



Yamaha FX SVHO/SHO Power Filter Kit

RY13070-3



Applications: 2014~18 FX SVHO & 2012~16 FX SHO

Approximate Installation Time: 1.5 Hr.

Recommended Specialty Tools:

None

Required Materials:

Blue Loctite

Optional Accessories (not supplied in kit):

Engine Breather Upgrade Kit

Catch Can / Engine Breather Upgrade Kit

GET THE LATEST UPDATES!

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

<https://rivaracing.com/instructions>

Part #

N/A

Part #

N/A

Part #

RY19040-12-EBUK

RY19040-BCC



Yamaha FX SVHO/SHO Power Filter Kit

RY13070-3

COMPONENT LIST

Item	Description	RIVA Part #	QTY	Notes
A	Filter Element	RK13090-4	1	
B	Power Filter Tube	RTL-RY13070-T	1	
C	Bracket	FSM-RY13070-BRKT	1	
D	Velocity Stack	QCA-RY13040	1	
E	Threaded Ring	QCA-RY13040	1	Shipped in velocity stack
	6-32 x 1/2" SHCS	93705A148	2	Installed in threaded ring
F	Hose Clamp	6564E-52	3	One installed on filter element
G	Silicone Coupler	RY15-04/2.0	1	
H	Lord Mount	RY15-2NPF2	1	
I	8 x 12 mm HHCS	.8C12HC3S	1	
J	8 mm Lock Washer	.8NMLWS	1	
K	8 mm Fender Washer	.8N24FENS	1	
L	Hex Key	7122A17	1	
M	Pre-filter	RK13090PF-BK	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.

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 *****

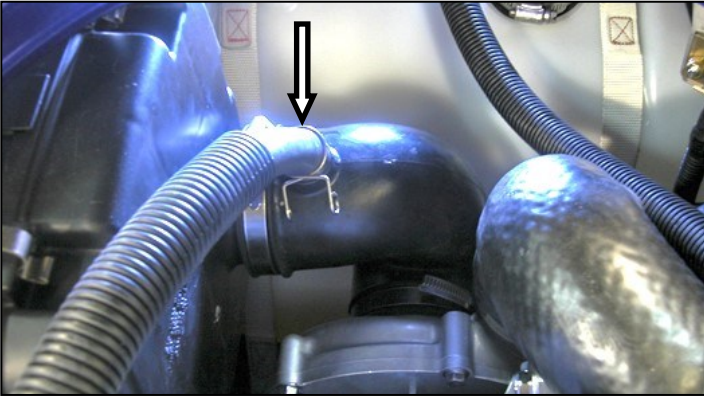
***** NO SMOKING *** NO SMOKING *** NO SMOKING *****

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.

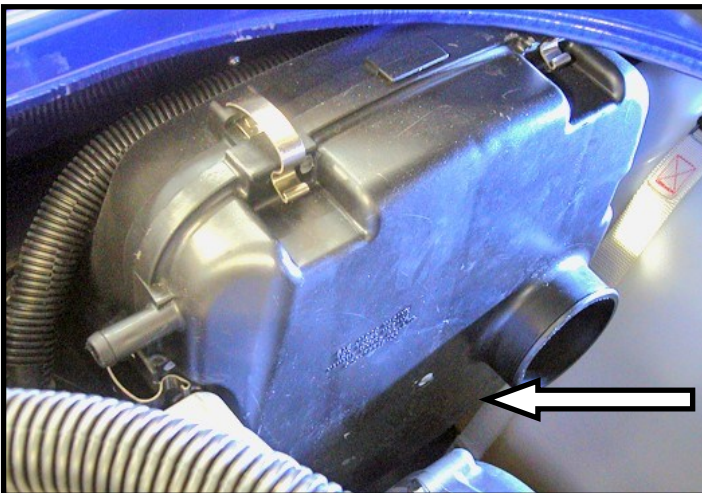
- INSTALLATION INSTRUCTIONS -

Disconnect lanyard. Remove seats.
Remove plastic engine cover.
Disconnect engine breather hose from supercharger inlet hose. (Figure 1)
Figure 1



