

KD VERTICAL BOAT LIFT ASSEMBLY MANUAL

Models: KDV1684, KDV2096, KDV2596, KDV2515



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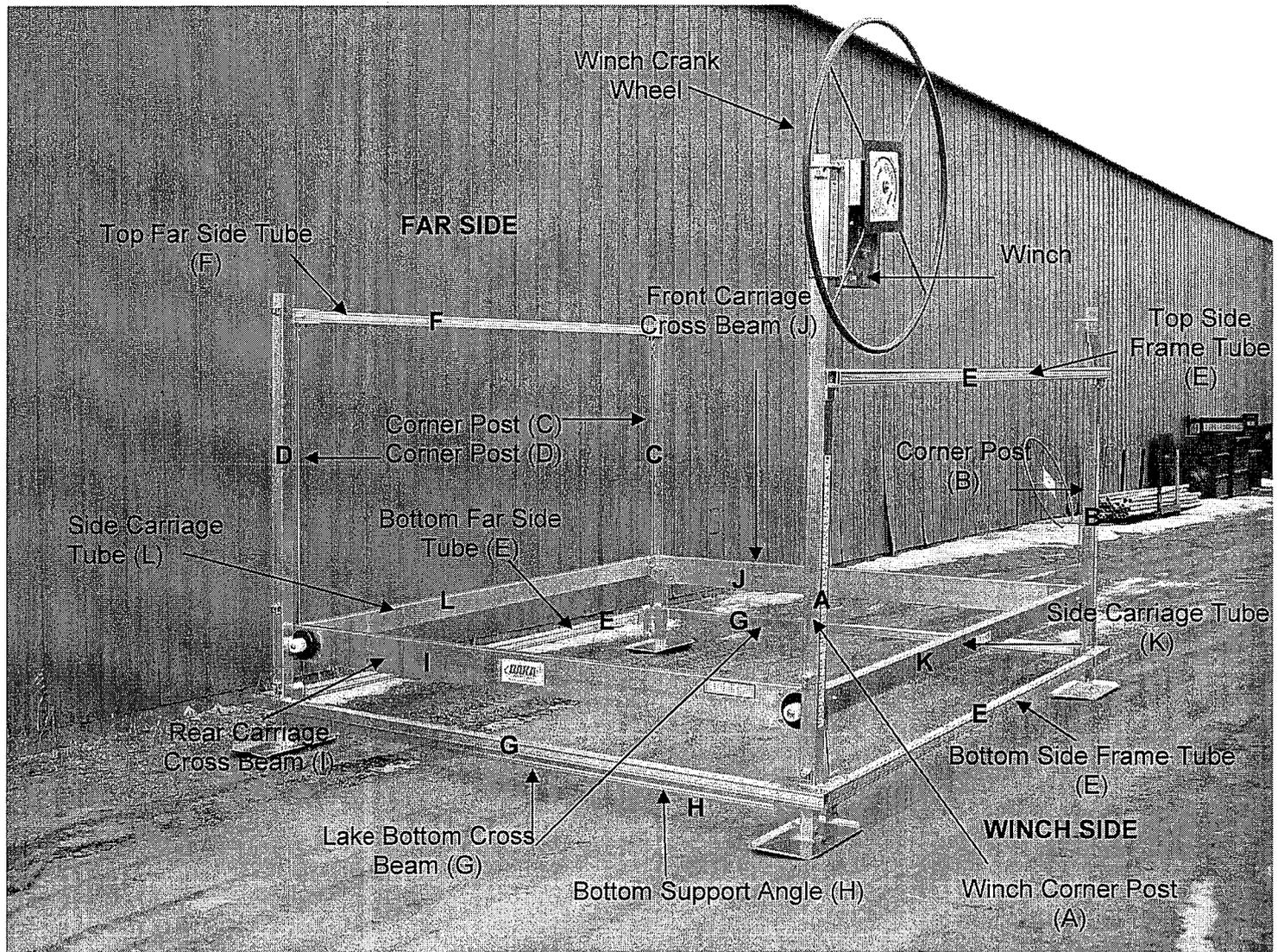


FIG. 1

ASSEMBLY TIPS

A good understanding of part names and shapes will greatly speed the assembly process.

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

WINCH POSITION

On the vertical lift, the winch and crank wheel can only be mounted on the winch corner post **A** 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. The lift may need to be rotated before placing into the water to position the winch next to the dock. Refer to FIG. 2 & 3 and note the position of the winch corner post in relationship to the dock.

Note: The **PREFERRED POSITION** of the lift is on the right side of the dock when viewed from the shore (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.

