

VERTICAL BOAT LIFT ASSEMBLY MANUAL



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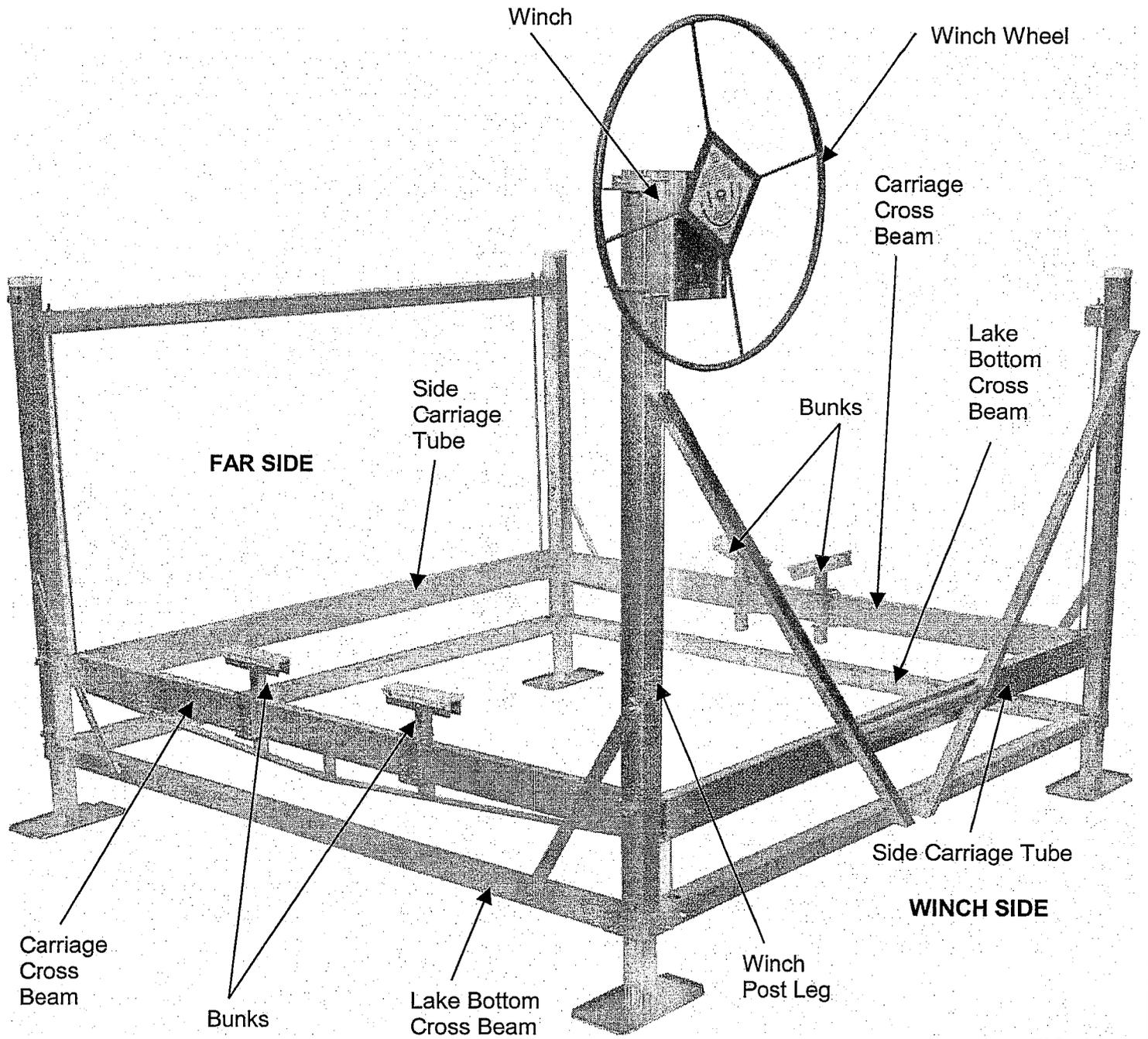


FIG. 1

TIPS ON HOW TO SPEED UP YOUR ASSEMBLY

It is recommended to review the parts identified in FIG. 1 before proceeding with the assembly instructions. **A good understanding of part names and shapes will greatly speed the assembly process.**

WINCH POSITION

On the vertical lift, the winch and crank wheel can only be mounted on the winch post leg as shown in FIG.1. When the lift is placed into the water, the winch and crank wheel need to be next to the dock. See FIG. 2 & 3. The lift may need to be rotated before placing into the water to position the winch next to dock. Refer to FIG. 2 & 3 and note the position of the winch post leg in relationship to the dock.

Note: The preferred location of the lift would be to the right side of the dock when viewed from the shore (See FIG.2). When the lift is installed in this position, the winch and lifting cable are at the rear of the boat where most of the weight load is concentrated. The lift may be installed on either side of the dock but, keep in mind, if you have a choice, install it as shown in FIG.2.

UNPACK ITEMS

Locate a level surface and unpack items from truck/trailer. Review part identification from FIG.1 on the preceding page. Do not proceed with assembly until you have a good understanding of part identification.

ASSEMBLE LAKE BOTTOM CROSS BEAMS TO SIDE FRAMES

1. Locate the winch side frame (See FIG.4). Locate the far side frame (See FIG.4).
2. Connect the two lake bottom cross beams to the winch side frame and far side frame using the four 7/16" flange nuts and bolts (See FIG.4 and 5).

Note: The hex head bolts should be mounted with the hex head to the inside of the frame and the nuts on the outside of the frame.

3. Loosely tighten at this time.
4. Repeat the above steps in the other three corners.
5. Firmly tighten the two hex head bolts that mount through the side frames. Tightening these two first will draw the cross beam to the side frame and guarantee a tight fit. Repeat this in all four corners.
6. Firmly tighten all remaining bolts.

