



Installation Manual

For

Kayak Launch



Safety Precautions



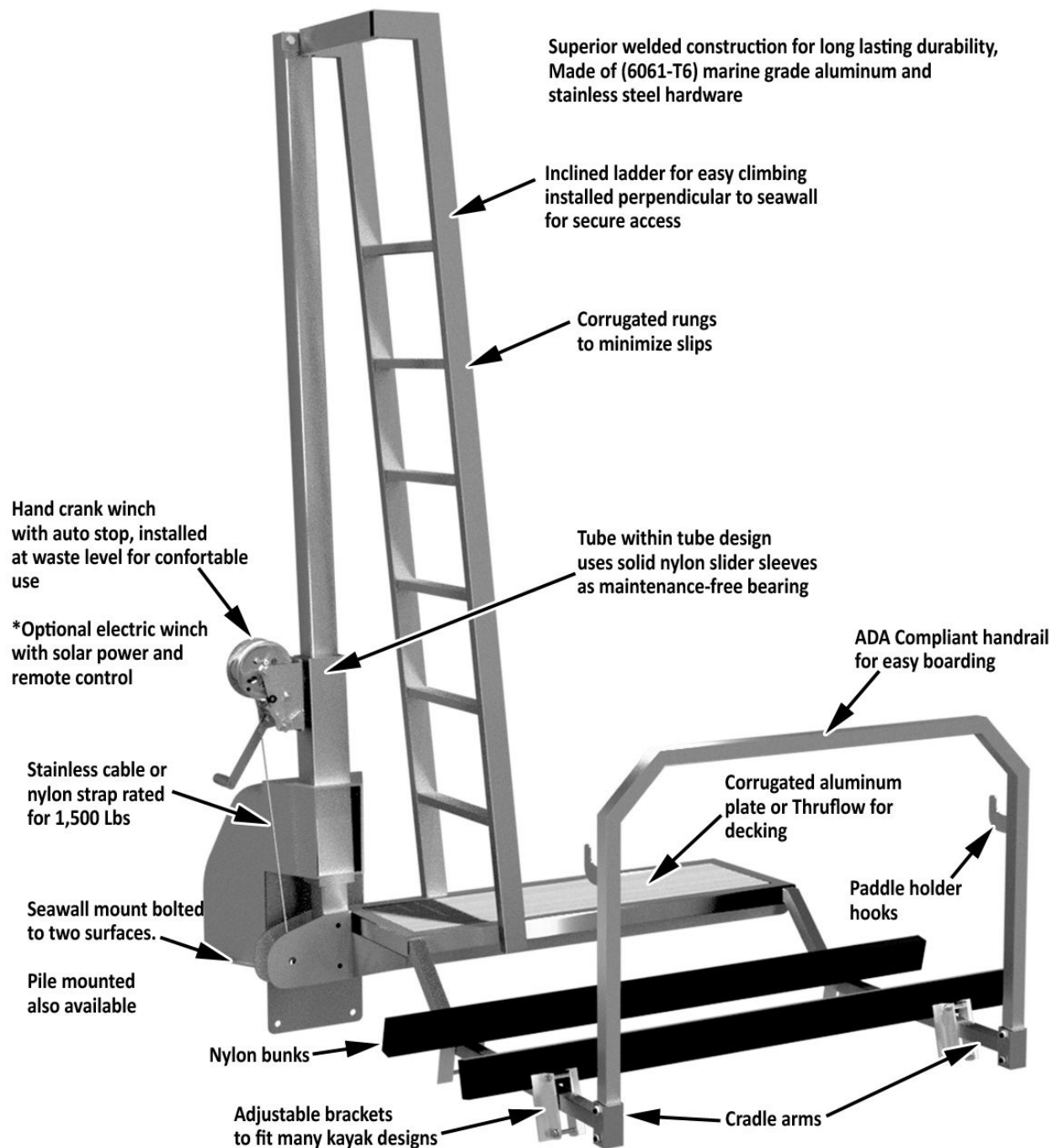
1. Your boat lift is a heavy duty piece of equipment. It is important that all persons that may operate this unit have read and understood the owner's manual. Given the inherent dangers of heavy machinery, your boat lift deserves respect, and good judgment is required in its operation. Before allowing others to operate the unit be certain that they understand the proper operating procedures. Do not allow children to operate the lift.
2. This product is for lifting unoccupied boats. Do not ride in your boat or on the lift during operation. Always attend the controls when operating the lift, and watch carefully to have others stand clear. Keep hands, feet, and clothing away from all moving parts.
3. Your lift is operated by electricity, therefore, additional care must be taken. It must be wired by a licensed electrician, and it must be installed with an approved ground fault interruption device. If you observe severed or damaged wiring, it must be repaired immediately by an electrician. When properly installed and maintained, electrical devices such as this lift are completely safe. However, any electrical device used in and around a water environment must be treated with great respect to prevent accidental electrocution. All electrical maintenance and service to this lift must be done by a licensed electrician.
4. While operating your lift, routinely look at all cables for fraying, damaged ends, or loose strands. A damaged cable must be replaced immediately. Make sure that all pulleys are turning properly. Routinely look over cables to make sure that they are winding properly. Look for signs of extreme wear and unusual corrosion, as well as, exposed or damaged electrical wires. If you find any of the above, have the problem repaired immediately.
5. Do not work on your boat or lift while the boat is hoisted. When working on your lift, keep your hands, feet, and clothing away from all moving parts. Exercise great care if chains or gearing are exposed. Never work underneath a raised lift, and do not walk or stand on a raised lift. Always disconnect electrical power when working on any part of the lift.
6. Be careful not to exceed the rated capacity of the lift. To determine the total weight of your equipment to be lifted, study the boat manufacturer's literature to determine its weight. Be sure to add enough extra weight to compensate for your added accessories, including water and fuel. Gasoline weighs about 6 lbs. per gallon and water weighs about 8 lbs. per gallon.
7. If you plan to leave your lifted boat unattended for several weeks, it is important that you remove the drain plug in the boat to prevent it from filling with rain water. Accumulated rain, snow or other water in your boat can rapidly become heavy enough to exceed the capacity of a lift, causing personal injury or damage to the boat and lift.

Components:

KAYAK LAUNCH

STANDARD SIZE:
PLATFORM 16" X 48"
CAPACITY: 600 LBS

LARGE SIZE:
PLATFORM 24" X 48"
CAPACITY: 1200 LBS



Welcome, and congratulations on your purchase of an **IMM Quality Boat Lift**! At IMM Quality Boat Lifts, we take pride in making the most advanced, most durable, easy to use and low maintenance boat lifts on the market today. The installation of this lift is simplified by its' lightweight aluminum construction and by extensive factory assembly. Only IMM Quality takes the extra time to pre-wind the cable on the winders, attach the drives, motors and covers, and pre-assemble the mounting brackets, bunk brackets and guide post assembly. We do all this as an added service to make life easier for our valuable customers. In the following pages, we will take you step-by-step through the entire installation process. We urge you to read this manual before attempting installation. If you have any questions, please contact us at 1-800-545-5603 and ask for technical support.

Required Tools for Installation

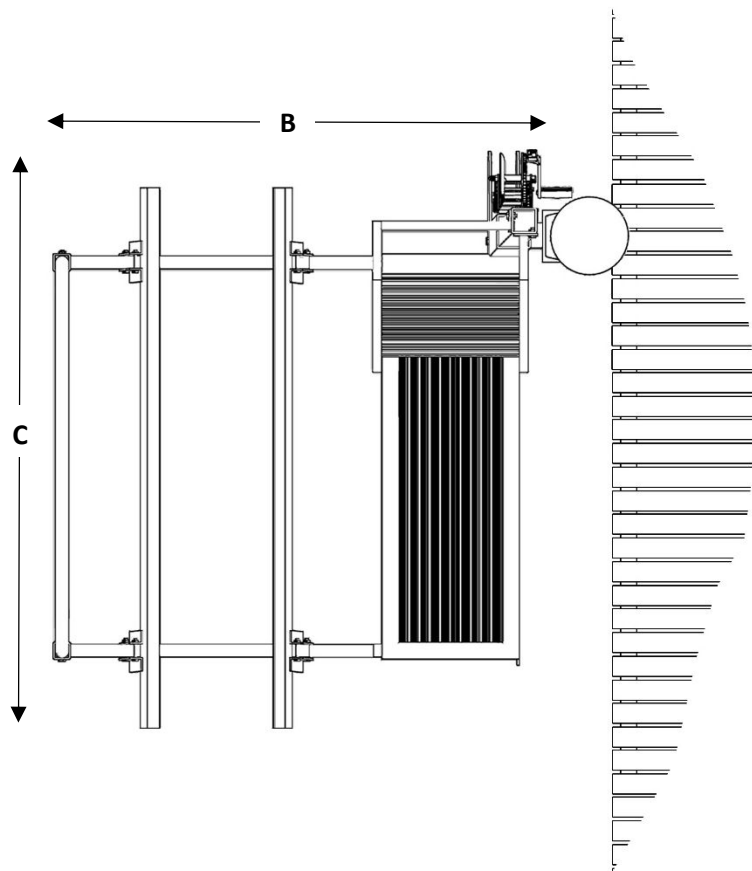
- Chain Saw (may be necessary to cut piles)
- 10 " Level
- 4' Level
- 5/8" Open End Box Wrenches
- Phillips screwdriver
- Flat head screwdriver
- ½" Drive Ratchet
- 5/8" Sockets
- Electricians Pliers
- Claw Hammer
- Cable Cutter
- 3/8" Battery Operated Drill
- 3/4" Auger Drill Bit

