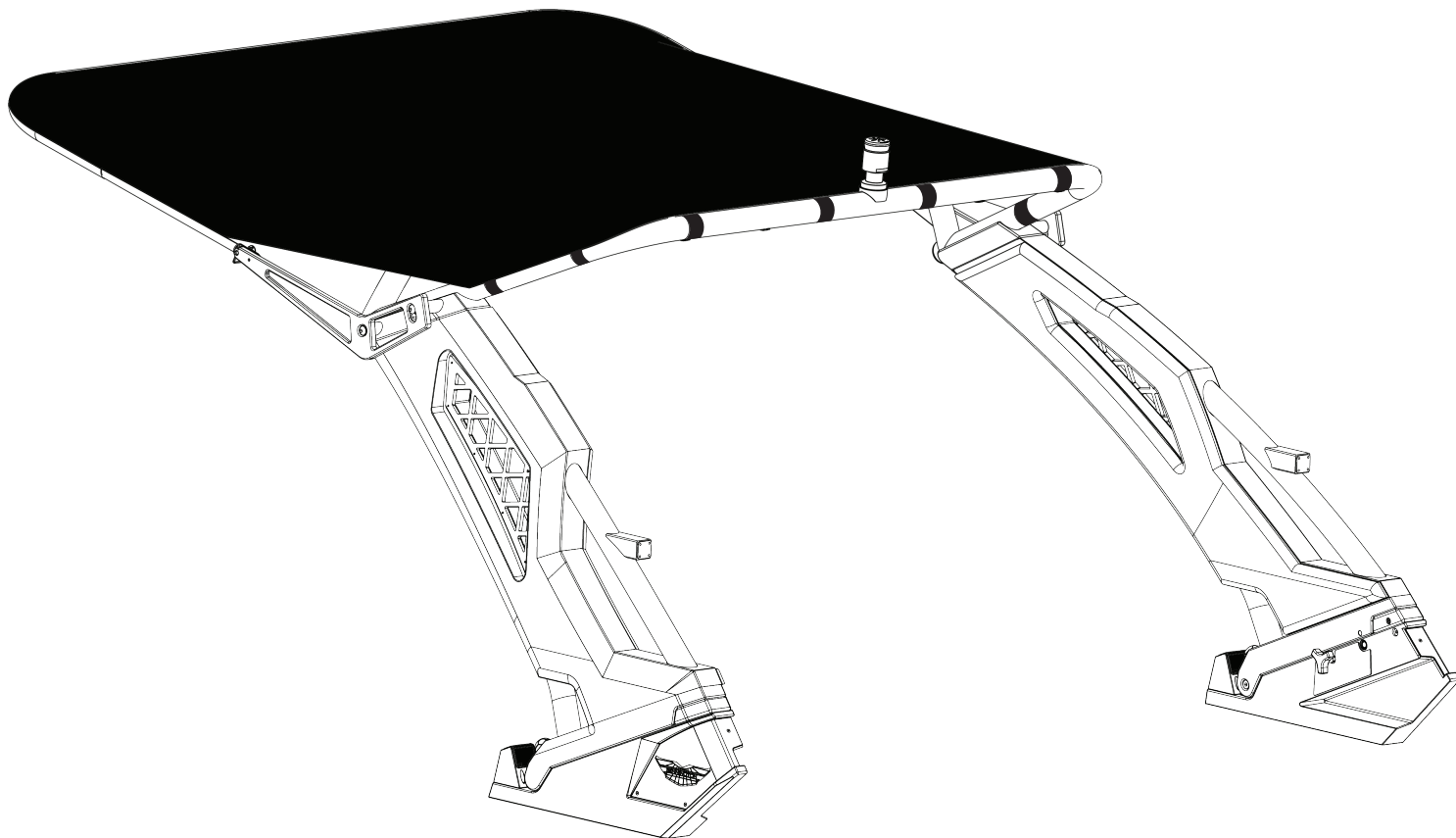


BENNINGTON

**Tower &
Accessories**
Care / Maintenance / Operation



Tower Part # C924-016650 or C924-017739
Bimini Part # C924-016652
Board Rack #C924-017091

Information: info@roswellmarine.com
If you have any questions please call : 1-321-638-1331



GENERAL TOWER CARE & MAINTENANCE

This product is to be used for the sole purpose of wakeboarding, wakesurfing, hydrofoiling, and kneeboarding (rope handle sports). Do not attach devices like inflatable tubes.

The tower is intended to tow a maximum of two wake boarders at one time and no more than 400lbs (181kg) collectively.

Check all tower hardware before every use on the water. We recommend keeping a set of Allen wrenches on your boat for this purpose. Verify that all bolts, screws, and nuts are tight. Even with threadlocker they may loosen over time.

Never attach a tow rope to anything other than the tow head.

Do not use the board racks as entry/exit handles to get in and out of the boat – they are not designed for this purpose.

Never hang from the tower. Do not climb or sit on the tower.

Be aware of the tow rope at all times. Ensure that it is not attached to anything on the tower other than the tow head, and that the rope is clear of any cleats or objects on the boat before pulling the rider up and out of the water.

Never travel at speeds in excess of 40mph / 64kmh (i.e. towing the boat on a trailer) or through extremely rough water with wakeboards, wakesurfers, skis, etc. in the racks.

Never travel at speeds in excess of 40mph / 64kph (i.e. towing the boat on a trailer) or through extremely rough water with the Bimini in it's deployed state. ONLY travel with the bimini in it's folded state secured to the tower.

Be cautious when driving your boat on the water or on a trailer if you have board racks. They may decrease your clearance into a garage or slip. Swivel your racks inboard when moving the boat.

Check the clearance between your tower and any overhead obstacles including bridges, canals etc.

NEVER USE CLEANERS ON YOUR TOWER OR ACCESSORIES!

The Bennington Tower has been treated with an automotive paint coating that forms a protective layer. A mild soap and water combination may be used to remove traveling grime or water spots. Clean with each use. Use only a soft cloth and never use any chemical cleaners. Treat as you would your vehicle. Wax to protect finish.

Happy Boating

Folding Your Tower

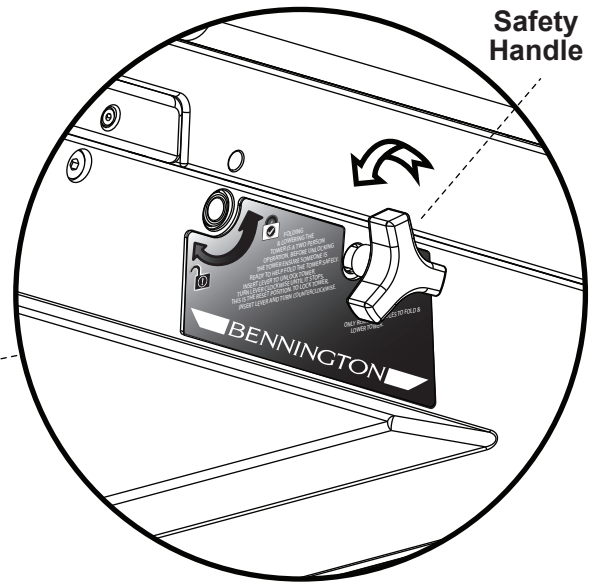
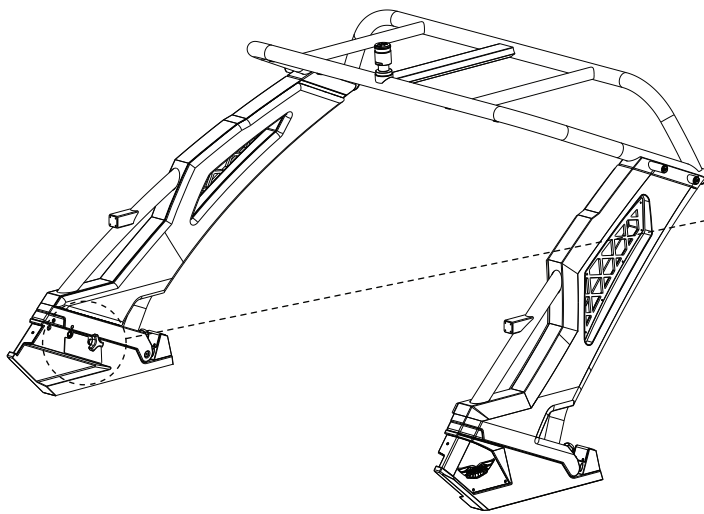
A

BEFORE ATTEMPTING TO FOLD YOUR TOWER :

- Ensure two people are present. This is a two person operation.
- Ensure all boards have been removed from racks.
- Ensure swivels are locked into either the inside or outside positions.
- Ensure your bimini is folded against the tower and secured.
- Ensure no body parts are near the folding area of the tower.
- Ensure that no one is sitting in the way of the folded tower.

B

Remove your 2 safety handles

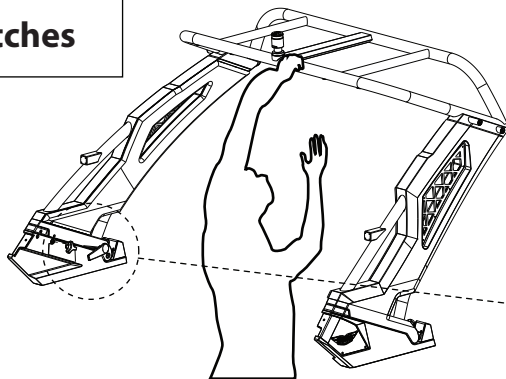


Safety Handle

Unscrew the safety handles from each side of the tower. Store them some place safe until you fold your tower back up.

C

Unlocking the latches



PORT Side Unlocking:

Insert and turn lever **CLOCKWISE** until it stops. This is the reset position.

PORT Side Locking:

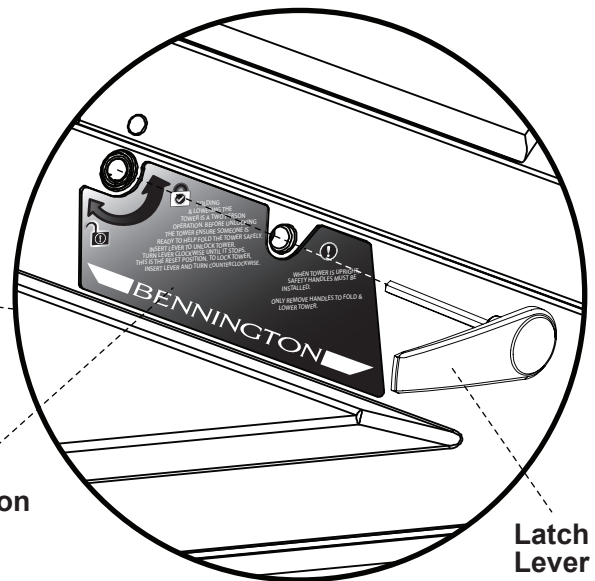
Insert and turn lever **COUNTERCLOCKWISE**.

