



BH-USA

THE COMPANY YOU CAN TRUST

360° ROTATING PERSONAL WATERCRAFT (PWC) LIFT GUIDE

Rvsd. 7-2015

THIS GUIDE IS INTENDED FOR THE END USER,
and contains general information for installing a BH-USA PWC 360° Lift onto a
dock/pier . This is not a construction manual, BH-USA is a manufacturer of hoists and
lift components and not an installer.



BH-USA assumes no responsibility or liability for installations and/or improper use of the equipment. This guide is intended to be used as a reference and general guideline only. BH-USA is not responsible for the design, construction or installation of docks, piers or lifts.

WARRANTY PROCEDURE

Please review this publication before attempting a return to BH-USA for warranty consideration.

DO NOT return the product to the store where it was purchased or to the installer/dealer.

Call
BH-USA
CUSTOMER
SUPPORT
800-259-8715

Returned merchandise must be sent via ground and not through the U.S. Postal Service.

Warranties depend upon an annual professional inspection by a qualified technician.

Although BH-USA does not endorse any builder or installer, a BUILDER LOCATOR is provided on the BH-USA website, listing builder's found to be reliable and knowledgeable using BH-USA equipment.
BH-USA.COM
/BUILDER-LOCATOR

BH-USA WARRANTY INFORMATION

- **GEARPLATE ASSEMBLIES (GPAS) - LIFETIME**
- **ENCLOSED GEARS - TWO YEARS**
- **MOTORS - ONE YEAR**
- **SWITCH AND GFCI - 30 DAYS**

The following warranty applies to all components and hoists manufactured by BH-USA. Warranty applies to manufacturing defects and/or failures due to design or fabrication. Replacement parts, a repaired unit, or a new unit will be supplied at no charge at the discretion of BH-USA. This does NOT include labor or freight.

THE FOLLOWING ARE NOT WARRANTABLE BUT ARE MANUFACTURED AND REGULATED BY SPECIFIC INDUSTRY STANDARDS.

SLINGS AND CRADLES

STRUCTURAL STEEL

FASTENERS

CABLE AND RIGGING

MACHINED PARTS, I.E. GEARS

Warranty is void if unit is improperly installed, maintained, or greased or alterations are made to the original manufacturer's design.

Warranty is predicated on the equipment being inspected and serviced on an annual basis by a qualified technician.

A record of inspection is required with any warranty request.

Warranty applies to original owner.

Warranty is VOID if transfer of ownership.

BH-USA RETURNS
2368 FM 2087N
LONGVIEW, TX
75603

Call prior to returning equipment for RMA (Returned Merchandise Authorization).

All Returns must have RMA number clearly listed on return box.

We are not responsible for damages incurred in shipment.

Customer is responsible for return shipping costs.

Once item is received, BH-USA will deem item returned warrantable within two weeks.

BH-USA reserves the right to determine whether warranted items will be repaired or replaced.

WHILE EVERY CARE HAS BEEN TAKEN TO AVOID MISTAKES, BH-USA WILL NOT ACCEPT LIABILITY FOR ANY ERRORS, MISPRINTS, TYPOGRAPHICAL ERRORS, OMISSIONS OR MISINTERPRETATIONS OF THE BH-USA OVERHEAD LIFT GUIDE - THE BH-USA EQUIPMENT GUIDE.

* See BH-USA Limited Warranty Information on the inside back cover of this publication.

**CAUTION...
BH-USA IS A
MANUFACTURER
ONLY**

While there are many notable and qualified professional lift installers, there is no governing or licensing agency that regulates installations. BH-USA assumes no liability for the installation of your lift.

End users should familiarize themselves with the basics of personal watercraft lifts and their design, to enable them to determine if a proper installation has been completed. BH-USA warrants PWC lift equipment based on proper installation and maintenance and the strict following of this guides.

APPROX. WEIGHTS

Fuel Weight=
Gallons x 6 lb

Approximate weights of many personal watercraft lifts can be found on the NADA website at:
WWW.NADAGUIDES.COM/BOATS/PERSONAL-WATER-CRAFT

BH-USA PWC LIFT INSTALLATION GUIDELINES

BEFORE FIRST USE - UNPACK AND CHECK EQUIPMENT

A handy item list is printed at the back of this publication. It includes everything that should be in the BH-USA PWC Box.

