

Nautique FAE Installation

The following instructions apply to all Nautiques after the 1990 year model.
Boats prior to that, please use the standard FAE installation instructions.

PLEASE inspect your FAE and read the instructions before installation (*before driving to the lake house*). Let us know if you think you are missing anything or don't understand something. Most instructions can be downloaded from our website at: www.FreshAirExhaust.com

We are available by cell phone to answer your installation questions. 512.647.7321 – Central Time

Tools and Supplies Needed

- Silicone sealant – any brand will work. Specifically formulated marine sealant is available at marine supply stores.
- 5/16" socket wrench or nut driver
- Typical wrench set
- Hacksaw, Sawzall or other metal cutting tool (to cut Square Tube and All-Thread bolt)
- Ruler
- Drill Motor
- 5/16" and 3/8" drill bit or Step Bit as shown here. When drilling into stainless, the trick is to have the drill motor spin slowly but use firm downward pressure. A step bit works well; it is fat so you can press firmly without breaking the bit.



Leave the plastic wrapping on the FAE to avoid scratching the finish during installation. You may also wish to place a blanket on the ground. An upside-down 5-gallon plastic bucket is about the correct height to place under the FAE to help hold it in position.



Standard Nut



For all bolts, use oil (or suntan lotion) on the threads. You should use standard nuts to position everything; then complete the installation with the Nyloc Nuts. Once you install a Nyloc Nut it is very difficult to remove. You can either remove the standard nut and replace it with a Nyloc Nut or just screw the Nyloc Nut over the standard nut.

During installation you will need to cut the long All-Thread bolt. Before cutting place a regular nut on the bolt; on the side of the bolt you want to keep. That way when you remove the nut, it will help clean up the threads you just cut.

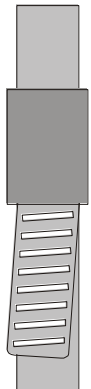
Both Single and Dual Exhaust Nautiques

Remove the Nautique flapper by removing the hose clamp (picture below left – bag and save the flapper and hose clamp). Attach the FAE rubber hose to the Nautique exhaust outlet – one clamp on the boat and 2 clamps on the FAE. Do not put 2 clamps on the boat's exhaust outlet; there is not enough room and it will weaken the holding strength. For best alignment of the FAE you may angle the rubber hose on the FAE; but not on the Nautique Exhaust Outlet. Rotate the hose clamp screw heads so they are less visible.



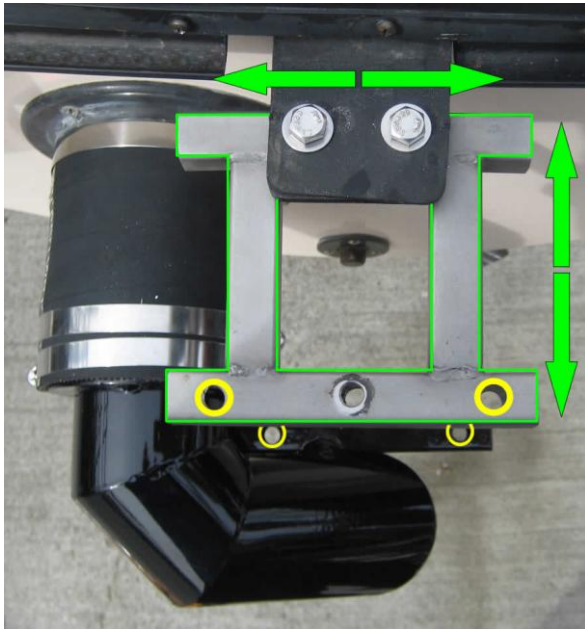
Hose Clamps

You MUST use a 5/16" socket wrench or nut driver to tighten the hose clamps; a screwdriver is not adequate. Check the tightness on one of the hose clamps marked with tape to feel how tight we tighten them. When a hose clamp is properly tightened, the portion of the band that sticks out will deviate to the side (as shown in drawing to right). Before tightening the hose clamps position them so the bands are straight and parallel with each other.