STARBOARD Side Unlocking:

Insert and turn lever **COUNTERCLOCKWISE** until it stops. This is the reset position.

STARBOARD Side Locking:

Insert and turn lever **CLOCKWISE**.



Instruction Decal

Latch Lever

Insert the Latch lever into the hole illustrated and follow the instructions indicated on the decal. The decal instructions are different on each side. Prior to unlocking the second latch ensure your helper is ready to support and slowly lower the weight of the tower.

Folding Your Tower

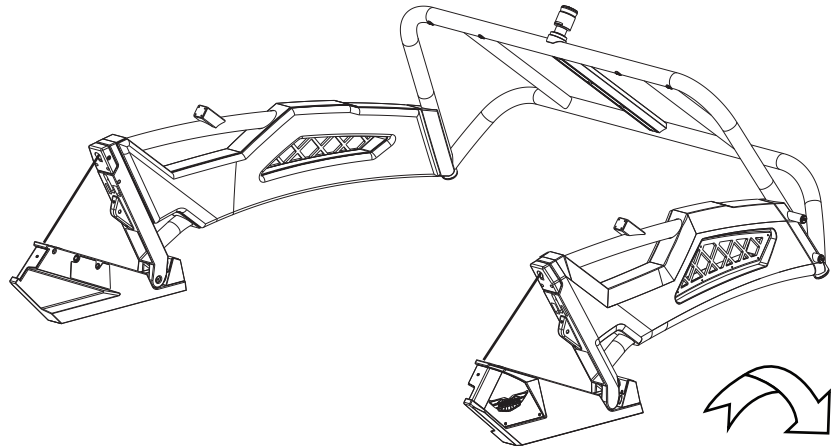
D

Fold the tower down

With both latches released, slowly lower the tower until it rests at the stop position.

This folded position is intended for low speed boat operation such as

- Parking boat in garage
- Boating under a bridge
- Parking Boat in Slip

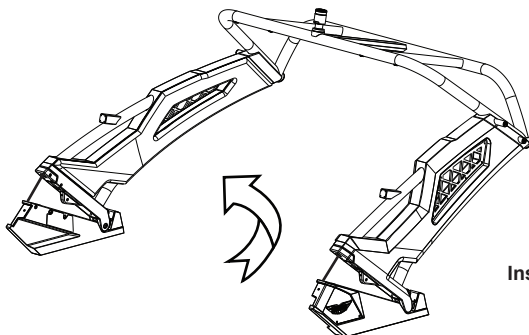


DO NOT TRAILER YOUR TOWER IN THE FOLDED POSITION

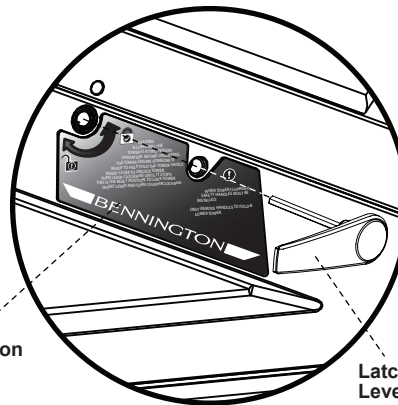
E

Raise the tower up

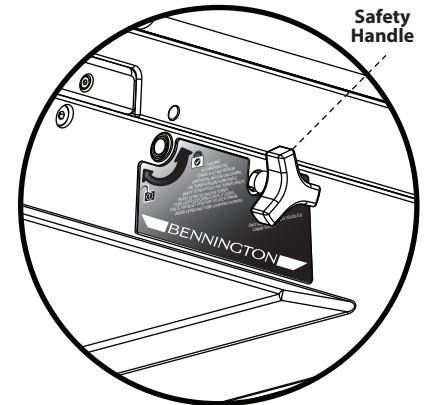
To raise the tower up repeat steps B, C, D & E in reverse.



1



2



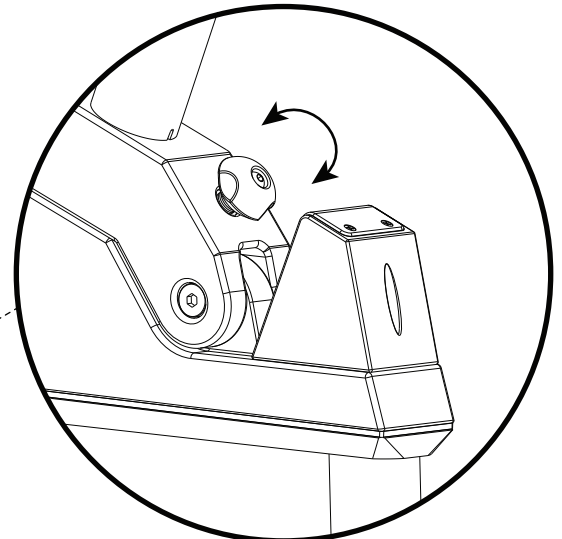
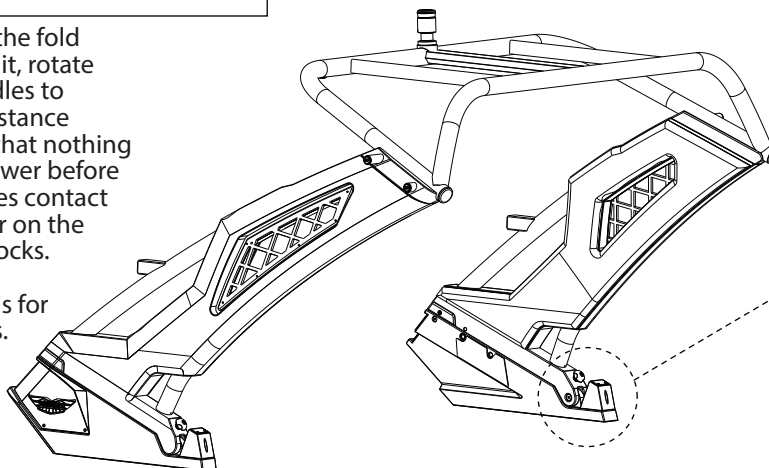
3

F

Adjust the fold limit

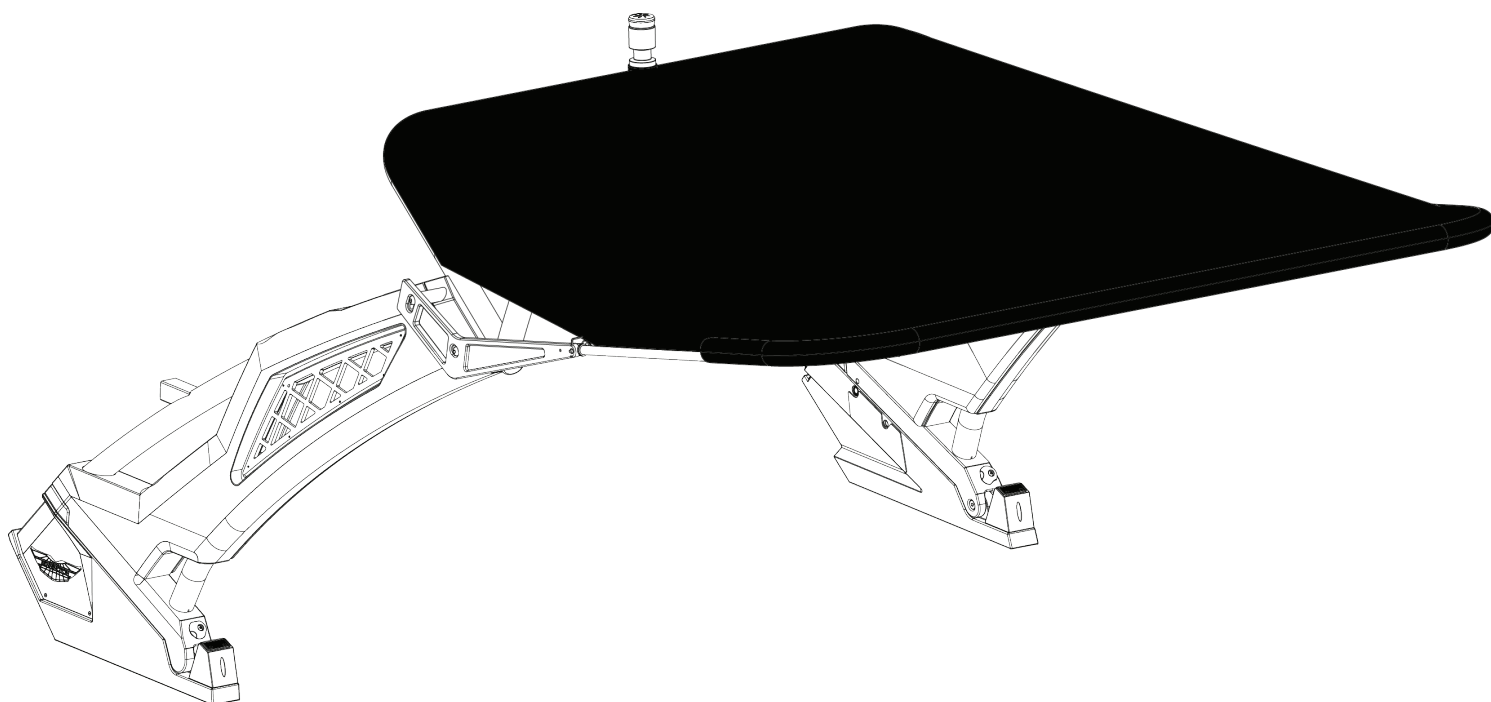
To adjust the fold height limit, rotate both handles to desired distance ensuring that nothing hits the tower before the handles contact the rubber on the folding blocks.

Repeat this for both sides.



Important

Read & follow these instructions carefully. Failure to do so may result in damage to parts.
Damage to parts from improper use is not covered under warranty.



