

# **AIRBORNE WAKEBOARD TOWER**

## **INSTALLATION GUIDE**



**INSTALLATION SUPPORT** 



## **IMPORTANT INFORMATION**

- This Aerial wakeboard tower fits motor boats with 76-108 inch wide beam widths. This measurement is taken from the Port to Starboard mounting points.
- Do not fold the tower without having the top section securely fastened to the side sections with the fasteners provided.
- Lubricate the telescopic side section tubes that slide in and out of the top section during installation. We recommend using a light grease to help the tubes slide together without binding.
- Do not fold the tower by yourself.
- Do not assemble tower on the ground and then try to install it on the boat.
- Do not use impact drivers to install any hardware.
- Torque set screws to 35ft-lbs
- Torque M12 bolts 50 ft-lbs
- We recommend using threadlocker on the threads of all fasteners that will not be adjusted while lowering or raising the tower.
- Check the top section for burrs before installing side sections to prevent the scratching and marking of tubes. Aerial does not cover damage caused by burrs during installation.
- If the area of the deck where the tower will be mounted has a fiberglass thickness of less than 1/4 inch, a backing plate kit must be purchased and installed to provide adequate support.
- Please leave the foam wrap on the tower until the installing is complete.
- Please note that when towing your boat you may notice what appears to be movement in your tower. It is important to understand that the boat is also moving on the trailer and that this movement can be visually deceiving.

## CLEANING

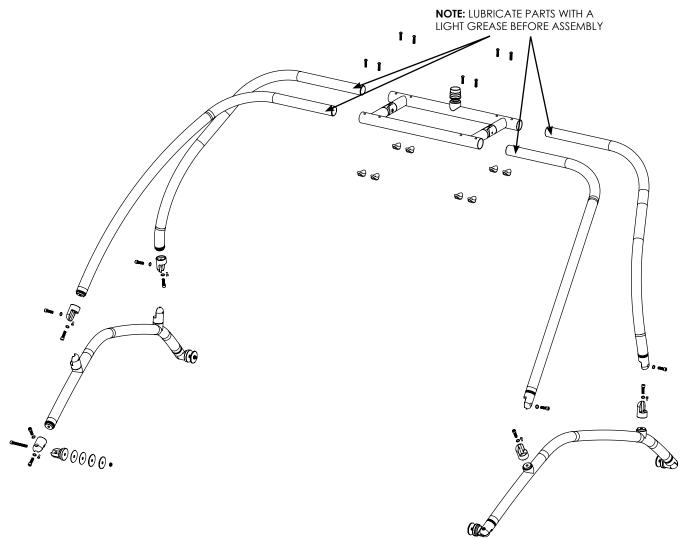
- Frequently wash your tower with soap and water.
- As required, use Mothers Mag & Aluminum polish to restore your tower to its original finish.

## WARNING

- BE CAREFUL when assembling this product. We CANNOT be liable for any burring or scratching that may occur when sliding sections in and out of each other.
- NEVER modify this product in any way.
- NEVER climb, stand or ride on this product.
- NEVER tow watersport tubes or inflatable's with this or any other Aerial Wakeboard Tower.
- ALWAYS use caution with approaching bridges or overpasses.
- ALWAYS inspect this product for loose bolts, fittings or damage before each use.
- Always carefully CONSULT the user manual for proper installation, maintenance and usage.
- Aerial is not liable for personal injury or property damage from the use of this or any other Aerial product.



