



**RIVA RACING**  
PERFORMANCE PRODUCTS & ACCESSORIES

## Speed Reduction Kit

**PART# - RY1200TW-30**

**APPLICATION(S):** VX110 & VX110 Deluxe

## **- INSTALLATION INSTRUCTIONS -**

**WARNING: Yamaha has issued a recall kit (part# 90891-40642-00) for all 2005 model VX110's, which must be installed prior to installing this Speed Reduction Kit. Please contact your Yamaha dealer for more information.**

1. Inside the front storage compartment, on fuel filler side, locate grommet securing forward bulkhead to hull. (see illustration #1)
2. Carefully pry upward with even pressure on both sides of grommet with large, flat head screwdrivers. Fold panel over to gain access to throttle controller assembly. (see illustration #1)
3. Disconnect and remove throttle cable. (see illustration #2)
4. Remove the two nuts with washers securing throttle controller assembly to hull and discard.
5. Remove throttle controller assembly. Disconnect throttle position sensor connector. (see illustration #3)
6. Remove stock throttle wheel with plastic spring retainer and throttle cable bracket from throttle controller assembly and discard. Retain Phillips head screws. (see illustration #4) **NOTE: Do not pry throttle wheel with any tools. Pull upward applying even pressure. Use care when removing, as springs will uncoil rapidly.**
7. 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.**
8. Install supplied plastic washer onto throttle wheel shaft. (see illustration #6)
9. Place supplied throttle wheel onto inner throttle return spring. (see illustration #7)
10. Place throttle wheel into outer throttle return spring. (see illustration #8)
11. Rotate throttle wheel clock-wise one full rotation. (see illustration #9)
12. Line up opening in center of throttle wheel with throttle shaft and install. (see illustration #10)
13. Install stock lock washer and throttle shaft nut onto throttle shaft and tighten. (see illustration #11) **NOTE: Do not over tighten nut.**
14. Twist and release throttle wheel several times to test for smooth, normal operation.
15. Using supplied drill bit enlarge openings in support bracket for mounting studs. (see illustration #12)
16. In hull, place supplied aluminum spacers onto throttle bracket mounting studs. (see illustration #13) Replace throttle controller assembly and secure using supplied barrel nuts and lock washers. **TIP:** Loosely install one barrel nut with lock washer. Then install second barrel nut with lock washer. (see illustration #14) **NOTE: Use red Loc-tite. Do not over tighten nuts.**
17. Replace throttle position sensor connector. (see illustration #15) **NOTE: Make sure connector "snaps" into place.**
18. Apply a generous amount of waterproof grease to throttle cable end. Install throttle cable end into throttle wheel. Install throttle cable housing end into throttle cable bracket. (see illustration #15) **NOTE: It will be necessary to completely loosen and remove nut closest to end of cable housing.**

19. Adjust throttle cable tension so that throttle wheel is rotated fully when throttle trigger is firmly against handgrip at full throttle. **NOTE: Apply red Loc-tite to threads of throttle cable housing adjuster. (see illustration #15) 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 trigger or throttle wheel. Be sure to replace throttle cable housing end seal! (see illustration #16)**
20. Run craft on a flush kit and test throttle trigger several times for smooth, normal operation.
21. Replace forward bulkhead panel.

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

### **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)

### 90-day Limited Warranty

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.

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 must accompany all warranty claims.

Warranted replacement parts will be returned freight collect.