GENERAL BIMINI CARE & MAINTENANCE

Check all bimini hardware before every use on the water. We recommend keeping a set of Allen wrenches on your boat for this purpose. Verify that all bolts are tight. Even with threadlocker they may loosen over time.

Watch your head when walking under the tower & bimini.

NEVER USE CLEANERS ON YOUR BIMINI FRAME!

The Bennington Tower Bimini is designed with materials and finishes that resist the elements. A mild soap and water combination may be used to remove traveling grime or water spots on the metal components. Use only a soft cloth and never use any chemical cleaners. Clean after each use.

For more info on how to clean and care for your Sunbrella Fabric please go to :
http://www.sunbrella.com/en_us/how/cleaning/marine-tops-covers.php

Information: info@roswellmarine.com

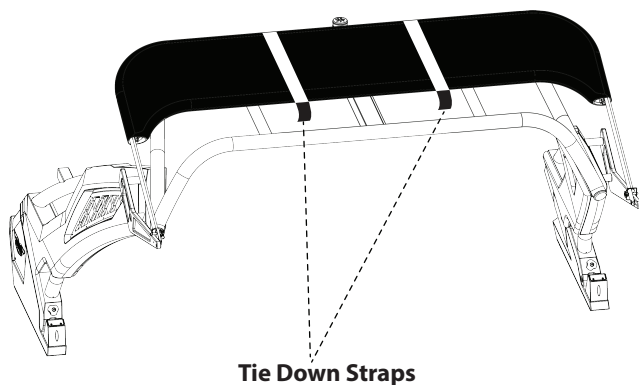
If you have any questions please call : 1-321-638-1331



Unfolding Your Tower Bimini

G

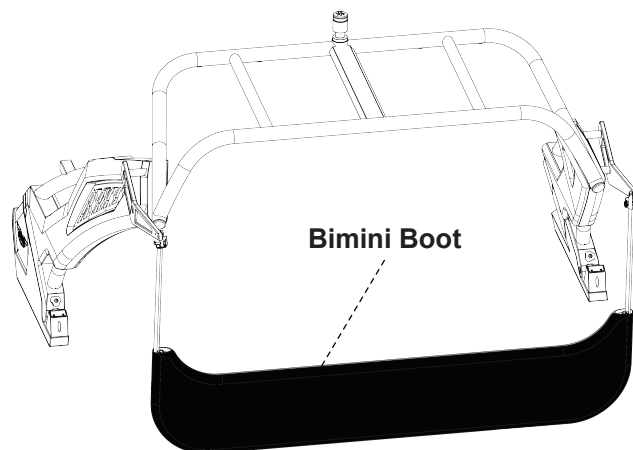
Undo the 2 straps that secure the bimini to your tower.



Tie Down Straps

H

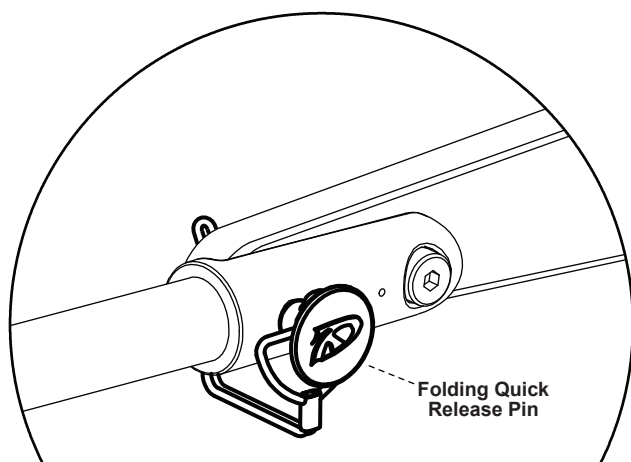
Unfold the frame from the tower. Unzip the bimini boot from the bimini frame. Unroll your fabric and middle bow.



Bimini Boot

I

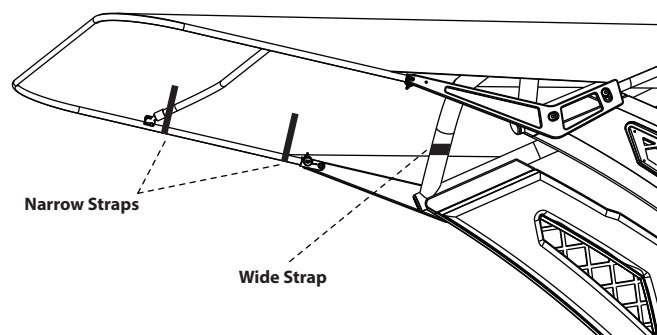
Rotate the frame upwards and insert the quick release pins into the bimini arms.



Folding Quick Release Pin

J

Buckle the two narrow straps around the front bow and tighten. Then loop the wide strap around the tower front pipe. Repeat this for both sides.

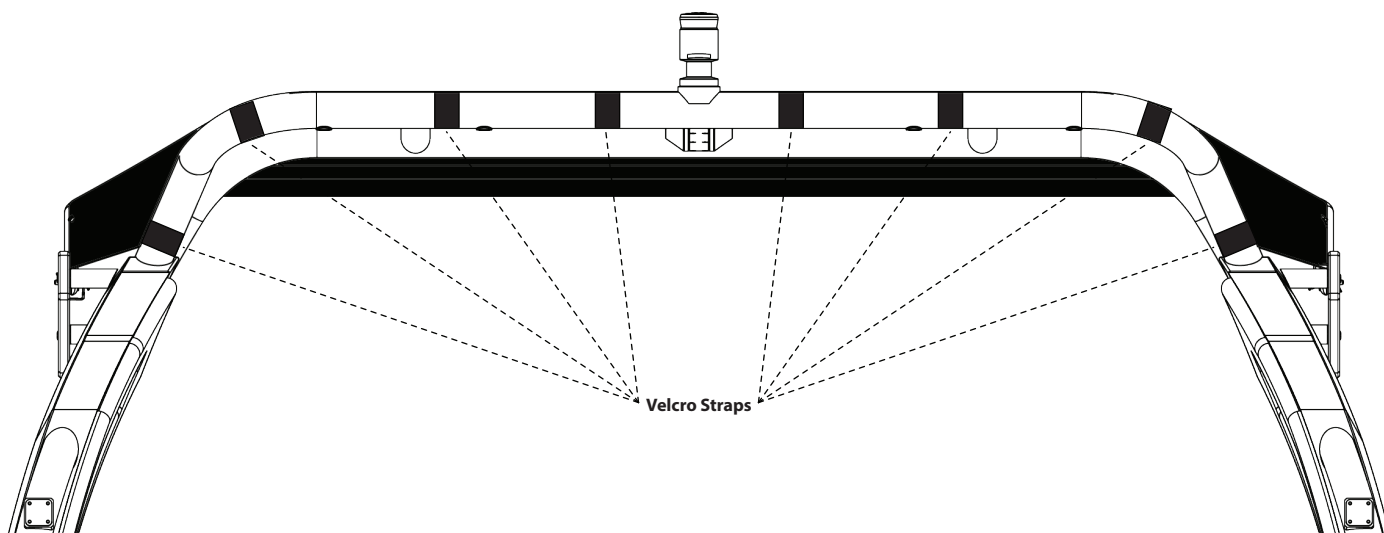


Narrow Straps

Wide Strap

K

Loop the 6 bimini velcro straps around the frame and secure bimini tightly to tower.

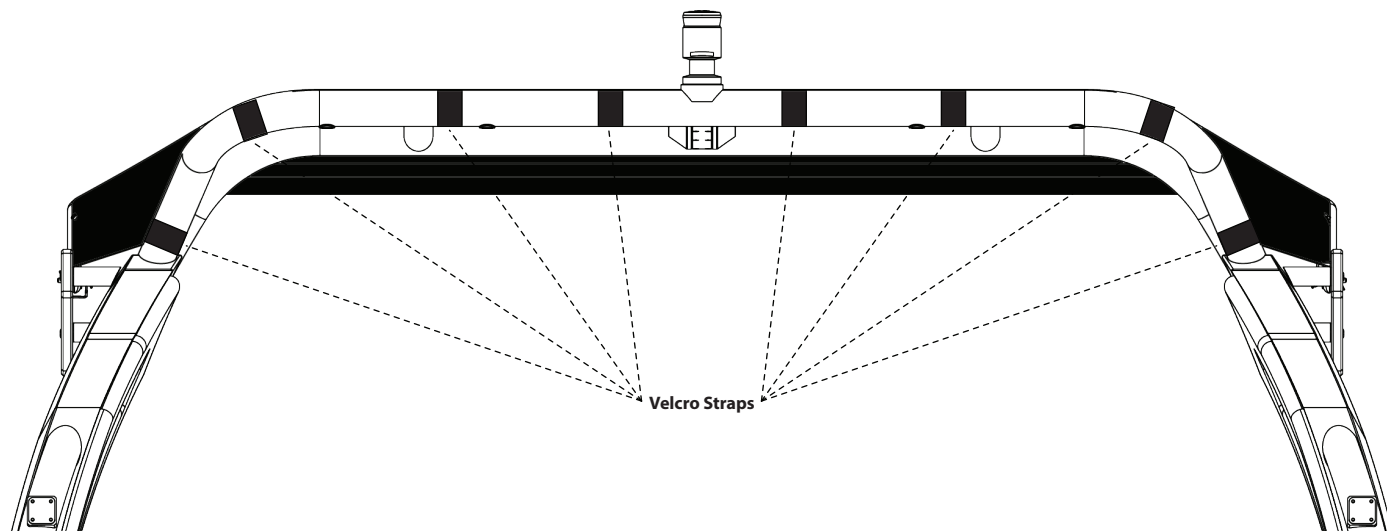


Velcro Straps

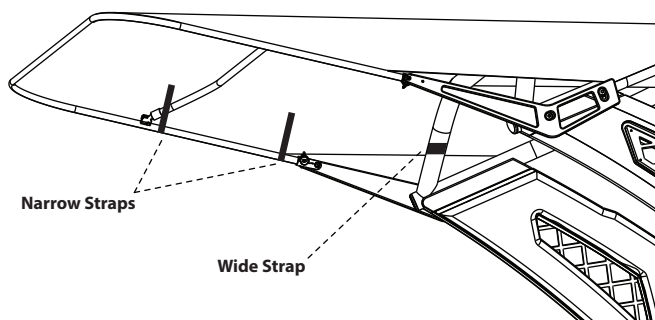
Folding Your Tower Bimini

L

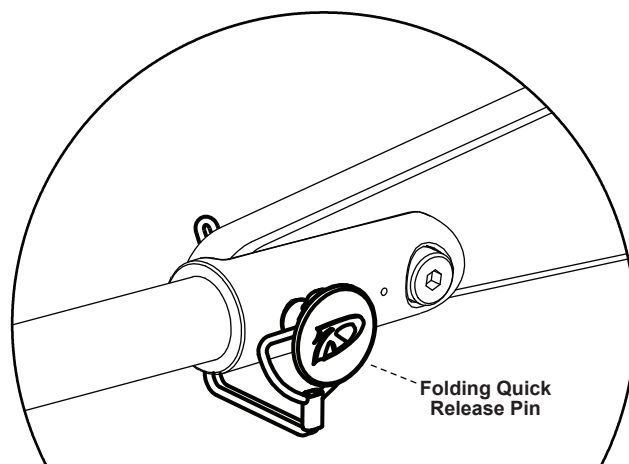
Detach the 6 bimini velcro straps around the frame and roll your bimini fabric towards the front bow.

