



RIVA RACING

PERFORMANCE PRODUCTS & ACCESSORIES

Yamaha VX TR-1 (1050) Power Filter Kit

RY13090-1



Applications: 2016+ Yamaha VX TR-1 (1050)

Approximate Installation Time: 2.0 Hrs.

Recommended Specialty Tools:

None

Part #

N/A

Required Materials:

Blue Loctite

Part #

N/A

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 *****



Yamaha VX TR-1 (1050) Power Filter Kit

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COMPONENT LIST

<u>Item</u>	<u>Description</u>	<u>RIVA Part #</u>	<u>QTY</u>	<u>Notes</u>
A	Air Intake Filter	RK13090-3	1	
B	Air Intake Tube, (Molded To Spec)	RTL-RY13100-T	1	
C	Silicone Reduction Coupler, (4" ID x 2.75")	RY15-04/2.75R	1	
D	Hose Clamp, (#64)	6564E-52	2	1 is supplied with filter element
E	Bracket, For Relocation Elec.	FSM-RY13100-BRKT	1	
F	Long Bracket, For Mounting Tube ('16~20 VX)	FSM-RY13090-BMT	1	
G	Lord Mount, (8 x 1.25 M/F)	RY15-2NPF2	1	
H	6mm Plastic Collar	QCA-RY13100-SP	4	
I	Fender Washer, (M6)	.6N18FENS	4	
J	Bolt, (6mm x 30mm) SHCS	.6C30SHCS	4	
K	Flat Washer, (6mm)	.6NWTFS	11	
L	Nylock Nut, (6mm)	.6CNNES	7	
M	Bolt, (6mm x 16mm) SHCS	.6C16SHCS	2	
N	Bolt, (8mm x 20mm) HHCS	.8C20HC3S	4	
O	Lock Washer, (8mm)	.8NMLWS	5	
P	Flat Washer, (8mm)	.8NWTFS	5	
Q	Bolt, (8mm x 16mm) HHCS	.8C16SHCS	1	
R	6mm Aluminum Sleeve	QCA-RS12050-S	2	
S	Elbow, Plastic, (1/2")	5463K598	1	
T	Filter, Engine Breather	RK13085-2480	1	Supplied with hose clamp
U	Zip Tie, Med.	TY24MX	4	
AA	U-Bracket, For Mounting Tube ('21+ VX)	FSM-RY13091-BMT	1	2021+ Models (packaged together)
BB	Bolt, (8mm x 35mm) HHCS	.8C35HC3S	1	
CC	Spacer/Collar	QCA-RY13160-W	1	
DD	Flat Washer, (8mm)	.8NWTFS	2	
EE	Nylock Nut, 8mm	.8CNNES	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.

- INSTALLATION INSTRUCTIONS -

Remove seats.

2021 & Newer Models

Remove left glove box cowling (3 bolts). (Figure 1)

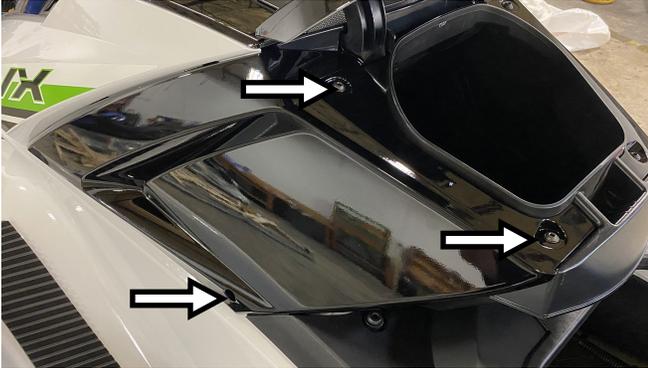


Figure 1

Remove seat base (7 bolts). (Figure 2)