# Speed Reduction Kit

PART# - RY1200TW-30

## - INSTALLATION IMAGES -



Illustration 1

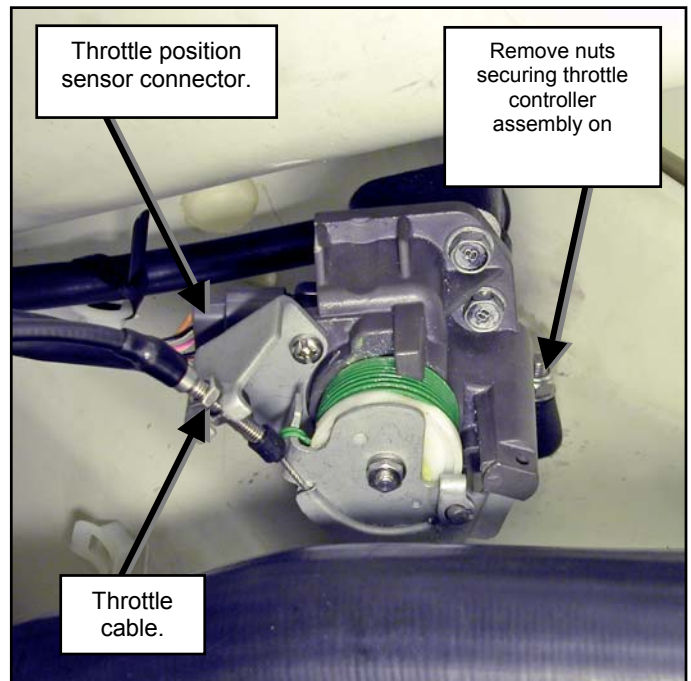


Illustration 2

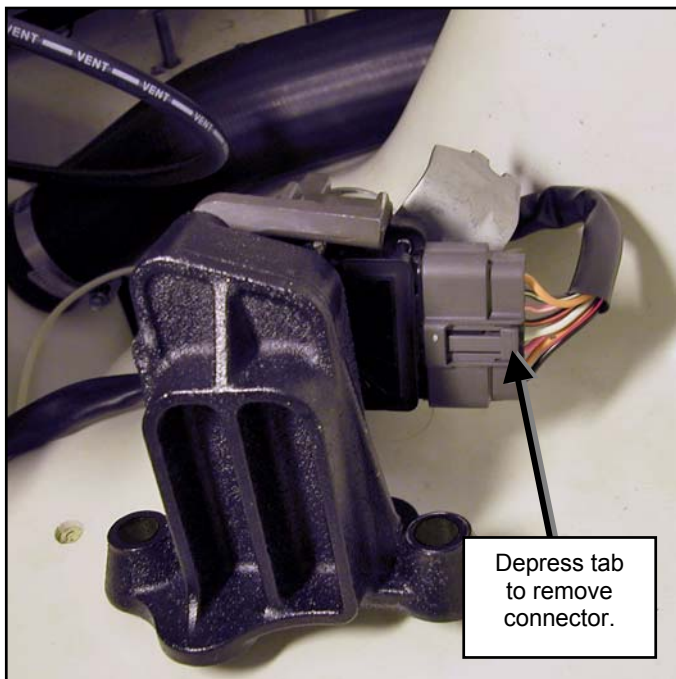


