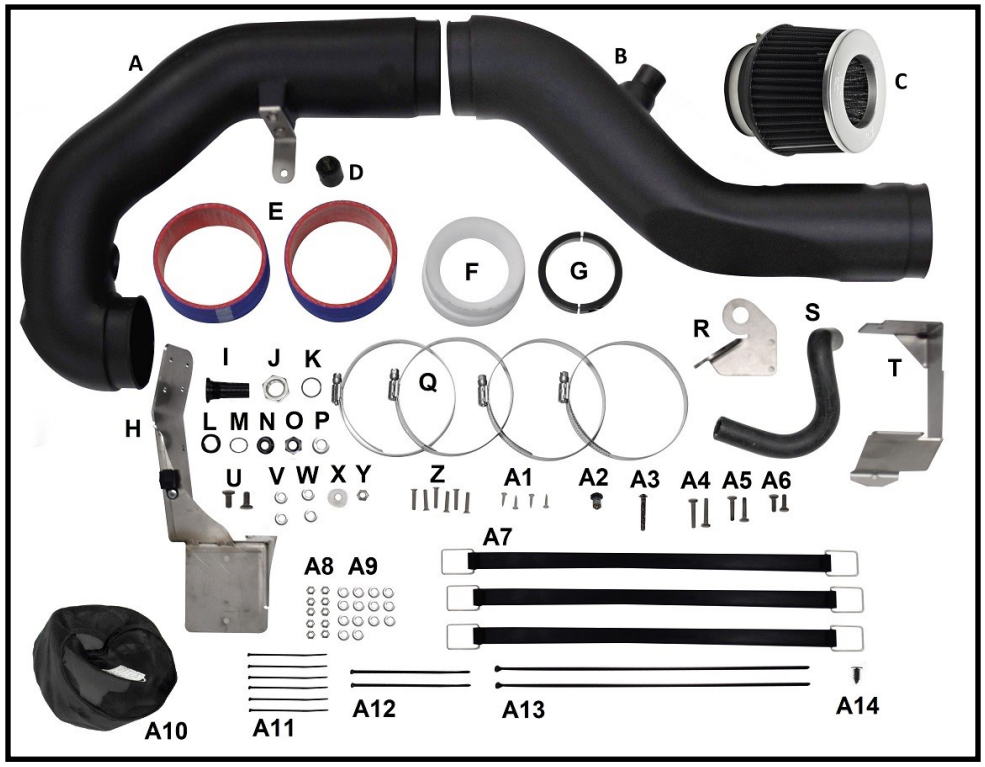
RXT/GTX 300 2018-2019 Power Filter Kit

RS13120



Applications: RXT / GTX 300 2018-2019

Approximate Installation Time: 4.5 hrs.

Recommended Specialty Tools:	***Part #***
	N/A

Required Materials:	***Part #***
Red loctite	*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 *****

RS13120 RXT/GTX 300 2018-2019 Power Filter Kit

COMPONENT LIST

	Description	Qty	Part #	Notes
A	Tube A	1		with L bracket, bolts, washers installed
B	Tube B	1		with large lord mount installed
C	Air Filter	1	RK13090-2	
D	Loard Mount, Sm	1	9232K17	with nylon washer
E	Silicone Coupler, (4" ID x 2-1/8" L)	2	RY15-04/2.0	
F	V-Stack	1	QCA-RS13140	
G	Threaded Ring	1		with screws
H	Electrical Bracket	1	FSM-RS13120-BS	with Diag plug socket installed
I	Barbed Fitting with O-ring (Breather)	1		assembled, fitting, o-ring, nut
J	7/8" Nut	1		assembled, fitting, o-ring, nut
K	O Ring, Buna Dash #119, (Barbed Fitting)	1	9452K83	assembled, fitting, o-ring, nut
L	Contour Ring (Exhaust Temp Sensor Relocator)	1	QCA-RS13140-SRB	in srb bag
M	O-ring (Exhaust Temp Sensor Relocator)	1		in srb bag
N	Threaded Insert (Exhaust Temp Sensor Relocator)	1		in srb bag
O	Plug (Exhaust Temp Sensor Relocator)	1		in srb bag
P	Gasket (Exhaust Temp Sensor Relocator)	1		in srb bag
Q	Hose Clamp, (#64)	4	6.56E-49	
R	Front Lift Eye/ Intake Bracket	1	FSM-RS13140-B	
S	Molded Hose	1	19625	
T	Reservoir Bracket	1	FSM-RS13120-BS	
U	Bolt, 8 X 16mm, SHCS	2	830236SS	
V	Washer, Lock M8	2	4478	
W	Washer, Flat M8	2	369023SS	
X	Washer, Fender M8	1	410.8.24	
Y	Nut, Nyloc M8	1	LMNL5X00800	
Z	Screw, Flat Head, 6 x 20mm PFHS	6	100.6.20	
A1	Screw, Self Tapping	4	92470A196	
A2	Well Nut, 6mm	1	67741967	
A3	Bolt, Button head Torx 6 x 35mm	1	M1635CTBA2	
A4	Bolt, 6 x 35mm HHCS	2	096.6.35	
A5	Bolt, 6 x 25mm HHCS	2	830158SS	
A6	Bolt, 6 X16mm HHCS	2	LMHC3X06016	
A7	Rubber Strap (Fuel Tank)	3	2938501204	
A8	Nut, Nyloc 6mm	10	561030SS	
A9	Washer, Flat 6MM	15	369021SS	
A10	Pre Filter	1	RK13090PF-BK	
A11	Zip Tie, 4"	6	TY23MX	
A12	Zip Tie, 5.5"	2	TY24MX	
A13	Zip Tie, 14"	2	TY28MX	
A14	Plastic Dart	1	502.5005.1	

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@rivamotorsports.com

- INSTALLATION INSTRUCTIONS -

Remove seats.