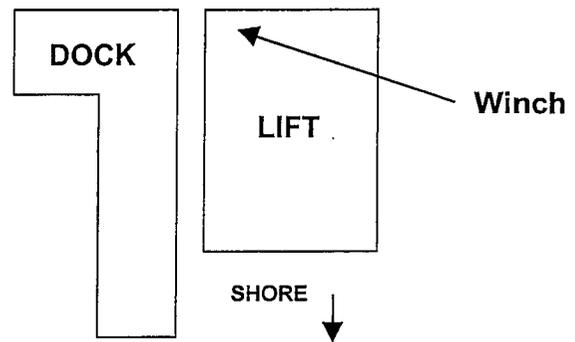


FIG. 2

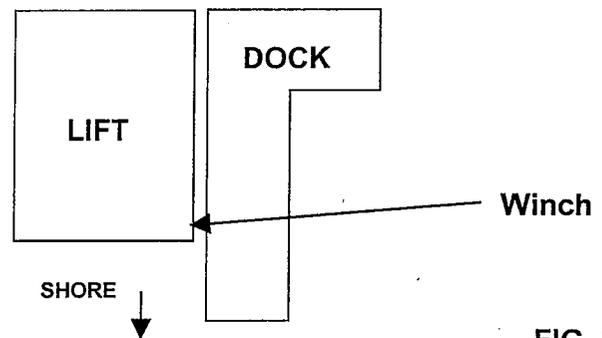


FIG. 3

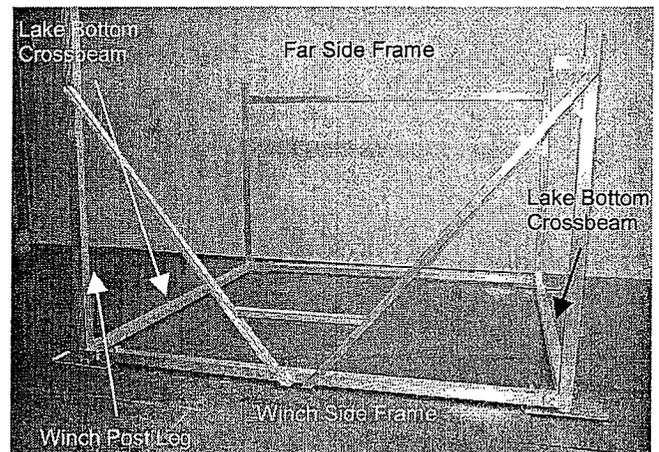


FIG. 4

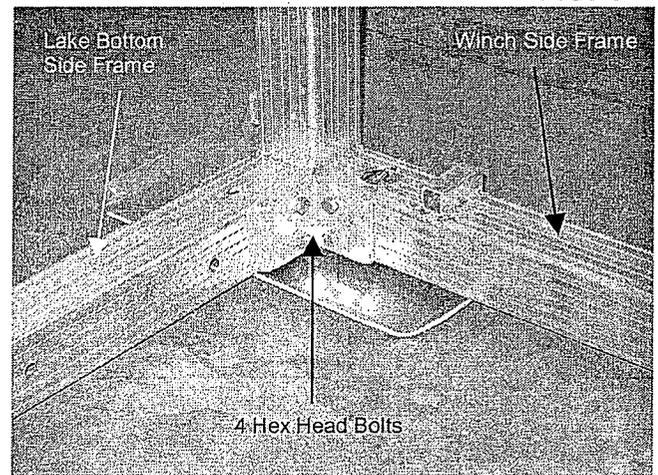


FIG. 5

ASSEMBLE CARRIAGE CROSS BEAMS TO CARRIAGE SIDE TUBES

There are two different styles of carriage cross beams:

Drop Carriage Cross Beams for shallow water depth installations. See FIG. 6.

Standard Carriage Cross Beams for normal water depth installations. See FIG. 7.

The installation of either cross beam style is the same except for the number of bolts used and their mounting hole positions. See FIG. 6 and 7.

Most of the photos will show the drop carriage beam, but they also apply to the standard carriage. Follow the steps below for both drop and standard carriage installations.

1. Review FIGS. 6 & 7 until you understand the bolt placement before proceeding onto the next step.
2. Locate the two cross beams. One will have only one cable protruding from each end. The other cross beam will have two cables protruding from each end.
3. Position the carriage cross beam with two cables at the end of the lift opposite of the winch as shown in FIG. 8.
4. Position the carriage cross beam with one cable at the end of the lift where the winch post leg is located as shown in FIG. 9.

