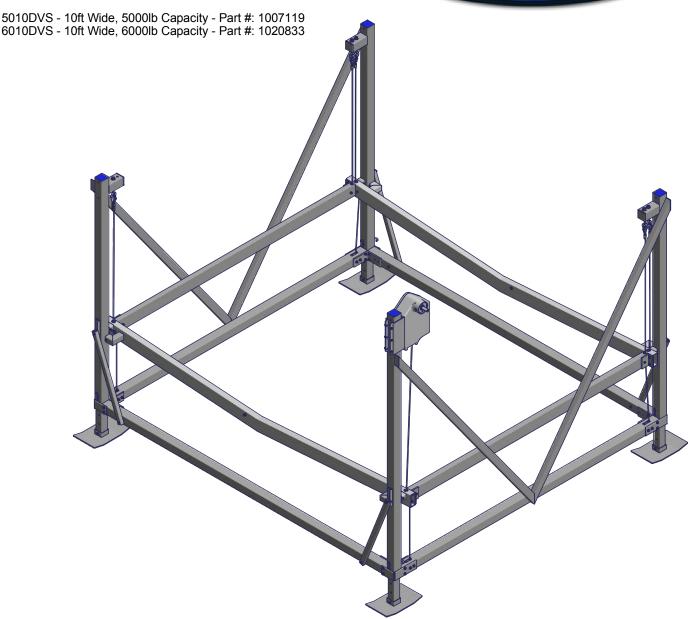
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# DVS Vertical Lift (Double V Side):

Frame Assembly Instructions. Models:



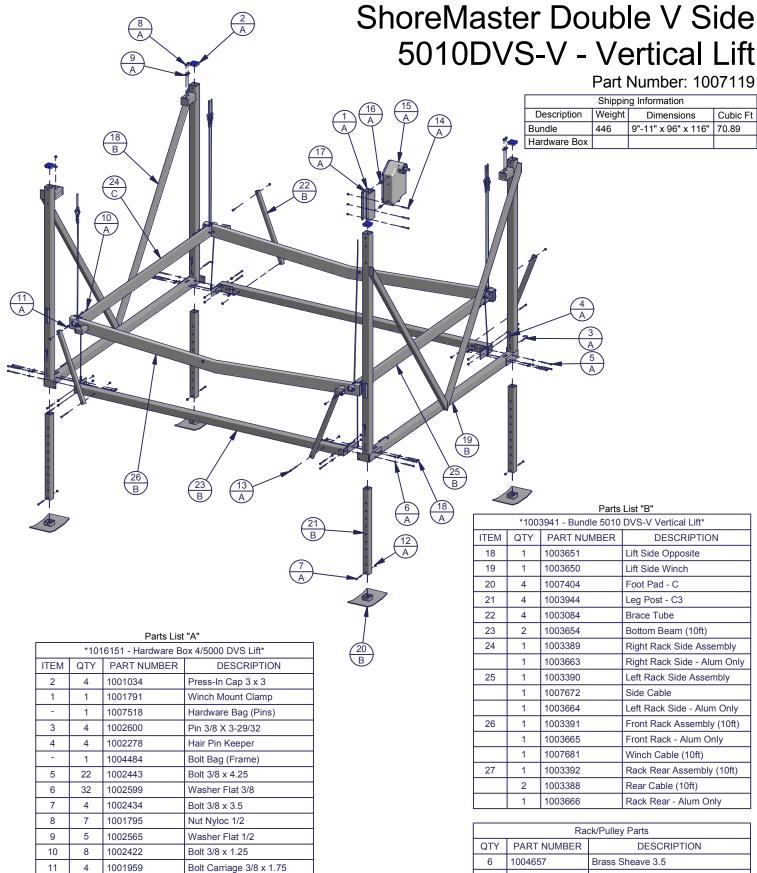


## **CAUTION - PUT SAFETY FIRST**

- 1. Before attempting to install or operate this lift, study and fully understand the proper operating procedures and safety precautions outlined in this owner's manual.
- 2. Never exceed the recommended weight capacity of your lift. The lifted weight will include hull, engine, fuel, battery, and added accessories or gear. Weigh your fully loaded boat at a certified scale to be absolutely sure of the total weight.
- 3. Do not allow anyone on, in, or under the lift while operating.
- 4. NOT COMPLYING WITH THE PROCEDURES AND PRECAUTIONS OUTLINED IN THIS MANUAL WILL INVALIDATE THE WARRANTY AND MAY RESULT IN PERSONAL INJURY OR DEATH.
- If you have any questions about assembly, installation, operation or suitability of this product, contact an authorized dealer.

