



# Free Flow Exhaust Kit PART# - RS16050-01-04

### - INSTALLATION INSTRUCTIONS -

Applications: Sea. Doo `04~06 215hp RXP

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

- 1. Remove D.E.S.S. lanyard and disconnect battery cables.
- 2. Disconnect steering cable from steering nozzle by removing M6 bolt, washer and nut.
- 3. Disconnect reverse gate cable from reverse gate linkage. (see illustration #2)
- 4. Disconnect O.P.A.S. linkage from bottom of steering nozzle by removing M8 bolt, washer and collar. Disconnect trim linkage from trim ring at top of pump assembly. (see illustration #1)
- 5. Remove complete pump as one assembly (stator section, reduction nozzle & steering nozzle) by loosening and removing the four M10 bolts holding stator to pump transom plate. (see illustration #1)
- 6. In pump area, disconnect VTS sliding shaft extension from VTS sliding shaft by removing the M6 bolt and nut. (see illustration #1)
- 7. Remove rubber boot sealing VTS sliding shaft to VTS thru-hull fitting by removing the two retaining clips. Using a large pair of pliers or Sea-Doo tool, loosen and remove large locking nut holding VTS thru-hull fitting to pump transom plate. (see illustration #1)
- 8. Unclip engine coolant overflow tank and remove from engine compartment cowling and lay on top of engine. Take care not to tip overflow tank allowing coolant to drain. (see illustration #4)
- 9. Remove engine compartment cowling by first removing the two forward-most M10 socket head cap bolts and rearmost M10 socket head cap bolt completely. (see illustration #3) Loosen the two remaining M10 socket head cap bolts on lower inside rear edge of engine compartment cowling. (see illustration #4)
- 10. Remove exhaust hose connecting water box to exhaust baffle on right side of engine compartment and discard. (see illustration #5)
- 11. Inside engine compartment, remove VTS motor housing and set aside. (see illustration #6)
- 12. At front of exhaust baffle loosen and remove M10 bolt and spacer. Completely remove exhaust baffle and hose connecting baffle to exhaust outlet and discard. (see illustration #7)
- 13. Thoroughly clean exhaust outlet flange. Install smaller end of supplied offset coupler onto exhaust outlet flange. Loosely install OE hose clamps over coupler. Do not tighten. (see illustration #8)
- 14. Thoroughly clean water box outlet flange. Install supplied blue silicone coupler halfway onto outlet flange and secure using supplied hose clamp. (see illustration #9) **NOTE: Do not over tighten clamp.** Loosely install OE clamp over silicone coupler.
- 15. Apply glass cleaner to both ends of Free Flow Tube. Install longer end of Free Flow tube into exhaust outlet hose. Do not secure clamps. (see illustration #10)
- 16. Install Free Flow tube into water box outlet coupler completely. Secure hose clamp. (see illustration #10) **NOTE: Do not over tighten hose clamp.**
- 17. At exhaust outlet ensure Free Flow tube is installed into offset coupler completely. Rotate offset coupler if needed to ensure proper alignment. Secure offset coupler to Free Flow tube and exhaust outlet flange. **NOTE: Do not over tighten clamps.**
- 18. Replace VTS motor making sure mounting grommet on bottom of housing is installed onto hull support. (see illustration #6) Secure to pump transom plate with large locking nut making sure rubber seal is in place. **NOTE: Do not over tighten locking nut.**
- Replace rubber boot sealing VTS thru-hull fitting and VTS slider tube. Secure using stock retainer clips. (see illustration #1)

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- 20. Replace VTS sliding shaft extension and secure with stock M6 bolt and nut. (see illustration #1)
- 21. Replace pump assembly in reverse order of Steps 2~5. **NOTE: Be sure stock rubber seals are in place in pump** transom plate and on pump housing prior to installing.
- 22. Replace engine compartment cowling previously removed during Step 9.
- 23. Replace engine coolant overflow tank and reconnect battery cables.
- 24. Installation is now complete. Thoroughly inspect engine compartment and bilge for tools, rags, parts, etc. Reconnect battery cables and run craft out of water using flush kit to check for leaks. Check hose clamps for snugness after running.

# Remember, the water belongs to everyone. Please ride responsibly! 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 <a href="mailto:tech\_support@rivamotorsports.com">tech\_support@rivamotorsports.com</a>T 90-day Limited Warranty

RIVA Free Flow Exhaust 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 must accompany all warranty claims.

Warranted replacement parts will be returned freight collect.

## - INSTALLATION IMAGES -

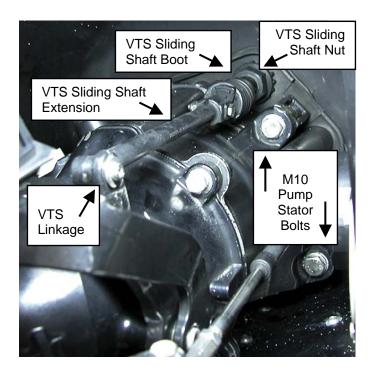




Illustration 1 Illustration 2

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Illustration 3

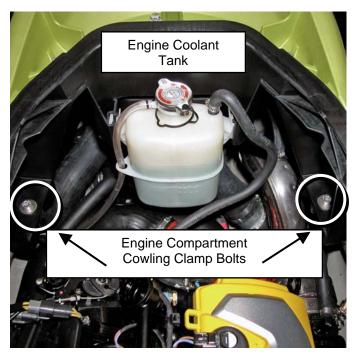


Illustration 4

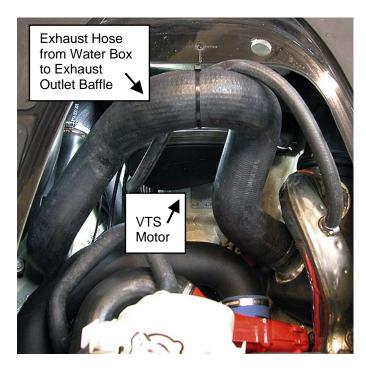


Illustration 5

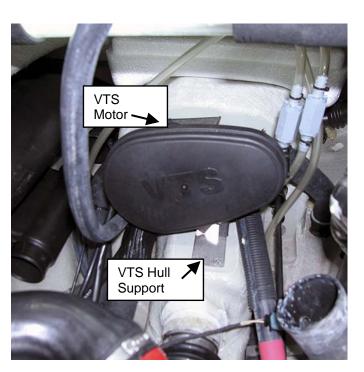


Illustration 6





Illustration 7 Illustration 8



Illustration 9



Install Free Flow Tube