



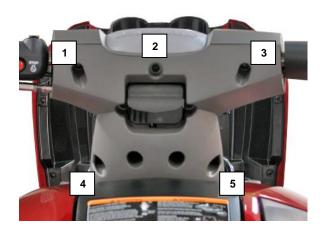
# Pro-Series Steering System PART# - RY20050-U-3.5-1

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. Read through instructions entirely before performing installation. These instructions have been written in step-by-step format and refer to illustrations. Please follow these step-by-step instructions and illustrations carefully.

APPLICATION(S): Yamaha FZR & FZS Models

# - INSTALLATION INSTRUCTIONS -

Remove screws (5) securing handlebar cover. Remove front half of cover.



Remove throttle cable from throttle trigger.

Remove screws (2) securing start/stop switch housing to handlebars. Remove start/stop switch housing.

Remove bar end cap from left hand grip.

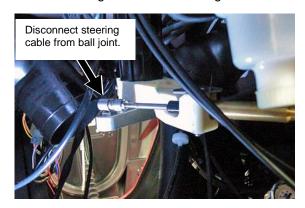
Remove screw (1) securing Q.S.T.S. grip assembly to handlebars.

Remove clamps (2 clamps/4 bolts) securing handlebars to stock steering.

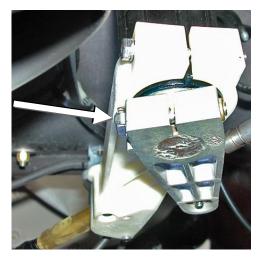
Withdraw handlebars from Q.S.T.S. grip assembly.

Inside front storage compartment remove rivets (5) securing service lid in place. Remove service lid. **NOTE:** At center of each rivet press pin inward.

Disconnect steering cable from steering arm.



Locate bolt securing steering arm to main shaft.



Pry locking tabs away from head of bolt. Remove bolt completely.

Pull down on steering arm to remove from end of steering shaft.

Remove stock steering from steering housing assembly by pulling upward.



Remove plastic collars (1 large/1 small) from steering shaft.

Install large plastic collar onto supplied large billet collar. Coat plastic collar with waterproof grease.



Install large billet collar into top of steering housing assembly. Coat plastic collar with waterproof grease.



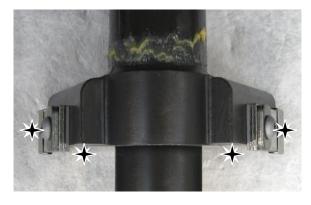
Install small plastic collar onto supplied small billet collar. Coat plastic collar with waterproof grease.



# 2009-2014 Year Models:

Apply generous amount of heat to head of bolts (2) securing OTS board springs to stock steering shaft. Apply heat to shaft under bolts as well.

NOTE: Take care not to burn yourself. Components will be very hot!



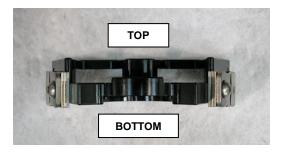
Remove bolts securing board springs to stock steering shaft. **NOTE: If bolts do not loosen easily apply more heat.** 



Remove OTS bolts and board springs. **NOTE:** If bolts do not loosen easily apply more heat. Take care not to burn yourself. *Components will be very hot!* 

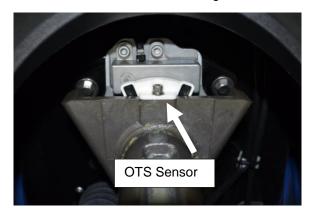
Allow components to cool completely.

Coat board springs with waterproof grease. Install onto sides of supplied billet steering stop plate. Secure with stock bolts. NOTE: Apply red Loctite to bolts. Torque bolts to 12.5 ft-lb / 17 N-m.



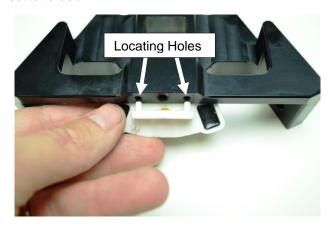
# 2015 & Newer Models:

Remove OTS sensor on stock steering shaft.



Install OTS sensor on to billet steering stop plate using original socket head bolt.

**Note:** The OTS sensor has 2 locating pins. Ensure pins are in alignment with holes on steering stop. Apply blue Loctite to bolt.