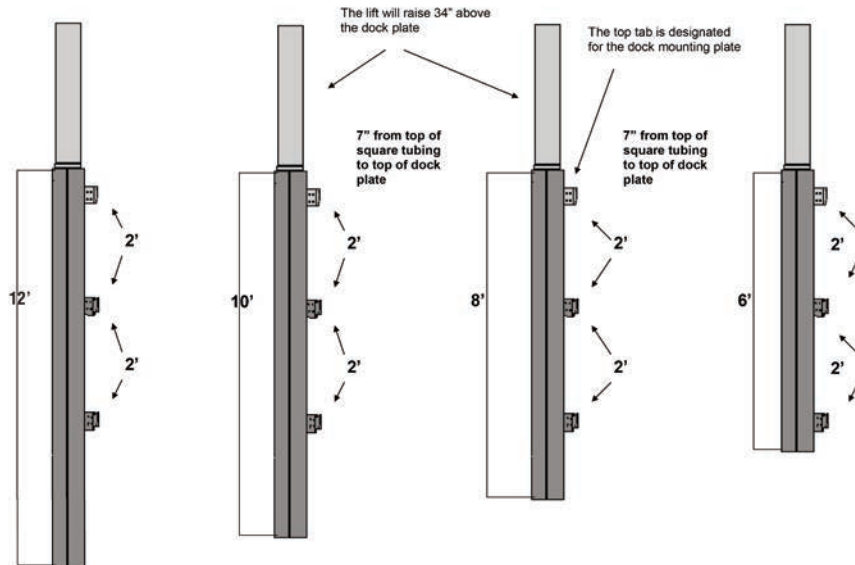
CHOOSING THE LIFT LOCATION AND INSTALLATION

In order to support both the weight of the lift, and PWC to be picked up, choose a location that is structurally sound.

IMPORTANT: The mounting structure must be structurally sound to support the weight of the lift and the intended PWC.

MEASURING THE BH-USA PWC SWINGING LIFT

The BH-USA PWC lift comes in four sizes: 6', 8', 10' and 12' travel or ride pipes. To determine which one is right for you, stand on the dock where the lift will be installed and measure from the top of the dock to the lake or bottom. It is recommended that at least 18" of pipe penetrate the bottom. If the lake is deeper than twelve feet, other mounting options are available.



**Only use the BH-PWC 360° to lift PWC's not any other type of boat.
DO NOT make any alterations to the unit.**

INSTALLING THE BH-USA PWC LIFT

- Attach the mounting brackets (dock mount, piling mount or seawall mount) to the ride pipe with four 1/2" x 1-1/2" galvanized bolts and nuts per tab, with lock washers.
- Tighten all 1-1/2" bolts.
- Set pipe over side, with square pipe in the water until dock mount sits flush with the dock.
- Install the ride pipe on the piling.
- Drop the pile mount bracket over the piling and tighten, leaving the top of the square portion of the ride pipe approximately level with the surface of the dock.

THE BH-USA 360° PWC LIFT

Launching jet skis or any other personal watercraft is easier with a PWC lift. The BH-USA 360° PWC lift has a straight line lifting capacity of 1250 lbs., and has a fully rotational cradle that makes launching and maintaining your PWC easy and safe.

The cradle travels on a galvanized ride pipe that stays in the water. This eliminates the need for an mast in the air. The BH-USA 360° PWC lift is perfect for mounting inside a boat house, under a canopy, or out in the open. It can be mounted straight to the dock or on a piling.

The innovative dock mount and pile mount installation is easy and reduces the amount of stress on the piling or dock.

The BH-USA PWC lift has the added advantage of being powered by the BH-USA Hoist —

BH-USA PWC LIFT INSTALLATION GUIDELINES

- Ensure that the pipe is plumb both fore to aft and side to side.

CAUTION: The ride pipe must extend 2 feet below the surface of the water at the lowest expected water level.

- Slide the ½" x 3-½" round bearing ring over the round top of the ride pipe until it rests on the square tube portion of the ride pipe. Failure to do this can result in serious damage to the lift.
- Install the main housing by sliding it over the rotate tube and letting it sit on the dock.
- Liberally grease the round portion of the ride pipe to assure smooth and easy operation.
- Lay out the winch components and the motor mount pipe.
- Mount the motor, large pulley and belt on the winch unit using supplied hardware, making sure to properly align the motor and winch pulleys
- Insert cable in the hole immediately next to the drum center, on the gear side, and pull out about two feet. Insert cable into the cable clamp so approximately ¼" of the cable extends past the end of the clamp.