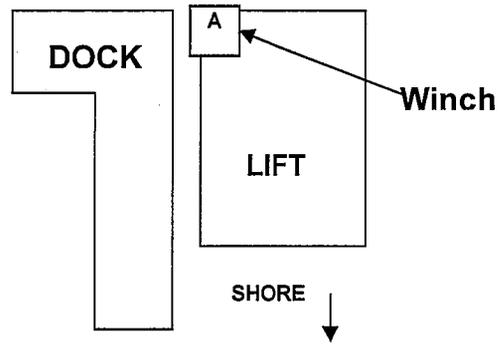


FIG. 2 – PREFERRED POSITION ABOVE

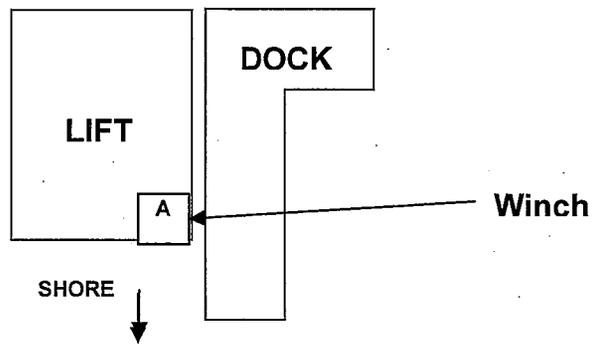


FIG. 3

ASSEMBLE WINCH SIDE FRAME

1. Locate winch corner post **A** and corner post **B** shown in FIG. 4.
2. Connect corner posts **A** & **B** using two side frame tubes **E** as shown in FIG. 5. *Install bottom side frame tube first. Use six 3/8" Bolts/Nuts. See FIG. 6 & 7.
3. Hand tighten bolts at this time to assure proper fit.

Note: The use of stiffener plates shown in FIG. 8 & 9 is for model KDV2096 only.

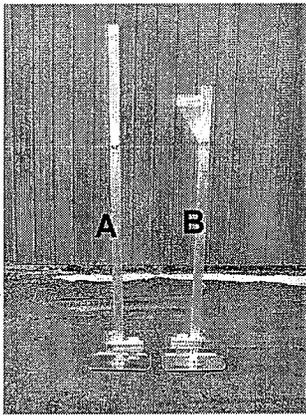


FIG. 4

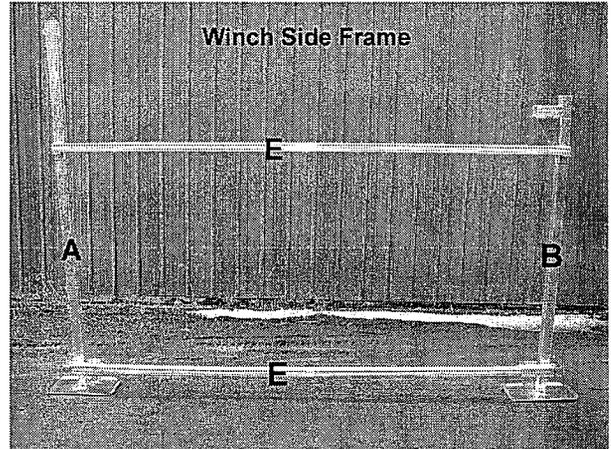


FIG. 5 - KDV1684, KDV2596, KDV25115

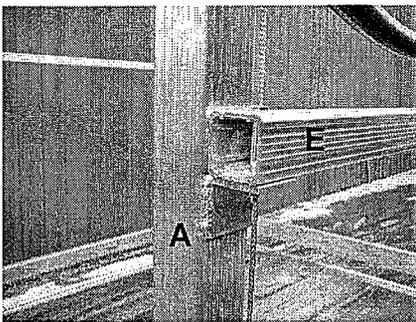


FIG. 6 - KDV1684, KDV2596, KDV25115

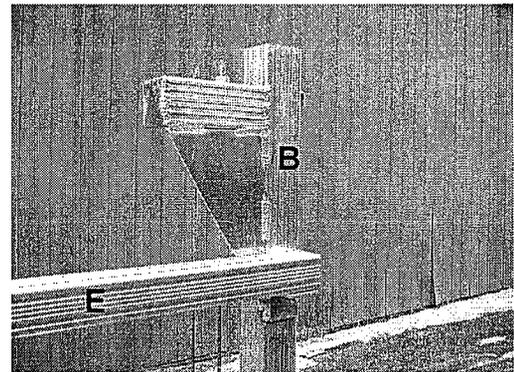


FIG. 7 - KDV1684, KDV2596, KDV25115

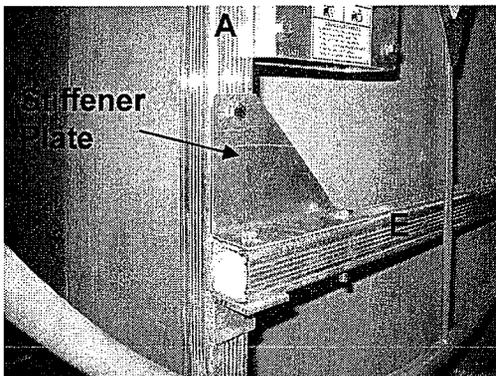


FIG. 8 - For Model #KDV2096 Only

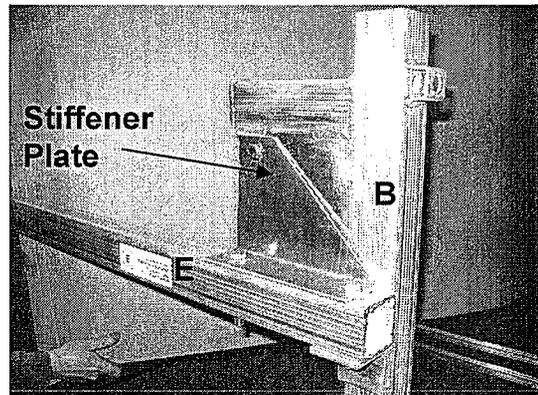


FIG. 9 - For Model #KDV2096 Only
ASSEMBLE FAR SIDE FRAME

1. Locate corner posts **C** & **D** shown in FIG. 10.
2. Connect the corner posts **C** & **D** using one side frame tube **E** and one top far side tube **F** as shown in FIG. 11.