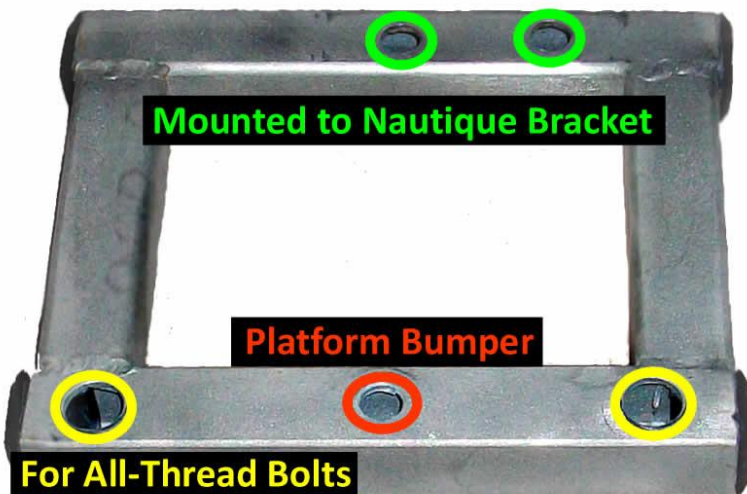


Next you will install the **FAE-Bracket** onto the **Nautique-Center-Platform-Bracket**. Determine what type of center platform bracket your Nautique has and proceed to that portion of the installation instructions that follow.

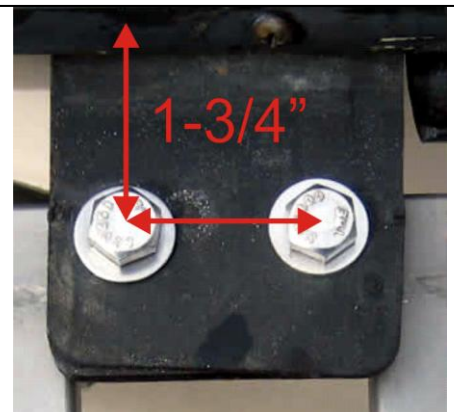
F AE Installation with a Nautique 2 Bolt Center Platform Bracket

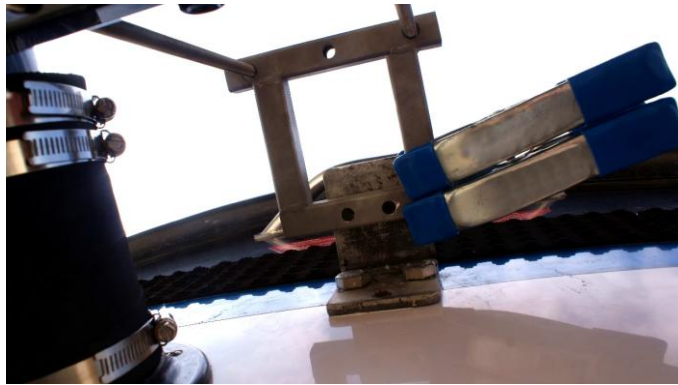


Position the **F AE-Bracket** (green outline above) over the square tube welded to the back side of the F AE, so the holes (yellow) line up as shown in the pictures. The **fore-aft** position and **left-right** positions (green arrows) are determined by the alignment of these holes. You may need to mount the F AE-Bracket off center. The picture above is on-center. The picture below shows a F AE-Bracket with the holes way off center; this is OK

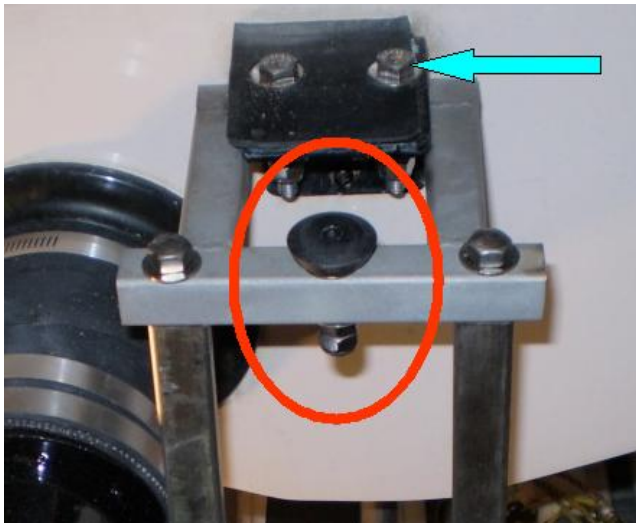


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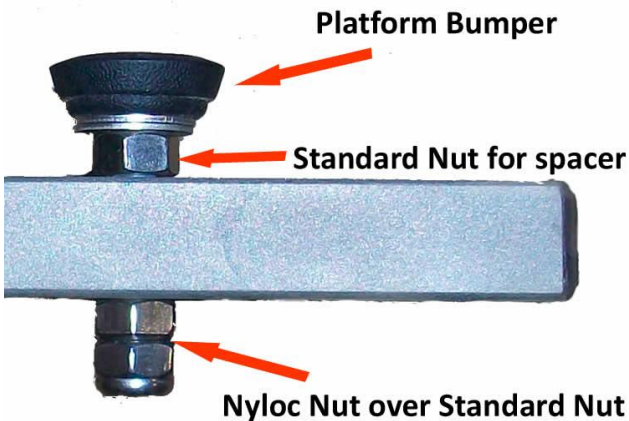




It is helpful to clamp the **FAE-Bracket** while obtaining the correct positioning. Once positioned correctly, mark and then drill 2 sets of 3/8" holes into the **FAE-Bracket** and the **Nautique-Platform-Bracket**. The hole locations (1-3/4" shown on the previous page) will likely work but verify before you drill.



