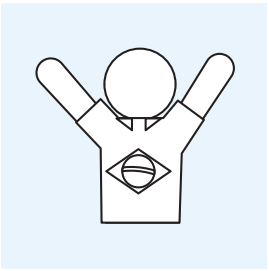
Fresh Air Exhaust Installation Instructions

for Tige' boats with single exhaust outlet (mount to existing exhaust outlet)

Used for most single exhaust outlet Tige' installation with hinge bracket mount



Congrats on your FAE purchase! If at any point during the installation, you run into questions, please call us at 512-789-6266 or email us at mail@FreshAirExhaust.com. Don't forget to register your FAE warranty.

Page 2 Tools and Supplies Needed

Page 3-7 Fresh Air Exhaust Installation

- Mounting to exhaust outlet
- Drilling screw holes
- Secondary mounting
- Sealant

Clean and maintain your FAE just as you do the fiberglass on your boat. Coat your FAE with polish or wax if you wish. The brushed stainless finish can be “polished” with a ScotchBrite pad. We use the maroon colored ScotchBrite. Never use steel wool (or SOS Pad) as that will cause your FAE finish to rust. Inspect your FAE periodically; it is so quiet you may forget it is there.

The greatest compliment you could give us would be to tell your friends and community (in person and online) about the safety and quiet of FAE.
Thank you and welcome to the FAE family!

Tools and Supplies Needed

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

There are lots of packaging peanuts, so have a clean garbage bag ready to dump them into. Keep the peanuts and shipping box in case the FAE needs to be returned (typically no but if something is not correct, we will make it right). If you think you are missing parts, please inspect the peanuts for parts that settled downward during shipping. While installing the FAE, keep the plastic wrap in place to keep your FAE cleaner. If any hose clamps have blue tape wrapped around them, for now, leave those hose clamps alone.

Tools and supplies needed.

- Silicone sealant – any brand
- 5/16" socket wrench or nut driver
- Phillips Screwdriver (if removing the swim platform)
- Typical wrench set
- Hacksaw, Sawzall or other metal cutting tool (to cut Square Tube)
- Ruler
- Drill Motor with 5/16" and 3/8" drill bits or Step Bits
- Anti-Seize or oil for threads (See below)

Hardware included with your FAE

(1) Custom Bracket - Trim Hinge Bracket
(1) 10" Square tube with hole on one end drilled 3/8" offset, customer to drill other one.
(2) 5/16 x 1.5" Bolts
* 5/16" 4 washers-2 nuts-2 Nylocs
3- #12 screws – 1"
3- #12 washers
2 Black end caps
(1) Wire

There may be additional instructions in the shipping box, the parts bags or sent by email. Please be sure to look at all the instructions.

1 Installing FAE to an existing exhaust outlet

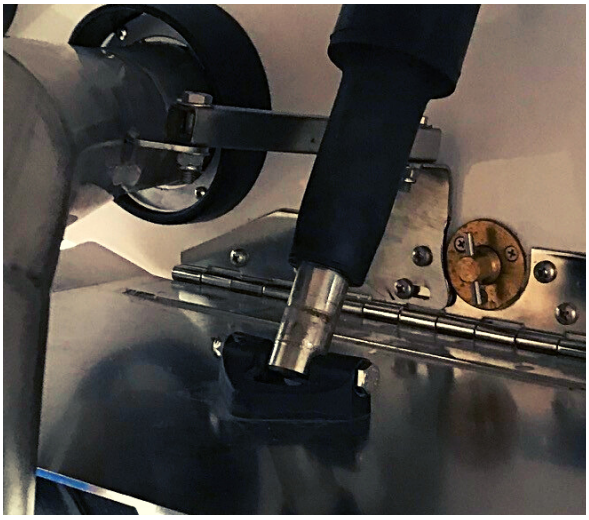
These instructions do not apply if you are removing your exhaust outlets and are installing through the hull/transom.

Your boat has the black plastic exhaust outlet as shown in this picture. Remove the rubber flapper (2 screws) and the 2 screws underneath the flapper.