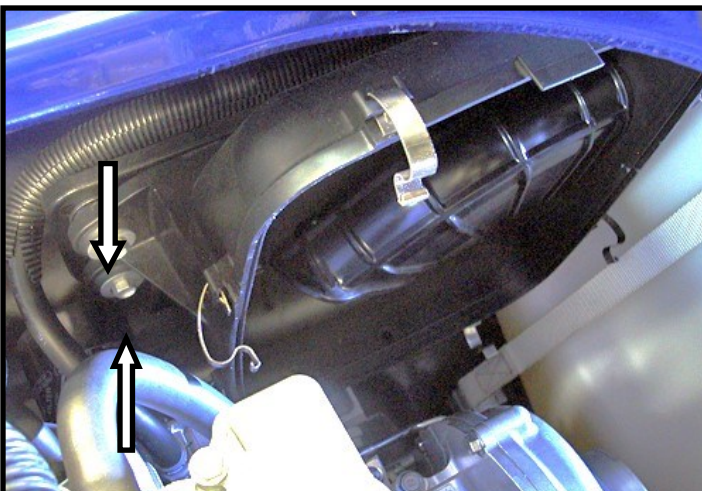
Remove hose between stock air box and supercharger and discard. Remove air filter case cover (8 clips) with air filter and discard. (Figure 2)

Figure 2



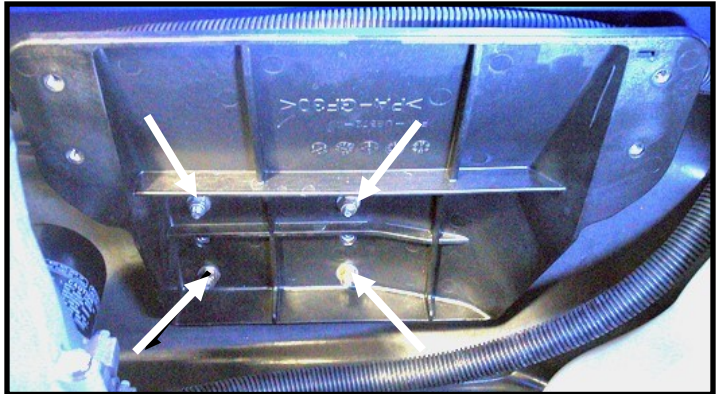
Remove air filter case mounting bolts (4 total – 2 on each side) and then air filter case. Retain mounting hardware. (Figure 3)

Figure 3



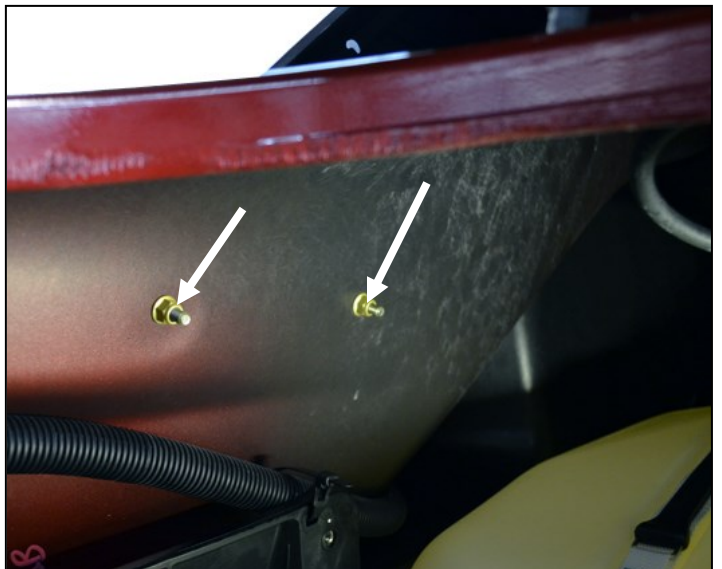
(Optional Step) Remove air filter case mounting bracket (4 nuts & washers). Retain hardware and discard bracket. (Figure 4)

