



RIVA RACING
PERFORMANCE PRODUCTS & ACCESSORIES

Yamaha 2021+ GP1800R SVHO Power Filter Kit

RY13160-3



Applications: Yamaha GP1800R SVHO 2021 & Newer

Approximate Installation Time:

1.5 hr.

Recommended Specialty Tools:

None

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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>

Required Materials:

Blue Loctite

Optional Accessories (not supplied in kit):

Water-repellent Pre-Filter

Engine Breather Upgrade

Catch Can/Engine Breather Upgrade

Part #

N/A

Part #

RK13090PF-BK

RY19040-12-EBUK-1

RY19040-BCC



RY13160-3 2021+ GP1800 SVHO Power Filter Kit
COMPONENT LIST

	QUANTITY	PART NUMBER	DESCRIPTION	Notes
A	1	RK13090-4	Filter Element	
B	1	RTL-RY13040-T	Power Filter Tube	
C	1	RY15-04/2.0	Silicone Coupler	
D	3	203BL064-04	Hose Clamp	One installed on Filter Element
E	1	FSM-RY13160-B	Bracket	
F	1	7122A17	Hex Key	
G	1	9753K54	Plastic Cap	
H	1	QCA-RY13040	Velocity Stack	
I	1		Threaded Ring Assy	
J	1	QCA-RY13160-W	Spacer Collar	
K	1	0096820	M8 x 20 HHCS Bolt	
L	1	RY15-2NPF2	Lord Mount	
M	1	410.8.24	M8 Fender Washer	
N	1	04478	M8 Lock Washer	
O	1	096.8.35	M8 x 35 HHCS Bolt	
P	1	08NWTFS	M8 Flat Washer	
Q	1	.8CNNES	M8 Nylock Nut	
R	1	TY24MX	Zip Tie	

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

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 -

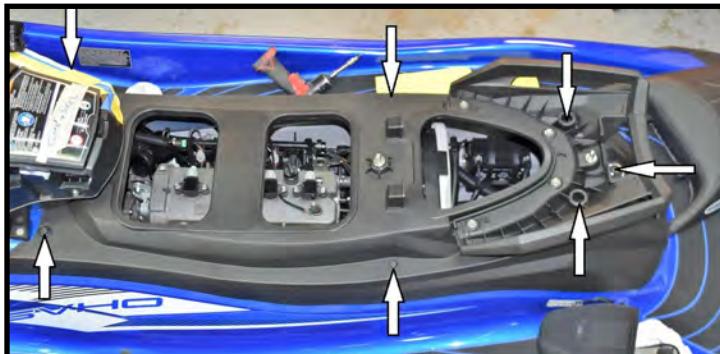
Remove lanyard.

Remove seats.

Remove screws (7) holding seat base to hull. (Figure 1)

Remove seat base.

Figure 1



Open front storage compartment.

Remove bolts (2) retaining left mirror. (Figure 2)

Lift mirror straight up to remove from craft.

Figure 2



Open glove box door and remove screws (2). (Figure 3)

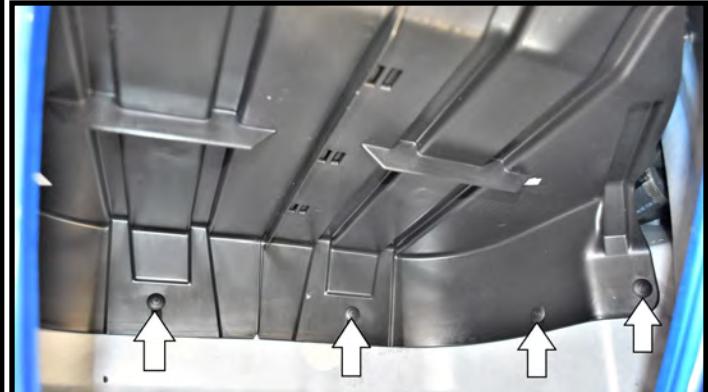
Figure 3



Open front storage compartment. Remove plastic rivets (6) retaining bulkhead by partially unscrewing center portion and pulling out rivet body. (Figure 4)