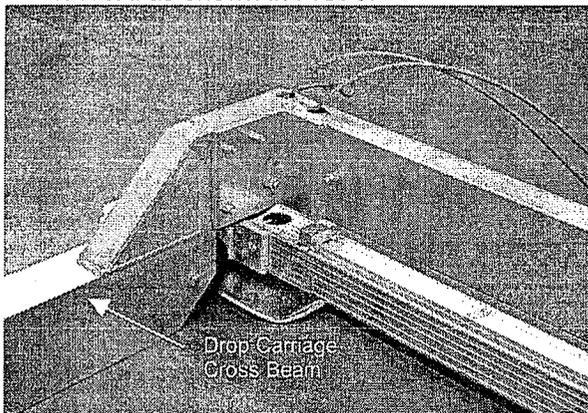


FIG. 6

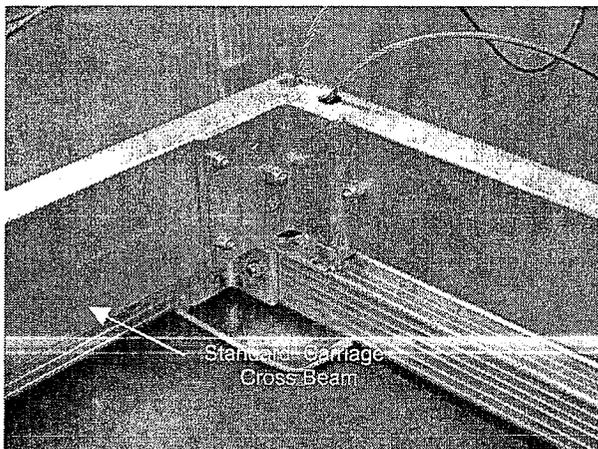


FIG. 7

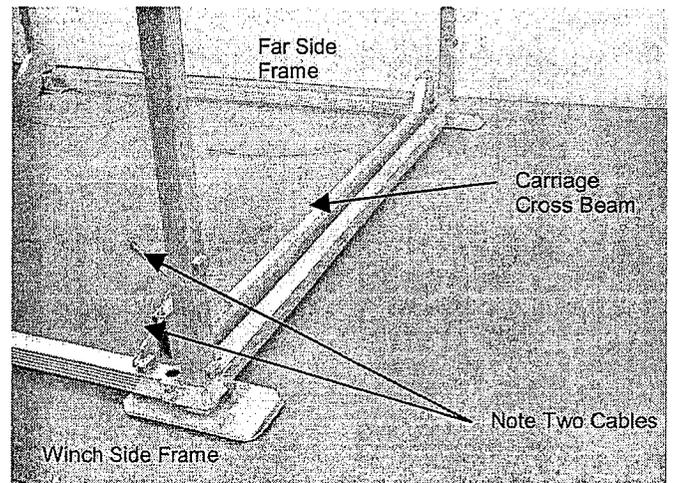


FIG. 8

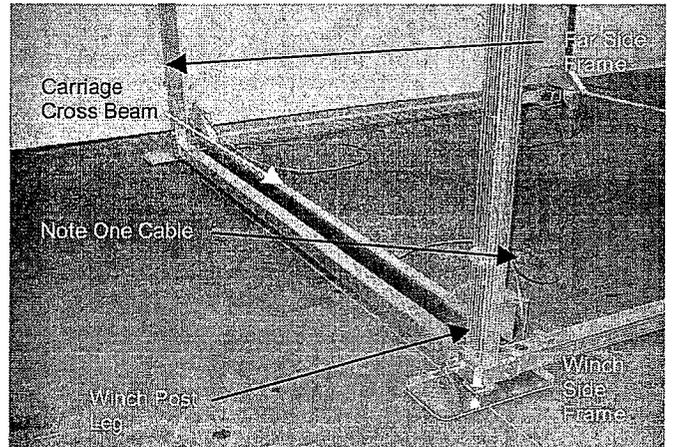


FIG. 9

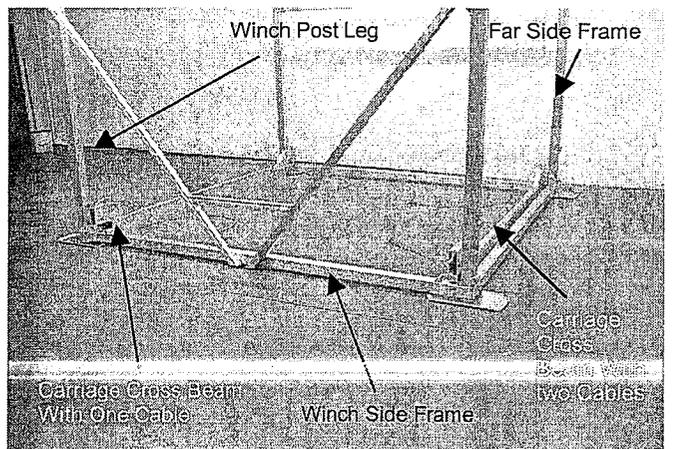


FIG. 10

5. Locate the side carriage tubes and place them into position as shown in FIG. 11 & 12. Refer to FIG. 11 and remove the nut from the bolt that is in the carriage cross beam as shown in FIG. 11. This bolt will need to be pulled back an inch or so, so that the threaded end is flush with the outside of the tube. **Do not remove the bolt.** The bolt holds together a pulley and cable assembly inside the carriage cross beam that is difficult to get back together once the bolt has been removed.

6. Place the side carriage tubes into position, between the two carriage cross beams.

Note: There are two side carriage tubes, one is labeled for right side, the other is labeled for left side. The left side carriage tube is for the winch side of the lift. The right side carriage tube is for the far side of the lift.

7. Once side carriage tubes are in position, push bolt through hole and reinstall nut as show in FIG. 13.

Note: Side carriage tube and carriage cross beam should be level with each other (See FIG. 6 and 7).

8. Install 2 or 3- 3/8" hex bolts and nuts as per FIG. 6 and 7.

Note: Use 3 each 3/8" hex bolts per corner when installing drop carriage cross beams. Use 2 each 3/8" hex bolts per corner when installing standard carriage cross beam.



FIG. 11

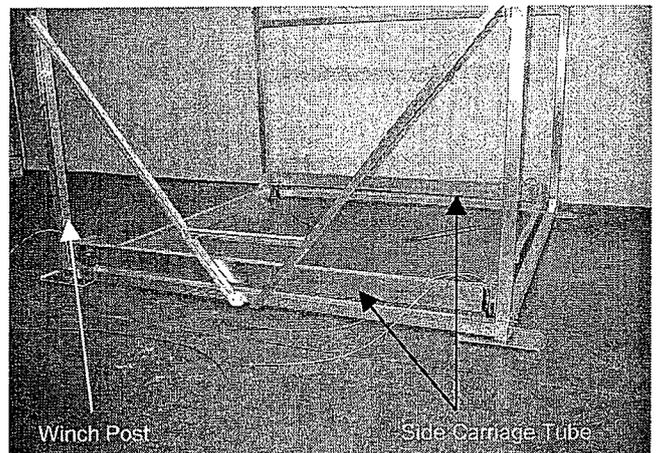
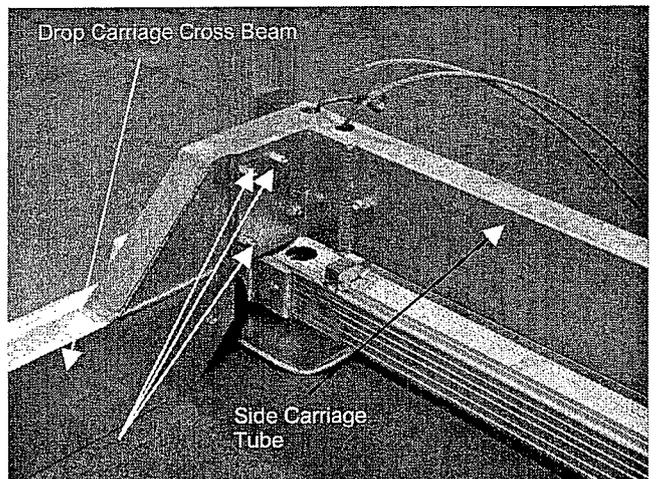


FIG. 12



3/8" hex bolts

FIG. 13

CABLE ASSEMBLY

1. Locate the cable end protruding from the carriage cross beam (See FIG. 14, 15).
2. Place the 7/16" bolt through the hole in the side of the winch side frame, through the cable loop and secure with the 7/16" nut.
3. Firmly tighten the nut on the bolt.
4. Repeat on far side.