Before you begin...

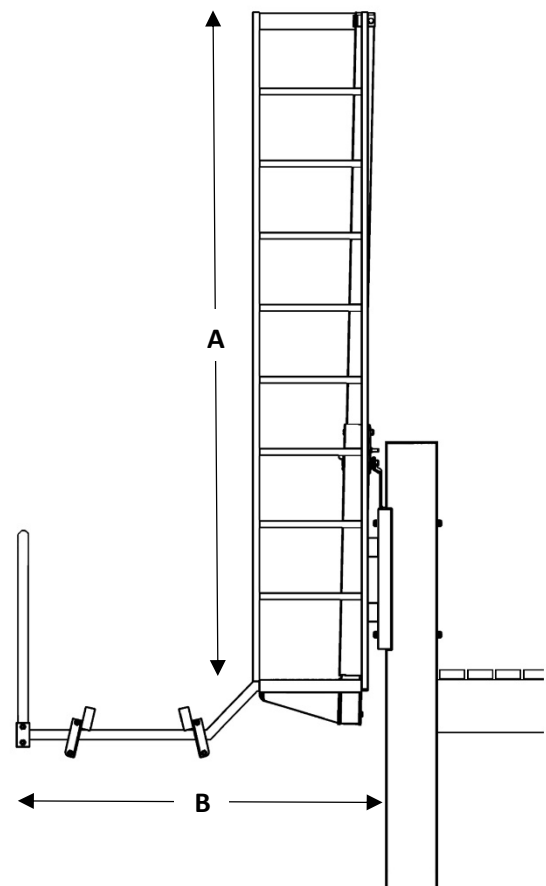
The pilings are the foundation of the boat lift and must be able to carry the combined load of the lift and the fully loaded watercraft. Local and National building code and common practice varies from area to area. Consult with our technical service department or your local marine contractor for appropriate guidelines.

Please refer to the figures below (and pages 7, 8, and 9) when laying out the slip. The bracket must be mounted to the side of the pile facing the slip.

Top View



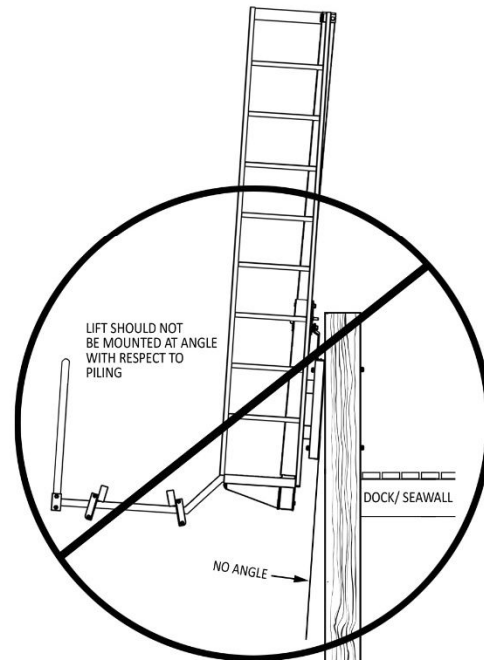
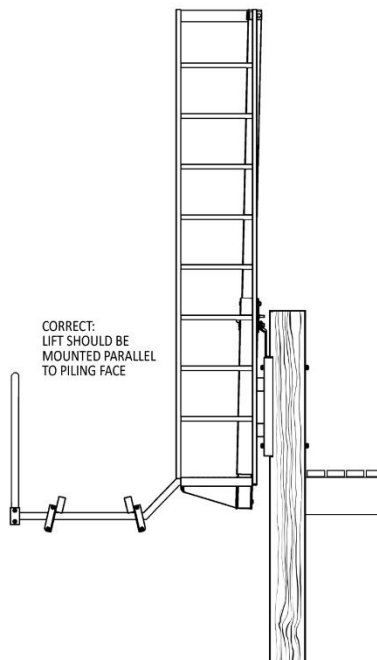
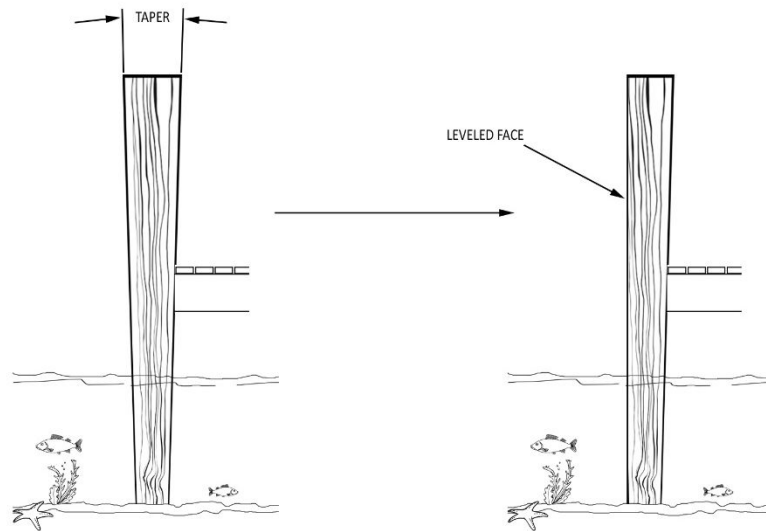
Side View



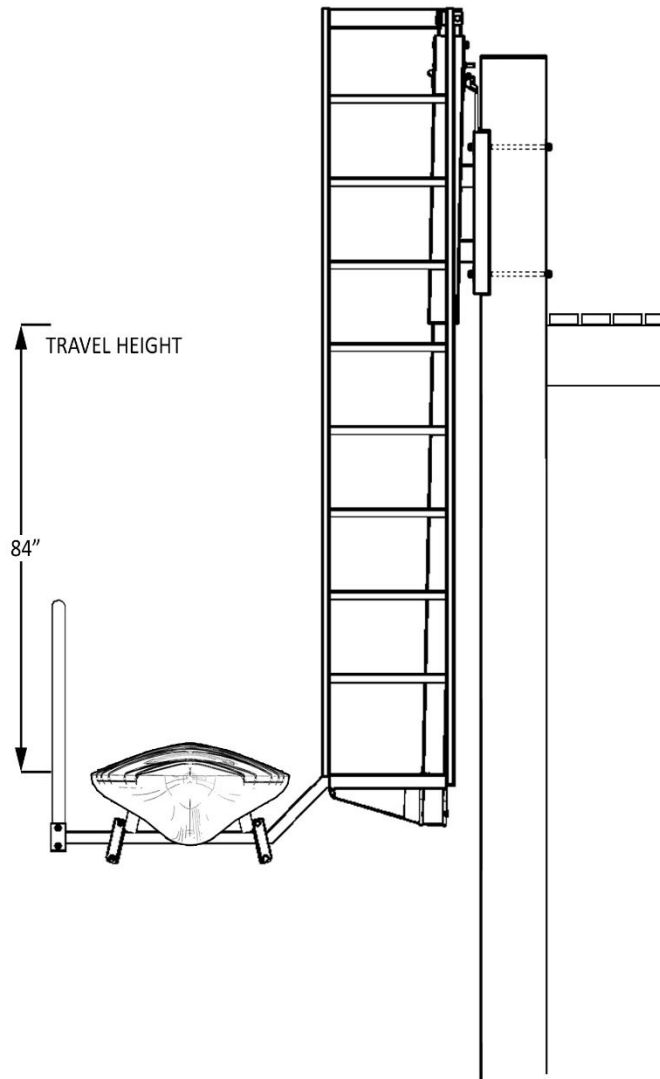
	<u>Standard</u>	<u>Large</u>
A Ladder Height	104" (8'8")	104" (8'8")
B Distance Into Slip	58" (4'10")	60.5" (5' 0.5")
C Launch Width	64" (5'4")	70" (5'10")

Preparing the Pile for Installation

The Kayak Launch should be mounted on as straight and vertical a pile as possible. Piles with excessive taper should be leveled as shown below. The Kayak Launch, mounted properly, should be parallel with the piling and should not be mounted at an angle. See figures below.

