



Sea-Doo Pro-Series Water Box

PART# - RS16081

APPLICATION(S): `08 & Newer Sea-Doo RXP-X, RXT-X, RXP, RXT & GTX-SC

*** NOTE: Allow craft's engine to cool thoroughly before performing installation. ***

- INSTALLATION INSTRUCTIONS -

Prior to installing this kit you are required to remove your O.P.A.S. system. RIVA Racing does not recommend this for recreational riding. OPAS Block-off Options: RIVA Performance O.P.A.S. Block-off Kit (All Models part# RS29050-1) or RIVA Pro-Series O.P.A.S. Block-off Kit (RXP-X/RXP part# RS29050 – RXT-X/RXT part# RS29085).

Craft not equipped with a RIVA Rear Exhaust Kit must purchase a RIVA Rear Exhaust Outlet Kit (part# RS15050-ET) and RIVA Exhaust Coupler Kit (part# RS16082-ECK) to complete this installation.

- 1. Remove seat(s). Remove engine coolant tank from mounting location.
- RXP-X/RXP: Remove engine cowling (5 bolts total). (see illustration #1) RXT-X/RXT/GTX-SC: Remove top half of deck beam (4 bolts total). (see illustration #2) Remove bottom half of deck beam. (see illustration #3)
- If craft is equipped with RIVA Rear Exhaust Kit remove aluminum exhaust tube with couplers. All others remove exhaust hose connecting water box (muffler) to exhaust baffle at right side of craft. Refer to applicable illustration: 215hp Models see illustration #4.
 255hp Models see illustration #5.
- 4. 255hp X-boats utilizing stock intercooler configuration only. All others proceed to Step 5.
 - a. Remove hoses between intercooler and engine (2). (see illustration #5) **NOTE: Mark hoses to identify location** and direction. Place clean rags in openings left when hoses were removed.
 - b. At pump remove VTS rod, rubber boot sealing VTS motor shaft, and nut securing VTS motor to hull. (see illustration #6)
 - c. Inside hull remove VTS from thru-hull fitting and set aside.
 - d. Remove intercooler completely.
 - e. Remove intercooler bracket. (see illustration #7)
- 5. Craft already equipped with RIVA Rear Exhaust Kit proceed to step 8. Loosen clamp securing exhaust baffle to exhaust outlet hose. (see illustration #8)
- 6. Remove bolt securing exhaust baffle to hull. (see illustration #8) Remove exhaust baffle and discard.
- 7. Remove stock exhaust outlet. Install exhaust outlet block-off provided in Rear Exhaust Outlet Kit and secure using stock gasket and lock nut. (see illustration #9) **NOTE: Apply silicone sealant to stock gasket and threads on block-off. Do not over tighten lock nut.**
- Disconnect waterlines between exhaust manifold and stock water box. Disconnect water box overheat sensor. (see illustration #10)
- 9. Disconnect engine breather hose from TOPS valve at rear of cylinder head. (see illustration #10)
- 10. At exhaust clamp loosen t-bolt nut enough to allow end ('T') to be removed from band clamp. (see illustration #11) Remove exhaust clamp.
- 11. Remove water box assembly.
- 12. At left rear motor mount cut zip tie securing overheat sensor wire and cooling line to hull. Route overheat sensor wire up and over supercharger towards water box area. Secure cooling line to hull with supplied zip tie.
- 13. Craft already equipped RIVA Rear Exhaust Kit proceed to step 16.

Using supplied template for your craft [see page 8 or 9 for your application] mark location on left side of transom where supplied billet exhaust outlet is to be installed. (see illustration #12) Hole can be made using a hole saw bit or with a Dremmel®, Roto Zip® or die grinder tool. NOTE: Do not make hole larger than 2-7/8" in diameter. Wear safety glasses and a dust mask. We strongly recommend the use of a shop-vac during this step as well.

