

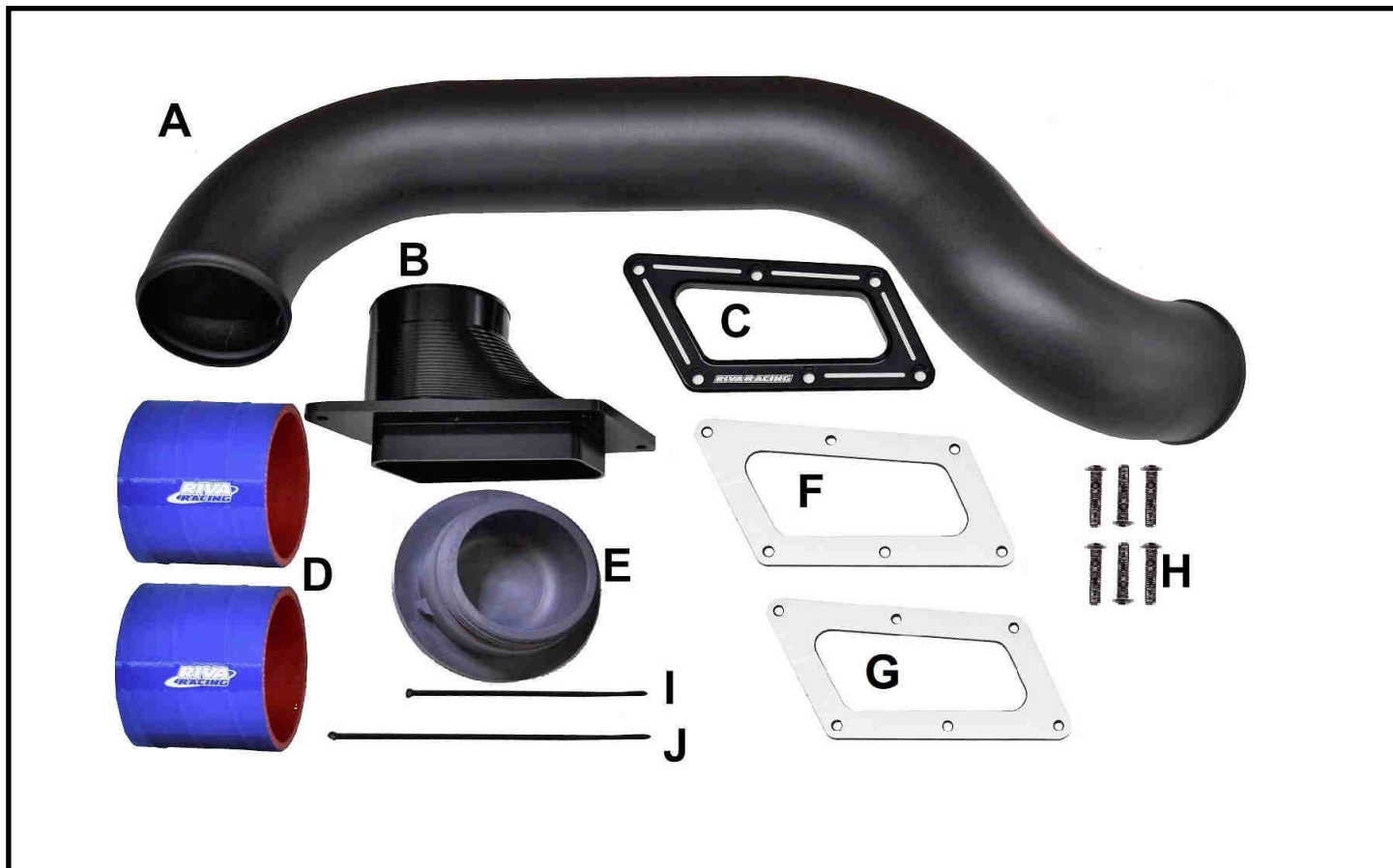


RIVA RACING

PERFORMANCE PRODUCTS & ACCESSORIES

RXT/GTX 300 and 230 2018+ Rear Exhaust

RS15120-1



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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>

Applications: RXT/GTX 300 and 230 18+

Approximate Installation Time: 3 Hr.

Recommended Specialty Tools:

3/4" hole saw
Roto Zip, Dremel, or small body saw
Sanding drum or Surform tool

Required Materials:

Blue Loctite
3/4" Formed Hose Only required for 2023+ ST3 (RXT and GTX)

Part #

N/A

N/A

N/A

Part #

N/A

RS10123-SBD



RS15120-1 RXT/GTX 300 and 230 2018+ Rear Exhaust

COMPONENT LIST

<u>Item</u>	<u>Description</u>	<u>RIVA Part #</u>	<u>Qty. Req.</u>	<u>Notes</u>
A	Exhaust Outlet Tube	W1-RS15120-T	1	
B	Exhaust Outlet	QCA-RS15120	1	
C	Cover Plate			
D	Coupler 3 x 3	RS15-03/03	2	
E	PVC Block-Off	QCA-RS15140-PLUG	1	
F	Gasket		1	
G	Gasket		1	
H	Bolt, 6MM X 25MM, BHCS	824074SS	6	
I	Zip tie 4"		1	
J	Zip tie 7"	TY25MX	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.