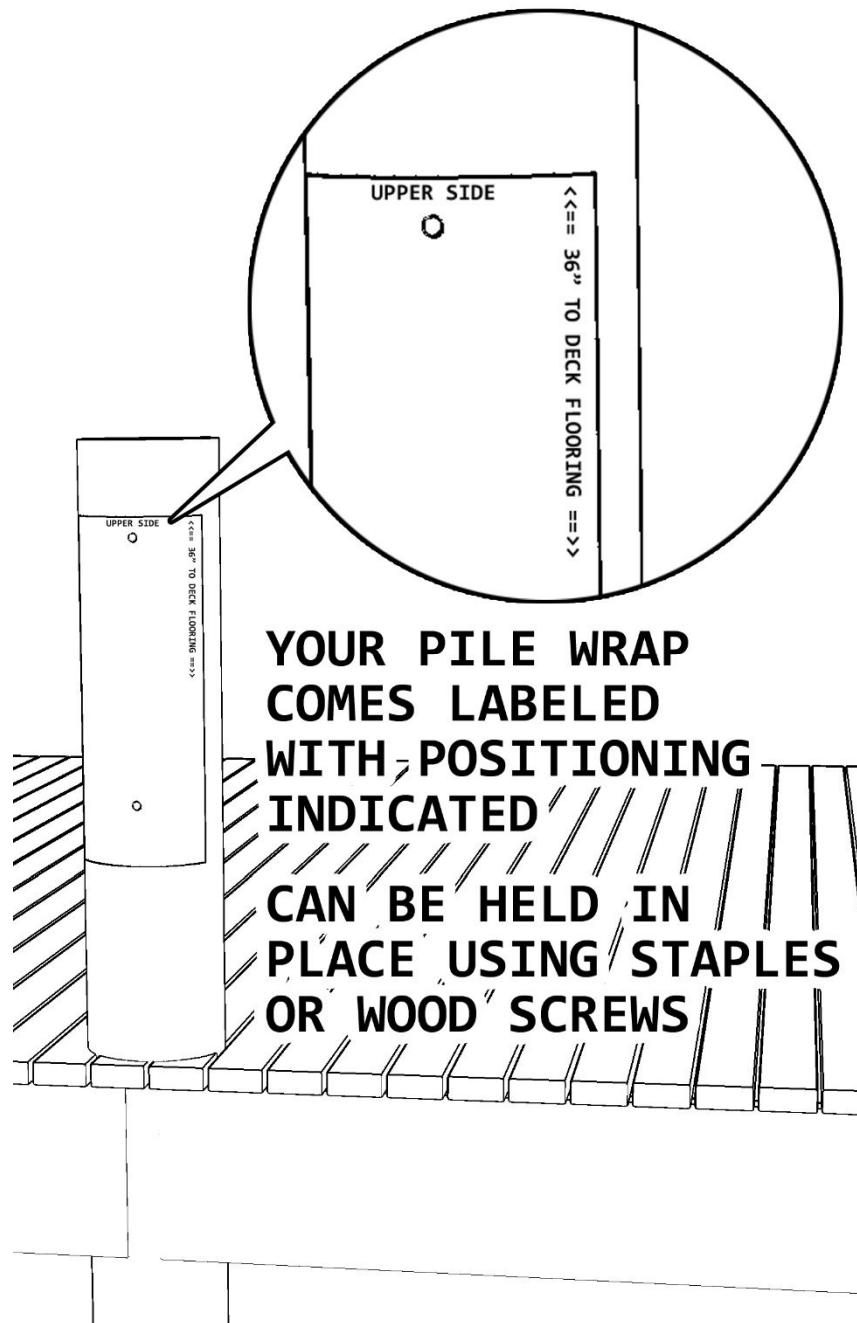


Kayak Launch Travel

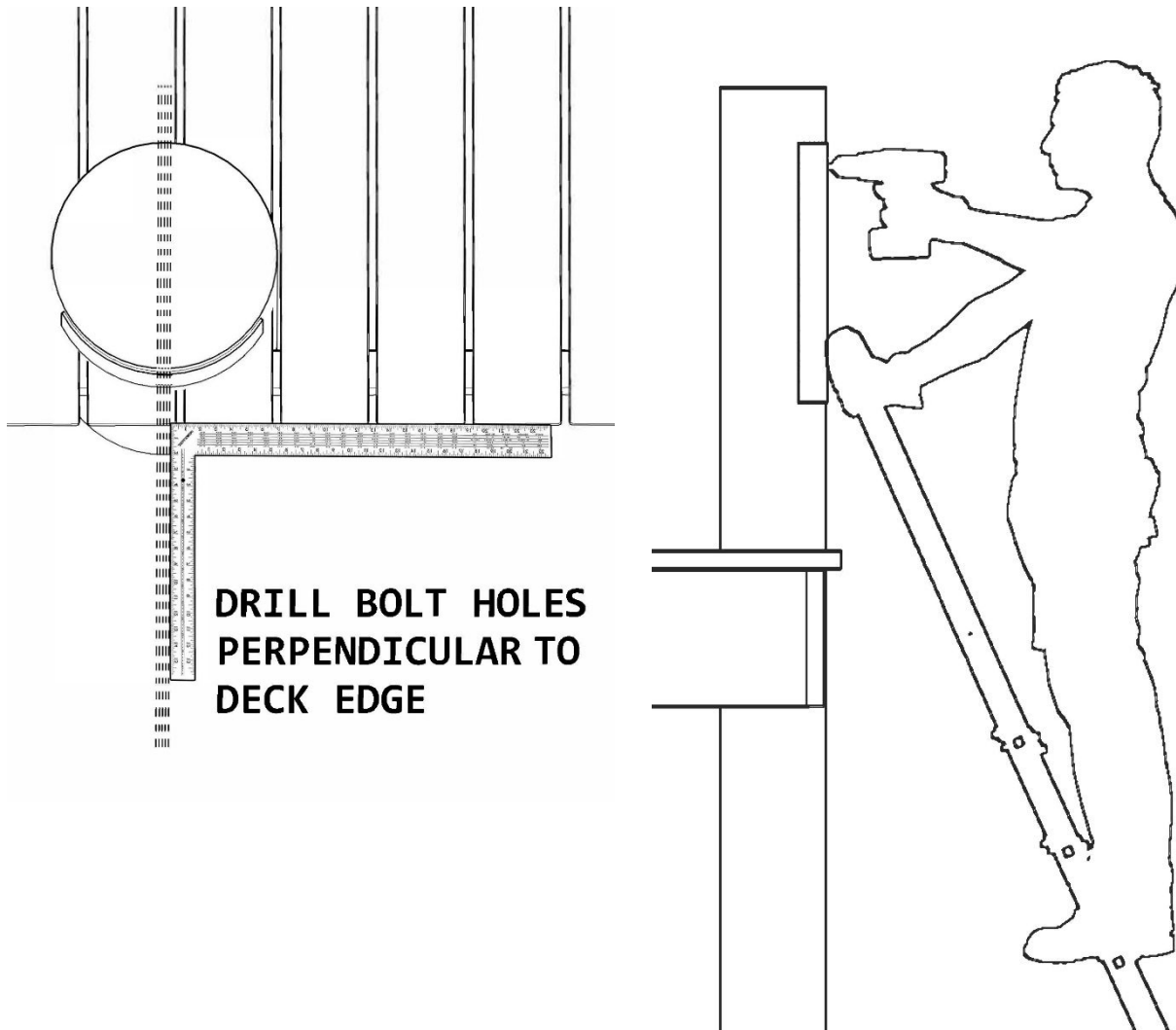


The standard kayak launch has seven feet (84") of travel. Please make sure that you will have enough water depth to float your kayak. The kayak launch can be custom made with more or less travel for an additional cost.

