

PONTOON HYDROFOIL APPLICATIONS INC.

VARA[®]

FOIL-STRT-PLATE

VARA[®] Skin

INSTALLATION RECOMMENDATIONS

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1.0 Introduction

Thank you for your purchase.

Your new VARA® **Skin** will provide a new and better way to enjoy your boat. The VARA® **Skin** is mounted to the crossbeams underneath your pontoon decking. It helps to decrease drag produced preventing waves and excess water from contacting the crossbeams while the boat is in motion.

Each application is different, and the purpose of this guide is to assist the installer with recommendations for attaching the new VARA® **Skin**. These are **only** recommendations and should not be solely relied upon for the installation. Read the document completely and carefully as PHA, Inc. desires HAPPY and SAFE customers. If you have questions, contact the PHA, Inc. Support Team before proceeding with the installation or use.

DO NOT ASSUME THIS IS THE MOST CURRENT INFORMATION. You must verify the latest version on the website at pontoonhydrofoil.com.

The intended audience of these recommendations must understand ALL the basic terms, definitions, tools, and methods described herein. Additionally, if you do not understand something in this document, **STOP** and verify the recommendation by contacting the PHA, Inc. Support Team by phone, email, or text with the questions or concerns **prior** to moving forward with any additional steps. **WAIT** for written answers before continuing to avoid proceeding with what may be improper and/or create an unsafe installation or boating situation.

It is highly recommended that the installer(s) watch an example of a do-it-yourself installation video posted on YouTube at <https://www.youtube.com/watch?v=WGrTEp3E-0s>.

IMPORTANT NOTES:



YOU ARE RESPONSIBLE FOR PROPER INSTALLATION AND YOUR INSTALL WORK.

READ THE ENTIRE GUIDE BEFORE PROCEEDING WITH THE INSTALLATION.

*If you do not understand or are unable to install the VARA® **Skin** as a do-it-yourself project, paid marine professionals are available and should be hired to perform the install rather than proceeding with an improper installation. Contact the PHA, Inc. Support Team with any questions or concerns.*

Ensuring all boaters have a safe boating experience is our highest priority.

2.0 Getting Started

2.1 Material and Tool Checklist

Examine shipping box and document any damage with pictures before opening. Open box, unwrap, inspect, and inventory all contents. Document any damage with pictures. Content List:

- VARA® Skin (1)
- VARA® Skin Hardware Kit

Gather Minimum Tools Needed for Installation:

- Measuring Tape
- Rope or cord
- Marker
- Razor knife
- Scissors
- File
- Mini straps (2-4)
- Small 2-inch Clamps (5-6)
- Battery-Powered Impact Driver with ¼ nut driver bits

2.2 Cautions and Tips Before Proceeding

1. It is highly recommended that two (2) people work together for the installation and each installer watch the basic installation help videos on our YouTube Channel @pontoonhydrofoil prior to proceeding.
2. It is recommended to install the material in temperatures above 55° F.
3. Locate and mark the position of all wiring, cables, fuel lines, etc. that run underneath or through the deck.
4. Remove battery cables and ignition key prior to beginning any work around the motor including pre-fit process and installation.
5. The material must be pulled tight when attaching it to the crossbeams. Use caution when using tools to avoid unintended cuts in the material. Loosely attached or damaged material will negatively affect performance, reduce product durability, and void the product warranty.
6. Exercise patience when fitting the material in front of and around the motor pod to ensure a snug fit with no pleating.
7. Ensure that a minimum of seven (7) self-tapping screws and washers are evenly spaced along each deck crossbeam located in front of the motor pod. Place an appropriate number of self-tapping screws and washers along each side of the motor pod to ensure a tight and secure fit.
8. Do not cross thread screws and ensure each screw is tight. Keep ALL screws or sharp edges from protruding or being exposed for safety reasons.

3.0 Installing the VARA® Skin

3.1 Pre-Installation Steps:

1. Determine if there are any attached accessories (i.e., under-deck lights, tow eye reinforcements, etc.) that may interfere with achieving a smooth surface. If possible, remove the accessories to avoid having to make unnecessary cuts in the material. You will re-attach them upon completion.
2. Measure underneath the boat to determine the centerline of the boat. Place a mark at the centerline point on the front cross beam AND place a mark on the cross beam located in front of the motor pod to use as a guide to ensure a straight line.
3. Using rope or cord, tie several guiding lines pulled tightly sideways under the deck from side to side (equally spaced apart) to help hold material up off the ground and closer to the cross beams.
4. Lay the rolled VARA® Skin down on a flat surface. Notice there is a smooth and a coarse side. **The smooth side should face down and the coarse side will face toward the decking during the installation.**
5. Determine the center point of the VARA® Skin and mark the location. You will line up the center mark with the mark with the centerline mark placed on the front crossbeam to get started.