Mount the **FAE-Bracket** with 2 bolts and **Nyloc Nuts**. The heads of the bolts (blue arrow) may hit the swim platform; if so you will need to drill a small indentation into the underside of your swim platform to clear these bolt heads (this applies to both Teak Wood and Fiberglass platforms).

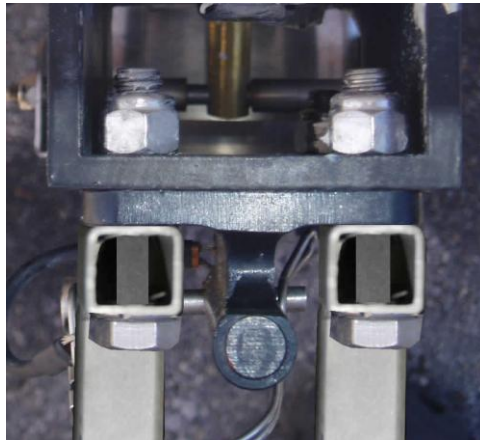
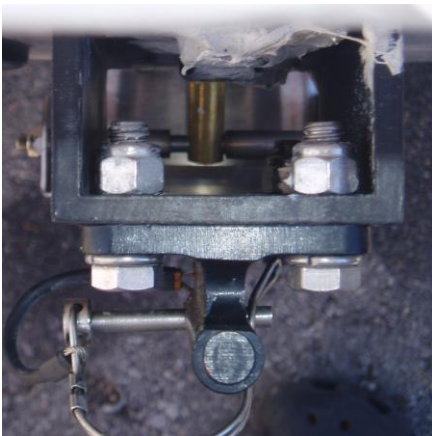


Install the **Platform Bumper** bolt (orange) into the center hole of the **FAE-Bracket**. Raise the **Platform Bumper** so it touches the bottom of the swim platform. You may need to use standard nuts and washers to raise the **Platform Bumper**. Once you have the correct height use the **Nyloc Nut** to secure the **Platform Bumper**.

FAE Installation with a Nautique 4 Bolt – with Spacer Center Platform Bracket



The 4 Bolt Nautique Platform Bracket with Spacer has a square black spacer that is 2 inches deep (red arrow).

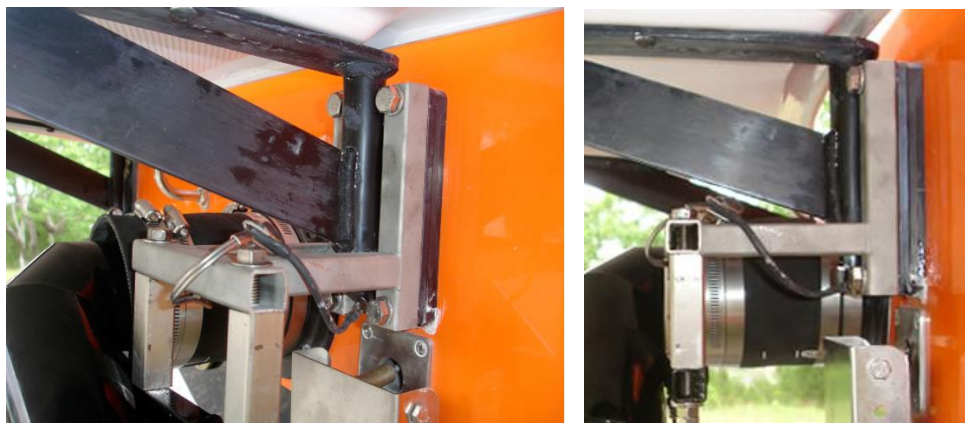


Remove the 4 bolts from the Nautique-Center-Platform Bracket. Mount the **FAE-Bracket** with 4 longer bolts and **Nyloc Nuts** supplied.

