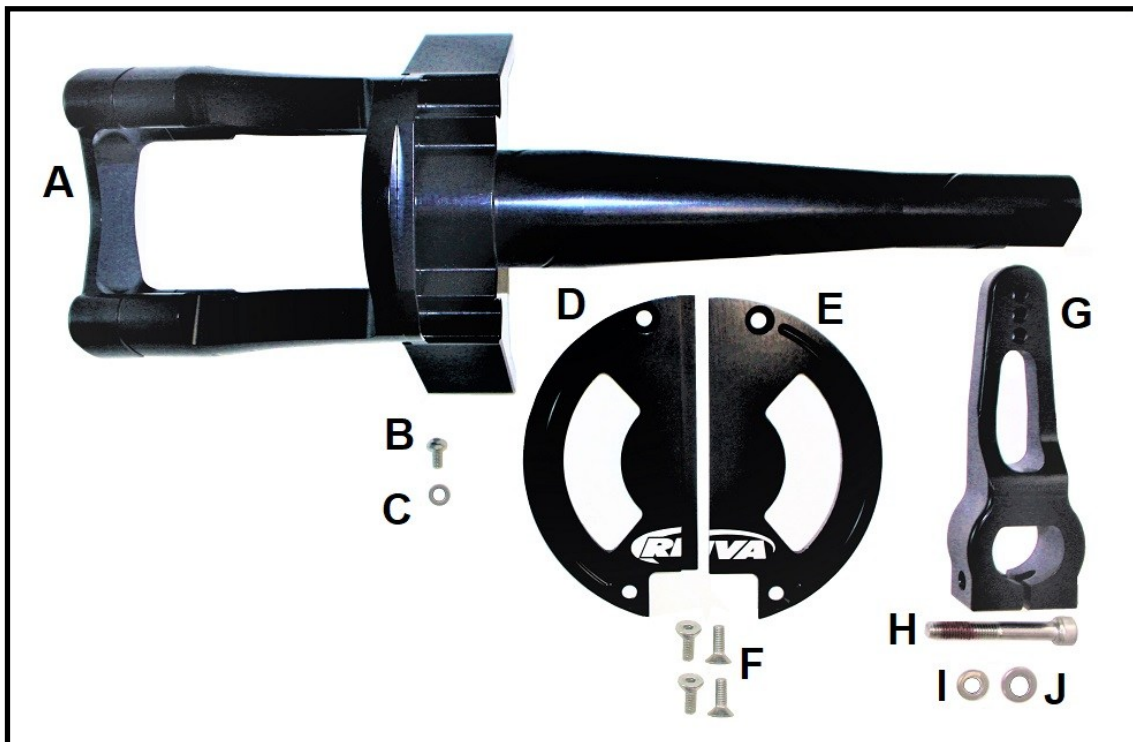




**RIVA RACING**  
PERFORMANCE PRODUCTS & ACCESSORIES

## Yamaha FX Pro-Series Steering System

RY20120



### Applications:

Yamaha 2015-21 FX Models

### Approximate Installation Time:

3 Hours

### Recommended Specialty Tools:

OEM Service Manual

### Required Materials:

Red Loctite

Blue Loctite

Waterproof Grease

### Part #

LIT-18616-1T-1X (2015-18)

LIT-18616-03-86 (2019-21)

### Part #

N/A

N/A

[ACC-GREAS-10-CT](#)

### 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>



**Yamaha FX Pro-Series Steering System**

*RY20120*

**COMPONENT LIST**

<b>ITEM</b>	<b>DESCRIPTION</b>	<b>RIVA PART #</b>	<b>QTY</b>	<b>NOTES</b>
A	Steering Column,	QCA-RY20120-U	1	
B	Bolt, BHCS, 5 X 10MM (Sensor)	098.5.10	1	
C	Washer, Flat 5MM (Sensor)	369020	1	
D	L Steering Cover Half		1	
E	R Steering Cover Half		1	
F	BOLT, 6MM X 16MM, FHCS	823078	4	
G	Steering Arm		1	
H	Bolt, 8MM X 55MM, SHCS	051.8.55	1	
I	Lock Washer, (8mm)	04478	1	
J	Flat Washer, (8mm)	369023SS	1	

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).