Remove access cap (A) and screws (13) at locations shown. **Note: Screws at location B go through the deck and are secured with nuts and washers underneath. Do not drop nuts and washers into hull.** Retain hardware for re-use. Figure 1

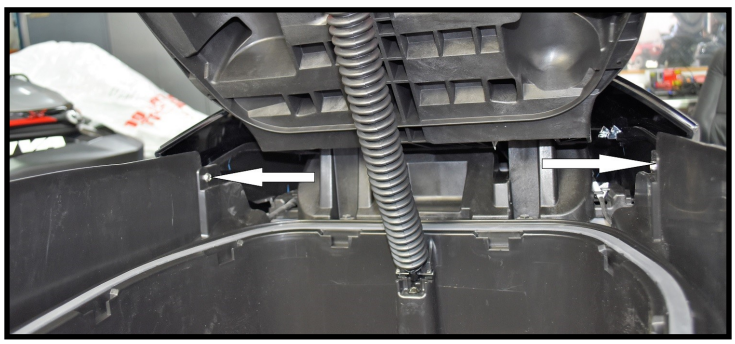
Figure 1

Remove engine compartment access cover. Remove plastic engine cover.

Disconnect battery cables. **Note: Disconnect negative cable first.**

Open storage compartment cover. Remove screws (2) securing hood. Pull hood forward and off . Figure 2.

Figure 2



Cut zip ties (2) holding rubber cover onto gas shock. Slide cover down and unscrew gas shock from top mount. Open cover as far as possible and secure with a bungie cord or tie down.

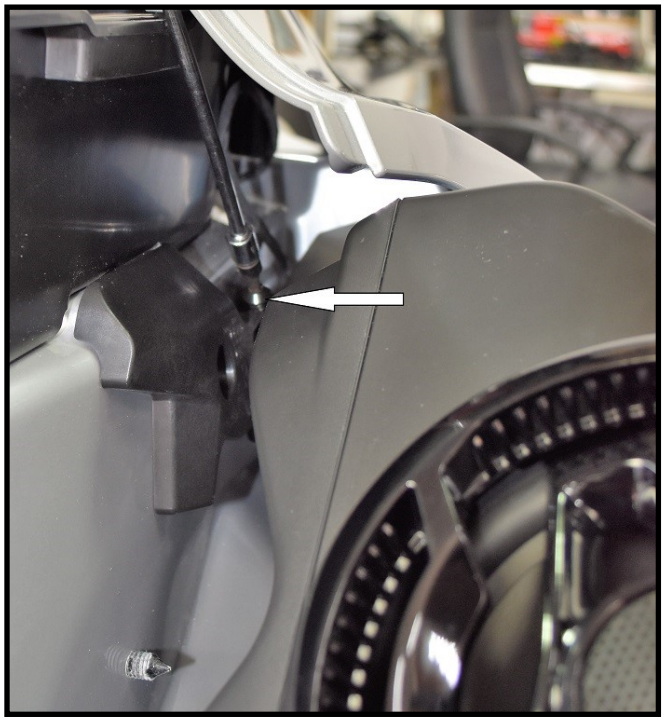
Remove screws (2) and plastic rivets (2) securing lateral cosmetic panel. Remove panels by pulling to rear and rotating upward. (Figure 3)

Figure 3

On units not equipped with audio system, remove screws (2 ea.) from LH and RH side grill panels. Remove side grill panels.

On audio equipped models remove screw (1 ea) from right and left speaker pods. Figure 4

Figure 4



Insert long 1/4” extension through hole in lower part of speaker. Push in until catch is released and speaker can be pulled out. **Note: Use caution as pushing too far will break the plastic catch. (**Figure 5)

Figure 5

Remove screw (1ea) and pull down on tab (A) to allow center cosmetic panel to be slid rearward and off. (Figures 6 and 7)

Figure 6

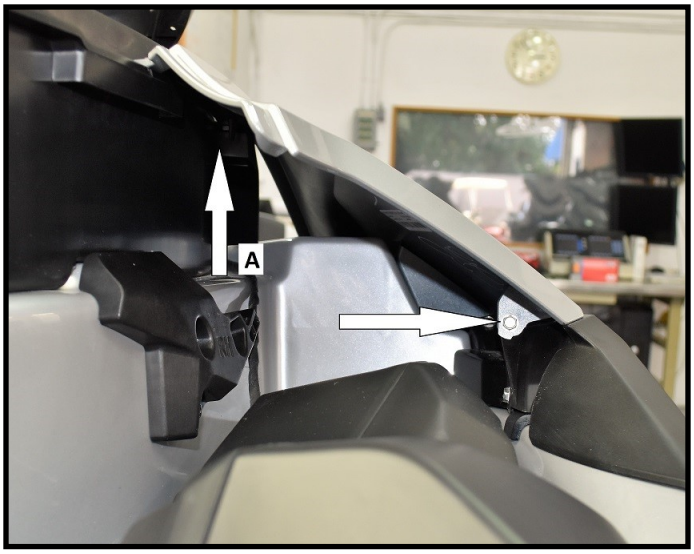
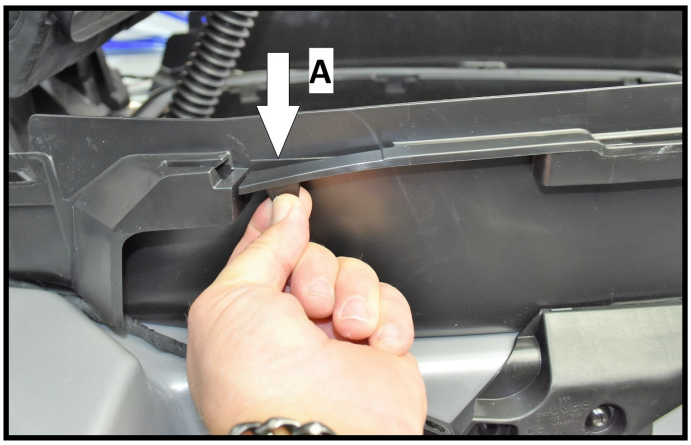


