



ATTENTION!

DO NOT DEVIATE FROM THESE INSTRUCTIONS WITHOUT DISCUSSING WITH WAY MARINE DESIGN. DO NOT ADD ANYTHING INSIDE THE CHU'S WITHOUT DISCUSSING WITH US. IF THERE IS A ISSUE, CONTACT US FIRST.

ATTENTION!

We can't stress enough that the piles are placed according to the pile placement diagram supplied to you. Unlike a conventional lift, there is a moving platform between the piles that must be able to travel freely. Another reason is the cables leave the bottom of the CHU and connects to the lifting cross members that supports the platform. If the piles are not set correctly, it will cause scoping of the cables that will create lateral pressure on the cable and the pulleys. If the piles are too far apart the cables will scope inward, if too close together the cables will scope outward and the platform will get pinched.

PLEASE CONFIRM THE PILES ARE PLACED CORRECTLY BEFORE YOU START THE INSTALL. IF THEY ARE NOT, CALL US AND DISCUSS THE ERROR AND WE CAN ADVISE WHAT NEEDS TO BE DONE.



TOOLS NEEDED FOR A SUCCESSFUL INSTALL

1/2" drill

3/8" x 12" drill bit

11/16" auger bit

7/16" drill bit

2 phillips bit

Screw gun for decking

T-20 torx bit for composite screws

(2) 15/16" wrenches

1/2" wrench and sockets

9/16" wrench and sockets

(2) 11/16" wrench and sockets

5/8" wrench and sockets

(2) 3/4" wrench and sockets

Hammer

Skill saw for trimming decking

Chalk box with non-staining chalk

100' Tape measure



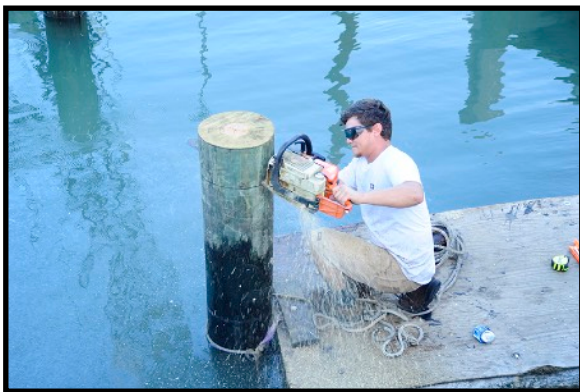
Way Marine Design has made the installation of the No Profile Boat Lifts an easy procedure when the installer takes the time to familiarize themselves with this installation document. Although you may have installed many conventional lifts, there are things that make installing the No Profile Boat Lifts different than the typical lift. The beauty of our design is that the installer doesn't have to install or "wind" the cable during the installation. This has been handled in our factory and bench tested prior to shipping. You will find that by following this installation procedure, the installation will be remarkably simple.

LET'S GET STARTED!

By virtue of our "no profile" feature, closer tolerances are required port to starboard than conventional lifts. Because of this, the pile placement is critical. If the piles are slightly out of place, a come-along can be used to coax the piles into place and the Cable Handling Unit (CHU), when bolted to the piles will keep the piles in place.

PILE PLACEMENT

Once the piles have been placed according to the signed pile placement provided, each pile will need to be cut **6 3/4 inches** below the finished grade of the deck adjacent to the existing dock. This will allow the CHU to be flush with the dock and remain "no profile". The piles may have to be trimmed to allow the CHU pile straps to settle into place and be through bolted or lagged to the pile.