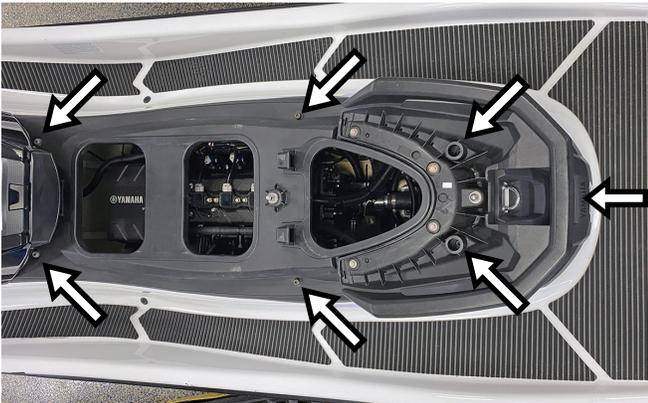


Figure 2

ALL MODELS:

Cut zip tie securing fuel line to air box lid (A). Remove air box lid (pry 2 latches downward - B). (Figure 3)



Figure 3

All Models (cont.)

Cut zip ties (2) securing harness to left side of air box. (Figure 4)



Figure 4

Remove rubber strap holding fuse block and push fuse block forward, off mounting studs. (Figure 5)

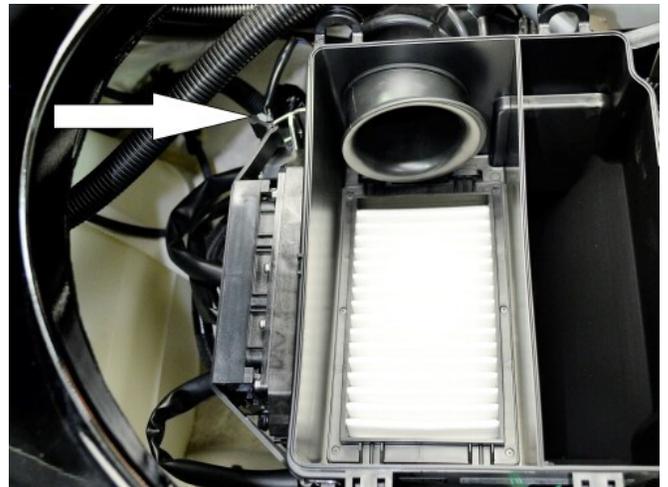


Figure 5

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- INSTALLATION INSTRUCTIONS -

All Models (cont.)

ECU is mounted in a rubber cushion. Pull ECU/cushion forward off mounting tabs and drop into hull. (It is not necessary to unplug ECU from harness) (Figure 6)

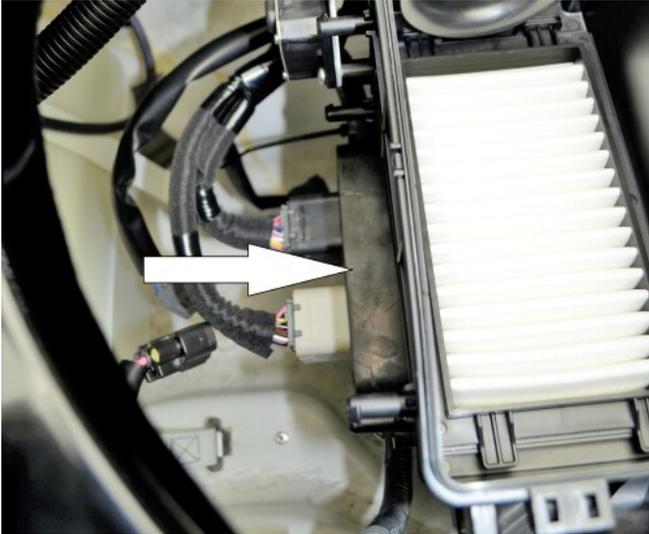


Figure 6

Unplug Tip Over Switch (A). Squeeze clamp and remove crankcase vent hose (B) from intake duct fitting. Loosen clamp (C) and remove intake duct (D) from air box and throttle body. (Figure 7) **Note: Retain OEM clamp at throttle body for use later.**

