



# Sea Doo Spark Engine Access Kit

PART# - RS4-130-EAK

APPLICATION(S): Sea Doo Spark. 2up & 3up Models.

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 \*\*\*

Part#

N/A

N/A

N/A

N/A

#### **Required Specialty Tools**

5/32" Drill Bit 13/64" Drill Bit Die Grinder / Cutting Wheel / Dremel Tool Small Countersink Bit

#### - INSTALLATION INSTRUCTIONS -

- 1. Remove seat.
- 2. Remove left side access panel by pulling top right side of panel straight out about  $\frac{1}{2}$ ". Then slide panel to right.



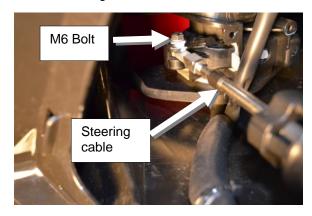
3. Locate steering & gauge wire harness. Disconnect plugs by sliding back red lock tabs on each connector. Push clip lock on each plug & pull plug apart.



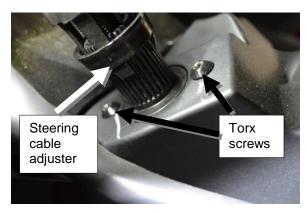
4. Remove left side knee pad by pulling on right side of panel.



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



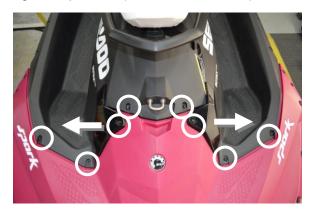
6. Remove Torx screws (2) holding steering cable to top deck.



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



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)



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



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



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



12. **2up Models:** Remove bolts (4) securing rear grab handle to top deck & remove handle.



**3up Models:** Remove bolts (4) securing rear grab handle, and remove handle. Remove bolts (2) holding seat support & remove.



13. Stand top deck up on end so underside is exposed. Place supplied mounting bracket around fire extinguisher area as shown in illustration below.



14. While holding bracket in position against the hull, drill the bottom right side bolt hole using a 5/32" size drill bit.



Install one supplied M4 flat head bolt to hold the bracket in place.



- 15. With bracket in position, drill bottom left side lower bolt hole using the 5/32" drill bit and install one supplied M4 flat head bolt to hold the bracket in place.
- 16. While holding the top of the bracket in position, drill the two left & two right side bolt holes using the same 5/32" size drill bit.



17. Using a #2 pencil, mark the two top mounting bracket holes.



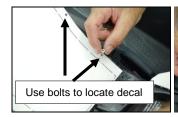
Remove bracket & bolts. Drill the marked top holes using a 13/64" size drill bit.

Installing the template:

18. Lay hull topside up on the ground.

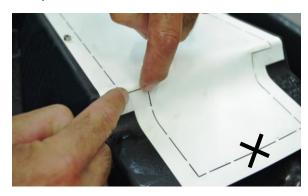
Starting with the front of the decal, peel off the adhesive backing & place decal over the fire extinguisher area.

Use the supplied M4 flat head bolts to properly locate the decal to the drilled holes on the top deck.

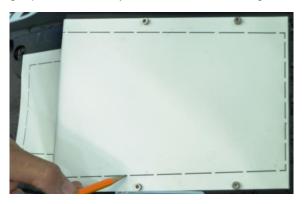




Continue by rolling the decal over the rear curved area of the deck. Make sure perforated line is just below the curve on the deck. You **WILL NOT** be able to apply the last rear portion of the decal.



19. Mark the perforated lines of the template on the hull using a pencil, wax crayon, scribe or something similar.



20. Carefully remove decal.

21. Finish perforated cut line at the rear of the fire extinguisher area. Use a straight edge to ensure the line is as straight as possible.





22. To help protect the top deck from debris, place tape slightly on the outside of the perforated pencil lines.





#### Cutting the top deck:

### Cut on the **INSIDE** of the perforated pencil line.

**Note:** Take your time making the cuts! You want to "sneak up" on the corners. Remember, you can always remove material....you cannot add material!

**Warning:** Plastic shavings can be extremely hot. Wear eye protection, pants & long sleeves when performing this procedure.

**Note:** These instructions show the use of a cutting wheel to perform the cut out. However, you may also use a jig saw with a fine blade, our similar. Use which ever tool you are comfortable with for this procedure.

23. Starting on the sides, start at the front and cut back towards the rear of the top deck. **Warning: stop cut at area shown in illustration below.** 



24. Cut the front section of the fire extinguisher area. Cut on the INSIDE of the perforated pencil line.

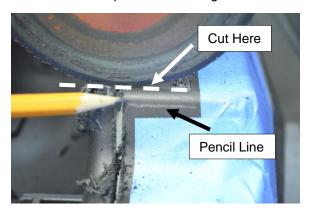
**Note:** Take your time with this cut. You want to "sneak up" on the left & right side cuts.



25. Cut the rear of the fire extinguisher section as shown in the illustration below. **Cut on the INSIDE** of the **perforated pencil line**. You want to "sneak up" on the corners.



