



**RIVA RACING**  
PERFORMANCE PRODUCTS & ACCESSORIES

## **Sea-Doo 255hp OEM Intercooler Upgrade Kit**

**PART# - RS17080-ICUK**

We strongly recommend the use of a Sea-Doo service manual to familiarize yourself with the various engine components and procedures involved with this installation. Please note that some of the original clamps, hoses and hardware removed in the disassembly process will be used in the installation process. These instructions have been written in point form and refer to illustrations (see illustration #). Please follow these step-by-step instructions and illustrations carefully.

**APPLICATION(S):** Sea-Doo 255hp RXP-X & RXT-X

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

## **- INSTALLATION INSTRUCTIONS -**

**Prior to installing this kit you are required to install two other RIVA Performance Products: RIVA O.P.A.S. Block-off Kit first (Pro-Series or Performance) and RIVA Rear Exhaust Kit second (part# RS15050-1). We also recommend the use of a RIVA Performance Power Filter Kit (part# RS13050-06).**

1. Connect D.E.S.S. lanyard. Set VTS to fully up position. Remove D.E.S.S. lanyard.
2. Remove seat(s). Remove engine coolant tank from mounting location.
3. **RXP-X:** Remove engine cowling (5 bolts total). (see illustration #1)  
**RXT-X:** Remove top half of deck beam (4 bolts total). (see illustration #2) Remove bottom half of deck beam. (see illustration #3) Discard vent tube.
4. Remove and discard hoses between intercooler and engine (2). (see illustration #4)
5. Disconnect straps securing OEM intercooler to mounting bracket and pull intercooler forward. Disconnect hoses secured to intercooler (3 total - One hose at top front edge / two hoses at rear). Remove intercooler completely. Retain OEM intercooler mounting straps.
6. At pump disconnect VTS rod from VTS shaft. Remove rubber boot sealing VTS motor shaft. Remove nut securing VTS motor assembly to hull. (see illustration #5) Inside hull remove VTS from thru-hull fitting and set aside.
7. Inside hull remove OEM intercooler bracket (4 bolts total). Discard bracket; retain bolts. (see illustration #6) Replace only the upper left bolt securing the pump to the transom. (see illustration #7) **NOTE: Apply red Loc-tite to bolt. Do not over tighten bolt.**
8. Remove lower right bolt securing pump to transom. (see illustration #8)
9. Install supplied intercooler relocation bracket and secure using OEM bolts. (see illustration #9) **NOTE: Apply red Loc-tite to bolts. Do not over tighten bolts.**
10. Install two of the supplied silicone couplers onto intercooler inlet and outlet flanges and secure using supplied hose clamps. (see illustration #10) **NOTE: Do not over tighten clamps.**
11. Locate the two intercooler cooling hoses in hull. (see illustration #11) Replace hose 'A' with the 24" length of supplied hose. Replace hose 'B' with the 36" length of supplied hose. **NOTE: Do not over tighten clamps.**
12. Attach intercooler cooling hoses to fittings at rear of intercooler and secure using OEM hose clamps. (see illustration #12) **NOTE: Do not over tighten clamps.**
13. Secure ends of OEM intercooler mounting straps to tabs at rear of intercooler relocation bracket. (see illustration #9) Slide intercooler onto bracket. Secure straps to tabs under front edge of relocation bracket so they criss-cross each other. (see illustration #13)
14. At top of the pump inlet tunnel (inside hull) loosely install the supplied VTS mounting bracket using hardware removed in step 7. (see illustration #14) **NOTE: Apply blue Loc-tite to bolts.**
15. Replace VTS motor assembly into thru-hull fitting making sure rubber grommet at bottom of housing is installed onto VTS mounting bracket.