- 14. Thoroughly clean inside of hull and transom surfaces (inside and out) so they are free of fiberglass dust.
- 15. Install supplied rubber gasket onto billet exhaust outlet. Install outlet into hull from outside. Apply silicone to retainer ring and install onto exhaust outlet from inside of hull. Secure using supplied hardware. **NOTE: Apply blue Loc-tite** to bolts. Do not over tighten bolts. Bolts are over tightened if rubber gasket begins to squeeze out from behind exhaust outlet flange.
- 16. Remove overheat sensor from stock water box and install into RIVA Pro-Series Water Box (see illustration #'s 13 & 14). **NOTE: Apply red Loc-tite to threads. Do not over tighten.**
- 17. On stock water box loosen one clamp on exhaust pipe coupler to allow coupler and exhaust pipe to be removed as one unit. (see illustration #13)
- 18. Thoroughly clean inside of coupler with a non-residual cleaner.
- Liberally coat outside of inlet tube on RIVA Pro-Series Water box with glass cleaner. Install exhaust pipe with coupler into water box inlet tube until end of coupler reaches second raised ring on water box. (see illustration #14) NOTE: Do not tighten hose clamp yet.
- 20. Craft already equipped with RIVA Rear Exhaust Kit proceed to step 21. Install 3-1/4" silicone coupler (part# RS16082-ECK) onto water box outlet tube completely. (see illustration #11) TIP: Liberally coat inside of coupler and outside of water box outlet tube with glass cleaner. Place hose clamps over coupler and tighten enough to hold in place. Proceed to step 22.
- 21. Remove shorter of two couplers (3-1/4" long) from previously removed aluminum exhaust tube. Thoroughly clean inside of coupler with a non-residual cleaner. Liberally coat inside of coupler with glass cleaner and completely install onto water box outlet tube. (see illustration #15) Place hose clamps over coupler and tighten enough to hold in place.
- 22. Loosen water box cradle on hull. (see illustration #16)
- 23. Install RIVA Pro-Series Water Box into hull. Slide water box outlet tube coupler onto thru-hull exhaust outlet.
- 24. Align exhaust pipe with exhaust manifold. Note measurements in instruction illustrations. Alignment is critical to prevent exhaust leaks. (see illustration #17)
- 25. Install exhaust clamp and secure t-bolt. NOTE: Check alignment between exhaust pipe and exhaust manifold.
- 26. Align water box with coupler. (see illustration #17) Secure coupler. NOTE: Do not over tighten clamp.
- 27. Adjust water box cradle and secure water box strap.
- 28. Secure water box outlet coupler to water box and thru-hull outlets. NOTE: Do not over tighten clamps.
- 29. 255hp X-boats utilizing stock intercooler configuration only. All others proceed to Step 29.
 - a. Replace intercooler bracket. NOTE: Apply red Loc-tite to bolts. Do not over tighten bolts.
 - b. Replace VTS into thru-hull fitting. **NOTE:** Make sure VTS housing is secured to intercooler bracket at bottom.
 - c. At pump secure VTS motor to hull. Replace and secure rubber boot sealing VTS motor shaft. Replace VTS rod. **NOTE: Apply blue Loc-tite to bolts. Do not over tighten bolts.**
 - d. Replace intercooler. Don't forget rubber pad! **NOTE: Do not over tighten clamps.**
 - e. Replace hoses between intercooler and engine (2). NOTE: Do not over tighten clamps.
- 30. Reconnect water box overheat sensor. (see illustration #18)
- 31. Replace cooling lines previously removed in step 8. Replace engine breather hose at TOPS valve hose. **NOTE: Do not over tighten clamps.**
- 32. Replace parts applicable to your craft that were removed during step # 2. **NOTE: Apply blue Loc-tite to bolts. Do not over tighten bolts.**
- 33. Check bilge for tools, rags, etc. Start craft and run using flush kit to check for exhaust leaks at connecting points of exhaust system. Do not run craft out of water for more than two minutes at a time.

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@rivamotorsports.com</u>.

Limited Warranty

RIVA Pro-Series Water Boxes 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.

- INSTALLATION IMAGES -

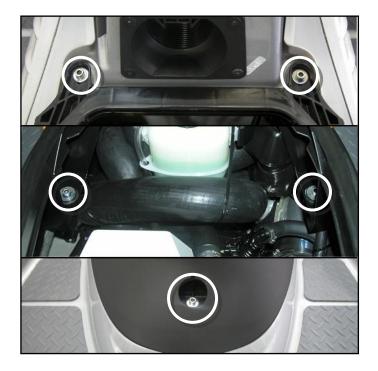


Illustration #1



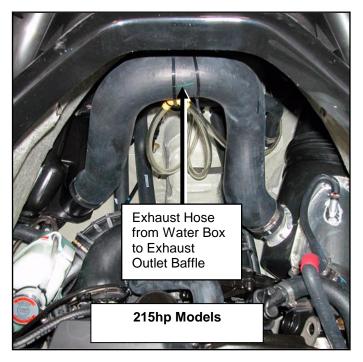
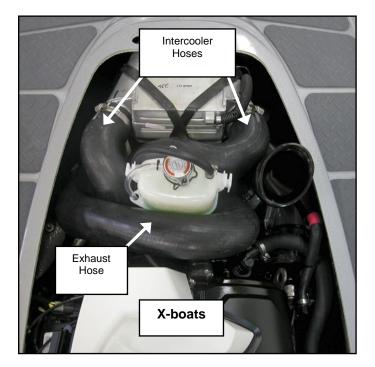