**M**

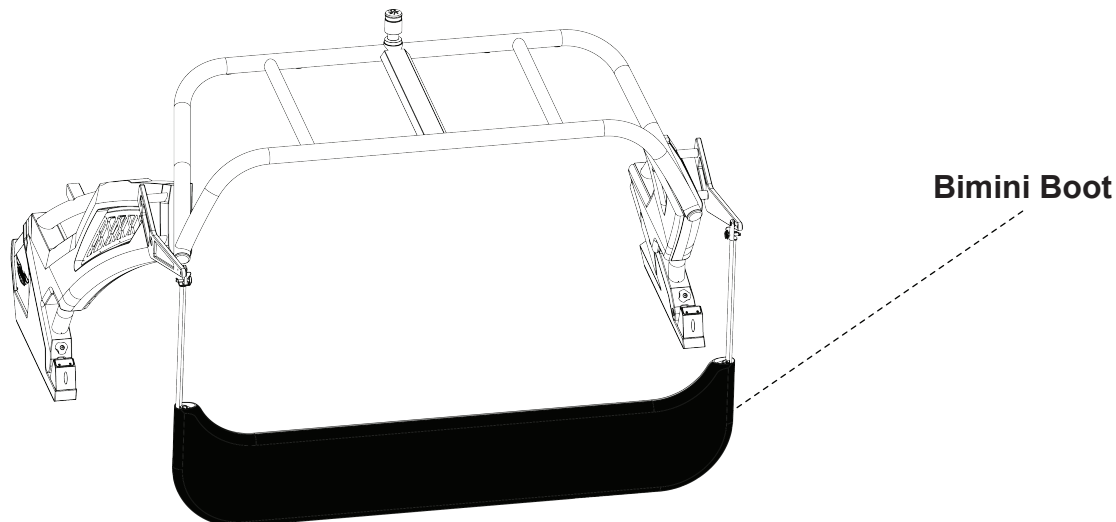
Detach the wide strap around the tower front pipe. Then unbuckle the two narrow straps around the front bow. Repeat this for both sides.

**N**

Remove your 2 folding quick release pins and lower the frame.

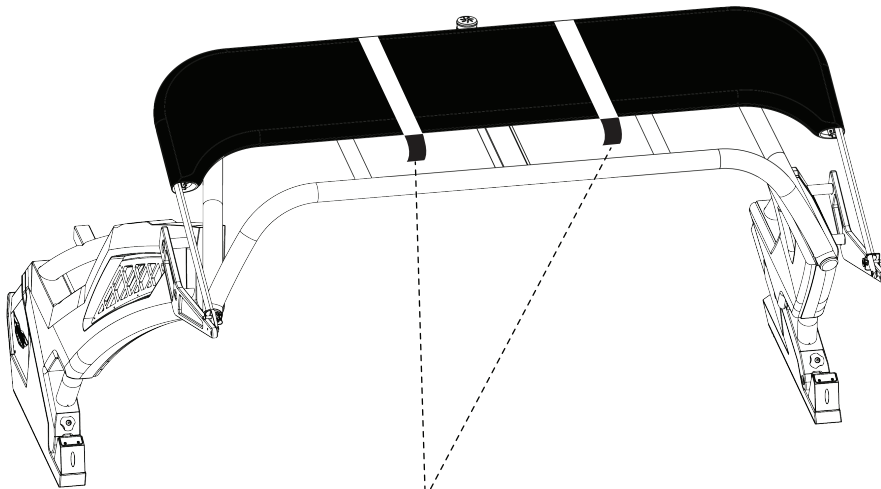
**O**

Fold the middle bow toward the front bow and wrap the fabric and straps around both bows. Zip the bimini boot over the bows and fabric.

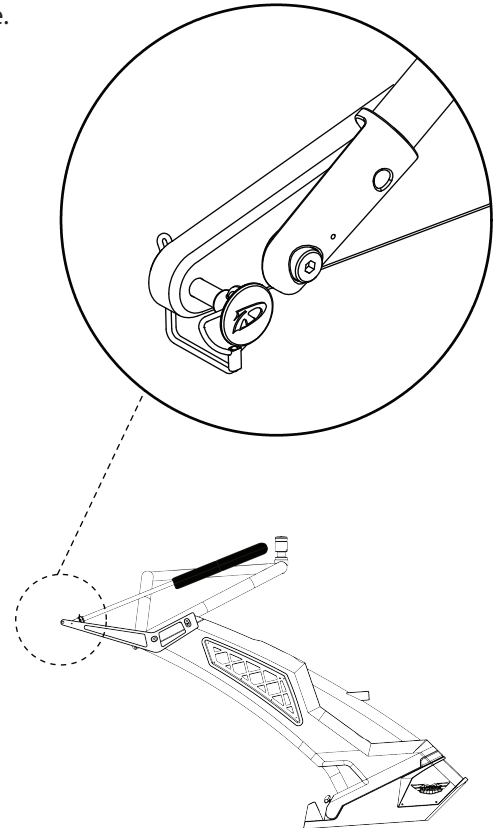


Trailing Your Tower Bimini

- P** Fold the bimini up towards the tower until it rests on top of the tower. Use the tie down straps and secure bimini to tower. Make sure Nav light is still visible.



Tie Down Straps



***** Illustrated is the ONLY acceptable way to safely fold your tower or trailer your tower with the bimini on*****

Q

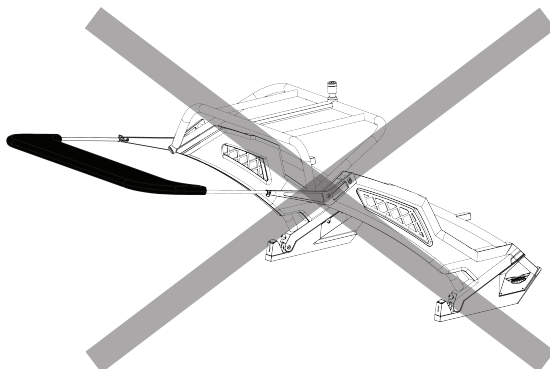
! ATTENTION !

DO NOT TRAILER YOUR BOAT WITH THE BIMINI IN ITS OUTSTRETCHED POSITION

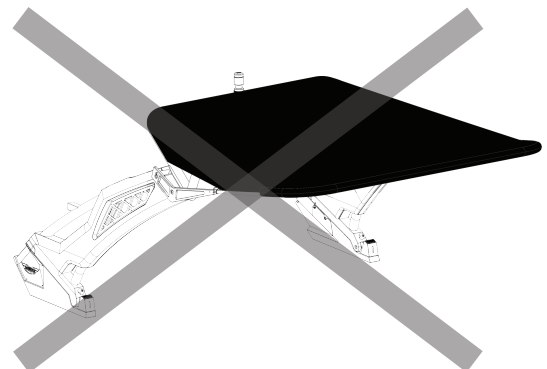
DO NOT FOLD YOUR TOWER WITH THE BIMINI IN ITS OUTSTRETCHED POSITION

DO NOT USE YOUR BIMINI IN ITS OUTSTRETCHED POSITION IN ANY HIGH WIND CIRCUMSTANCES

WHEN BOATING WITH BIMINI BOOTED, BIMINI MUST BE STRAPPED DOWN FLAT. ENSURE NAVIGATIONAL LIGHT IS VISIBLE FROM ALL ANGLES AROUND THE BOAT



DO NOT FOLD THE TOWER OR TRAILER BOAT WITH BIMINI IN THIS POSITION



DO NOT FOLD THE TOWER OR TRAILER BOAT WITH BIMINI IN THIS POSITION

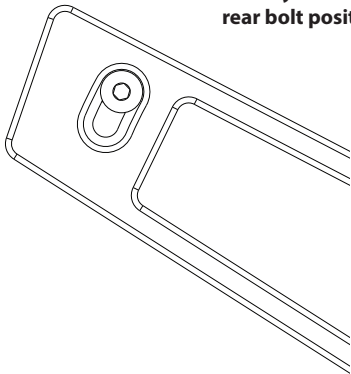
Tightening Your Tower Bimini

R

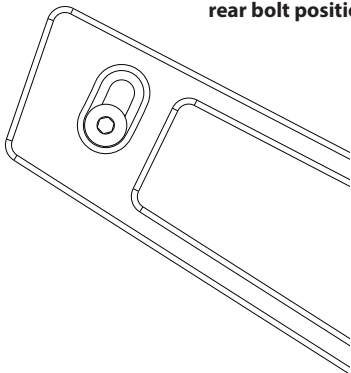
**It is normal that your bimini canvas will stretch over time and use. Your tower bimini has been designed to allow you to tighten your canvas as needed.
This method is best executed with 2 people**

Remove the rear bimini arm bolts on port and starboard sides. Do not remove the front bimini arm bolts. Once both rear bolts are removed, re-apply thread locker to each bolt and re-thread them loosely back into the tower. Have a friend lightly pull down on the bimini arms one side at a time. With the arm being pulled down, re-tighten the rear bimini arm bolt. Repeat on the other side.