Illustration 3

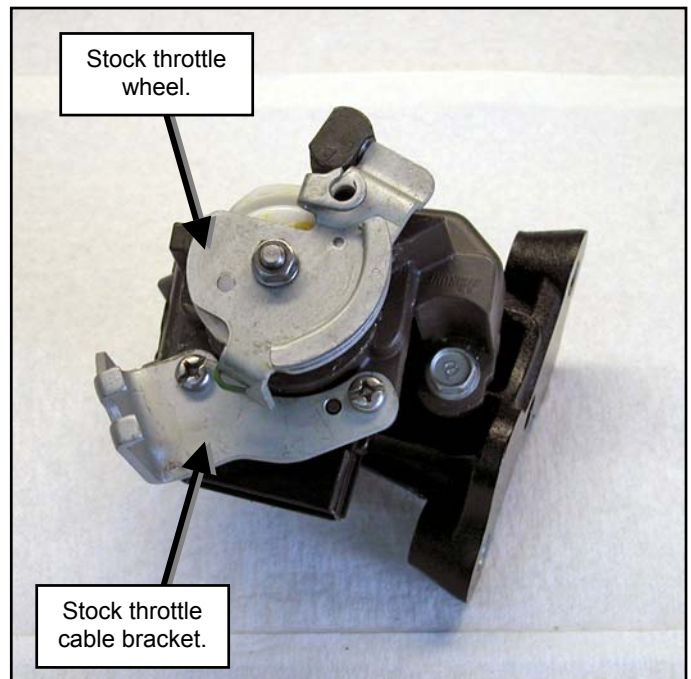


Illustration 4

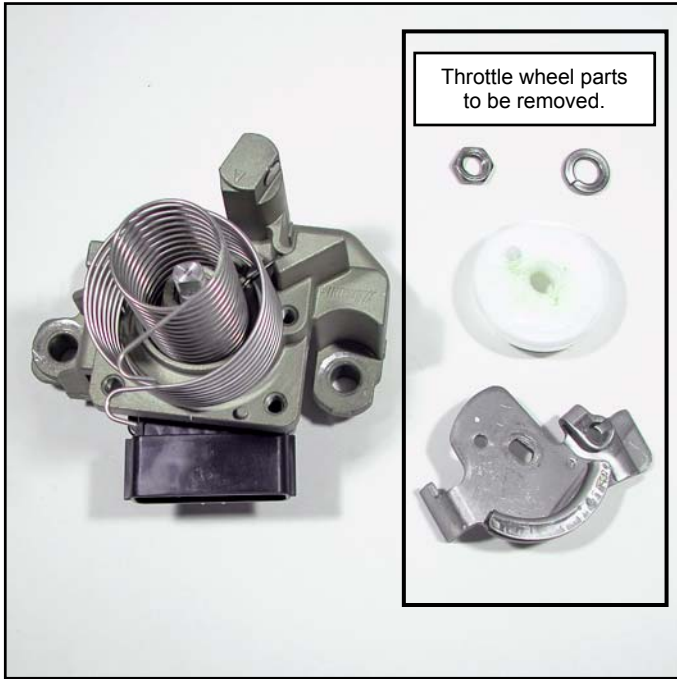


Illustration 5

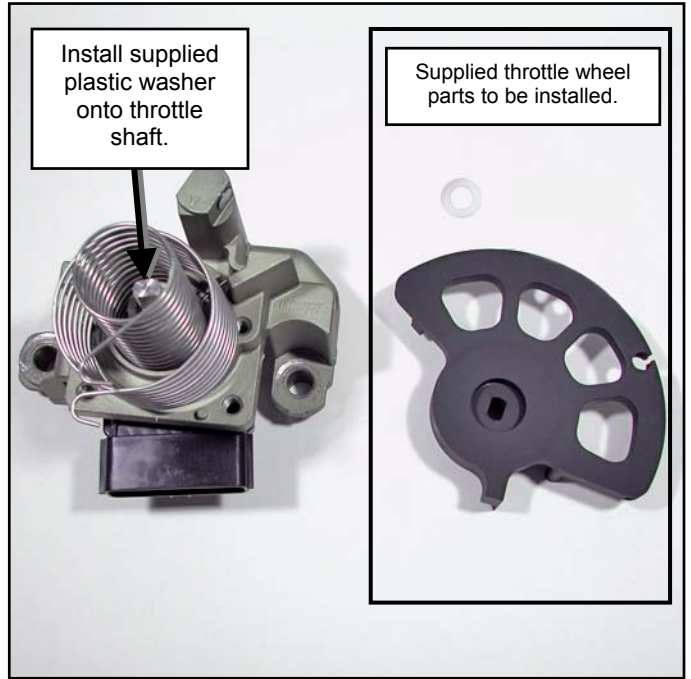