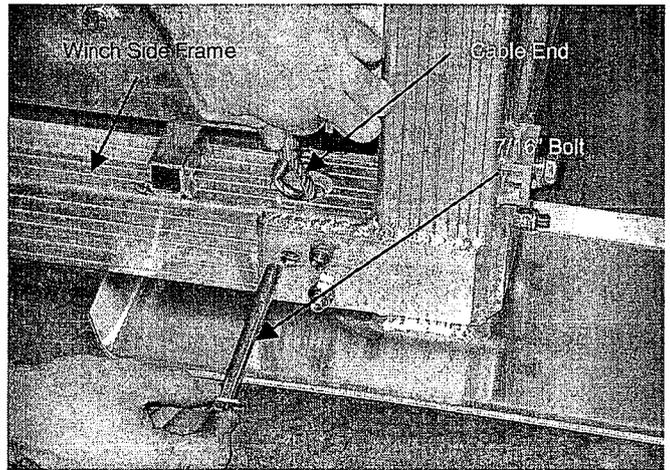


FIG. 14

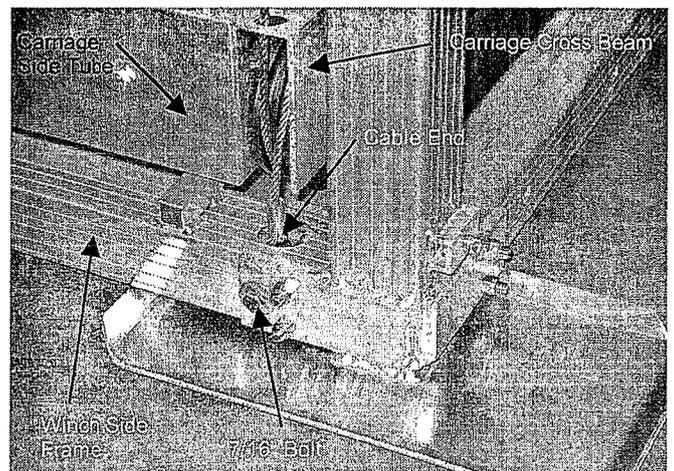


FIG. 15

CABLE ASSEMBLY CONTINUED

1. Review FIG. 18, 19, and 20. Note the two cable ends coming out of the top of the carriage assembly. Note that on the end of the cables there is a threaded stud, washer and nut.
2. Remove the nut and washer from the end of each cable.
3. Place the two threaded cable ends through the mounting holes on the winch side frame (See FIG. 17).
4. Remount the two nuts and washers onto the threaded cable ends and tighten nuts so that the cable closest to the post has approximately a $\frac{1}{2}$ " of exposed thread. The other cable end should have approximately 1 full inch of exposed thread. Before installing nuts and washers on studs, remove all weight from cables. To do this, lift and block carriage up approximately 6" off the ground. Do not stand on carriage and try to tighten nuts. ***Do not use an impact wrench to tighten.***
5. Locate the two cables protruding out of the carriage side tube on the far side (See FIG. 17) and repeat the above steps on these two cables.

