

SAMSON SPORTS, LLC

Edge Tower Mounting Instructions

***Read all instructions prior to installation**

Edge tower parts list:

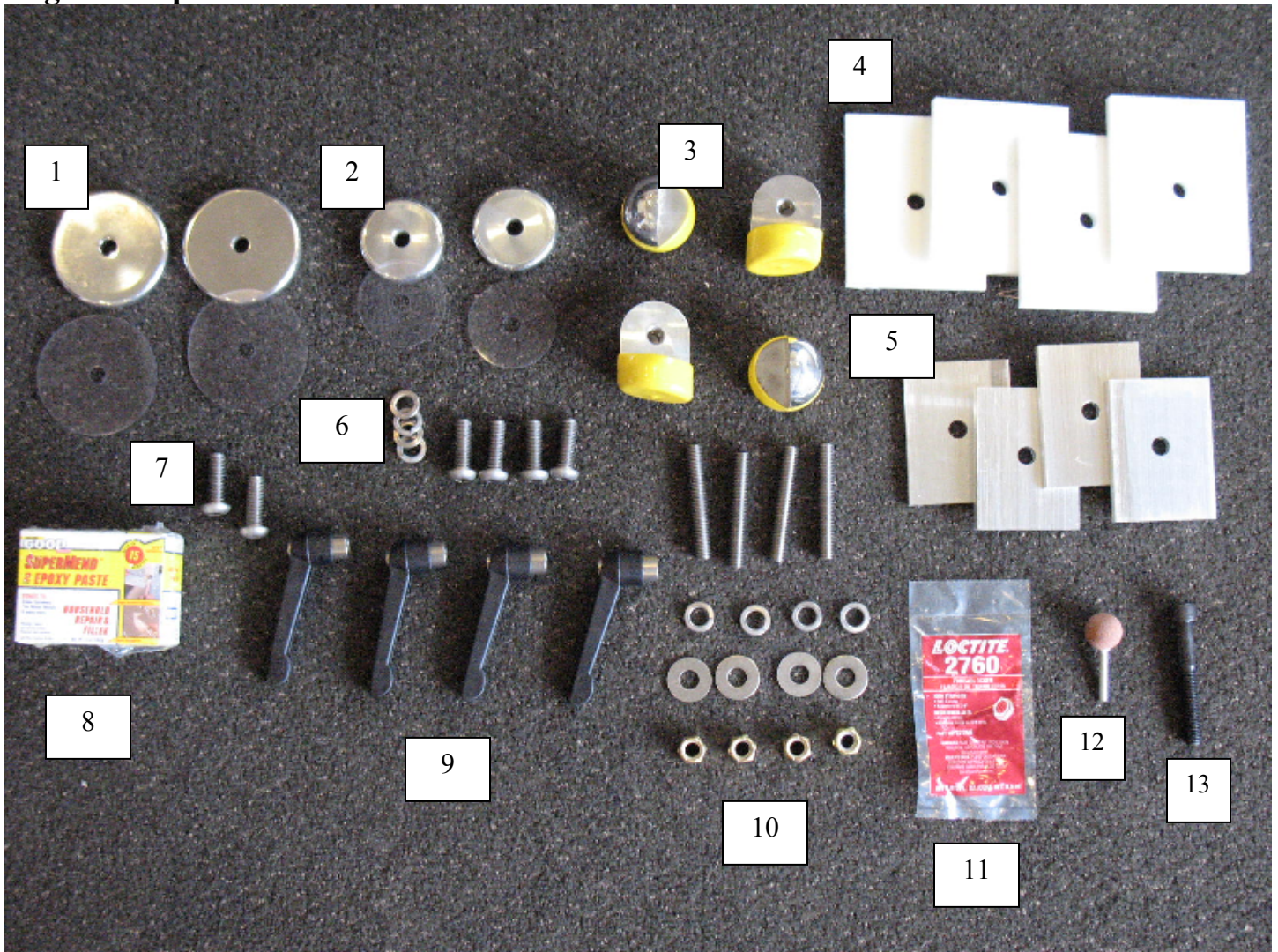


Fig.1 Rear washers & gaskets (may be rectangular shaped)

Fig.2 Front washers & gaskets (may be rectangular shaped)

Fig.3 (2) Right and (2) Left mounting feet

Fig.4 Composite backing plates

Fig.5 Aluminum backing plates

Fig.6 (4) 1/2 x 1 1/2 button head bolts and lock washers to attach feet to tower

Fig.7 (2) 1/2 x 1 1/2 button heads for attaching lower legs of tower to center main section