Note: Install top far side frame F first. (See FIG. 12 & 11) Use six 3/8" Bolts/Nuts.

3. Hand tighten all bolts at this time to assure proper fit.

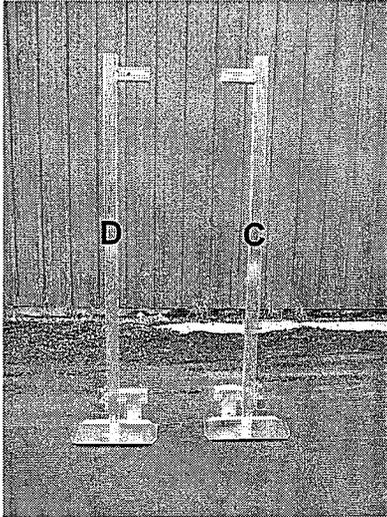


FIG. 10

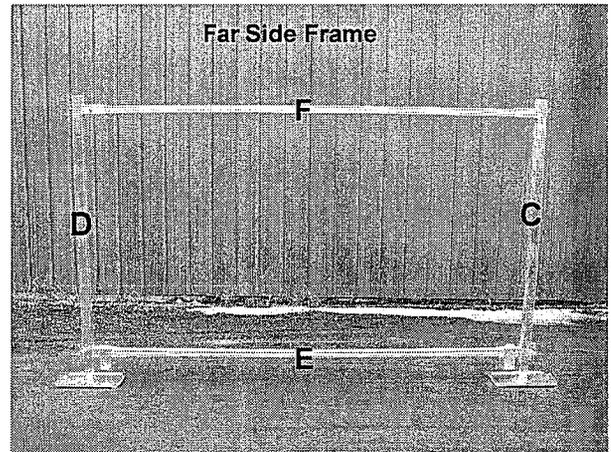


FIG. 11

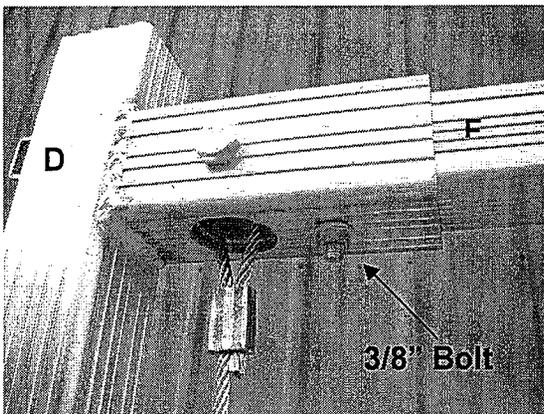


FIG. 12

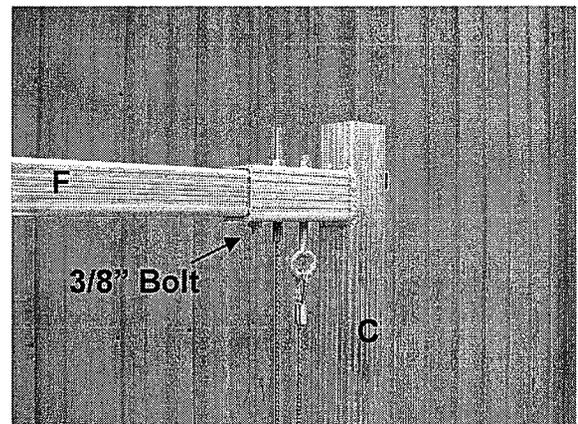


FIG. 13

Note: All cables shown in FIG. 12 & 13 will be installed at a later step. Do not attach any cables at this time.

CONNECT SIDE FRAMES

1. Connect the winch side frame and far side frame using Lake Bottom Cross Beams **G** as shown in FIG. 14. (See FIG. 15 & 16.)

2. Locate bottom support angle **H** and connect to lake bottom cross beam **G** as show in FIG. 14.

The bottom support angle **H** will connect to the lake bottom cross beams **G** at the winch end of the lift only.

Note: Only one bottom support angle H is provided per lift.