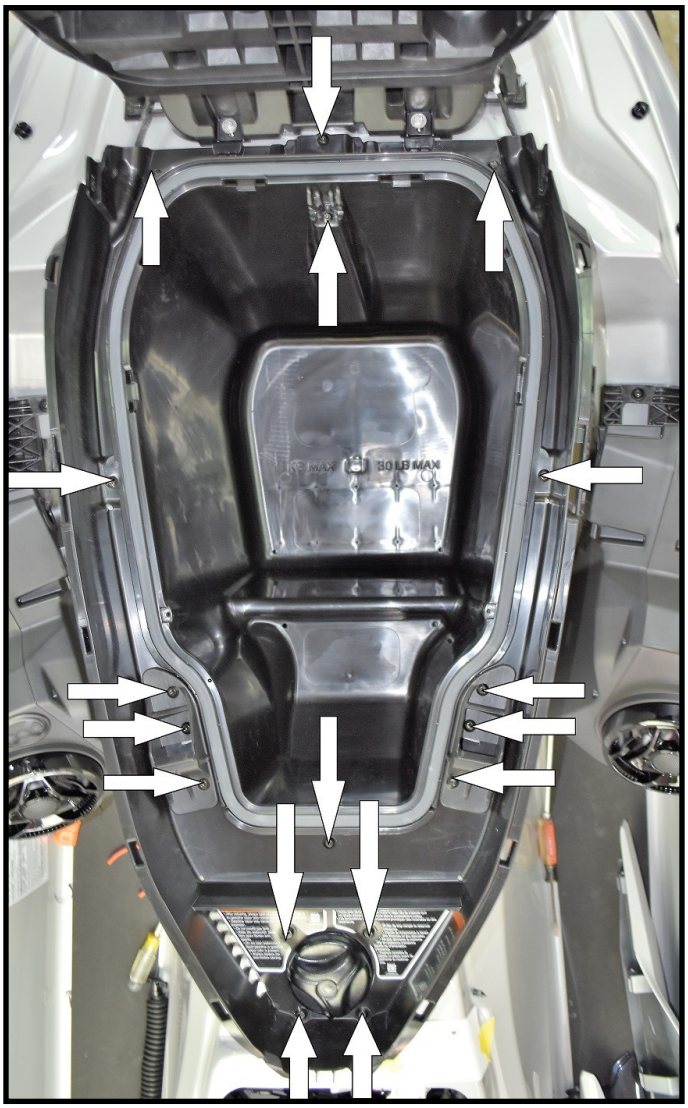
Figure 7



Tab A shown after center cosmetic panel removed

Remove fuel filler cap and screws (17) securing storage bin. (Figure 8)

Figure 8



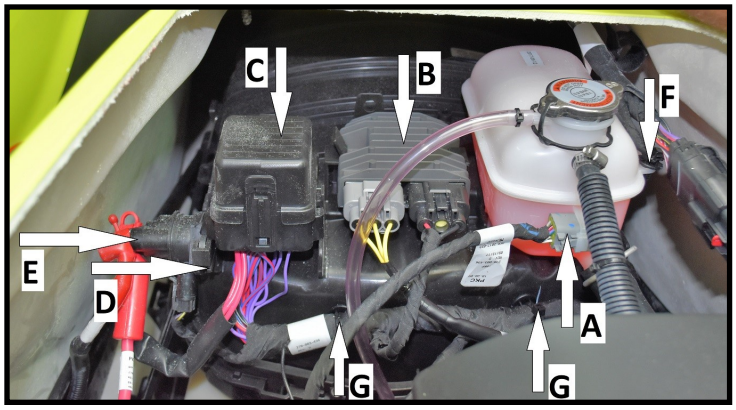
Lift storage bin up and cut zip ties (2) securing ventilation hoses to front bottom of bin. **Note: Cut zip ties at point indicated by arrow.** (Figure 9)

Figure 9

Remove storage bin.

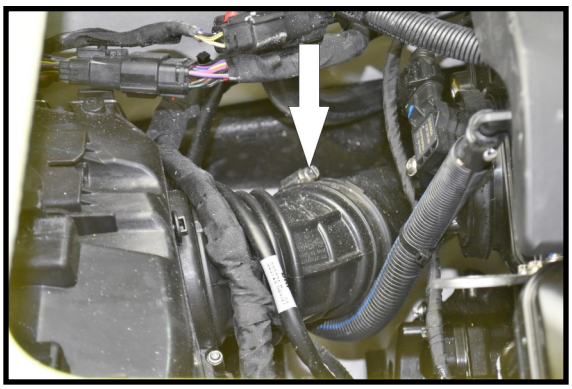
In engine compartment remove diagnostic plug (A) from coolant reservoir. Unclip voltage regulator (B) and fuse box (C) from airbox and drop into hull. Push catch (D) and lift starter relay (E) to remove from airbox. Remove plastic rivet (F) securing harness to reservoir. Unclip reservoir from airbox. **Note: support reservoir to prevent coolant leak.** Cut zip ties (G) securing harness to rear of airbox. Cut harness zip tie at right rear corner of airbox. (not shown). (Figure 10)