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Nut Flange 3/8

Bolt 3/8 x 4.5

Bolt 3/8 x 2.75

Whisper Winch Model 241

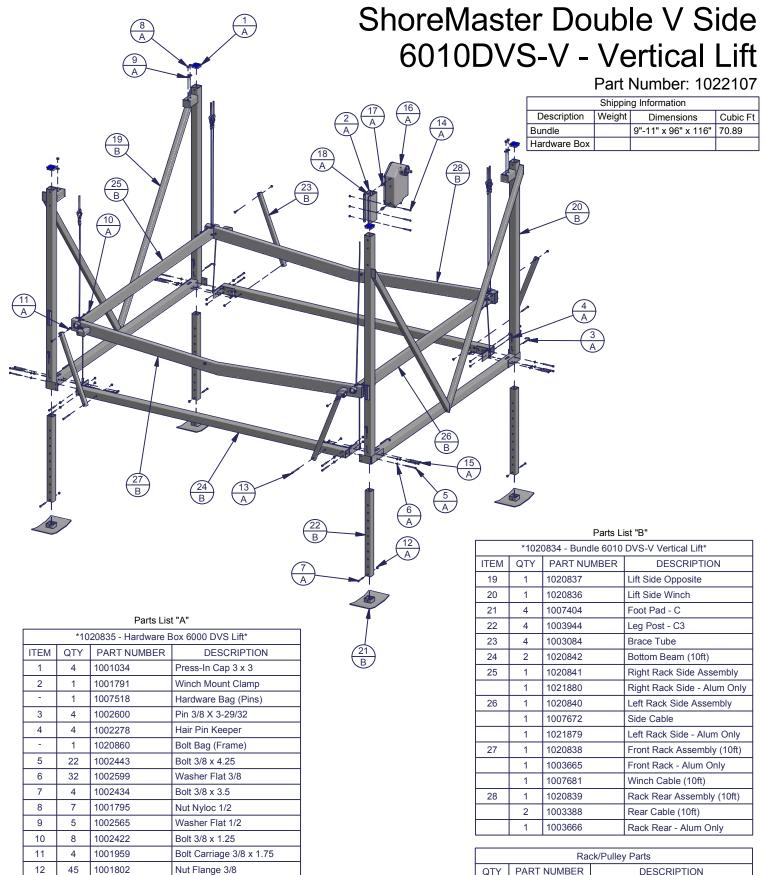
Hardware Bag Winch

Bolt Custom 1/2 x 1.0

Set Screw 3/8 x 3/8

Bolt Hex 1/2-13 x 4.5

Traditi and Farts			
QTY	PART NUMBER	DESCRIPTION	
6	1004657	Brass Sheave 3.5	
4	1006916	Brass Sheave 3.75 (Side)	
4	1006907	Bushing (Front)	
4	1006909	Bushing (Rear)	
8	1002205	Bushing (Side)	
8	1002706	Vertical Roller	
2	1000953	Cable Roller	
2	1000952	Cable Roller Shaft	



Bolt 3/8 x 4.5

Bolt 3/8 x 2.75

Bolt 1/2 x 4.5

Whisper Winch Model 241

Hardware Bag Winch

Bolt Custom 1/2 x 1.0

Set Screw 3/8 x 3/8

Rack/Pulley Parts			
QTY	PART NUMBER	DESCRIPTION	
6	1020844	Sheave 3.5 (Front & Sides)	
2	1020845	Sheave 3.5 (Rear)	
2	1020846	Bolt for 6010 DVS Front Rack	
4	1020847	Bolt for 6010 DVS Side Rack	
8	1002706	Vertical Roller	
2	1000953	Cable Roller	
2	1000952	Cable Roller Shaft	

## Frame Assembly Instructions Your safety is the most important issue related to this product.

- Fully read and understand each step before proceeding with that step.
- · Wear protective gloves, clothing and eyewear when assembling and installing the lift.
- Do not assemble, install or use this product if items are missing or damaged.