CAUTION: It is important to ensure that the cable clamp is tight against the side of the cable drum on the winch. Slide the motor mount pipe/winch assembly onto the rotate tube/ride pipe until it contacts the bearing ring. Rotate the assembly several times to ensure even distribution of the grease. Make sure the cable comes over the drum, so the running line is on the outside of the assembly, away from the motor mount pipe. Uncoil the cable and attach the free end to the cradle lifting tab. Connect the motor to the power source. Wind the cable tightly onto the drum, while keeping tension on the cable until the slack is taken up and the weight of the cradle is on the cable.

The cable MUST wrap in the correct direction on the drum or contact with the tab on the motor mount pipe will occur.

- Measure the width of the watercraft and divide by two. Measuring out from the guide post stanchions, mark the center line of the watercraft on the cradle. This will be the centering mark for the bunk boards. For PWC's, mount each bunk 6" to 8" from the center line, using the bunk board brackets and bolts supplied. Make sure the bunk boards are resting on a flat part of the PWC, that the PWC is not touching the steel at any point and that the boat is snug against the guide posts.
- When operating the lift, make sure that the cable is wrapping on the outboard side of the drum and not wrapping over itself, until each layer on the drum is completely full.
- Grease the zerk fittings with BH-USA Grease^{*}, on the winch unit; they are near the top of the gear, under the motor mount. Rotate the cradle over the water, lower and raise the lift several times to be sure it is operating correctly. Grease the zerk fittings again. The gears must be well-greased at all times. On rotating models, raise lift to the point it will clear the dock or seawall and rotate it back and forth several times to check for proper operation. To increase the life of your lift, grease all zerk fittings every three months.
- The cable must be kept tight with no slack. The cradle must never rest on the bottom, this could allow the cable to become slack and overwrap itself. This can cause the cable to fray and create an unsafe condition when operating the lift. If the cradle is rested on the dock, caution should be taken to ensure no slack is allowed in the cable.

^{*}BH-USA Grease can be ordered online at BH-USA.com.

ADVANTAGE OF THE BH-USA PERSONAL WATERCRAFT LIFT

Hot Dipped Galvanized

Stronger than Aluminum

Fully Rotational

Easily Installed

Doesn't require a specially fortified dock construction

Powered by the BH-USA Hoist

Backed by the BH-USA Lifetime Warranty

1250 lbs. Straight Line Lifting Capacity

Available in 6', 8', 10' and 12' travel/ride pipes

BH-USA PWC LIFT INSTALLATION GUIDELINES

- Install posts over guide stanchions
- Install the white vinyl motor/gear cover.

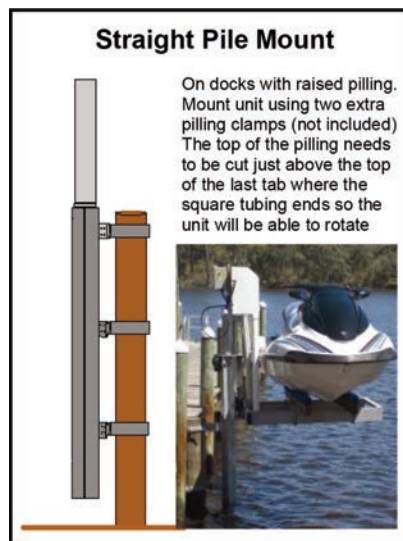
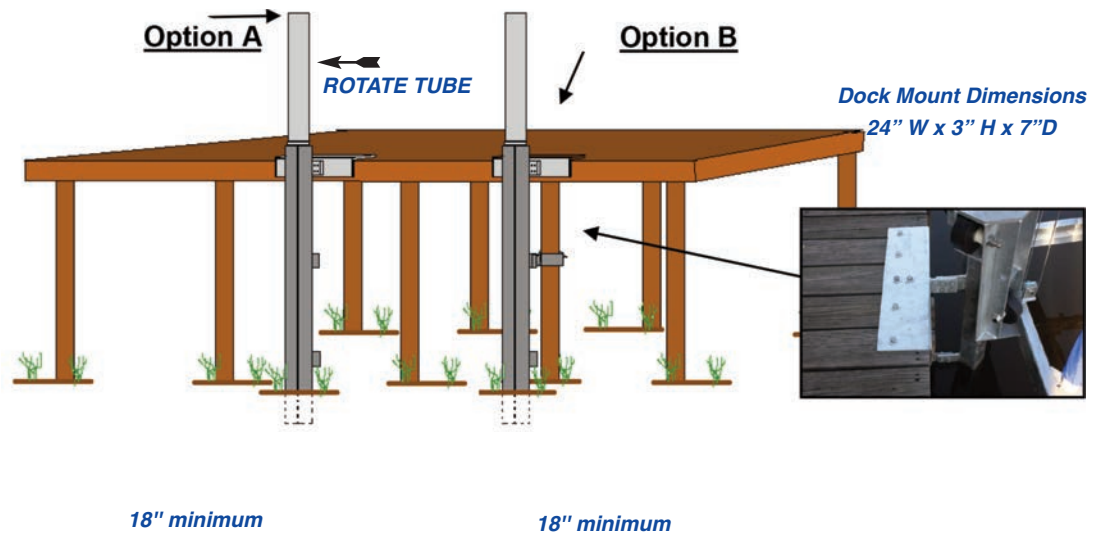
WARNING: Unplug lift and stow cord prior to rotating!

