



# Sea Doo Spark Intake Manifold Upgrade Kit

PART# - RS12130-IMUK



APPLICATION(S): Sea Doo 900 ACE engines 2014+

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 \*\*\*

Required Specialty Tools Part#

T30 Torx Bit N/A
5/16" Nut Driver N/A
Oetiker Clamps Pincer Tool C-48550347

Recommended tools Part#

Sea Doo Service Manual 219100760
Approximate Installation Time: 2.0 Hr.

#### - INSTALLATION INSTRUCTIONS -

Step 1: Remove seat.

Step 2:Remove left side access panel by pulling top right side of panel straight out about ½". Then slide panel to right.



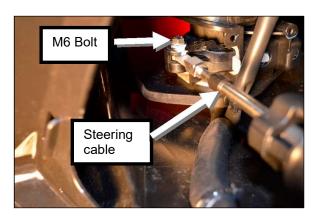
Step 3: Locate steering & gauge wire harness. Disconnect plugs by sliding back red lock tabs on each connector. Push clip lock on each plug & pull plug apart.



Step 4: Remove left side knee pad by pulling on right side of panel.



Step 5: Locate end of steering cable at steering column. Remove M6 bolt holding steering cable to column & disconnect steering cable.



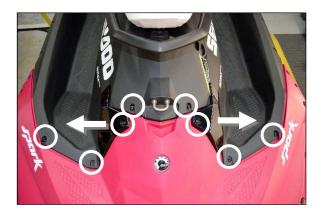
Step 6: Remove Torx screws (2) holding steering cable to top deck.



Step 7: Remove the five (5) circled self tapping screws at front of top deck. (see illustration below)



Step 8: Remove the eight (8) circled self tapping screws at the rear of the top deck. Remove rear trim pieces by sliding out of position. (see illustration below)



Step 9: Remove the ten (10) circled Torx screws & nuts on the sides of the hull. (see illustration below)



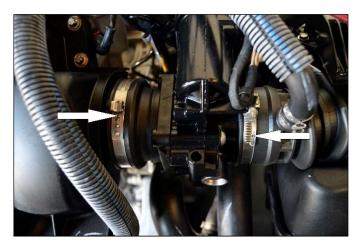
Step 10: Remove three (3) self tapping screws located at the fuel fill cap.



Step 11: With assistance, remove top deck by lifting straight up from lower deck. Guide steering cable through cable access hole in top deck.



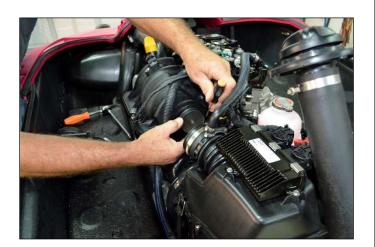
Step 12: Remove the two hose clamps securing the throttle body to the airbox connector and manifold. Use the Oetiker Pince Tool or a pair of side cutter pliers to cut the Oetiker clamp on the manifold end of the throttle body.



Step: 13: Locate the flame arrestor ribbon in the opening of the intake manifold.



Step 14: Remove the flame arrestor ribbon by inserting the blade of a thin bladed straight screwdriver between the manifold inlet sidewall and the ribbon and prying gently outward. Proceed slowly working at several points around the circumference of the ribbon taking care not to damage the manifold or the rubber ring around the ribbon.

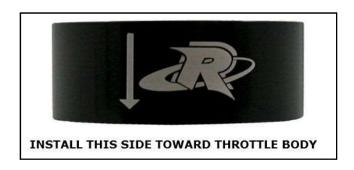




Step 15: remove the rubber holder from around the flame arrestor ribbon.



Step 15: Before installing the rubber holder onto the billet sleeve note the direction of the arrow on the sleeve. When assembled this arrow <u>must</u> point toward the throttle body.



Install rubber holder onto the billet sleeve and insert it into the intake manifold opening. Make sure it is fully seated. Make sure that the arrow on the billet sleeve points toward the throttle body.



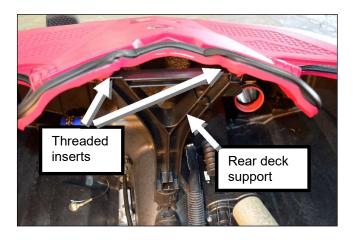
Step16: Slip included stainless oetiker clamp onto the rubber flange at the intake manifold end of the throttle body. Slide the rubber flange over the intake manifold inlet. Note the locating stud shown in the photo below and make sure it aligns with the cutout in the rubber flange as shown. Use the Oetiker Pincer Tool to secure the clamp.



Step 17: Slide the original hose clamp onto the airbox hose pushing it well up onto the hose. Slip the hose onto the throttle body. Place the hose clamp into position and tighten. Do not over tighten.



Step 18: Reinstall top deck to lower deck. (refer to step 11) Make sure rear deck support is correctly positioned and top threaded inserts (2) are in place. (see illustration)



Guide steering cable through cable access hole on top deck. Use care to ensure the rubber deck seals are properly sealing. Line up screw holes between the top & lower deck.

Step 19: Reinstall bolts, nuts & washers (2) at side alignment tabs first. (circled in illustration below) Torque to 3.5 N.m / 31 inch lbs.



Step 20: Install rear support screws (circled in illustration below) Torque to 5.5 N.m / 49 inch lbs.



Step 21: Install side rail bolts, nuts & washers. (circled in illustration below) Torque to 3.5 N.m / 31 inch lbs.

Note: Sea Doo recommends replacing these M6 side elastic stop nuts. Sea Doo replacement part # is 232561200.



Step 22: Reinstall rear trim pieces (refer to step 8) & reinstall self tapping screws at front & back of hull. (circled in illustration below) Torque to 5.5 N.m / 49 inch lbs.



Step 23: Reinstall self tapping screws (3) at gas fill cap. Torque to 4.5 N.m / 40 inch lbs. (refer to step 10)

Step 24: Reconnect the steering & gauge wire harness. Make sure plugs "click" when connected. Lock each plug together by sliding red locking tab.



Step 25: Reinstall self tapping screws (2) holding steering cable adjustment to top deck.(refer to step 6)

Step 26: Reinstall end of steering cable to steering column arm and secure with M6 bolt. (refer to step 5)

Step 27: Reinstall left side knee pad (refer to step 4) and left side access panel (refer to step 2) and reinstall seat.

Installation is now complete. Thoroughly inspect 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 <a href="technical-support@rivamotorsports.com">technical-support@rivamotorsports.com</a>.

### **Limited Warranty**

RIVA Intake Manifold Upgrade 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.