Your boat has the black plastic exhaust outlet as shown in this picture. Remove the rubber flapper (2 screws) and the 2 screws underneath the flapper. The FAE flange will then attach to the black plastic exhaust outlet. Your FAE has slots in the flange. Mount the FAE close to vertical, then step back about 10' and verify the down pipe is aligned vertically.

Before applying any sealant, perform a complete installation and verify fitment. Raise the trim tab fully up and down to verify trim tab/FAE clearance. Verify your FAE is nearly centered with your propeller or rudder.

When mounting to the trim hinge, refer to "Drilling the Screw Holes" instructions on the following page. It is recommended that you use marine sealant to "glue" the tab in place. Once the tab is mounted and the FAE is mounted and aligned, you will need to connect the 2 tabs (the one attached to the transom and the one welded onto your FAE). If the tabs are not perfectly aligned, you can use a crescent (adjustable) wrench to bend them (slowly and gently).



Drilling screw holes

For most boats we send both wood screws and machine screws. For mounting the tab to the trim hinge, you can use wood screws or machine screws. Either is fine as the holding power comes from the marine adhesive.

If your FAE comes with a transom block (instructions will be packaged with the transom block), you will use machine screws.

Machine Screw

Wood Screw

The machine screws are more difficult to install because you have to install the washers and nuts inside the boat. For the machine screws use a 1/4” drill bit.

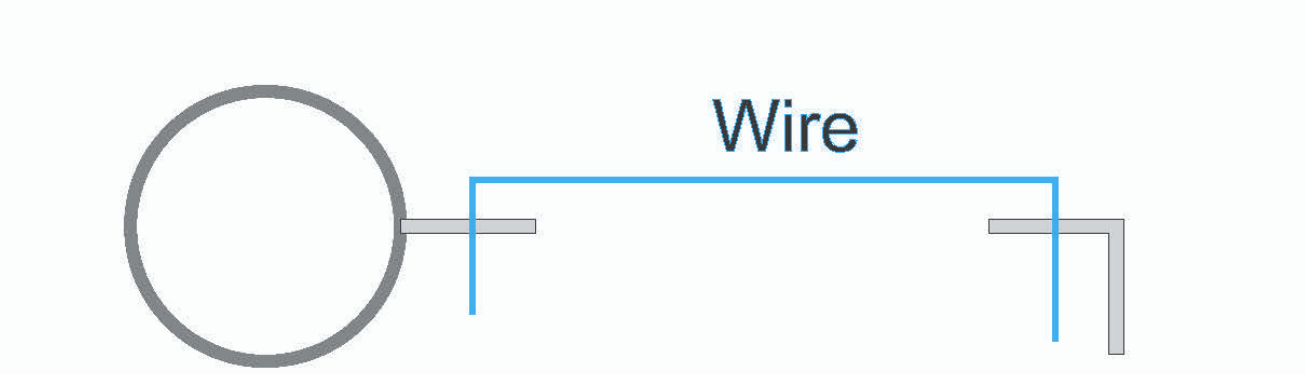
For the wood screws, use the 11/64” drill bit. The hole size is slightly small so the screw will be very tight. You may have to screw in and then back out several times as you slowly cut the screw threads into the fiberglass.

DO NOT BREAK A SCREW! - PROCEED SLOWLY! If the hole is too tight, re-drill it and “wallow” the hole out slightly or go to a 3/16” drill bit. The goal is to get the tightest fit.
After you mount your FAE, before the final tightening of the screws, step back and verify that FAE downpipe is vertical. If not, the slots IN THE FLANGE will allow you to make small adjustments.

When starting the hole, switch the drill to reverse. This will “grind” a hole through the gelcoat and minimize chipping.

Note: when removing the wood screws on the trim hinge, Tige uses wood screws except for one machine screw on each side. If you encounter a screw that just turns and doesn't come out, you will need help to hold the nut inside the boat.

Your FAE parts may have included a piece of wire. Bend the ends of the wire at right angles to measure the distance between the tab holes. Put the bent ends into the holes. Use the wire to mark where you need to drill holes in the square tube.