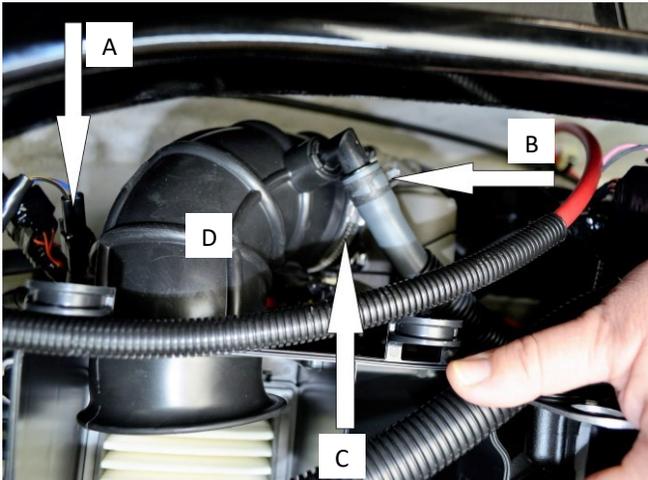


Figure 7

All Models (cont.)

Cut zip ties (A) holding harness to right side of air box. Slide harness out of holder tabs (B) at bottom, front of air box. Pull starter relay and rubber mount (C) off mounting tabs and drop into hull. (Figure 8)

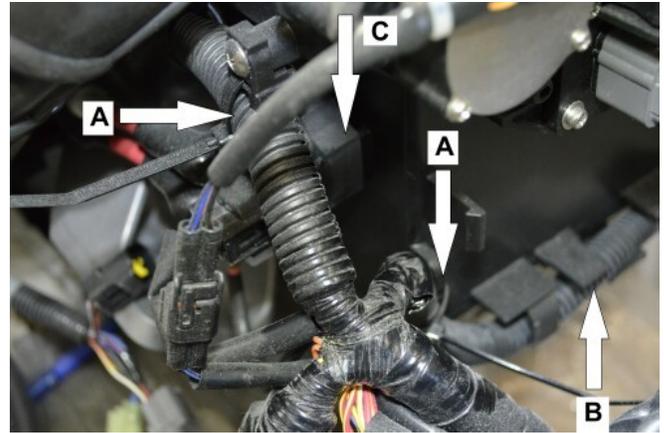


Figure 8

Remove bolts (4) holding air box to engine. **Note: Use caution when removing top air box bolts. Do not allow engine lift-eyes to fall into hull.** There are 2 top and 2 bottom bolts on each side. Only left side bolts are shown below. Right side bolts are in similar location. (Figure 9)

