



RIVA RACING
PERFORMANCE PRODUCTS & ACCESSORIES

Free Flow Exhaust Kit

PART# - RK16110



APPLICATION(S): Kawasaki Ultra 310 Models

NOTE: If using in conjunction with RIVA Pro-Series Water Box (part# RK16091-1) you must order exhaust coupler RK15-2.38/3.25 to connect Free Flow Exhaust Tube to Pro-Series Water Box.

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 will be used in the installation process. These instructions have been written in step-by-step format and refer to illustrations. Read through instructions entirely before performing installation. Please follow these step-by-step instructions and illustrations carefully.

***** ALLOW ENGINE TO COOL COMPLETELY BEFORE PERFORMING INSTALLATION *****

- INSTALLATION INSTRUCTIONS -

Remove seats. Remove rear storage tray/grab handle (4 nuts).



TIP: Cover the four studs for storage tray with several pieces of tape to prevent injury while performing work.

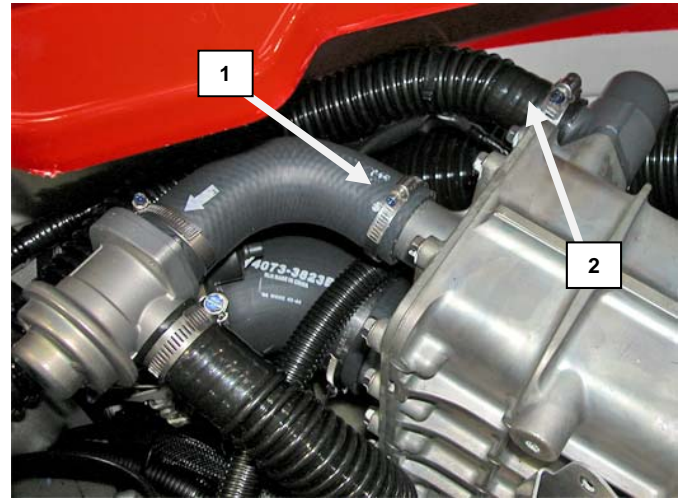
Remove bolts (2) securing oil separator tank to intercooler.



Disconnect hoses attached to oil separator tank and remove tank from engine compartment.

Disconnect intercooler air inlet hose (left side of intercooler).

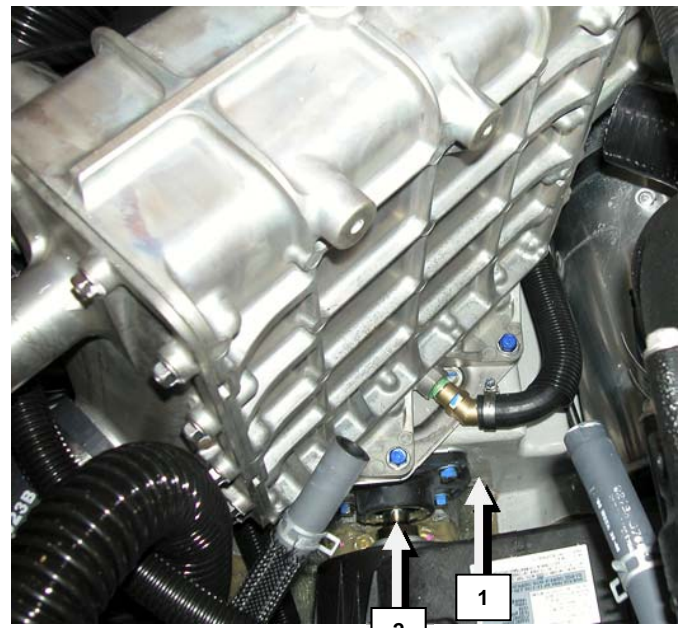
Disconnect primary bypass valve¹ and over-boost bypass valve² from intercooler.



Disconnect intercooler inlet temperature sensor electrical connector.

Disconnect intercooler air outlet hose (right side of intercooler).

Disconnect waterline¹ secured to bottom center section of intercooler.



Remove bolts² (2) securing intercooler to hull.

