



## 'GEN-2' Power Cooler Kit

PART# RS1751-PC-1

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):** 215hp Sea-Doo RXP / RXT / GTX-SC Intercooled

**Recommended tools**

Service Manual

**Part#**

Please Call

**\*\*\* 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).

Connect D.E.S.S. lanyard. Set VTS to fully up position.  
Remove D.E.S.S. lanyard.

Remove seat(s). Remove engine coolant tank from mounting location.

**RXP:** Remove engine cowling (5 bolts total).

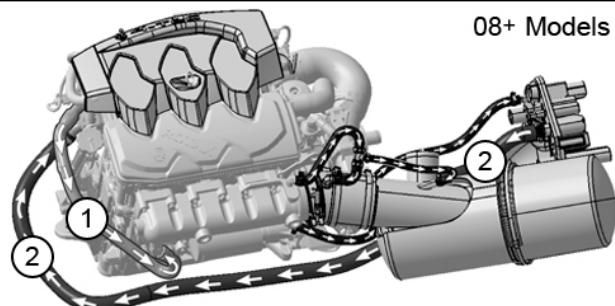
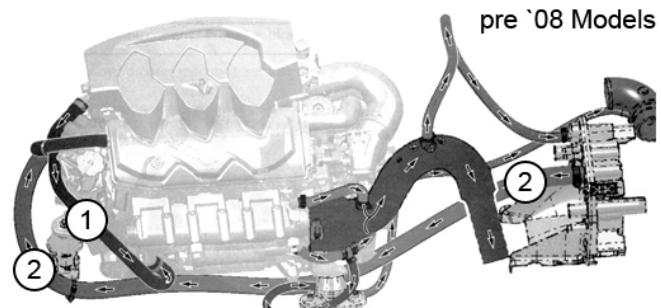
**RXT/GTX-SC:** Remove deck beam (4 bolts total).

Remove connecting hose joint between supercharger outlet and throttle body.



**NOTE:** If using a RIVA Blow-off Valve Kit, remove completely (including vacuum line). A longer vacuum line or vacuum cap is supplied with this kit.

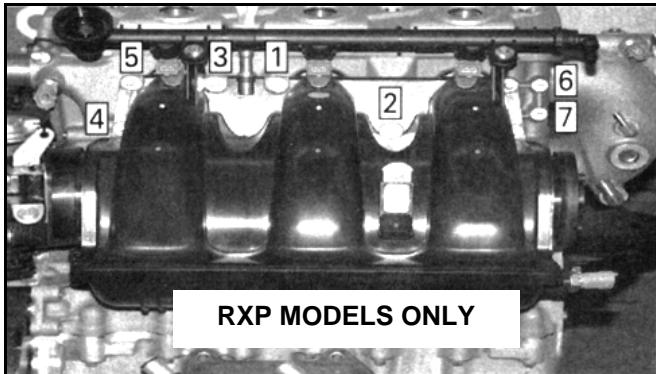
At front of intake manifold disconnect waterlines (2) connected to stock intercooler.



Disconnect Line 1 at front of exhaust manifold and remove completely. Disconnect Line 2 at pump transom and remove completely. **NOTE:** Retain both lines for use when installing supplied intercooler.

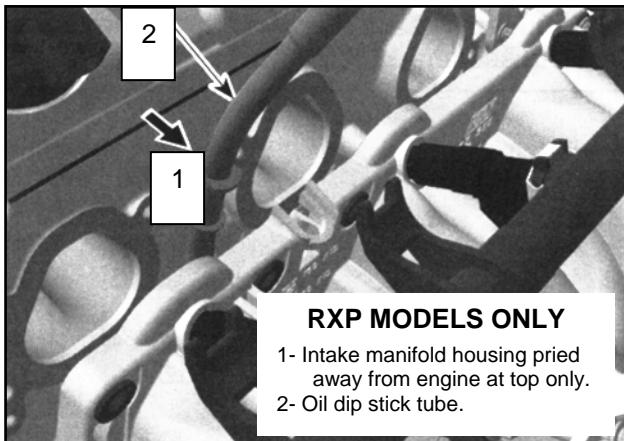
At front of intake manifold remove collar securing intercooler to intake manifold. Retain collar for use later during installation process.

**RXP ONLY. RXT & GTX-SC Proceed to next paragraph.** Disconnect ignition coils (spark plug caps) and ECU connectors. Remove Torx® screws (7) securing intake manifold to engine.



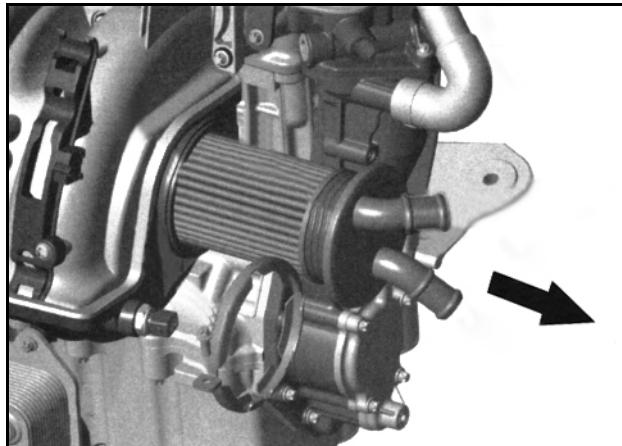
For RIVA Power Filter Kits it is necessary to remove filter element from Power Filter Tube. Be sure to cover Power Filter Tube inlet to prevent debris from entering.

