



# **RIVA RACING**

**PERFORMANCE PRODUCTS & ACCESSORIES**

## **Sea-Doo 4-TEC Thermostat Kit**

**PART# RS1015**

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 clamps, hoses and hardware removed in the disassembly process. Replacements clamps have been provided for the installation process. These instructions have been written in point form and refer to illustrations and templates. Please follow these step-by-step instructions and illustrations carefully.

**APPLICATION(S):** RXP/RXT/GTX 4-TEC Models

### **Required tools**

Oetiker Pliers (*Supplied with kit!*)  
E-8 Star Socket  
Hydraulic Press  
Drain Pan (LG)

### **Part#**

C-48550347  
RS90531 (8-pc set)  
N/A  
N/A

## **– INSTALLATION INSTRUCTIONS –**

**\*\* CAUTION: ALLOW ENGINE TO COOL THOROUGHLY BEFORE PERFORMING WORK!! \*\***

1. Drain engine coolant following steps outlined in section 3 of the Sea-Doo Vehicle Shop Manual (4-TEC Manual).
2. Coolant expansion tank holder removal.

### **RXP Models Only:**

- Unclip engine coolant overflow tank, remove from engine compartment cowling and lay on top of engine.
- Remove engine compartment cowling by first removing the two forward-most M10 socket head cap bolts and rear-most M10 socket head cap bolt completely (see illustration #1). Loosen the two remaining M10 socket head cap bolts on lower inside rear edge of engine compartment cowling. (see illustration #2)

### **RXT/GTX Models Only:**

- Unclip engine coolant overflow tank, remove from engine compartment cross-section and lay on top of engine.
  - Completely loosen the four M8 bolts holding engine compartment cross section in place. Remove both top and bottom halves of engine compartment cross-section supports. Leave air intake duct attached to bottom half. (see illustration #'s 3&4)
3. For Supercharged models only. For standard 4-TEC models proceed to step 4.
    - **Stock models:** Remove section of stock air intake tube connected to supercharger inlet to expose thermostat housing.
    - **RIVA Power Filter Kit:** Loosen clamp securing Power Filter tube coupler to supercharger. Remove the two bolts securing front of Power Filter tube to engine bracket. Slide Power Filter tube towards rear of craft to expose thermostat housing.
  4. Remove hoses (6) connected to thermostat housing. (see illustration #5) **TIP:** Remove Oetiker clamps using supplied Oetiker pliers.
  5. Remove Torx bolts (8) securing thermostat housing to engine. (see illustration #6) Remove thermostat housing from hull. **TIP:** Inspect coolant pump impeller for damage. Replace if necessary.
  6. Using a hydraulic press and supplied cutting tool (sharp edge facing down) carefully cut tabs securing stock outlet flange to thermostat housing. (see illustrations #7&8) **NOTE: Do not use a bench vice for this step. Performing this step horizontally could result in damage to thermostat housing so that it cannot be reused. Take care not to damage locator tabs and o-ring seal on thermostat housing.**
  7. Remove housing from press. **DO NOT REMOVE CUTTING TOOL FROM HOUSING.** Use a sharp instrument to pick cut tabs out of openings in thermostat housing. (see illustration #9)
  8. Place cutting tool in a bench vice with thermostat housing attached. (see illustration #10) While twisting housing pull straight up to remove cutting tool. **DO NOT MOVE HOUSING SIDE TO SIDE while pulling up. Doing so could result in damage to thermostat housing so that it cannot be reused.**

9. Install supplied thermostat and o-ring into thermostat housing. (see illustration #11) **NOTE: Apply waterproof grease to o-ring prior to installation.**
10. Place supplied billet outlet flange into thermostat housing at an angle. With locking tabs on outlet flange aligned with openings in thermostat housing carefully press outlet flange into thermostat housing. (see illustration #12)
11. Using a hydraulic press and supplied cutting tool (sharp edge facing up) install supplied billet securing ring onto outside of thermostat housing. (see illustration #13) **NOTE: Be sure sharp edge of cutting tool is facing up. Securing ring need only be seated onto thermostat housing. Use moderate pressure.**
12. Inspect o-ring on thermostat housing where it mates to engine. Install thermostat housing onto engine and secure using OE Torx bolts. Torque in specified order to 89 lbf•in / 10 N•m. (see illustration #14) **NOTE: Apply blue Loctite to bolts. Do not over tighten bolts.**
13. Install supplied Oetikers onto cooling system hoses. (see illustration #15) Install hoses onto thermostat housing. (see illustration #16) Secure Oetiker clamps using supplied Oetiker pliers.
14. For Supercharged models only. For standard 4-TEC models proceed to step 15. Replace air intake parts removed during step 3.
15. Replace coolant following steps outlined in section 3 of the Sea-Doo Vehicle Shop Manual (4-TEC Models).