Any BH-USA Rotating Lift is intended to rotate 180 degrees in either direction. It is not intended to rotate past 180 degrees. Failure to follow this warning may result in the lift cord twisting around the lift with serious consequences. Caution must be exercised when rotating the lift!

BH-USA PWC LIFT MOUNTING GUIDE

DOCK MOUNT Option A - This option allows for the ride pipe to actually penetrate the ground below the deck. It is a strong installation which offers minimal stress on the dock. The ride pipe is used as the main support and is driven approximately 18" into the ground if a structure is not available behind the lift.

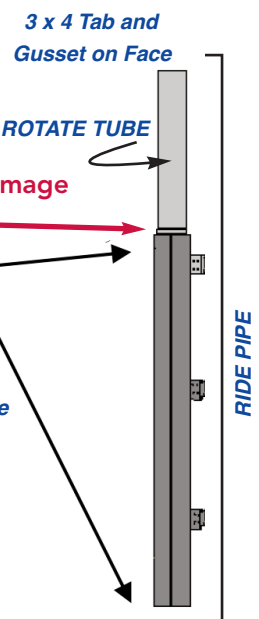
DOCK MOUNT Option B - With this option the ride pipe is still the main support and is driven into the ground approximately 18" with a piling clamp attached to an existing piling for added support. It is the strongest mount.



CAUTION:
Bearing Ring must be installed to avoid serious damage to the BH-USA PWC Lift.

6ft, 8ft, 10ft and 12ft drive pipes are measured from the top to bottom of the square tubing only.

The ground must be hard, not mud and must have plenty of surface behind it.



ADVANTAGE OF THE BH-USA PERSONAL WATERCRAFT LIFT

Hot Dipped Galvanized

Stronger than Aluminum

Fully Rotational

Easily Installed

Doesn't require a specially fortified dock construction

Powered by the BH-USA Hoist

Backed by the BH-USA Lifetime Warranty

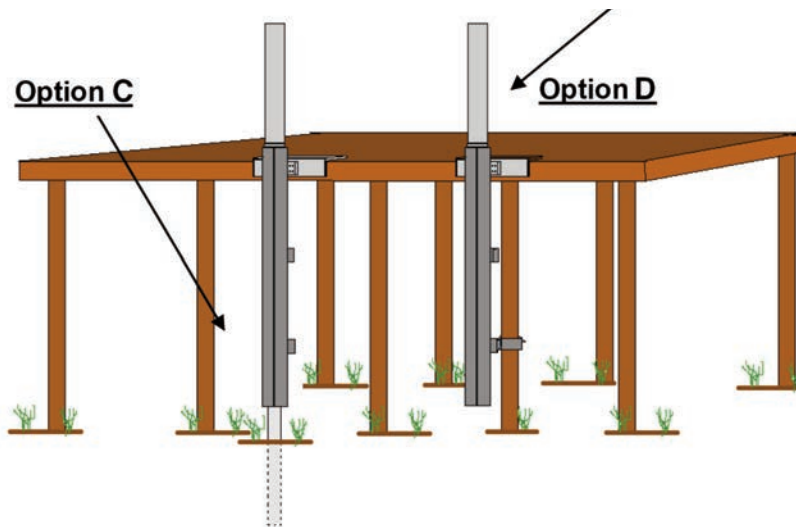
1,250 lbs. Straight Line Lifting Capacity

Available in 6', 8' and 10' travel/ride pipes

BH-USA PWC LIFT MOUNTING GUIDE

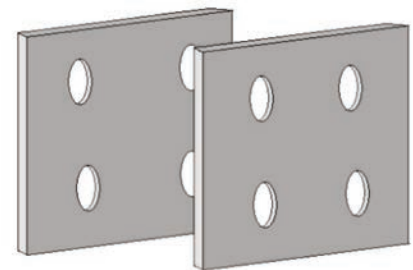
DOCK MOUNT Option C - If the ride pipe does not reach the ground, a piece of 2" galvanized pipe (not included) can be used to extend the pipe so that it can be driven into the ground. Slide the ride pipe over the top of the pipe. Use dock mount for support. Use of a space is recommended and should be welded to the bottom of the square tubing. Pipe must be driven into bedrock or hard surface.