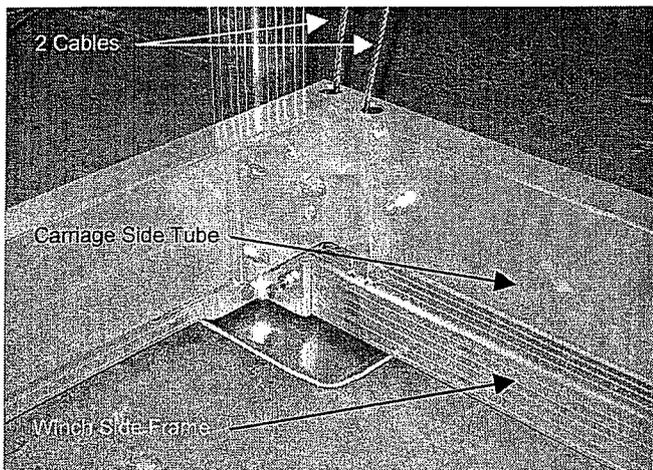


FIG. 16

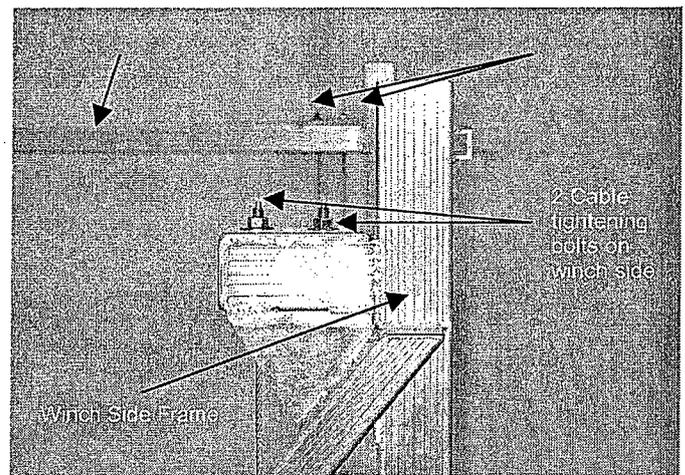


FIG. 17

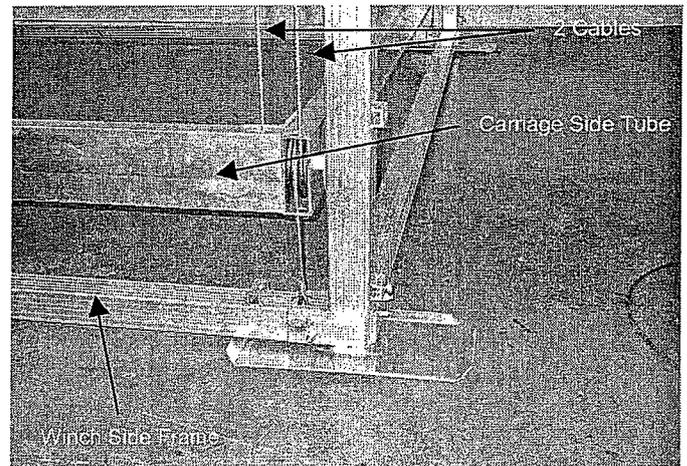


FIG. 18

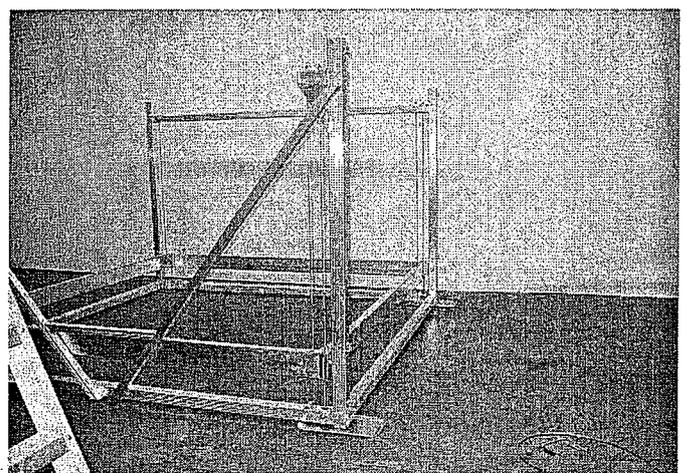


FIG. 19

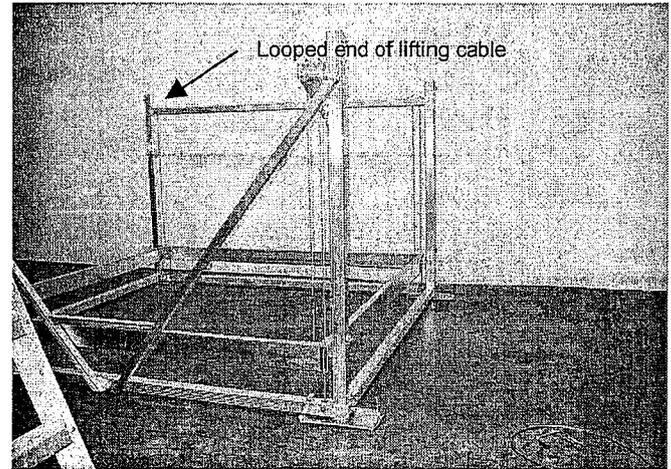


FIG. 20

CABLE ASSEMBLY CONTINUED

1. Locate the single cable in the carriage cross beam at the winch end of the lift (See FIG. 20). This cable is also known as the lifting cable. The looped end of this cable must get secured to the far side frame.
2. Locate the 1/2" bolt, place through the hole in the far side frame as shown in FIG. 21. At the same time place the cable end loop up into the hole on the bottom side of the far side frame as shown in FIG. 21.
3. Place the bolt through the cable end and out the other side of the far side frame and secure in place with 1/2" nut.
4. Firmly tighten at this time (See FIG. 21, 22).

The other end of the cable will be attached to the winch in a later step.

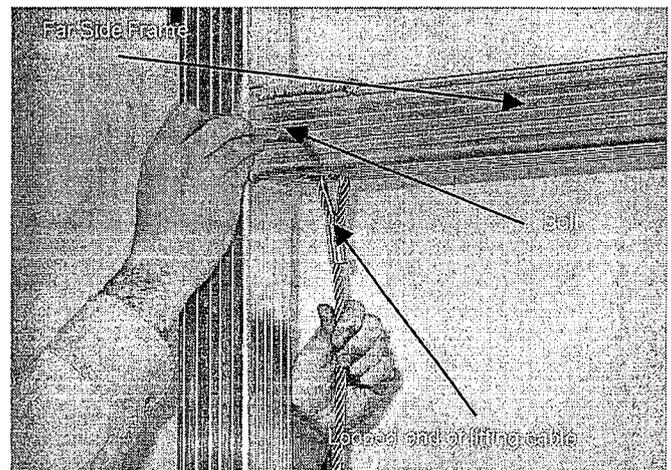


FIG. 21

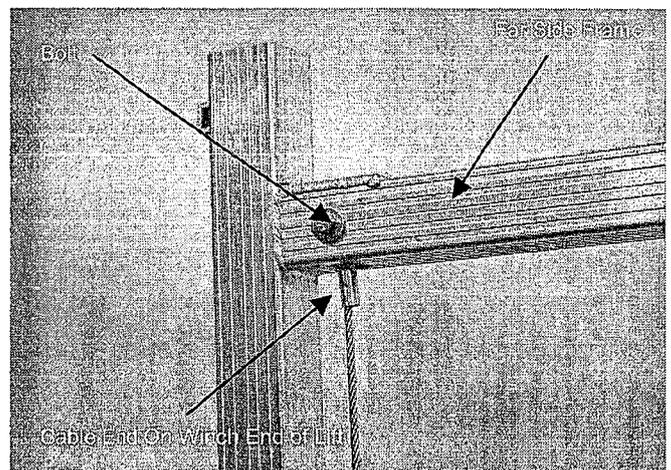


FIG. 22

INSTALL WINCH

Remove top cover plate and install 7/16" U-Bolt with 7/16" nuts onto winch as shown in Fig. 23. Lift winch into position, sliding U-bolt over side frame tube. Install lower U-bolt with 7/16" nuts onto winch post. Tighten 7/16" nuts using a 11/16" wrench. See FIG. 25. Re-install top cover plate.

Note: Winch always is mounted on inside edge of the winch side frame (See FIG.25).

MOUNT CABLE TO CUSTOM CHAIN DRIVE WINCH-MODEL 25

The Model 25 winch is used on all 3000 lb. capacity vertical lifts.

Feed one end of cable up through bottom of winch frame and into the hole in cable spool (but not protruding beyond the spool hole). Firmly tighten the cable to the winch spool using a 5/32" allen wrench provided. The setscrew is located through hole in backside of winch (See FIG 24). You may have to rotate cable spool to line up setscrew with allen wrench. (See FIG. 24).

MOUNT CABLE TO CUSTOMER CHAIN DRIVE WINCH-MODEL 40

The Model 25 winch is used on all 4000 lb. capacity vertical lifts. When installing cable on a Model 40 winch insert cable through the two slotted holes in the drum. Make sure cable passes between the drum wall and the clamping plate. Push approximately 2 feet of cable through clamping plate, wrap cable around drum and insert cable back through the slotted holes and clamping plate again. Then tighten set screws with allen wrench provided. Make sure to insert cable so that it will wrap in a clockwise direction when lifting.

Note: Clockwise direction is when viewing winch from the outside of the lift (i.e. the dock).

Note: All winches must have at least three full wraps of cable on drum when lifting starts.

