



## Stainless Steel Replacement Wear Ring PART# - RS33-155-SR, RS33-159-SRX & RS33-161-SRX

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. We strongly suggest reading through the instructions entirely before performing installation. Please follow these step-by-step instructions carefully.

APPLICATION(S): 155mm liner fits 185,155 & 130hp 4-Stroke units.

159mm liner fits 260, 255 & 215hp 4-Stroke units.

161mm liner fits 300hp 4-Stroke units

#### **Required Specialty Tools**

OEM Service Manual Hydraulic Press or Large Bench Vice

#### - INSTALLATION INSTRUCTIONS -

Place supplied Stainless Steel Replacement Wear Ring in a freezer. Yes, a freezer!!!

Remove pump assembly and pump impeller following steps outlined in OEM service manual for your model Sea-Doo.

Remove rubber seal around edge of pump housing at wear ring and set aside. Remove plastic water inlet fitting from pump housing.

Place pump in freezer for several hours. Check periodically to see if plastic wear ring has loosened. If so, remove wear ring and discard. If not continue to freeze until you are able to remove wear ring. If wear ring does not loosen after several hours carefully remove by cutting in two places. **NOTE: Take care not to damage the housing.** 

**TIP:** This can be done using a small jigsaw, small handheld grinder, or low-clearance hacksaw such as a Snapon HS3 or equivalent.

Inspect inside wall of pump housing for damage (EGrough spots, gauges, raised edges). Smooth housing wall if necessary.

Allow pump to return to room temperature. Using a heat gun warm pump housing evenly. **NOTE: Do not use an open flame.** 

To make installation of supplied wear ring easier the following step should be done quickly!

#### Part#

Please Call N/A

Align supplied stainless steel replacement wear ring with pump stator housing so that arrows face inward. Slide wear ring into pump housing evenly and completely.

**NOTE:** Wear ring should slip into pump stator housing. If wear ring does not remove immediately and repeat freezing and warming processes again.

Immediately place pump stator in a press or vice securing evenly with moderate pressure. **DO NOT REMOVE** until pump & wear ring return to room temperature. This can take several hours. **Do not speed up process in any way.** 

Replace pump impeller. **NOTE:** Tolerance of Stainless Steel Replacement Wear Ring is tighter than that of a stock OEM plastic wear ring. If edges of pump impeller blades rub housing remove impeller and file edge of blade. Repeat until impeller spins freely.

Replace rubber seal around edge of pump housing at wear ring. Make sure rubber gaskets are in place at top of pump housing if equipped.

Replace plastic water fitting in pump housing. **NOTE:** Apply pipe thread sealant to threads. Do not over tighten.

Replace pump assembly following steps outlined in OEM service manual for your model Sea-Doo.

Check bilge for tools, rags, etc. Run craft on a 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 Stainless Steel Replacement Wear Rings 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.