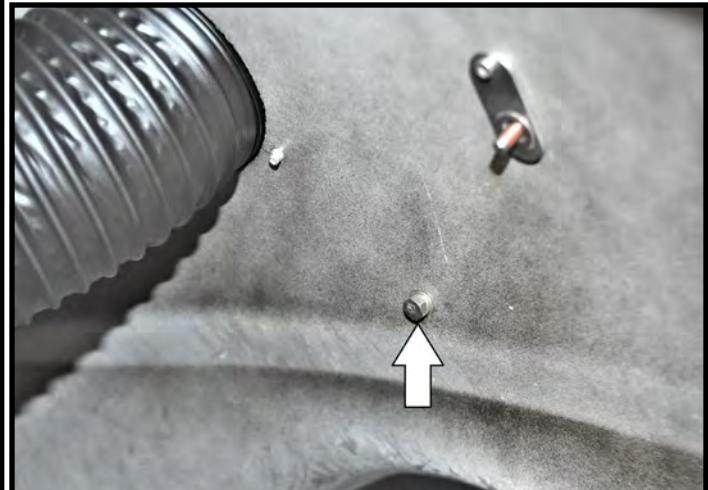
Remove bulkhead.

Figure 4 (2 rivets hidden from view on left side of photo.)



Inside left body of craft behind bulkhead (previously removed), remove nut on panel stud at location shown. (Figure 5)

Figure 5



Remove screws (4) at front and rear of left side panel. (Figure 6)

Pull out panel to clear stud, slide forward to release tabs and remove from craft.

Figure 6



- INSTALLATION INSTRUCTIONS -

Remove screws (2) holding plastic engine cover. (Figure 7)

Pull cover up off rubber mounts

Figure 7

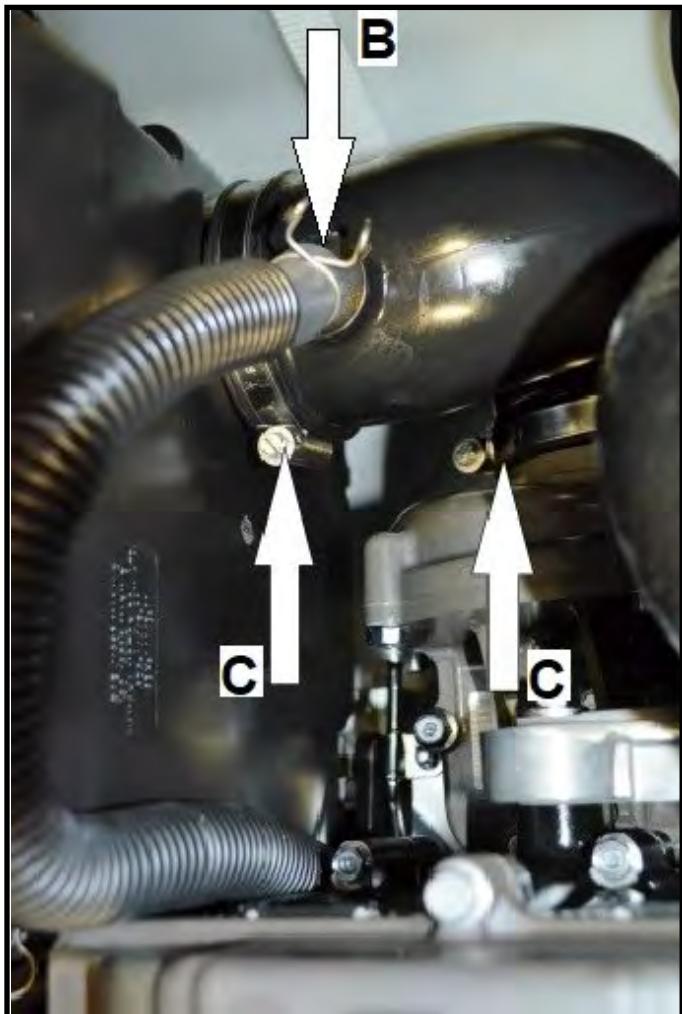


Disconnect engine breather hose from supercharger air inlet hose fitting. (B in Figure 8)

Loosen clamps (2) on air inlet hose between air box and supercharger. (C in Figure 5)

Remove air inlet hose and discard.