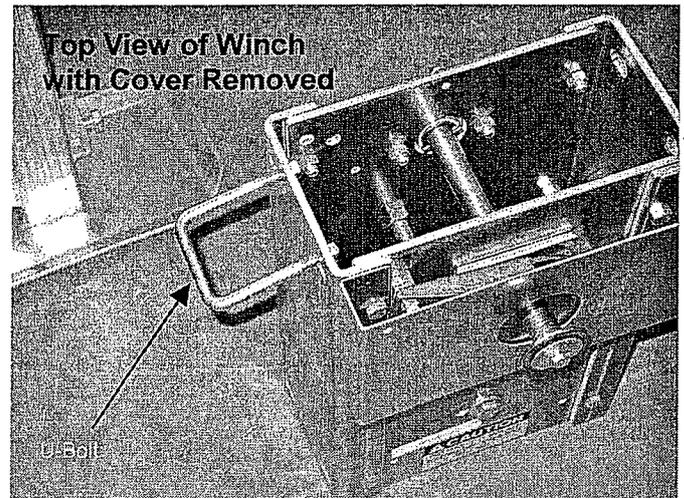


FIG. 23

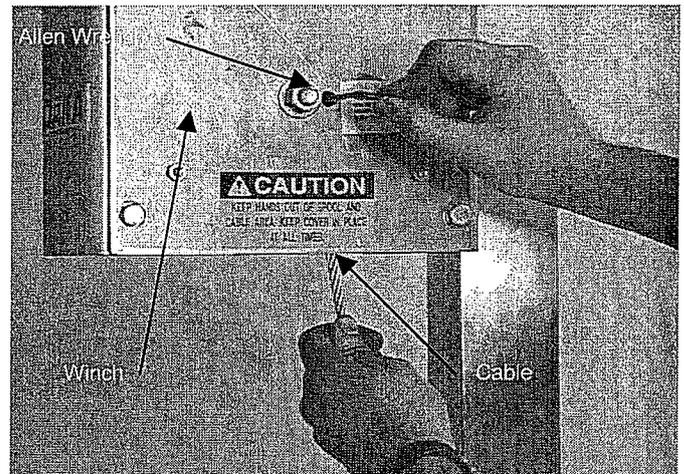


FIG. 24

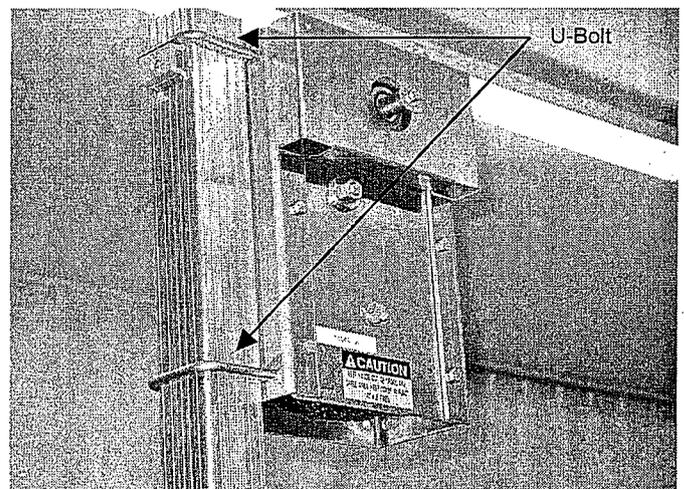


FIG. 25

ATTACH WINCH WHEEL

Remove tape protecting the threaded shaft. Mount winch wheel onto the threaded shaft. Firmly lock in place using a 5/16" x 1" bolt, 5/16" lock washer and 5/16" washer (See FIGS. 26, 27).

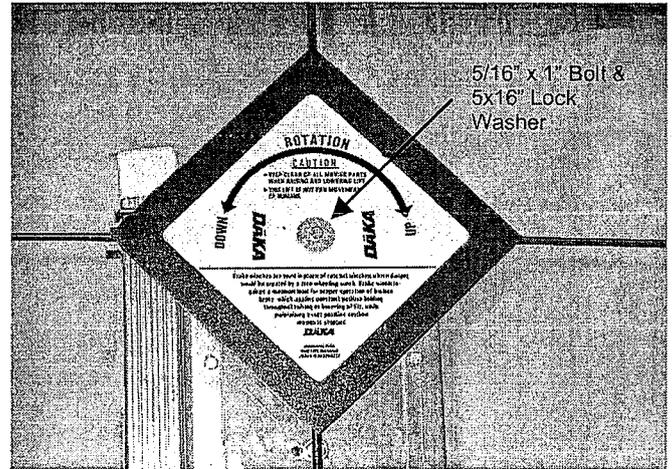


FIG. 26

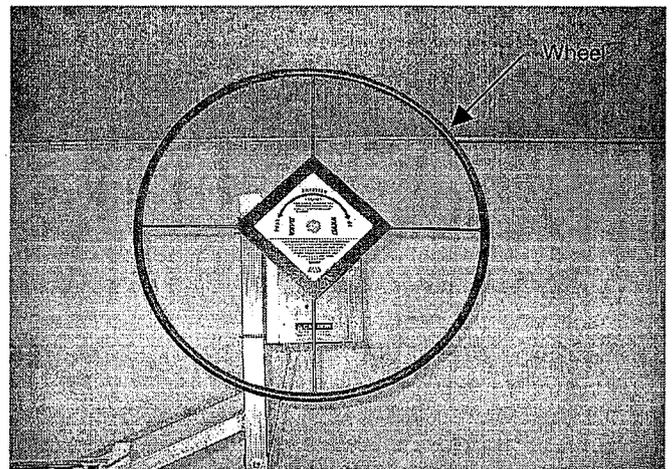


FIG. 27

ASSEMBLE CARRIAGE STOP

The carriage stop is installed as shown in FIG. 30 & 31. As the carriage is raised, the carriage stop meets the winch wheel (See FIG. 31) and stops the carriage from lifting any further.

1. Locate the carriage stop parts bag.
2. Refer to the assembly sheet in the parts bag for assembly installation instructions for the carriage stop.