Fig.8 Epoxy for backing plates

Fig.9 (4) Tower handles

Fig.10 (4) studs, lock washers, flat washers and nylock nuts for mounting feet

Fig.11 Loctite for studs

Fig.12 Grinding ball

Fig.13 Black 1/2 x 3 1/2 allen head bolt

Tools you will need:

- Drill and 1/2" drill bit
- 5/16 allen wrench (T- Handle style if possible)
- 3/4" wrench and/or 3/4" deep socket and ratchet
- Sharpie marker
- Pencil or dry erase marker
- Masking Tape
- Hacksaw -if backing plates require trimming.
- Pliers or Vise Grips

1. Connect the two lower side tower units to the upper main tower. There is a right and left lower unit that will be marked "driver" and "passenger" side (there should be grease on this fitting, do not wipe off). Slide the tongue pivot from the lower side unit into the groove pivot of the upper unit. Use Loctite (provided in hardware kit) on the threads of the 1/2 x 1 1/2 button head bolt and insert the bolt thru the tongue and groove pivot. Do not use a lock washer on this bolt. Use a 5/16 allen wrench and tighten the bolt. If you use a T-handle allen wrench, tighten the bolt as tight as you can using ONE hand. Do not over tighten. Install the 2 upper arms and secure them with the 4 black ratchet handles that come with the tower
2. Place masking tape on the boat, approximately where the tower legs will mount (this will prevent scratching while allowing for positioning marks to be made). Make sure protective yellow colored caps are on each mounting foot. With the help of at least one person, carefully set the tower on masking taped areas. Adjust the mounting feet so they are sitting as flat as possible against the boat. (The curve of the fiberglass will be addressed later with the curved mounting washers) Loosen the button head to adjust the foot. If you need to spin the insert inside the tubing to allow the mounting foot to sit flat, you can use your allen wrench as a lever to rotate the fitting. Place the allen wrench into the head of the allen bolt.(See figure Fig.1) By pulling or pushing on the allen wrench, you should be able to spin the fitting.



Fig.1

3. It will take quite a bit of force but it should rotate. If the insert fitting will still not rotate, remove the button head bolt that attaches the mounting foot to the tower insert and place a round object (Phillips screw driver, Allen wrench, etc.) thru the bolt hole. You can use this as a tool to help you spin the fitting. **There is a right and left mounting foot. If you remove the mounting feet, make sure you get each**

one on the correct insert. Install the mounting foot back onto the insert and check to make sure they are flat against the boat. Repeat this step until the foot is flat against the fiberglass. **Do not loosen the bolt that holds the insert into the end of the tower leg.** Do not install the studs into the feet yet.

4. Use “X” measurements as a guide to position the tower so that it is “square” on boat. Most Edge model towers are designed to match the lines of the windshield and side window frame. By moving the tower forward or back, you can align the side window frame with the lower side tubing on the tower. It can be tricky to measure where the tower should sit because most boats are not symmetrical. Many times the windshield, cleats, bimini hardware etc. are off from one side to the other. Usually you can use the side window frame as a point of reference but more importantly the tower needs to look like it is placed evenly on the boat.
5. Once the tower is positioned properly, and the mounting feet are sitting flat against the fiberglass, use a Sharpie and trace around the yellow caps on the front mounting feet. (Your marks should be on the masking taped area.) Make a mark in the center of the circle you traced for locating the ½” hole that you will drill for the mounting stud. Slide the tower back far enough to gain access for drilling. Before drilling any holes, check to make sure the mounting washers will fit properly in the area you have marked. (see step 7) Check the FRONT and REAR mount location for any obstructions-wires, cables etc.-before drilling any holes.

DRILLING INSTRUCTIONS: Only drill the holes for the front mounts at this time. Check all four mounting areas before drilling any holes. Make sure there are no obstructions (wires, cables, hoses, etc). Use a ½” bit and drill the holes for the front mounting feet. Make sure you run the drill in **REVERSE** until you have cleared the gel-coat. This will prevent the drill bit from chipping the gel-coat. Once you have cleared the gel-coat, you can run the drill in forward. Remove the masking tape from the front mount area. After drilling the driver and passenger side ½” holes, chamfer the gel-coat with the supplied round grinding ball ****See Fig 2 below****. Chamfer enough to put a small bevel – about 1/16” -on the hole. This will greatly reduce any chance of gel-coat spider cracks starting around the stud.



Fig. 2.

6. Remove protective yellow rubber caps from the front mounting feet and screw the stud into foot.
*****Use Loctite thread locker on mounting foot stud threads***** Use pliers or vise grips to screw the stud into the bottom of the mounting foot. Grip the stud close to the foot so you don't damage the threads where the nut will be. Screw the black allen head bolt into the side of the mounting foot to use as a handle to hold on to the foot while installing the stud.