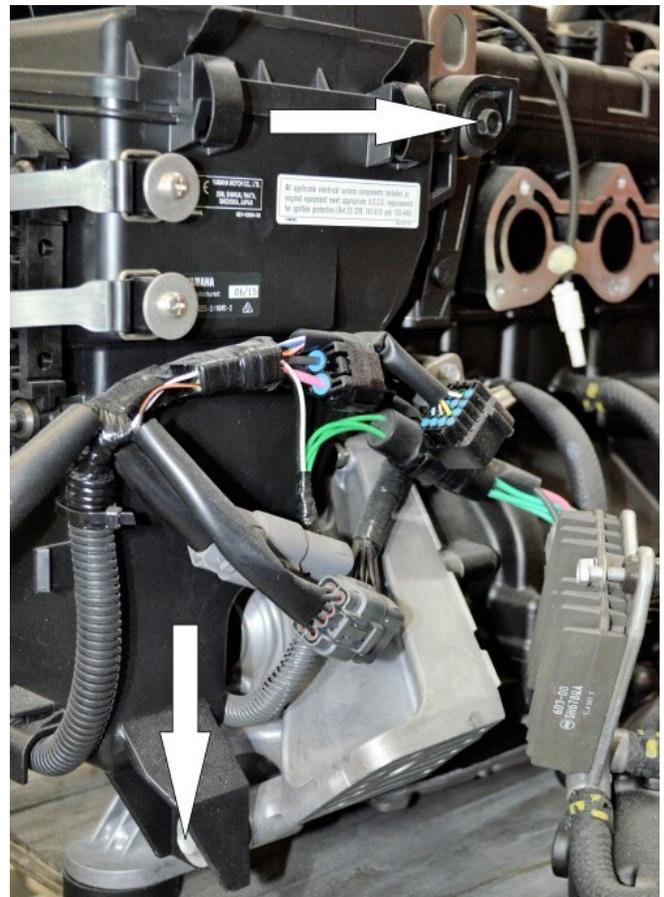


Figure 9

- INSTALLATION INSTRUCTIONS -

All Models (cont.)

Remove OEM air box. Remove angle sensor from OEM air box and install onto supplied electrical mount bracket. Secure using 2 each supplied 6 x 16mm allen bolts, 6mm aluminum sleeves, M6 flat washers, and M6 nylock nuts (A). **Note: Back of sensor is marked with an arrow and "UP". Sensor must be installed with arrow pointing upward.** (Figure 10)

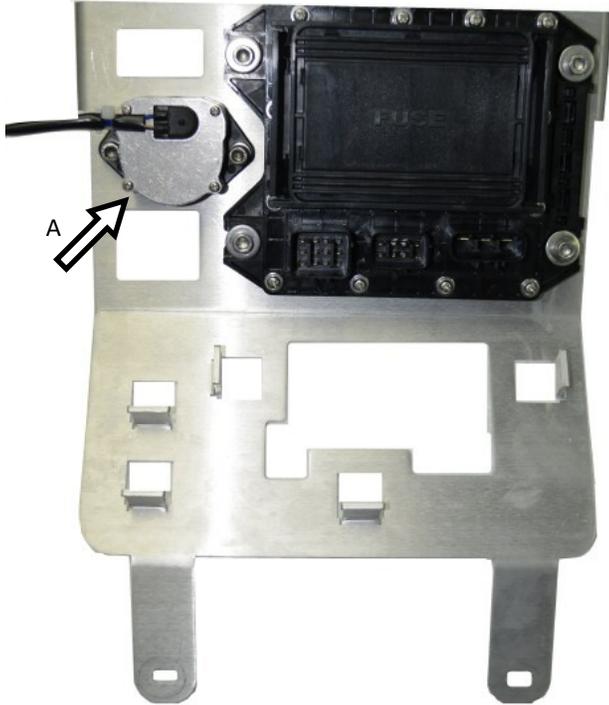


Figure 10

Install fuse block onto supplied electrical mount bracket using 4 each supplied 6 x 30mm allen bolts, M6 plastic collars, M6 fender washers, M6 flat washers and M6 nylock nuts. (Figures 10 and 11)

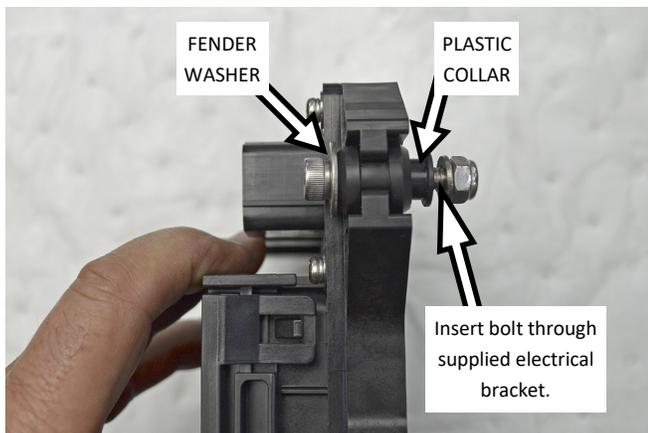


Figure 11

All Models (cont.)