Pile Mount Installation

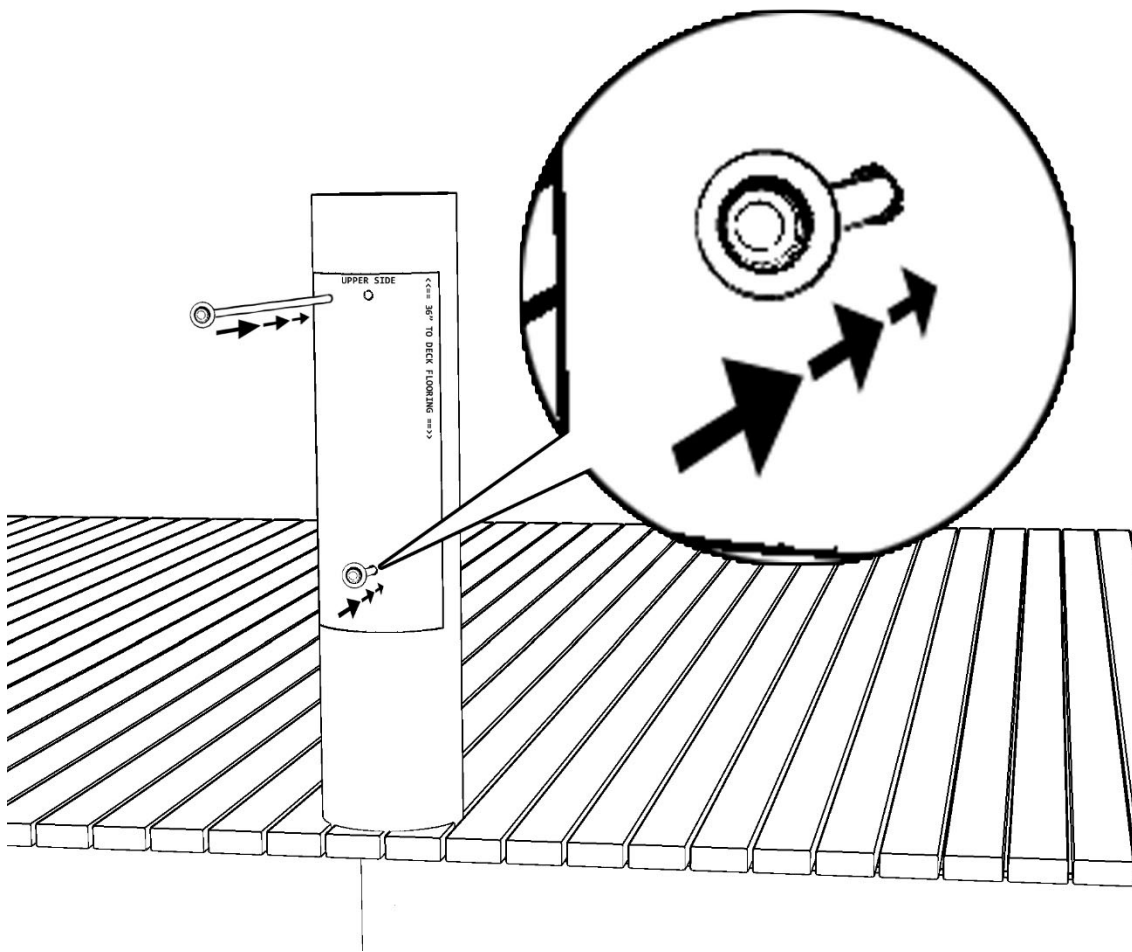


- Your lift is supplied with pile wrap. The pile wrap isolates your lift's aluminum structure from the copper in the pile's preservative to prevent galvanic corrosion from the dissimilar metals. The supplied pile wrap is labeled and may be used as a template for drilling the holes through the pile. Attach the pile wrap in the desired location with staples or screws.

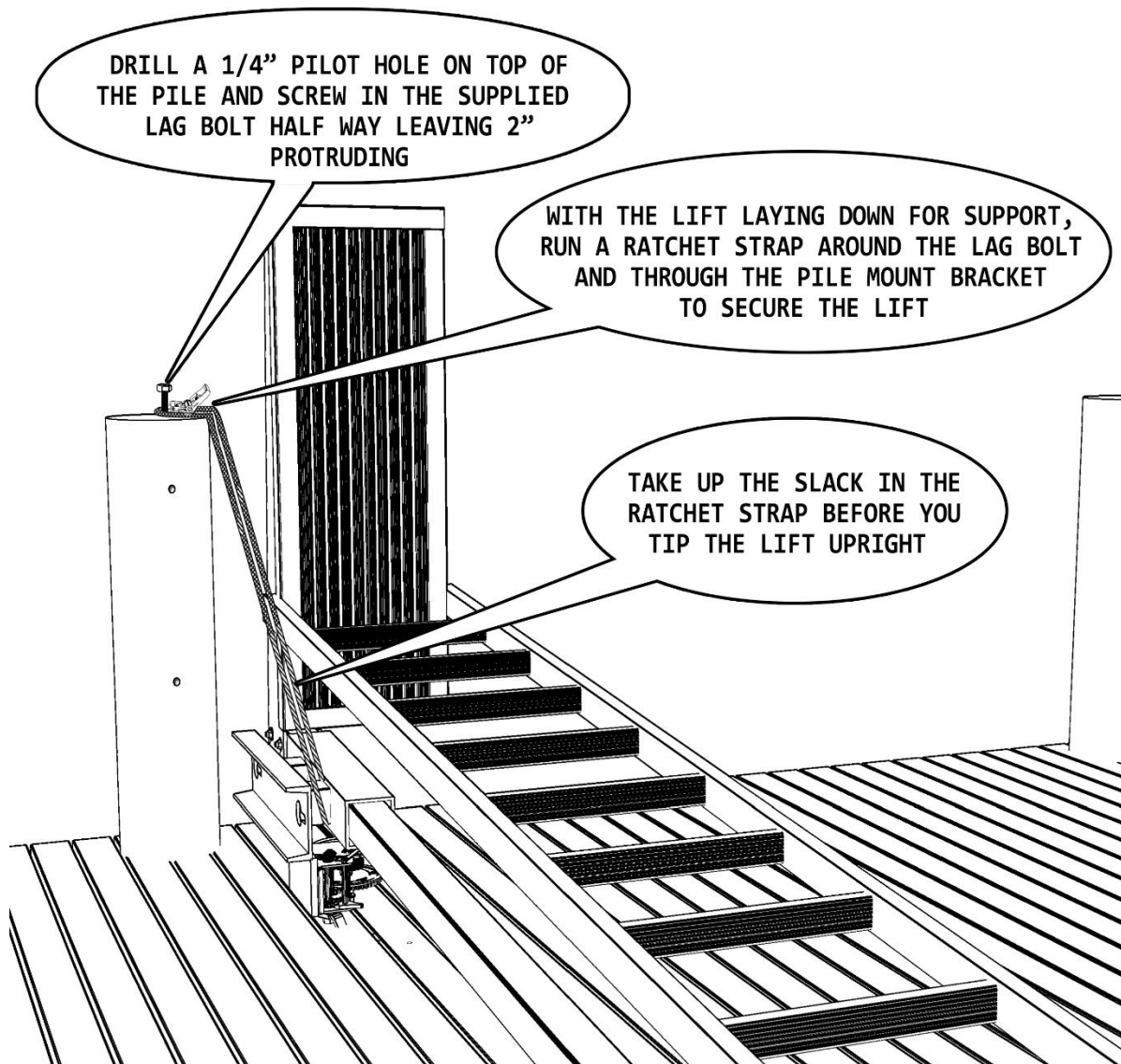


- Using the pile wrap as a template, and a $\frac{3}{4}$ " auger bit, drill holes through the pile.
- Try to make sure that the bolt holes are drilled perpendicular to the deck edge. (See above left)
- It is often difficult to drill holes through a pile that are perfectly straight. That is why we recommend drilling from the water side of the pile to better ensure that the bolt holes align with the key holes on the pile mount bracket. (See above right)