Illustration 6

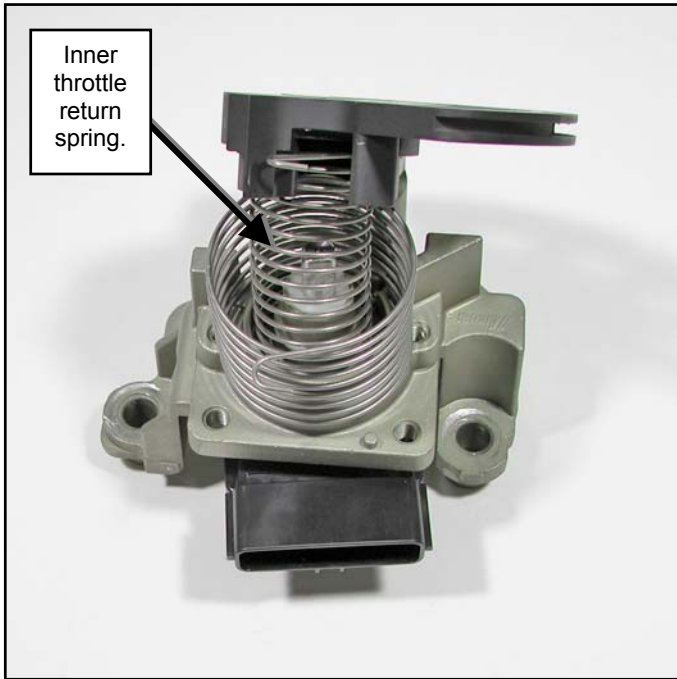


Illustration 7

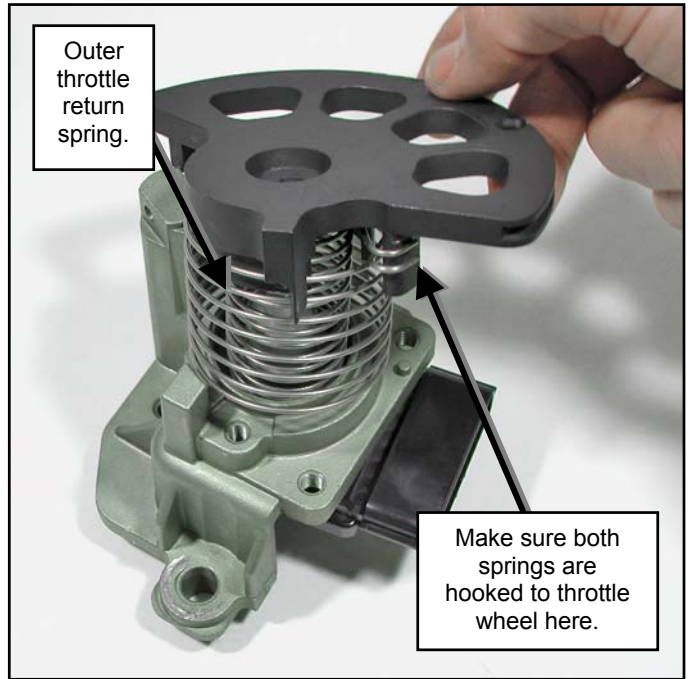


Illustration 8

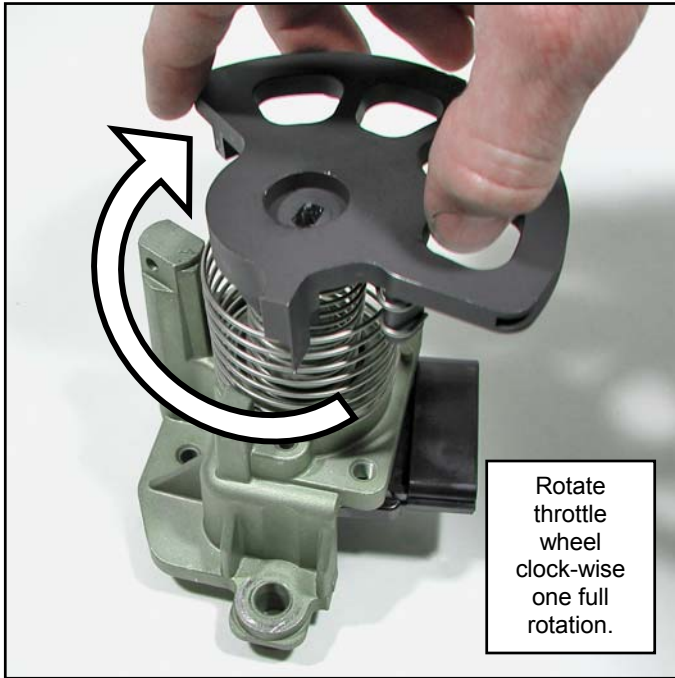


Illustration 9