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.**

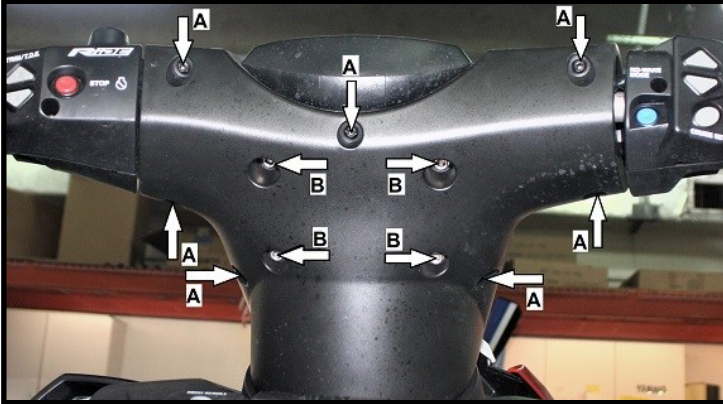
## - INSTALLATION INSTRUCTIONS -

Remove seats.

Open front storage compartment and remove rivets (5) retaining bow locker plate. Remove bow locker plate.

Remove screws (7), (A in figure 1) holding front steering pad and remove front pad. Remove bolts (4), (B in figure 1) holding rear pad to steering column and remove rear pad.

Figure 1

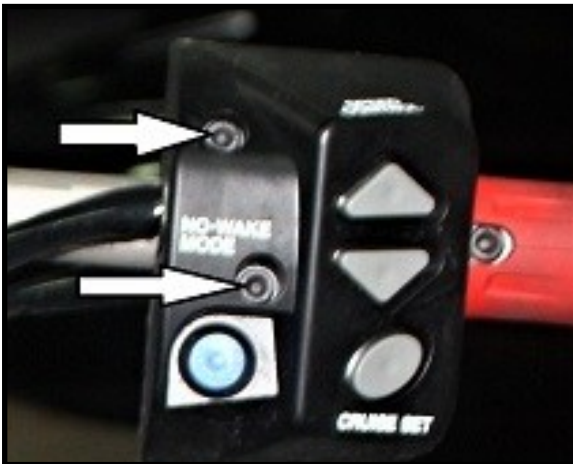


Remove screws (6) from control housings. (Figures 2 and 3) Remove control housings from handlebar.

Figure 2



Figure 3

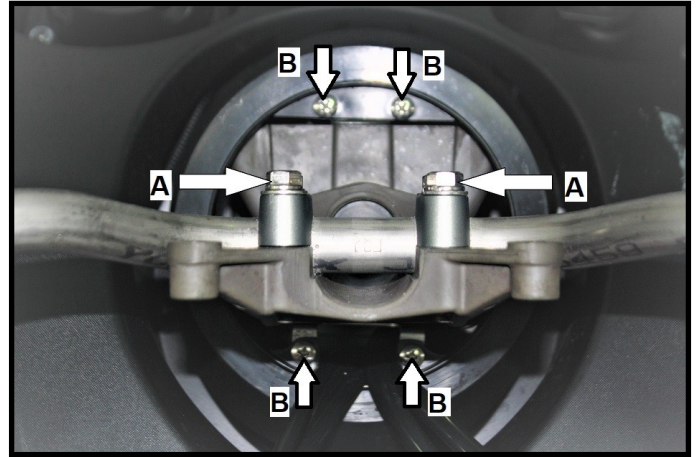


Remove bolts (4) holding handlebar clamps to steering column. (A in figure 4) Remove handlebar.

Remove screws (4) retaining steering cover and remove from craft. (B in Figure 4)

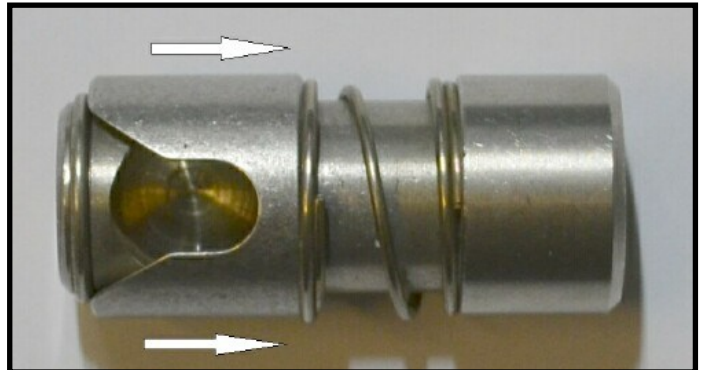
**Note: Guide control assemblies, wires and cables through cover one by one to avoid damage to switches or wiring.**

