



## Speed Reduction Kit *PART# - RY1200TW-30-1*

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

**APPLICATION(S):** 2007~11 Yamaha VX110 Models

### **- INSTALLATION INSTRUCTIONS -**

Inside the front storage compartment, access throttle wheel.

**2009 & Older VX:** On fuel filler side, locate grommet securing bulkhead to hull. Fold panel over to gain access to throttle controller assembly.



**TIP:** Push center of rivet in to release.

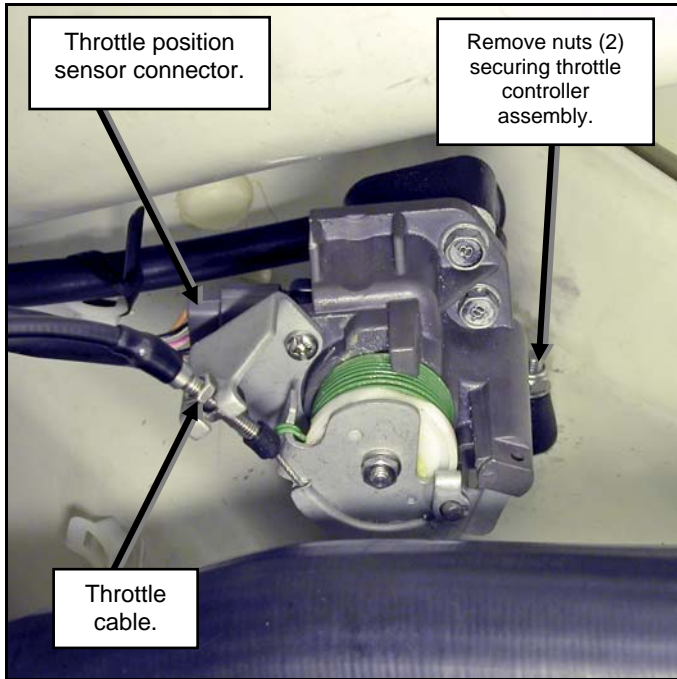
**2010 & Newer VX:** Inside front storage compartment remove service lid (5 rivets).



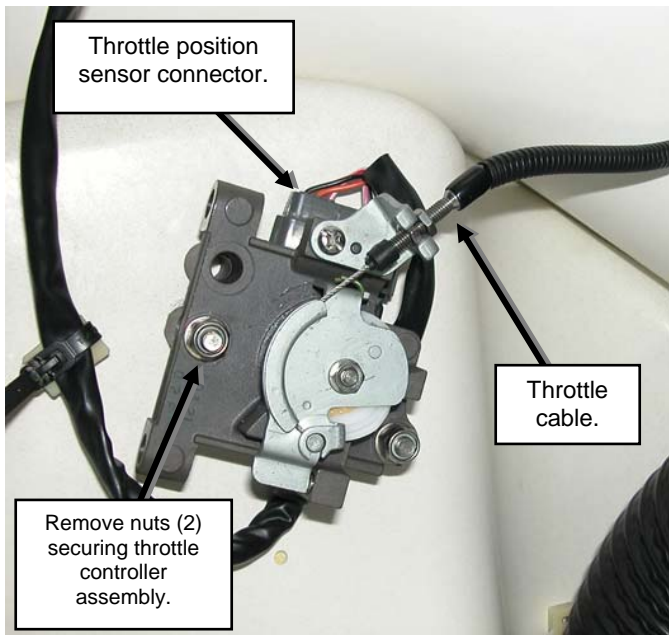
**TIP:** Push center of rivet in to release.

Disconnect and remove throttle cable. Remove nuts with washers (2) securing throttle controller assembly to hull and discard. Remove throttle controller assembly. Disconnect throttle position sensor connector.