Install supplied electrical mount bracket into same location as OEM air box. Attach to engine with 4 each supplied 8 x 20mm hex head bolts, M8 flat washers and M8 lock washers. **Note: Top bolts also hold engine lift-eyes. Install lift-eyes between engine and electrical mount bracket.**

Install ECU and ECU suspension onto tabs (3) on lower, left side of supplied electrical mount bracket (A). (Figure 12)

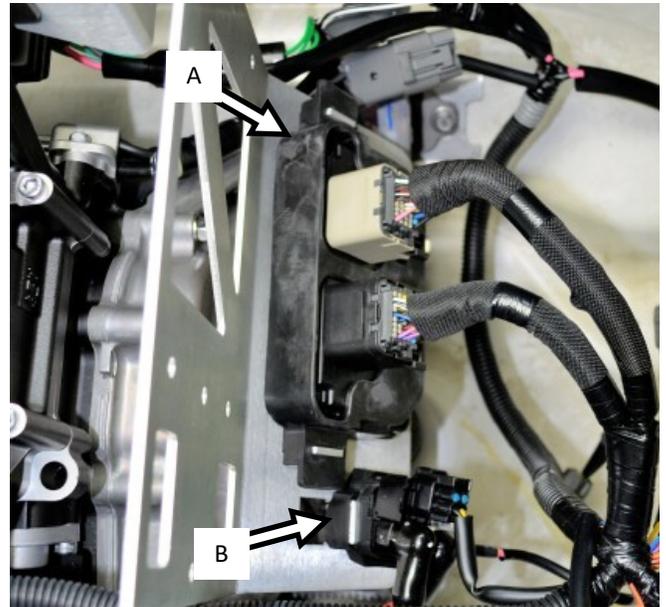


Figure 12 (Some additional components removed for clarity.)

Remove metal U-bracket beneath starter relay from suspension rubber. (Figure 13)

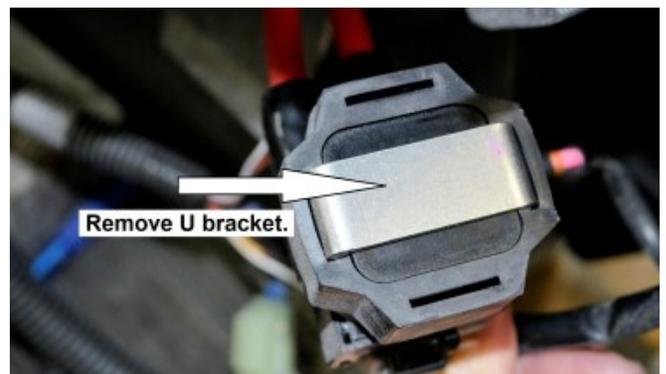


Figure 13

Install starter relay and suspension onto tabs (2) next to ECU (B - Figure 12). **Note: It may be necessary to bend the tabs of the cables to ease installation onto the tabs.** Use supplied zip ties to fasten wires to electrical bracket. On some units it may be necessary to cut the zip ties on the main harness to accommodate cable connections.

- INSTALLATION INSTRUCTIONS -

All Models (cont.)

Disconnect harness plugs from fuse block and remove fuse block from hull.