DOCK MOUNT Option D - The lift can also mount on top of the dock piling. Use the dock plate and the piling bracket that is included, mount piling bracket to the lowest tab for support. An optional piling bracket can be ordered at BH-USA.COM to add even more support to the dock.



Installation Tabs - Typical installations will use two of the three available tabs. The top tab is used for the dock mount bracket. The pile mount will be placed on one of the two lower tabs depending on the structure and installation for this dock. Some installations only require one tab (dock mount) to be used if the drive pipe can penetrate the lake bottom by at least 18". There are three tabs welded to the main drive pipe, one tab welded to the dock mount and one tab welded to the included pile mount clamp. The tabs bolt together to support the drive pipe on the dock.

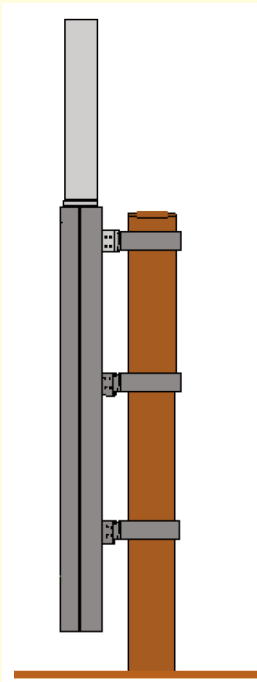
Fasteners are NOT to scale and will require measuring.



FOOTNOTES

MOUNTING DIRECTLY TO A WOOD PILING NOT USING THE DOCK MOUNT

The BH-USA PWC Lift can be mounted directly to a minimum 8" piling without using the Dock Plate. Two additional piling clamps will need to be ordered from BH-USA.COM to accomplish this. Only one piling clamp is supplied with the lift. In order to rotate the lift the piling must be cut off so it is no more than 7" above dock level.

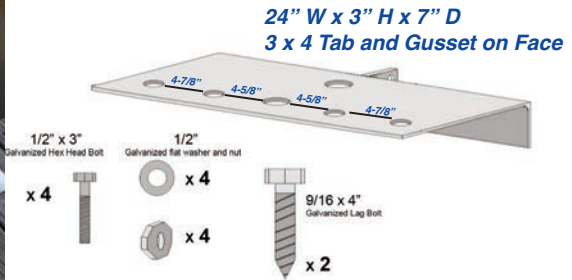
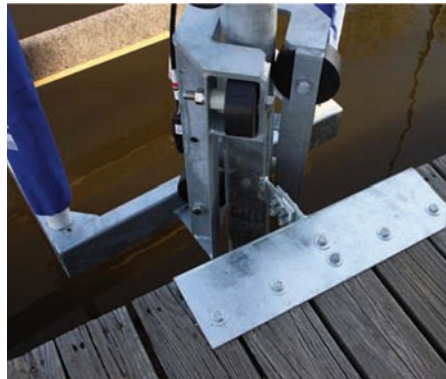


BH-USA PWC LIFT MOUNTING GUIDE

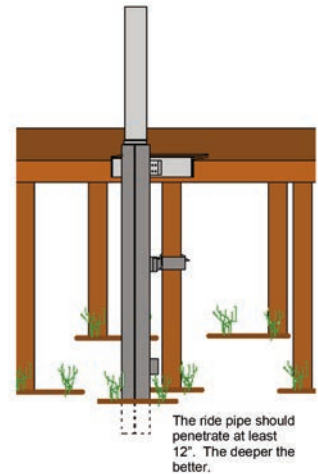
Dock Mount Plate - The BH-USA PWC Lift comes with one dock mount plate. Install the dock mount plate first on the dock. Remember to leave room for the lift to rotate on either side, the recommendation is at least five feet. Use the four 1/2" bolts supplied with the lift and back them with washers. It is not recommended to lag bolt the four outside points. The two large center points can be lag-bolted using the large bolts supplied.

BH-USA fasteners for the dock plate will work on typical dock construction. There is a possibility that a dock might require longer bolts than the ones supplied with your lift. When purchasing additional, longer bolts hot dipped galvanized bolts are strongly recommended.