3. With all tubes in place tighten all bolts and nuts firmly.

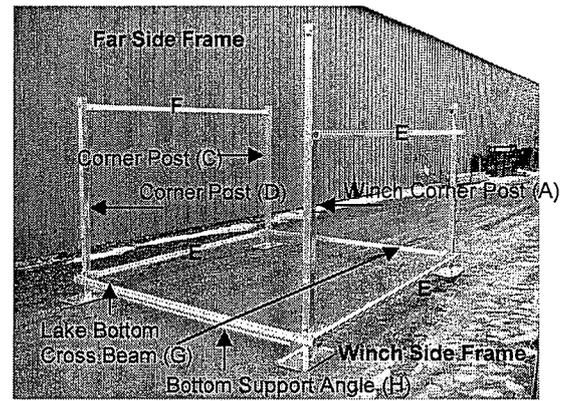


FIG. 14

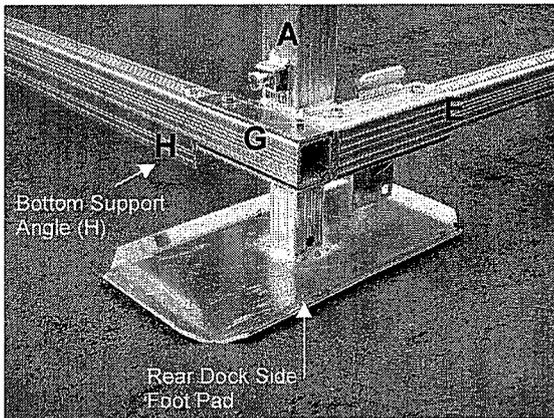


FIG. 15

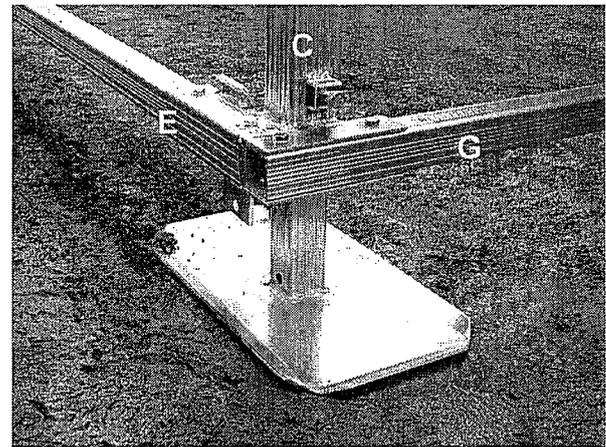


FIG. 16

(View of end opposite of winch end of lift)

Note: No bottom support angle needed.

ASSEMBLE CARRIAGE CROSS BEAMS TO CARRIAGE SIDE TUBE

1. Review FIG. 17 thru 19 until you understand the bolt placement before proceeding onto the next step.
2. Locate the two cross beams I & J. The cross beam labeled I will have only one cable protruding from each end. The cross beam labeled J will have two cables protruding from each end.
3. Position the cross beam I at the end of the lift where the winch corner post A is located.
4. Position the carriage cross beam J with two cables at the end of the lift opposite of the winch as shown in FIG. 19.
5. Position the carriage cross beam I with one cable at the end of the lift where the winch post leg is located as shown in FIG. 18.
6. Locate the side carriage tubes and place them into position as shown in FIG. 18, 19, & 20. Refer to FIG. 18 and remove the 1/2" nyloc nut from the bolt that is in the carriage cross beam I. 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.
7. Place the side carriage tubes into position, between the two carriage cross beams.
Note: There are two side carriage tubes, one is labeled K, and the other is labeled L. The K carriage tube is for the winch side of the lift. The L carriage tube is for the far side of the lift. See Fig. 1.
8. Once side carriage tubes are in position, push bolt through hole and reinstall nut as shown in FIG. 18, 19, & 20.
Note: Side carriage tube and carriage cross beam should be level with each other (See FIG. 18 & 19).
9. Install two 3/8" hex bolts and nuts as in FIG. 20.