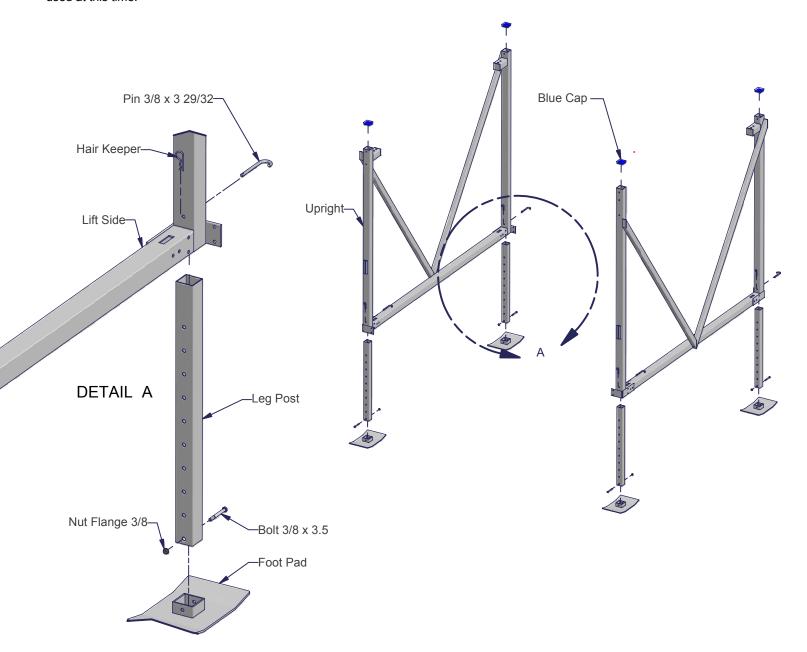
For ease of assembly find a flat area with plenty of room to assemble lift. The following tools will be needed for assembling lift:

- 1. Pair of 7/16" Wrenches
- 2. Pair of 9/16" Wrenches
- 3. 3/4" Wrench
- 4. Measuring Tape
- 5. Hammer
- 6. 3/16" Allen Wrench

Only hand tighten bolts and nuts until lift is completely assembled.

#### STEP 1

Press in Blue Caps on Uprights as shown. Insert all four Leg Posts into Foot Pads. Secure using one Bolt 3/8 x 3.5 and one Nut 3/8 in each place. Insert Leg Posts into Lift Sides as shown. Secure with one Pin 3/8 x 3 29/32 and one Hair Pin for each Leg Post. No washers are used at this time.

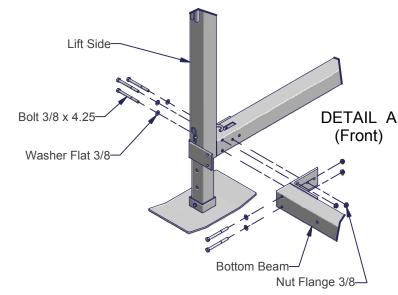


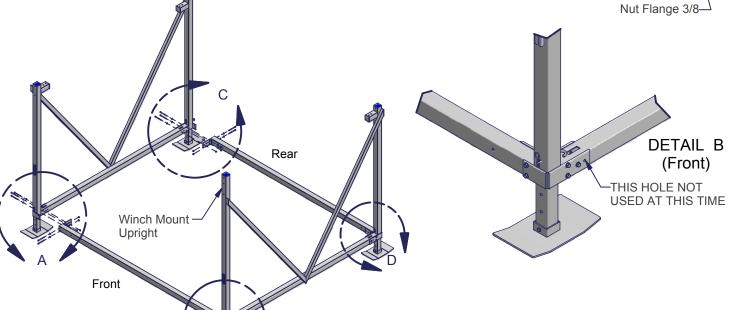


Attach one Bottom Beam to front both Lift Sides. Secure each end of the Bottom Beam with five Bolts  $3/8 \times 4.25$ , five Washers Flat 3/8 and five Nuts Flange 3/8 - as shown in Detail "A."