26. Cut just above the pencil line as shown in the illustration below. **Note:** Take your time with this cut. You want to "sneak up" on the left & right corners.



#### 27. Complete the left & right side cuts

# 28. Remove the fire extinguisher panel & discard.



29. Using a hand file, file down the left & right rear corners of the cut out. (see illustration below)





Using a hand file and/or a sander, make adjustments and clean the edges of the cut out. Square the corners using a hand file & ensure the access panel fits properly.





30. Using a small countersink bit, <u>SLIGHTLY</u> countersink the 2 left, 2 right and 2 rear drilled bolt holes so the M4 flat head bolts sit flush with the top deck. **DO NOT** countersink the 2 front drilled holes.



2up models proceed to step 33.

## 31. 3up Models Only:

Using supplied template (located on last page of instructions) mark seat support on left & right side as shown in illustrations below.

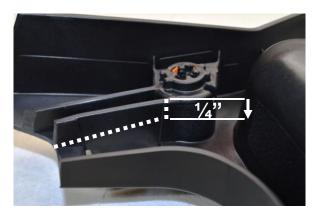




Cut the marked line using a cutting wheel, jig saw with a fine blade, or similar. (Use whichever tool you are comfortable with for this procedure.)

Note: Cut on the <u>INSIDE</u> of the perforated pencil **line.** Take your time making the cuts! You want to "sneak up" on the corners. Remember, you can always remove material....you cannot add material!

32. On the underside of the seat support, remove the left & right inside "rib" material as shown in the illustration below.



Using a Dremel tool or small hand file, "round off" the left & right boss mount area, and radius the inside corners as shown in the illustration below.



33. Position the supplied access panel bracket on the inside of the top deck. Secure in place using the 6 supplied M4 flat head bolts, washers & nuts. **Do not over tighten.** 

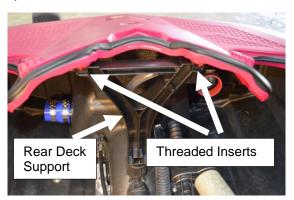


2up models proceed to step 35.

34. 3up models:

Reinstall seat support. Do not over tighten screws.

- 35. Reinstall rear grab handle. (refer to step 12) **Do not over tighten screws.**
- 36. 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 below)



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.

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



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

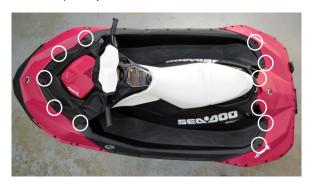


39. Install side rail bolts, nuts & washers. (circled in illustration below) Torque to 3.5 N.m / 31 inch lbs.

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



40. Reinstall rear trim pieces (refer to step 8) & reinstall self tapping screws at front & back of top deck. (circled in illustration) Torque to 5.5 N.m / 49 inch lbs.



- 41. Reinstall self taping screws (3) at gas fill cap. Torque to 4.5 N.m / 40 inch lbs. (refer to step 10)
- 42. Reconnect the steering & gauge wire harness. Make sure plugs "click" when connected. Lock each plug together by sliding red locking tab.



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

- 44. Reinstall end of steering cable to steering column arm and secure with M6 bolt. (refer to step 5)
- 45. Reinstall left side knee pad (refer to step 4) and left side access panel (refer to step 2) and reinstall seat.
- 46. Install supplied access panel by first sliding in the rear section of the panel between the rear grab handle and top deck. Lower into position.



47. Secure access panel in place using the 2 supplied bolts. Tighten by hand. **Do not over tighten bolts.** 



Installation is now complete.





# 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 Spark Engine Access Kit carries 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.

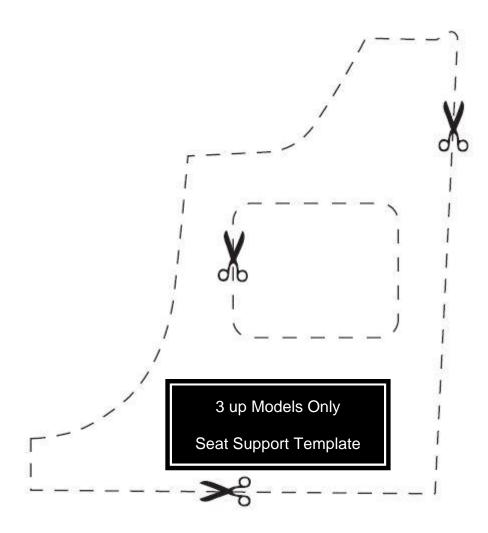
RIVA Racing's liability is expressly limited to the repair or replacement of the components contained within or associated with this kit. RIVA Racing agrees to repair or at RIVA's option, replace any defective unit without charge, if product is returned to RIVA Racing freight prepaid within the warranty 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.



- Cut template out along dotted lines.

# **IMPORTANT:**

BEFORE PRINTING MAKE SURE THAT
"Output Option/PrintingType/Scaling"
ARE SET TO **NONE** IN THE PRINT DIALOG
PROPERTIES WINDOW FOR YOUR PRINTER.