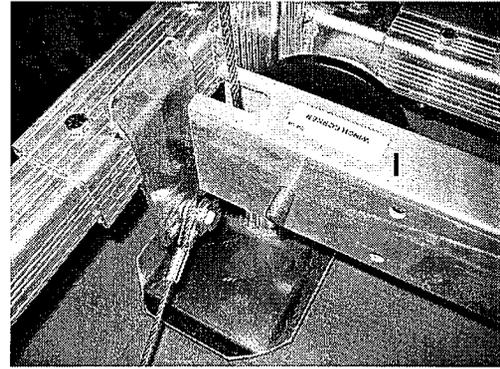


FIG. 17

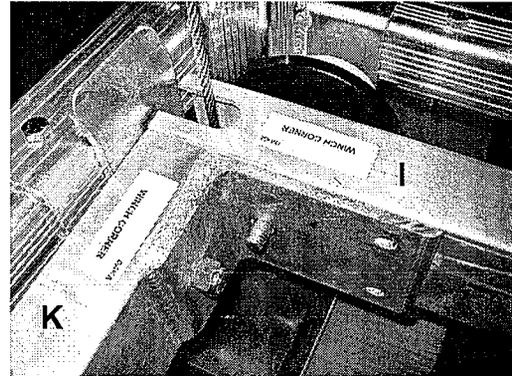


FIG. 18

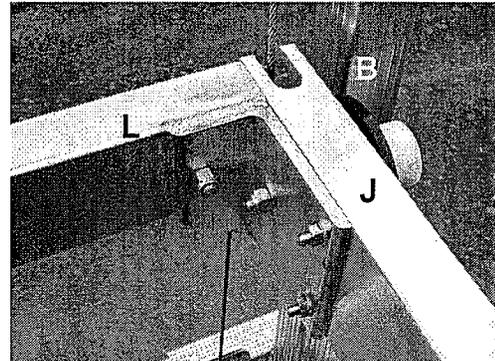


FIG. 19

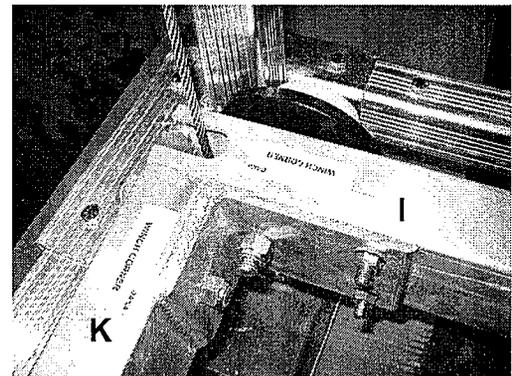


FIG. 20

CABLE ASSEMBLY

1. Locate the cable end protruding from the front carriage cross beam J (See FIG. 21).
2. Assemble 1/2" bolt, 1/2" washer and aluminum spacer tube. Slide cable loop over bolt assembly. Attach assembly to side frame plate. Attach with 1/2" nyloc lock. (See FIG. 21 & 22.)
3. Repeat on remaining corner posts. (See FIG. 23 & 24.)

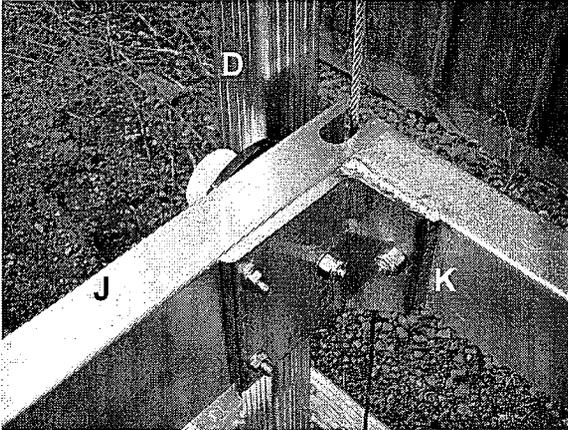


FIG. 21

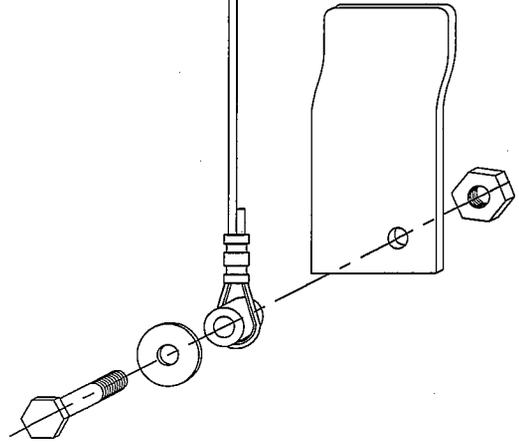


FIG. 22

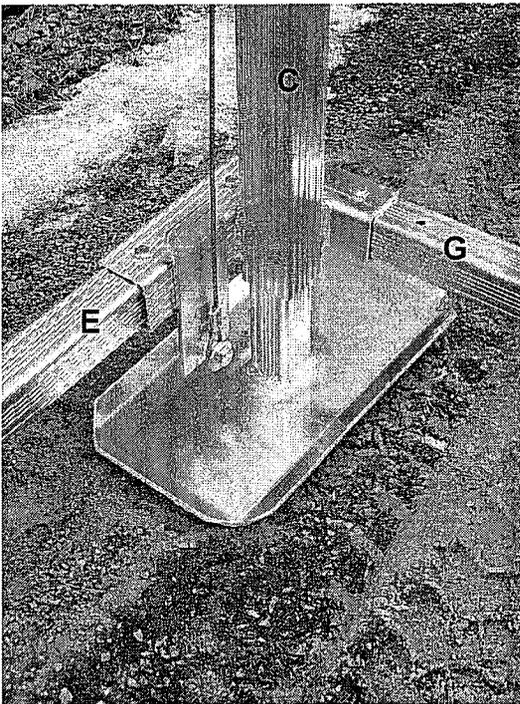


FIG. 23

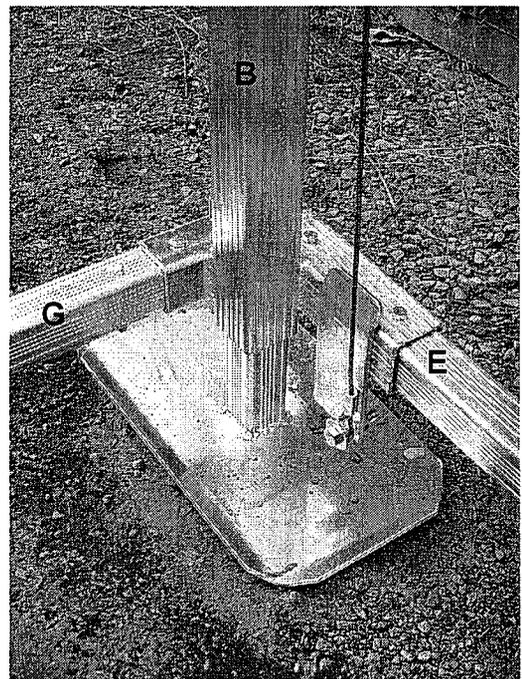


FIG. 24

CABLE ASSEMBLY CONTINUED

1. Review FIG. 24, 25, 26 & 27. 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. 26).
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 $1\frac{1}{2}$ " 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. 24 & 25) and repeat the above steps on these two cables.