7. Remove the masking tape and fit the mounting washer to the boat by centering it on the hole you drilled. Rotate the washer so the curve of the washer matches the curve of the fiberglass. If you can't make the curved washer match the shape of the boat, call for technical help. If you have 2 different size mounting washers, the smaller ones go on the front mounts. You may also have front or rear washers with different curves. Many boats have a different curve on the passenger side than on the passenger side. The curve of each washer is written on the back of each washer. Using a pencil or dry erase marker, make a line on the washer and the boat. (**See Fig. 3 below**) This will allow you to make sure the washer does not rotate while you are tightening the nut on the stud. Install the mounting washer and rubber washer on to the stud and insert the stud into the hole. Check to make sure the line on the washer and the line on the boat match.

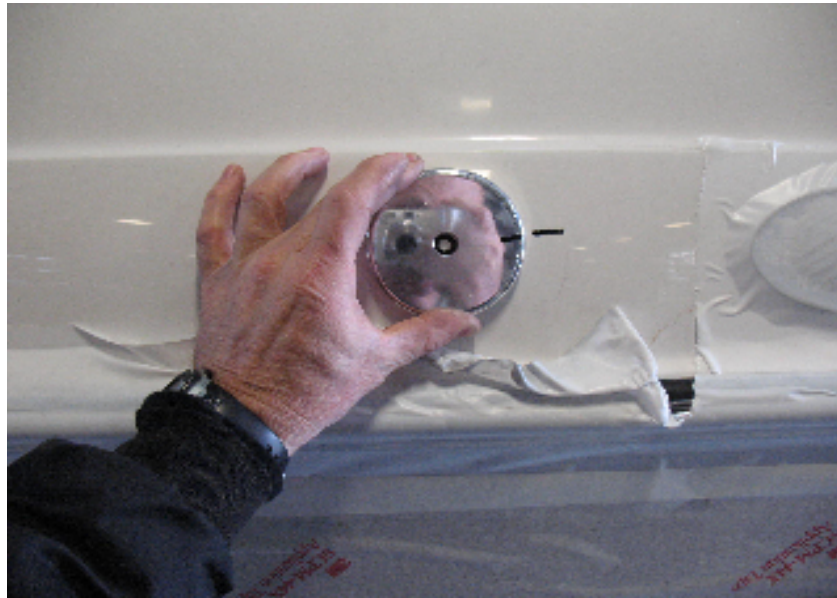


Fig. 3

8. Fit the backing plates to the inside of the boat. If there is carpeting in the way, remove it from the area where the backing plates will go by making a slit in the top edge of the carpet. The plate needs to sit as flat as possible against the fiberglass and be as big as possible. You may need to trim the composite and aluminum plate to make it fit against the inside of the boat with as little of gap as possible. Do not trim off more than necessary. You want the backing plate as big as possible without having a big gap. Once the passenger and driver side backing plates are fitted to the boat, you will need to mix the 2 part epoxy paste. Mix only what you will need for 2 backing plates at this time. The epoxy is used to fill any gaps between the composite backing plate and the fiberglass to distribute the load evenly. Spread the epoxy on the backing plate and install it on to the mounting foot stud. Install the aluminum plate over the composite backer. Install a flat washer, lock washer and Nylock nut on to the stud. Make sure the backing plates do not twist as you tighten the nut. Screw the black allen head bolt into the mounting foot. Use this as a handle to keep the mounting foot from turning while the nut is being tightened. Tighten until the epoxy starts to squeeze out the edge. Do not tighten all the way at this time. Place a

rag or paper towel to catch any epoxy that might drip on the carpet. Depending on the temperature, it may take up to 30 minutes for the epoxy to harden. Usually by the time you get the plates, nuts, and bolts installed on both sides you can go back and tighten the nuts all the way. Make sure the epoxy is hard before you tighten the bolts for the final time.

Attach the tower to the front 2 mounts using the ½ diameter button head bolts and lock washers. Tighten the button head tight and then back off 1 turn. Adjust the rear mounts so they are sitting flat against the boat just as in step # 2. Repeat step # 5 and #7 for marking the holes for drilling and for fitting the washers. Remove the 2 front button heads, remove the tower and then drill your rear holes. Repeat step #8 to fit the rear backing plates.

9. Re-install the tower on to the boat. Tighten all 4 button head bolts on the mounting feet and tighten the 4 nuts on the inside of the boat
10. Periodically check all of the mounting hardware to make sure it is tight.

If you have any questions about installation please call us at
360-833-2507