16. At pump replace and secure VTS motor nut. Replace and secure rubber boot sealing VTS motor shaft. Reconnect VTS rod.
17. Inside hull push VTS mounting bracket forward to ensure it is installed completely into VTS motor housing. (see illustration #15) Tighten bolts securing VTS mounting bracket to hull. **NOTE: Do not over tighten bolts.**
18. Install one supplied silicone coupler completely onto motor end of supplied aluminum tube without mounting flange. (see illustration #16) TIP: Apply a generous amount of glass cleaner to aluminum tube and inside of coupler.
19. Place one supplied hose clamp over intercooler outlet and two clamps over throttle body inlet. Install tube between intercooler and throttle body. (see illustration #17) Secure hose clamp at intercooler side of tube. Slide opposite coupler onto throttle body inlet and secure clamps. **NOTE: Do not over tighten clamps.**
20. Install remaining supplied silicone coupler completely onto motor end of supplied aluminum tube with mounting flange. (see illustration #16) TIP: Apply a generous amount of glass cleaner to aluminum tube and inside of coupler.
21. Place one supplied hose clamp over intercooler inlet and two clamps over supercharger outlet. Install tube between intercooler and supercharger. (see illustration #18) Secure hose clamp at intercooler side of tube. Slide opposite coupler onto supercharger outlet and secure clamps. **NOTE: Do not over tighten clamps.**
22. Attach and secure 1/4" OEM hose to fitting at top front edge of intercooler. (see illustration #18) **NOTE: Do not over tighten clamps.**
23. At this point you are left with installing your option for the mounting flange on the supercharger discharge tube. RIVA Racing strongly recommends the use of a Blow-off Valve to prevent unnecessary wear on the supercharger clutch. We offer the following options:
  - 255hp Stage II & above: Pro-Series Blow-off Valve Kit (part# RS17080-BV-PSV)
  - Block-off Plate (part# RS1750-BVBO)
24. Replace components applicable to your craft that were removed during step #3. **NOTE: Apply blue Loc-tite to bolts. Do not over tighten bolts.**
25. Check bilge for tools, rags, etc. Start craft and run using flush kit to check for leaks at connecting points of Intercooler Upgrade Kit Tubes. Do not run craft out of water for more than two minutes at a time.

***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 [tech\\_support@rivamotorsports.com](mailto:tech_support@rivamotorsports.com).

### **Limited Warranty**

RIVA Sea-Doo Intercooler Upgrade Kits carry a 1-year 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 -

