



## Sea-Doo 4 TEC 1630 2020+

## Free Flow Exhaust

RS16121

	B	
Applications: All Sea-Doo 2020+ 1630 4-TEC 130-300		GET THE LATEST UPDATES!
Approximate Installation Time: 2 hrs. Recommended Specialty Tools:	<u>Part #</u>	Prior to installation, go to the RIVA Racing online Instruction Library to download the latest version of these instructions:
Necommended Specially Tools.	<u>Part #</u> N/A	https://rivaracing.com/instructions
<u>Required Materials:</u> 3/4" Formed Hose Only required for 2023+ ST3 (RXT and GTX )	<u>Part #</u> RS10123-\$	SBD

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 \*\*\*





## **COMPONENT LIST**

	Description	Qty. Req.	RIVA Part #	Notes
A	Aluminum Tube	1	W1-RS16121-T	
В	Silicone Coupler	1	RS15-03/03	Assembled to tube
С	Ziptie, 13" SS Tab	1	TY27MX	
D	Ziptie, 11" SS Tab	r 1	TY26MX	

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 <u>tech\_support@rivaracing.com</u>

## - INSTALLATION INSTRUCTIONS -

#### **RXT/GTX/GTR/GTI All Years**

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.

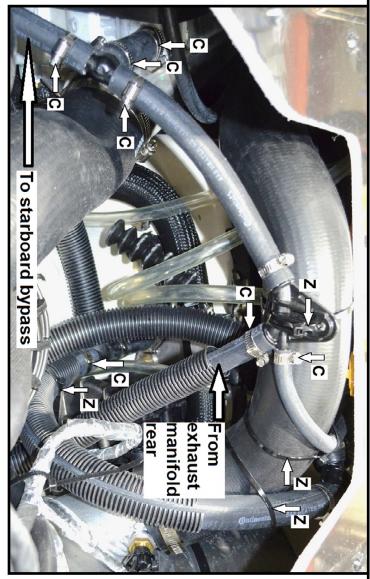


## 2023 and newer RXT and GTX models only! For all other years and models go to page 5.

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



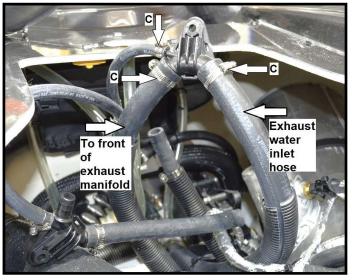
Loosen clamps (2) at both ends of OEM exhaust hose and remove exhaust hose from waterbox and resonator. (Figure 2023 B)

### 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



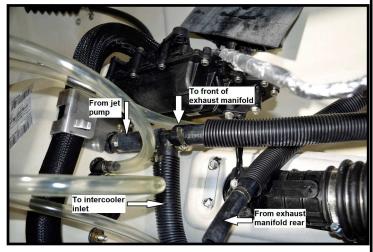
Cut 9-1/4" (20.7 cm) from the end of the 3/4" hose that runs from the underside front of the exhaust manifold to the cooling water inlet. (Hose on the left in figure 2023 C.) Cut enough from the hose sheath to allow installation of a hose clamp . (Figure 2023 E) Figure 2023 E

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

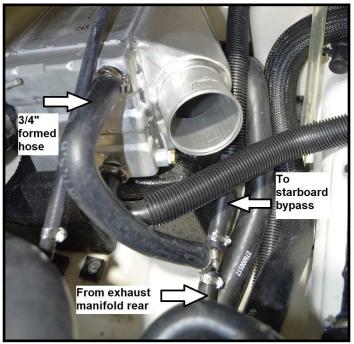


Remove the 1/2" hose to the starboard water bypass from beneath the intercooler foam support. Cut 17-1/2" (44.5 cm) from the inner end of the 1/2" hose. Shorten hose protector to leave hose end accessible. Slip 1/2" hose clamp, previously removed, onto shortened hose and install T fitting previously removed from intercooler inlet. **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 on-

#### to 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. You may now proceed with the instructions for **All Models** on page 5 column 2.

#### RXP-X

Remove seat.

Remove the two bolts on each side holding the side panels in place and remove the side panels. (Figure 2)

#### Figure 2



Remove 2 screws (A) and 2 plastic rivets (B) holding vent cover to rear grab handle and remove vent cover (Figure 3).

#### Figure 3



Remove 2 plastic rivets under side panels removed previously (Figure 4)

#### Figure 4



Press the (2) locking tabs (A) on the coolant reservoir towards the reservoir body and lift the reservoir out of its mounting location. Lay the reservoir to the starboard side to provide better access to the exhaust.

Remove (6) bolts (B), nuts and washers holding rear grab rail in place and remove grab rail. **Caution: Do not drop nuts and washers into hull.** (Figure 5)

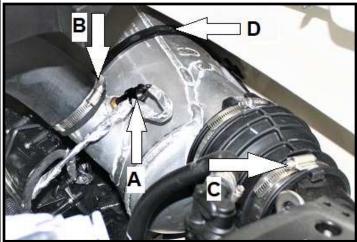
Figure 5



#### All Models

Disconnect exhaust temperature sensor (A). Loosen clamp (B). Remove Exhaust outlet hose from Waterbox. Loosen clamp (C), at exhaust manifold outlet. Retain clamp. Remove hold down strap (D). (Figure 6)

## Figure 6



Remove water box assembly from hull.

Loosen front exhaust hose to resonator clamp.(Figure 7) Remove front exhaust hose from hull. Retain clamp.

### Figure 7



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

Figure 8

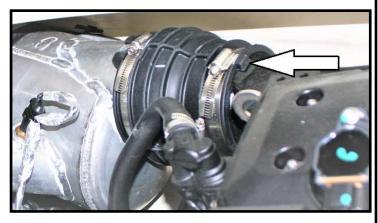


While twisting side to side pull resonator up and out of molded outlet hose. Remove resonator from craft and discard. Retain hose clamp for use during reassembly.

Reinstall waterbox reversing removal procedure. **Do not** tighten clamp and do not install strap yet. Note: Spray coupler and exhaust manifold with foaming glass cleaner to ease installation

Note: Alignment tab on coupler must fit between bosses on exhaust manifold. (Figure 9)

Figure 9



Slip three hose clamps (previously saved) onto supplied Free Flow Exhaust tube. Temporarily tighten just enough to keep them from sliding off. Insert tube into craft, longer end with 90° bend first. Insert longer end with 90° bend into molded outlet hose. Slip coupler on shorter end with 45° bend onto waterbox. Slide hose clamps into place and tighten just enough to keep them in place. **Note: Spray hoses and tube with foaming glass cleaner to ease installation.** (Figure 10)

Install supplied large zip tie around exhaust tube as in Figure 6. Using smaller supplied zip tie secure siphon bilge hoses to large zip tie as shown. (Figure 10) Figure 10



Install waterbox hold down strap and tighten all exhaust hose clamps. **Do not overtighten clamps.** Reconnect temp sensor.

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 <u>tech\_support@rivaracing.com</u>.

### Limited Warranty

RIVA Free Flow 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 option, 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.