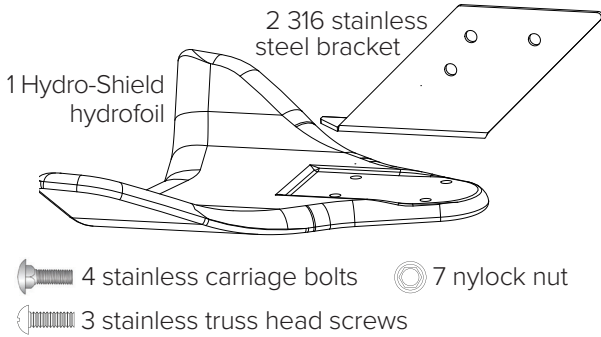









**PACKAGE CONTENTS**



**PREPARATION**

**Tools required for installation**  
(not included):

-  7/16 inch wrench
-  1/4 inch drill bit & drill
-  Clamp
-  Phillips screwdriver
-  Tape measure
-  Ruler or Straight Edge
-  **Optional:** Urethane sealant\*



Estimated installation time:  
**20-25 minutes**

**VIDEO GUIDE**

Scan this QR code



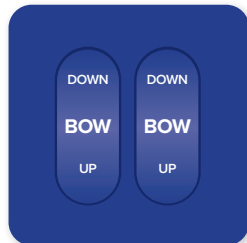
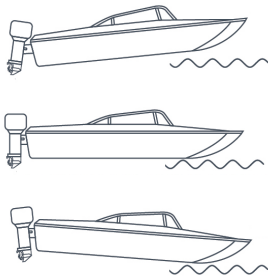
Or visit this URL:  
[Hydro-Shield.com](http://Hydro-Shield.com)

\* If the motor's lower unit is left in the water all the time, urethane sealant should be used between the stainless steel bracket and skeg. This will reduce electrolysis between the stainless bracket and the aluminum skeg. Note the zinc anode mounted to the cavitation plate or other part of the engine should be kept in good condition to control electrolysis with stainless steel used in the motor.

**INSTALLATION**

**1A** For boats **with** Power Trim control and operates trim out at speed, **follow instructions below.**

**With Power Trim**



Standard Integrated Tactile Switch Kit...

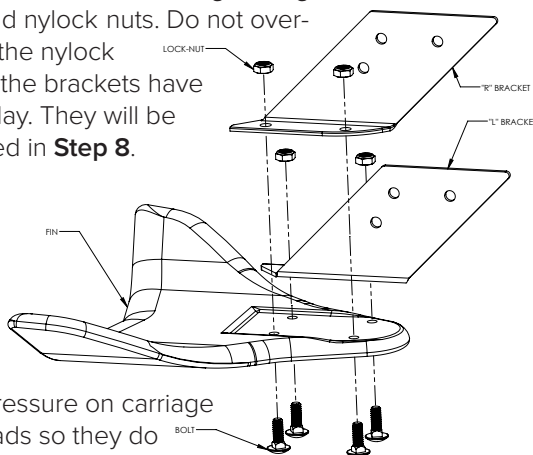
**1B** For boats **without** Power Trim control, and the engine is left in a fixed position, Step 4 measurements "A" and "D" would be the same. Contact Hydro-Shield for questions. Engines using Large Hydro-Shields normally have Power Trim.

**No Power Trim**



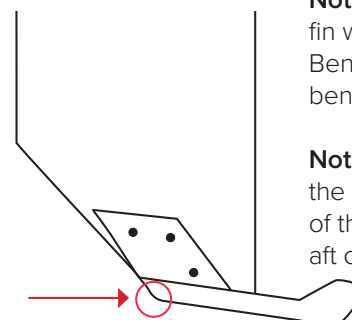
Standard Integrated Tactile Switch Kit...

**2** Mount brackets on fin using carriage bolts and nylock nuts. Do not over-tighten the nylock nuts so the brackets have some play. They will be tightened in **Step 8.**



Keep pressure on carriage bolt heads so they do not fall and strip out the internal locking collar in the foil.

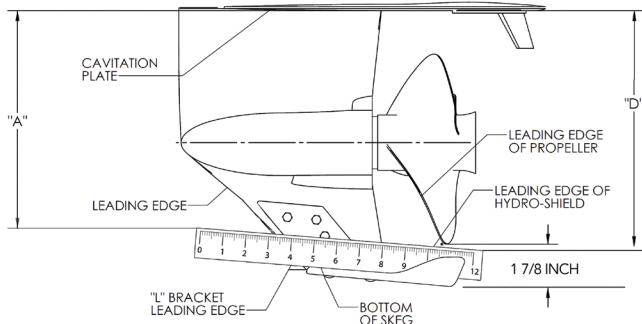
**3** Place the bracket with fin on the skeg of the motor. Line up the leading edges of the bracket and skeg. The bracket should not protrude beyond the leading edge of the skeg.



