



RIVA RACING
PERFORMANCE PRODUCTS & ACCESSORIES

RIVA Yamaha FX SVHO 2019+ Power Filter Kit

RY13120-3



Applications: 2019+ Yamaha FX SVHO, FX Cruiser SVHO, & FX Limited SVHO

Approximate Installation Time:

1.5 hr.

Recommended Specialty Tools:

N/A

Required Materials:

Blue

Optional Accessories (not supplied in kit):

Water repellent Pre-Filter

Engine Breather Upgrade

Part #

N/A

Part #

N/A

Part #

RK13090PF-BK

RY19040-12-EBUK

RY19040-BCC

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Prior to installation, go to the RIVA Racing online Instruction Library to download the latest version of these instructions:

<https://rivaracing.com/instructions>



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RY13120-3

COMPONENT LIST

ITEM	DESCRIPTION	PART #	QTY	NOTES
A	Air Intake Filter	RK13090-4	1	Supplied with #64 Clamp
B	Air Intake Tube, (Molded To Spec)	RTL-RY13040-T-1	1	
C	Silicone Coupler, (4" ID x 2" L)	RY15-04/2.0	1	
D	Hose Clamp, (#64)	6564E-52	2	
E	Bracket, For Mounting Tube	FSM-RY13120-1	1	
F	Hex Key	7122A17	1	
G	Push-on Round Cap Fits	9753K54	1	
H	Velocity Stack	QCA-RY13040	1	
I	Threaded Ring Assy		1	Shipped in Velocity Stack
	Bolt, (6-32 x 1/2") SHCS	93705A148	2	Installed in Threaded Ring Assy
J	Spacer Collar	QCA-RY13160-W	1	
K	Bolt, (8mm x 16mm) HHCS	830236SS	1	
L	Rubber Shock Mount	RY15-2NPF2	1	
M	Flat Washer, (8mm)	.8NWTFS	1	
N	Lock Washer, (8mm)	836080SS	1	
O	Bolt, (8mm x 35mm) HHCS	096.8.35	1	
P	Zip Tie, Med.	TY24MX	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.

Notes and Precautions

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.

This kit is not intended for use on pollution controlled vehicles. Installation on pollution controlled vehicles may constitute a violation of state or local statutes.

- INSTALLATION INSTRUCTIONS -

Disconnect lanyard. Remove seats.

Remove two screws holding plastic engine cover and pull cover up off rubber mounts. (Figure 1)

Figure 1



Disconnect engine breather hose from supercharger inlet hose. (Figure 2)

Figure 2



Loosen clamps (2) and remove hose between stock air box and supercharger and discard. (Figure 3)

Figure 3



Remove air filter case cover (8 clips, 2 on each side) with air filter and discard. (Figure 4)

Figure 4



Remove air filter case mounting bolts (4 total, 2 on each side) and then air filter case. Discard bolts and case. (Figure 5)

Figure 5



Remove air filter case mounting bracket (4 nuts & washers). (Figure 6) Retain one of the M8 nyloc nuts for re-use.

Figure 6

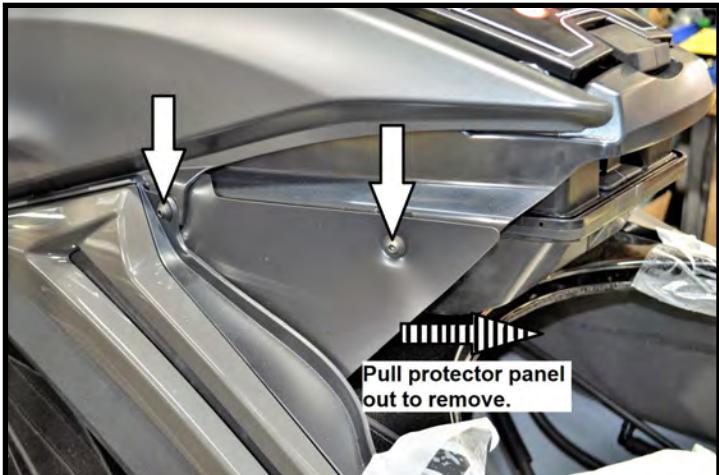


- INSTALLATION INSTRUCTIONS -

2021+ FX models have a protector beside the glove box that must be removed to install the RIVA Power Filter Kit. **Models prior to 2021 skip this step.**

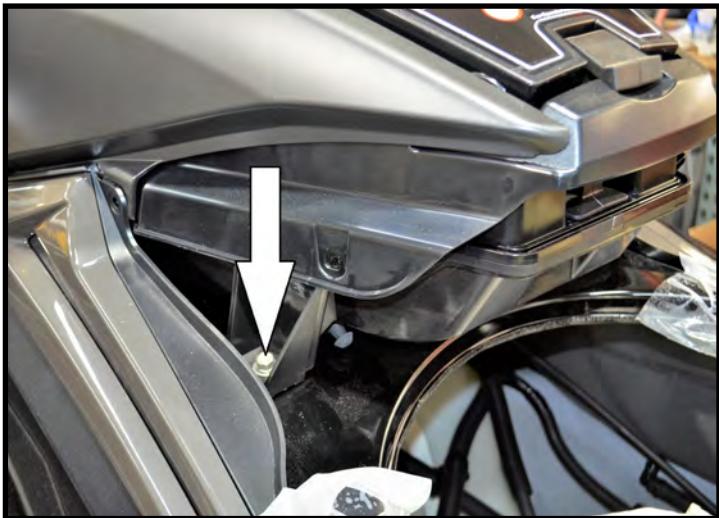
Remove screws (2) securing protector to body panel. (Figure 7) Remove protector. Retain protector and screws for reinstallation.

