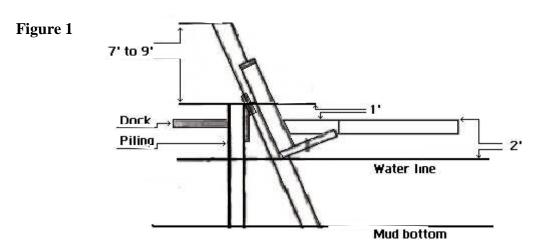
# **Aluminum Elevator Installation Instructions**

Note: This lift may be mounted to a dock piling, concrete seawall, or a concrete deck. The depth of water needs to be approximately 24 inches plus the draft of the watercraft. It is the contractors responsibility to determine and construct a suitable support fixtures and bracing for lift piling and/or seawall mounts. The Elevator lift cannot be mounted to a freestanding piling, the piling may collapse. For tech support e-mail: (techsupp@qualityaluminumboatlifts.com).

Note: The piling spread should be set no more or no less than the specification sheet for your lifts requirement.

# **Piling Mount Installation**

Step 1: Cut the piling approximant 1 foot above the highest desired point of travel of the cradle. See figure 1.



Step 2: Thru bolt piling mounts to the top of the piling with three  $\frac{1}{2}$ " bolts or threaded rod. Leaving a few inches of exposed piling above the mounting holes. Note: recommended to shave the piling flat to prevent track twist. See figure 2 - 2.3

Figure 2
Notched Piling
Step 3: Slide the track through the mount.

Figure 2.2 Straight Mount Figure 2.3 Angled Mount Figure 3







**Note:** Make sure the mounting holes for the

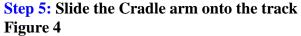
top units face the water

Note: For straight lifts use a level to guide the

track into the ground.

Note: For angle lifts use an angle locator to guide the track into the ground, or cut a 2x10 or 2x12 @ 24 degrees to put on the piling to help keep the angle or the track correct. See Figure 3

Step 4: Hammer or jet the track into the ground Making sure the tracks stay at the degree the Specifications recommend, and with a minimum of 8' of the track must be in the soil.



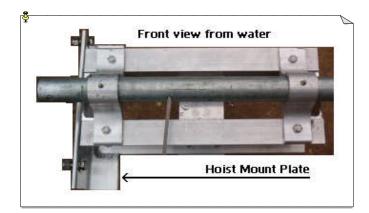
Note: this is recommended to be done with a crane or barge. Hang the cradle arm on the water side of the track, and the pull the cradle arm to the top of the track until the top rollers are higher than the track, then pull the cradle arm back until top rollers are behind the water side of the track then lower the cradle arm onto the track. Note: The top rollers goes on the inside of The track and the bottom wheels on the Outside of the track (water side).

See: Figure 4 & 5

Note: you may want to secure the cradle Arm with a rope so you don't have to Pull the cradle from the bottom or leave The cradle in the water.

Step 6: Attach the elevator top unit to the track.

Note: Looking from water side towards shore
the hoist mounting plate should be on the
left side of the track. Note: See Pictures Below





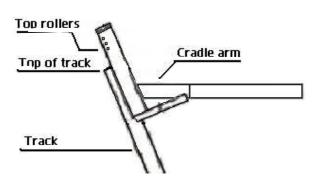
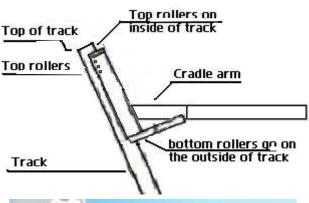


Figure 5





Step 7: Attach the deadman bracket to the Track. The track should have pre drilled hole for the deadman bracket.

Note: The deadman bracket may mount To the right or left depending on the cable Winder on the top unit. The deadman angle should mount on the opposite side of the cable start on the cable winder. Figure: 6



# **Step 8:** Put hoist plate together.

Step 8.2: Attach the motor to the back plate Only using the upper to mounting holes( the bottom will be used for cover mount hardware) Next attach 10" pulley to the hoist plate. Note: Make sure the motor pulley and hoist pulley line up. Attach the belt to the two pulleys. Make sure there is tension on the belt.