When all the piles have been cut to grade, the CHU's can be placed on the piles port and starboard. You will notice that on the underside of the CHU where it will come into contact with the top of the pile, we have installed a hard plastic barrier shield to prevent the pile and the aluminum CHU from coming into contact with each other. We also recommend you place some shower pan on top of the pile for extra protection. This barrier will also be on a pile sharing bracket (when a pile sharing bracket is utilized). **MAKE CERTAIN THAT THIS BARRIER IS NOT REMOVED.**

To do service add the following as well

1/2" or 3/8" torque wrench

Grinder and cutting wheel that will cut
Stainless Steel

3# hammer

1/2" x 12" drive pin

PB Blaster Corrosion Stop Protectant, 11
oz. aerosol can

(available at Home Depot)

Pressure washer

Battery powered blower

Water hose

If you have an install with the CHU up against the bulkhead or dock as shown below, you will have to drill a hole all the way through the pile and use the threaded rods supplied and then get a nut on the side against the bulkhead to secure. THE CHU'S MUST BE ATTACHED TO PILES ON BOTH SIDES.



Through Bolt or lag CHU



Spacers



When you unload the Cable Handling Units from the truck with a Fork Lift, be sure to match the forks with the pick up points on the CHU. The CHU's are not evenly balanced so it's important to pick up correctly. The same applies with lowering the CHU onto the piles. Use a spreader bar as shown. If the motor box is attached as shown, this goes to the bow end of lift.

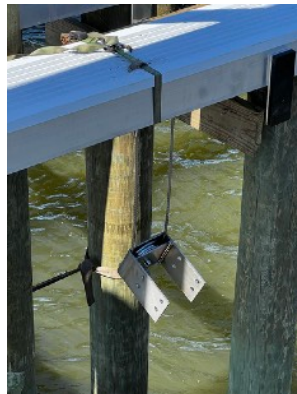
ATTACHING THE CHU'S TO THE PILES

***** We highly recommend that you remove the CHU Covers and store in safe place until lift installation is complete to prevent damage during install.**

In a perfect world, the CHU pile straps and the pile will align perfectly. If this is not the case, there are a few options to correct this. If the pile is out of alignment with the pile strap, a come-along can be utilized to complete the alignment and through bolted with the provided threaded rod or lagged. In the event that this doesn't completely solve the problem, the pile straps can be moved to get a proper purchase on the pile. **WARNING:** If the strap must be moved, new holes must be drilled. It is very important that if the strap is moved, make sure that any bolts added (use only pan head bolts on the interior of the CHU) will not impede the cables or pulleys that travel inside the CHU or the down transition pulleys or cables as they exit the bottom of the CHU. We strongly suggest that if the straps have to be moved, a phone call to our engineering department is in order. (1-800-688-1033) The CHU is 12" wide and when you use a smaller diameter pile, spacers should be inserted to prevent pile straps from bending. If the pile diameter is provided to us when the lift was ordered, WMD will provide the necessary spacers.



5K and 10K Connect



15K, 20K, and 30K Connect

CROSS-MEMBER INSTALLATION

Depending on the lift model, each lift will have two or three cross-members and are each marked as stern, midship, and bow. Our 5K and 10K lifts will have the cable hanging out of the bottom of the CHU and it connects directly to the cross-members with the provided hardware. Our 15K, 20K, and 30K lifts will have a pulley block that attaches to the cross-members as shown. These pulley blocks will ship attached to the underside of the CHU. To release them, remove the CHU cover and remove the bolt holding them in place.

ATTENTION

30K, 40K AND 50K Cable Connection to Cross-Member

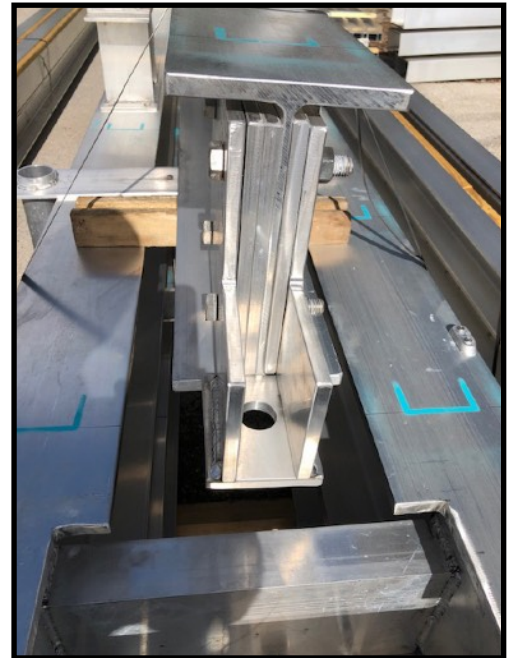
Remove both nuts and washers from the end of the cable. Slide through hole in Cross-Member and attach. Make certain that the distance from the top of the washer to the end of bolt is 3 inches. We have made these adjustments in the shop to allow the platform to be level and flush with