Figure 4



Grasp the spring loaded cover of the steering cable ball joint and push in the direction shown while lifting off ball stud on steering arm. (Figure 5)

Figure 5



Bend down locking tabs and remove bolt from steering arm. Remove steering arm from steering shaft. (Figure 6)

Figure 6

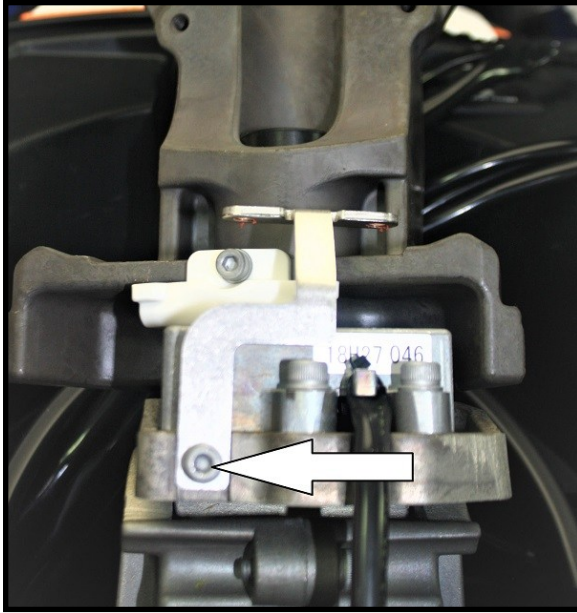




## - INSTALLATION INSTRUCTIONS -

Loosen bolt on front steering cover bracket. (Figure 7)

Figure 7



Hold front steering cover bracket out of the way and pull steering shaft straight up to remove from craft. **Note: take care not to allow upper and lower nylon steering bushings to drop into hull.**

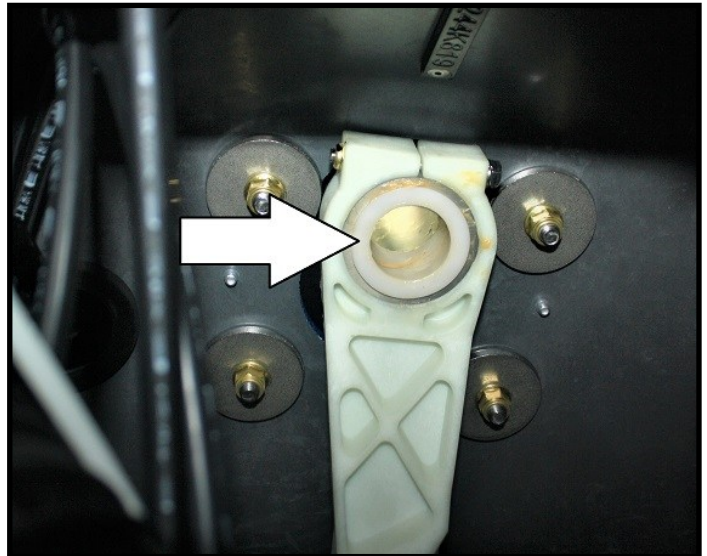
Remove supplied steering arm from supplied steering shaft. Transfer magnets (A) and bushing (B) to supplied steering shaft. **NOTE: Apply red Loctite to bolt. Do not overtighten.** (Figure 8)

Figure 8



Insert supplied steering shaft into place. **Note: hold lower bushing in place to make sure it does not drop into hull while installing shaft.** (Figure 9)

Figure 9



Remove ball stud from OEM steering arm. Transfer to supplied steering arm as shown. **Install with red Loctite.** OEM locknut is not used. **Note: three positions are provided for installation. Center position duplicates OEM steering. Installing ball stud closer to shaft enables faster steering response. Farther out enables slower steering response.** (Figure 10)