**Note:** The front is indicated by the Winch Mount Upright - as shown.

**Note:** Bolt only five of the six holes at each corner at this time. The remaining hole will be used in a later step. See **Detail "B"** for the one connection hole (in each front corner) not used at this time.

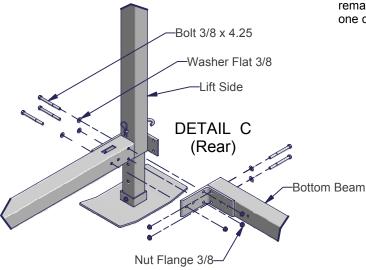


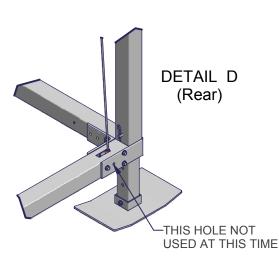


STEP 3

Attach the Bottom Beam to rear of the Lift Sides. Secure with Five Bolts 3/8 x 4.25, five Washers Flat 3/8 and five Nuts 3/8 Brass - as shown in Detail "C."

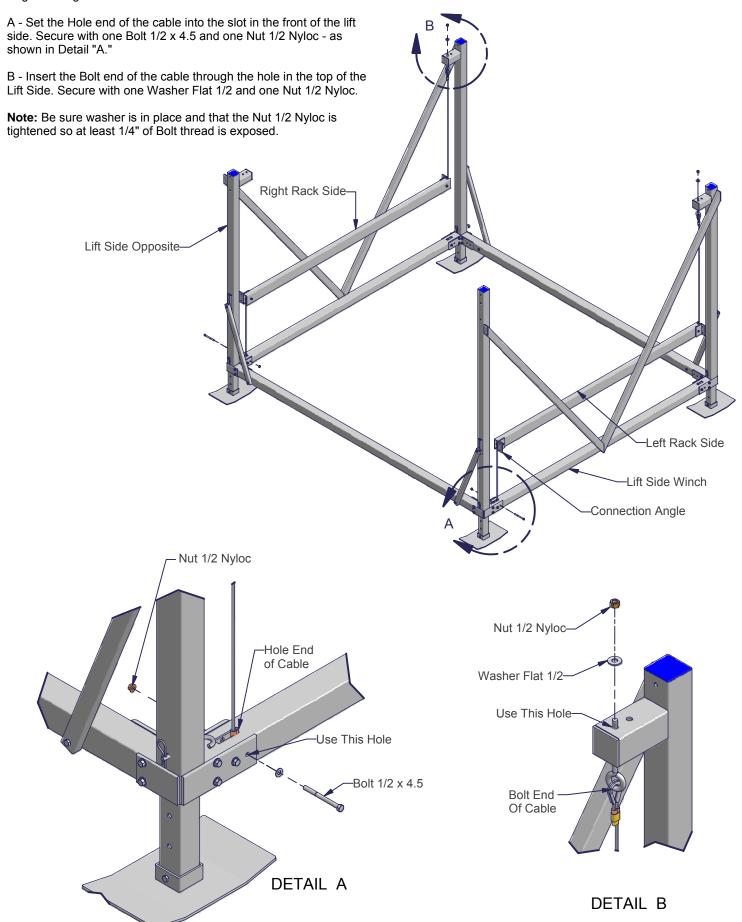
**Note:** Bolt only five of the six holes at each corner at this time. The remaining hole will be used in a later step. See **Detail "D"** for the one connection hole (in each rear corner) not used at this time.