Figure 10



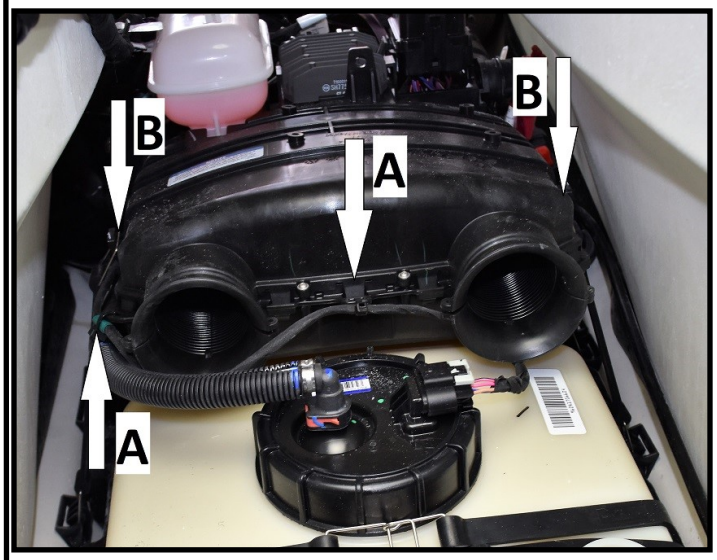
Release clamp holding OEM inlet tube to airbox hose and disconnect hose from tube. (Figure 11)

Figure 11



Disconnect rubber straps (4) at rear of airbox (not shown) securing airbox in craft. In storage compartment opening cut zip ties (A) securing harness to airbox. Disconnect rubber straps securing airbox (B) (Figure 12)

Figure 12



Push fuel filler tube to the side and pull airbox forward and up. Remove airbox through storage compartment opening. **Note: Take care not to damage fuel hoses or wiring.**

Remove OEM airbox straps (6) and replace with supplied rubber straps (3) to secure fuel tank.

Re-install storage bin. Attach vent hoses to bottom of storage bin using supplied 14” zip ties (2). Thread zip ties through opening in zip ties previously cut and wrap loosely around vent tubes. (Figure 13)

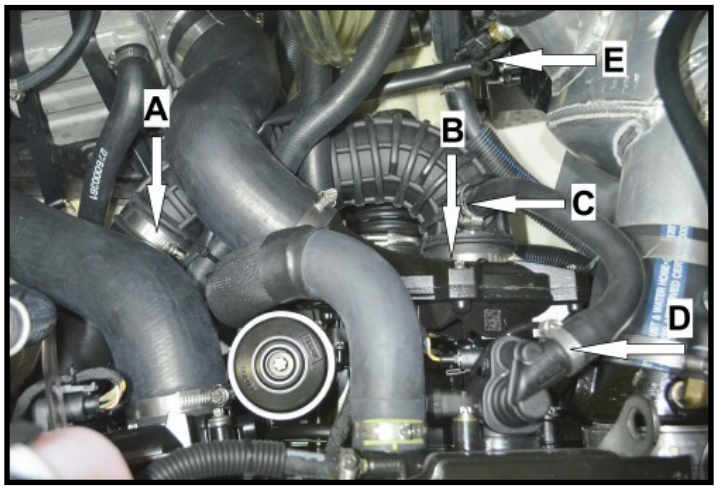
Figure 13

Release clamp (A) securing supercharger inlet hose to rear of OEM inlet tube. Pull hose off inlet tube. Remove OEM inlet tube by sliding out through front storage compartment.

Reassemble storage compartment and reinstall body panels in reverse order of removal. Reattach shock cover with supplied 4” zip ties (2)

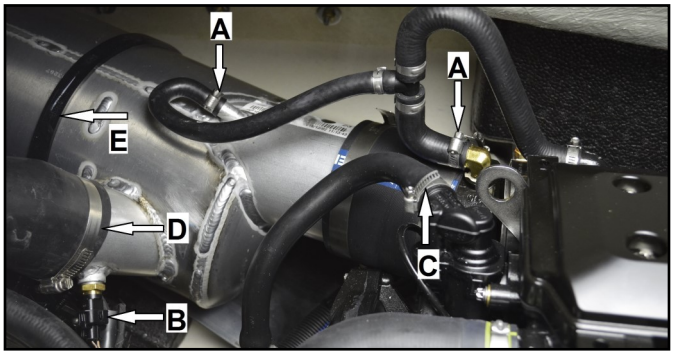
Release clamps (B, C and D) and remove OEM supercharger inlet hose and crankcase breather hose. Disconnect cable from exhaust temp sensor (E) and drop connector into hull. (Figure 14)

Figure 14



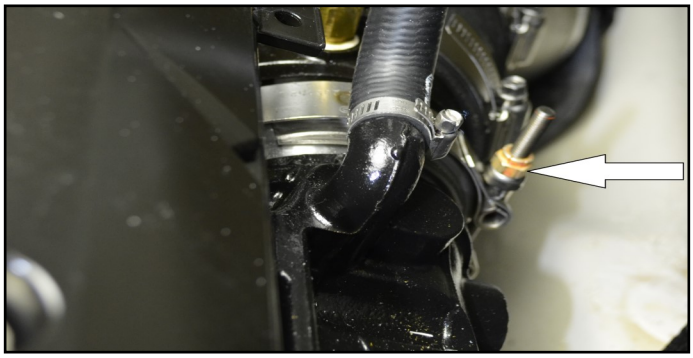
Disconnect waterlines between exhaust manifold and water box (A) Disconnect engine breather hose from TOPS valve at rear of cylinder head (C). Disconnect exhaust outlet hose from water box (D). Remove rubber strap around waterbox (E). (Figure 15)

Figure 15



At exhaust clamp loosen t-bolt nut enough to allow end ('T') to be removed from band clamp. Remove exhaust clamp. (Figure 16)

Figure 16



Remove water box assembly from hull. Remove temperature sensor from water box. Install supplied plug into OEM temperature sensor hole. **NOTE: Apply red Loc-tite to threads. Do not over tighten.**

Place supplied Sensor Mount Collar onto water box outlet tube, curved side down. Position collar next to weld. **Make sure collar is not on weld bead!** Trace inside opening of collar with a marker. (Figure 17)