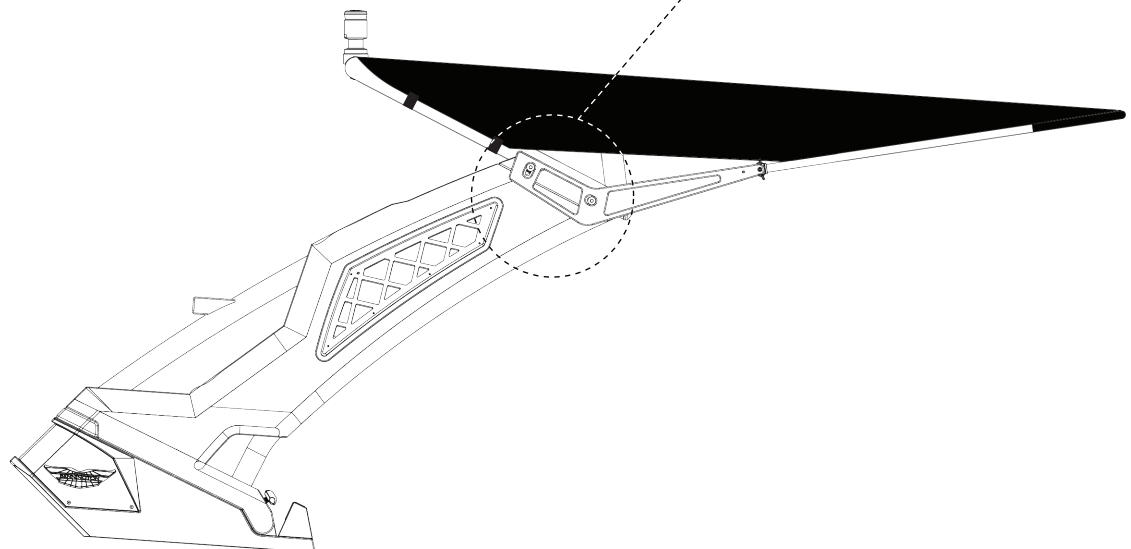
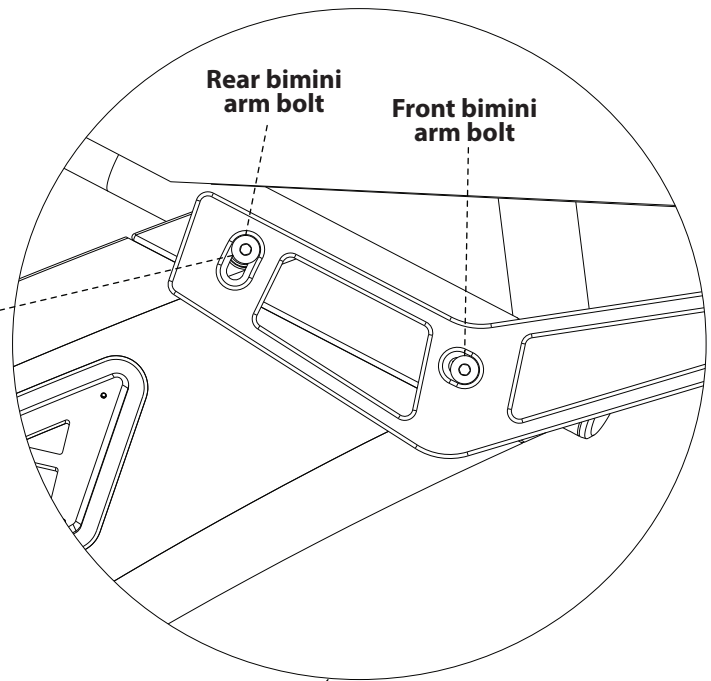
**Factory installed
rear bolt position**



**Tighter canvas
rear bolt position**



**Remove
this bolt**



5/16"

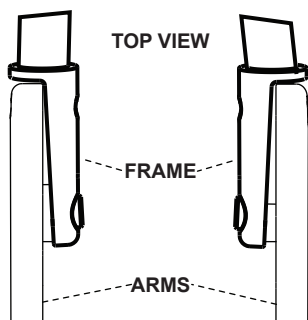


Tips & Tricks for Your Tower Bimini

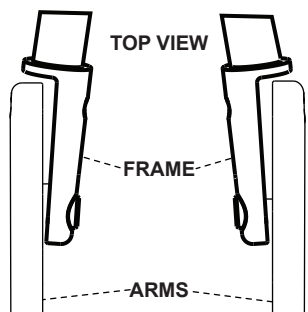
S

It is normal that there is potentially a slight variation from one tower bimini to another. Listed below are some tips and tricks to ensure that your bimini is installed and functioning properly. This process is not mandatory for all biminis.

1 : It is possible that once your bimini is installed your frame and arms are not parallel where they pivot. This could make inserting and removing your quick release pins difficult. If you are not experiencing any issues, skip this page.

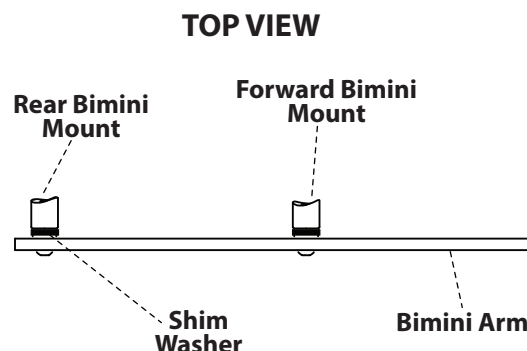


If your bimini looks like this, in Step 2 you will need to add shim washers between the forward bimini mounts and your bimini arms

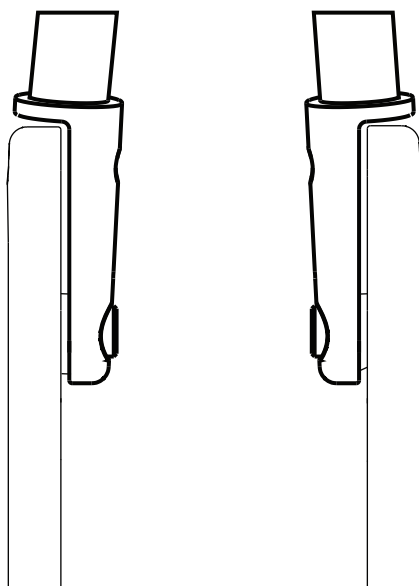


If your bimini looks like this, in Step 2 you will need to add shim washers between the rear bimini mounts and your bimini arms

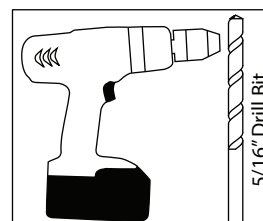
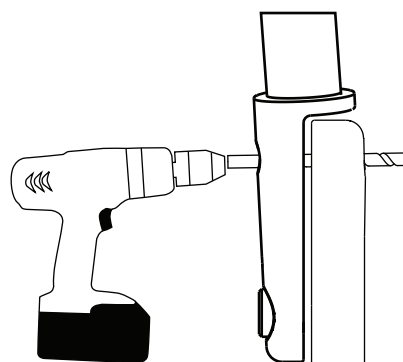
2 : Choose one side of your tower to work on first. Determine which bimini mount the shim washers will need to be added to. Completely remove the bolt that secures the bimini arm to your chosen bimini mount. Loosen the other bimini arm bolt. Add the shim washer(s) in between the chosen bimini mount and bimini arm. (In some cases 2 washers may be required under each arm) Re-insert the bolt with loctite applied. Remove the loosened bolt, apply Loctite and re-insert. Tighten down the front and rear bimini arm bolts in the same position they were in prior to loosening them. Repeat on the other side of your tower.



3 : Now that your shim washers have been added your frame and arms should be parallel or much closer. Test removing and inserting your quick release pins. If it is still difficult to remove or insert the pins proceed to the next step.



4 : If your quick release pins are still difficult to remove and insert with the addition of the arm shim washers, Roswell recommends using a drill with a 5/16" drill bit to clean out the holes. Drill through the frame and bimini arms at the same time. This will help with the alignment and ensure an accurately aligned hole.

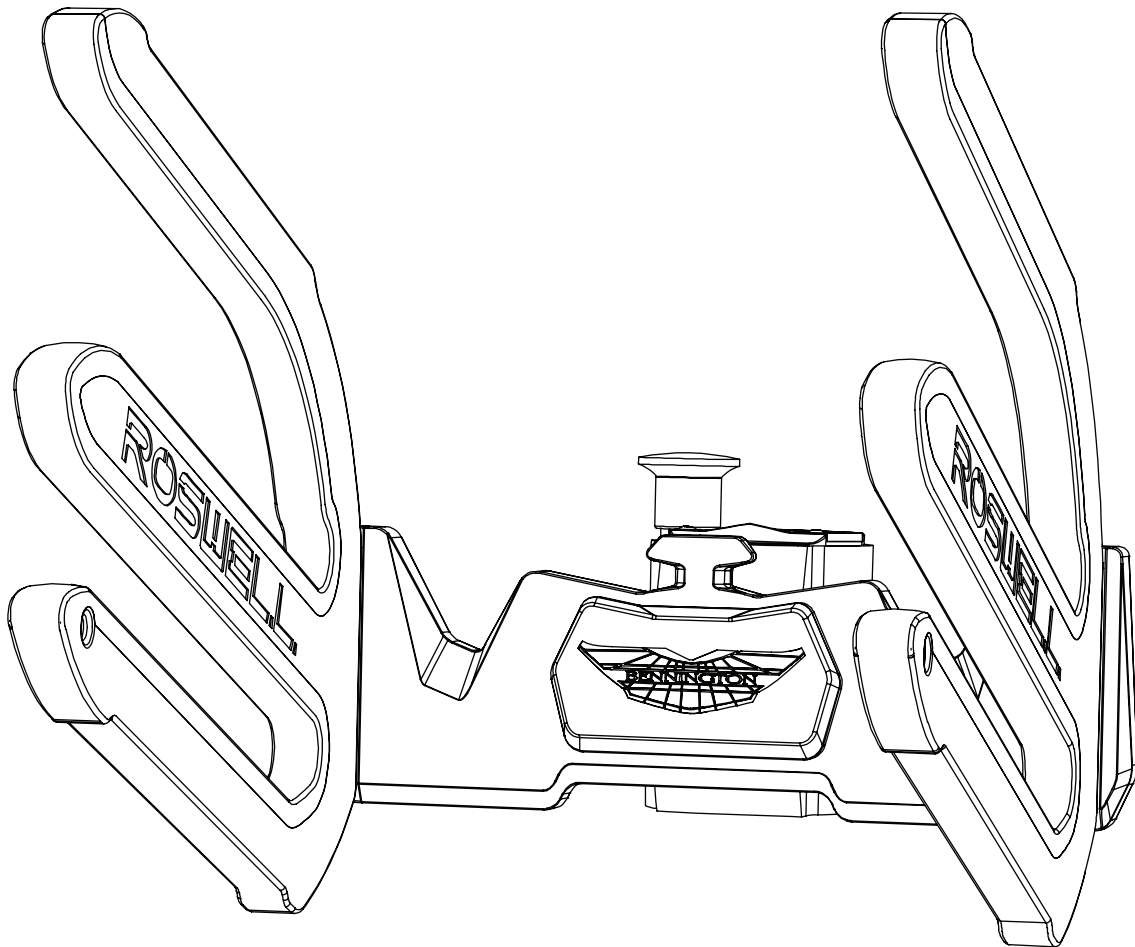


ROSWELL.