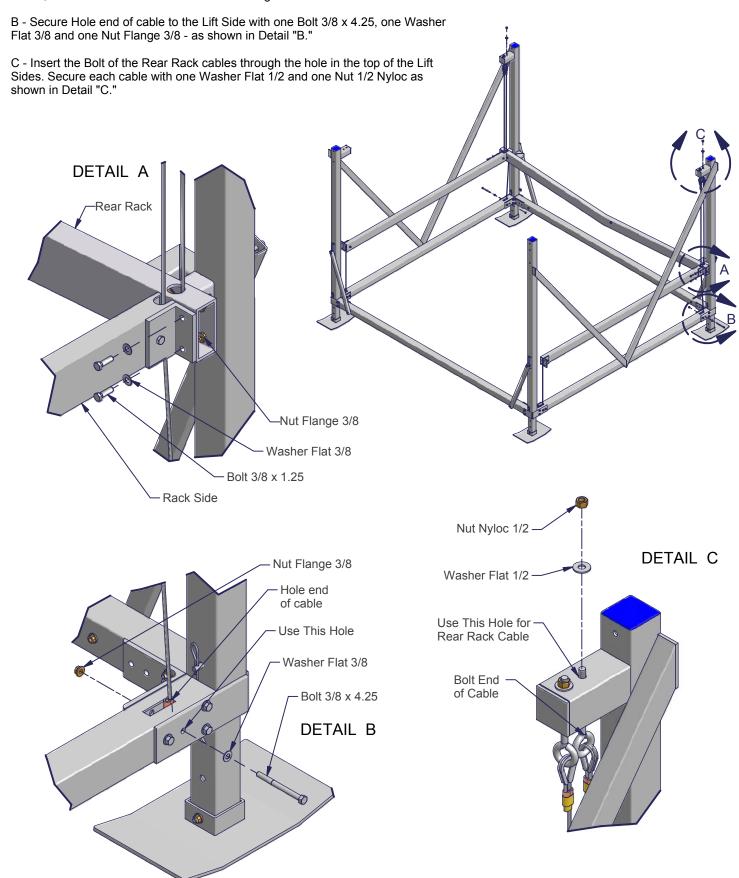


STEP 4 Attach the Brace Tube to the Lift Sides and Bottom Beams. Secure each Brace Tube to the Bottom Beams with one Bolt 3/8 x 4.5, and one Nut Flange 3/8 - as shown in Detail "A." Secure each Brace Tube to the T Slot of the Lift Sides with one Bolt Carriage  $3/8 \times 1.75$  and one Nut Flange 3/8 - as shown in Detail "B." Note: Take two measurements between the two Lift Sides, one at the top and one at the bottom. The measurement should be the same at the top and bottom of the Lift Sides. -Nut Flange 3/8 Bottom Beam Brace Tube-DETAIL B Lift Side DETAIL A T-Slot-Bolt Carriage -3/8 x 1.75 -Bolt 3/8 x 4.5 Brace Tube Nut Flange 3/8-

Place the Rack Sides in the Lift Sides as shown with Connection Angles facing out.



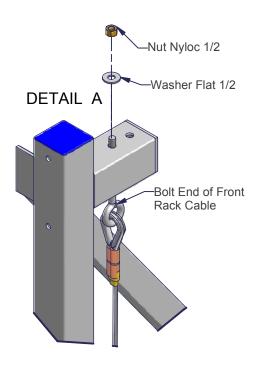
A - Attach the Rear Rack to the Rack Sides. Secure at each end with two Bolts 3/8 x 1.25, two Washers Flat 3/8 and two Nuts Flange 3/8 - as shown in Detail "A."

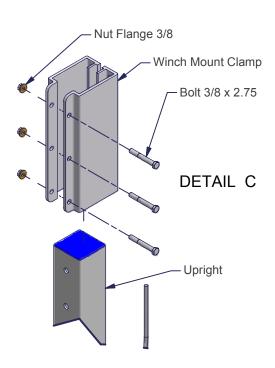


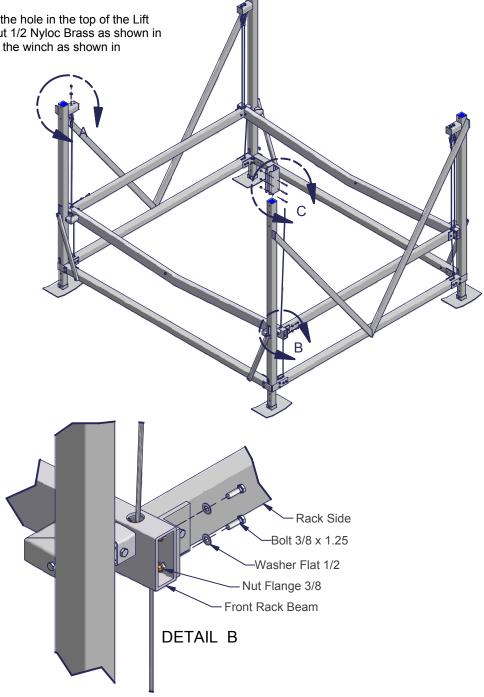
Set the Front Rack in place and attach to the Rack Sides. At each end secure with one Bolt  $3/8 \times 1.25$ , two Washers Flat 3/8 and one Nut Flange 3/8 in two places as shown in Detail "A."