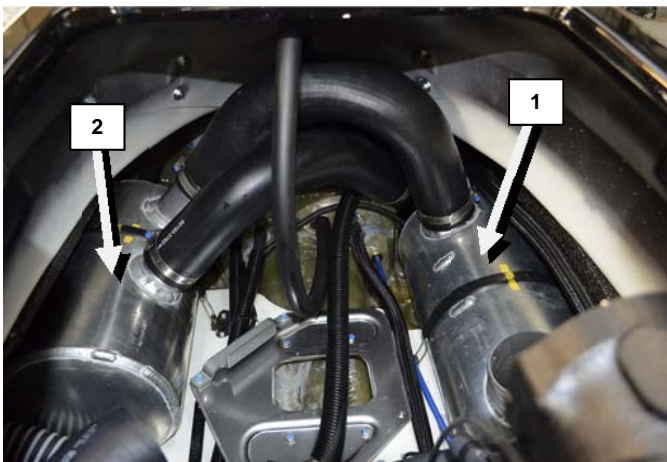
Carefully slide intercooler towards exhaust pipe until tab at rear on opposite side clears securing bracket. Remove second waterline secured to bottom of intercooler (under intercooler air outlet).



Remove intercooler by rotating air outlet side upward while lifting.

Inside hull at rear remove hull ventilation tube(s) as needed.

Remove exhaust hoses between primary muffler¹ and secondary muffler². **NOTE: Retain hose clamps.**



Remove secondary muffler² and discard.

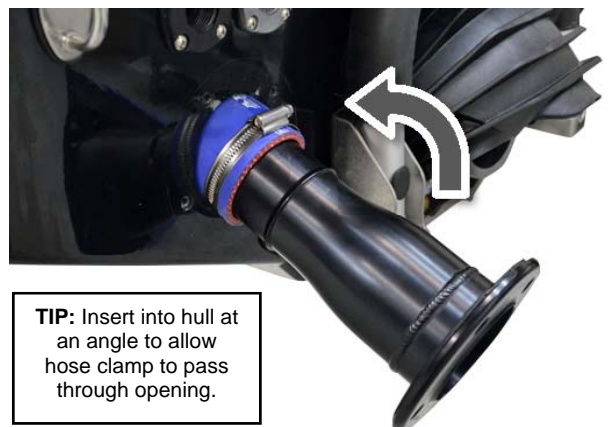
At rear of craft remove exhaust outlet cover (3 bolts) and discard.

Remove bolts and washers (4 each) securing stock exhaust outlet. Carefully remove stock exhaust outlet. Retain rubber gasket. Discard exhaust outlet.

Transfer exhaust outlet gasket to supplied Billet Exhaust Outlet. Install supplied 2-3/8" I.D. x 3-1/4" Long coupler onto billet exhaust outlet and secure using supplied clamp.



Install Billet Exhaust Outlet into hull and secure using stock hardware. **NOTE: Be sure rubber gasket is in place between flange and hull. Do not apply sealant to gasket. Apply blue Loctite to bolts. Do not over tighten bolts.**



Inside hull place one stock clamp (loosely) over exhaust outlet coupler.

Install supplied reduction coupler onto water box end¹ of supplied Free Flow Exhaust Tube. **NOTE:** Apply generous amount of glass cleaner onto tube and inside of coupler before installing.

Loosely place stock (2) clamps over coupler.



Install outlet end² of Free Flow Exhaust Tube into Billet Exhaust Outlet coupler. **TIP:** From outside of craft spray glass cleaner into Billet Rear Exhaust Outlet to ease installation.

Align Free Flow Exhaust Tube with water box outlet and slide coupler down onto outlet.



Secure coupler to water box outlet. **NOTE:** Do not over tighten clamp.

Check alignment and clearance of Free Flow Exhaust Tube. Secure remaining clamps (2). **NOTE: Do not over tighten clamps.**

Replace hull ventilation tubes (at rear).

Replace and secure intercooler. **NOTE: Apply blue Loctite to bolts. Torque bolts to 22 ft-lb (30 N-m, 3.1 kgf-m).**

Reconnect intercooler cooling lines, air inlet and air outlet hoses and bypass valves. **NOTE: Do not over tighten clamps.**

Reconnect intercooler inlet temperature sensor.

Replace oil separator tank. **NOTE: Apply blue Loctite to bolts. Torque bolts to 78 in-lb (8.8 N-m, 0.9 kgf-m).**

Replace rear storage tray/grab handle. **NOTE: Apply blue Loctite to studs. Torque nuts to 87 in-lb (9.8 N-m, 1.0 kgf-m).**

Installation is now complete. Thoroughly inspect engine compartment and bilge for tools, rags, parts, etc. Run craft on stand using flush kit to check for proper operation.

***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 tech_support@rivamotorsports.com.

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 and a Return Authorization Number (RA#) must accompany all warranty claims.

Warranted replacement parts will be returned freight collect.