www.roswellmarine.com

BENNINGTON

Board Rack Assembly Installation & Usage



Part #C924-017091

Information: info@roswellmarine.com

If you have any questions please call : 1-321-638-1331

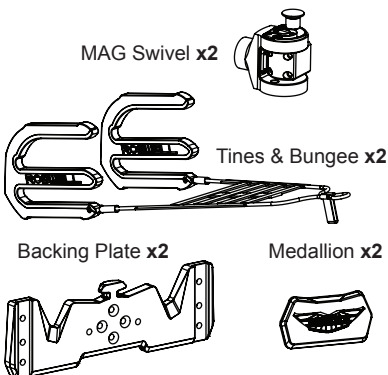
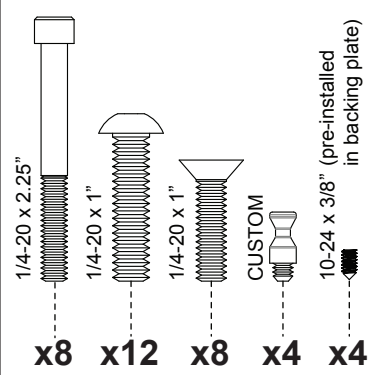
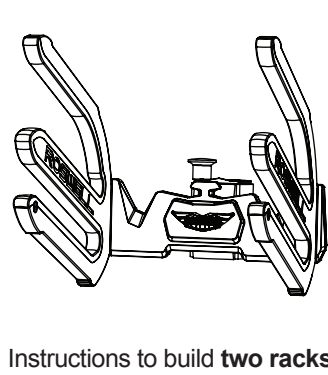


! ATTENTION !

Roswell strongly recommends that a routine inspection of hardware and components be done to ensure proper function and safety and to maximize product life. If bolts are found to be loose, discontinue use until threadlocker is re-applied and bolts are re-tightened.

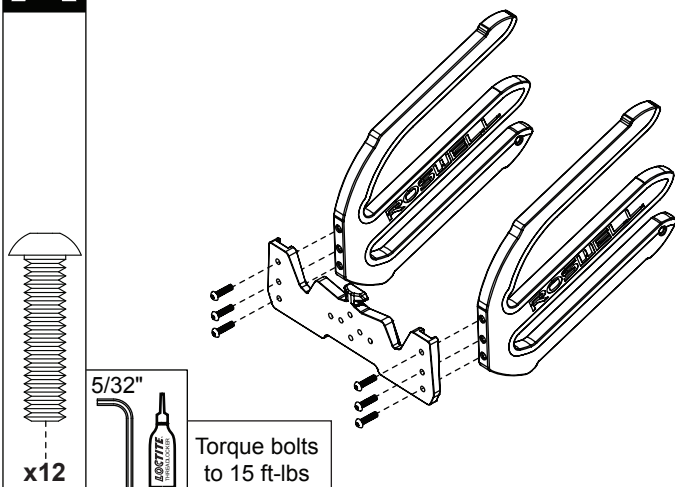
! ATTENTION !

- Always ensure your boards are securely **fastened** in place by the rack. Give the board a quick tug to check it is secure before setting off.
- Always ensure your swivel is properly **locked** before moving your boat. Give the rack a tug and visually check locking pin to make sure it is secure after you have put the swivel in a new position.
- Never insert boards that are beyond the stated maximums and minimums for the rack:
- Always swivel your racks inboard when docking and/or trailering your boat.
- Never trailer your boat with boards in the racks. Racks are for on water use only.
- Check all bolts on the rack and swivel for tightness before using your boat. If any bolts are found to be loose remove them, apply red threadlocker and re-tighten the bolts.
- The driver should check their lines of sight before operating the boat being sure nothing in the rack blocks their safe view and operation of the boat.
- Be aware of your rope making sure it does not get wrapped around the board rack, the boards, or any other objects.

Parts	Hardware	Tools Required	
 MAG Swivel x2 Tines & Bungee x2 Backing Plate x2 Medallion x2	 1/4-20 x 2.25" x8 1/4-20 x 1" x12 1/4-20 x 1" x8 CUSTOM x4 10-24 x 3/8" (pre-installed in backing plate) x4	 LOCTITE RED THREADLOCKER 3/32" Allen Key 5/32" Allen Key 3/16" Allen Key	 Instructions to build two racks

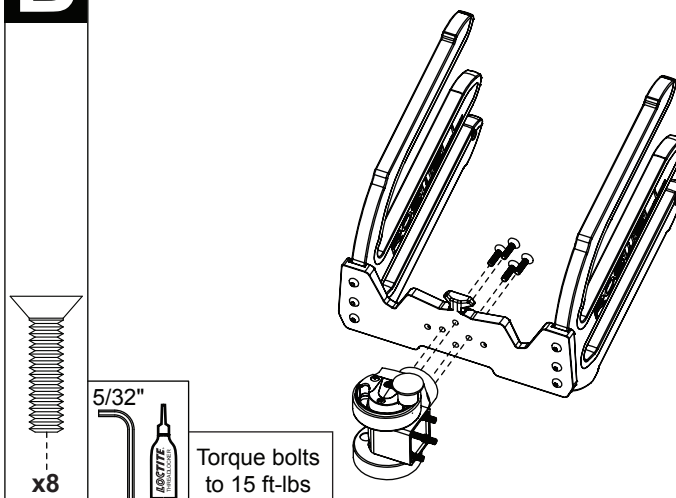
A

Apply RED threadlocker to 6 button head bolts, mount the backing plate to a set of tines. Make sure the tines are properly seated in the backing plate grooves.



B

Apply RED threadlocker to 4 flat head bolts and assemble the swivel to the board rack backing plate with the spacer in between.



C

1) Apply red threadlocker to 2 custom bolts and fasten to the back of the medallion. 2) Insert the medallion into the backing plate, 3) Fasten the medallion in place by inserting 2 set screws under the backing plate. **Do not use thread lock on the set screws.**

x4

3/32"

Hand tighten bolts

2)

3) Do not thread lock these set screws

1: Mounting to a standard Tower

-Proceed Below

or

2: Mounting to a Roswell Tower

-Proceed to step K

1: Mounting to a standard Tower

PACKAGE CONTENTS

Clamp Box Contents							Swivel Adapter box contents			
x1	x2		x1	x1	x2	x1	x1	x1	x3	x1

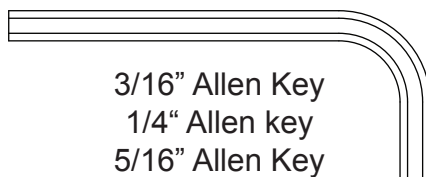
TOOLS NEEDED

Torque Wrench with
3/16" Allen Bit
1/4" Allen Bit
5/16" Allen Bit



OR

3/16" Allen Key
1/4" Allen key
5/16" Allen Key

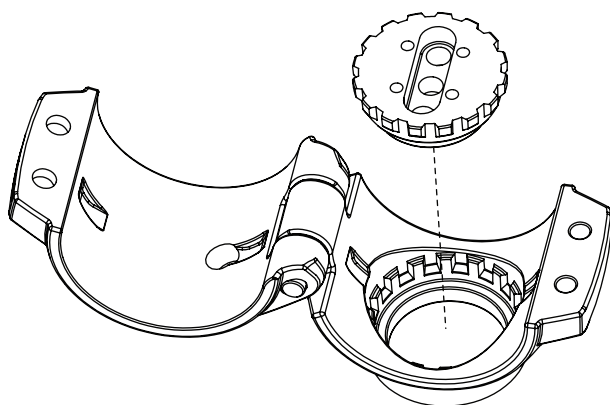


LOCTITE
THREADLOCKER

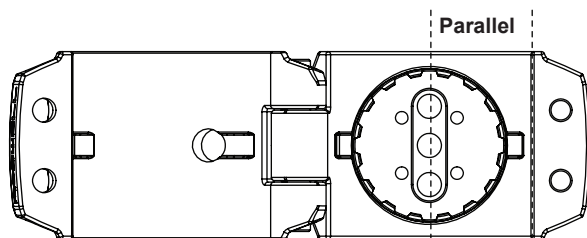
RED



D



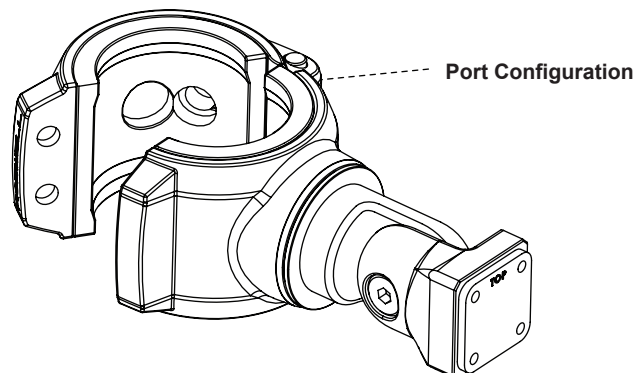
1: Insert the angle adjustment piece into the clamp base in the orientation shown.