**2009 & Older VX:**

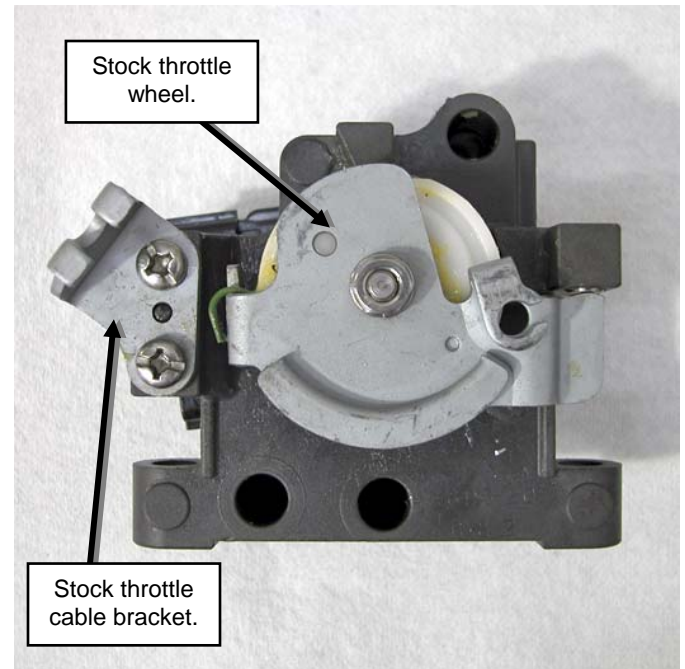


**2010 & Newer VX:**

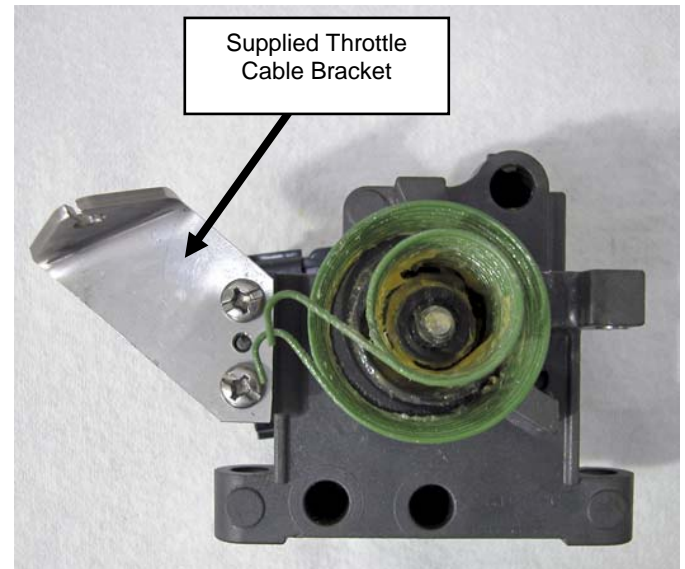


Remove stock throttle wheel with plastic spring retainer and throttle cable bracket from throttle controller assembly and discard. Retain Phillips head screws.

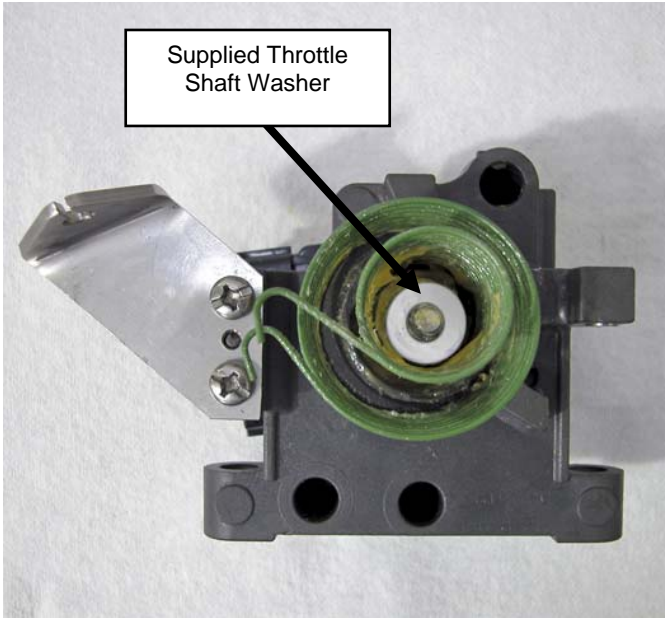
**NOTE: Do not pry throttle wheel with any tools. Pull upward applying even pressure. Use care when removing as springs will uncoil rapidly.**