Fasteners are NOT to scale and will require measuring.



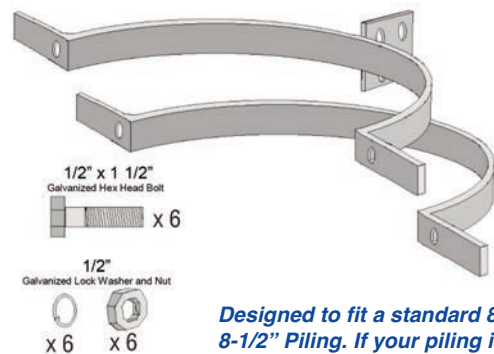
Ride Pipe - Set the ride pipe into the water and bolt to the installed dock plate using four 1/2" x 1-1/2" bolts. Secure the lower portion of the drive pipe to the support structure of the dock using the included piling clamp. If the lower part of the drive pipe can penetrate a minimum 12" into the lake bottom, the lower clamp may not actually be needed. Depending on the softness of the lake bottom, and the depth of the pole into the lake bottom, insufficient support for leveraging the lift could be a problem. BH-USA recommends using the pile clamp for this reason. The deeper the drive pipe is driven into the lake bottom, the more support will be added. If the drive pipe does not reach the bottom, install the pile clamp on the lowest tab to help alleviate the stress on the dock due to the weight of the PWC. Extra pile clamps can be ordered at BH-USA.COM



Fasteners are NOT to scale and will require measuring.



18-1/2"W x 1-1/2" H x 4-1/2"D
3 x 4 Tab on Face

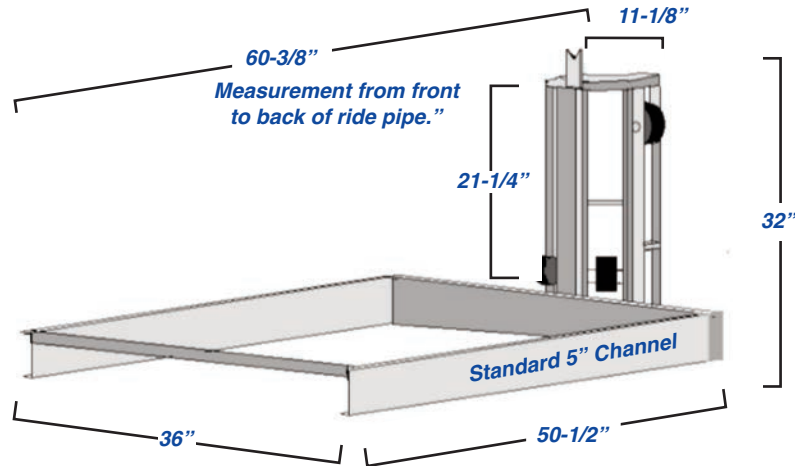


Designed to fit a standard 8 to 8-1/2" Piling. If your piling is smaller shims may be required. If your piling is larger longer bolts may be required.

BH-USA PWC LIFT MOUNTING GUIDE

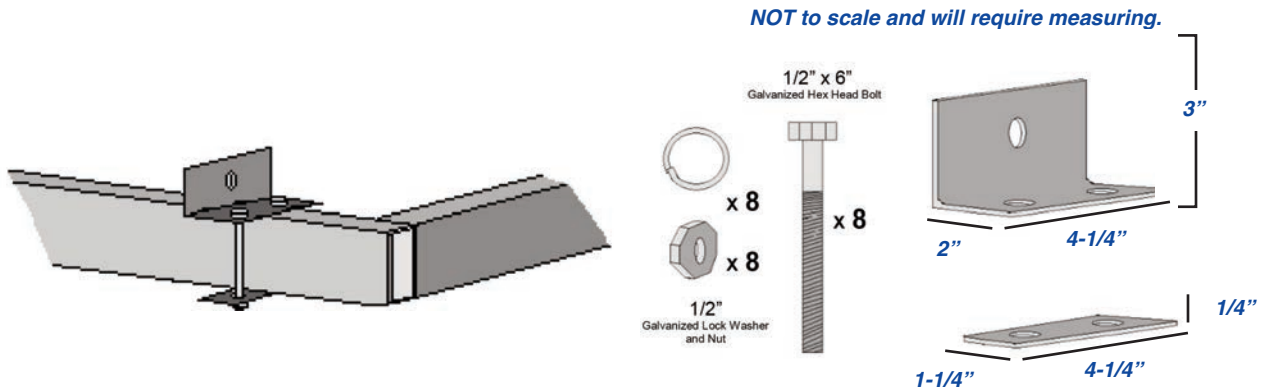
Main Carriage - Once the ride pipe is secured to the dock lift and slide the main ride carriage over the top of the round tubing at the top of the square tubing. This part will extend 34" above the dock and meaning it will need to be lifted this high. Install the main housing so that the square area where the bunks will mount is resting on the dock.