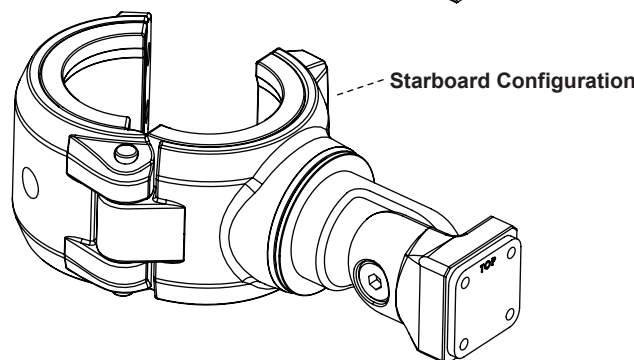
2: Once located, this is how your clamp should look. Ensure the holes are running parallel to the edge indicated.

E

Before proceeding to step F, view the images below to know how your clamp and swivel adapter will look once assembled depending on which side it will be installed on.

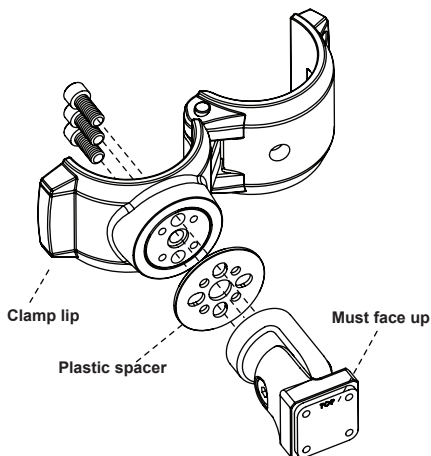


Port Configuration



Starboard Configuration

F



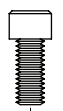
Assemble the swivel adapter to the clamp with the bolts provided. Be sure the plastic spacer is sandwiched between the clamp and the swivel adapter.

IMPORTANT

The swivel adapter has the word "TOP" Marked on it. This must face up for final installation. The Lip of the clamp must face out for final installation.



x1



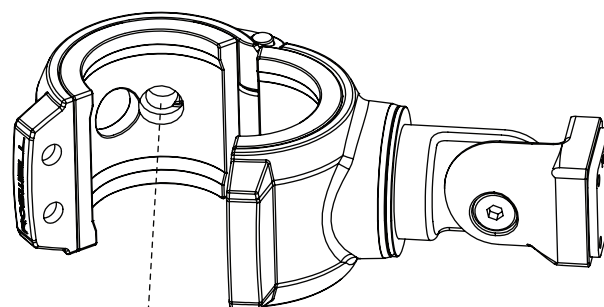
x3

Torque bolts to 25ft-lb



5/16" RED

G



Set screw hole



2" inserts

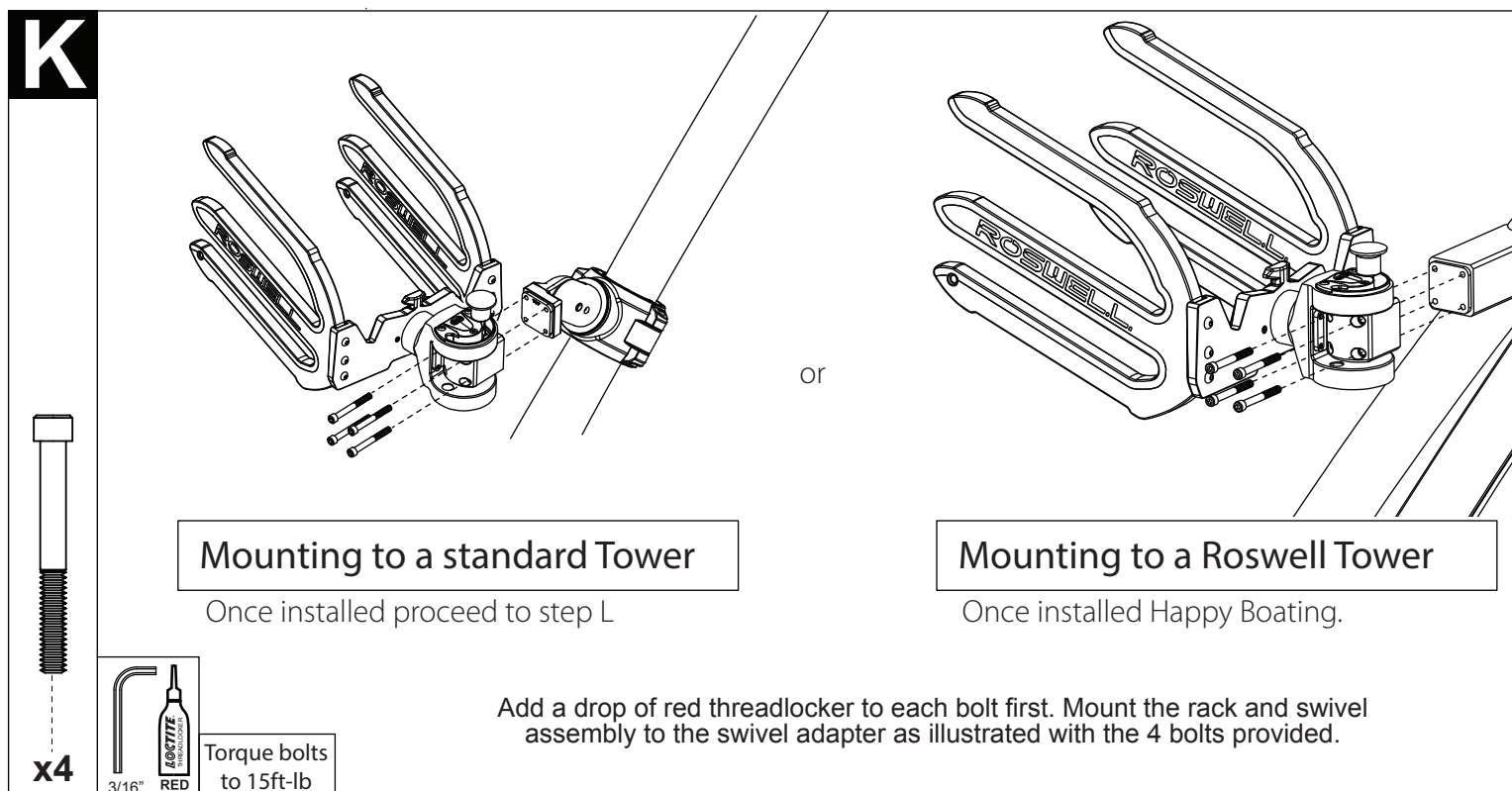
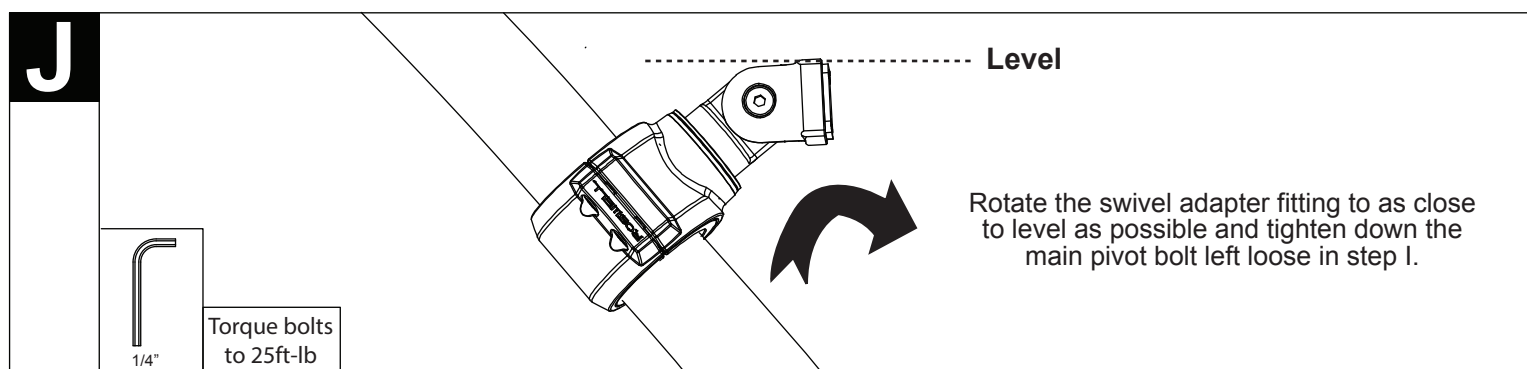
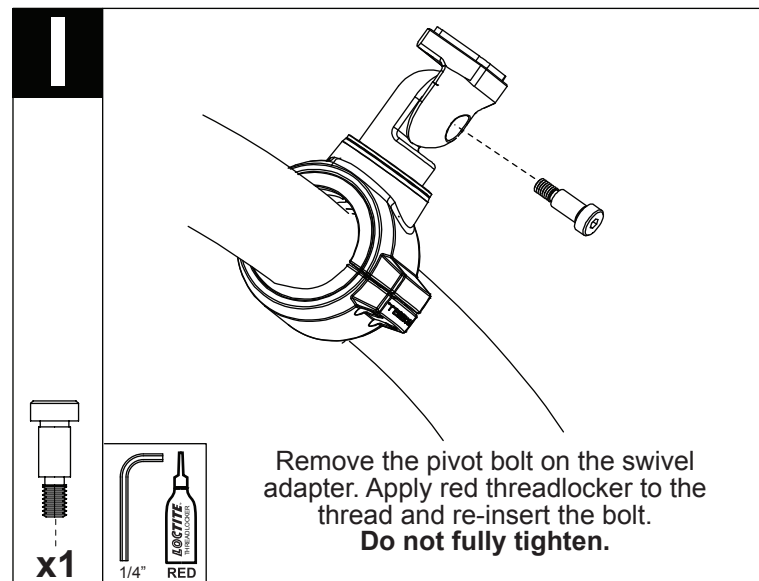
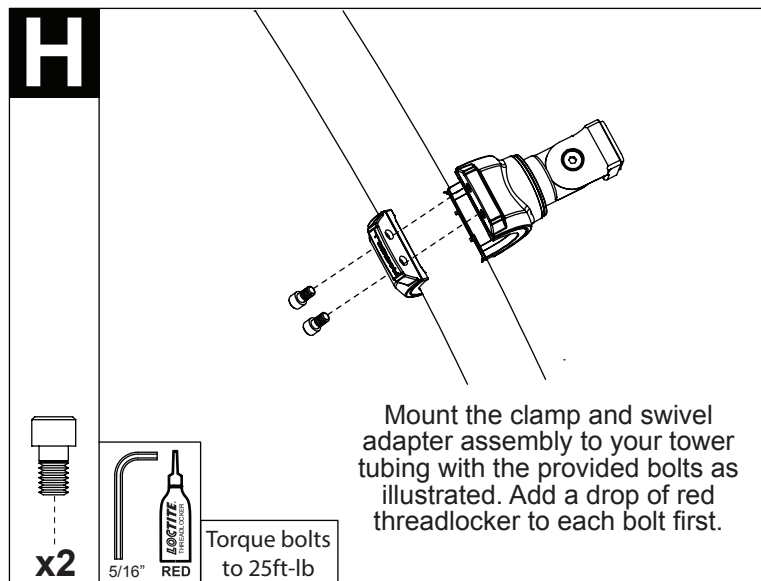
x2