## **EXPLODED OVERVIEW**



## **TOOLS REQUIRED**



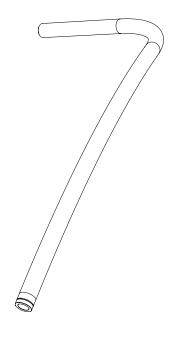


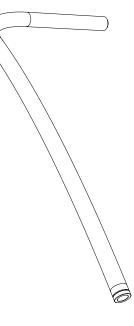
## **PARTS LIST**

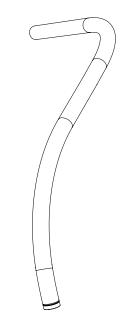
### TOWER PACKAGE

ITEM #	DESCRIPTION	QTY	COMMENTS
1	2.25" TOWER JOINT - THREADED (INCL. M6 X 12mm BOLT)	4	
2	2.25" TOWER JOINT - THRU HOLE (INCL. M6 X 12mm BOLT)	8	
3	DECK MOUNT	4	
4	M12 X 40mm BOLT	16	FOR USE WITH ITEMS - 1, 2
5	M12 X 45mm BOLT	4	FOR USE WITH ITEMS - 3
6	M12 X & 75mm BOLT	4	FOR USE WITH ITEMS - 3
7	M12 SPRING LOCK WASHER	24	FOR USE WITH ITEMS - 4, 5, 6
8	M10 X 75mm BUTTON HEAD BOLT	8	FOR USE WITH ITEMS - 19
9	M10 LOGO NUT	8	FOR USE WITH ITEMS - 8
10	M12 NYLON LOCK NUT	4	FOR USE WITH ITEMS - 6
11	M12 NYLON FLAT WASHER	4	FOR USE WITH ITEMS - 6
12	LARGE NYLON FLAT WASHER (OD = 70mm)	4	FOR USE WITH ITEMS - 3
13	CURVED RUBBER WASHER (OD = 70mm)	4	FOR USE WITH ITEMS - 3
14	LARGE ALUMINUM FLAT WASHER (OD = 70mm)	4	FOR USE WITH ITEMS - 3
15	M12 ALLEN KEY	1	
16	M8 ALLEN KEY	1	
17	M6 ALLEN KEY	1	
18	THREADLOCKER	1	
19	TOP SECTION TUBE	1	
20	LOWER SIDE RAILS	2	
21	FRONT LEGS	2	1 PORT & 1 STARBOARD
22	REAR LEGS	2	1 PORT & 1 STARBOARD

**PARTS LIST** 







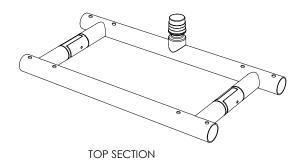


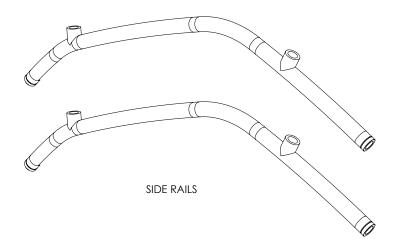
PORT FRONT LEG

STARBOARD FRONT LEG

PORT REAR LEG

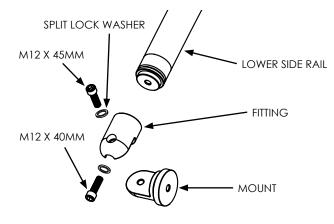
STARBOARD REAR LEG







## **STEP 1**



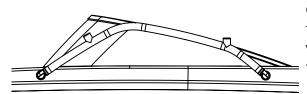
Assemble the side rails to the deck mounts. Note: these should only be loosely tightened at this stage as they will require further adjustment in the following stages of assembly.

## STEP 2



Tape off all the areas that may potentially come into contact with the side rails.

## STEP 3



Once the feet are connected to the side rails, hold the side rail up to your boat. Once the rail is aligned with your windshield use a small piece of tape to mark the position of the mounting feet.



## **STEP 4**



Once the desired position is achieved, place one of the large nylon whasers over the piece of tape and trace around it with a permanent marker.

## STEP 5



#### Transferring marks from the other side.

This step is very important! After taping the second side of the boat in approximately the same areas as the first side you will need to measure the distance that you marked on the first side of the boat

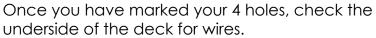


It is best to take measurements from the back of the boat and mark with blue tape. Be sure to measure from the same point on both sides.