**RXP ONLY. RXT & GTX-SC Proceed to next paragraph.** Carefully pry top of manifold housing away from engine by moving top portion towards right side of craft.



**RXP ONLY. RXT & GTX-SC Proceed to next paragraph.** **NOTE: Do not remove completely. Do not lift or pull upward. Take care not to dislodge oil dipstick tube from crank case.**

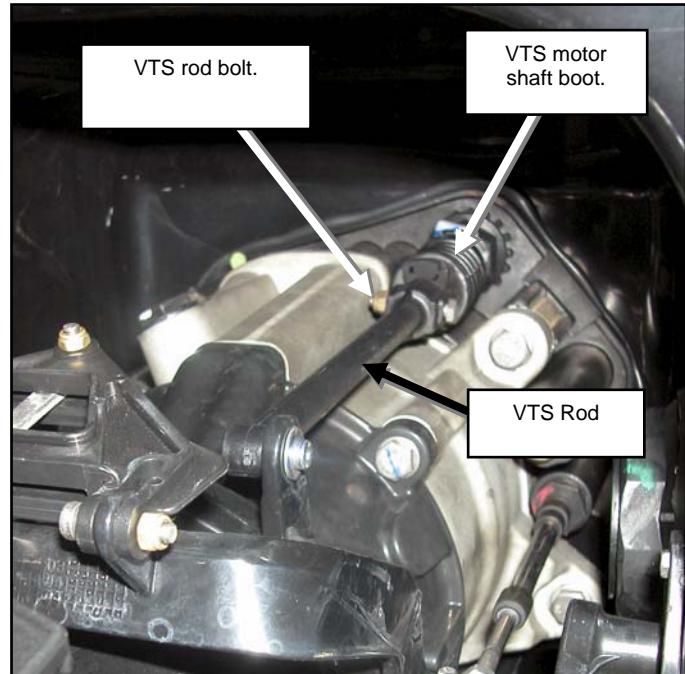
Pull stock intercooler forward towards front of craft to remove.



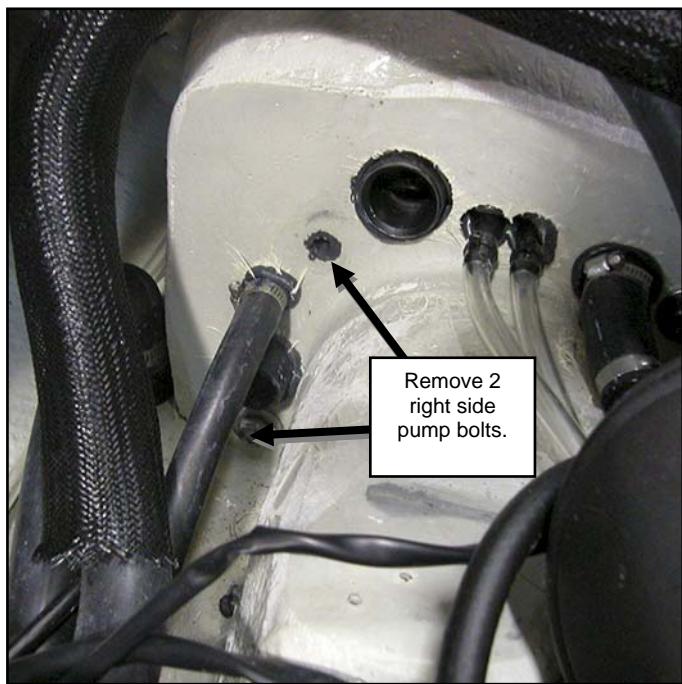
**RXP ONLY. RXT & GTX-SC Proceed to next paragraph.** Allow intake manifold housing to relax against engine. Replace Torx® screws (7) previously removed and torque to 6 N·m (53 lbf·in). **NOTE: Use blue Loctite. Do not replace ignition coils and ECU connectors if you plan to install a Blow-off Valve.**

Install supplied aluminum block-off (with o-ring) into opening at front of intake manifold housing created when stock intercooler was removed. Secure with stock collar removed previously. **NOTE:** Apply a thin layer of waterproof grease onto o-ring before installing block-off.

**RXP ONLY. RXT & GTX-SC Proceed to next paragraph.** At pump disconnect VTS rod from VTS motor shaft. Remove rubber boot sealing VTS motor shaft. Remove nut securing VTS motor assembly to hull. Inside hull remove VTS motor from thru-hull fitting and set aside.



Inside rear of craft at pump transom remove the right two M10 bolts and washers securing pump support to hull.