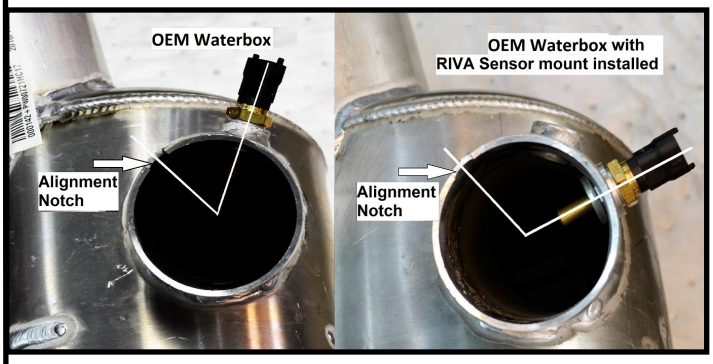
Figure 17

Measure and mark the center of the hole (Figure 18)

Figure 18

Hole center should be at 3:00 to 4:00 position with respect to index notch in water box tube. (Figure 19)

Figure 19



Center punch and drill hole center with a 1/4" drill bit. Enlarge hole to full size using a 5/8" drill bit.

Press supplied o-ring into groove in curved side of Sensor Mount Collar. Insert supplied Sensor Mount through hole from inside of pipe. Slip collar over mount. Install temperature sensor into Sensor Mount and tighten. **Apply red Loc-tite to threads. Do not overtighten.** (Figure 20)

Figure 20

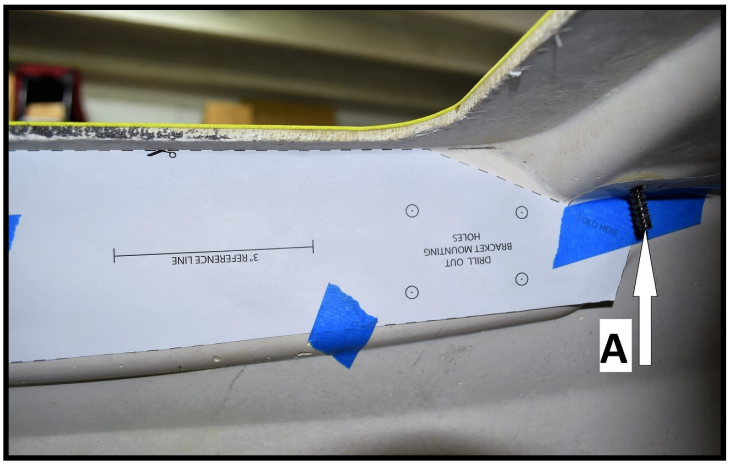
Reinstall water box and coupler assembly onto exhaust manifold reversing removal procedure. **NOTE: Do not tighten hose clamp yet. Tip: Lubricate inside of coupler and outside of exhaust manifold with glass cleaner to ease installation.** Leave water box loose and exhaust outlet disconnected to make it easier to install Power Filter Inlet Tube A

Cut out templates for electrical bracket and reservoir bracket. If you printed these templates on your own printer make sure that the scale printed on the template measures as indicated.

Punch out holes in templates where indicated.

Slip hole punched into electrical bracket template over LH lateral cosmetic panel screw (A) and tape template into place as shown. (Figure 21)

Figure 21



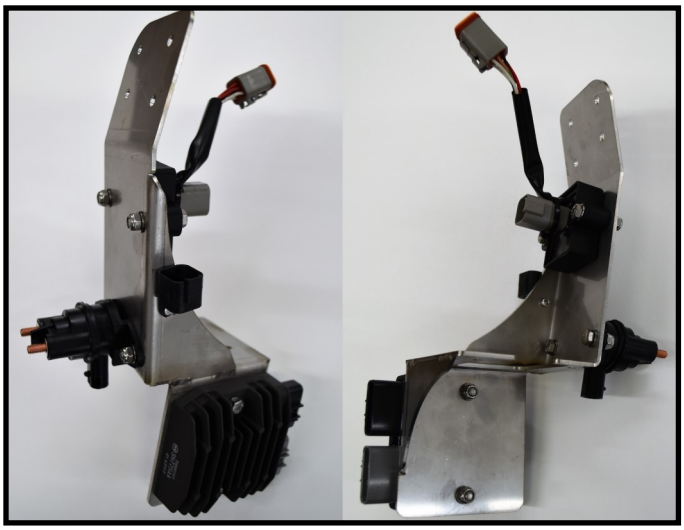
Install voltage regulator onto electrical bracket using supplied 6 x 25mm HHCS (2), 6mm flat washers (4), and 6mm nyloc nuts (2). Align electrical bracket holes with template and verify clearance for fuel tank and battery as shown. **Note: there should be at least 1/2" of clearance between battery negative terminal and voltage regulator and at least 1/4" of clearance between bracket and fuel tank.** Move template if necessary to assure proper clearance. (Figure 22)

Figure 22

Drill through hull from inside with 17/64" drill bit at 4 hole locations shown on the template. Countersink holes from outside of hull to allow heads of supplied 6x30mm PFHS to sit flush with hull surface.

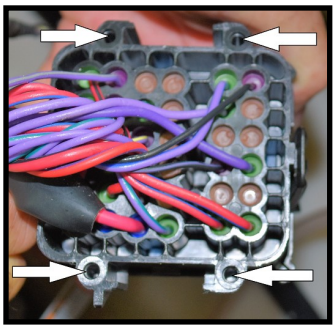
Using supplied 6X16mm HHCS (2), 6mm nyloc nuts (2) and 6mm flat washers (4), install starter relay onto electrical bracket as shown. If unit is equipped with **optional** SCOM module install onto electrical bracket as shown using supplied 6x35mm HHCS (2), and 6mm nyloc nuts (2) and 6mm flat washers (4) from SCOM kit. (Figure 23)

Figure 23



Fuse block has 4 holes on the bottom to accept mounting screws. (Figure 24)

Figure 24



Invert electrical bracket and install fuse box onto electrical bracket as shown using supplied self tapping screws (4). **Note: Do not "wind up" harness wires when installing.**

Install bracket onto hull using supplied 6x20mm PFHS (4), 6mm nyloc nuts (4), and 6mm flat washers (4). (Figure 25)

Figure 25

Only if using RIVA Open Loop Cooling Kit skip this section on installing reservoir and bracket. Secure diagnostic plug in socket provided on electrical bracket.