## **STEP 6**

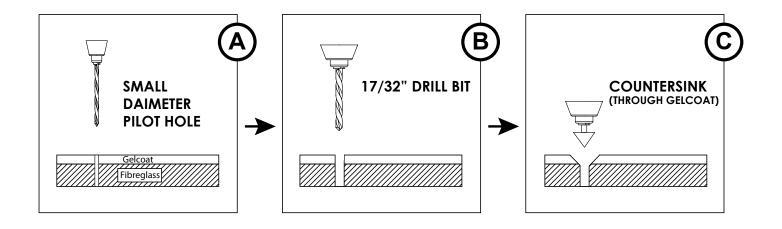
### Drilling







If necessary, you should move the wires out of the way while you drill. We recommend drilling a small pilot hole which will keep the 17/32" drill bit from walking (moving). A small rat tail file can be used to ease the edge and keep the gel coat from chipping. Be careful of wires!

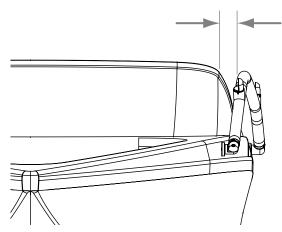




**STEP 7** Install the tower mounts to the boat deck in the order shown in the diagram. Note: in the case where the deck of your boat is less than 1/4" thick, a reinforcing kit is required to thicken and reinforce the deck in the mounting locations.

#### **CURVED DECK - MOUNT ASSEMBLY** FLAT DECK - MOUNT ASSEMBLY M12 X 75MM M12 X 75MM **BLACK NYLON WASHER** BLACK NYLON WASHER MOUNT MOUNT NYLON WASHER NYLON WASHER CURVED RUBBER WASHER FLAT DECK CURVED DECK REINFORCEMENT REINFORCEMENT RUBBER WASHER RUBBER WASHER ALUMINUM BACKING PLATE ALUMINUM BACKING PLATE SPLIT LOCK WASHER 0 SPLIT LOCK WASHER 9 NYLON LOCK NUT NYLON LOCK NUT 9

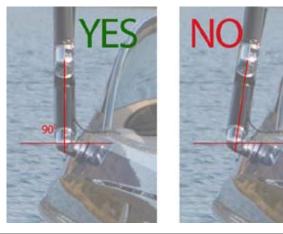
## STEP 8



Measuring from your windshield, check the distance to the side rail to make sure both sides are symmetric.



## **STEP 8 - CONTINUED...**



The side rails need to be mounted straight up and down. If they are leaning in or out, this will cause a problem with the tower when you want to fold it.

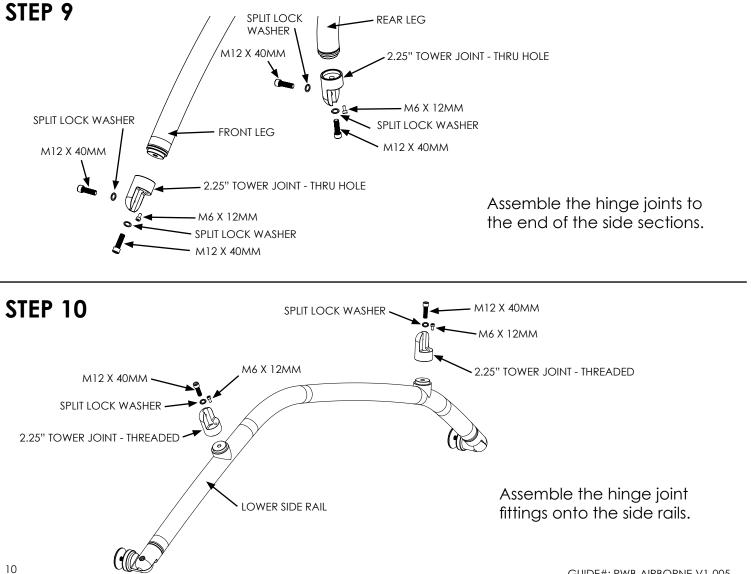
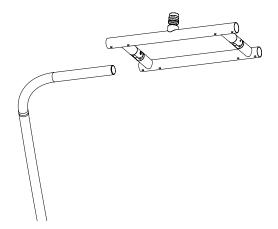


IMAGE SHOWS THE SIDE SECTION BEING



## STEP 11



Make sure that there are no burrs on the inside of the top section tubes.

Someone will need to hold the top section for you as you insert the front arms into the top section and connect the hinge fittings into the side rails.

#### \*\*\* IMPORTANT NOTES \*\*\*

- Lubricate telescopic parts with a light grease before sliding together.