Insert one leg of supplied 1/2" elbow into end of OEM engine breather hose (A). **Note: Lubricate with window cleaner to ease installation.** Secure with OEM spring clamp. Insert remaining leg of elbow through hole in top, right side of electrical mount bracket. Install supplied breather filter onto elbow and secure (B). **Note: Do not overtighten clamp.** (Figure 14)

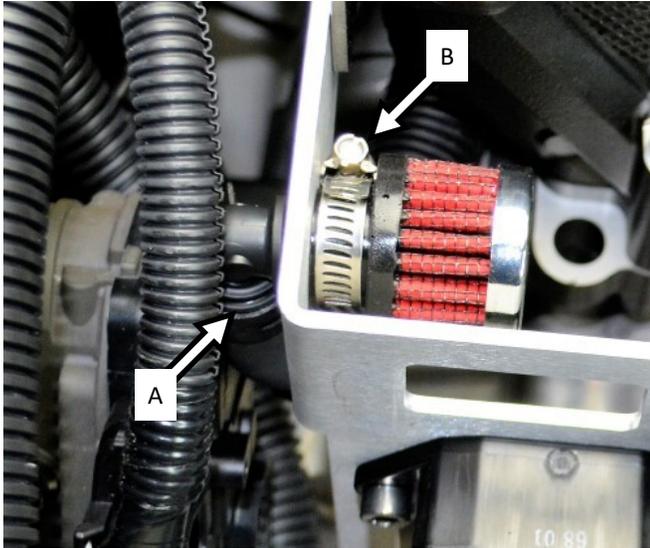


Figure 14

Install supplied Lord mount onto supplied air filter tube. **Note: Apply blue Loctite to stud threads. Do not overtighten.** Install flame arrestor and supplied coupler onto air intake tube and secure hose clamps. **Tip: Spray inside of coupler with glass cleaner. Note: Do not overtighten clamps.** (Figure 15)



Figure 15

(2016~20 Models Proceed to Page 8)

2021 & Newer Models

At left side of glove box, where cowling was removed previously, locate bolt securing front of glove box to hull. Remove bolt and discard. Install supplied 8x35mm bolt and M8 washer and secure. **Note: Torque to 11 lb-ft (15 N·m).** (Figure 16)

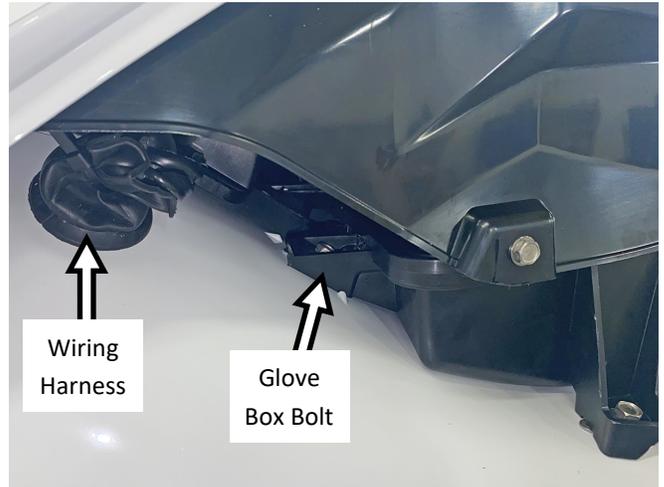


Figure 16

Inside hull locate OEM nut bracket with newly installed bolt extending through it. **Tip: It's near the wiring harness.** (Figure 17)

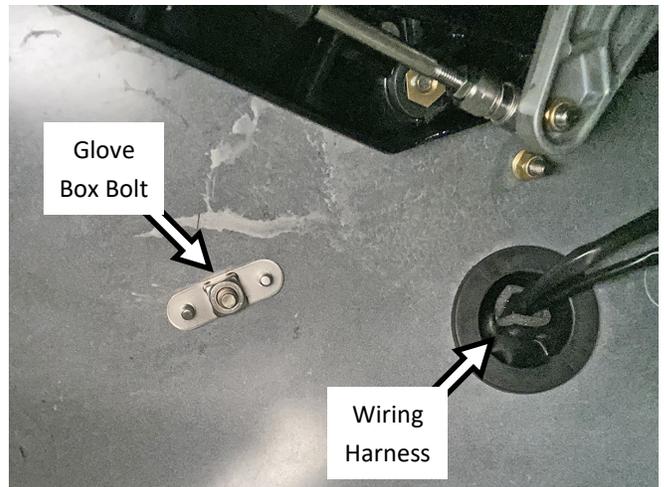


Figure 17

Proceed to Next Page

- INSTALLATION INSTRUCTIONS -

2021 & Newer Models (cont.)