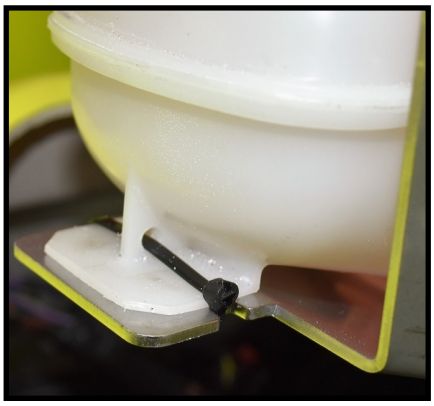
Insert RH lateral cosmetic panel screw through hole punched in reservoir bracket template and tape template in place as shown. (Figure 26)

Figure 26

Using a 17/64” drill bit, drill two holes through body at locations indicated on template. Countersink top side of holes to allow heads of supplied 6x20mm PFHS to fit flush with hull surface.

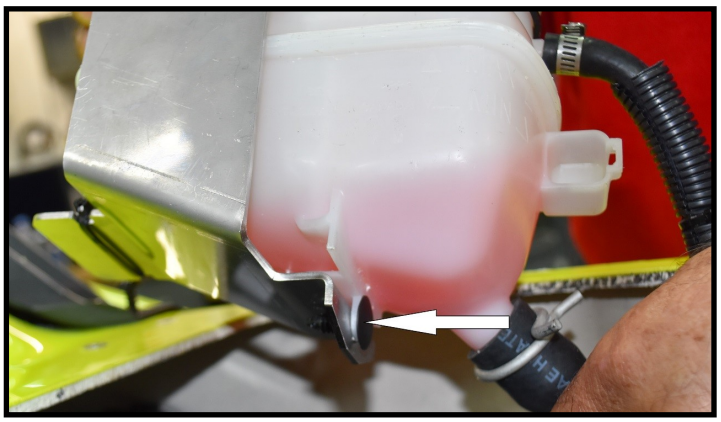
Using a 5/32” drill bit, drill a hole in forward reservoir mount and secure to reservoir bracket with supplied 5.5” zip tie as shown. (Figure 27)

Figure 27



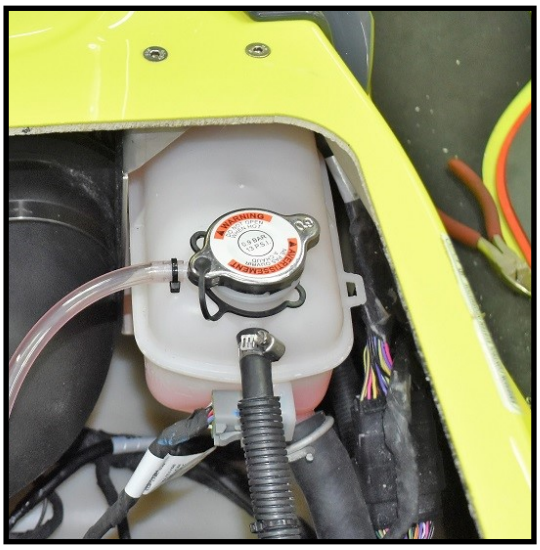
Insert supplied plastic dart through existing holes in reservoir and bracket to secure aft end of reservoir to bracket. (Figure 28)

Figure 28



Install bracket onto body with supplied 6x20mm PFHS (2), 6mm nyloc nuts (2), and 6mm flat washers (2). (Figure 29)

Figure 29



Re-insert plastic rivet holding wire harness into tab on RH side of reservoir.

Insert diagnostic plug in socket on reservoir.

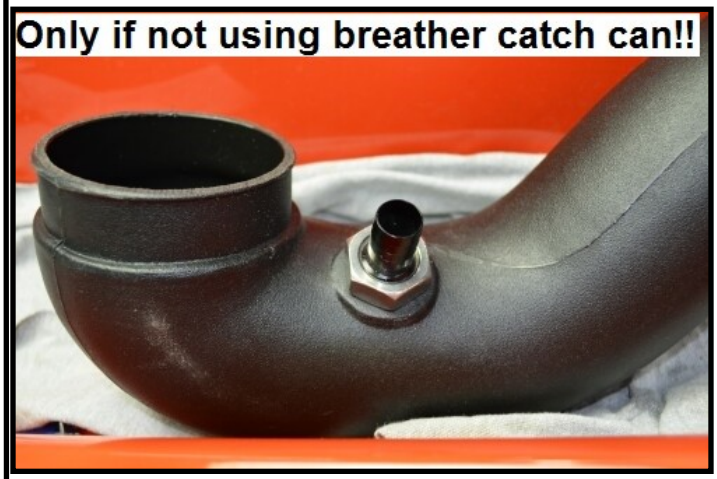
Using supplied 4” zip ties secure harness wires together in front of engine.

If using optional RIVA Breather Catch Can Kit install now following instructions in kit.

If you plan to use the OEM crankcase breather system you must install a fitting into the new inlet pipe to accept the crankcase breather hose.

