



# Spark Top Loader Intake Grate PART# RS22130

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.

APPLICATION(S): Sea Doo Spark

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

Required Specialty Tools / Supplies
Loctite 5900 or equivalent

N/A

T30 Torx Bit N/A

Recommended toolsPart#Sea Doo Service ManualN/A

# - 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.



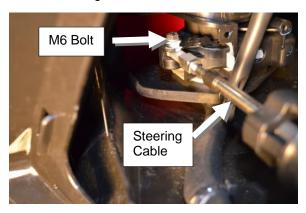
Step 3: Locate steering & gauge wire harness. Disconnect plugs by sliding back red lock tabs on each connector. Push clip lock on each plug & pull plug apart.



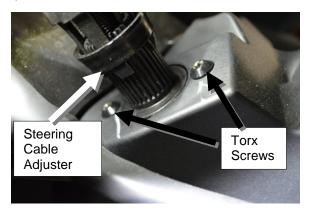
Step 4: Remove left side knee pad by pulling on right side of panel.



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



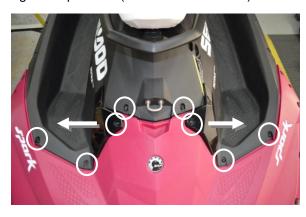
Step 6: Remove Torx screws (2) holding steering cable to top deck.



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.



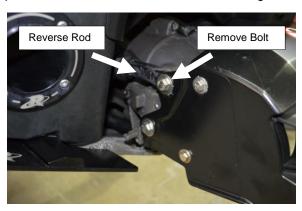
Step 11: With assistance, remove top deck by lifting straight up from lower deck. Guide steering cable through cable access hole in top deck.



IBR Models: Continue following instructions.

Non IBR Models: proceed to step 14.

Step 12: Disconnect reverse rod from reverse gate.



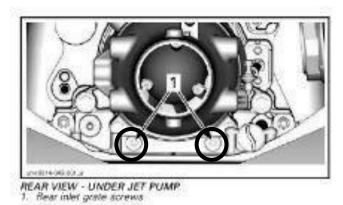
Step 13: Remove nut & washer holding IBR actuator to hull.



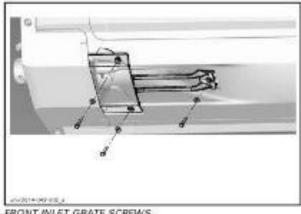
Carefully rotate IBR actuator counter clockwise.



Step 14: Using a long socket extension, remove the two rear inlet grate self tapping screws (8mm head) located just under jet pump. (circled in illustration below)

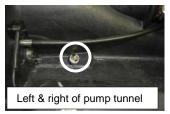


Step 15: Remove front intake grate bolts, washers & retaining nuts. (retaining nuts located on inside of hull) **Tip:** Have someone hold the retaining nuts in place when removing the intake grate bolts.



FRONT INLET GRATE SCREWS

### Retaining nuts shown below:





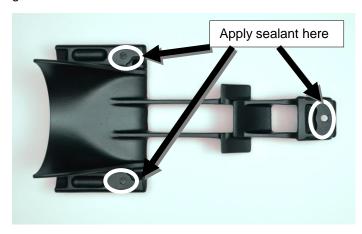
#### Remove intake grate

Step 16: Remove any remaining sealant/silicone on both the inside & outside of the hull where the intake grate bolt holes are located. Clean the area of any grease or oil using a non residual cleaner. (brake cleaner)

**Note:** If installing RIVA Intake Grate Backing Plate Kit (part# RS21130-BPK-RI), refer to Backing Plate Kit instructions at this time.

**Note:** If using suggested RIVA Pump Seal Kit (part# RS25130), install Pump Seal Kit at this time.

Step 17: Apply a generous bead of Loctite 5900 sealant or equivalent around bolt holes of Top Loader Intake grate as shown in the illustration below.



Step 18: Install Top Loader Intake Grate in position on underside of hull. Loosely install the 3 front intake grate bolts, washers & retaining nuts. **Tip:** Have someone hold the retaining nuts in place when installing the intake grate bolts.

Install the 2 supplied M6 bolts & washers on the rear inlet screw location, under the jet pump. (refer to step 14) **Note:** Apply blue Loctite on the M6 bolts. Do not over tighten bolts.

Tighten the 3 front intake grate bolts/retaining nuts to 18 ft. lbs.

## **IBR Models: Continue following instructions**

Non IBR Models: proceed to step 20.

Step 19: Rotate the IBR motor clockwise back in position. (refer to step 13) Guide bolt through mounting hole on IBR motor. Reinstall nut & washer on bolt & secure in position. **Do not over tighten.** 

Reconnect reverse rod to reverse gate. (refer to step 12) Ensure the collar that the bolt passes through is in position on the reverse arm.

Step 20: Check bilge for tools, rags, etc.

Reinstall top deck to lower deck. (refer to step 11)

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



Step 22: Install rear support screws (circled in illustration below) Torque to 5.5 N.m / 49 inch lbs.



Step 23: 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 24: 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 25: Reinstall self taping screws (3) at gas fill cap. Torque to 4.5 N.m / 40 inch lbs. (refer to step 10)

Step 26: Reconnect the steering & gauge wire harness. Make sure plugs "click" when connected. Lock each plug together by sliding red locking tab.



Step 27: Reinstall self tapping screws (2) holding steering cable adjustment to top deck. (refer to step 6)

Step 28: Reinstall end of steering cable to steering column arm and secure with M6 bolt. (refer to step 5) and reinstall left side knee pad. (refer to step 4)

Reinstall left side access panel & seat. (refer to step 2 & 1)

Installation is now complete.

Important: Allow 24 hours for the sealant on the intake grate to cure before use.

# 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="mailto:tech\_support@rivamotorsports.com">tech\_support@rivamotorsports.com</a>.

#### **Limited Warranty**

RIVA Top Loader Intakes 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.