Remove Top Deck (All Models)

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)

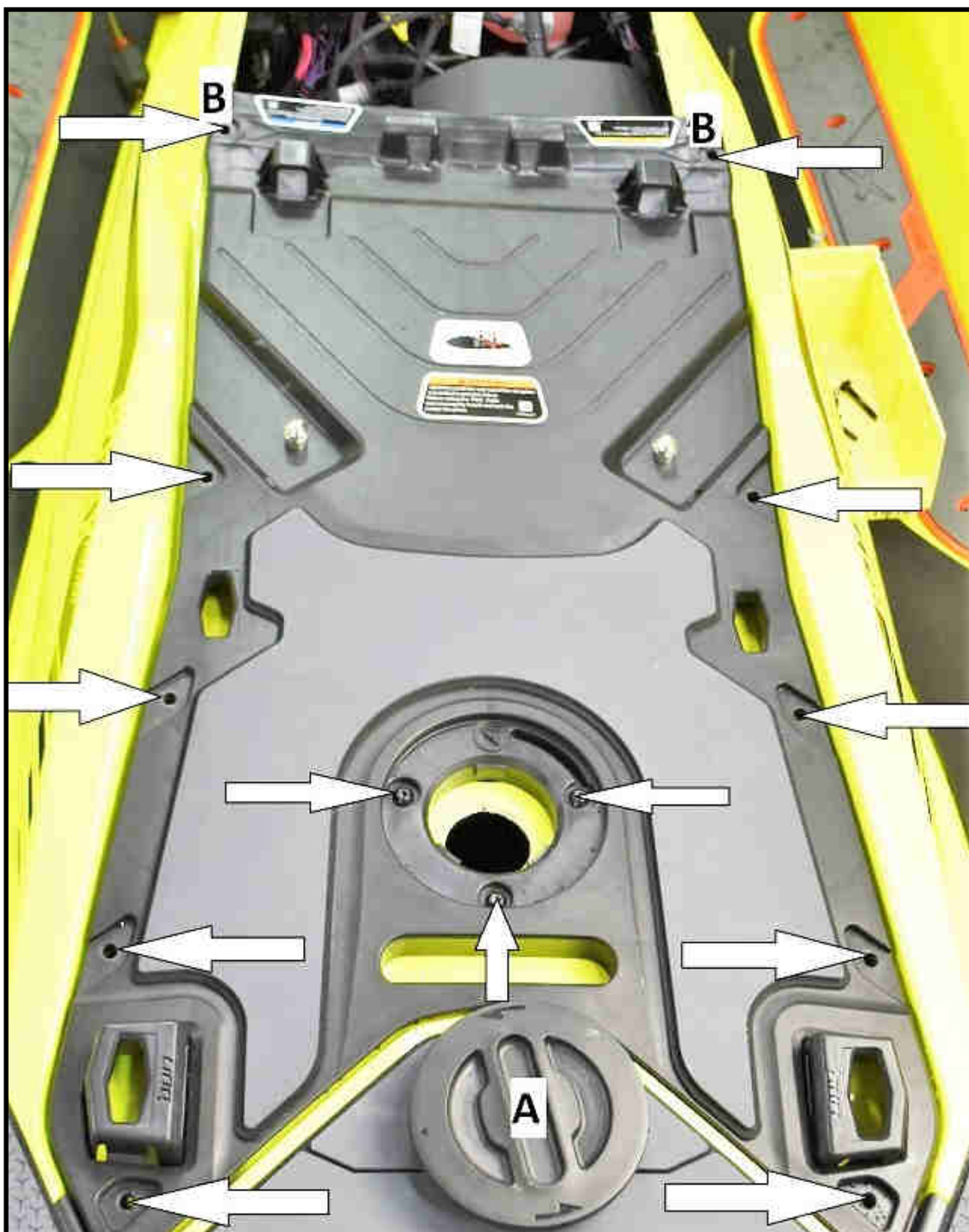
Remove engine compartment access cover. Remove plastic engine cover.

2023+ models proceed to Cooling System Modification page 4.

2018-2019 models proceed to Resonator Removal page 6.

2020-2022 models proceed to Resonator Removal page 7.

Figure 1

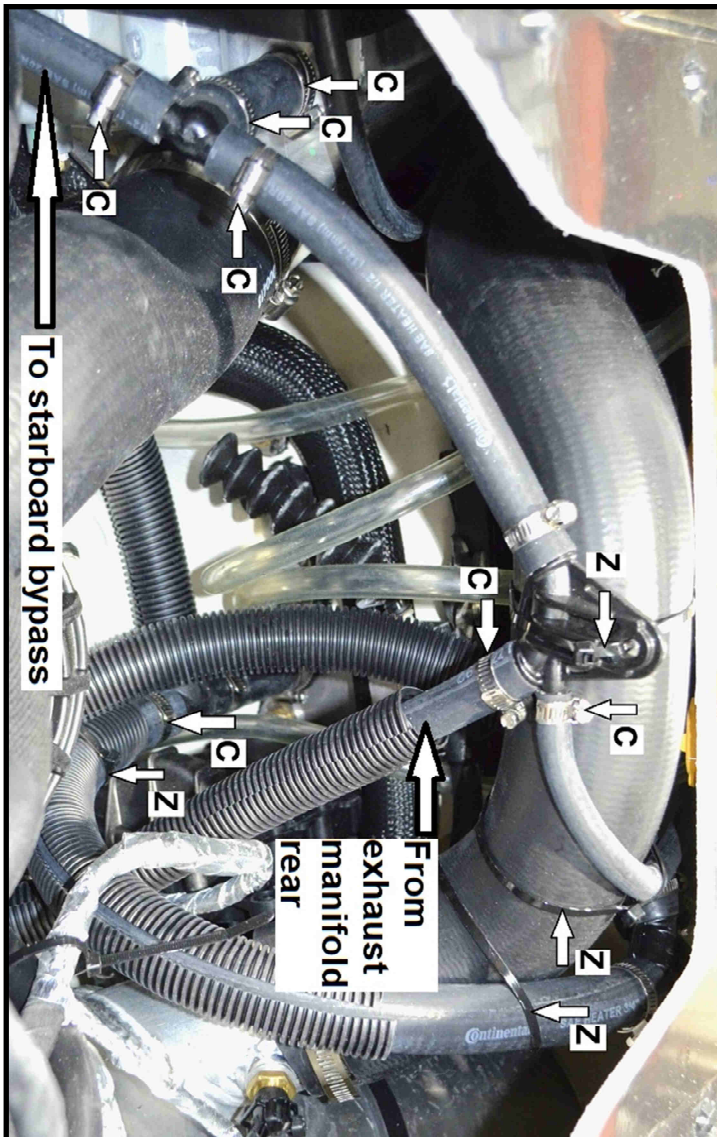


Cooling System Modification 2023+ Models

2023 and newer Sea-Doo PWCs with ST3 hull have a pair of siphon break fittings plumbed into the cooling system to prevent hard starting when the craft is left for extended periods with the stern nearly submerged and the engine not running. That system must be removed to install this RIVA exhaust.