Insert the Eye Bolt of the Front Rack cable through the hole in the top of the Lift Sides. Secure with one Washer Flat 1/2 and one Nut 1/2 Nyloc Brass as shown in Detail "B." The other end of the cable is attached to the winch as shown in Winch/Wheel Instructions (included with the winch).

**Note:** There are five Eye Bolts to attach. See the drawing of Eye Bolts and cables on next page to ensure correct location.







#### STEP 8

Slide Winch Mount onto Lift Side Winch Upright with the bolt holes facing the front of the lift (the left side of the lift when facing the Lift Side Winch). Secure Winch Mount by using three Bolts  $3/8 \times 2.75$  and three Nuts Flange 3/8 - as shown in Detail "C."

The Winch Mount is attached to the Lift Side Winch Upright that is 12" longer than the three other Uprights, and the top should be flush with the top of Lift Side Winch Upright.

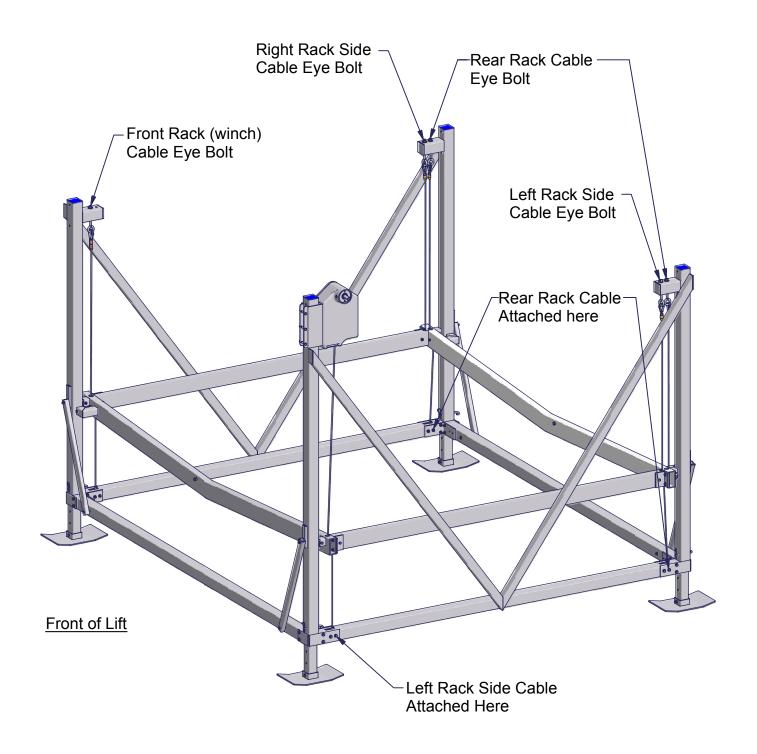
**Note:** On the 3000 Lifts with the Silent Brake Winch, this step must be done with the winch installed on the Winch Mount Clamp.

#### STEP 9

Now firmly tighten all nuts and bolts.