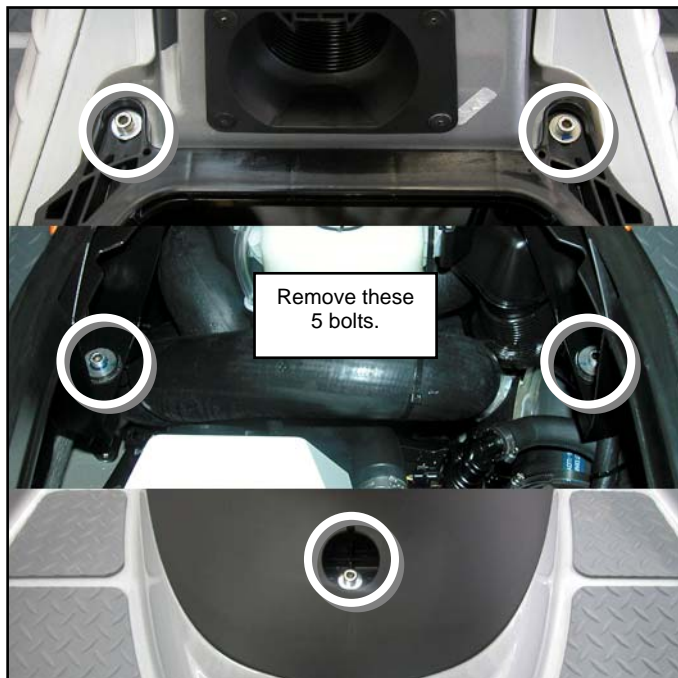


Illustration #1

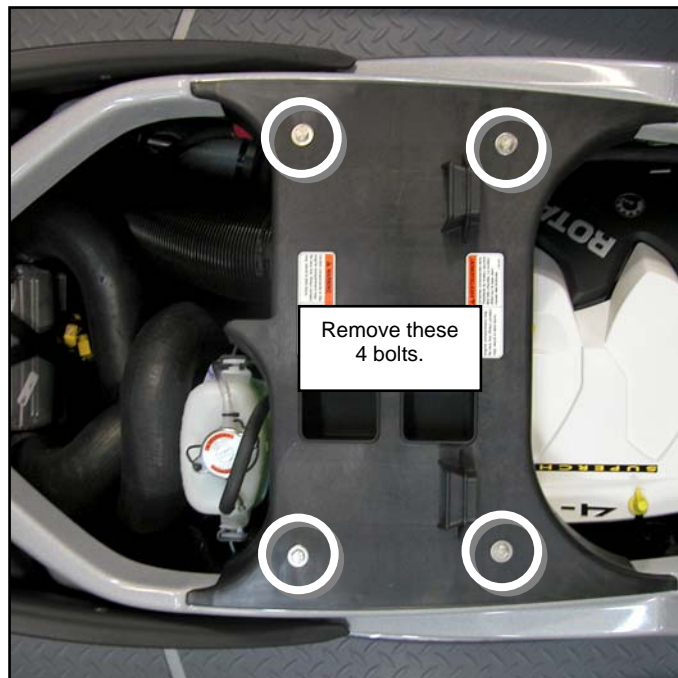


Illustration #2

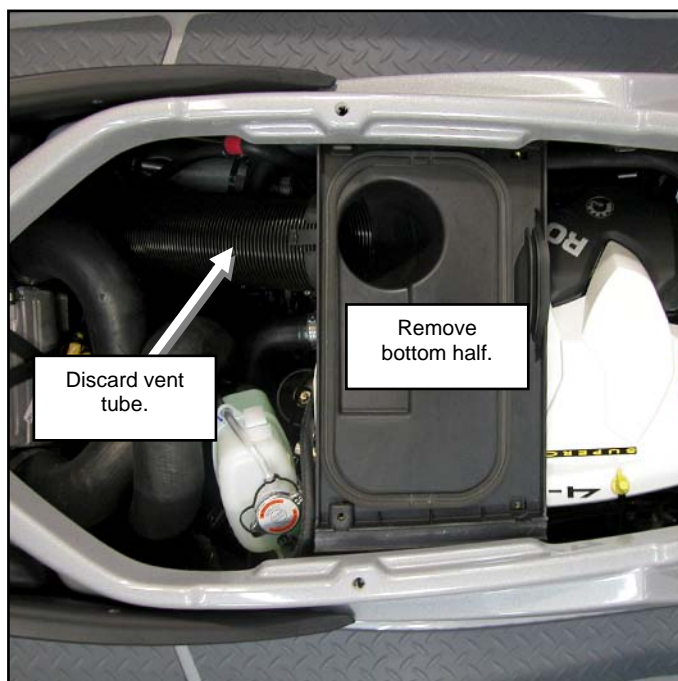


Illustration #3