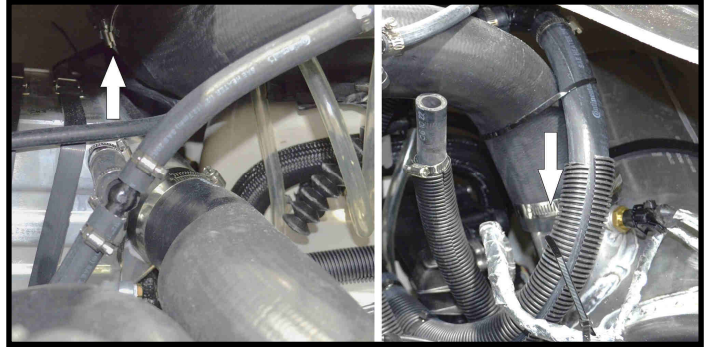
Cut zip ties (4) at locations marked Z. Loosen hose clamps (7) at locations marked C. Remove hoses from fittings at those locations. (Figure 2023 A) Save clamps for re-use. Save T fitting for re-use. Remove fitting with attached hose from craft,

Figure 2023 A



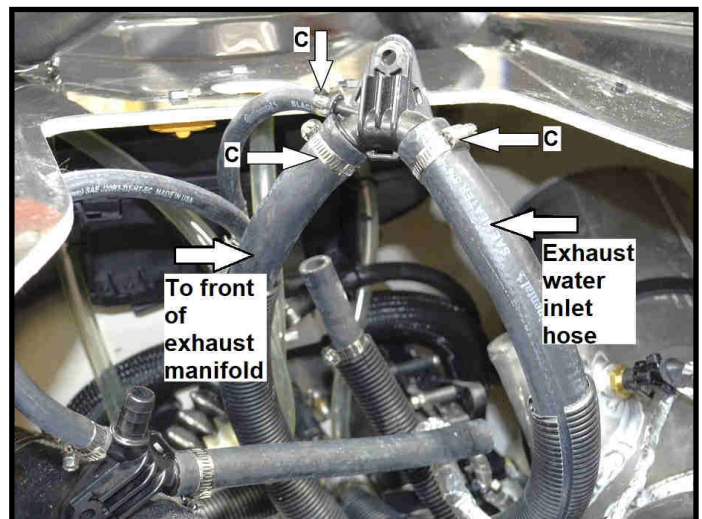
Loosen clamps (2) at both ends of OEM exhaust hose and remove exhaust hose from waterbox and resonator. (Figure 2023 B)

Figure 2023 B



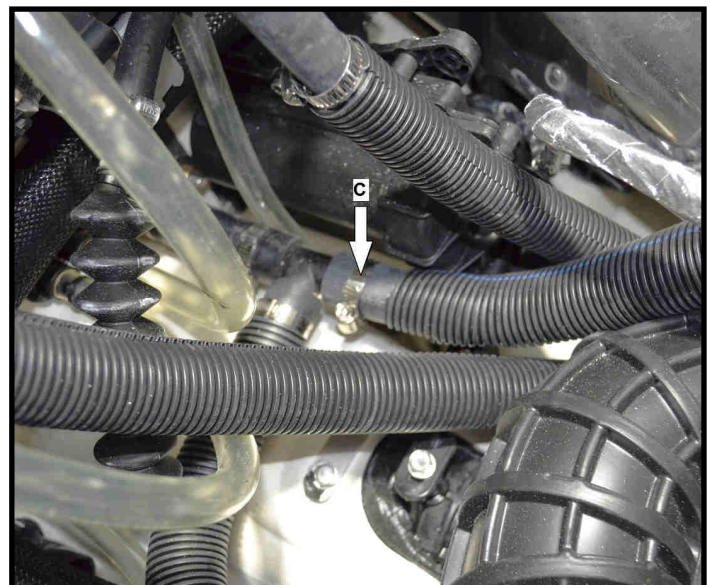
Loosen hose clamps (3) and remove fitting. Save clamps for re-use. (Figure 2023 C)

Figure 2023 C



Loosen hose clamp on exhaust water inlet hose at T fitting and remove hose. (Figure 2023 D) Save clamp for re-use.

Figure 2023 D



Cooling System Modification 2023+ Models

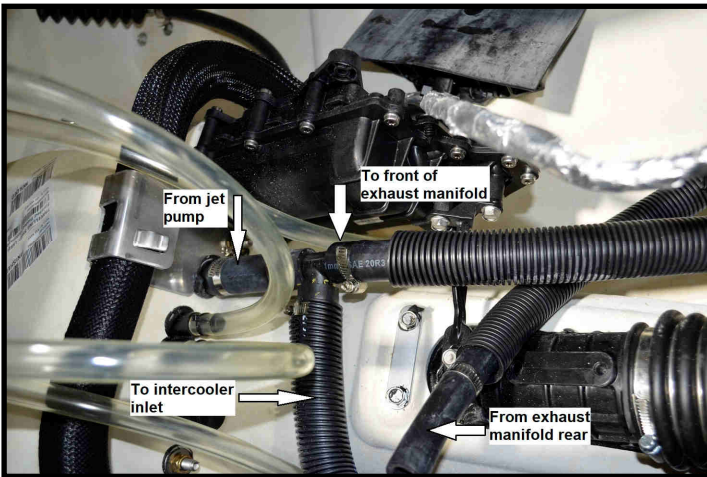
Cut 9-1/4" (20.7 cm) from the end of the 3/4" hose that runs from the underside front of the exhaust manifold to the cooling water inlet. (Hose on the left in figure 2023 C.) Cut enough from the hose sheath to allow installation of a hose clamp. (Figure 2023 E)

Figure 2023 E

Install shortened hose onto T fitting at water inlet from jet pump.