On supplied Power Cooler install two of the supplied silicone couplers onto inlet and outlet flanges. Secure using supplied hose clamps. **NOTE: Do not over tighten clamps.**

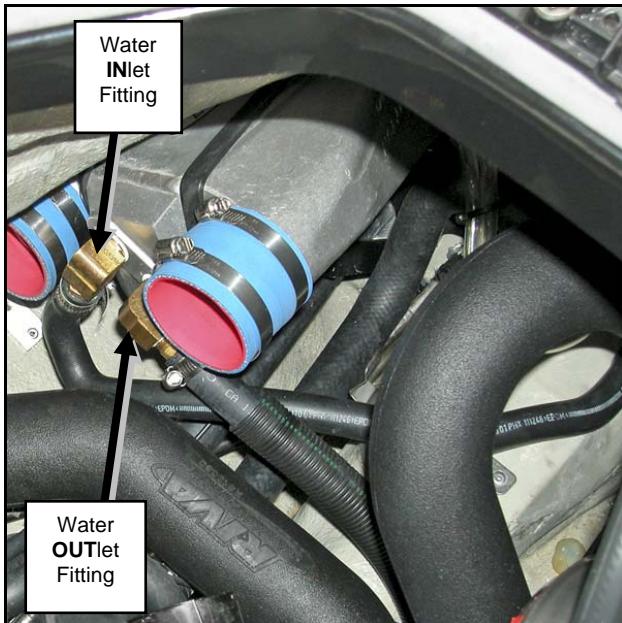
Secure Power Cooler to supplied mounting bracket. **TIP:** Apply glass cleaner to underside of straps and top of intercooler. Use vise grips to pull hooks and secure to posts on underside of bracket.



Apply silicone sealant to surface area of mounting bracket that will be placed against hull. Install and secure Power Cooler/Mounting Bracket assembly using stock hardware. **NOTE: Apply red Loctite to bolts. Torque to 61 N•m (45 ft•lb).**



Using waterline previously removed from between intercooler and exhaust manifold (Line 1 previously), connect end with distinct bend to water **inlet** fitting on Power Cooler and secure using supplied hose clamp.



Route loose end towards water inlet fitting at pump transom and secure using supplied hose clamp.

Using waterline previously removed from between water inlet fitting at pump transom and stock intercooler (Line 2 previously) connect one end to water **outlet** fitting on Power Cooler. Route loose end towards left side of engine, then forward and connect to barbed fitting at front of exhaust manifold. Secure using supplied hose clamp. **NOTE: Take care not to kink hoses. It may be necessary to trim excess hose for proper fit. Do not over tighten clamps.**

**RXP ONLY. RXT & GTX-SC Proceed to next paragraph.** Replace VTS motor assembly into thru-hull fitting making sure rubber grommet at bottom of housing is installed onto VTS mounting bracket. At pump replace and secure VTS motor nut. Replace and secure rubber boot sealing VTS motor shaft. Reconnect VTS rod.

Loosely install two supplied hose clamps onto supercharger outlet and onto throttle body inlet.

Loosely install remaining hose clamps onto couplers on intercooler.

Install remaining supplied silicone couplers (2) completely onto engine side of supplied aluminum tubes. **TIP:** Generously apply glass cleaner inside couplers and onto aluminum tubes.

Install aluminum tubes into couplers on Power Cooler. Slide engine side couplers completely onto supercharger outlet and throttle body inlet. Secure hose clamps. **NOTE: Do not over tighten clamps.**



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:

- **215hp Stage II & above:** Pro-Series Blow-off Valve Kit (part# RS17080-BV-PSV)
- **215hp Stage I & II:** Performance Blow-off Valve Kit (part# RS17080-BV-PFV)
- Block-off Plate (part# RS1750-BVBO)

**RXP:** Replace engine cowling (5 bolts total). **NOTE: Use blue Loctite. Do not over tighten bolts.**

**RXT/GTX-SC:** Replace deck beam (4 bolts total). **NOTE: Use blue Loctite. Do not over tighten bolts.**

Replace engine coolant overflow tank.

Check bilge for tools, rags, etc. Start craft and run using flush kit to check for proper operation. Do not run craft out of water for more than two minutes at a time

**IMPORTANT MAINTENANCE TIP:** To assure optimal performance with this kit extra care must be used with flushing the cooling system after riding. After flushing craft using stock Sea-Doo flush kit you must flush the RIVA Power Cooler using the supplied flush kit. When doing so we strongly recommend the use of a salt /deposit remover such as Salt-Away® which can be purchased through RIVA Racing's parts department. When flushing with a salt/deposit remover do not flush with fresh water afterwards. Allow salt/deposit remover to remain in cooling system. This will prevent build up of salt and/or mineral deposits from water left in cooling system that could clog intercooler core.

Your Power Cooler is equipped with a sacrificial anode (opposite fitting in end cap with flush kit fitting). This should be inspected at the beginning and end of each riding season. Replace as needed by contacting RIVA Racing's parts department. **NOTE: Apply pipe thread sealant when replacing. Do not over tighten.**

***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 Power Cooler 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. Corrosion build up in core of intercooler is not covered.

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.