Using a Dremmel, Roto Zip or similar tool, make a 7/8” diameter hole in the center of the boss provided on the supplied inlet tube A. Place the supplied o-ring on the supplied 7/8” barbed fitting and insert it through the hole from the inside of the inlet tube. Secure with supplied 7/8” nut. **Note: Apply silicone sealer to threads.** (Figure 30)

Figure 30



Remove OEM front engine lifting eye and replace with supplied mount bracket / lift eye as shown. Reuse OEM 6mm torx head screws. **Note: Apply red loctite to screw threads**. (Figure 31)

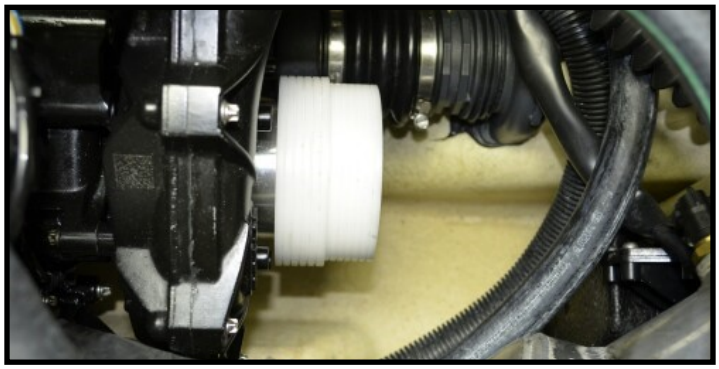
Figure 31

Loosen bolts in supplied threaded ring and slip over supercharger inlet. Note: Assemble ring so that both ring halves have two dots showing. (This will align threads in both halves.) Position threaded ring against flare on supercharger inlet and tighten allen screws. **Do not over tighten screws. Do not use Loctite on threads.** (Figure 32)

Figure 32

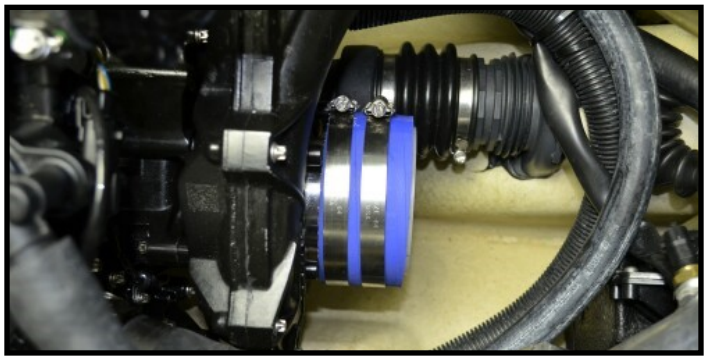
Screw velocity stack onto threaded ring. Tighten hand tight. Be sure velocity stack is seated all the way onto threaded ring. (Figure 33)

Figure 33



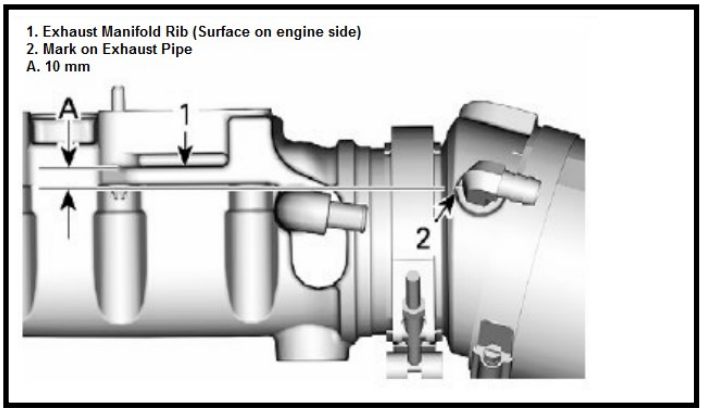
Slip supplied silicone coupler onto velocity stack. Slide two supplied hose clamps loosely over silicone coupler. Tighten clamp closest to engine only. (Figure 34) **Tip: Spray glass cleaner on inside of coupler and outside of Velocity Stack to ease installation.**

Figure 34



Align exhaust pipe with exhaust manifold. Note measurements in instruction illustrations. Alignment is critical to prevent exhaust leaks. Tighten clamp. (Figure 35)

Figure 35



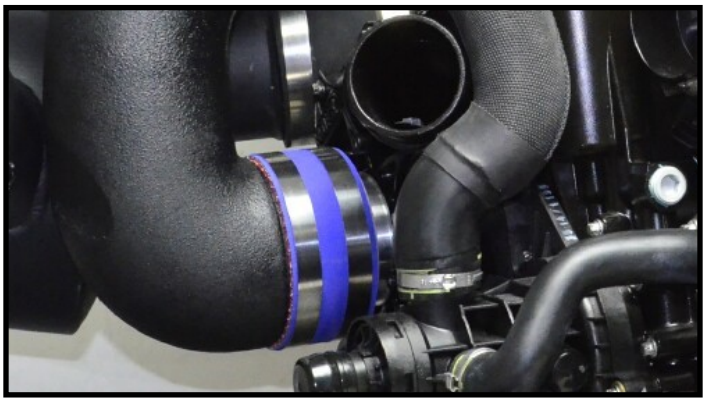
Reconnect waterlines previously removed. (Figure 15)

Install Inlet Tube A onto velocity stack. Velocity Stack must slide into Inlet Tube until it is completely seated. When inlet tube is properly installed lord mount on L bracket will align with the hole in rear engine lift eye. Install 8 mm nyloc nut and fender washer onto lord mount stud. Do not tighten. (Figure 35)

Figure 35

Pull loose hose clamp onto coupler over Inlet Tube and tighten. (Figure 36) **Do not over tighten clamps. Tip: Lubricate coupler and tube with glass cleaner.**

Figure 36



Reattach cable to exhaust temperature sensor. If using OEM breather system install formed hose onto crankcase vent valve and barbed fitting previously installed into Inlet Tube A. Short end of formed hose goes onto barbed fitting.