Secure using OEM hose clamp previously removed and saved. (Figure 2023 F) **Note: Do not tighten clamp.**

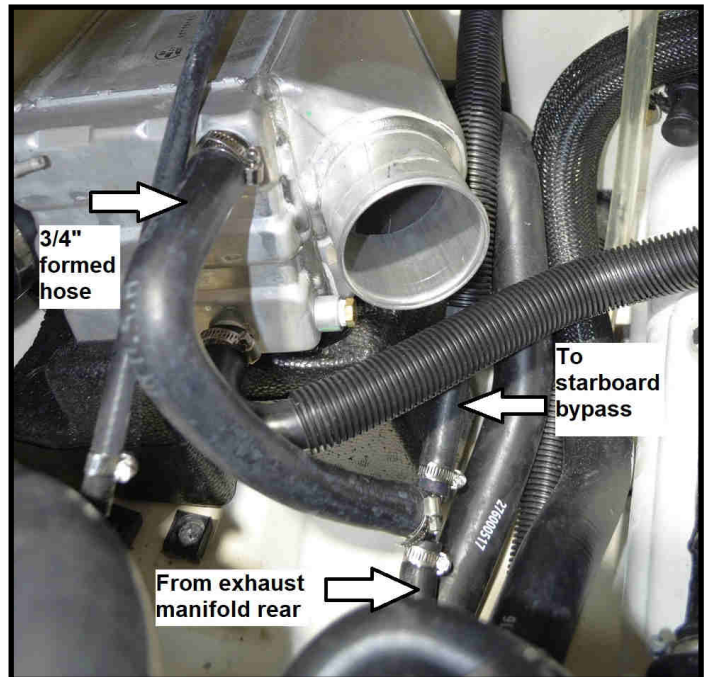
Figure 2023 F



Remove the 1/2" hose to the starboard water bypass from beneath the intercooler foam support. Cut 17-1/2" (44.5 cm) from the inner end of the 1/2" hose. Shorten hose protector to leave hose end accessible. Slip 1/2" hose clamp, previously removed, onto shortened hose and install T fitting previously removed from intercooler outlet. **Note: Do not tighten clamp.** Pass hose from rear of exhaust manifold through gap in hull below driveshaft. Slip 1/2" hose clamp, previously removed, onto hose and install onto T fitting. **Note: Do not tighten clamp.** Slip 3/4" hose clamp, previously removed, onto short end of 3/4" formed hose (RIVA part number RS10123-SBD). Install hose onto intercooler outlet (upper fitting). **Note: Do not tighten clamp.** Slip 3/4" hose clamp, previously removed, onto long end of 3/4" formed hose and install onto T fitting. **Note: Do not tighten clamp.**

Adjust hoses on T fitting and intercooler to prevent kinking in hoses. Tighten all clamps (4). **Note: Do not overtighten clamps.** (Figure 2023 G).

Figure 2023G



This completes the changes required specifically for 2023+ models with the siphon break installed in the cooling system.

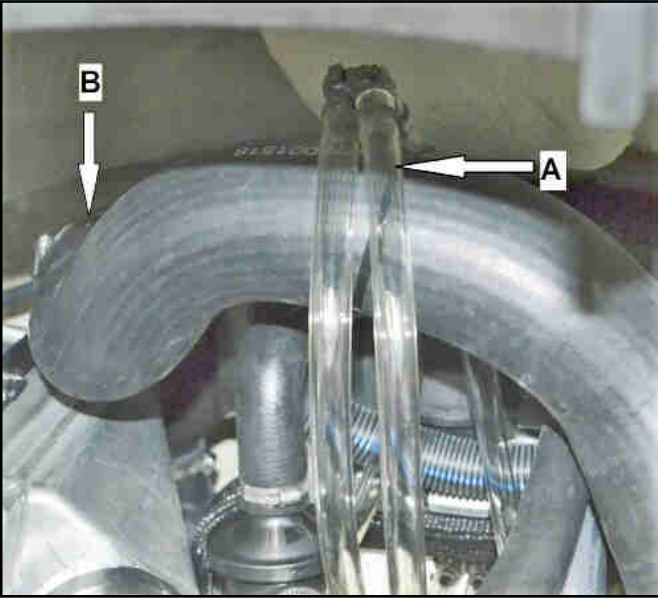
Proceed to Resonator Removal 2020+ models (page 7).

Resonator Removal 2018-2019 Models

To remove the resonator you must remove the waterbox from the craft.

Cut zip tie (A) securing siphon bilge hoses to exhaust outlet hose. Loosen clamp on exhaust outlet hose at resonator inlet. (B). (Figure 2)

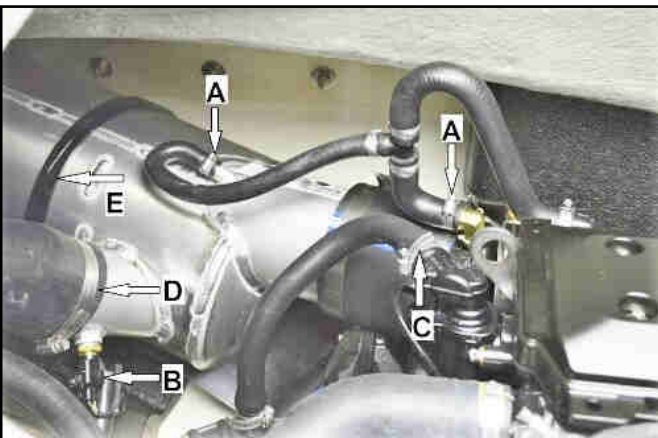
Figure 2



Loosen clamp on exhaust outlet hose at waterbox (D). (Figure 3)

Remove exhaust outlet hose. Retain clamps for reuse during reassembly. Disconnect temp sensor (B). Disconnect waterlines between exhaust manifold and waterbox (A). Remove rubber strap around waterbox (E). (Figure 3)

Figure 3



At exhaust clamp loosen t-bolt nut enough to allow end ('T') to be removed from band clamp. Remove exhaust clamp. (Figure 4)