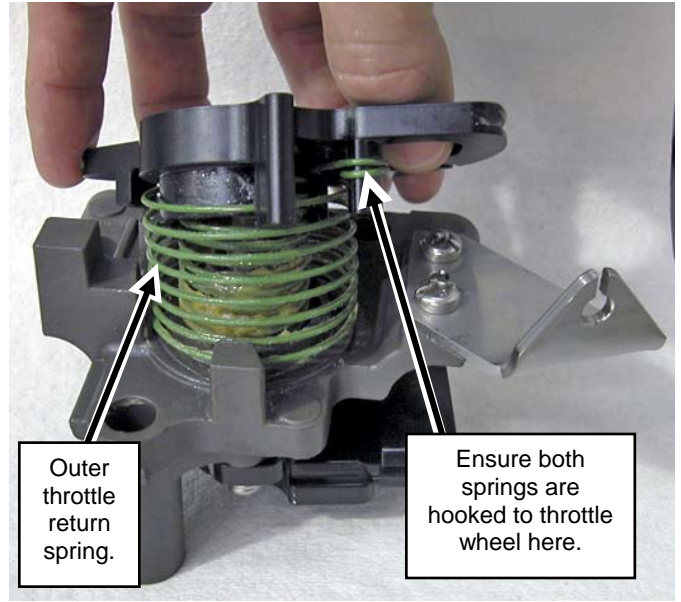
Install supplied throttle cable bracket onto throttle controller assembly and secure with stock Phillips head screws. **NOTE: Use red Loc-tite on threads. Do not over tighten screws.**



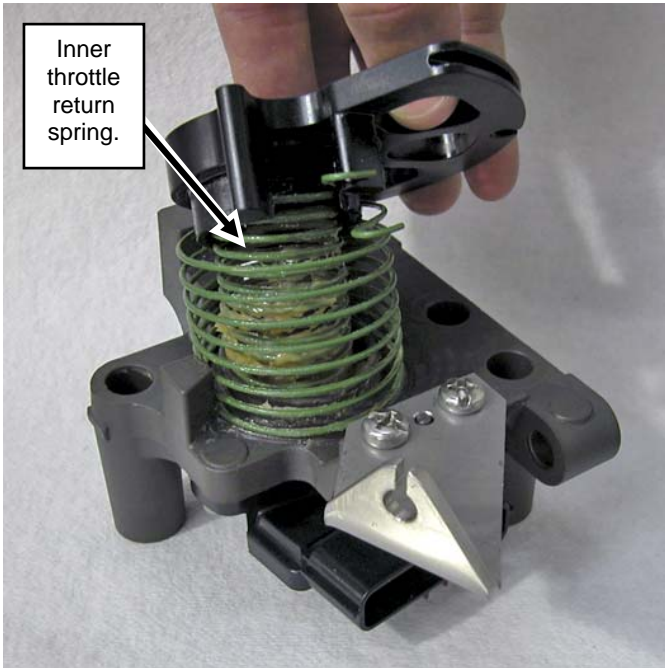
Install supplied plastic washer onto throttle wheel shaft.



Place throttle wheel into outer throttle return spring. (see illustration #8)



Place supplied throttle wheel onto inner throttle return spring.



Rotate throttle wheel clock-wise one full rotation, line up opening in center of throttle wheel with throttle shaft and install.



Rotate further to install throttle wheel onto throttle shaft completely. Install stock lock washer and throttle shaft nut onto throttle shaft and tighten. (see illustration #10)



**NOTE: Do not over tighten nut.**

Twist and release throttle wheel several times to test for smooth, normal operation.

**2009 & Older VX ONLY:** Using supplied drill bit enlarge openings in support bracket for mounting studs.



Replace throttle controller assembly in hull.

**2009 & Older VX:** Place supplied aluminum spacers onto throttle bracket mounting studs.



Secure throttle controller assembly.

**2009 & Older VX ONLY:** Secure using supplied barrel nuts and lock washers. **TIP:** Loosely install one barrel nut with lock washer at a time **NOTE: Use red Loctite. Do not over tighten nuts.**



Reconnect throttle position sensor connector. **NOTE: Make sure connector "snaps" into place.**

Reconnect throttle cable and secure. **TIP:** Apply a generous amount of waterproof grease to end of throttle cable. **NOTE:** It will be necessary to completely loosen and remove nut closest to end of cable housing.

Adjust throttle cable tension so that throttle wheel is rotated completely when throttle trigger is firmly against handgrip at full throttle. **NOTE: Apply red Loctite to threads of throttle cable at adjustment nuts.**

**IMPORTANT:**

**There should not be a gap between throttle trigger and handgrip at full throttle when cable is adjusted properly. Failure to adjust cable properly could result in a broken throttle cable, throttle trigger or throttle wheel. Replace worn or damaged throttle cables.**

Check bilge for tools, rags, etc. Run craft on a flush kit to check for proper operation.

Replace forward bulkhead panel.

***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).

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RIVA Speed Reduction Kits carry a 90-day 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.

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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.