Figure 7



Remove left rear glove box bolt. Replace with supplied M8 X 35 HHCS and 8mm flat washer. (Figure 8) **Notes: Apply blue Loctite to bolt threads. Do not overtighten bolt.**

Figure 8



Note correct orientation of supplied bracket and spacer collar. (Figures 9 and 10)

Figure 9

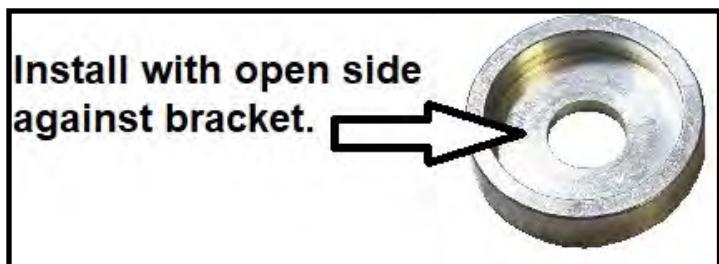
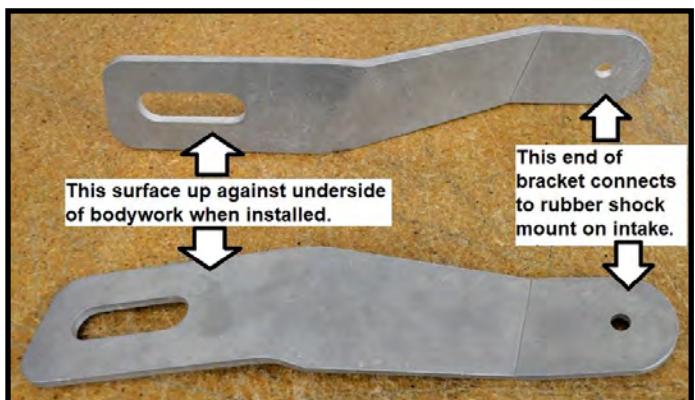


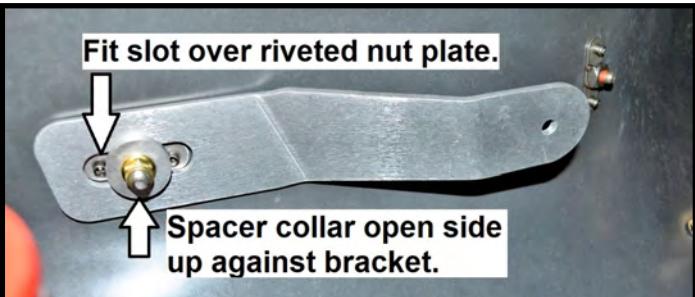
Figure 10



Inside engine compartment above fuel tank install bracket and spacer collar onto glove box bolt previously replaced with supplied M8 x 35 HHCS. Align slot in bracket with riveted nut plate. Secure with OEM M8 Nyloc nut previously removed from air filter case mounting bracket.

(Figure 11) **Note: Do not overtighten nut.**

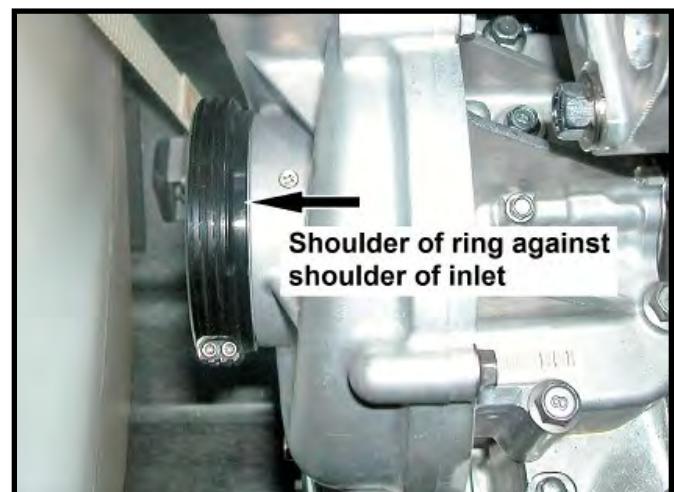
Figure 11



Thoroughly clean outside of supercharger inlet using a non-residual cleaner.