**Note:** Nylon Locking Nuts (Nuts Nyloc) should not be reused, if one is removed it should be replaced with a new one.

## **Proper Cable Locations**



## **CAUTION**

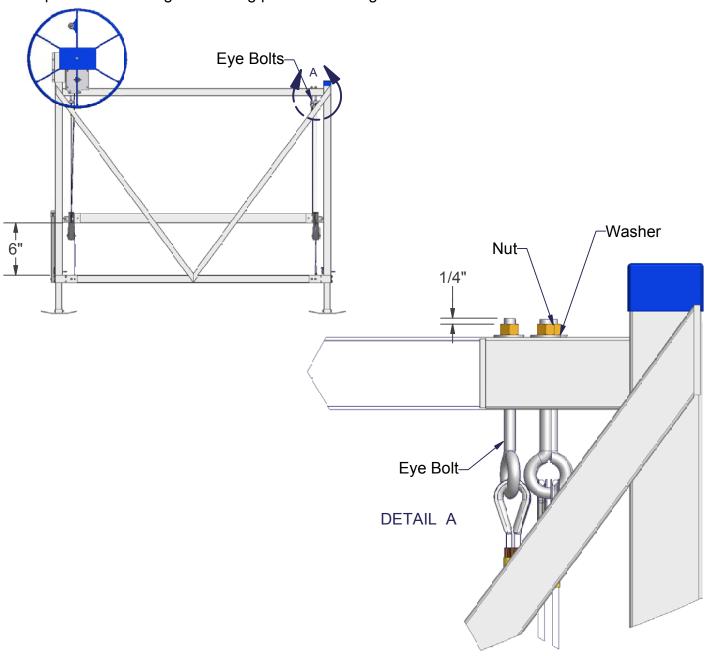
Be sure washer is in place and that Nyloc Nut is tightened so at least 1/4" is exposed. Failure to attach cables, Eye Bolts, Washers and Nyloc Nuts correctly could result in a severe crushing, cutting or pinching injury. Severe damage to lift or boat could also occur.

## Proper Cable Adjustment

- a) There are four cables with Eye Bolts and nuts that must be adjusted to properly level cables. These Eye Bolts are all located near the rear uprights as shown.
- b) Turn wheel so front rack beam raises about 6" above the bottom of frame. Adjust cables so all corners of rack are the same distance from frame.

**Note:** Adjust the cable length by turning the nut on top of the Eye Bolt. Hold the Eye Bolt stationary while adjusting the top nut. Using the frame below the rack as your reference point, measure the distance from frame to rack in each corner. These distances should all be within a 1/4 inch.

**Note:** Be sure washer is in place and that Nyloc Nut is tightened so at least 1/4" of Eye Bolt thread is exposed. 3/4" is a good starting point for leveling the Rack.



#### INSTALLATION INSTRUCTIONS

Do not under any circumstances, endanger yourself or risk damage to your lift or boat when installing.

- Situations will widely vary between installation sites. ShoreMaster recommends that your dealer or other trained boat lift installer train you and perform the initial installation.
- Wear protective gloves, clothing and eyewear when assembling and installing the lift.
- Do not assemble, install or use this product if items are missing or damaged.

The following are guidelines or suggestions for installation:

#### STEP 1

Measure the water depth of the position you want to locate the lift. Measurements should be taken at both the projected position of the end nearest shore and end furthest from shore.

#### STEP 2

Before installing, adjust lift legs so the boat can float into position before raising, while still allowing a high enough position so the boat can be fully raised up and out of the water.

#### STEP 3

Carry, lift, roll, float or slide the lift into position alongside the dock. Ask your dealer about a wheel caddy unit to allow your lift to be rolled into position.

#### STEP 4

Ensure that your lift is level. Measure the distance from the top of the cross beam to the water surface. The distance at each of the four corners of the lift should be within two inches of each other. If they are not, adjust the legs accordingly.

**Note:** If the lift legs will extend 3 feet or more, ShoreMaster recommends deep water braces to stabilize and strengthen the lift. Ask your dealer for more information.

#### CAUTION

The lift must be resting on the water bottom in a level, secure and stable position for safe operation. An unstable lift installation could result in tipping of the lift during operation, causing damage to watercraft and a crushing or pinching injury to the operator or bystanders.

## STEP 5

After loading and operating the lift pursuant to the operating instructions, remove the boat and recheck that the lift remains level.

## **OPERATING INSTRUCTIONS**

## **CAUTION**

When first using the boat lift after installation, the weight of the boat may cause the lift to settle and become unbalanced. Until you are certain the lift has stabilized, make sure people are not in the immediate vicinity of the lift.

Now that you have installed and leveled the lift, you are ready to raise your boat for the first time. Prior to use, see to it that anyone who may use the lift looks upon the unit not as a toy but a piece of heavy equipment that deserves your respect and good judgment.