Place slotted opening of supplied U-shaped aluminum bracket over OEM nut bracket. Then, place supplied spacer/collar over nut bracket and secure with supplied M8 washer and M8 nylock nut. (Figure 18) **Note: Do not overtighten.**

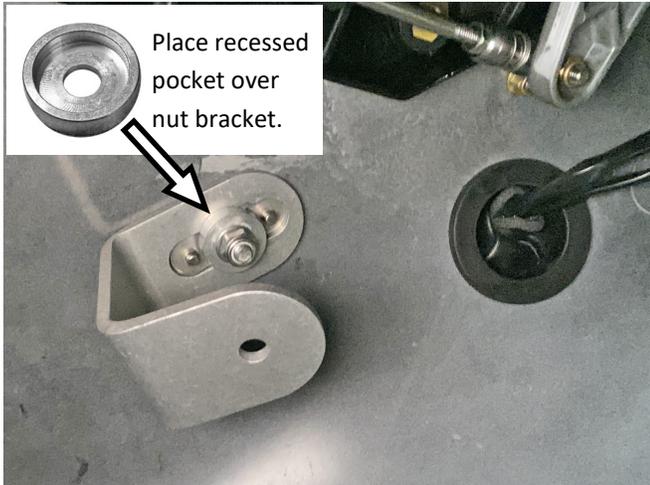


Figure 18

Thoroughly clean throttle body flange with a non-residual cleaner. Loosely place OEM clamp over throttle body flange.

At front of engine, insert flame arrestor end of air intake tube into hull and forward over fuel tank. Slide coupler onto throttle body completely. Do not secure clamp at this time. (Figure 19)



Figure 19

2021 & Newer Models (cont.)

Align air intake tube with bracket. Secure lord mount to bracket using supplied 8x16mm bolt, M8 lock washer and M8 flat washer. (Figure 20) **Note: Apply blue Loctite to bolt. Do not overtighten bolt; distorting or twisting lord mount.**

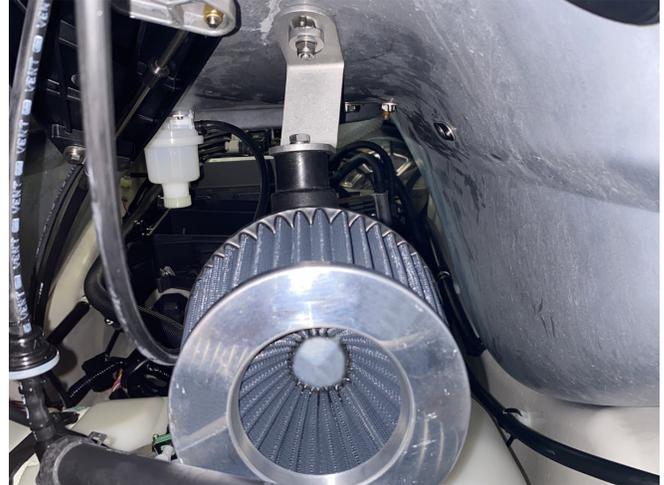


Figure 20

Tighten clamp securing air intake tube coupler to throttle body. **Note: Do not overtighten clamp.**

Replace left glove box cowling previously removed. **Note: Apply blue Loctite to bolts (3). Torque to 4 lb·ft (5.4 N·m).**

Replace seat base. **Note: Apply blue Loctite to bolts (7). Torque to 12 lb·ft (16 N·m).**

Check bilge for tools, rags, etc.

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

Installation for 2021+ models is now complete!