Figure 4



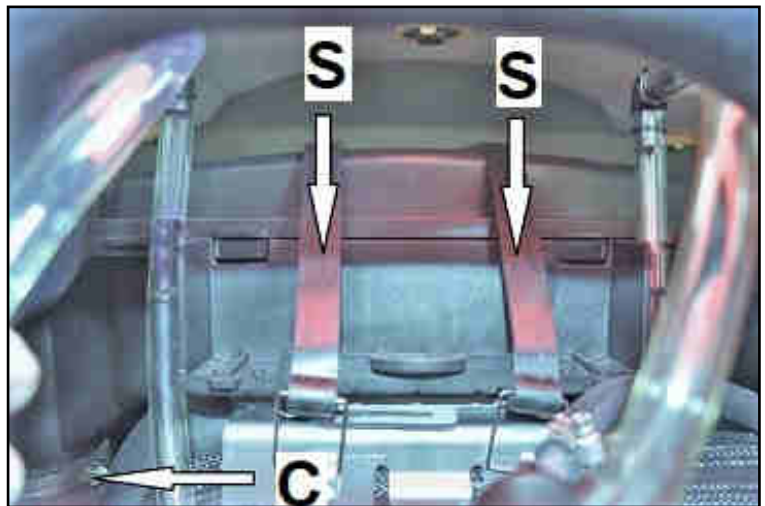
Remove waterbox assembly from hull.

Hint: If installing RIVA Power Filter Kit perform exhaust temp sensor relocation before re-installing waterbox.

Loosen clamp holding resonator to molded outlet hose (C). (Figure 5)

Disconnect resonator hold down straps (S). (Figure 5)

Figure 5



While twisting side to side, pull resonator up and out of molded outlet hose. Remove resonator from craft and discard. Retain hose clamp for use during reassembly.

Remove straps from craft and discard.

Reinstall waterbox reversing removal procedure. **Notes: Do not tighten clamps and do not install strap yet. Spray hoses and tube with foaming glass cleaner to ease installation.**

Proceed to Exhaust Installation All Models, page 8.

Resonator Removal 2020+ Models

To remove the resonator you must remove the waterbox from the craft.

Loosen clamp on exhaust outlet hose at resonator inlet. (Figure 6)

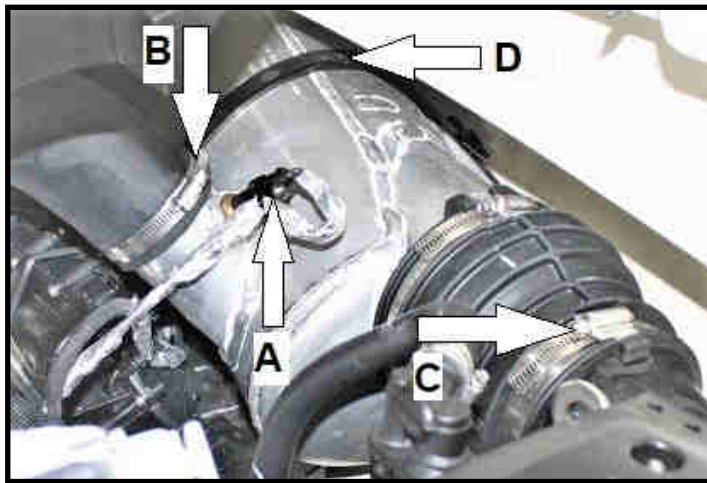
Figure 6



Disconnect exhaust temperature sensor (A). Loosen clamp (B). Remove exhaust outlet hose from waterbox and resonator. Retain clamps. (Figure 7)

Loosen clamp (C), at exhaust manifold outlet. Remove hold down strap (D). (Figure 7)

Figure 7

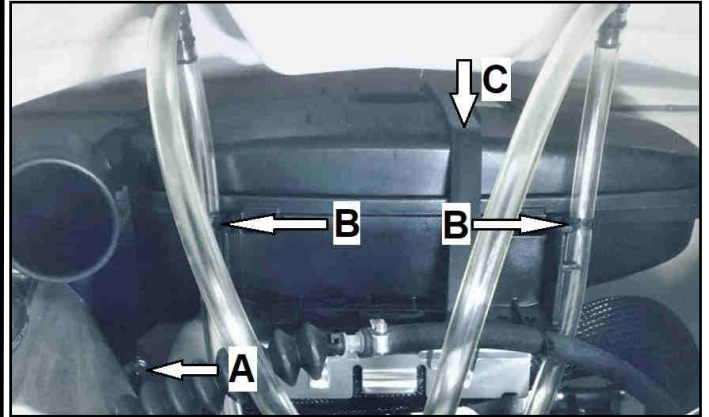


Remove waterbox assembly from hull.

Retain clamp for re-installation.

Loosen clamp holding resonator to molded outlet hose (A). Cut (2) zip ties (B) securing siphon bilge hoses to resonator. Remove rubber resonator strap (C). (Figure 8)

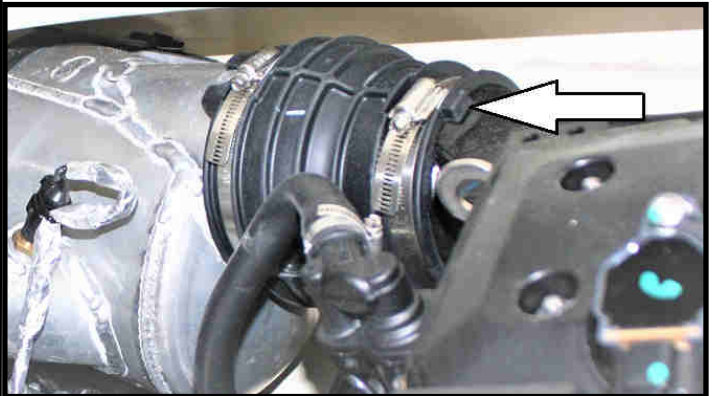
Figure 8



While twisting side to side, pull resonator up and out of molded outlet hose. Remove resonator from craft and discard. Retain hose clamp for use during reassembly.