FAE Installation with a Nautique 4 or 6 Bolt – NO Spacer Center Platform Bracket



Option 1 - Remove The Bolts - Go inside your boat and remove the bolts holding the **Nautique-Center-Platform-Bracket**. You will replace these bolts with the longer bolts we provide. Apply oil to the threads of the new longer bolts and attach the **FAE-Bracket** to the **Center-Platform-Bracket**. Apply copious amounts of silicone sealant (available at hardware stores or marine outlets) - it is reasonably easy to clean up with dry paper towels. Make sure there is sealant underneath the washer inside the boat and that you install Nyloc Nuts onto these bolts.



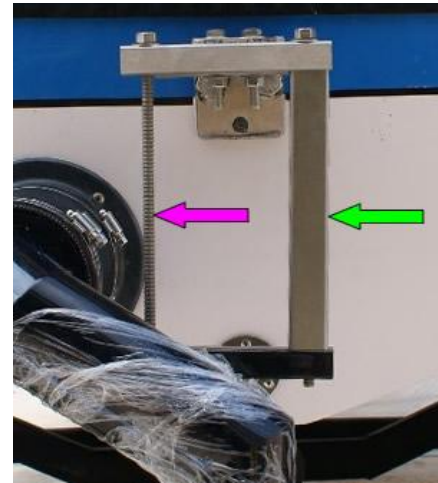
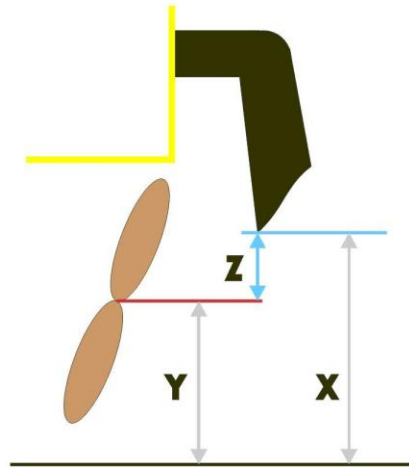
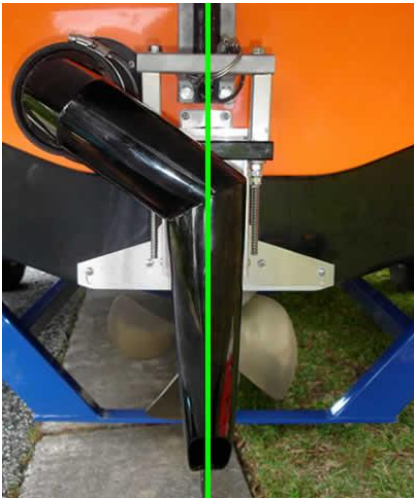
Option 2 - Mount to swim platform (Teak Wood or Fiberglass)



We provide a swim platform mounting bar per additional measurements.

All Nautiques

Position the FAE so that the downpipe is straight up and down and in line with the propeller (green line in picture).



Measurement Z is the distance of the tip of the FAE downpipe to the center of the propeller (see drawing above). Measurement Z is determined by measuring from the bottom tip of the FAE to the ground (X) and then minus the measurement from the center of the propeller to the ground (Y). Measurement Z should be between 1-1/2" and 2-1/2" (contact us if you are unable to achieve this range). This adjustment is held in place by the all-thread bolt length (see below). When making this measurement the boat needs to be approximately level; if on the trailer the trailer jack can be adjusted up or down.

Measure the Square Tube and cut to length. The Square Tube (green arrow) covers the All-Thread bolt (purple arrow) – see picture above. The 2 Square Tubes may need to be cut slightly different lengths. Cutting the Square Tube shorter raises the FAE and increases the Z Length (and vice-versa). Your FAE may have shipped with 2 Square Tubes or one long Square Tube.

The all-thread bolt can be installed with the Bolt Head (welded nut) either on top or on the bottom.

- If the Bolt Head is on the bottom (the all-thread bolt pointing upwards) the all-thread is easier to cut but you need to remove your swim platform first. Before you commit to this orientation you need verify that the extra length pointing up will clear the swim platform.
- If the Bolt Head is on the top (the all-thread bolt pointing downwards) the all-thread can be inserted into the FAE-Mounting-Bracket before it is installed so you don't need to remove the swim platform.
- The all-thread bolt can also be measured and cut in a vise before installing it.

Completing the Installation

Once everything is in place and aligned, install the Nyloc Nuts and tighten all nuts and hose clamps. Remove the plastic wrap and blue tape at this time. Give your FAE a final inspection; you should be able to firmly push and pull on the downpipe without much movement.

It is recommended that you spend the first couple of hours on the water at wake surf speeds (below 15 mph). This will heat the rubber hose to help it settle into position. After your first outing, double check that all bolts and hose clamps are tight before you go faster.

Clean and maintain your FAE just as you do the fiberglass on your boat.