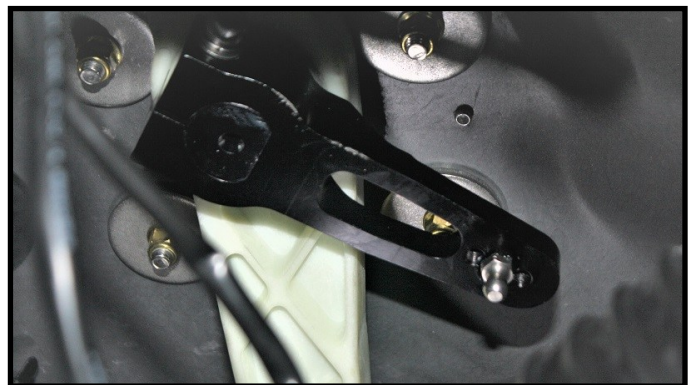
Figure 10

Install supplied steering arm onto steering shaft.



**Note: Steering arm locates shaft vertically. Arm should fit snugly against lower steering bushing to prevent up and down motion of steering shaft. Shaft should turn freely.** Secure steering arm with supplied 8 x 55mm SCHS lock washer and flat washer. (Figure 11)

Figure 11



Connect steering cable to ball stud in steering arm.

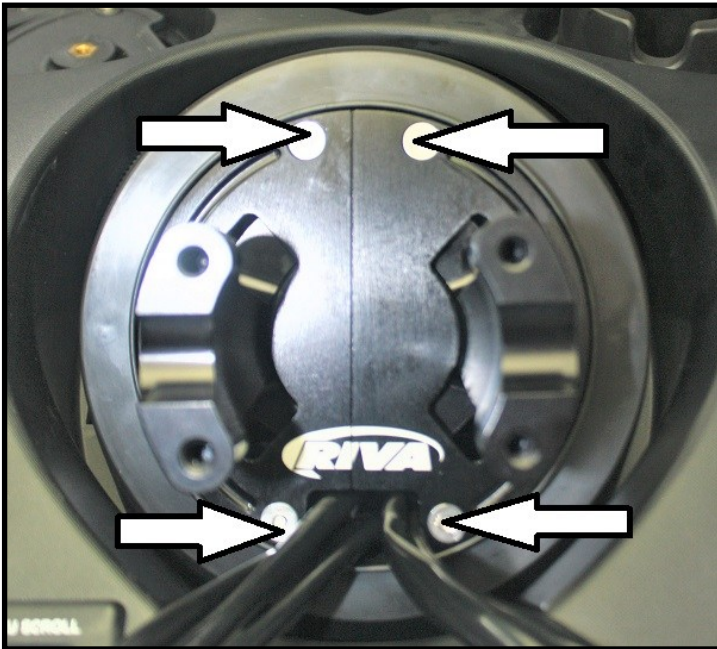
## - INSTALLATION INSTRUCTIONS -

Tighten bolt securing front steering cover mount in upright position. (Refer to figure 7, pg 4.)

Remove top clamp screws (4) and top clamp from supplied RIVA steering column.

Install steering cover and supplied cover plates using supplied 6 x 16 mm FHCS. (Figure 12) **Note: Apply blue Loctite to fasteners. Do not overtighten.**

Figure 12



Install aftermarket handlebars and center side to side. Secure handlebars using supplied clamp and M8x25 SHCS (4). **NOTE: Apply red Loctite to threads. Ensure handlebar cross-bar is directly over clamp. Torque bolts evenly in a crisscross pattern to 15 ft•lb (20 N•m).**

Verify steering travel and centering. Adjust steering using cable adjusters as necessary.

Reinstall parts previously removed reversing removal procedures.

Check bilge for tools, rags, etc.

Run craft on a flush kit to check for proper operation.

## CONTROL OPTIONS

### RIVA Racing Handlebar Option:

RIVA Yamaha 'PRO-BAR' Runabout Bars

Item #: [RY204BK-BAR-2](#) (32")

[RY205BK-BAR-2](#) (30")

### RIVA Racing Grip Options:

ODI Rogue Lock-On Grips, 130mm, No Flange, Black

Item #: [L31RGB-S](#)

ODI Ruffian Lock-On Grips, 130mm, No Flange, Black

Item #: [L32RFB-S](#)

RIVA ODI Grip End Cap & Clamp Kit

Item #: [RY206-COLOR](#)

***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@rivamotorsports.com](mailto:tech_support@rivamotorsports.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.