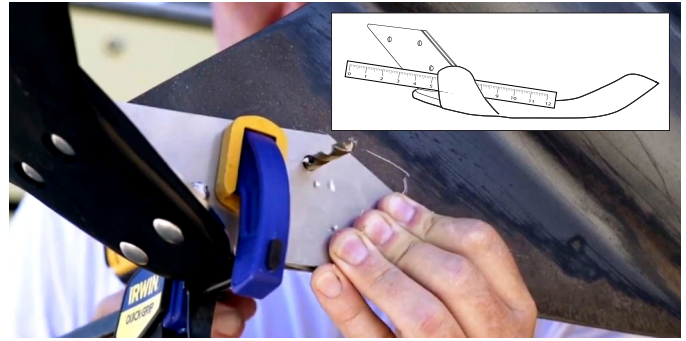
**Note:** If the skeg is bent, the fin will be mounted "tipped". Bend the brackets without bending the skeg.

**Note:** For power trim install, the top front leading edge of the bracket will be more aft of the skeg than the bottom portion.

- 4** Use a tape measure to verify dimensions “A” and “D,” with the “D” measurement being 1/2 inch greater than “A.” Rotate propeller to check for clearance (the minimum distance between the prop and the **trailing edge** of the foil is 1 7/8 inch).



- 5** After clearance has been verified, use a clamp to hold brackets and Hydro-Shield in place.

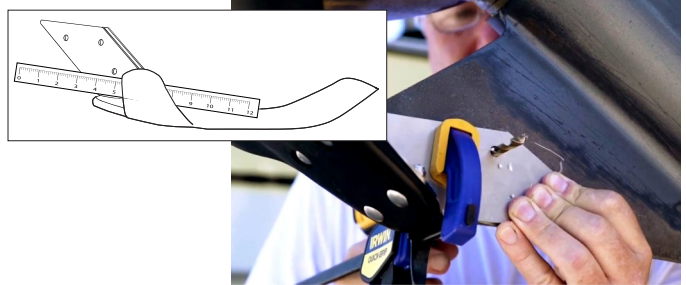


**Note:** The ruler extends the planing line of the L bracket flange. This is the proper way to get the “A” and “D” measurements.

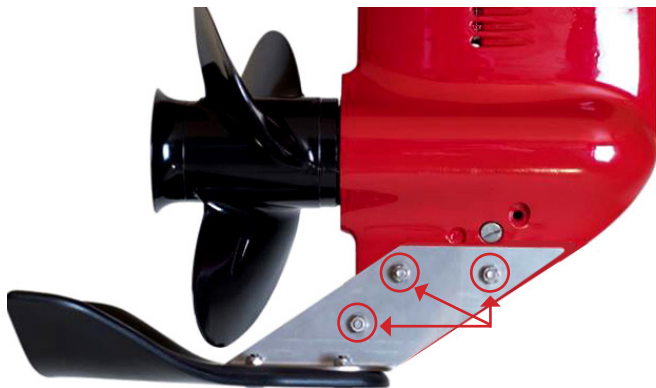
- 6** Use the holes in the bracket as a template. Drill top aft hole first. Affix truss bolt and nylock nut.



- 7** Recheck A and D measurements and gap between prop blade and trailing edge of the foil for proper alignment before drilling the second top hole. Affix bolt and nylock nut. Then drill third hole and affix bolt and nylock nut. If using Urethane sealant, do not apply until you have confirmed fitment by fastening screws.



- 8** If installed bolt threads extend beyond the nylock nut, cut off excess threads to prevent cavitation, reduce drag, and improve performance.



- 9** Tighten all screws and bolts that secure the brackets to the skeg and to the fin to complete installation. Confirm nylock nuts are tight before boating. Check tightness after first outing.



**Note:** If you accidentally followed No Power Trim install and have Power Trim the rear bolts on the Hydro-Shield can be spaced down to add the 1/2 inch angle to regain top speed by placing washers between the hydrofoil and the back of the brackets. Longer carriage bolts would be required spec is (1/4" 20 1 1/2").

**In case of underwater strikes to your Hydro-Shield:**

If the brackets become bent from a hard hit, remove the brackets from the skeg and straighten before reinstalling. Pressure is maintained on the carriage bolt heads so they do not drop and strip out the foil's internal locking collar.