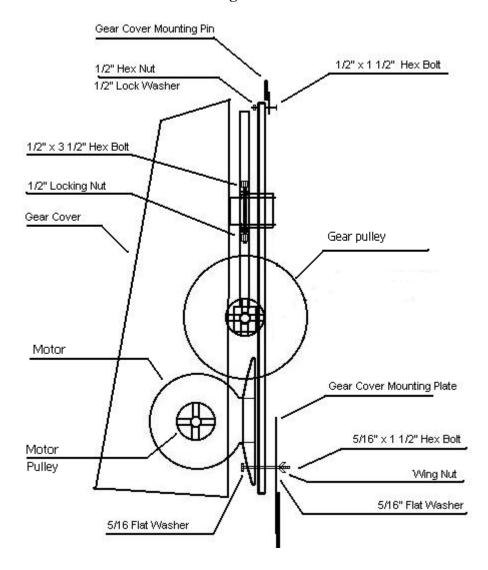
Gear Cover Pin Mounting Holes

Gear Plate Mounting Holes

Gear Box Pulley

Motor Pulley

Figure 8



**Step 9:** Carefully Hang the motor plate on the top unit drive pipe with motor on bottom Then secure the hoist using the motor plate to lift hardware (don't tighten all the way)

Step 10: Insert the cable into the cable winder. On one side of the cable winder there is a bolt that hold the cable winder in place on the other side there is a pre drilled hole for the cable. Note: To make installation easier put a small wrap of duck tape on end of cable to keep it from unraveling. Carefully slide the cable into the hole till it touches the back side of the drive pipe, then pull the cable approximately half way back out of the hole. Fold the cable sticking out of the drive pipe in the direction you want to push the cable out of the drive pipe. Hit the cable with a hammer right where it goes into the cable winder, this will give the cable a slight memory, then lift the cable back straight. Now push the cable into the drive pipe until the end comes far enough out of the drive pipe to put the cable clamp

on. Tighten the cable clamp on the cable at least 2" from the end of the cable. After tightening the cable clamp pull the cable where it goes into the cable winder. This will pull the cable clamp back into the drive pipe. Note: Make sure the cable is pulled enough to get the cable clamp back to where the cable entered the cable winder.

Step 11: Slide the motor spacer onto the drive pipe and in the main hoist (this will take the play out of the hoist and the drive pipe. Then secure the motor spacer with gear bolt provided with the hoist. Note: do not use a stainless bolt if the bolt is missing! Tighten the motor plate to lift hardware.

Step 12: Run the cable down from the hoist to the pulley in the top of the cradle arm and back up to the adjustable cable bracket. Note: Make sure the Cable adjuster bolts are secure before winding the cable. See figure 9 & 10

Figure 9 Adjustable Deadman Bracket

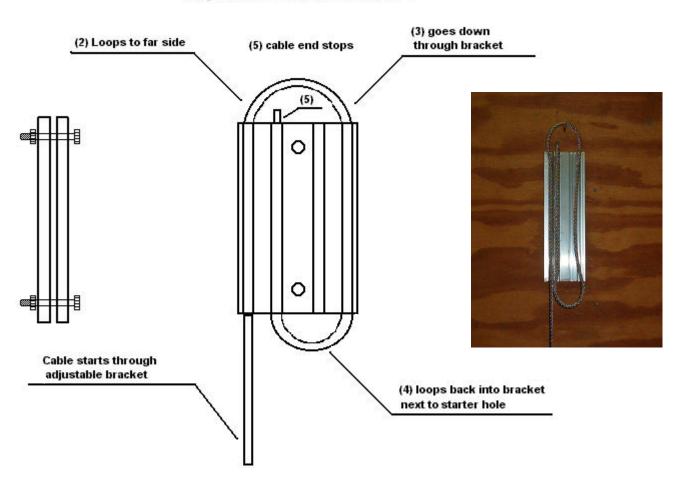


Figure: 10



Your Unit should look similar to this.

**Note:** If you are hardwiring your drive unit it is recommended to do this at this time. If not you may plug your units into your power supply.

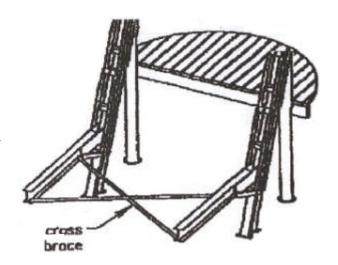
Step 13: Wind up the cable onto the cable winder. Turn your switch to the up position and make sure the cable is wrapping on the outside (open side) of the cable winder. If the units are picking up on the wrong side when you turn the unit to up You will need to switch the wires on T8 & T9 in the switch. Note: Make sure have the power supply off before opening the switch box! If the units are turning in the correct direction continue rolling the cable onto the cable winder. (one at a time) Note: You may want to where a pair of gloves for this. You will need to hold tension on the cable as it rolls onto the cable winder. Continue until the cable start pulling cradle arms up the track. Now level the cradle arms.

Note: If your lift doesn't include cross bracing skip to Step:15

Step 14: Attach the cross bracing to the cradle arms. Note: Check your specification sheet to determine how many cross braces your lift requires. Standard cross bracing goes on the

bottom of the cradle arm. First you must make sure the cradle arms are square. Then attach one of the cross braces to the bottom of the cradle arm closest to shore. The other side goes to the bottom of the opposite cradle arm farthest from shore. The next cross brace goes on the top of the flange on the bottom of the cradle arm starting on shore first then to the opposite cradle farthest from shore. Then double check the cradle to make sure they are square and drill a hole in the middle where the two cross braces meet and attach the bolt in the middle to secure the two. See figure 11

Figure 11



Step 15: Next you need to attach the guide post brackets to the cradle arms.