Reinstall waterbox reversing removal procedure. **Notes:** Do not tighten clamp and do not install strap yet. Spray coupler and exhaust manifold with foaming glass cleaner to ease installation. Alignment tab on coupler must fit between bosses on exhaust manifold. (Figure 9)

Figure 9



Proceed to Exhaust Installation All Models, page 8.

Exhaust Installation All Models

It is necessary to remove the VTS trim ring to access the OEM exhaust outlet.

To remove the VTS trim ring use the iBR override function to move the iBR gate so you can access the bolts. **Warning! Keep hands and feet clear of the gate while moving. Serious injury could result from failure to take proper precautions.**

Put lanyard on DESS post and press start button to turn on multifunction gauge. (**Do not start ski.**)

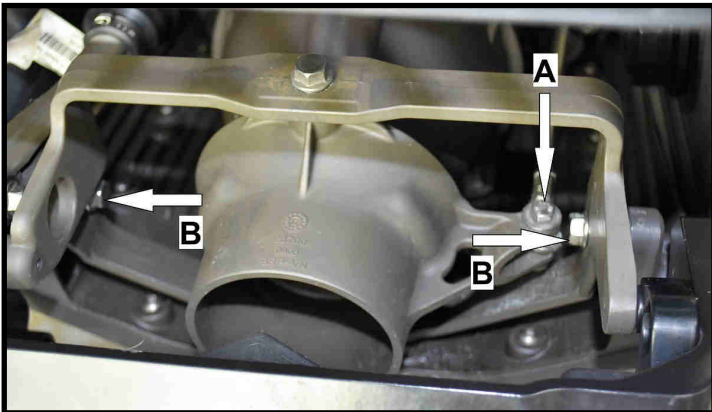
Pull in on the iBR lever. (There will be a beep.)

Press the SET button on the multifunction gauge.

Press the VTS "Down" button to move the iBR gate until you can access and remove the bolts.

Remove steering cable bolt (A). Remove (2) bolts (B) holding VTS trim ring. (Figure 10)

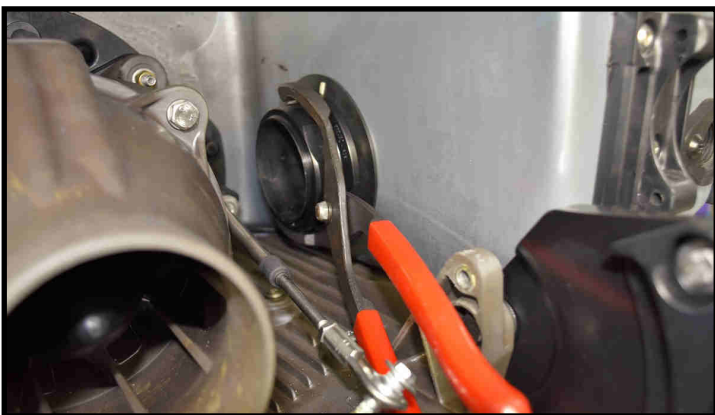
Figure 10



Remove VTS trim ring.

With a strap wrench or oil filter pliers grasp the nut on the exhaust through hull fitting and unscrew it. Set aside the nut for reuse later. (Figure 11)

Figure 11



Remove the through hull fitting from the ski by pulling from the inside of the hull. Retain the gasket for reuse. Remove

the clamp holding the 90 degree elbow fitting to the OEM through hull fitting. Keep the clamp for later reuse. Discard the OEM through hull and elbow fittings.

Insert supplied through hull plug through hole. The head of the plug will be inside the hull. The OEM nut and gasket will be on the outside. Note that the plug has alignment tabs that must be aligned with corresponding notches in the hole. (Figure 12)



Figure 12

Place OEM sealing washer gasket onto through hull plug and thread OEM through hull nut onto the supplied through hull plug. Use strap wrench or oil filter pliers to tighten. **Note: Do not overtighten.**

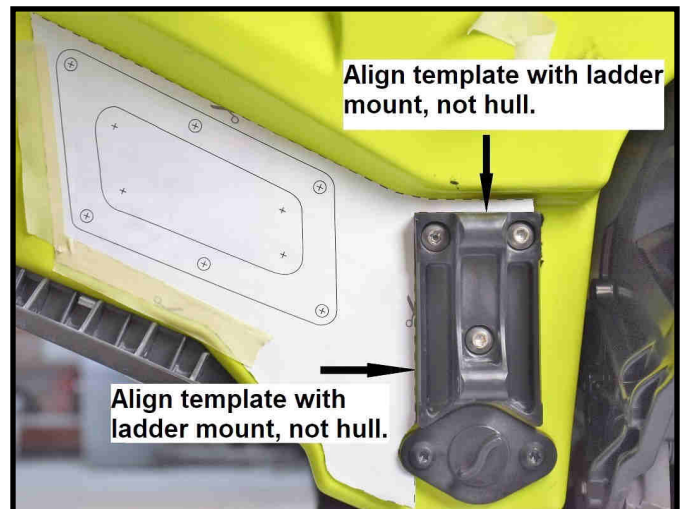
Reassemble VTS trim ring and steering cable, reversing disassembly. **Apply blue Loctite to threads.**

Cut out supplied paper template according to the instructions on the template. (Page 11)

Do not cut out the hole for the exhaust outlet. If you print the template on your own printer make sure that the printed template is the correct size. (See the printer reference instructions on the template.)