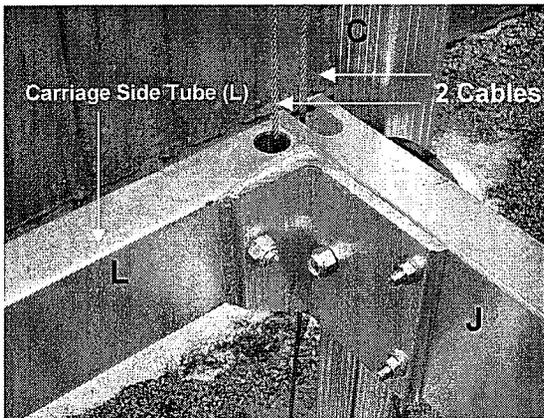


FIG. 25

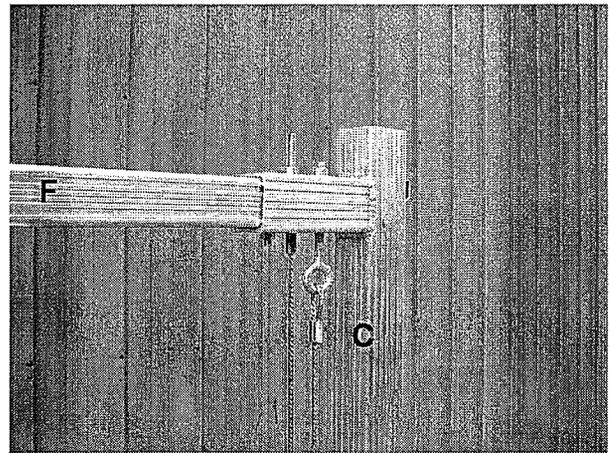


FIG. 26

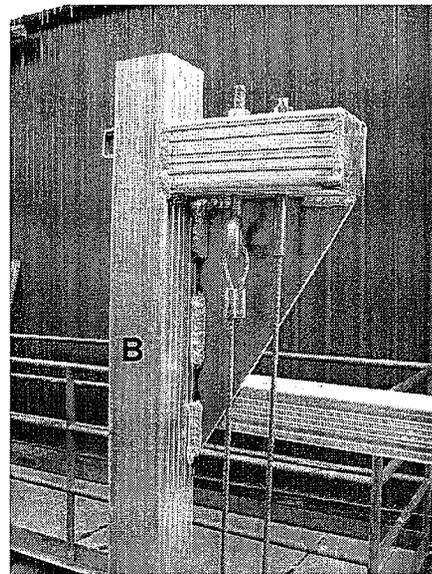


FIG. 27

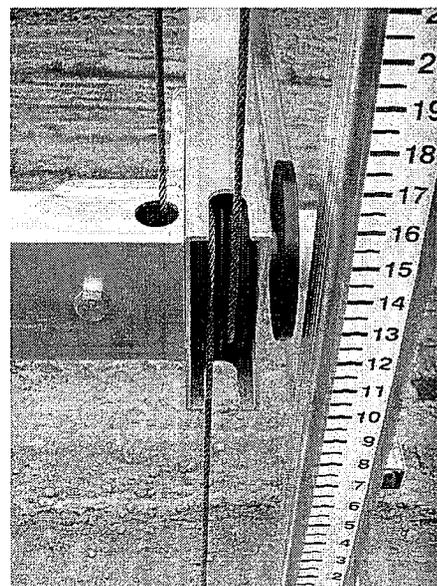


FIG. 28

CABLE ASSEMBLY CONTINUED

1. Locate the single cable in the carriage cross beam at the winch end of the lift (See FIG. 29). 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. 29. 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. 29.
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. 29).

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

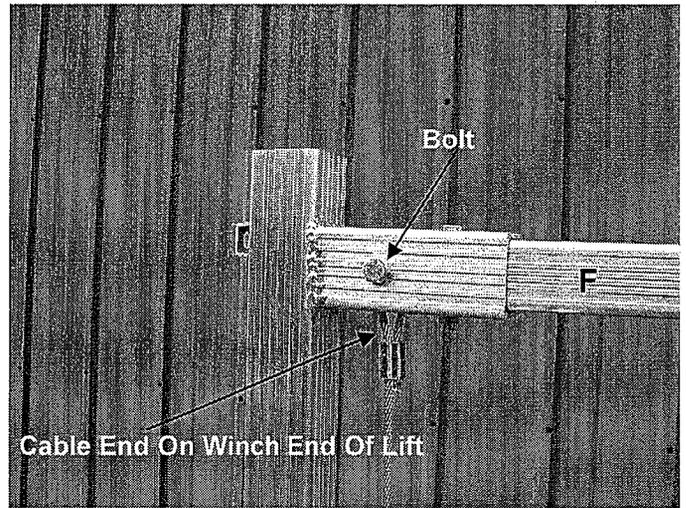


FIG. 29

INSTALL WINCH

MODELS: KDV 1684/2096

Bolt directly to winch corner post A.

MODELS: KDV 2596/2515

Remove top cover plate and install 7/16" U-Bolt with 7/16" nuts onto winch as shown in Fig. 30. 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 an 11/16" wrench. See FIG. 30. Re-install top cover plate.

Note: Winch always is mounted on inside edge of the winch side frame (See FIG. 1).