**See Figure: 12 & 13** 

Note: Figure 12 is a guide post for a straight lift Note: Figure 13 is a guide post for a 24 degree lift

Note: For straight lifts mount the guide post as close to land as possible, but make sure that when the cradle arms come up to the top of the track the guide post will not hit the top unit

Figure 12

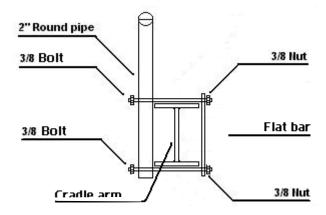


Figure 12



Note: For 24 degree lifts the guide post typically mount at the bottom of the cradle arm by the lower roller this is done by loosening the nuts on the bottom of the guide post bracket and use the angles on the bottom of the guide post bracket to clamp to channel the rollers are mounted too.

Figure 13



# Step 16: Attaching the bunk brackets to the cradle arms. First measure the width of your boat. Now from the guide post edge measure out on the cradle arm to where the center of your boat should be, and make a center mark. There are eight aluminum angle bracket which make 4 sets. Each pair attaches to the cradle arm with two stainless steel bolts. One bolt will rest on top of the cradle arm and one will hang under the cradle arm. From the center mark mount each of the bunk brackets 12 to16 inches away from the center mark. Note: bunk spreads may vary boat up to 9000 lbs 12 to 14 inches most larger boat 16 inches. See figure 14

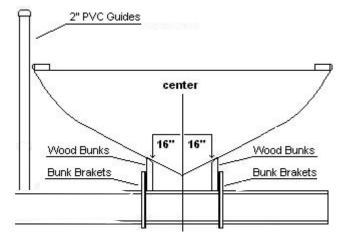
### **Bunk Bracket**



**Step 17:** Attaching the bunks to the bunk brackets.

Before attaching the bunks to the brackets make the cradle arms are level and are still square. Lay the bunks on the inside of the Bunk brackets. With the cradles square measure out the distance of the cradle arms and tranfer to the inside of the bunks allowing equal over hang past the beams. Be sure the cradle arms stay square while doing this. Lay the bunk in position with the marks at the edge of the cradle arms. Drill the four 3/8 holes and install the bunk bolts. Repeat this procedure for the opposite end of the bunk.

Figure 14



Repeat on the other bunk. Tighten hardware.

Step 18: Slide the weight pipe into the top of the guide post, then slide the pvc guide onto the weight pipe.

Step 19: Attach the cover to the lift by fitting the cover over the mounting pins on top then loosen the wing nuts on the bottom of the drive plate slide the plate down into the two holes on the bottom of the covers, and tighten the wing nuts.

## Instalation complete.





# Fitting Boat To Lift

Bunk Adjustment: Loosen the eight bunk bracket bolts (See figure 7). Mark center line port to starboard on both cradle beams. The bunk spread varies; for boats up to 9,000 lbs. (26 to 28' range), spread bunks 32" apart; 16' from center lines on cradle beams.

Move boat in position for lifting. Guide poles will keep boat centered over bunks. Very seldom is tere more than 3 feet of boat hanging beyond stern lift pilings. You need to get center of boat balance as close as possible to center of lift (bow to stern). This will evenly distribute the load over the two cradle beams. Bow and stern cable tension will be equal with a balanced load.

Start lifting boat. If boat starts lifting as you pick it us, you will have to readjust pickup bunks and try again. If boat does not list, continue raising boat until you can make a visual inspection of hull and bunk contact. The following are necessary for proper buning; keel of boat should **NOT** be touching cradle beams. If it is making contact with beam(s), you will have to move wood bunks closer together; next, make sure the pickup bunks are not resting against any thru-hull accessories, such as water intakes, transducers, etc.

Most Commonly Asked Questions
1. To Switch Motor Direction Change T-8 & T-9 in the Switch.
2. Your Gem Remote Wiring Diagrams are located in side the remote.

Caution: Boatlifts Are Not Made For Lifting Humans!!

Note: Place A Rubber Mat Between Top of Piling And Aluminum To Prevent Electrolysis.

Installer is responsible for determining if pilings are adequate to carry the lift and the lifts payload! Warning: Any modification to lift voids Warranty!

For Tech Support e-mail: <a href="mailto:techsupp@qualityaluminumboatlifts.com">techsupp@qualityaluminumboatlifts.com</a>
Please keep in mind to handle your questions we prefer them to be in e-mail so that all of our staff has access and can help you.

To quicken the process if you can take pictures of the part or area you have questions on and send them to us. Having the pictures helps us clarify any questions due to the high volume of lifts we manufacture for different companies.