The square tube can be positioned on top or below the tabs. It can be on top of the boat end and under the FAE end; whatever lines up best. Drill and cut the square tube. Use the hardware provided to complete installing the square tube. We include a regular nut and a nylon lock nut with the hardware. You can use the regular nut while assembling but you must use the nylon lock nut for the final assembly. You need to put grease or oil on the bolt threads during assembly to prevent the stainless bolt from seizing (stainless bolts have a tendency to seize and if this occurs, they need to replaced.

©

4 Sealant Instructions - IMPORTANT INFORMATION

You MUST use a high-grade marine sealant. 3M 5200 Slow Cure is the strongest in the industry but takes a week to cure (WE RECOMMEND 2 WEEKS TO BE SURE) and must remain above 40 degrees; use it if time and temperature allows.

How to apply sealant

Please note in this picture, the marine adhesive is shown as yellow. The adhesive needs to be this thick all the way around the tube.

Use too much sealant on each exhaust outlet.

You can mark a line on your FAE equal to the thickness of the boat's transom. 1-1/4” should work for most boats. If you get a chance, please let us know how thick your transom is.

The goal is to put sealant on the flange (flat part) **and the tube up to the red line**. The Sealant on the tube will glue your FAE and prevent movement. Cover the flange and the tube with a medium layer (1/8” to 1/4” thick), then fill the corner even thicker. When you push the FAE into the hole in the transom, you want sealant filling the entire void between the FAE and the exhaust outlet hole (in the fiberglass). When you tighten the screws, you want sealant oozing out around the flange and inside the boat as well.

Don't forget to install the 3 small round washers between the flange and the transom. If you wish, you can also apply sealant under the large shaped washers as well (the three on the outside that cover the slots in the flange). Tighten the tree screws snug. Step back and verify the FAE is aligned vertically. Then, tighten the three screws firmly.

Sealant Instructions (continued)

DO NOT tighten the screws firmly yet. Screw them tight enough to hold the FAE in position but not so tight as to squeeze all the sealant out from under the flange. Please note in the faulty sealant picture below, the sealant on the flange is squeezed to almost nothing. That is due to over-tightening. If the sealant under the flange is about the thickness of a toothpick, that is good. Consider supporting the FAE during this stage. *In this picture, the FAE is supported by a bucket. You can raise or lower the trailer jack to position correctly.*

After several hours of cure time, finish tightening the screws. The screws hold the FAE in place while the adhesive is curing (1 day for most adhesive, one week for 3M slow cure). Once the adhesive cures, the screws are superfluous. If there is not enough adhesive, if the void is not filled, the slight movement that occurs will eventually crack the weld and break the screws, no matter what hardware is used. Please note, these same instructions apply if using through bolts.

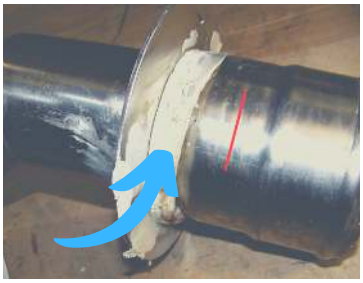
Cleanup: If you wait 2 to 3 hours (less in hot weather), you can readily pull off the extra sealant on the outside of the boat. If you clean up too soon, the sealant smears, and if you wait too long, it sticks to the fiberglass.

- 3M 5200 - Slow Cure - 7 Days
- 3M 5200 - Fast Cure - 3 Days
- Boat Life - 3 Days

The sealant must have adequate time to cure, and the temperature must remain above 40 degrees during the entire process.

After waiting the cure time. for the first water test, it is recommended to not exceed 15 mph (surf speeds). After the first outing check that all FAE components are still tight. Once you have confirmed there is no movement of the FAE, resume high speed boating as you wish.

If you have any questions, please ask us! Through customer discussion and feedback, you help us ensure that we are providing the best support.
You can reach our Support Team directly at 512-789-6266.

The picture below show an FAE that failed due to inadequate sealant.

FAULTY SEALANT INSTALLATION AND FAILURE!