CAUTION: The main housing weighs over 160 lbs. do no attempt to lift this part without a helper.

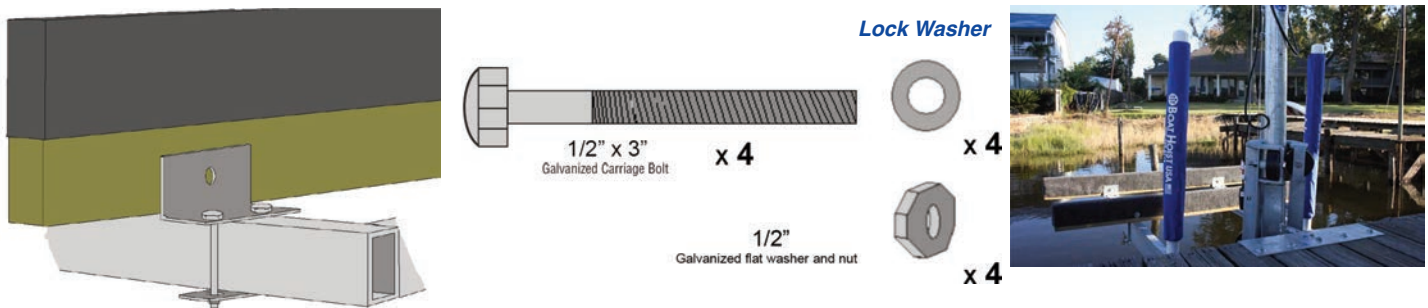


Bunk Bracket Installation - The BH-USA PWC lift come with four piece of angle and four backing plates for bunk brackets. Install these brackets on the Square tubing at the bottom of the main housing using two 1/2" x 6" Hex Head Bolts for each bracket. Sandwich the bracket to the tubing using the flat back-up

Fasteners are



Wood Bunk Installation - Place the two carpeted wood bunks (included) in place along side the brackets so that the angle is on the inside. Mark these points, drill a hole large enough to slide the 1/2" bolt through, this will secure the bunks to the brackets.



WARNING:

NEVER OPERATE THE UNIT WHILE SITTING ON THE PWC.

NEVER ALLOW THE SWITCH TO HANG DOWN TO THE PWC.

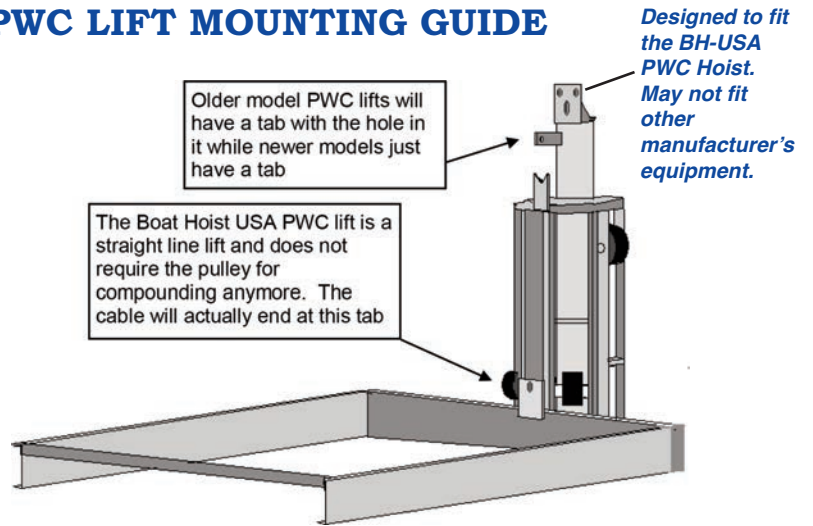
MOUNT THE SWITCH IN A DRY LOCATION WHERE YOU MUST GET OFF OF THE PWC AND ONTO THE DOCK TO OPERATE THE LIFT.

UNPLUG THE ELECTRIC MOTOR WHEN NOT IN USE.

NEVER LIFT ANYTHING BUT A PWC WITH THIS LIFT.