Figure 4



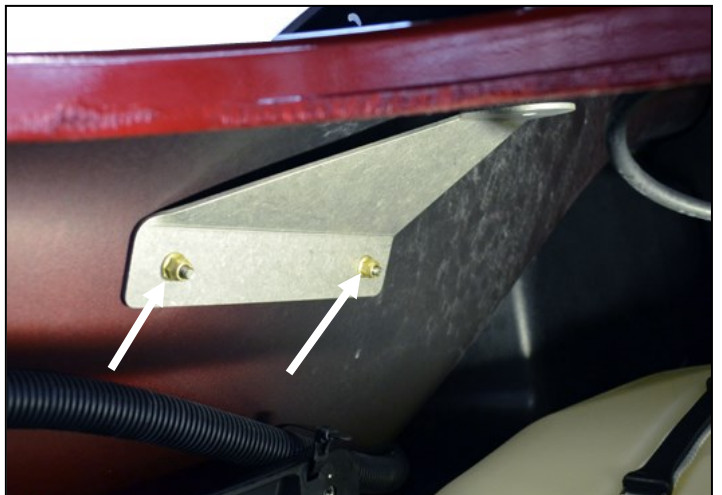
Inside engine compartment locate brass nuts (2) securing left accent piece to hull. Remove and retain. (Figure 5)

Figure 5



Install supplied aluminum mounting bracket and secure with stock brass nuts. **NOTE: Do not over tighten nuts.** (Figure 6)

Figure 6



- INSTALLATION INSTRUCTIONS -

Thoroughly clean outside of supercharger inlet using a non-residual cleaner. Install supplied billet adapter flange onto supercharger inlet completely. Secure using supplied hex key wrench. (Figure 7)

Figure 7



Carefully screw (right-handed threads) supplied velocity stack onto billet adapter flange. **NOTE: Do not over tighten. Flange only needs to be snug.** (Figure 8)

Figure 8



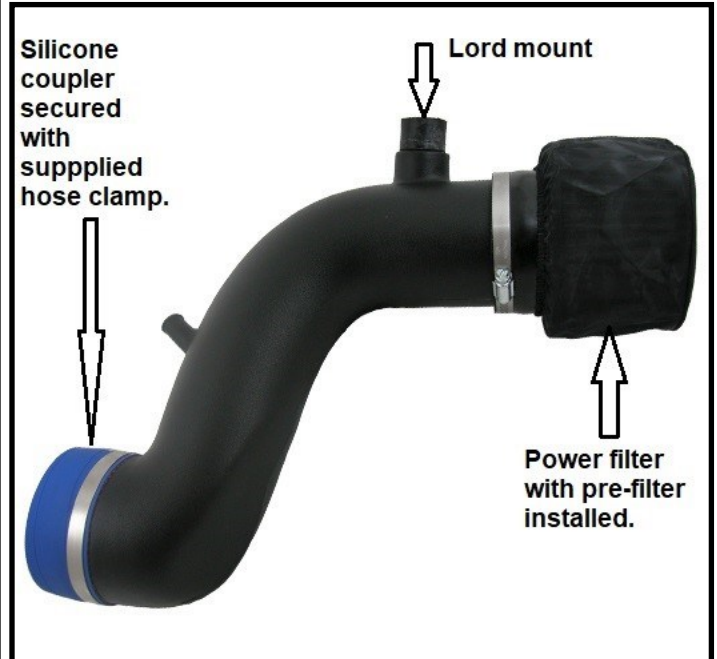
Thoroughly clean both ends of supplied Power Filter tube and inside of supplied Power Filter with a non-residual cleaner. Install supplied Power Filter onto end of tube with threaded brass insert and secure. **NOTE: Install supplied pre-filter to prevent engine damage.**

Thoroughly clean inside of supplied silicone coupler. Install onto opposite end of Power Filter tube. Secure using one supplied hose clamp. **NOTE: Do not over tighten clamp.**

Place second supplied clamp over adapters on supercharger inlet.

Install supplied lord mount into threaded brass insert in Power Filter tube. **NOTE: Apply blue Loctite to stud. Do not over tighten.** (Figure 9)

Figure 9



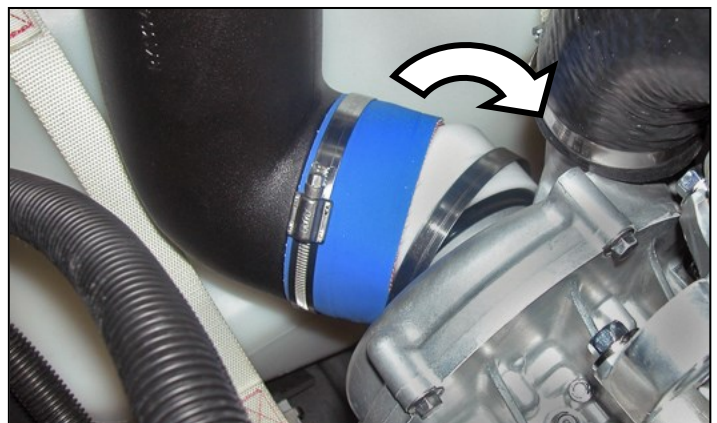
At front of engine insert Power Filter tube assembly into engine compartment over fuel tank (Filter end first).