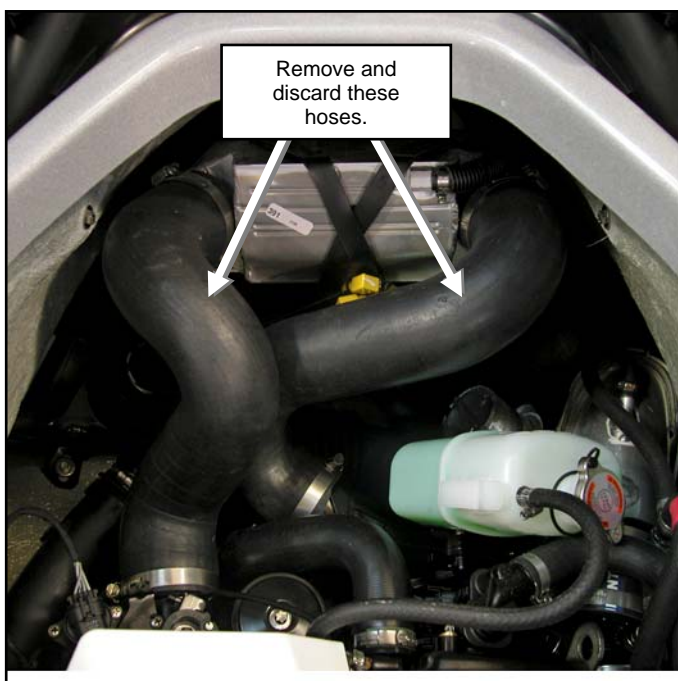


Illustration #4



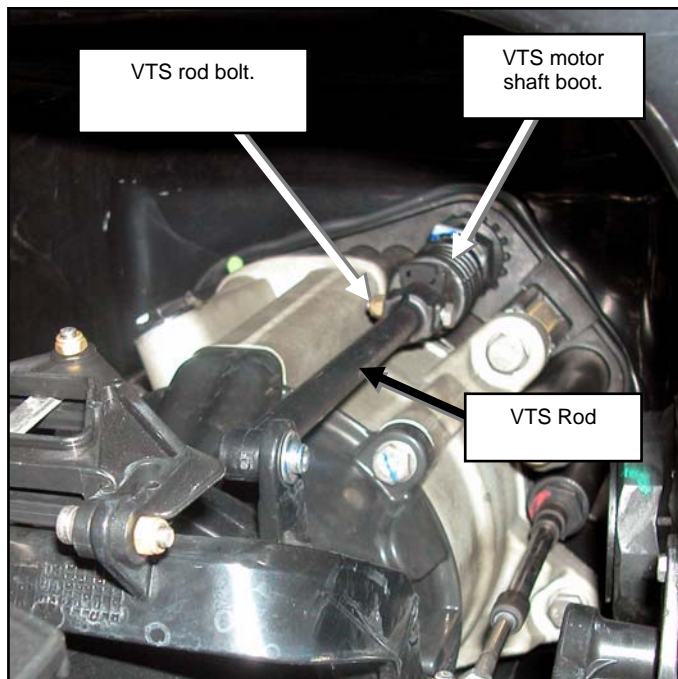


Illustration #5

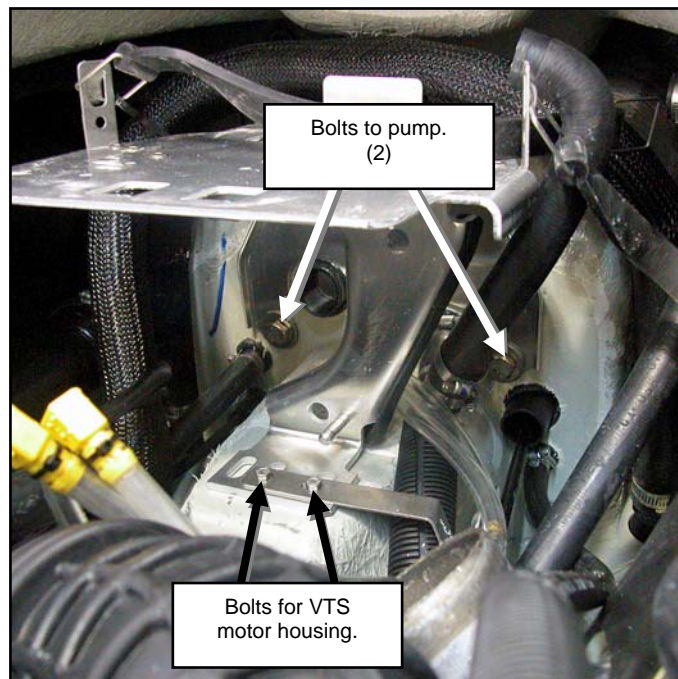


