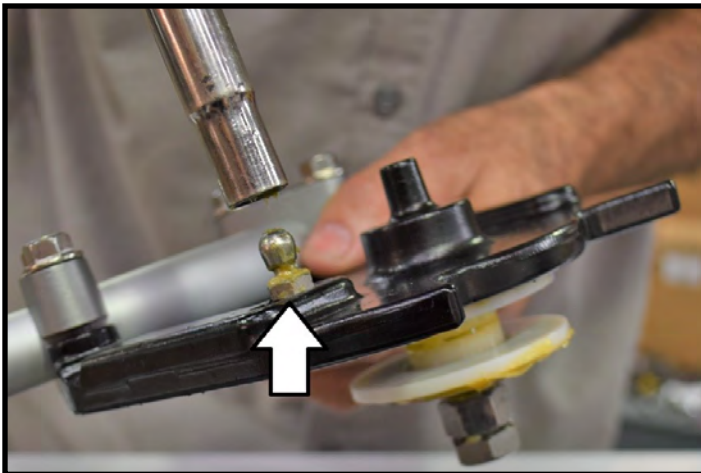
# Installation OEM and Aftermarket Handlepoles

Figure 30



Remove ball stud from OEM steering system. (Figure 31)

Figure 31



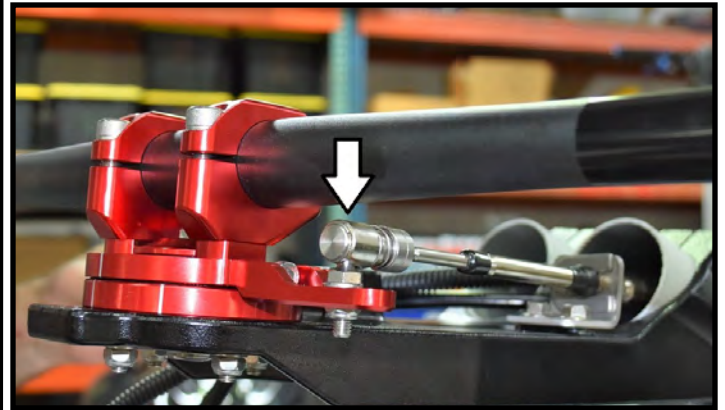
Install ball stud into slot in steering arm with supplied M6 flat washer and M6 nyloc nut. (Figure 32) **Note: Flats of nyloc nut fit into slot in bottom of steering arm. Ball stud position is adjustable to change steering response rate. Closer to pivot is slower response, farther out from pivot gives faster response. Do not overtighten stud.**

Figure 32



Apply waterproof grease to ball stud and snap steering cable joint into position on stud. (Figure 33) **Note: Adjust steering cable as needed.**

Figure 33



Using a Dremmel or similar, with a sanding drum remove locator stud from LH handlebar switch. (Figure 34) **Note: Repeat procedure to remove locator stud from OEM throttle housing if it will be used on craft.**

Figure 34

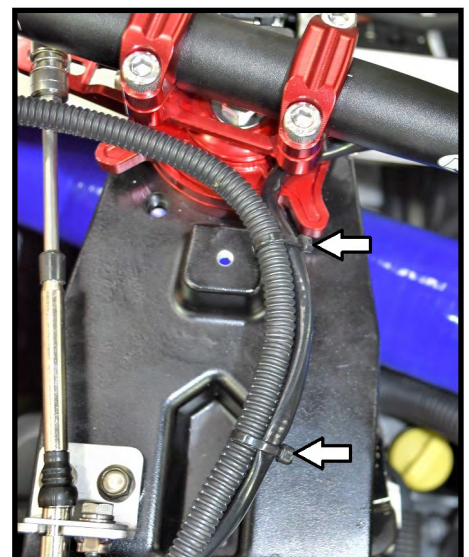


Assemble switch on LH handlebar. Secure with OEM screws previously saved.

Install preferred throttle assembly following instructions with throttle. Adjust throttle cable as necessary.

Secure switch harness to throttle cable with supplied zip ties (2). (Figure 35)

Figure 35

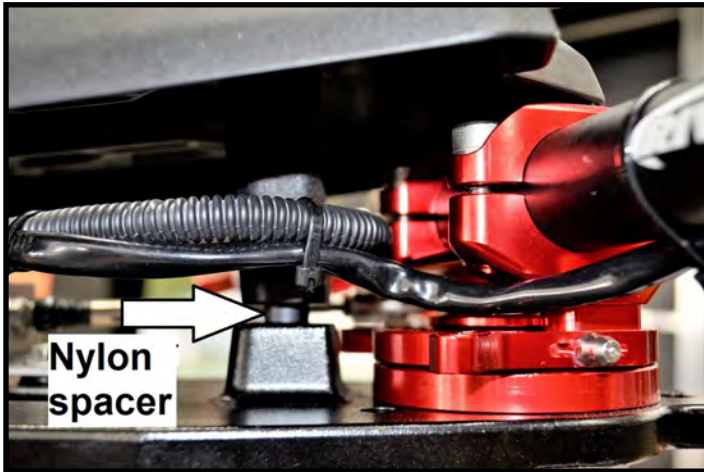




## Installation OEM and Aftermarket Handlepoles

Re-install OEM steering cover using OEM hardware and supplied nylon spacer. (Figure 36 and Figure 1, page 3)

Figure 36



Check freedom of movement ("feel") of steering. Steering "feel" is adjusted by tightening or loosening the pivot bolt. Loosen the M10 nyloc locking nut and tighten pivot bolt for more steering effort, or loosen pivot bolt for less steering effort. Retighten lock nut while holding bolt head after adjustment is completed.

Check adjustment of steering and throttle cables. Adjust as necessary.

Check craft for rags, loose hardware, etc.

Run craft on a flush hose to verify proper operation.

## Maintenance and lubrication of steering system.

RIVA recommends inspecting and lubricating the steering system with waterproof grease every 10 hours of operation.

When adding grease, you must turn the steering system slowly to apply grease evenly. Once you see grease coming out from under the seal the system is full of grease.

**Note: Do not apply too much pressure when adding grease to avoid blowing out the o-rings.**

***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](mailto: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.