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

Install by rotating Power Filter tube assembly while pulling towards engine. **NOTE: Tapered plastic flange installs into Power Filter tube.** (Figure 10)

Ensure Power Filter tube is installed onto adapter flange completely. Snug hose clamp, but do not tighten completely.

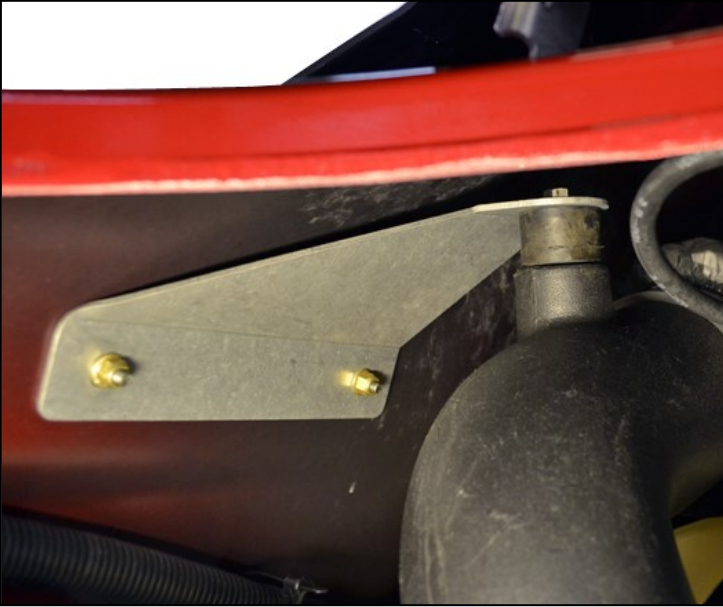
Figure 10



- INSTALLATION INSTRUCTIONS -

Locate lord mount on Power Filter tube. Rotate Power Filter tube towards mounting bracket until aligned. Secure lord mount to bracket using supplied M8 bolt, M8 lock washer and M8 fender washer. **NOTE: Apply blue Loctite to bolt. Do not over tighten bolt.** (Figure 11)

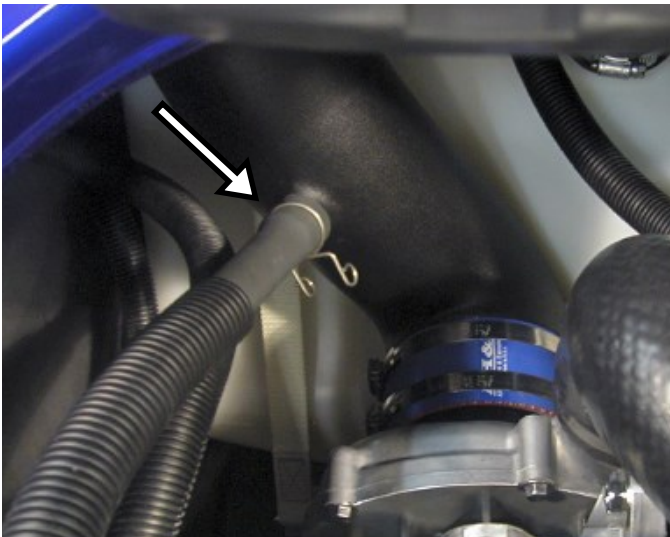
Figure 11



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

Install supplied engine breather adapter hose onto fitting at center of Power Filter tube. Secure with supplied zip tie. Install engine breather hose onto adapter and secure with stock spring clamp. (Figure 12)

Figure 12



Replace plastic engine cover. **NOTE: Apply blue Loctite to bolts. Do not over tighten bolts.**

Check bilge for rags, tools etc.

Run craft on a flush hose 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.