Install supplied billet threaded ring assy. onto supercharger inlet completely. Secure using supplied hex key wrench. (Figure 12) **NOTE: The side with the small shoulder must face the supercharger housing. DO NOT USE LOCTITE. Bolts come equipped with thread locking agent. Do not overtighten bolts.**

Figure 12



- INSTALLATION INSTRUCTIONS -

Carefully screw (right-handed threads) supplied velocity stack onto billet adapter flange. (Figure 13) **NOTE: Do not over tighten. Velocity stack only needs to be snug.**

Figure 13

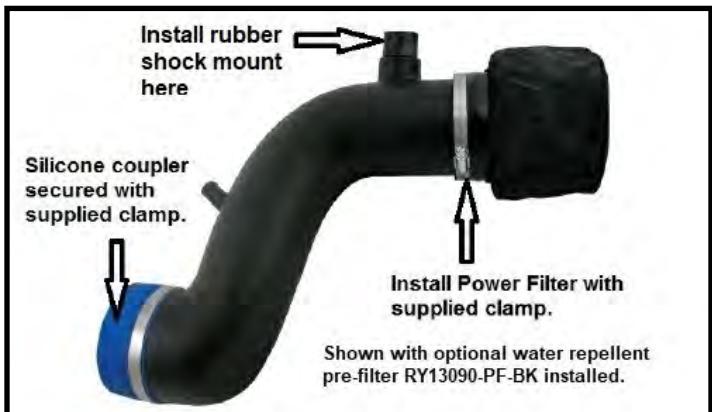


Install supplied rubber shock mount into threaded brass insert in Power Filter tube. (Figure 14) **NOTE: Apply blue Loctite to stud. Do not overtighten.**

Install supplied Power Filter onto end of tube with threaded brass insert and secure. (Figure 14) **Tip: Lubricate inside of filter and outside of tube with glass cleaner. NOTE: Do not overtighten clamp.**

Install supplied silicone coupler onto opposite end of Power Filter tube. Secure using one supplied hose clamp. (Figure 14) **Tip: Lubricate inside of coupler and outside of tube with glass cleaner. NOTE: Do not overtighten clamp.**

Figure 14



Place second supplied clamp loosely over velocity stack/adapter on supercharger inlet.

At front of engine insert Power Filter tube assembly into engine compartment over fuel tank (Power Filter end first).

Lower coupler end of Power Filter tube assembly into place by rotating towards supercharger. Place coupler at an angle over left side of velocity stack on supercharger inlet.

Install by rotating Power Filter tube assembly while pulling toward engine. (Figure 15) **Tip: lubricate inside of coupler, inside of tube, and outside of velocity stack with glass cleaner. NOTE: Velocity stack fits into Power Filter tube.**

Ensure Power Filter tube is installed onto velocity stack completely. **Do not tighten clamp yet.**

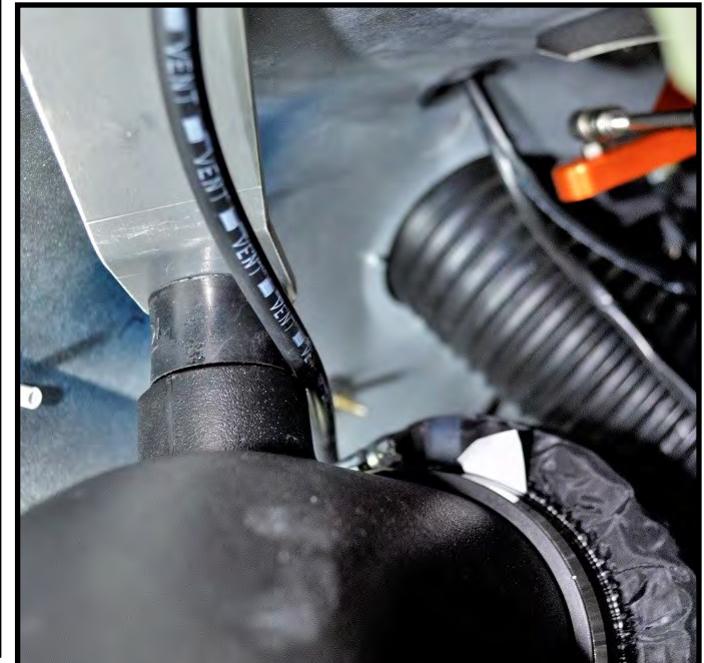
Figure 15.



Locate rubber shock mount on Power Filter tube. Rotate Power Filter tube towards mounting bracket until aligned. Secure rubber shock mount to bracket using supplied M8 bolt, M8 lock washer and M8 flat washer. (Figure 16)

NOTE: Apply blue Loctite to bolt. Do not overtighten bolt.

Figure 16



- INSTALLATION INSTRUCTIONS -

Tighten clamp for coupler at supercharger inlet. **NOTE: Do not overtighten clamp.**

Using OEM clip, install engine breather hose onto fitting at center of Power Filter tube. (Figure 17) **NOTE:** If using RIVA Engine Breather Upgrade Kit or RIVA Catch Can Kit install supplied plastic cap onto Power Filter tube fitting and secure using supplied zip tie.

Figure 17



Replace plastic engine cover. (See Figure 1, page 4)

NOTE: Apply blue Loctite to bolts. Do not overtighten bolts.

2021+ models: Reinstall protector. (Figure 7, page 4)

Check bilge for tools, rags, etc.

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

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.