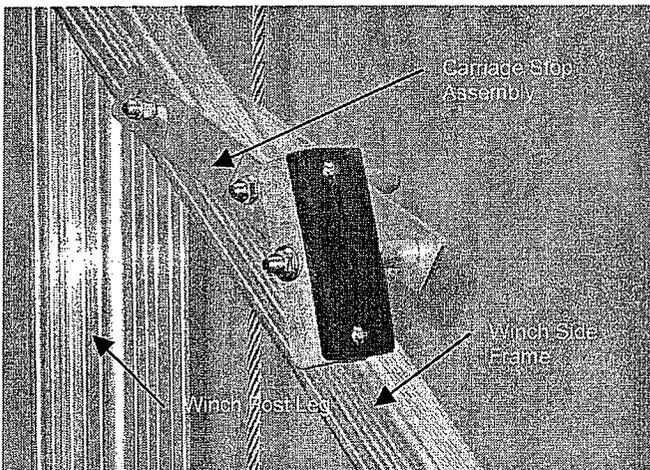
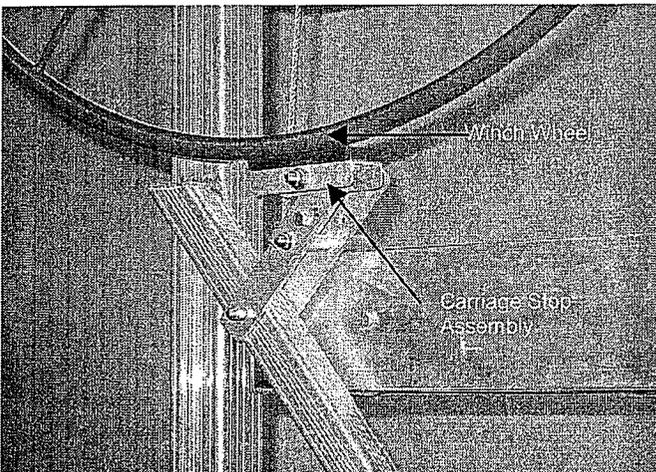


FIG. 30



DOUBLE CHECK ALL ASSEMBLIES

Once lift is fully assembled:

1. Double check tightness of all bolts.
2. Fully lower and raise lift.
3. Make sure the carriage hits the carriage stop.
4. Check top bolt on bunks, make sure that they are loose enough to allow the bunks to pivot.
5. Correct all problems before placing lift in water.

LEVELING FOOTPADS

A leveling footpad has been mounted at the factory in each of the 4 corners of the lift. The footpads are locked in position by the leg set bolt. (See FIG. 34).

The set bolt is mounted in the lower position at the factory. This position is for deeper water installations. The upper position is for shallow water installations. Remount the set bolt if required for your installation. (See FIG. 34).

PLACE LIFT IN LAKE

Place lift in lake and complete the following steps:

1. Place lift in a minimum of 18" of water at lake end of lift.
2. When the lift is placed into the water, the winch needs to be positioned next to the dock (See FIG. 35 and 36). Position lift accordingly before placing lift into water.

Note: The preferred location of the lift would be to the right side of the dock when viewed from the shore (See FIG.35). When the lift is installed in this position, the winch and lifting cable are at the rear of the boat where most of the weight load is concentrated. The lift may be installed on either side of the dock but, keep in mind, if you have a choice, install it as shown in FIG.35.

3. Level the lift by adjusting the footpads accordingly. See FIG. 34.

Note: For the lift to operate properly, it ***must be level side to side and front to back***. All four lift legs are equipped with leveling labels. Make sure that the lift is level when first installed. The lift may settle into the lake bottom and need to be releveled once it has been loaded with weight. Check and relevel if necessary.

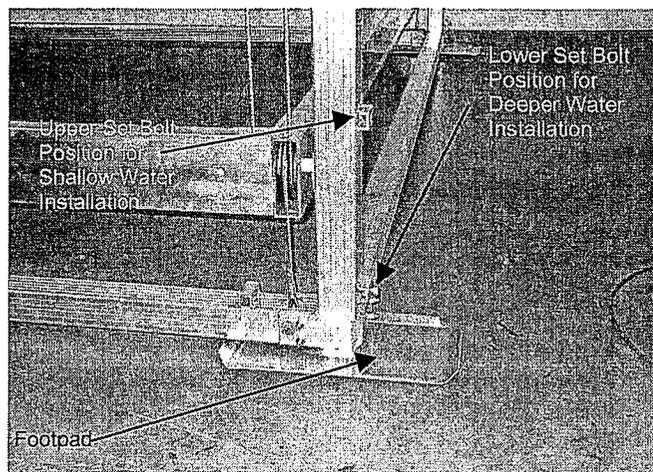


FIG. 34

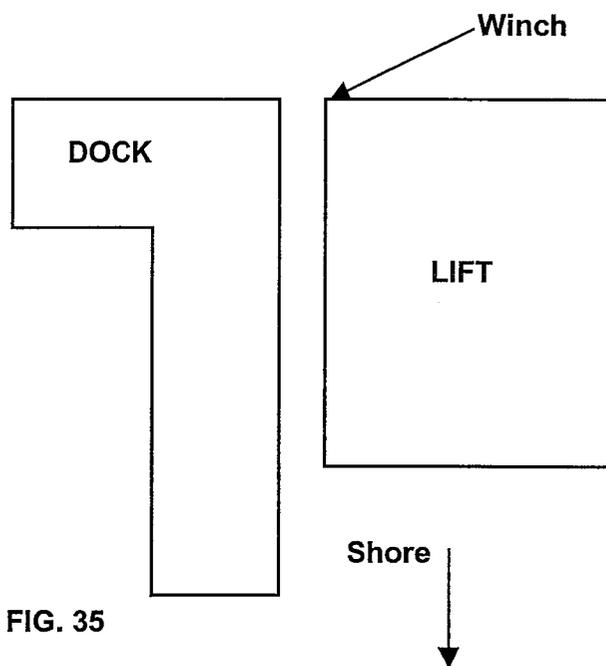
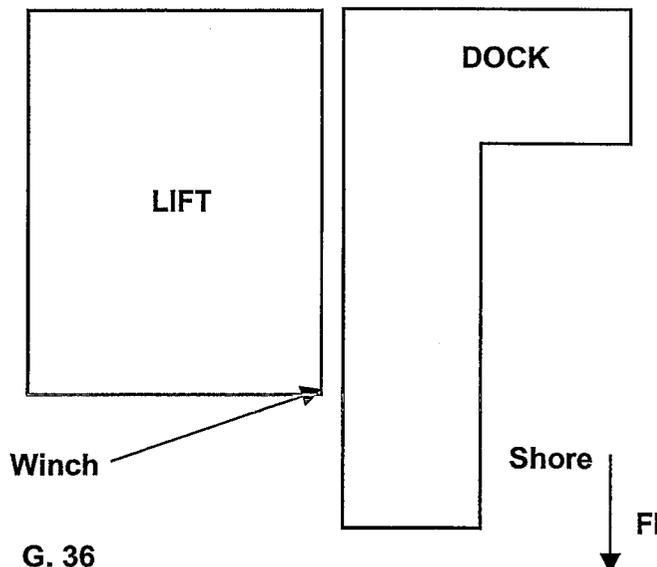


FIG. 35



G. 36

 **Caution:**

Do Not Exceed Maximum Lifting Capacity!!