Figure 8



Remove air filter case cover (8 clips, 2 on each side) with air filter and discard. (Figure 9)

Figure 9



Remove air filter case mounting bolts (4 total , 2 on each side) (Figure 10)

Remove air filter case from craft.

Figure 10



Remove air filter case mounting bracket nuts and washers (4 each). (Figure 11)

Remove filter case from craft.

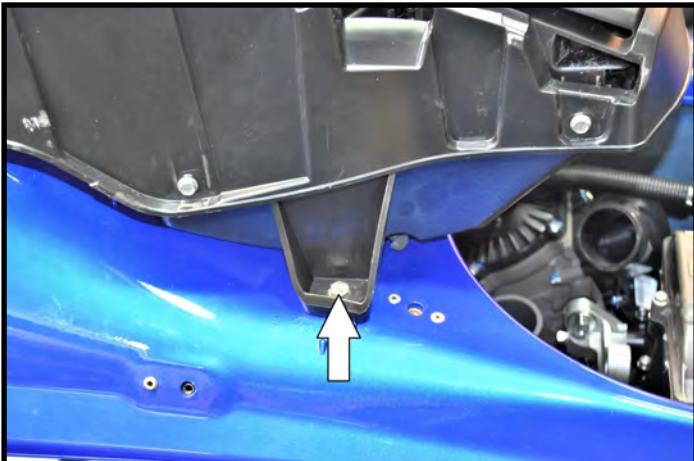
Figure 11



- INSTALLATION INSTRUCTIONS -

Remove left rear center cover bolt. (Figure 12)
Replace bolt with supplied M8X35 HHCS. **Do not overtighten bolt.**

Figure 12



Note correct orientation of supplied bracket and spacer collar. (Figures 13 and 14)

