# Star One Standard and Deluxe Towers

## Owner's Manual & INSTALLATION INSTRUCTIONS

#### QUESTIONS?

As a manufacturer, we are committed to providing complete customer satisfaction. If you have questions, or if there are missing parts, we will guarantee complete satisfaction through direct assistance from our factory.

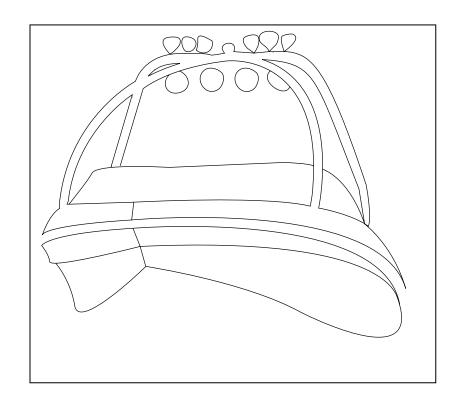
### PLEASE CALL OUR CUSTOMER HOTLINE:

1-916-858-1178

Monday – Friday (7 am – 4 pm) PST

### **CAUTION**

Read all precautions and instructions in this manual before using this equipment.



- Please read these instructions carefully.
- If you have any question or a part appears to be missing or incorrect, call us immediately for assistance.

### Star One Wake Tower Assembly and Installation:

This tower has been manufactured specifically to fit each different model of boat. There should be no persuasion necessary to install this tower. If this is the first Star One Tower that you have installed, please read all instructions before proceeding. If this is the first time that you have installed a Star One, we recommend that you call us at (916) 858-1178, and ask for technical support. Tell us that you are installing your first tower and we'll go over the installation procedure with you, so that everything goes smoothly.

- 1. After you have unpacked and identified the various components, your first step will be to install the baseplates. The baseplates, when properly installed, allow the tower sections to lie down (usually backward). Therefore, it is imperative that the baseplates are square to each other to eliminate binding. Lay the baseplates on the deck then position them and square them as necessary to achieve the proper mounting location. (Refer to the specifications on the next page for the distances between baseplates that we used to build the tower.) An eight-foot metal straightedge works well for squaring the front baseplates to each other (READ: PARALLEL) as well as squaring the rear baseplates to each other. Also, it is important that the baseplate makes complete contact with boat deck to minimize the potential for stress cracking in the boat deck. Position the baseplates in as flat of an area on the deck as possible to achieve this, and if necessary, grind the underside of the baseplate to achieve a good fit. Since boats aren't square, flat, or necessarily even symmetrical, it is also important that you take the time to ensure that the port mount locations, both front and rear, are exact mirrors of the starboard mount locations. Verify square by determining their location from multiple reference points. It's not always safe to assume that rails, cleats, etc. are identically placed from one side to another. Once you have established where you want to put the baseplates, check the underside for access and/or obstructions, then mark the centers of the holes with a pen using the baseplate as the template. (Note: A baseplate's location can be moved up to one inch, if necessary to avoid an obstruction, provided that its opposing baseplate also makes the same move except mirrored.)
- 2. Drill holes. The holes are ultimately drilled to 5/16". Start with a 1/4" pilot hole first, then run a countersink down until the hole is 7/16" diameter (not deep) at the deck surface. This should remove enough gelcoat to eliminate any gelcoat contact with the edge of the 5/16" hole when it is drilled. This will also prevent chipping of the gelcoat while drilling the 5/16" hole. Finally, drill the 5/16" holes.
- 3. Attach front and rear baseplates using the supplied 5/16" hardware and aluminum backing plates. It is important that the baseplate and backing plate make complete contact with their respective mounting surfaces (the boat deck) to minimize the potential for fatigue and stress cracking in the boat deck. Occasionally, some modification of the base plates and/or backing plates is necessary to achieve a proper and complete fit. Front baseplates are usually 3.00" x 3.00" and rears are usually 2.00" x 3.00". Additionally, the front baseplates should be positioned so that the heim joint bolt will thread from the outside inward, and the rear baseplates bolts from the inside outward. This should create a slight inward lean for the baseplates.
- 4. Screw the heim joints into the tapered ends of the tower tubes. Initially, there should be approximately 3/8" of thread showing when the jam nut is against the tube end. Do not tighten the jam nuts yet, as some final adjustment may be necessary once the tower is installed and connected in its upright position.

- 5. Attach the rear hoop (upside down "U" shape) to the rear baseplates (using the .50" X 1.50" stainless socket head screws for 3.00" x 2.00" baseplates and the .50" x 1.75" for 3.00" x 3.00" baseplates.) The connector plate located at the top center of the rear hoop should be facing down when the hoop is laid back. Do not fully tighten the screws yet, as they will need to be removed to turn the heim joints if any adjustment is necessary.
- 6. Attach the tow spool and the circular disk with attached lanyard and safety pin to the front wishbone with the tow spool on the top using the (1/2-13X1") cross drilled socket head screw. When the tow spool is completely tightened, ensure that the tab of the circular disk is pointing to the left (port) side of the boat, and the cross-drilled hole is oriented left-to-right on the boat (as opposed to front-to-rear). Additionally, slide the two rubber sleeves onto the legs of the wishbone. These sleeves will act as a bumper between the windshield and the wishbone.
- 7. Attach the front wishbone (using the .50" X 1.75" stainless socket head screws for 3.00" x 3.00" baseplates and the .50" x 1.50" for 3.00" x 2.00" baseplates.) Do not fully tighten the screws yet, as they will also need to be removed to turn the heim joints if any adjustment is necessary.
- 8. Check the alignment of the two main tower components by lifting the rear hoop into an upright position and laying the front wishbone down onto it. The socket head holding the tow spool should nest nicely in the rear hole of the connector plate on the rear hoop. If necessary, adjust one of the front heim joints in or out to move the wishbone left to right. Adjusting the heims in the rear hoop will tilt it left to right. Under no circumstance, should the heim be screwed in less than 5/8" into the tapered tube end.
- 9. Once any necessary adjustments are made, insert a .50" X .75" stainless socket head screw through the bottom connector plate and screw it into the top connector plate.
- 10. TIGHTEN ALL SCREWS AND NUTS.
- 11. The two black rubber sleeves are used to protect the wishbone and windshield when the tower is collapsed, or to protect the wishbone and rear hoop if a prop rod is used. Also the square black rubber bumper can be applied to the upper corner of the walk-through windshield if it hit the wishbone when opened.

### 12. Go wakeboarding.

Note: This tower is designed to be collapsed for garaging purposes only. It should remain secured in its upright position whenever the boat is in use or being trailered.

BOAT YEAR/MODEL:
BASEPLATE MOUNTING DIMENSIONS:
FRONT SPREAD (center-to-center):
REAR SPREAD (center-to-center):
FRONT TO REAR SPREAD (center-to-center):