 **Caution:**

Do Not Enter Boat When In Raised Position!!!
Lower Boat Lift Before Entering Boat!!!

 **Caution:**

Do Not Let Children Play On Or Around Lift!!

 **Caution:**

This product is not a toy. It is capable of lifting very heavy objects. The lift should be respected as power equipment. High forces are created when using a lift, creating potential safety hazards. Never allow children or anyone who is not familiar with the operation of the lift to use it.

 **Caution:**

Not for moving of humans. This product is not a hoist. Never use in application where persons could be positioned on or under the load.

 **Caution:**

Keep the lift area free of all persons. Never stand between load and lift.

 **Caution:**

Keep hands and fingers clear of all moving parts. (i.e. winch, crank wheel, cables)

Boat lift should be placed in a minimum of 24" of water at lake end of the lift.

- Maintenance -

Before installing lift in the spring and after removing lift in the fall, lightly oil cables and pulleys. Check all cables and bolts for deterioration, replace if necessary.

Note: If winch wheel is hard to turn when trying to lower lift, place hand on winch wheel and quickly jerk wheel in a counter clockwise direction to loosen brake mechanism.

LIMITED WARRANTY

DAKA Corporation warrants its boat docks and boat lift components purchased new by the original owner to be free of defects in material or workmanship, from the date of sale for the periods of time set forth below:

New DAKA built aluminum boat docks and lifts carry a 15 year conditional warranty on all aluminum and aluminum welds, and a 5 year pro-rated warranty on canopy tops, excluding fading.

New DAKA built steel boat docks carry a 10 year conditional warranty on steel and steel welds. There is no warranty on paint and/or finish.

DAKA Corporation further warrants all other parts, excluding wood, used on DAKA built lifts, boat docks and accessories, purchased new by original owner, to be free from defects in the material and workmanship under normal use for a period of 24 months from the date of purchase (excluding components and options which carry their own manufacturer's warranty, wherein that warranty will apply). Excluded from this warranty are all paint and/or finishes, and wood decking. There is no other express warranty. DAKA Corporation is not liable for incidental or consequential damages or injuries of any kind due to installation, removal, use, misuse, snow or ice, electrolysis, severe weather, acts of God, misapplication, or improper selection of one of our purchased or displayed products. DAKA agrees to repair or replace only defective parts returned to the factory (prepaid) and deemed defective by DAKA. Warranty is void when misuse or neglect is the cause. Specifications are subject to change without notice.

DAKA is not responsible for removal, dismantling or reinstallation cost. This warranty is void if the boat lift or dock is used in other than normal residential service, or installed in salt water. *For commercial boat dock and lift warranty, see Commercial Warranty.*

For services under this warranty, contact selling dealer or DAKA Corporation, Customer Services Department, 955 Industrial Street, N.E., Pine City, Minnesota 55063; Telephone (320) 629-6737.

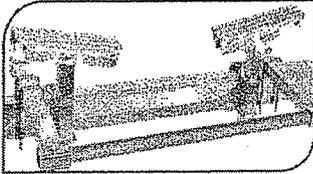
Implied warranties including that of merchantability are expressly limited in duration of this warranty. DAKA Corporation disclaims any liability for incidental or improper selection, removal, use, misuse, misapplication, neglect or improper selection of our product. Some states do not allow limitations on how long an implied warranty lasts, or the exclusion or limitation of incidental or consequential damages so this limitation and exclusion may not apply to you.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

This is our exclusive written warranty.

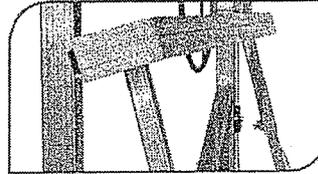
Effective 09/03
Revision 1: 11-1-07

Lift Accessories



Motor Stop

The adjustable Motor Stop helps land the boat perfectly every time, so the weight is centered on the lift carriage. (2015)



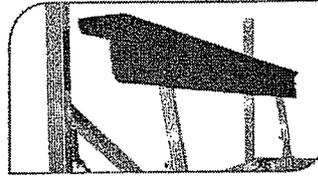
Vinyl Guide-ons

Full-length Vinyl Guide-ons center a boat as you drive onto the lift, while providing a non-marring vinyl surface that protects the boat from the lift uprights. (2075)



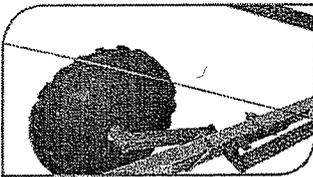
Stationary Wheel Kit

Add a bolt-on Stationary Wheel Kit to make moving your lift easy. Just clamp the polyethylene wheels to the lift frame. (2020)



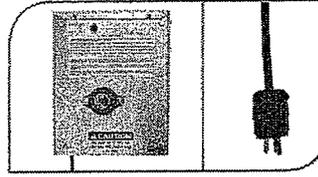
Carpeted Guide-ons

Protect your boat from damage by the lift uprights with Full-Length Carpeted Wood Guide-ons that keep the boat centered as you drive on. (2075WC)



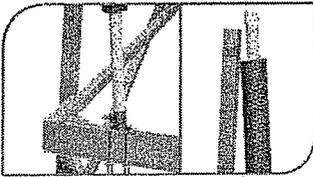
Lifting Wheel Kit

Installation is made simple with a Lifting Wheel Kit. Polyethylene wheels attach to the cantilever lift frame without inhibiting the lift carriage. (2022)



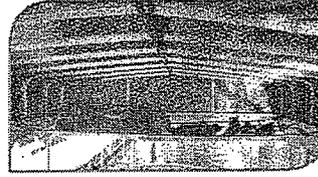
Electric Lift Motor

Eliminate the manual labor of raising and lowering a lift by adding the 12V or 110V Electric Lift Motor to do the cranking for you.



PVC Guide-ons

Land a boat perfectly with foamed-covered PVC Guide-ons. Even in rough water, guide-ons align your boat over the bunks and guide it into place. (2070)



Canopy Cargo Net

Avoid the clutter of water toys and equipment. Add a Canopy Cargo Net to stow and protect skis, ropes and lifejackets. (2090/2095)



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