3.2 Measuring and Attaching the VARA® Skin in Front of the Motor Pod:

1. Place the front edge of the VARA® Skin material and line it up with the front edge of the boat. Unroll a section of the material and pull it towards the back underneath the boat. [HINT: Use the rope/cord previously pulled side to side to keep material off the ground.]
2. Line up the center mark placed on the VARA® Skin with the center of front cross beam leaving one (1) inch of material overhang forward of deck line. At the centerline. Apply a self-tapping screw and washer into place to attach the material. Remember the coarse side faces the decking underneath the boat.
3. Using the side-to-side guide lines, pull the material aft to the centerline in front of the motor pod's closest accessible cross beam - pulling tightly to remove loose material. Attach a self-tapping screw and washer on both sides of the centerline point to the closest beam in front of the motor pod to hold it in place.

4. Pull tightly while screwing the material into place to remove slack helps achieve a straight/tight look. HINT: Each application is different, and you may choose to pop a chalk line to mark the centerline from front to back to aid in keeping screw location lines straight. Vise grips or similar clamps help, but DO NOT overtighten!
5. Using the self-tapping screws and washers, attach material to the remaining center line beams on each cross beam between the bow and motor pod. [HINT: Keep the material straight using clamps as needed.]
6. Now attach the two outermost screw locations at the front cross beam. Then attach remaining self-tapping screws and washers for a total of seven (7) across. [HINT: Pull VARA® Skin very tightly toward the outside to remove any loose material while keeping the lines straight.]

3.3 Attaching the VARA® Skin Around the Motor Pod

Optional: ONLY WHEN SAFE TO DO SO, you may choose to loosen the forward most motor pod bolt(s) if they are accessible to continue attaching the material for a tight fit underneath the area before making any cuts for each side. Remember to firmly re-attach any nuts/bolts loosened in the process. Contact PHA, Inc. Support Team for additional tips before proceeding with this option.

1. At the front of the motor pod, place a slit at the centerline of the material leaving enough excess material to cover and attach to motor pod later. [HINT: The idea is to have plenty of material around motor pod but not too much that it affects pulling material tight sideways from pontoon to pontoon.]
2. Pull both sides of the material toward the back of boat.
3. Clamp the material in such a way at the back end to pull the material tight. When pulled tightly back, material should be equal distance from centerline or outside pontoon attachments or both.
4. Attach a self-tapping screw and washer on the first side starting at the back then moving forward along the OUTER EDGE from back to front with while keeping material straight and aligned. Repeat for the opposite side applying the self-tapping screw and washers to the remaining beams.
5. Finish attaching the remaining material along the motor pod.
6. Re-tighten any bolts loosen in the process.

3.4 VARA® Skin Trimming and Final Inspections

1. Double check ALL screws are in place and the VARA® Skin is pulled very tight. At a minimum, ensure that seven 7 self-tapping screw and washers have been used along each cross beam.
2. Ensure an adequate number self-tapping screw and washers have been used around the motor pod to ensure a proper and tight fit. Ensure all nuts/bolts are tight.
3. Trim any excess VARA® Skin material as needed.
4. Re-attach any under-deck accessories previously removed.
5. Replace battery cables and ignition key once ALL checks are complete and everyone is safely clear from the area.
6. Check and double check that ALL drain plugs are tightened before use or returning the boat to the water.
7. It is recommended to save any left-over pieces for patch material if needed.

4.0 Maintenance and Care

PHA, Inc. highly recommends each boat owner routinely perform regular maintenance and safety checks on all VARA® products including the VARA® Skin, VARA® Plate and VARA® Foil Hydrofoil System components. Contact PHA, Inc. for any replacement parts that may be required.

At a minimum, complete the following on a regular basis:

- Visually inspect the VARA® Skin material for rips or tears. Use the patch material provide and/or saved during installation. Contact PHA Inc. for assistance.
- Inspect all screws and washers to ensure they are tight, but not over-tightened. Tighten any loose hardware. Replace any missing or worn hardware.
- Ensure all bolts for the motor pod are tight and in proper working condition. Replace any missing or worn hardware.

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Check out our other patent-pending VARA® products when upgrading your pontoon, tritoon or power catamaran including the VARA® Plate and VARA® Foil Hydrofoil Kit.

Follow us on YouTube and visit our website for complete details.

You are now ready to start enjoying the VARA® Life!