Illustration 10

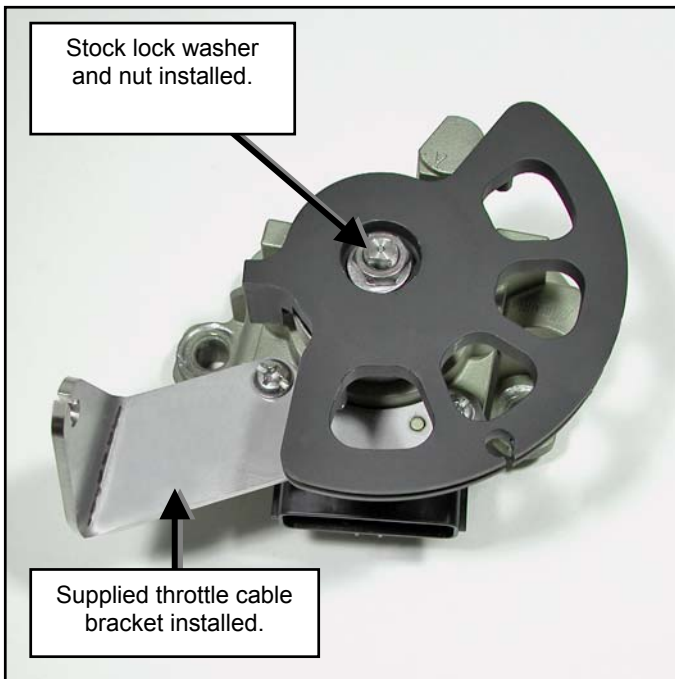


Illustration 11

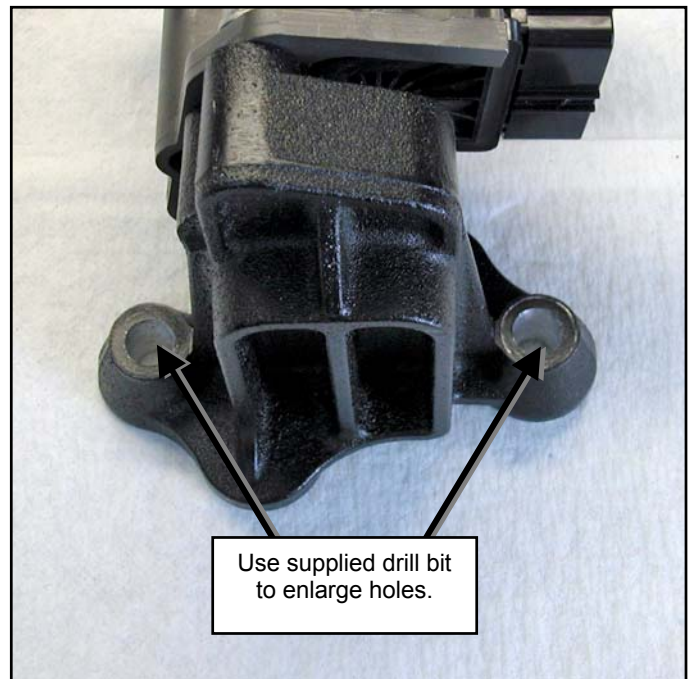


Illustration 12

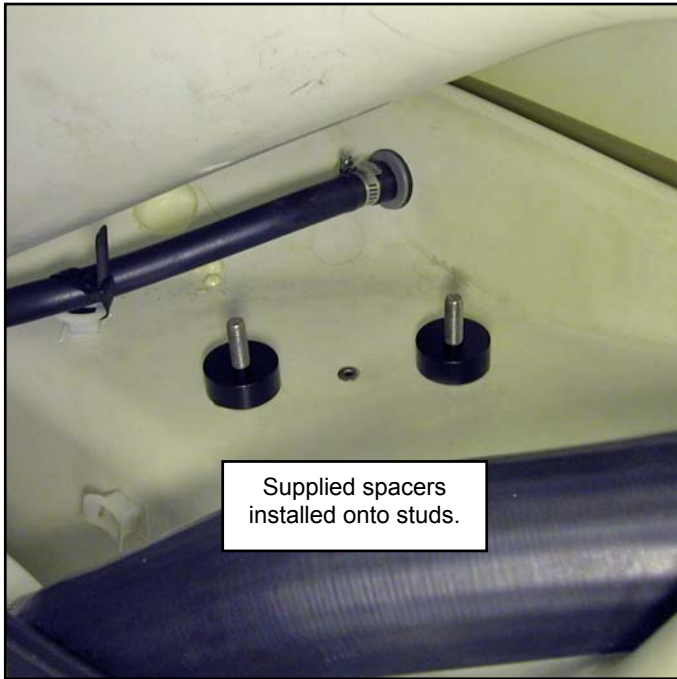