***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 Thermostat 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 -

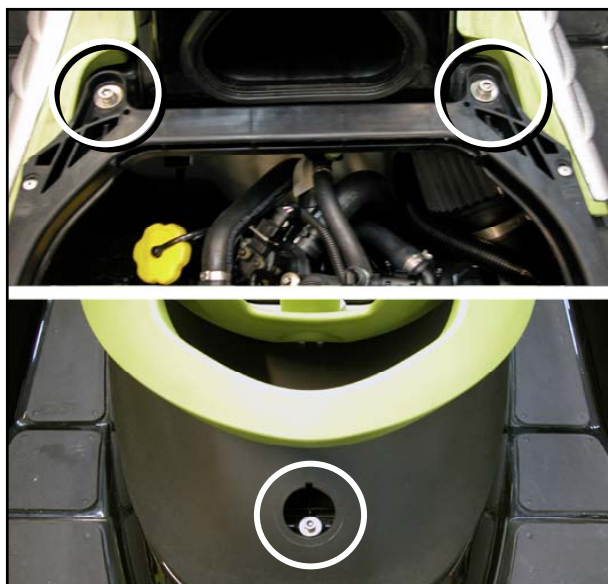


Illustration 1

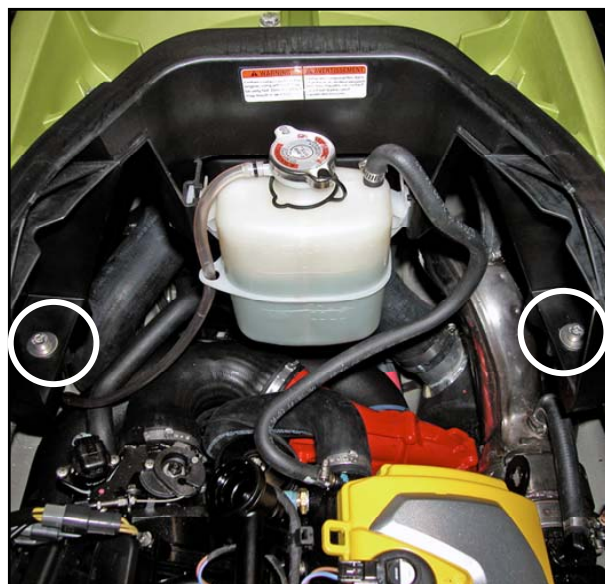


Illustration 2