Illustration #4



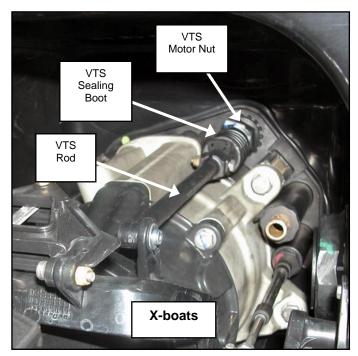
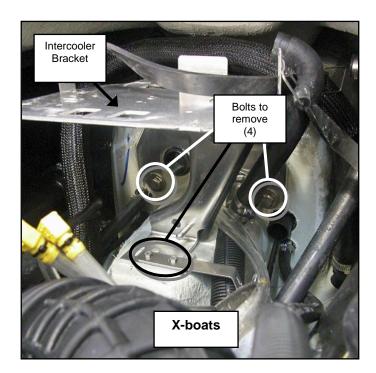


Illustration #6



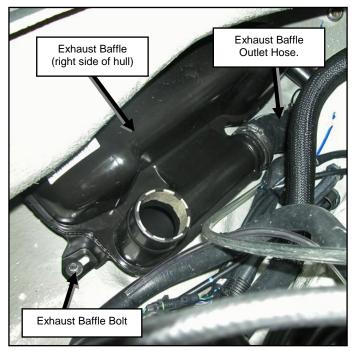


Illustration #8

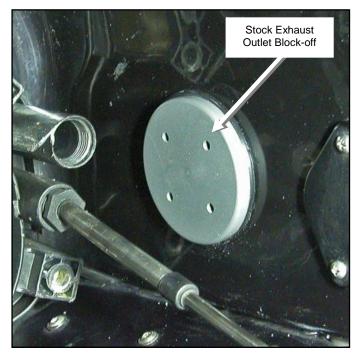


Illustration #9

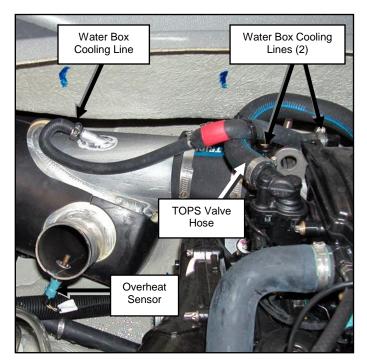


Illustration #10

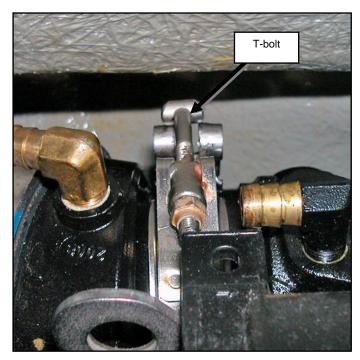
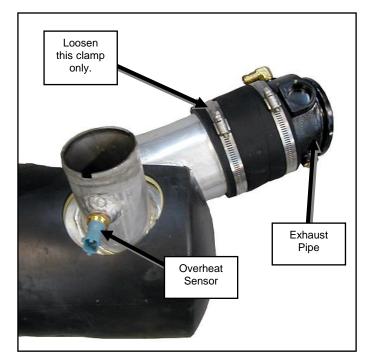


Illustration #11



Illustration #12



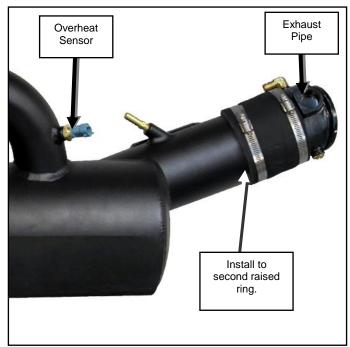


Illustration #14



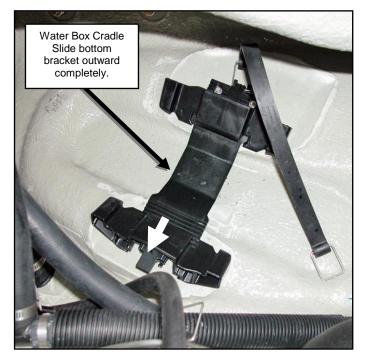


Illustration #16

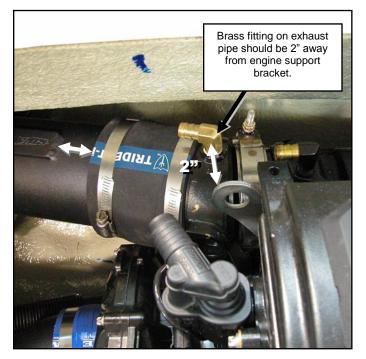


Illustration #17



Illustration #18