Illustration 13

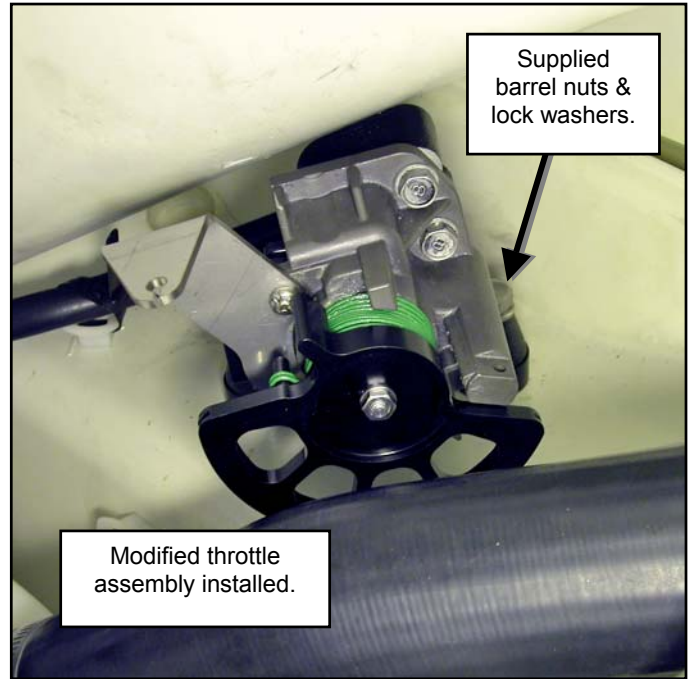


Illustration 14

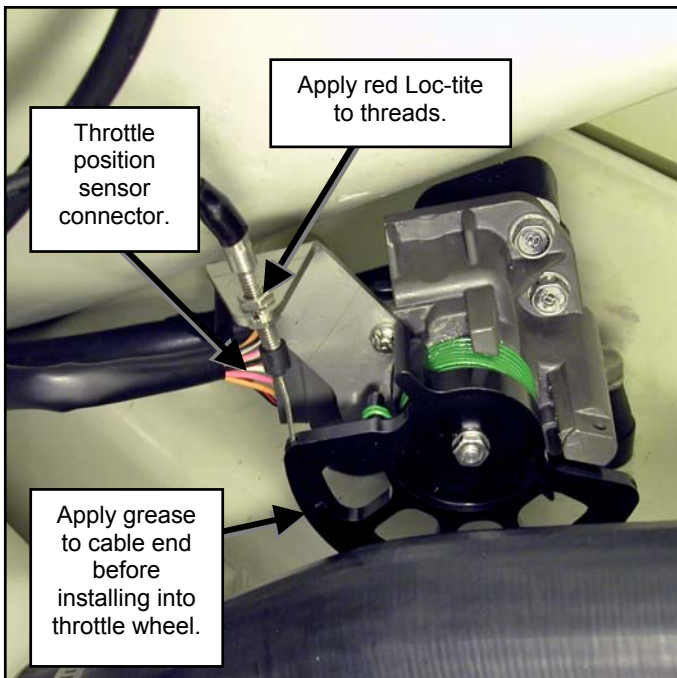


Illustration 15

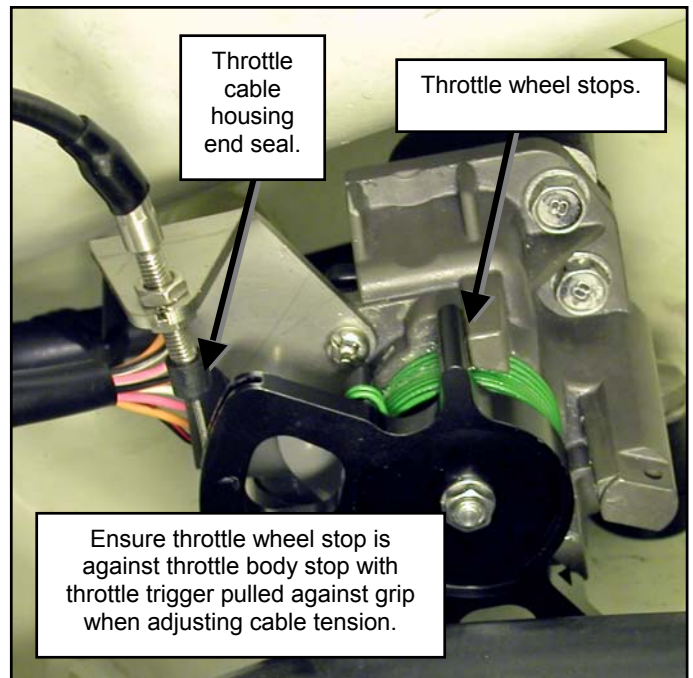


Illustration 16