Figure 13

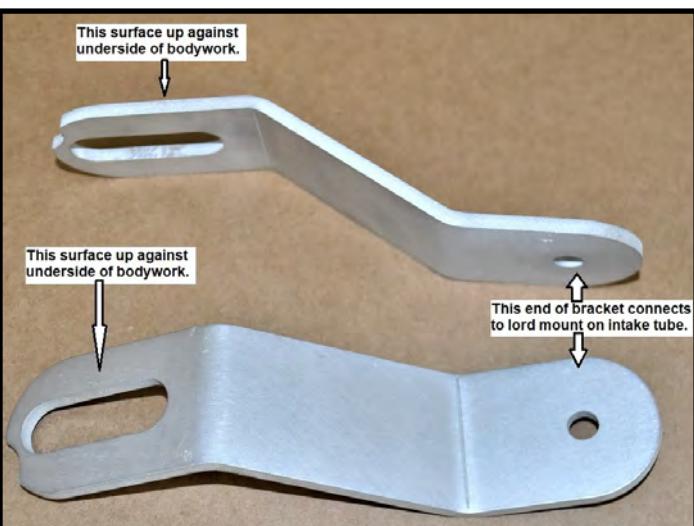


Figure 14

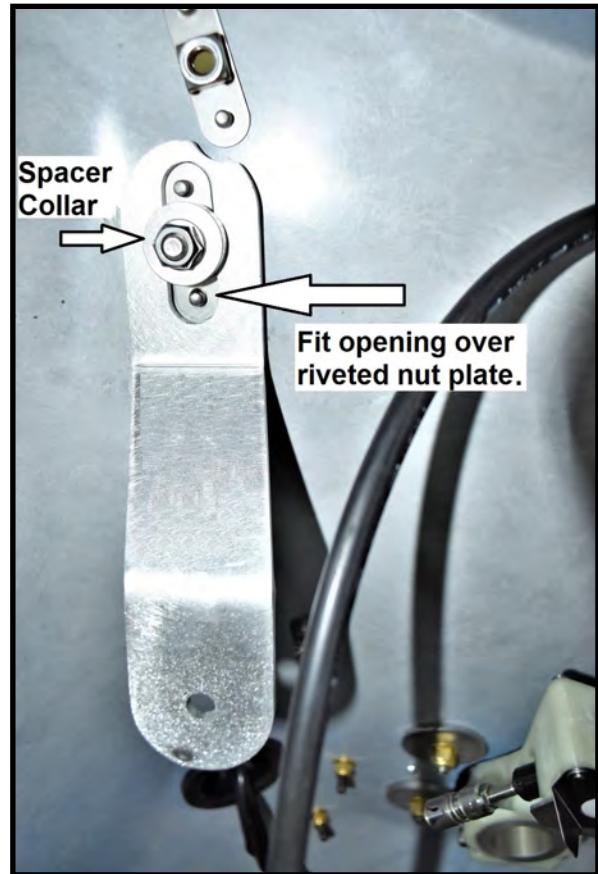


Install supplied bracket inside hull over previously replaced body panel bolt. Align slot in bracket with riveted nut plate. (Figure 15)

Fasten with supplied Spacer Collar, M8 flat washer and M8 nut. **Do not overtighten nut.**

(See figures 13 and 14, for proper orientation of bracket and spacer collar.)

Figure 15

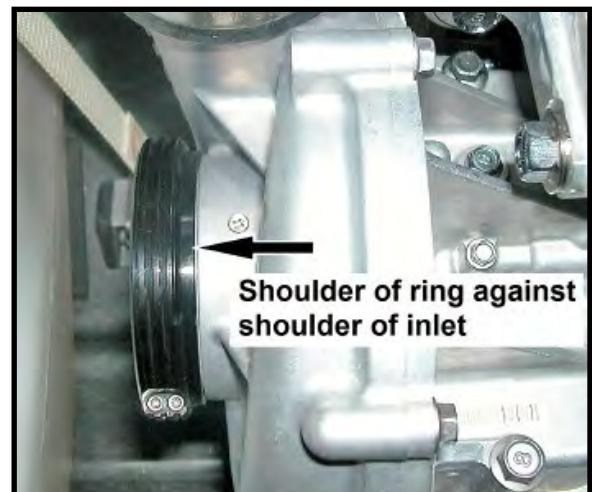


Thoroughly clean outside of supercharger inlet using a non-residual cleaner.

Install supplied billet threaded ring assy. onto supercharger inlet completely. Secure using supplied hex key wrench.

(Figure 16) **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 16



- INSTALLATION INSTRUCTIONS -

Carefully screw (right-handed threads) supplied velocity stack onto billet adapter flange. **NOTE: Do not over tighten. Velocity stack only needs to be snug.** (Figure 17)

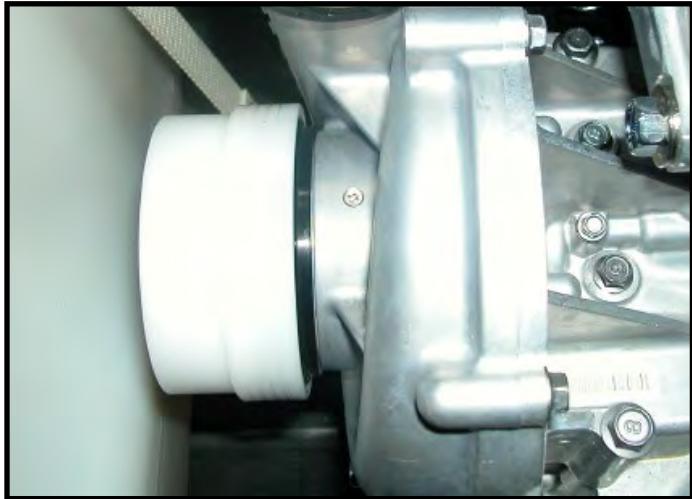


Figure 17

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 18)

