



FX 2019+ FX SVHO Power Filter Kit

RY13120



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

Approximate Installation Time: 2.0 hr.

Recommended Specialty Tools:

Pop-Rivet Installation Tool

N/A

Required Materials: Part #

Blue Loctite

Optional Accessories (not supplied in kit):Part #Water repellent Pre-FilterRK13090PF-BKEngine Breather UpgradeRY19040-12-EBUK

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 ***





RY13120 2019+ FX SVHO Power Filter Kit Component List

ITEM	QUANTITY	PART NUMBER	DESCRIPTION		
Α	1	RK13090-2	Filter Element		
В	1	RTL-RY13040-T	Power Filter Tube		
С	1	RY15-04/2.0	Silicone Coupler		
D	3	203BL064-04	Hose Clamp		
E	1	QCA-RY13120-BRKT	Bracket		
F	1		Hose Adapter Assy.		
G	1	7122A17	Нех Кеу		
Н	1	9753K54	Plastic Cap		
I	1	QCA-RY13040	Velocity Stack		
J	1		Threaded Ring Assy		
K	1	96820	8 x 20 mm SS Hex Head Bolt		
L	1	RY15-2NPF2	Lord Mount		
М	1	410.8.24	8 mm Fender Washer		
N	1	4478	8 mm Lock Washer		
0	1	TY24MX	Zip Tie		
Р	2		Rivet		

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@rivamotorsports.com

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



If installing RIVA Power Cooler RY17081-PC Skip this step. Leave filter case bracket to mount Power Cooler.

Remove air filter case mounting bracket (4 nuts & washers). (Figure 6)

Figure 6



Open front storage compartment and glove box.

Remove screws (3) and nut (1, inside engine compartment) retaining left Ornament panel. Remove left Ornament Panel. (Figures 7 and 8) Repeat with right Ornament Panel.

Figure 7



Figure 8



Remove screws (2) inside glove box holding left side to center cover. (Figure 9) Repeat with right side cover screws.

Figure 9



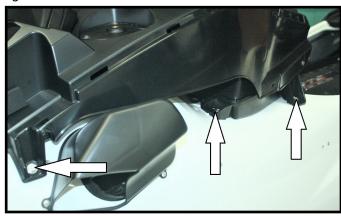
Remove screws (2) and nut (1, inside front storage compartment) holding front of left side cover to hull. (Figure 10) Remove left side cover. Repeat with right side cover and screws.

Figure 10



Remove bolts (6) on both sides holding Center Cover and Glove Box assembly to hull. (Figure 11)

Figure 11



Push Center Cover and Glove Box assembly toward right side of ski to expose rivets at rear bolt hole. Hold in place by inserting a screwdriver into middle bolt hole. (Figure 12)

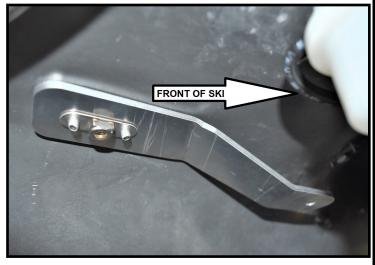
Figure 12



While holding nut plate from inside engine compartment, drill off heads of rivets. Remove nut plate from engine compartment and clean out any remains of rivets from holes in nut plate.

Insert heads of supplied rivets through upper hull into engine compartment. Install Supplied Filter Bracket and OEM nut plate onto rivet heads. While holding bracket and nut plate against hull crimp rivets with pop-rivet tool. (Figure 7)

Figure 7

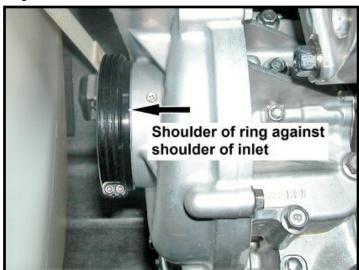


Remove screwdriver and reinstall bolts securing center cover and glovebox. **Note: Apply blue Loctite to bolt threads.**

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 9) 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 over tighten bolts.

Figure 9



Carefully screw (right-handed threads) supplied velocity stack onto billet adapter flange. **NOTE: Do not over tight-en. Velocity stack only needs to be snug.** (Figure 10)

Figure 10

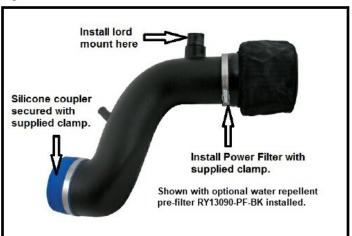


Install supplied lord mount into threaded brass insert in Power Filter tube. **NOTE: Apply blue Loctite to stud. Do not over tighten**

Install supplied Power Filter onto end of tube with threaded brass insert and secure. **Tip: lubricate inside of filter** and outside of tube with glass cleaner. **NOTE: Do not over tighten clamp.**

Install supplied silicone coupler onto opposite end of Power Filter tube. Secure using one supplied hose clamp. **Tip: lubricate inside of coupler and outside of tube with glass cleaner. NOTE: Do not over tighten clamp.** (Figure 11)

Figure 11



Place second supplied clamp over adapters 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

Install by rotating Power Filter tube assembly while pulling toward engine. (Figure 12) **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.

Figure 12



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

Using supplied adapter hose and OEM clip install engine breather hose onto fitting at center of Power Filter tube. Secure with supplied zip tie. (Figure 13) If using RIVA Engine Breather Upgrade Kit install supplied plastic cap on Power Filter tube fitting using supplied zip tie.

Figure 13



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

Reassemble bodywork in reverse order of disassembly using OEM hardware. **Note: Apply loctite to bolt threads.**

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

Technical Support

respect the environment!

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.

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.