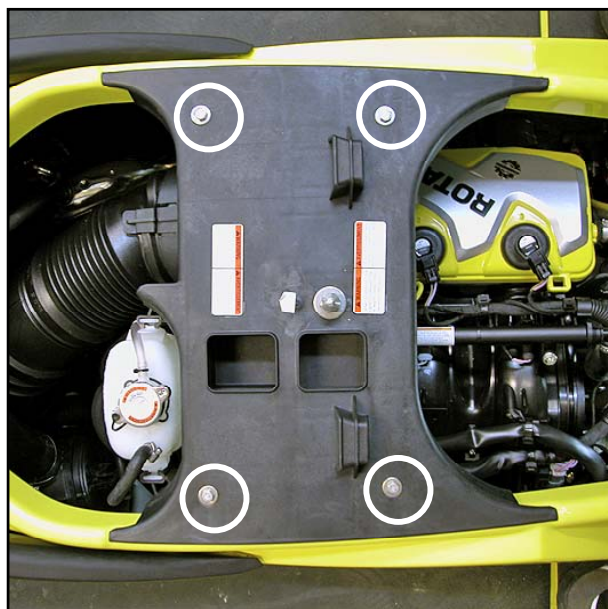


Illustration 3

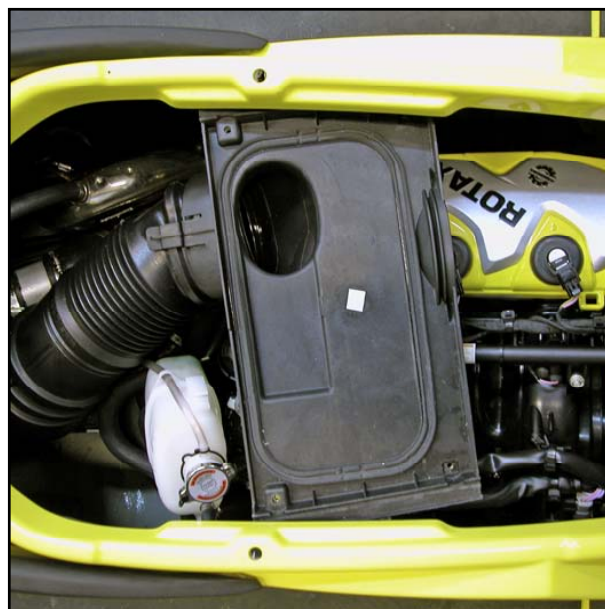


Illustration 4

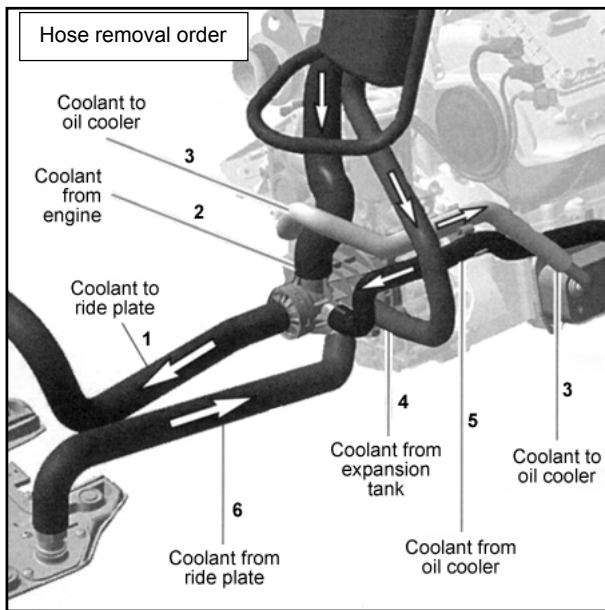


Illustration 5



Illustration 6

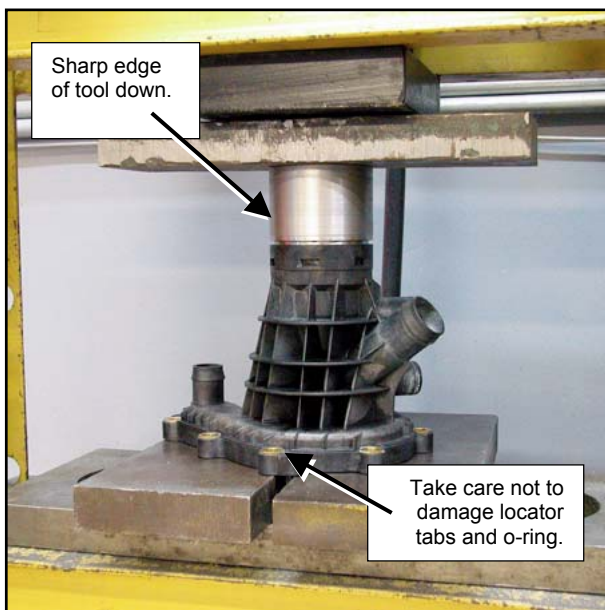


Illustration 7