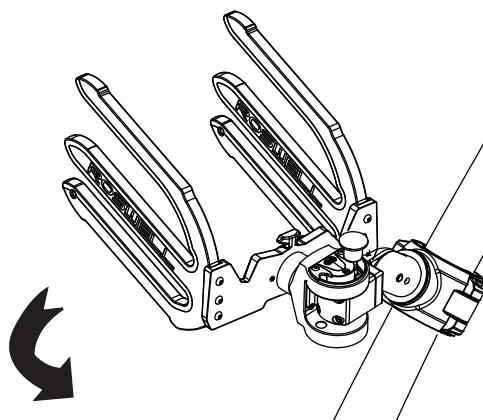
2.5" inserts

x2

Determine which size plastic inserts you require to mount your rack to your tower. Insert the appropriate size plastic inserts into the clamp halves being sure to line up the set screw hole in the plastic with the set screw hole in the top of the clamp.



Note: Following instructions are only for mounting to a standard Tower

L

Swivel your rack to the inside and outside positions with a board. Ensure your swivel is operating well and locking in both positions. Ensure there is no interference occurring. This is the point where you can tweak the angle of the swivel adapter (Step J) and the clamp angle on the tubing to optimize fit and function. If you alter anything, Check clearance and function again.

M

Use with
2.5" clamp
inserts

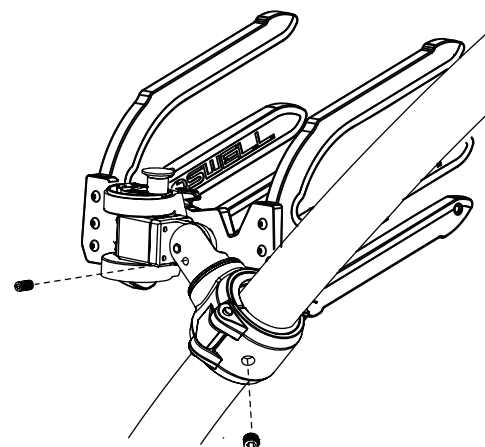


x1
OR



x1
Use with
2.0" clamp
inserts

Torque set screws
to 25ft-lb



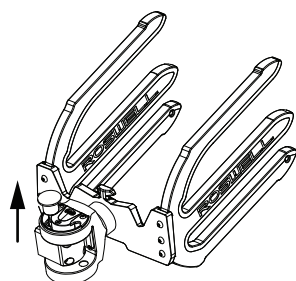
Apply a drop of red threadlocker to each set screw first. Once you are happy with the final location of the rack, install the swivel adapter set screw to lock in the angle of the swivel adapter. Then install the clamp set screws to lock the location of the entire rack assembly.

Swivel Operation

Swivel assemblies must be completely locked to avoid damage to boat or injury to occupants. Proper Swivel operation is crucial to ensure racks do not swing into boat unintentionally. To ensure proper engagement of locking pin be sure to swing racks until they reach a lock position AND compress the rubber bumper at end of travel. Once this is accomplished the locking pin will be drawn down automatically leaving no gap between pin handle and swivel.

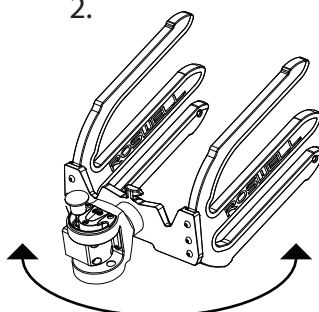
How to properly operate the Swivel

1.



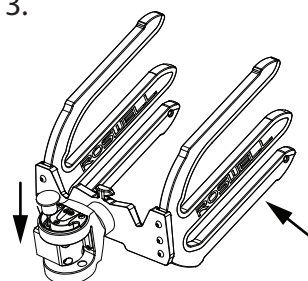
Lift pin to unlock swivel

2.

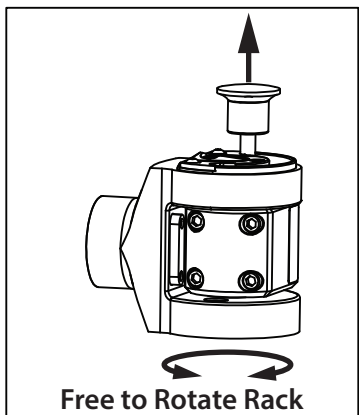


Rotate Rack 180° to second position

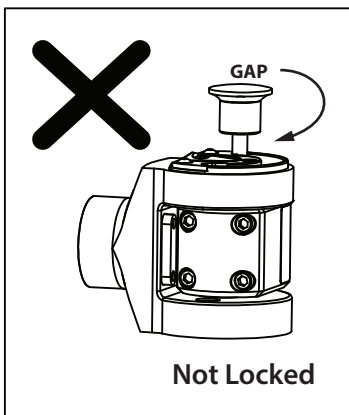
3.



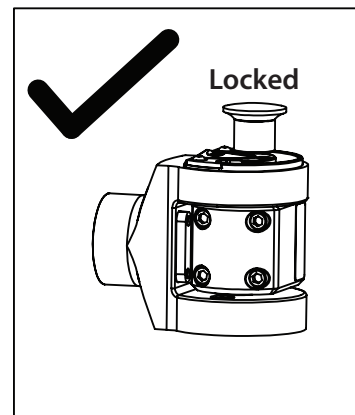
Push rack to compress rubber and the pin will drop in lock hole



Free to Rotate Rack



Not Locked

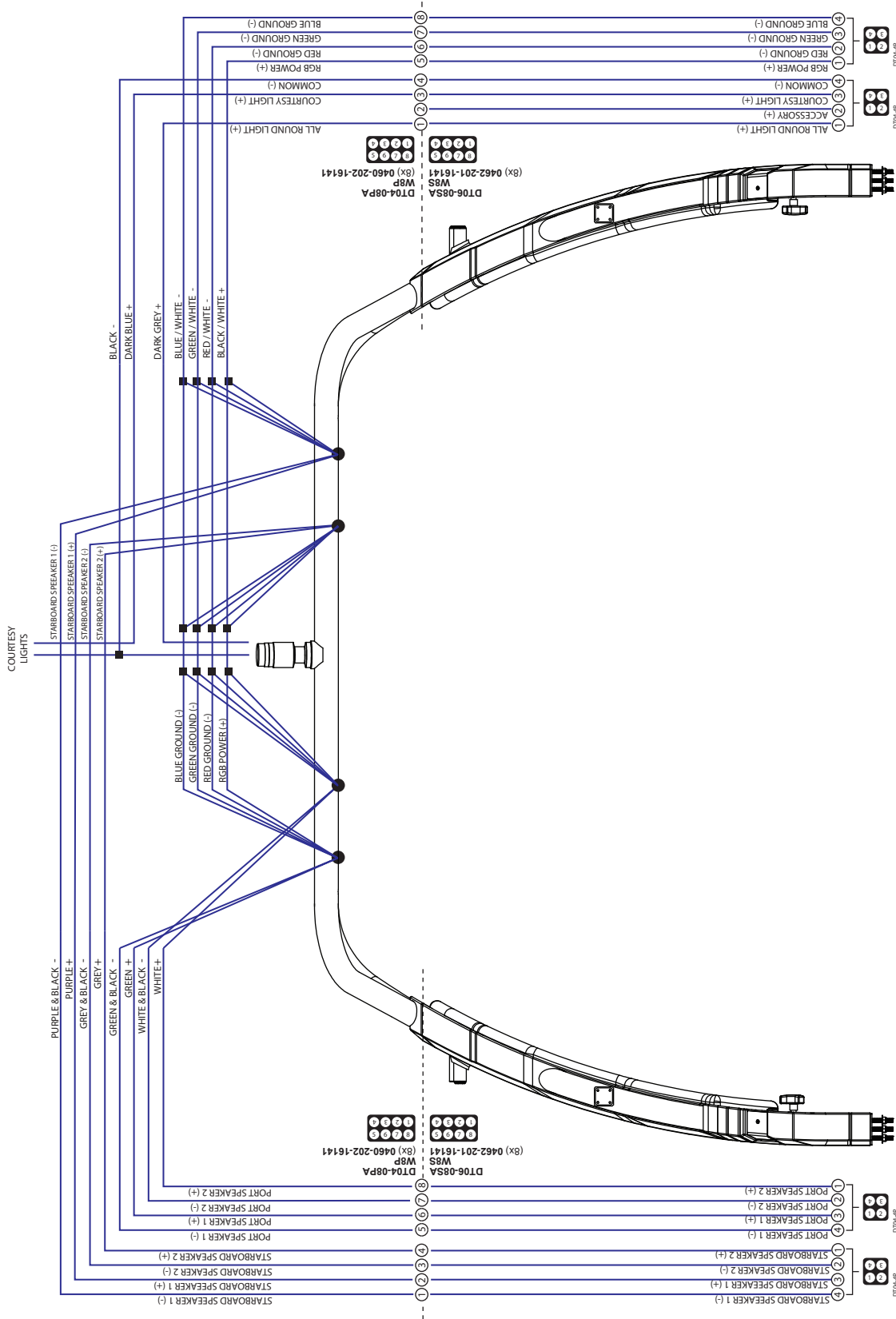


Locked

NOTE:

Some parts on the Mag swivel are considered wearable parts. After extended use some parts on the Mag swivel will need replacement. If you feel looseness in your rack the replacement kit will get the swivel working like new. Part # C710-0089

Bennington QX Tower Wiring Diagram



LIGHTS

STARBOARD SIDE

AUDIO

PORT SIDE

NOTES

[illegible]