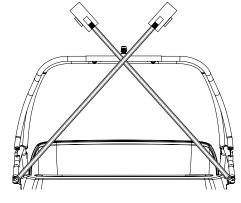
- Grease will not prevent the smaller diameter tube from being scratched by the top section tube during insertion so be very careful not insert the side section tube any further than the final installation width.

Do the same for the rear arms. It is important to try to keep the top section centered on the boat during this

Note: the top section can be rotated up or down to be parallel with the boat.

BE CAREFUL! We CANNOT be liable for any burring or scratching that may occur when sliding the tube in and out of the top sections.

## **STEP 12**



#### Drilling the top section.

The X measurement is a great way to make sure that your tow point is in the center of your boat. To do this, measure from the tow point to your rear foot, then to your other foot. Cover your boat with an old sheet or old cover to make removing the metal shavings easy. Someone should hold the top section while you drill.





## STEP 12 - CONTINUED...

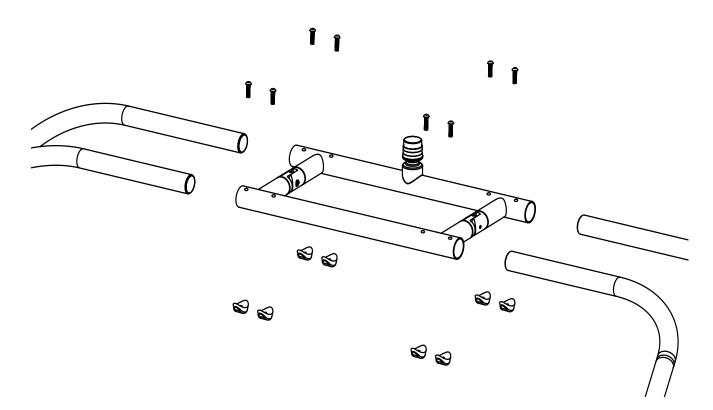


Use a smaller bit to make a pilot hole, then use your 27/64" bit.

## STEP 13

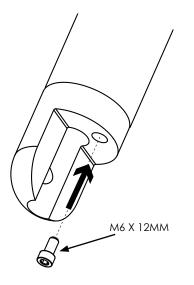
After each hole is drilled, insert the 4 bolts into the top section to keep it from moving.

Once all bolts are in place, install the M10 Logo Nuts to the underside of the top section and tighten the bolts with an Allen key.





## **STEP 14 - LOCKING THE ROTATING FITTINGS**



Once you are happy with your tower installation and all of the fittings are lined up to allow the tower to fold and function correctly it will then be important to firmly lock the rotating fittings in place to prevent any unwanted rotation or loosening. To do this the M12 x 40mm bolts that run through the center of the fittings will need to be firmly tightened. Next, the pre-instaleId M6 x 10mm fasteners found in the fittings will then need to be firmly tightened with an Allen key. We recommend using threadlocker during this step.

## **STEP 15**



#### Lowering the Tower.

Loosen the rear tower hinges about 1/4 turn. The front tower hinges need to be disconnected with the help of an Allen key to allow the tower to fold back.

Once the tower is folded back, remove the 2 Allen bolts from the top section hinge which will allow the arms to fold down for storage.



It is designed to be installed on the top of the tow point.

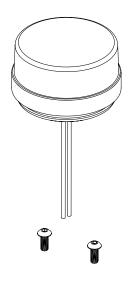
tower or the accessories that they will mount to the tower.

For a clean wiring installation the wires supplied can be passed through the center of the tow point, along the inside of the top section and down inside the leg tube. The wires will need to exit the leg tube just above the fittings and then be passed over the fittings before entering back into the side rail tube. Finally the wires will exit the side rail tube just above the mounting foot and then enter the deck of the boat (through a hole that will need to be drilled) so that they can be connected to a switch and power source.

Note: The tower is not supplied with pre-drilled wiring holes as each customer may have a different wiring requirement depending on how they fold their

The navigation light is shipped separately.

## **INSTALLING THE NAVIGATION LIGHT**



NAVIGATION LIGHT (SHIPPED SEPARATELY)