Illustration #6



Illustration #7

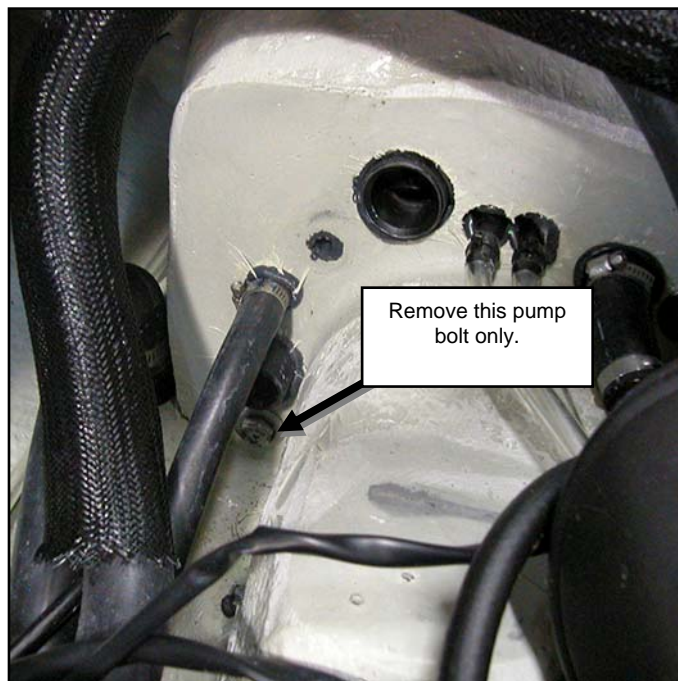


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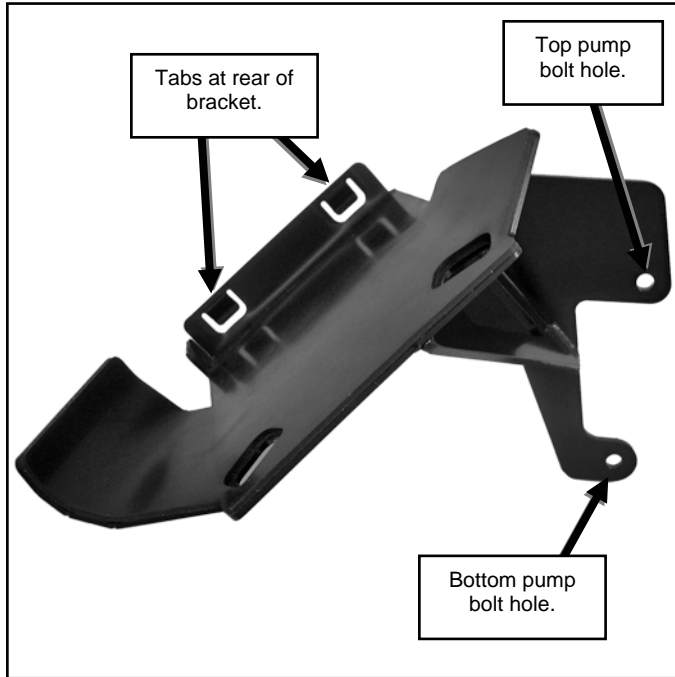