Cable End



Stern and Midship
Cross-Member



Forward Cross-Member

HULL GUIDE PLACEMENT

Included with the lift, you'll find 4 hull guide receiver brackets that are attached to the stern and midship cross-members. Based on the beam of the boat, measure from the center of the cross-member $\frac{1}{2}$ of the beam of the boat plus 2 inches and tighten the brackets. Make certain that the receiver tube is on the stern side of the cross-members. In the event the client hasn't chosen a boat, leave the brackets attached and when the client decides on a boat, it will require removing a few deck boards to properly position the guide brackets.



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STERN BUMPER PLACEMENT

Included with the lift, you'll find a stern bumper that attaches to the stringers at the stern end of the cut out. This bumper is designed to prevent deck board damage by the outdrive or outboard motor foot.

STERN FACIA BOARD

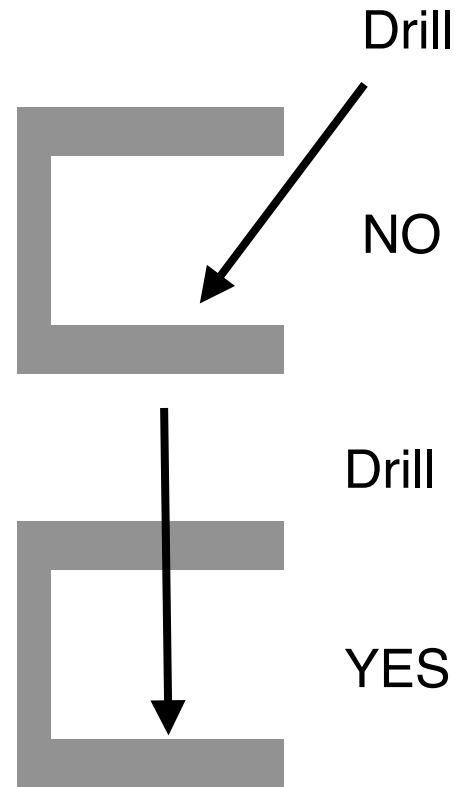
On each end of the stringers, you'll find a piece of 2 x 4 bolted to the stringer. This will allow a deck board to be attached to hide the ends of the stringers.

You will notice that the cross-members are marked with the location of the stringers. Place the stringers wood side up and drill and bolt into place on each cross-member as marked. Attach using the supplied $\frac{5}{16}$ bolt by attaching with the flat washer on top and



Stern Cut-Out Bumper

the flat split washer and nut on bottom. The wood allows the deck screws to be placed into the wood so you don't have to pre-drill into the aluminum. In our standard configuration, we have a "cutout" in the stern of the deck to allow the outriggers to "penetrate" the deck for proper vessel placement on the platform.