BH-USA PWC LIFT MOUNTING GUIDE

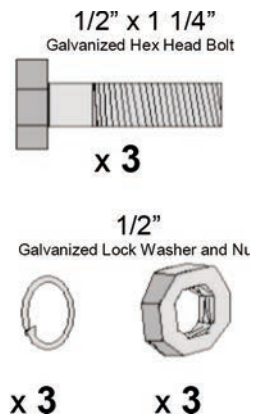
Rotating Sleeve and Motor Mount - Slide the bearing ring over the ride pipe first, then slide the motor mount pipe mount welded to it over the round tube section of the ride pipe. An installer's tip is to grease the inside of the sleeve before you slide it over the ride pipe.



MOUNTING MOTOR AND WINCH

Assemble the drive unit by bolting the motor to the top of the gear box using the stainless steel motor mounting hardware supplied in the motor box. Attach the gear box and motor to the top of the motor mount pipe using three 1/2" x 1-1/4" galvanized bolts. Attach the cable to the spool inside the housing using the copper cable stop. Attach the loop of the cable to the tab welded to the main carriage using the included shackle. Put the cove on the unit.

Fasteners are NOT to scale and will require measuring.



SAFETY FIRST!

A hoist should NEVER be used to lift human beings.

Hoists are not designed, nor intended to lift human beings, or to lift loads over areas where humans might be. NEVER use this hoist for any other application other than the one for which it is designed.

NEVER put children or adults in a boat while the boat is on a lift.

NEVER allow children to play in or around a boat while it is on a lift.

NEVER allow children or adults to swim around or under a boat lift or near the boat lift when it is submerged.

Precautions, such as using NEMA and UL components and installing GFCIs on systems and wiring should not be relied upon when the risk of electrocution is possible. Components can fail. For this reason it is NEVER a good idea to swim around a lift.

Be vigilant about safety, submerged cables can conduct electricity to the water if your system is not properly grounded, or you have developed a voltage leak.

NEVER stand on a lift platform if partially submerged, due to the possibility of electric shock.

NEVER mount or hang a drum switch where it can be reached while in the boat.

ALWAYS exit the boat and have all passengers exit the boat before lifting the boat.

NEVER ride the lift while in the boat.

NEVER leave your boat in the lift with the drain plug open, if the lift drops the boat while you are absent, the boat could fill with water and sink.

ALWAYS have an operating bilge pump with a functional float switch in any boat on a lift. Rain water can fill the boat adding thousands of pounds that the lift might not be able to handle.

PARTS LIST

| ITEM | .QTY |
|-----------------------------|------|
| PWC Main Housing | 1 |
| PWC Motor Mount Pipe | 1 |
| PWC Ride Pipe | 1 |
| PWC Winch | 1 |
| PWC Motor | 1 |
| PWC Guide Posts and Bumpers | 2 |
| PWC Carpeted Bunks | 2 |

PWC Hoist Cover Box Contents

| | |
|-------------------------------------|---|
| PWC Hoist Cover | 1 |
| PWC 1/4" Swedged Cable 13' Long | 1 |
| #8 Pan head 1/2" Hoist Cover Screws | 4 |
| #8 Zinc Washers | 4 |
| 3/16" Cable Clamp | 1 |

Kit Box Contents¹

| | |
|-----------------------------------|----|
| Dock Mount Plate | 1 |
| Pile Mount Bracket w/Tab | 1 |
| Pile Mount Bracket w/o Tab | 1 |
| Bunk Mount Angle | 4 |
| Bunk Mount Angle Back Plate | 4 |
| Bearing Ring | 1 |
| 7/16" 1.5 Ton Shackle | 1 |
| 1/2" x 3" Galv. Hex Head Bolt | 4 |
| 1/2" x 3" Galv. Lag Bolt | 2 |
| 1/2" x 1-1/2" Galv. Hex Head Bolt | 13 |
| 1/2 x 6" Galv. Hex Head Bolt | 8 |
| 1/2" x 3" Galv. Carriage Bolt | 4 |
| 1/2" Galv. Hex Nut | 29 |
| 1/2" Galv. Lock Washer | 29 |
| 1/2" Galv. Flat Washer | 2 |
| BH-USA 360 Guide | 1 |

**ACCESS MORE INFORMATION
AND ORDER ON-LINE AT
WWW.BH-USA.COM**

**BY PHONE 800-259-8715 BY FAX 903-758-3646
MONDAY — FRIDAY, 8AM TO 5PM CST**