- Before allowing anyone to operate the lift, be sure they fully understand the proper operating procedure.
- Do not exceed maximum capacity of the lift; overloading may cause mechanical failure and serious personal injury.
- Do not allow anyone who is in the water within six feet of the lift.
- Do not allow anyone on, in or under the lift while operating.

When operating the lift, the following procedures should be adhered to:

#### STEP 1

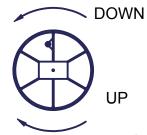
Be sure the lift rack and cradles or bunks are positioned below the water surface so they will not interfere with the boat floating into position.

### STEP 2

Properly balance and center the boat on the lift prior to raising. The boat should be positioned with the center of gravity near the middle of the lift. For most rear engine mounted boats, this requires you to position the boat somewhat forward in the lift.

#### STEP 3

Turn wheel in direction of arrow (clockwise) to raise lift. Turning wheel and wrapping cable in wrong direction may cause fast spin down of wheel.



#### WARNING

Stay clear of lifts (facing wheel) while operating. Do not allow anyone on, in or under lift. A cable or lift part failure can cause a sudden drop of boat, resulting in a crushing or falling injury or death!

#### CAUTION

Do not touch wheel or attempt to stop it if fast spin down of wheel occurs. Placing hands or feet on spinning wheel can cause broken or cut limbs.

#### STEP 4

Carefully bring the lift up until the bunks or cradles have secured the boat. Then, stop the lift and check to see that the bunks or cradles have automatically positioned themselves to the shape of the hull, as they are designed to do. If so, continue bringing the boat out of the water until it is about one foot above the surface. Stop the lift again and check the stability of the lift, particularly to see that it is fairly level and will not topple over. Finally, continue lifting the boat while paying close attention to the positioning of the lift until it is at its desired height.

After loading and operating the lift, remove the boat and recheck that the lift remains level. (See Step 4 of the Installation Instructions.) If the lift is not level, the legs should be adjusted accordingly. Because the lift may settle and become unbalanced, the lift levelness should be rechecked two weeks after installation and periodically as needed.

#### STEP 6

If lift is without a boat in it for more than one day, raise the rack (pulleys) fully out of the water to help prevent corrosion of these parts. At all times, make sure the boat is stored high enough out of the water to avoid wave action against the hull. A moving boat as a result of wave action will damage the lift and can take the boat off the lift.

#### **CAUTIONS:**

- 1. <u>Do not over raise lift rack</u>. Stop before top of rack hits cable loops attached to Eye Bolts. Over raising could cause damage to winch, cables or other parts.
- 2. <u>Do not over lower rack so slack develops in cable</u>. Doing this could cause cable to jump off winch spool. This may result in sloppy wrapping of cable next time you raise the lift, resulting in premature wear or cable breaking. Turn wheel down one or two turns past point when craft begins to float (This must always be at some point before lift rack is contacting rear bottom beam). Then turn wheel up slightly until clicking sound is heard to secure wheel position and brake on winch.
- 3. <u>Properly cover your boat</u>, or pull your boat's plug when the boat is in a raised position. Rain water accumulating in your bilge can quickly increase your gross weight over the capacity of the lift.
- 4. <u>Do not leave lift, or boat on lift, in water if ice formation is possible</u>. Ice can severely damage your boatlift.

## SAFETY MAINTENANCE Monthly Checks

Check cables for frays, corrosion or breaks at least once a month. A cable breaking while boat is in lift could damage boat or lift. Severe bodily injury could also occur.

## Spring and Fall Checks

- 1. Inspect nuts and bolts for damage, wear or loose connections. Tighten or replace parts as needed.
- 2. Inspect lift frame, pulleys, winch and pivot points for unusual wear, damage or bent parts. Replace or repair as needed.
- 3. Check that the rack is level with the bottom frame of your lift. Cable stretching or settling of lift could require you to adjust nuts on Eye-Bolts.
- 4. Lubricate winch and wheel threads. Do not get lubricant on brakepads! Brake will fail and wheel will spin down if brake pads are lubricated.
- 5. Check and lubricate pulleys to ensure that they are turning freely.
- 6. Check Eye-Bolts to make sure they are not working themselves loose.

ShoreMaster dealers usually offer service visits. Please contact them if you are unable or unwilling to perform maintenance or service to lift.