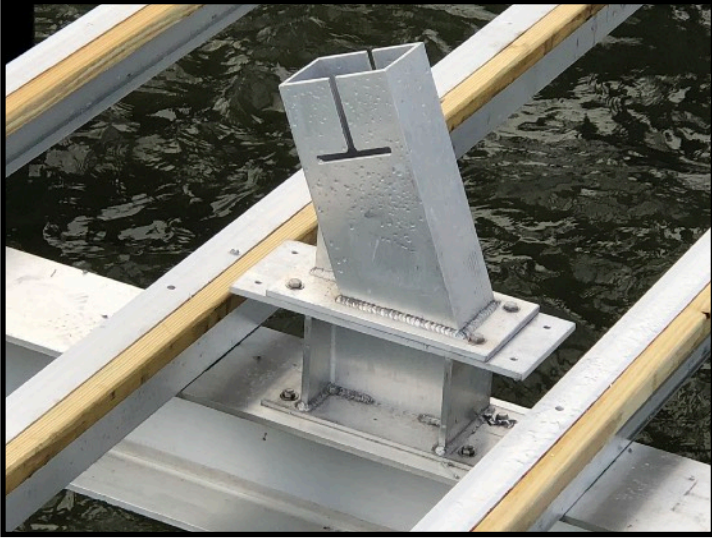


DO NOT DRILL THE HOLE INTO THE STRINGER AT AN ANGLE.

This photo shows our Bunk Base Plate. You can see the pre-threaded holes that will allow the bunks to be adjusted from the deck. If you have the chance to place the boat on lift, you can make sure the location of the Base Plate will work based on how the boat sits on the lift. If needed, the Base Plates can be moved closer or further apart. You want to be able to adjust the bunks to avoid an obstruction like chines or transponders etc.

NOTICE

IF AT ALL POSSIBLE, WE SUGGEST THAT YOU INSTALL THE LIFT AND GET OPERATIONAL BEFORE DECKING. IF YOU CAN PLACE THE BOAT ON THE LIFT BEFORE DECKING, YOU COULD MAKE ADJUSTMENTS TO THE BUNK OR HULL GUIDES IF NEEDED. IT'S NOT REQUIRED, JUST A SUGGESTION.



DECKING THE LIFT

If the lift has power, you can bring the lift into the full upright position before decking. If you don't have power, the lift can still be decked but you may want to wait until the lift can be raised before trimming the deck boards. Start at the bow end of lift and work your way to the stern. The gap between the CHU and the moving deck should be at least 1 inch. At the location of the pile straps, the deck boards will need to be trimmed around the black plastic pile strap cover.



Pile Strap Cover

INSTALLING BUNKS

The bunk uprights are already installed on the stern and midship cross members. The base plate that supports the Bunk Upright has pre-threaded holes that allow the bunks to be adjusted further apart or closer together. Take note of the hole placement the bunk uprights are connected to. Mark the correct holes with a Sharpie. Remove the port side stern bunk upright. Place the bunk upside down and slide the stern bunk uprights onto the bunk. The stern end of bunk has the vertical carpeted piece on the end. Slide the bunk into the forward bunk upright and position the stern upright on the base plate and replace bolts. **DON'T TIGHTEN BOLTS UNTIL ALL BOLTS ARE ATTACHED.** Tighten the bolts until snug. Don't over tighten. Have the same overhang of bunk at both ends. Repeat on the starboard bunk.



REMOTE MOTOR INSTALLATION

In the event this lift has been designed to have remote mounted motors, follow these instruction.

When the remote motor boxes have been placed in their designed locations, you will need to measure the distances from each motor to it's designated CHU. All hoses need to be the same length. If they are different lengths one side may start moving sooner.and become un-level. Measure the run from the remote motor box to the port and starboard CHU fittings and supply us the lengths and we will make up the hoses and ship them to you. We typically send the hoses with a straight stainless fitting to attach to motor box and a 90 degree fitting on the end that attaches to the CHU. If you want a different configuration, let us know.