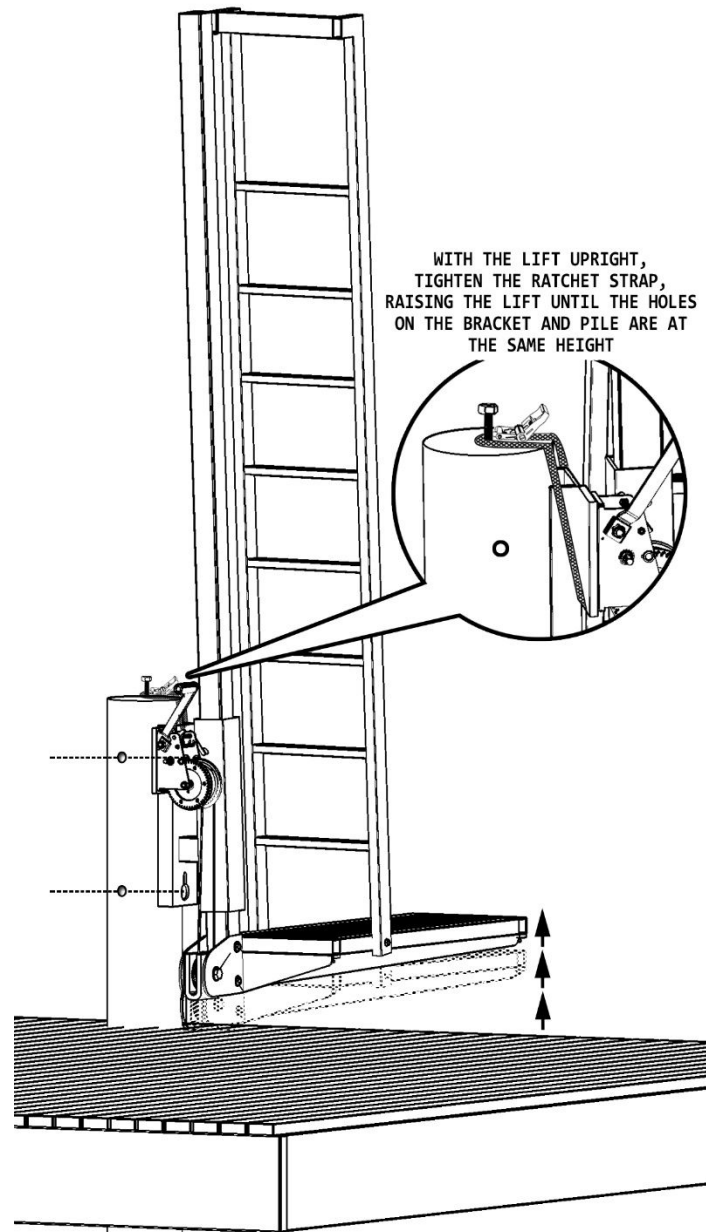
INSERT 5/8" BOLTS (LENGTH SHOULD BE AT LEAST 4" GREATER THAN THE DIAMETER OF THE PILE) WITH WASHERS FROM THE WATER SIDE OF THE PILE



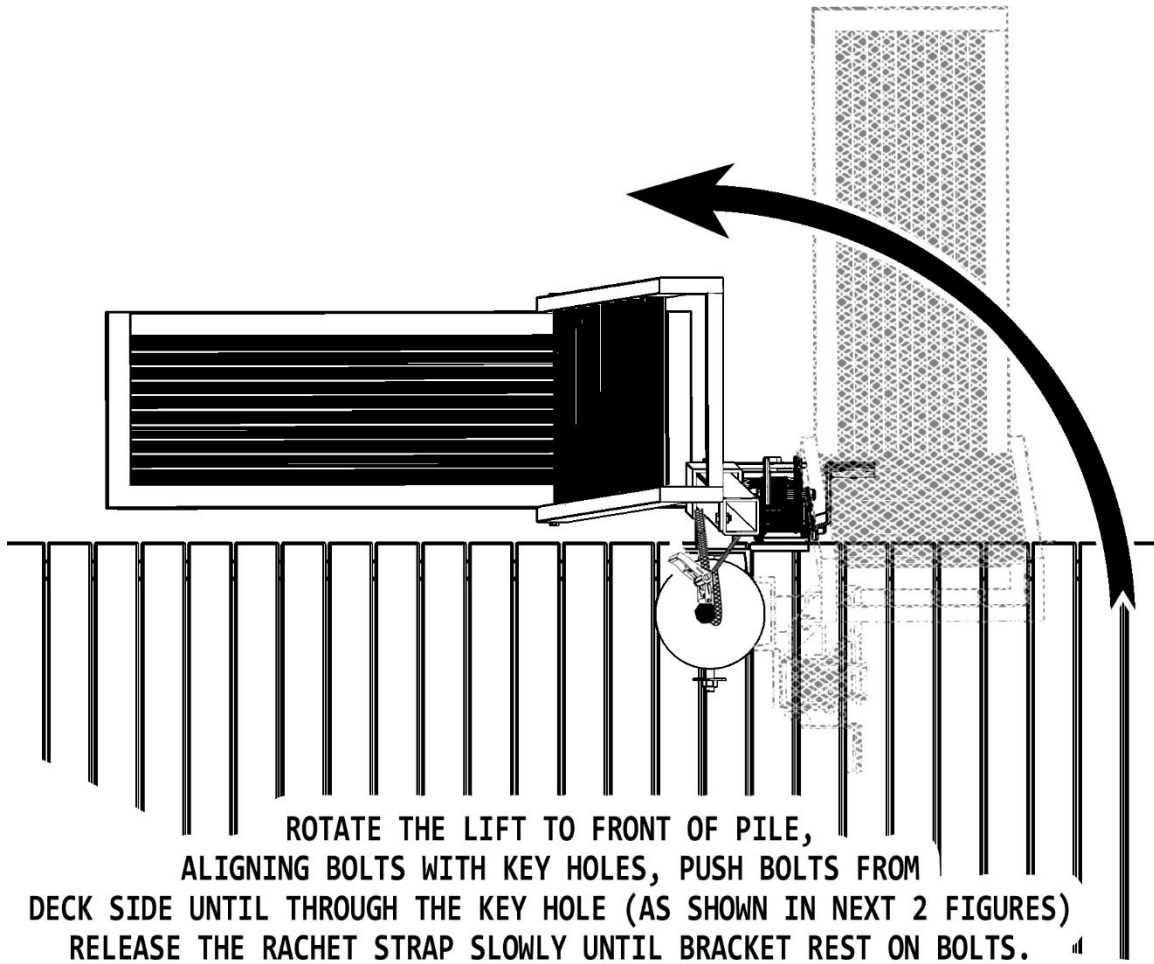
- You need to thru-bolt the pile mount bracket to the pile using stainless steel bolts. The pile should be 10-12" in diameter and at least 36" above the deck. The bolts should be 5/8" in diameter and are not supplied with the lift (the minimum length should be the diameter of the pile plus 4"). **Do NOT use lag bolts.** Insert the two bolts with washers from the water side of the pile.