Tape the template to the port transom. (Figure 13)

Figure 13

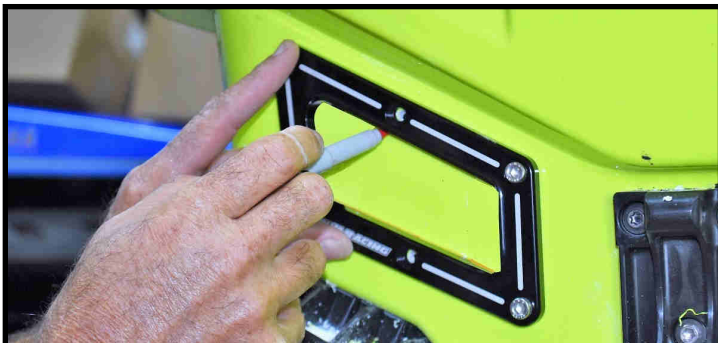


With a small diameter drill bit mark the centers of the six bolt holes and the 4 corner radii. With a 17/64" bit drill holes through the hull at the six bolt locations marked on the template. **Be careful when drilling holes to not drill into iBR bellows which is just inside hull.** Remove template from hull.

Exhaust Installation All Models

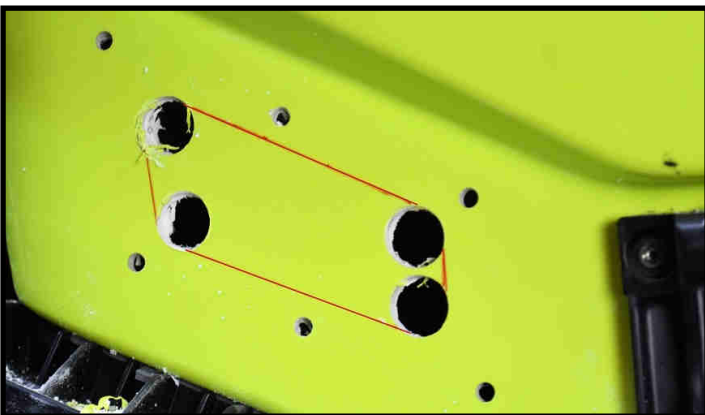
Place cover plate on hull and insert bolts through cover plate and hull. Mark around inside opening of cover plate with a sharp pointed marker. (Figure 14)

Figure 14



Remove cover plate. Using a 3/4" holesaw cut through hull at corner radii (4) previously marked with small drill bit. (Figure 15)

Figure 15



Cut between holes with a body saw, roto zip or other tool. **Stay inside lines. Be careful not to cut iBR bellows!** Switch to coarse sanding drum, file or surform tool to cut to final shape and size. Insert exhaust outlet from inside of hull to verify opening size and alignment with bolt holes.

Assemble supplied exhaust tube, couplers(2) and outlet as shown. Coupler will only fit about 1" onto outlet. Snug clamps onto couplers but do not tighten. Tube should be able to rotate in couplers. **Hint: Use foaming glass cleaner to lubricate couplers and fittings to ease assembly.** (Figure 16)

Figure 16



Two gaskets are supplied with this kit. Both are the same shape. The thick gasket goes on the exhaust outlet on the inside of the hull. The thin gasket goes on the cover plate on the outside of the hull. (Figure 17)

Figure 17



Remove protective cover from one side of self adhesive gasket and install onto outlet as shown. (Figure 18)

Figure 18



Insert tube assembly into hull and align outlet with opening.

Remove protective cover from one side of thin self adhesive gasket and install onto supplied cover plate as shown. When assembled this will be on the outside of the hull. (Figure 19)

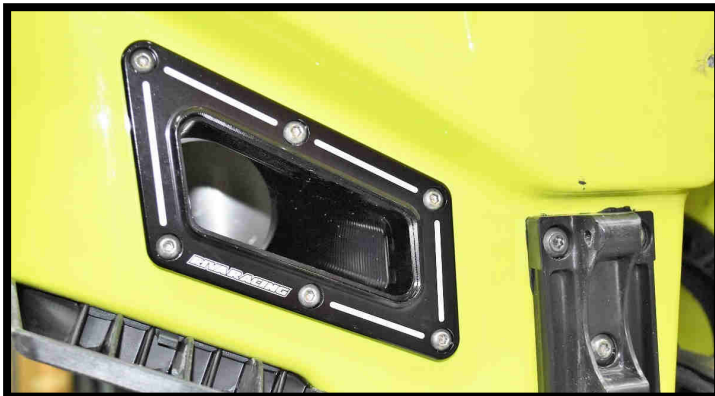
Figure 19



Remove protective cover from the other side of the cover plate gasket and install cover plate with supplied M6 x 25 BHCS(6). Tighten screws evenly around cover plate. **Notes: Apply Blue Loctite to screw threads. Do not overtighten screws as this could squeeze gaskets out of place. Do not apply sealer to gaskets.** (Figure 20, next page.)

Exhaust Installation All Models

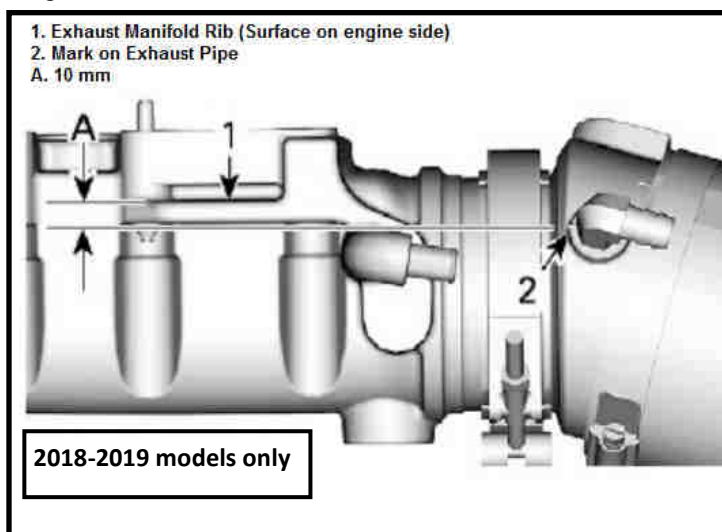
Figure 20



Assemble inner end of exhaust tube with coupler onto waterbox. **Note: Use foaming glass cleaner to lubricate coupler and fitting to ease installation.**

2018—2019 models only. Align exhaust pipe with exhaust manifold. **Note measurements in instruction illustration. Alignment is critical to prevent exhaust leaks.** (Figure 21) Tighten T clamp. **Note: Do not overtighten clamp**