MOUNT CABLE TO CUSTOM CHAIN DRIVE WINCH

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. The setscrew is located through hole in backside of winch (See FIG 31). You may have to rotate cable spool to line up setscrew with allen wrench.

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

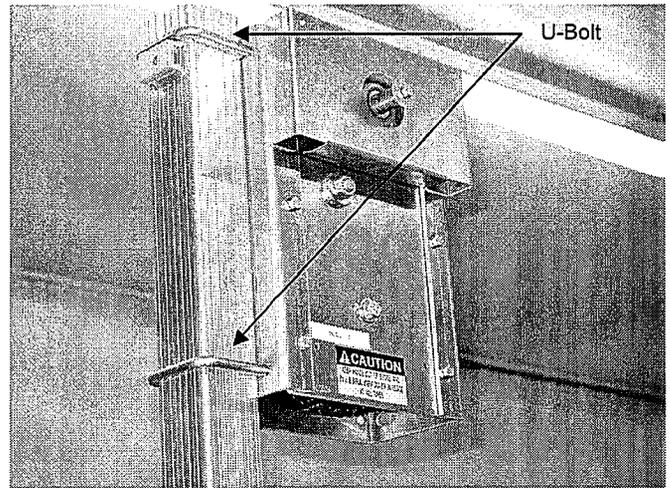


FIG. 30

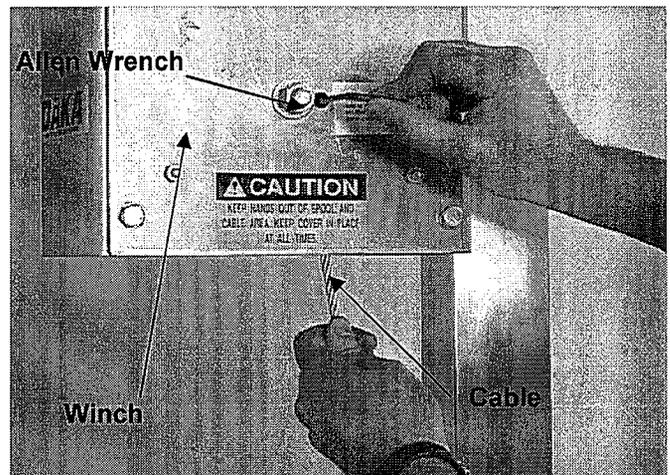


FIG. 31

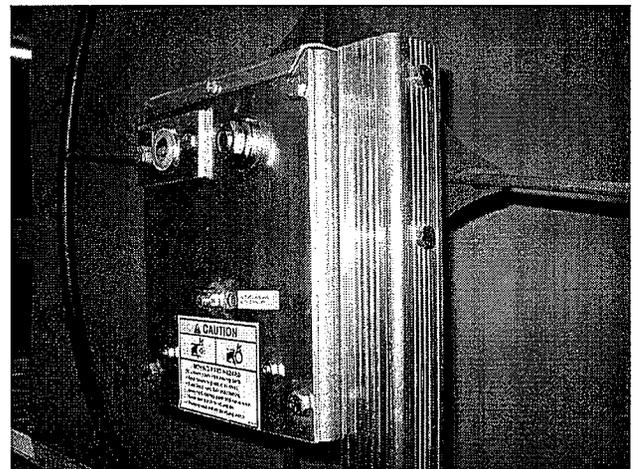


FIG. 32

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 FIG. 33 & 34).

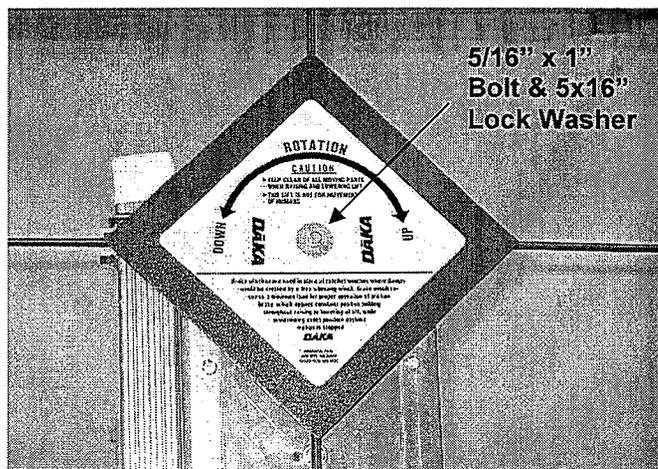


FIG. 33

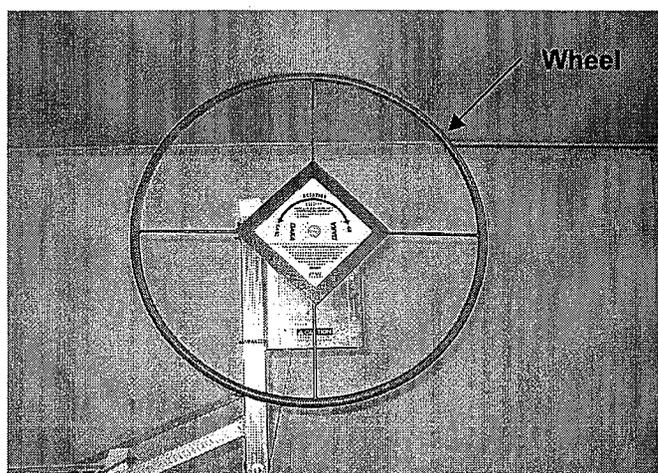


FIG. 34

DOUBLE CHECK ALL ASSEMBLIES

Once lift is fully assembled:

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

LEVELING FOOT PADS

A leveling foot pad 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. 35). 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. 35).