Illustration #9



Illustration #10

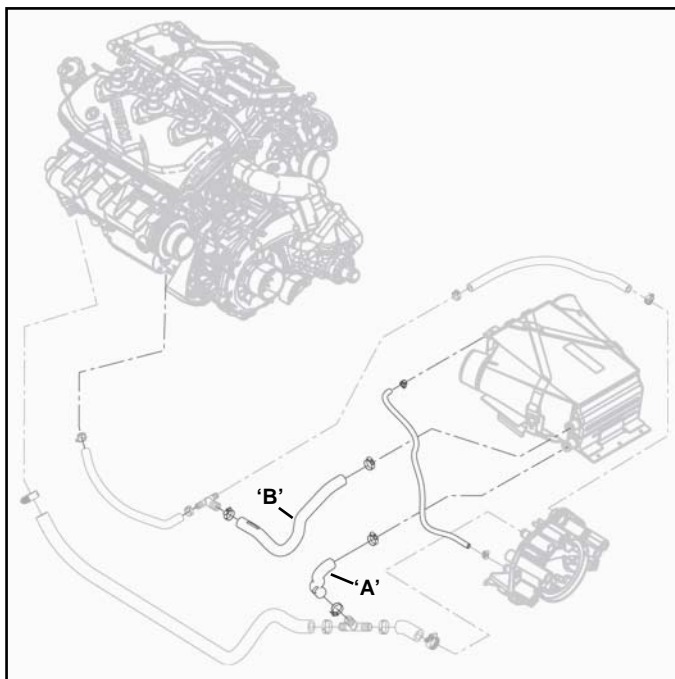


Illustration #11

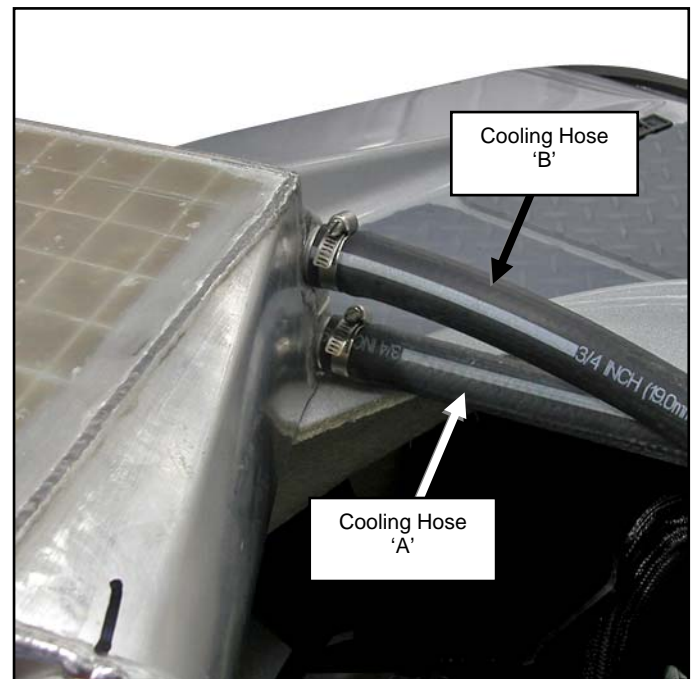


Illustration #12





Illustration #13

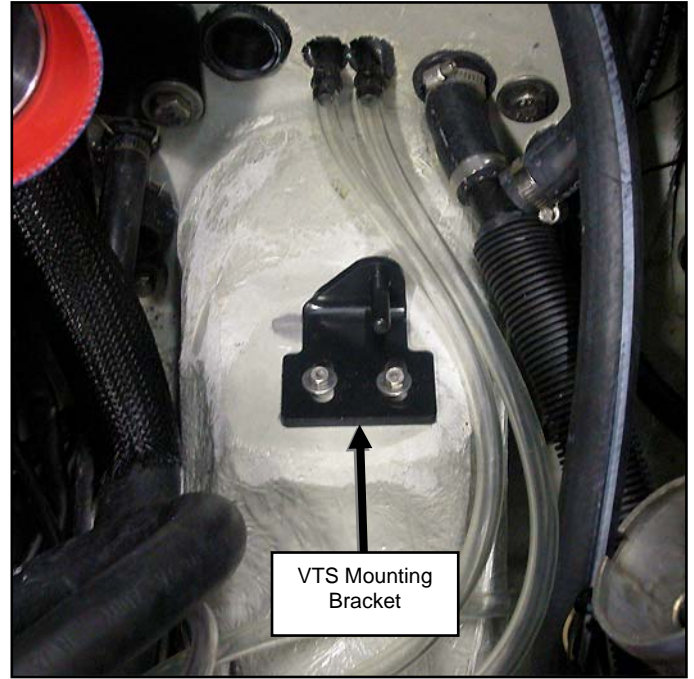


Illustration #14

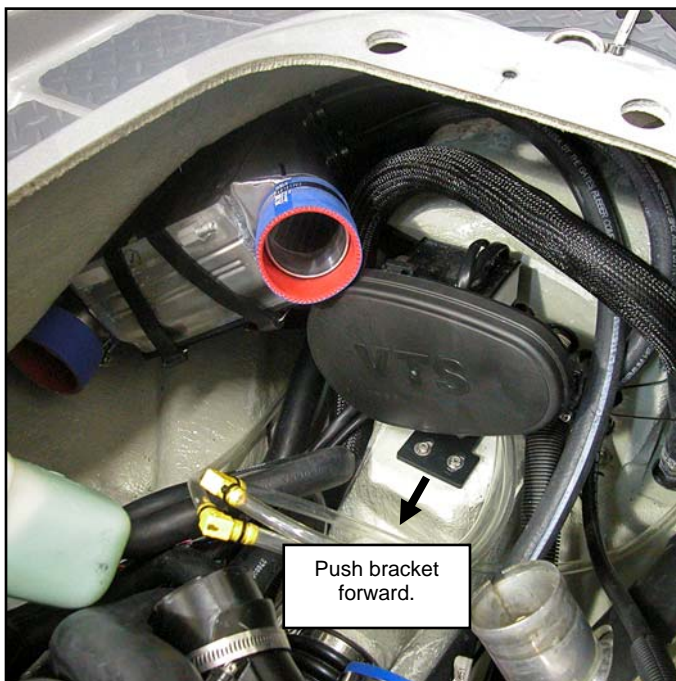


Illustration #15



Illustration #16



Illustration #17

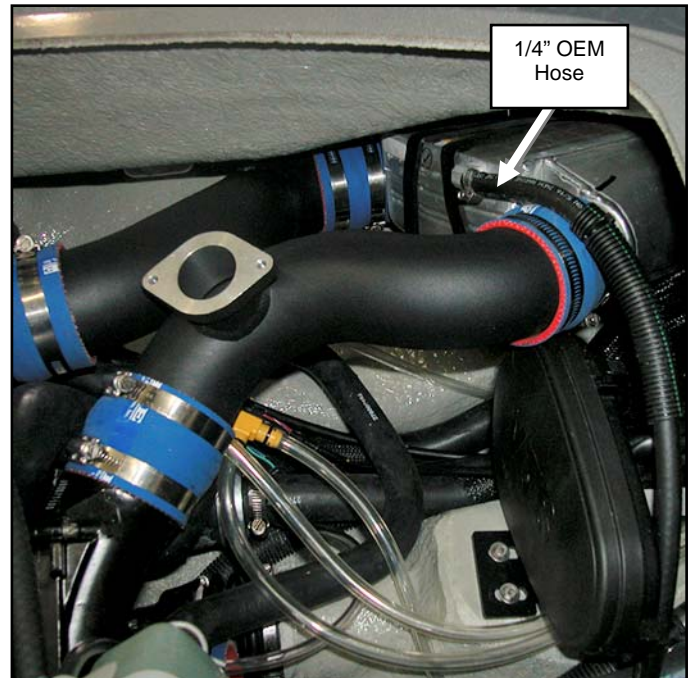


Illustration #18