2016~20 Models Proceed to Next Page

- INSTALLATION INSTRUCTIONS -

2016~20 Models

Inside hull, remove nut securing support for glove box to hull. (Figure 21)

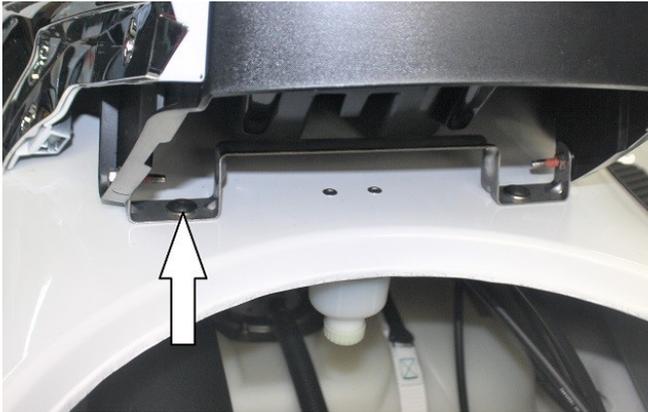


Figure 21

Loosely install supplied long bracket onto lord mount on air intake tube using supplied 8x16mm bolt, M8 lock washer and M8 flat washer. Align bracket so that it is parallel with air intake tube when secured. (Figure 22)
Note: Apply blue Loctite to bolt. Do not tighten bolt.



Figure 22

At front of engine, insert flame arrestor end of air intake tube into hull and forward over fuel tank. Slide coupler onto throttle body completely. Do not secure clamp at this time. (Figure 23)



Figure 23

2016~20 Models (cont.)

Raise air intake tube to place bracket over exposed stud for glove box support. Secure bracket to stud using supplied M8 flat washer & M8 nylock nut. (Figure 24)

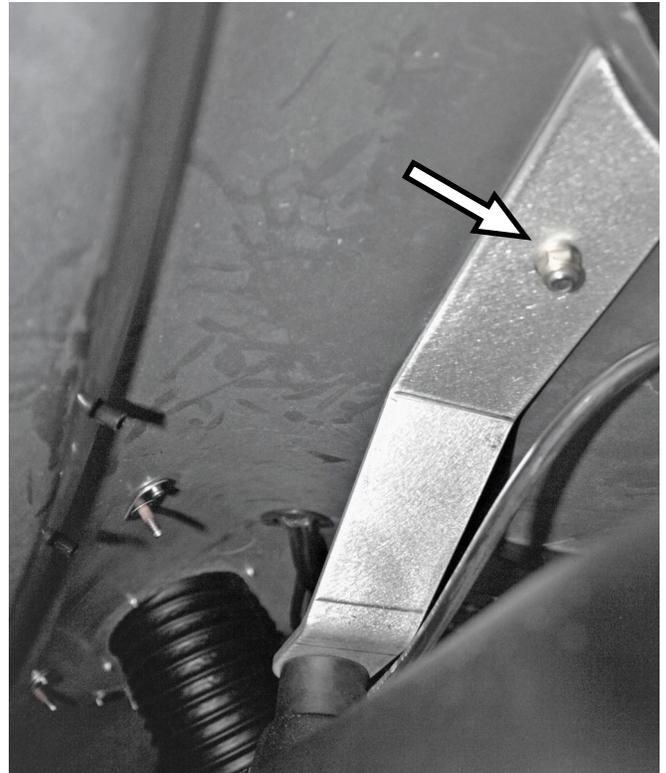


Figure 24

Tighten bolt securing air intake bracket to lord mount.
Note: Do not overtighten bolt; distorting or twisting lord mount.

Tighten clamp to secure coupler to throttle body. **Note: Do not overtighten clamp.**

Check bilge for tools, rags, etc.

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

Installation for 2016~20 models is now complete!

Yamaha VX TR-1 (1050) Power Filter Kit

RY13090-1

***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.

Limited Warranty

RIVA Power Filter Kits 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.