PLACE LIFT IN LAKE

Place lift in lake and complete the following steps:

1. Place lift in a minimum of 24" 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. 36 and 37). Position lift accordingly before placing lift into water.

Note: The **PREFERRED POSITION** of the lift is on the right side of the dock when viewed from the shore (See FIG.36). 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.36.

3. Level the lift by adjusting the footpads accordingly. See FIG. 35.

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 relevelled once it has been loaded with weight. Check and relevel if necessary.

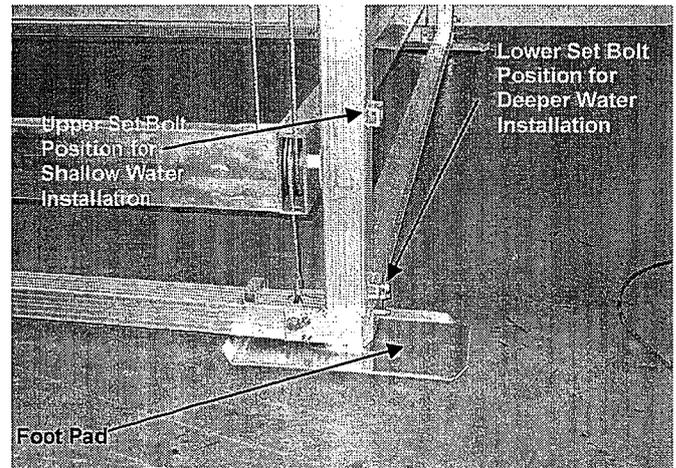


FIG. 35

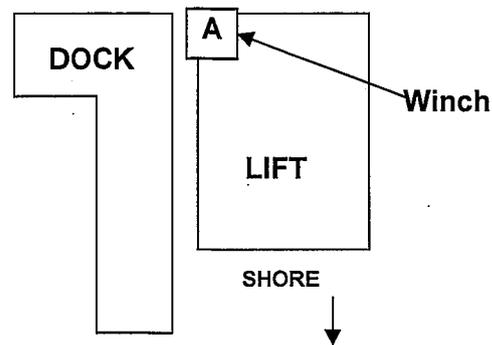


FIG. 36 – PREFERRED POSITION ABOVE

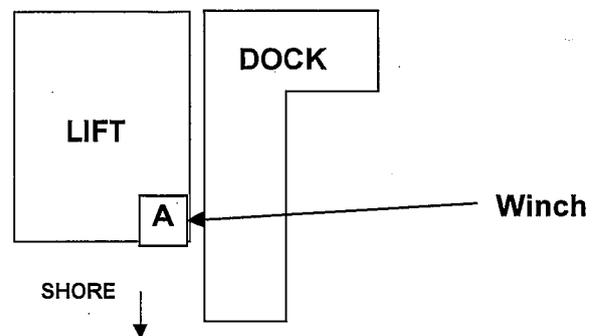


FIG. 37

⚠ 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 an 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.

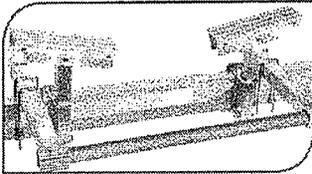
Implied warranties including that of merchantability are expressly limited in duration of this warranty. DAKA Corporation disclaims any liability for incidental or improper selection, removal, use, misuse, misapplication, neglect or improper selection of our product. Some states do not allow limitations 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.

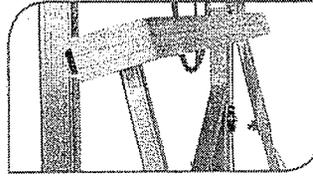
Effective 09/03
Revision 1: 11/1/07

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)



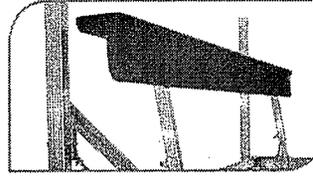
Vinyl Guide-ons

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)



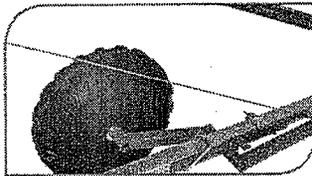
Stationary Wheel Kit

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



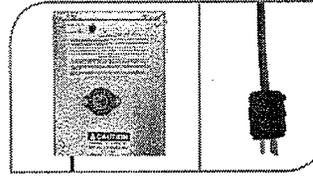
Carpeted Guide-ons

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)



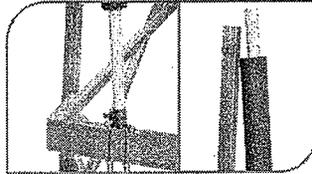
Lifting Wheel Kit

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



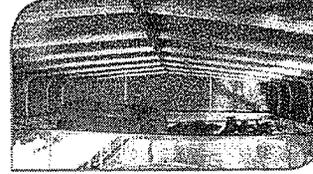
Electric Lift Motor

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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