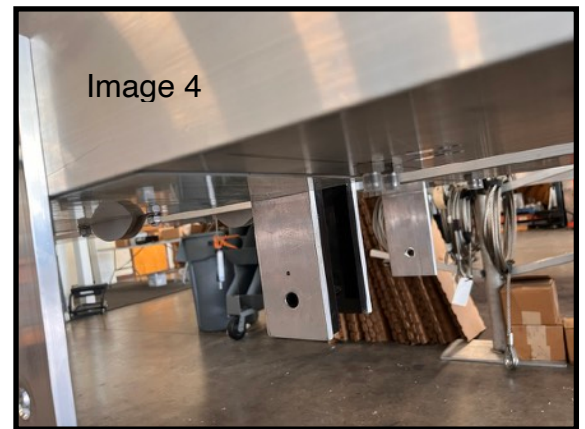
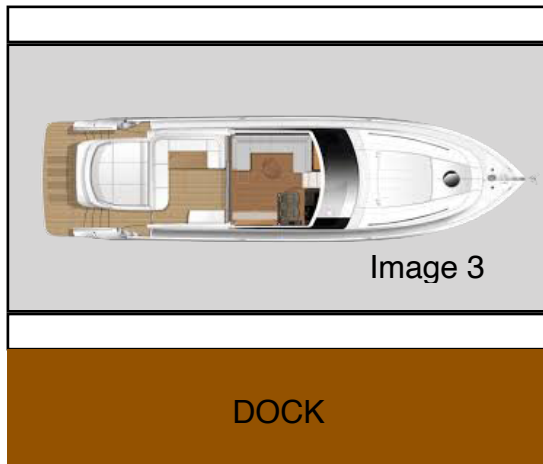
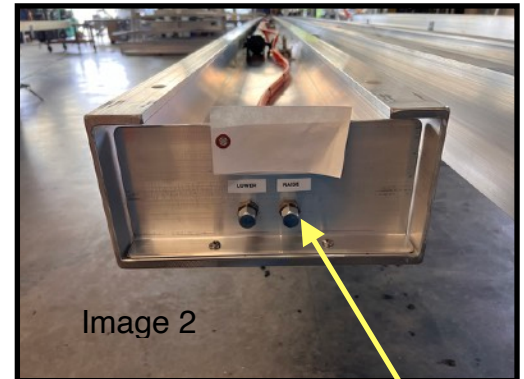
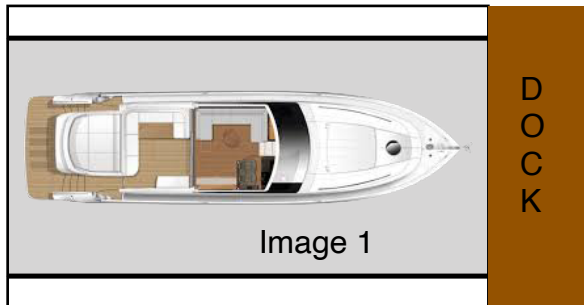


MOTOR INSTALL

When power has been provided, place the motors into their proper motor box. Each motor is tagged as port and starboard. Hook up the two hydraulic lines and plug in the electrical pigtail connection. When the power is supplied to the lift and the Control Box has been attached to the pedestal, the lift is ready to operate.

HYDRAULIC HOSE CONFIGURATION

Depending on the orientation of your lift in relation to your dock, will dictate where the Hydraulic fittings are located. If the orientation of the lift is like image 1, the Hydraulic fittings will be at the bow end of the CHU as shown in image 2.