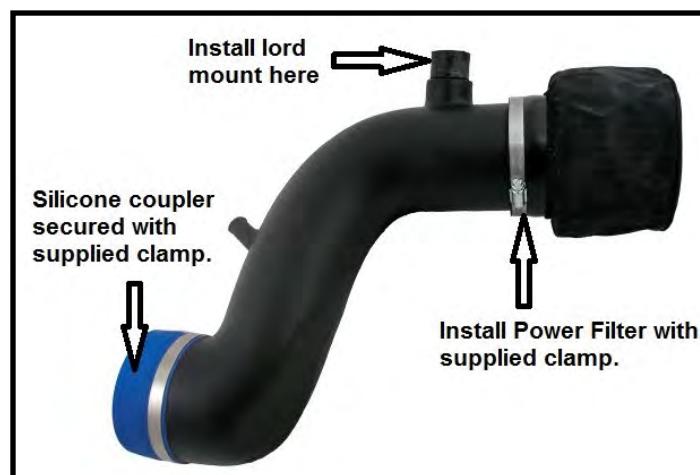


Figure 18

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 19) **Tip: Lubricate inside of coupler, inside of tube, and outside of velocity stack with glass cleaner. NOTE: Velocity stack fits into Power Filter tube.**

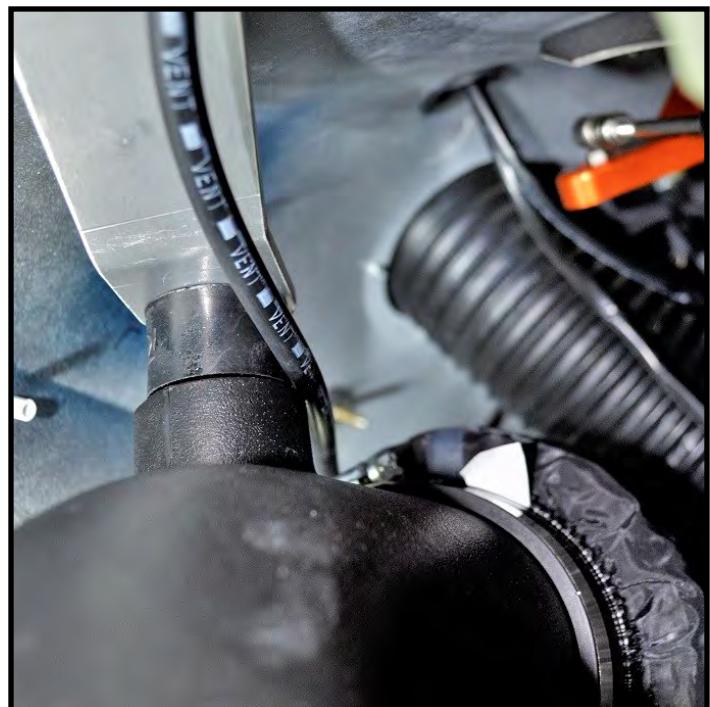
Ensure Power Filter tube is installed onto velocity stack completely. **Do not tighten clamp yet.**

Figure 19



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. (Figure 20) **NOTE: Apply blue Loctite to bolt. Do not over tighten bolt.**

Figure 20



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

- INSTALLATION INSTRUCTIONS -

Using OEM clip, install engine breather hose onto fitting at center of Power Filter tube. (Figure 21) **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.

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

Reinstall left side cover, mirror, bulk-head, and seat base reversing removal procedure. (Page 3)

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.