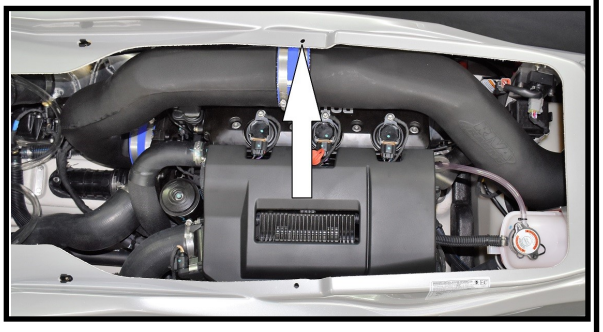
Reinstall exhaust outlet tube/hose. Reconnect battery cables. **Note: Connect positive cable first.**

Install Flame Arrestor and Pre-filter onto Inlet Tube B using supplied hose clamp. Install supplied silicone coupler onto Inlet tube B. Slide supplied hose clamps onto inlet tube B but do not tighten. (Figure 38) **Tip: Lubricate Flame Arrestor, coupler, and tube with glass cleaner to ease installation.**

Figure 38

Drill out front LH engine access cover screw hole shown using a 1/2” drill bit. Insert supplied 6mm well nut. (Figure 39)

Figure 39

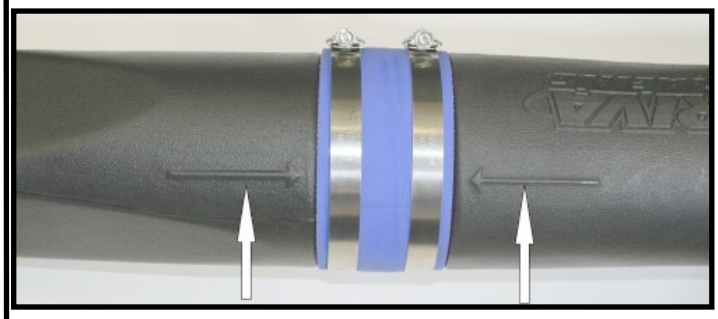


Insert filter end of assembled Inlet Tube B into starboard side of hull ahead of engine and rotate assembly until inlet tubes A and B are aligned. Pull Inlet Tube B back toward Tube A until the ends of the tubes meet and the coupler is fully installed.. Secure Inlet Tube B to front engine lift eye/ bracket with supplied 8 mm bolt, flat and lock washers. **Note: Apply Blue Loctite to threads.**

Align arrows on inlet tubes (Figure 40) and tighten fasteners on the lord clamps on Inlet Tubes A and B. Verify that Inlet tube does not touch oil filler cap or crankcase breather

Figure 40

While maintaining alignment tighten hose clamps on coupler between A and B. **Do not over tighten clamps.**



Check bilge for tools, rags, etc. Reinstall plastic engine cover and engine access cover. Use supplied torx screw and 6mm flat washer in front LH cover hole (where well nut is located) instead of OEM screw and nut combination. Reinstall seats.

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@rivamotorsports.com.

Limited Warranty

RIVA Powerfilter kits carry a 90 day 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.

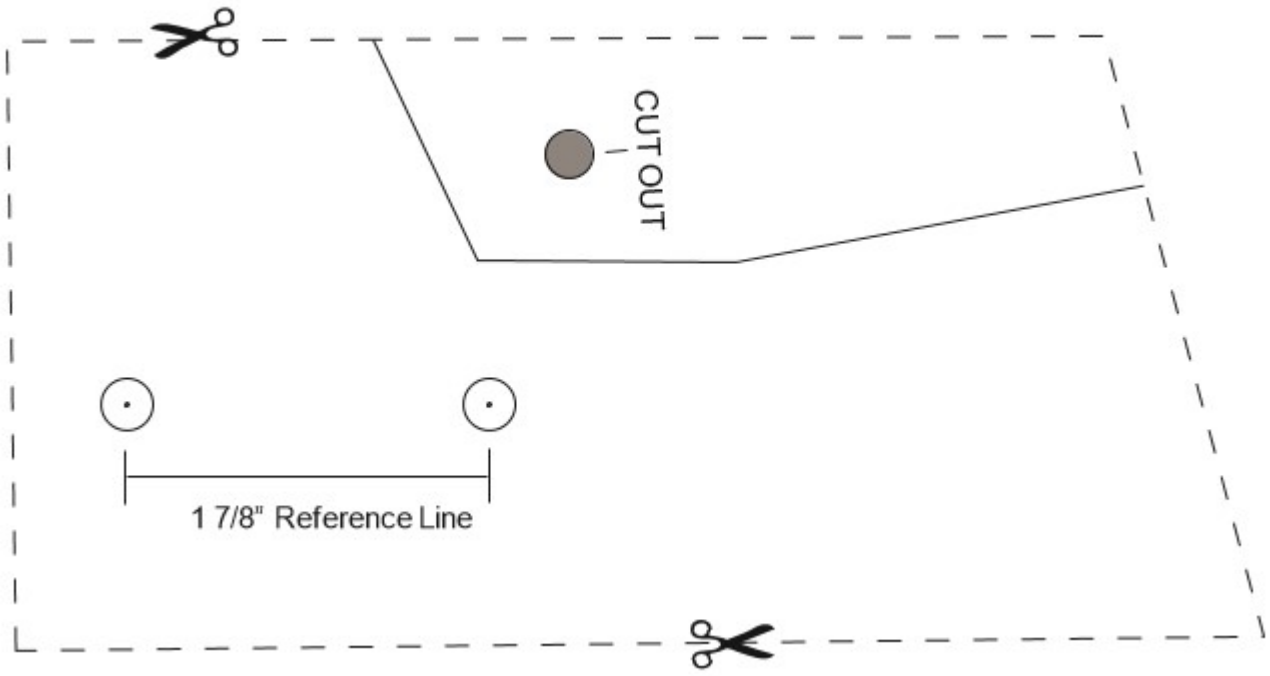
No other warranty, express or implied, including, but not limited to the implied warranties of merchantability and fitness for a particular purpose, applies. Various states do not allow for the limitation of incidental or consequential damages and therefore the above exclusion or limitation may not apply 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.

Reservoir Bracket Template.

Cut around outline and punch out hole as shown.



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2018 SEA-DOO RXT-X & GTX 300
ELECTRICAL COMPONENT BRACKET