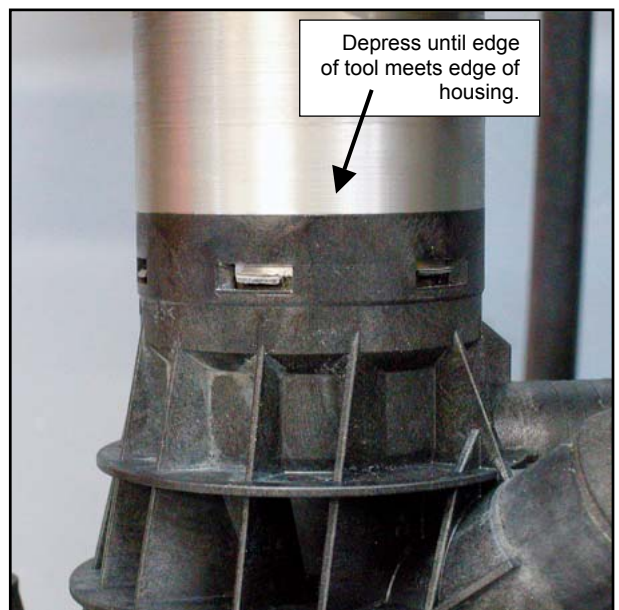


Illustration 8



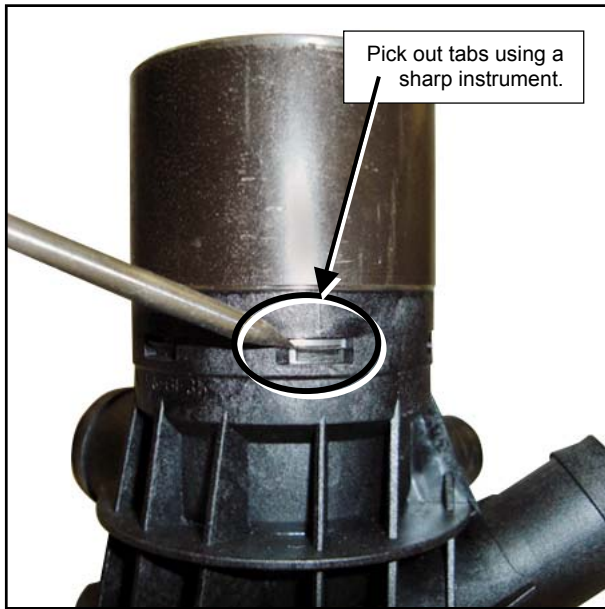


Illustration 9

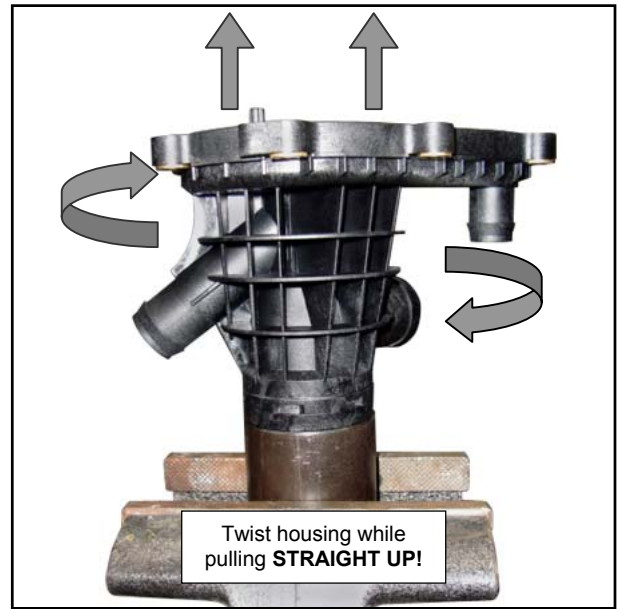


Illustration 10



Illustration 11

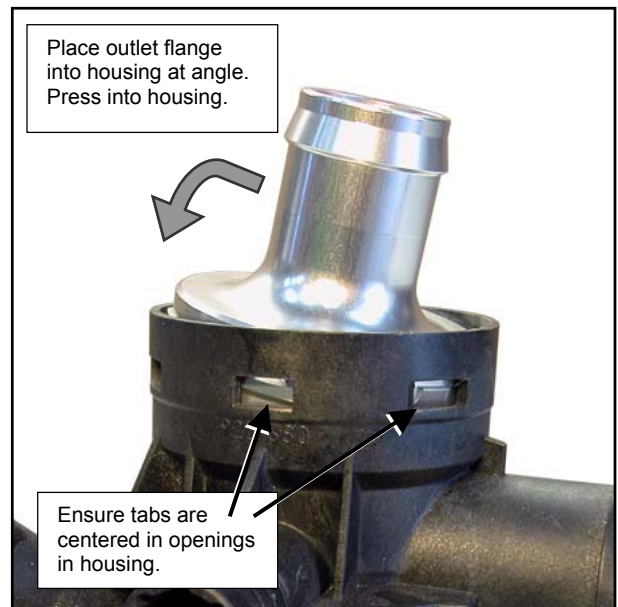


