Brian Dehler's 1990 Supra Sunsport Classic

- Monster Tower Installation -

ORDERING & UNPACKING

I decided on purchasing the Monster Tower after more than a year of research on the web and talking to several dealers at boat shows. Several advantages of the Monster Tower assisted its rise to the top of my list (in no particular order):

- > The clean lines of the tower...no cross members.
- > It is an "engineered" product.
- Silent, rattle-free operation.
- > Outstanding customer service and access to it.
- > Their return policy.
- > Price, including free shipping.
- Universal fit.
- Ease of installation.
- > Their unbiased opinions and thoughts posted on message boards...they let their customers do the marketing for them.

I ordered my tower online during lunch one Friday afternoon. The tower arrived the following Monday during one of several Charlotte ice storms this winter. In addition to the tower, I ordered two board racks and the Quick Release Kit. The tower and accessories were delivered in two corrugated cardboard boxes (see Figure 1). Needless to say I was anxious to dive into this DIY winter project and immediately opened the boxes. The tower pieces and board racks were individually bubble wrapped and neatly packed. The remaining hardware was also individually wrapped in plastic and tightly packed in smaller corrugated cardboard boxes. Of course instructions were included too.



Figure 1 - Tower Arrival and Unpacking

Upper left – top section Upper Right – rear legs

Bottom left – board rack box Bottom right – board rack

LAYOUT

After unpacking I was ready to begin installation. The photos and comments that follow will hopefully make it easier for other do-it-yourselfers ready to install their Monster Towers. Here is what I did.

- Read the instructions.
- Re-read the instructions.
- Read the instructions again.
- > Became familiar with all the parts and hardware to understand the terminology and what goes where.
- > Read the instructions again.
- ➤ Prepare your boat for laying out the location of the bases by using masking tape to protect your deck (Figure 2). This also makes it easier to precisely mark the location of the mounting holes.
- ➤ The supplied instructions indicate the top section should rest on the rear seat cushion when the tower is folded. This is the ideal case and may be realized 99% of the time on newer boats. However, I found that the older boats were constructed a little differently. For example, the cockpit and bow areas of the older boats are shorter than on the newer ones. Also, the rear sundecks (and underlying storage areas) are narrower and pull the rear seat toward the rear of the boat compared to newer models. In my opinion, this would have placed the tower too far back on my boat.
- There have been some discussions about the location of the pylon on the tower compared to the floor mounted ski pylon. I, like others, positioned the tower so that the pylon on the tower was located on a line extended upwards from the floor mounted ski pylon...almost like and extended pylon pole. My feeling here was that this method would have the least impact on the performance of my boat.
- > TIP If you plan to modify and re-use your existing bimini top, consider this in determining the location of the rear bases.
- ➤ I wanted an "aggressive" stance and look to the tower so I reviewed the customer photos on Monster Tower's website (particularly for my brand of boat) to get ideas.
- Access to base locations from under the deck was also considered. In my case, I had one very difficult location and had to remove my amp and CD player, and pull back the carpeting to cut a hole for access.
- ➤ **TIP** Without about four friends or family members to help me out, I needed a way to position the tower on the boat and hold it in place so I could determine its final location. I decided to use industrial strength stick-on Velcro (about \$2.50 for a package of two at Wal*Mart 2 packages needed). After placing the Velcro on the boat and bases, I erected the tower (Figure 3).

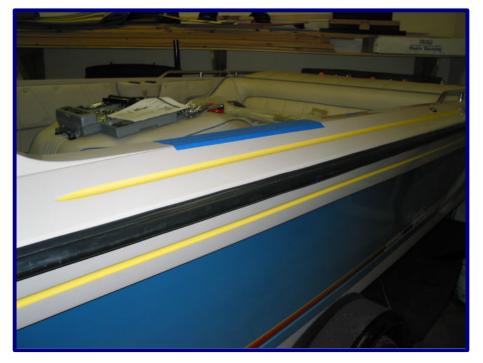


Figure 2 - Masking Tape on Deck

- In my case, I had to remove the garage door opener in order to have enough clearance to install the tower on my boat in my garage.
- > TIP Use the tube of anti-seize compound provided and apply liberally to all threads. I found it best to put some on the tip of my index finger and applied to the threads of the bolts.



Figure 3 - Tower Layout

Upper left – front base Upper Right – rear base

Bottom left – 3-leg tower layout Bottom right – tower stance

DRILLING

After being satisfied with the mounting location, carefully mark the holes for the bases on the masking tape.

- > **TIP** Measure from several different reference points on your boat to either the front or back of the bases. Only when you are satisfied, mark the base holes.
- ➤ Using the supplied drill bits and a variable speed, reversible drill.
- > Drill in reverse, first with the smaller drill bit, then the larger one.
- ➤ Move up to a ½" drill bit to chamfer the mounting holes. The chamfer should penetrate through the gel coat. The instructions say to drill in reverse <u>by hand</u> with the ½" drill bit but I cheated and used an extremely low speed on my drill. I thought I would get a more consistent chamfer this way because it was easier to hold the drill than the drill bit. Figure 4 shows the results.



Figure 4 - Chamfered Mounting Holes

➤ The next issue I faced was access to underneath the deck. Because my boat has double sidewall construction, I removed the upholstered sidewall pads and cut a hole in the sidewall. It is conveniently sized at 5-1/4" so I could add speakers later if so desired.



Figure 5 - Access to Underneath Deck

INSTALLING THE TOWER

Once I gained access to the mounting locations, I simply followed the instructions to install the tower.

- ➤ TIP At this point I needed some help to hold the bases and top bolts in place while tightening the nylock nuts from below. No torque recommendations were provided in the instructions. I tightened the bolts enough to compress the Monster Paws.
- ➤ I also needed help holding the tower legs and attaching them to the base swivels and top section.
- ➤ TIP At this point, I made sure all the hardware was snug, but I still wanted some play because the next step is to center the tower. I measured diagonally from top to bottom as shown in the instructions. I measured about one dozen times before I was satisfied. I then tightened all hardware again but not to final torque recommendation. I then measured the diagonals again to make sure the tower was still centered and nothing had shifted after I tightened the hardware.
- ➤ I drilled the hole with the supplied drill bit through the rear leg and into the top section rear leg swivel. I inserted the bolt and tightened to a snug fit (Figure 6).



Figure 6 - Adding Stiffness

- > I measured the diagonals again and again before moving to the other side of the boat and drilling the final hole.
- > I then drilled the final hole, inserted the bolt and tightened according to the instructions.
- > I moved around the boat tightening all the bolts to the torque settings recommended in the instructions.
- > Step back and admire the work!