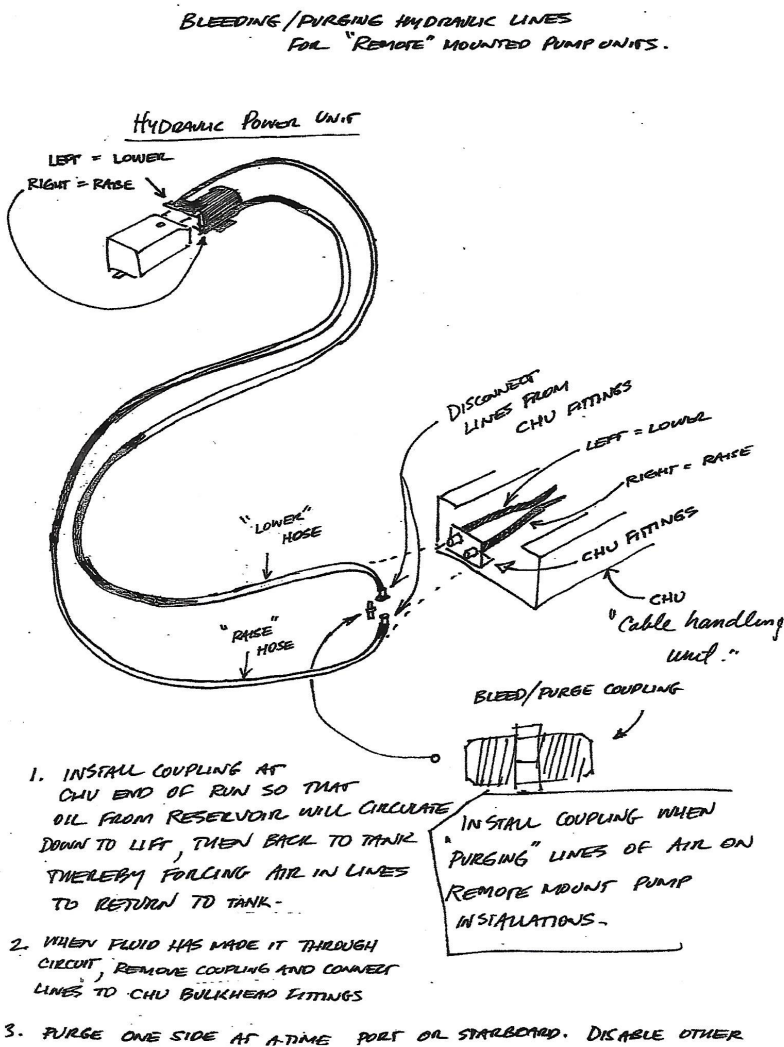
If the orientation is like image 3, the 2 hydraulic hoses that have to service the outboard CHU will have to be run thru a conduit down the forward pile, across the seabed, and up the outboard piling. The Hydraulic fittings will be under the CHU in close proximity to the forward pile as shown in image 4. The inside diameter of the conduit should be a minimum of 2 inches.

When the possibility exists of a hydraulic hose chafing against the edge of a conduit or any other obstruction that could cause chafing and hose failure, the hose in that area needs to be wrapped by this anti-chafe wrap. Please let us know if this is an issue on this particular project and we will include it with the lift.



BLEEDING THE HYDRAULIC LINES FOR REMOTE MOUNTED MOTORS.

1. Connect the Hydraulic Hoses to the motor boxes first. In the motor box, you'll find some plugs and caps to facilitate the bleeding of the lines.



Caps & Unions

Tools Needed:
2- 3/4 wrenches
1- 5/8th wrench
1- 11/16th

1. Place cap on both ends of empty hydraulic hoses and run through conduit.
2. Connect both hoses to the Motor Boxes. On the other ends connect both hoses with the unions and run the lift to remove all air from the hoses.
3. Remove union plugs and connect to the fittings on the CHU.
4. Run the lift up and down a few times before placing boat on lift.
5. Put parts in a zip lock and leave in the motor box.



NOTICE

When you remove the CHU Covers, you may see what looks like a hydraulic leak. This is NOT a leak. We spray down the entire lift with a product called Corrosion X. We do this for added protection. Not an issue.



OPERATING LIFT FOR FIRST TIME

Before placing the boat on the lift, run the lift up and down a couple of times. This will ensure all air is out of the lines. WITH THE LIFT IN THE FULL UPRIGHT POSITION, CHECK THE FLUID LEVEL OF EACH PUMP AND ADD HYDRAULIC FLUID TO THE FILL LINE IF NEEDED.

Lower the lift to allow the boat to go forward. You'll notice a Center of Gravity decal on the inside edge of the CHU between the stern and midship Cross Members. You will place the COG of the boat. (generally where you sit or stand at the helm) in line with COG of lift before raising the boat.

Take a look how the hull rests on the bunks to make sure the bunks are in the right position. If necessary, the bunks can be moved closer together or further apart based on the hull.



This is the only hydraulic fluid to be used in the No Profile Boat Lifts. If you can't source it, we can supply it.