Illustration 12

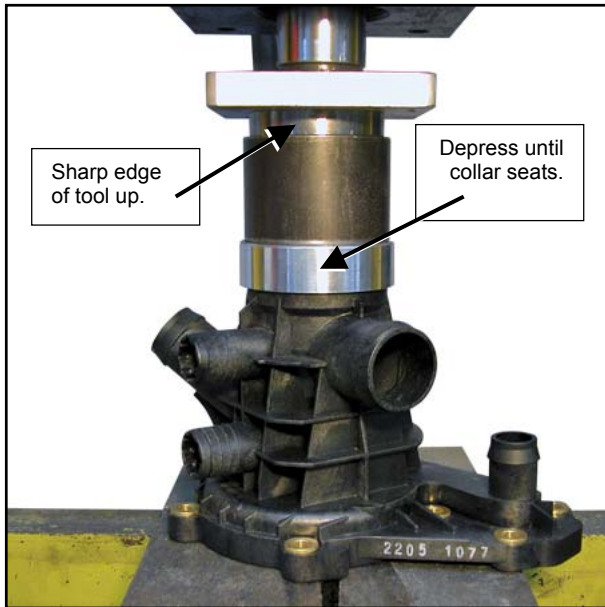


Illustration 13

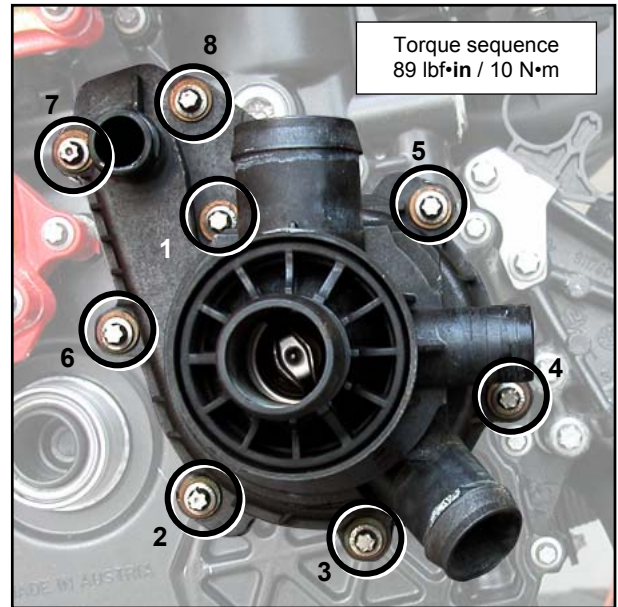


Illustration 14

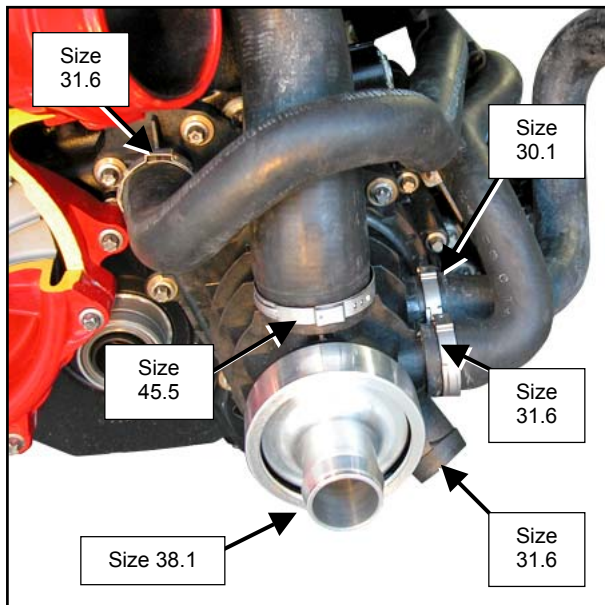


Illustration 15

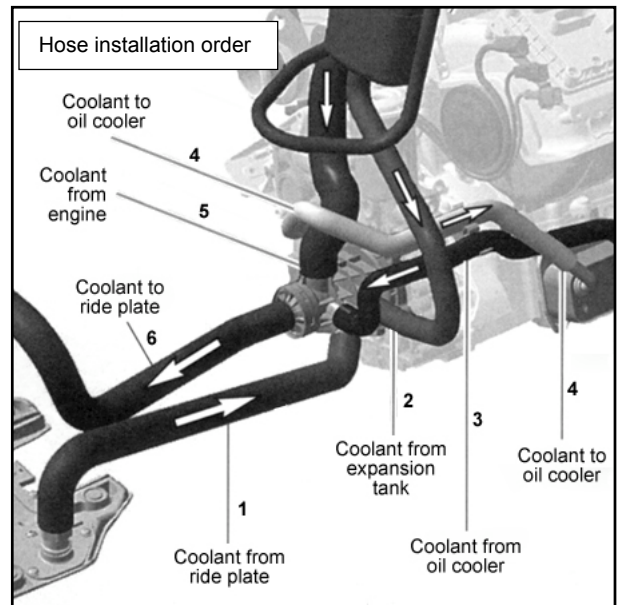


Illustration 16