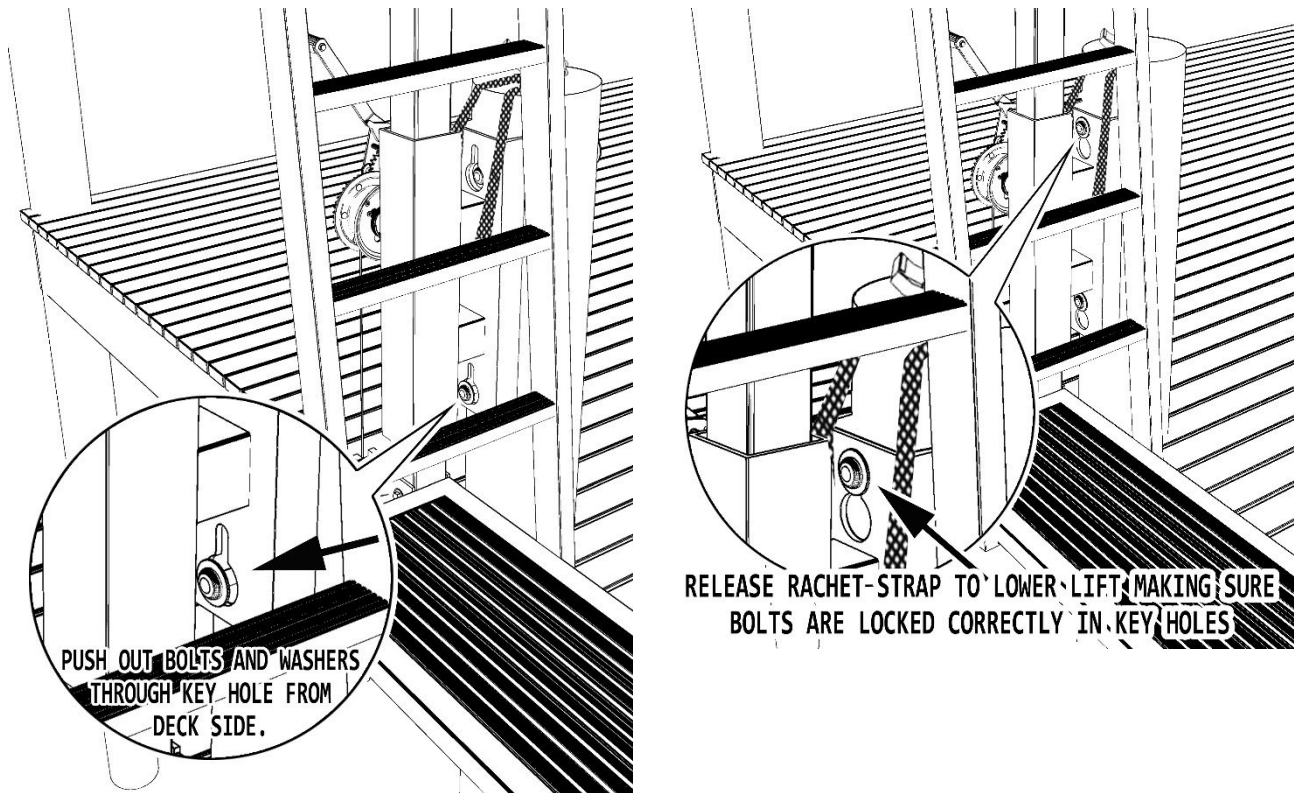
- Although the kayak lift can be carried by two people, it is large and awkward. We recommend using strapping to help carry the weight. A third person will make the installation easier.
- Lay the kayak lift down on the decking as shown above.
- Drill a $\frac{1}{4}$ " pilot hole on top of the pile and screw in the supplied lag bolt leaving 2" remaining above the top of the pile. After the installation is complete, you may remove the lag bolt.
- Run a ratchet strap around the protruding lag bolt and through the pile mount bracket. Take up the slack in the ratchet strap. Carefully tip the kayak lift upright while taking up the slack in the strapping.



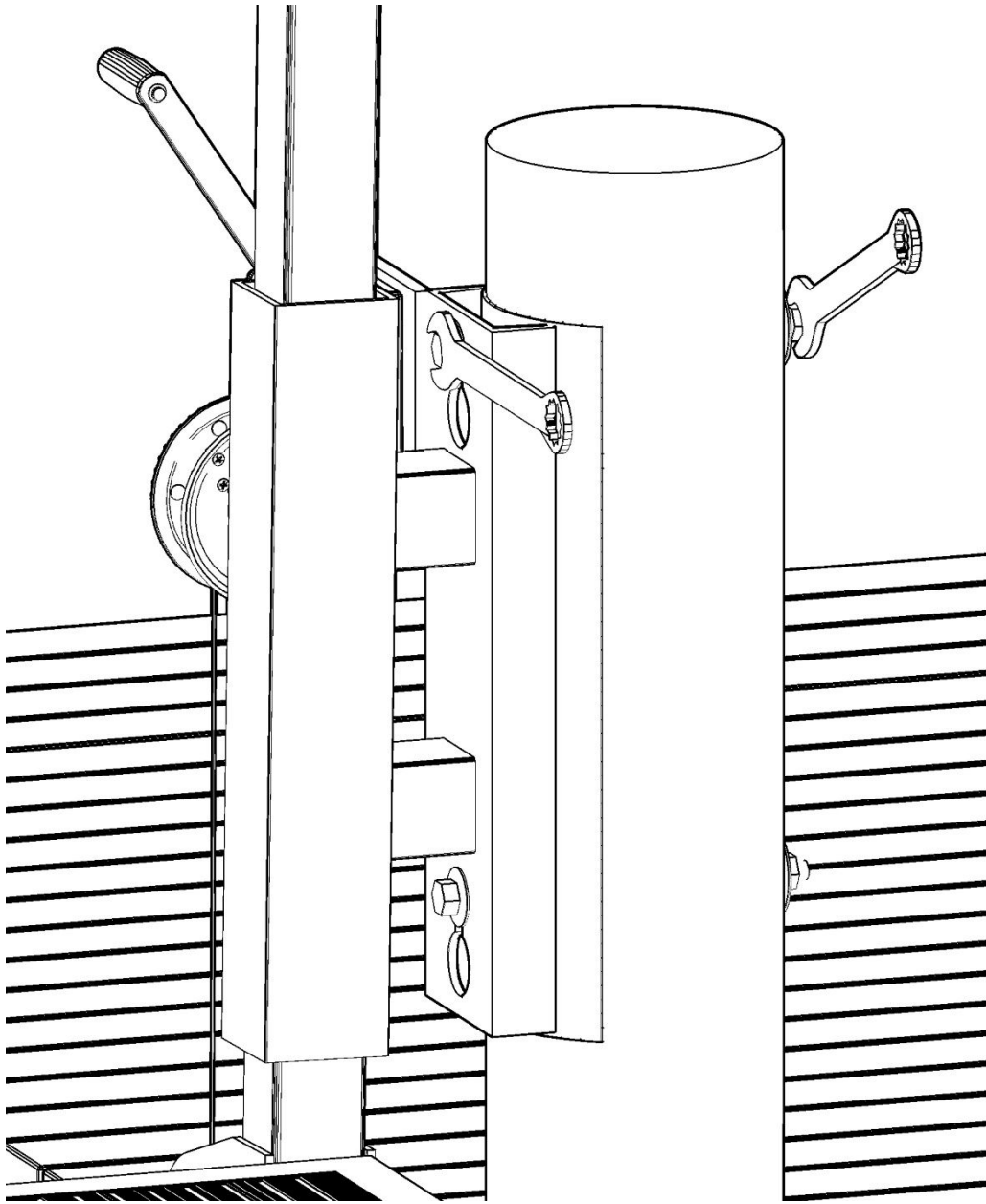
- With the lift upright, continue raising the lift by tightening the ratchet strap. Raise the lift until the key way holes on the mount bracket and the bolt heads are at the same height.



- Rotate the lift to the front of the pile so that the kayak lift platform is parallel with the dock and the channel legs of the pile mount bracket are firmly seated against the pile.
- Adjust the position of the lift using the ratchet strap and by rotation until the bolt heads and the key holes on the pile mount bracket are aligned.

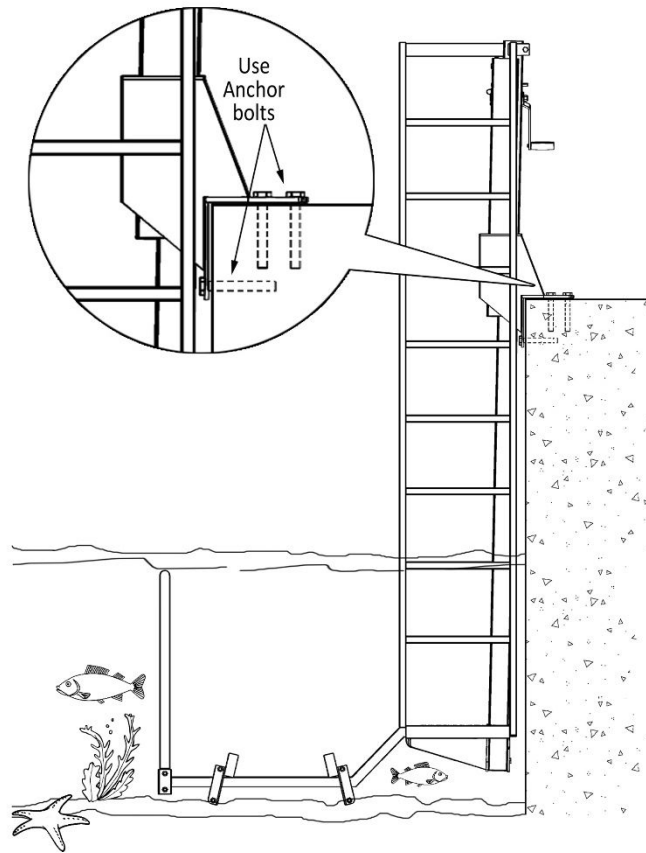


- With the bolt heads aligned with the key holes, tap on the dock-side of the bolts until the bolt head and washer come through the key hole (as shown on left above).
- With the bolt heads and washers through the key hole, slowly release the ratchet strap to lower the lift until the bolts are seated in the slots (as shown on right above).
- Check that the kayak lift is plumb and square. Adjust the lift position accordingly.
- It may be necessary to place shims between the pile and the legs of the pile mount bracket channel, both to bring the lift position into proper alignment and/or to provide a tight fit between the legs of the pile mount bracket channel and the pile.