All models years – continue this point forward.

Install billet steering stop plate onto large billet collar.

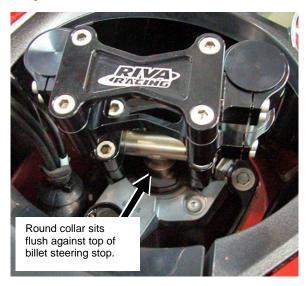


Secure supplied billet steering shaft to supplied steering riser. Thoroughly clean clamping components where they join using a non-residual cleaner. NOTE: Apply red Loctite to clamp bolts. Torque bolts evenly to 14.8 ft-lb / 20 N-m.

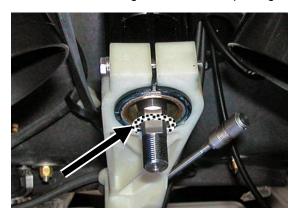


Apply generous amount of waterproof grease around top of stainless steel steering shaft (see detail area above).

Install steering shaft into billet steering stop plate and billet collar. **NOTE:** Stop plate and collar are machined to accept steering shaft. Check alignment before installing shaft.



Coat lower end of steering shaft with waterproof grease.



Install small billet collar onto end of steering shaft and into housing assembly.



Coat billet collar and end of steering shaft with waterproof grease.

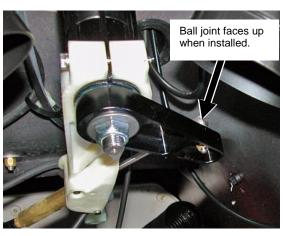


Transfer steering ball joint and lock nut from stock steering arm to supplied billet steering arm.



**NOTE:** We have provided three installation options. The center is equal to stock. Inside option will move steering nozzle faster. Outside will move steering nozzle slower. Always check steering cable travel to ensure steering locks on billet steering stop and not the actual cable.

Install supplied billet steering arm onto end of steering shaft. **NOTE:** Arm is machined to fit over billet collar.



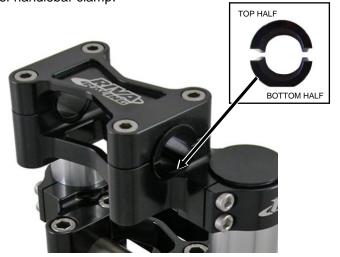
Install supplied washer and secure with supplied nut. **NOTE:** Tighten nut until you are no longer able to turn upper portion of steering freely by hand.

Note: The steering shaft nut is a nylon locking nut and does not require Loctite. DO NOT use Loctite on lower steering shaft nut as this may cause the threads to strip or gall if the nut needs to be removed. Use only Anti-Seize on the lower steering shaft threads.

Cover ball joint with waterproof grease. Connect steering cable to ball joint. Ensure slide collar covers ball joint completely.

#### HANDLEBAR INSTALLATION:

The RIVA Pro-Series Steering Stem accepts both standard 7/8" bars and 1-1/8" bars. Billet spacers are supplied to allow use of 7/8" bars. Note that billet spacers have a flange collar on one side. This faces out. Also note that one spacer on each side has a flat surface machined into the flange collar. Place in bottom of handlebar clamp.



NOTE: Thoroughly clean bars, billet spacers and handlebar clamping surfaces with a non-residual cleaner. Apply red Loctite to handlebar clamp bolts. Torque bolts evenly to 14 ft-lb / 20 N-m.

Install aftermarket handlebars, controls and hand grips.

Check steering nozzle alignment and steering cable travel. Adjust as necessary using procedure outlined in your OEM service manual.

Check throttle cable adjustment to ensure proper engine idle when bars are turned either direction completely. Reference OEM service manual.

Check bilge for tools, rags, etc.

# **ADJUSTMENT NOTES:**

Handlebar height and tilt are both adjustable. When final position is achieved remove all bolts loosened one at a time, apply blue Loctite and re-torque. Periodically check all bolts to ensure they are properly torqued. If any are loose remove, reapply Loctite and re-torque.

# 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 <a href="mailto:tech\_support@rivamotorsports.com">tech\_support@rivamotorsports.com</a>.

# **Limited Warranty**

RIVA Pro-Series 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.