Figure 21



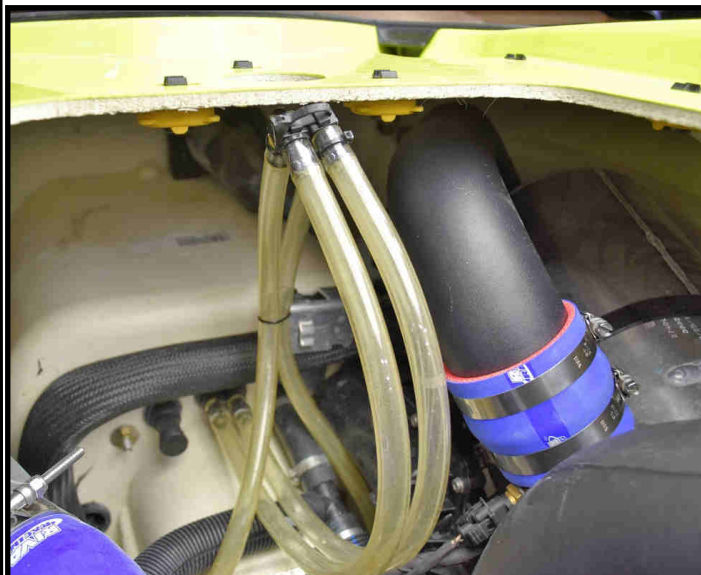
All models: Install waterbox hold down strap and tighten all exhaust hose clamps. **Note: Do not overtighten clamps.**

Reconnect exhaust temperature sensor.

2018-19 models only: Reinstall waterlines previously removed.

All models: Using supplied zip ties secure siphon bilge hoses to resonator bracket in upright position as shown. (Figure 22)

Figure 22



Replace parts previously removed to access exhaust. Check bilge for rags, etc.

Run craft on 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 Rear Exit Exhaust kits carry a 6 month 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.

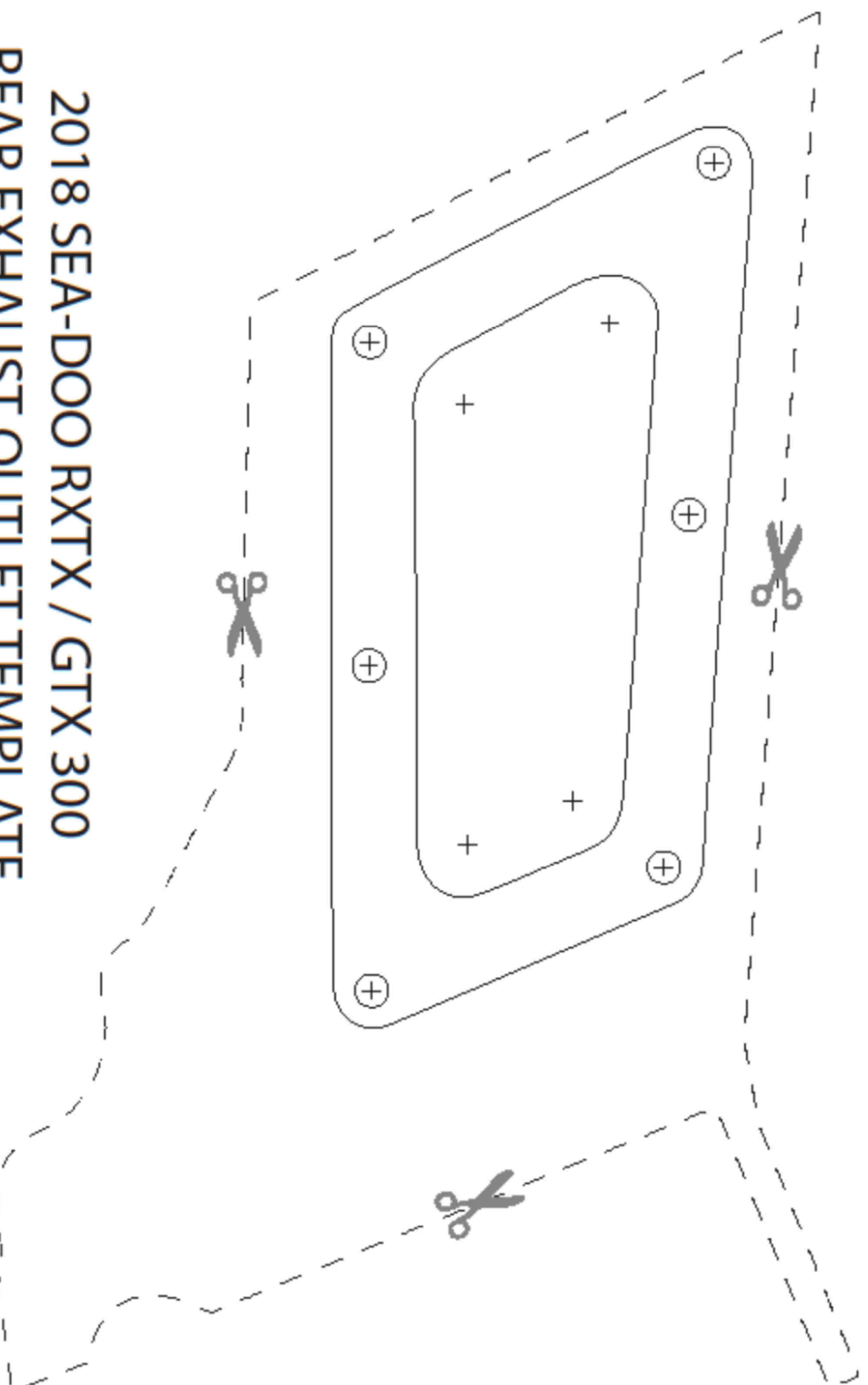
RIVA Racing shall have no liability for special, incidental or consequential damages or injury to persons or property from any cause arising from the sale, installation or use of this product.

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

4" REFERENCE LINE



2018 SEA-DOO RXTX / GTX 300 REAR EXHAUST OUTLET TEMPLATE