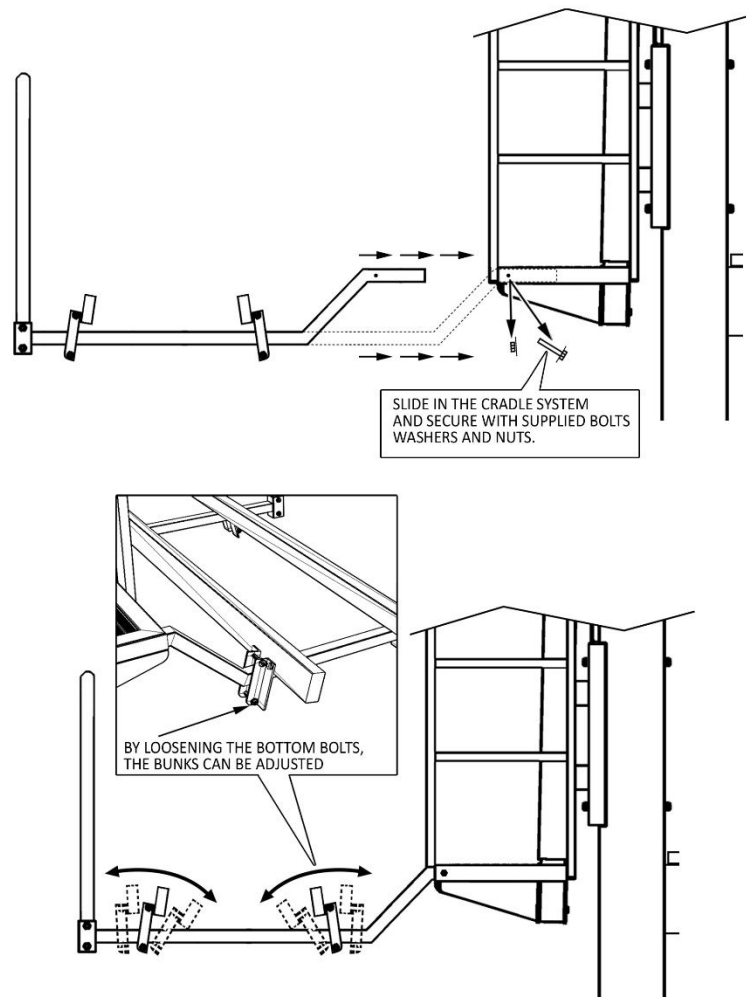
- Once the lift is in the correct position, secure the bolts with washers and lock nuts.
- Using two wrenches, tighten the lock nuts. Once bolted, the pile mount bracket should be secure and not able to move or shift.
- Remove the ratchet and strapping before operating the kayak lift.
- You may trim any excess bolt length from the dock side using a hack saw.

Seawall Mount Installation



- Mark the location of the six holes from the seawall mount (4 on horizontal surface, 2 on vertical surface).
- Drill the holes a minimum of 3.5" deep with a 5/8" masonry bit.
- Clean out dust and debris from the holes with a vacuum or other means.
- Fill the holes with a high strength adhesive anchoring epoxy and then insert 5/8" stainless steel wedge anchors in two of the holes on the horizontal surface.
- Hang the Kayak Launch by placing the seawall mount bracket over the anchor bolts. Loosely secure with washers and nuts.
- Tap additional wedge anchors into the remaining holes and secure with washers and nuts.
- Tighten all nuts to firmly anchor the mount bracket to the seawall. When properly installed, the seawall mount bracket will not move or shift.

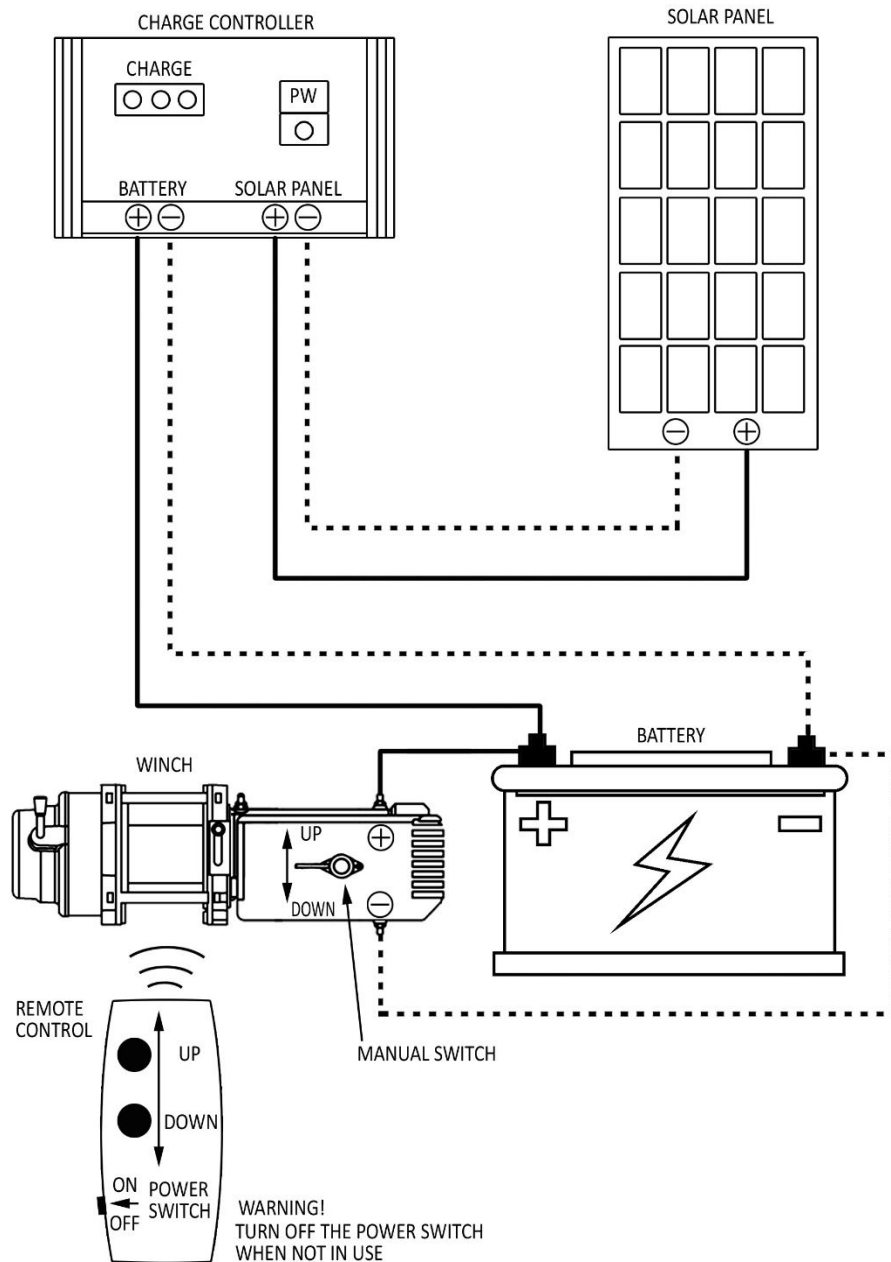
Cradle and Nylon Bunk Installation



CRADLE AND BUNK BOARD ASSEMBLY

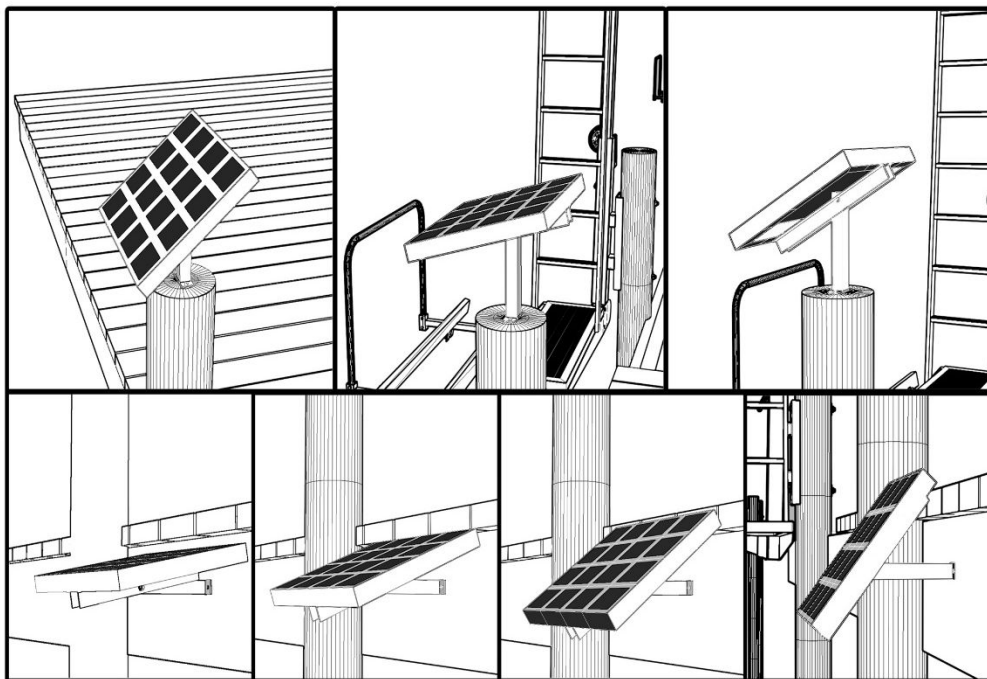
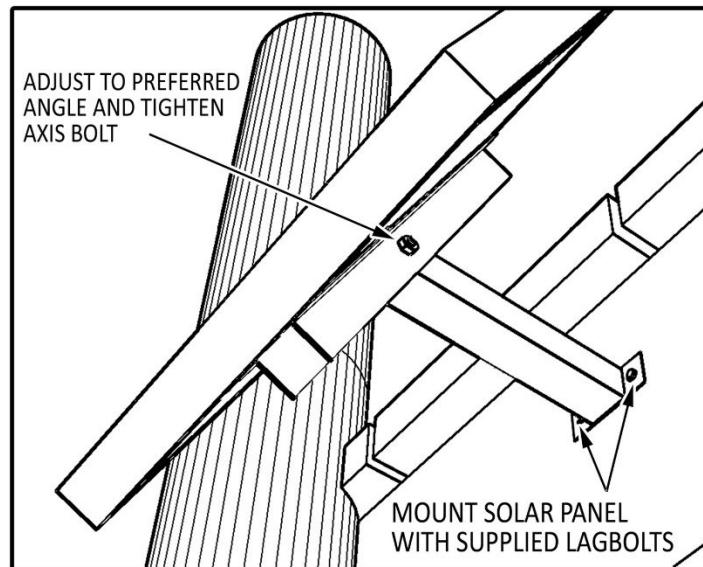
- The bunks come pre-assembled with the brackets attached to the cradles.
- Slide the ends of the cradle assembly into the box beams at the ends of the platform. Align the holes and install a bolt in each box beam and secure the cradle arms with washers and nuts.
- The bunk brackets sandwich the sides of the cradle beams with one bolt above and one bolt below the cradle beams.
- The brackets may be repositioned by loosening the nuts at the bracket and sliding along the cradle beam.
- The spacing between the bunks should be set to provide a stable platform for the watercraft. Securely tighten the nuts when in place.

Wiring Diagram for Model with Electric Winch



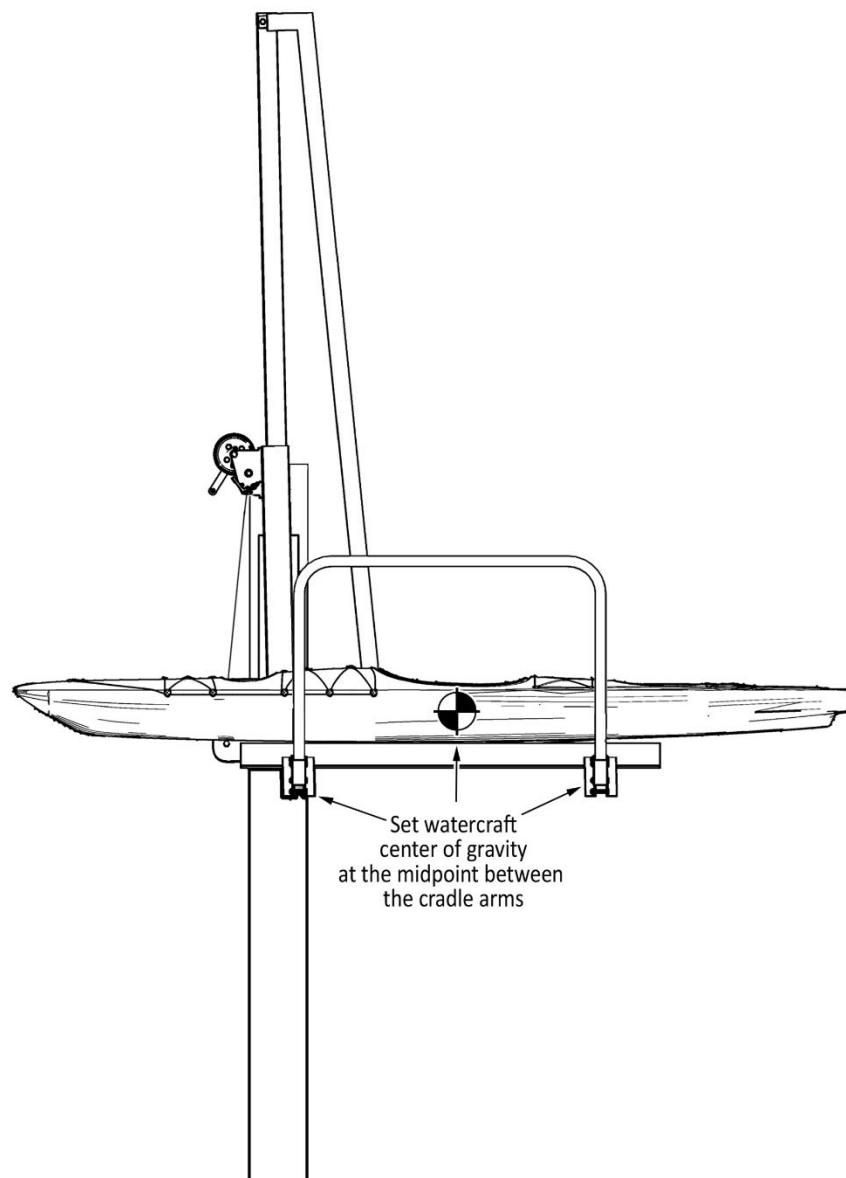
Note: Imm Quality Boat Lifts recommends that the electrical hookup be performed by a licensed electrician and conforms to all national and local electrical code. The appropriate wiring diagram and further instructions are enclosed by the OEM in the battery box. Please read all instructions and wiring diagrams before connecting or changing any wires.

Please install the charge controller and battery inside the provided battery box. The solar panel can be mounted with the provided bracket. It is best to mount the solar panel facing south, at an angle that approximates the latitude of the install location (typically 30 to 40 degrees). In the top figure, the solar panel is mounted to the dock ledger board with lag bolts. Alternatively, the solar panel may be mounted to a nearby piling. The goal is to capture as much sun light as possible in an unobtrusive location.



Watercraft Positioning

The water craft must be properly balanced on the lift before attempting to operate the kayak launch. Generally, water craft are heavier towards the rear section. The water craft must be positioned so that the center of gravity of the water craft is centered between the two cradle arms. The figure below shows the watercraft positioned correctly with a typical kayak. Please consult with the manufacturer to determine the location of the center of gravity for your particular watercraft.



Notes: