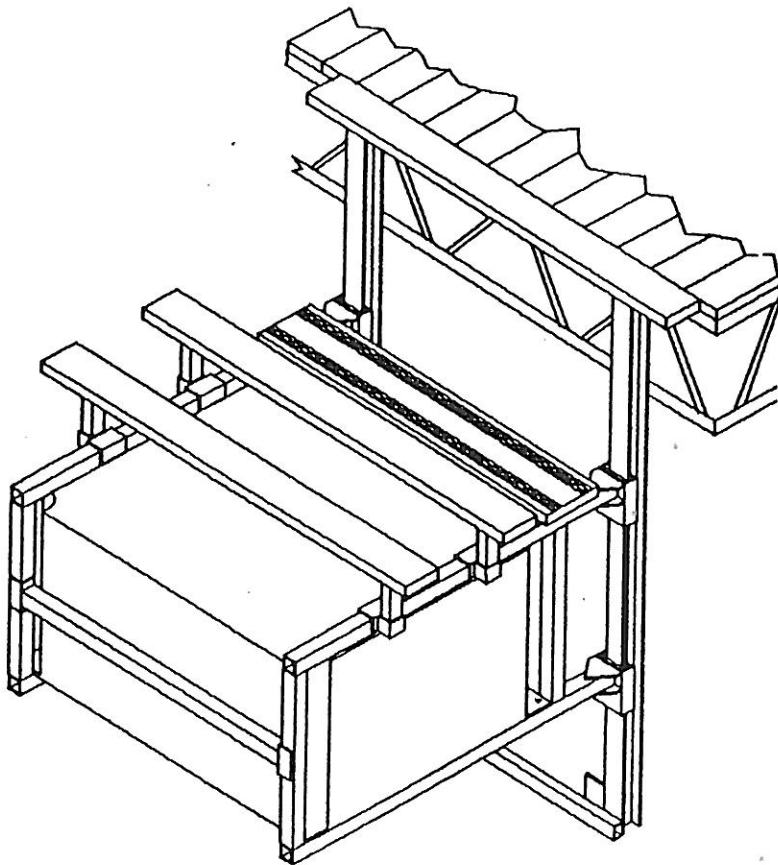


# SHOREMASTER

FLOATING PERSONAL WATERCRAFT LIFT

-OWNERS MANUAL-

Model 1000 - Personal Watercraft Lift



Manufactured by ShoreMaster Inc.

Revision no. (1) 12 - 1 - 94

ShoreMaster Inc.

P.O. Box 358

1 ShoreMaster Drive

Fergus Falls, MN 56538

1-800-328-8945

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## INTRODUCTION

The ShoreMaster Floating Personal Watercraft Lift is used with floating dock systems that allow proper mounting, operation, and positioning of lift. Lift is used with floating docks that allow for a two point side connection. Water depth of 4 feet or more is required for lift to properly function.

The lift functions by blowing air into the lift tank (forcing water out) to raise, and releases air into the atmosphere (allowing water in) to lower. A properly attached lift, adequate dock system and correctly positioned watercraft will allow level lifting and lowering of your boat. **The watercraft must be positioned correctly for proper operation.**

The information in this manual is not all inclusive and does not cover all unique situations. Questions about assembly, installation, use, or suitability of this product for your situation can be answered by contacting an authorized ShoreMaster dealer or ShoreMaster toll-free 1-800-328-8945.

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## WARNINGS AND SAFETY

**YOUR SAFETY IS THE MOST IMPORTANT ISSUE RELATED TO THIS PRODUCT. It is critical that all assemblers, installers and users read and fully understand all warnings and safety information contained throughout this manual before using this product!**

### Safety Instructions

Never exceed recommended weight capacity of your lift. The weight of your craft includes the hull, engine, fuel, gear, battery, and added accessories. The dry weight reported by manufacturer usually includes only basic craft and engine. The craft manufacturers reported weights can be understated by 10 - 30%! This is before you add fuel, fluids, batteries, accessories, etc.! Weigh your craft at a certified scale to be absolutely sure of the total weight. You will be lifting 20 - 50% more than the reported dry weight when everything is considered.

- **! Warning !** If using electric tools near water, use proper safety precautions! **Never allow power tools or cords to touch water.** Not following precautions could result in **Death by Electrocution!**
- **A properly trained person is recommended for assembly and installation of this product.** Call ShoreMaster if you have any questions!
- Use proper protective clothing and safety glasses when assembling, installing or servicing this product.
- Do not assemble or use this product if items are missing or damaged.
- This product requires two or more persons to safely assemble and install.
- Inspect bolts, washers, nuts, pins, hoses, hose clamps, bushings and power cords at least every three months for damage, wear or loose connections. Tighten or replace parts as needed.
- Do not ride or stand on lift.
- Do not position yourself near, on or under lift during operation, or at anytime after installed
- Never operate, install or service electrical lift parts without power being disconnected and shut off.
- Blower box must be properly installed with cover in position before connecting and turning on power.
- Only a properly trained electrical technician should hook up blower box and power source.
- Do not make adjustment or alterations when watercraft is in lift.
- Do not allow people in watercraft when lift is in use or in a raised position.
- Properly cover your craft when it is in raised position on lift if rain can gather in your craft. An inch of rain adds several pounds. Added weight may result in craft being over capacity of lift.

## FLOATING LIFT PARTS LIST

Before assembly, identify each part. Remove parts from boxes, bags and bundles. **Mark each item with proper Part letter** (indicated in left-hand column of this page). This will confirm that all parts are here before beginning assembly and allows you to easily follow assembly instructions.

### BOLT BAG

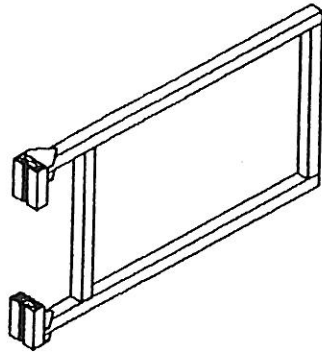
<u>QTY.</u>	<u>DESCRIPTION</u>
32	1/4" X 1/2" Carriage Bolt
4	1/4" x 2 3/4" Carriage Bolt
36	1/4" Lock Washer
36	1/4" Nut
4	3/8" x 1 1/2" Hex Bolt
8	3/8" x 2" Hex Bolt
8	3/8" x 3" Hex Bolt
8	3/8" x 3 1/2" Hex Bolt
4	3/8" x 4" Hex Bolt
4	3/8" Fender Washer
24	3/8" Flat Washer
36	3/8" Lock Washer
44	3/8" Nut
4	3/8" Lock Nut
2	#14 x 1 1/2" S.S. Phillips Screws
3	Hose Clamps

### Tools Required for Assembly & Installation

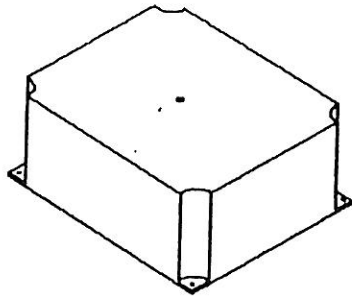
8- 3/8" x ?? bolts, washers and nuts are used for connecting lift to dock. These are not supplied because dock sizes and designs vary. The bolt length required will be about 1 1/4" longer than the width of your dock rail.

Magic Marker  
Tape Measure  
Saws-All or Hacksaw  
Knife  
Screw Driver  
1/2" Wrench  
9/16" Wrench  
3/4" Wrench  
1 1/8" Wrench (two of these needed)  
Socket Set  
Needle Nose Vise Grip  
Rubber Mallet  
Hammer  
Square  
Channel Lock Pliers  
Boat Plug 1"

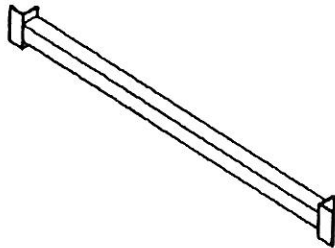
PART A  
END SECTION  
QTY. 2



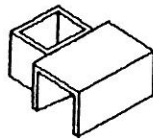
PART B  
TANK  
QTY. 1



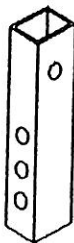
PART C  
SIDE TUBE  
QTY. 2



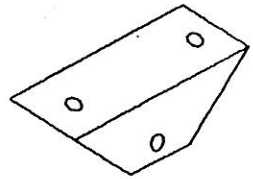
PART D  
BUNK POCKET  
QTY. 4



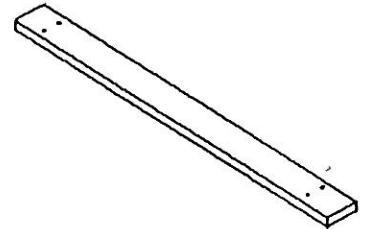
PART E  
BUNK LEG  
QTY. 4



PART F  
PIVOT CHANNEL  
QTY. 4



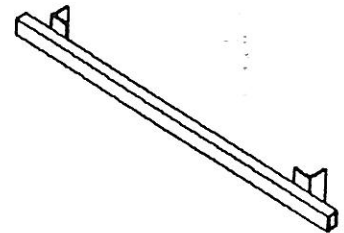
PART G  
BUNK BOARD  
QTY. 2



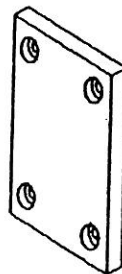
PART H  
I BEAM  
QTY. 2



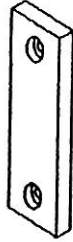
PART I  
DOWN STOP  
QTY. 1



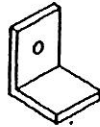
PART J  
WIDE PAD  
QTY. 4



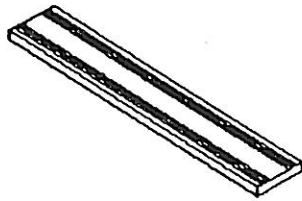
PART K  
NARROW PAD  
QTY. 8



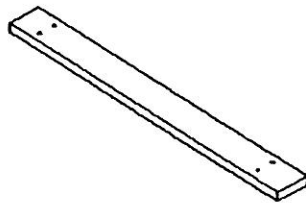
PART L  
UP STOP  
QTY. 4



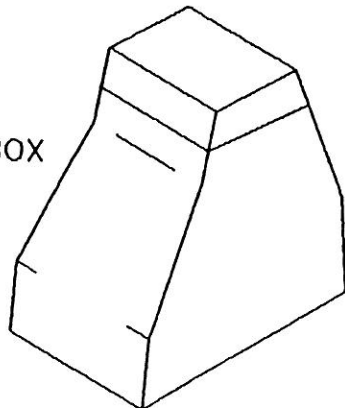
PART M  
ALUM. STEP  
QTY. 1



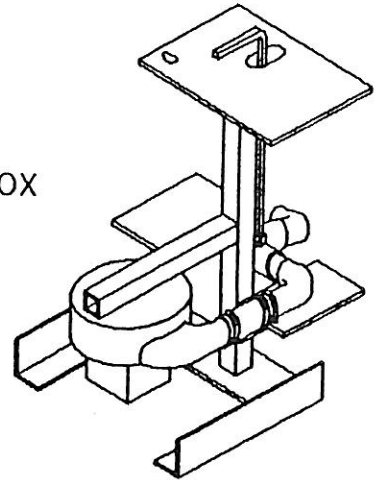
PART N  
WOOD STEP  
QTY. 1



PART O  
BLOWER BOX  
QTY. 1



PART P  
BLOWER BOX  
FRAME  
QTY 1



PART Q  
1" DIA. X 15' HOSE  
(NOT SHOWN)

## ASSEMBLY - Part One

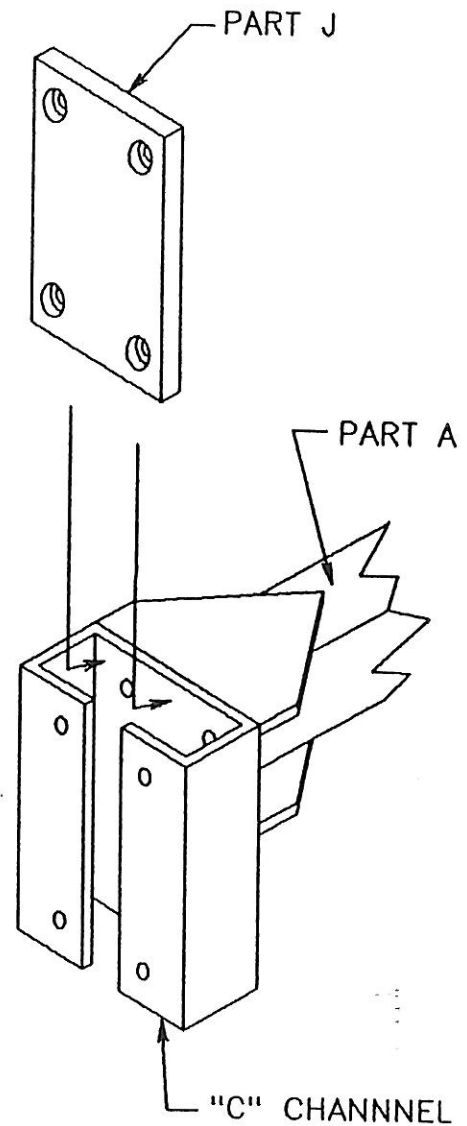
**\*\*Two or more people are needed to properly assemble and install this product.**

**\*\*Fully read and understand each step before proceeding with that step.**

**\*\* Lock washers always go against nut when attaching parts.**

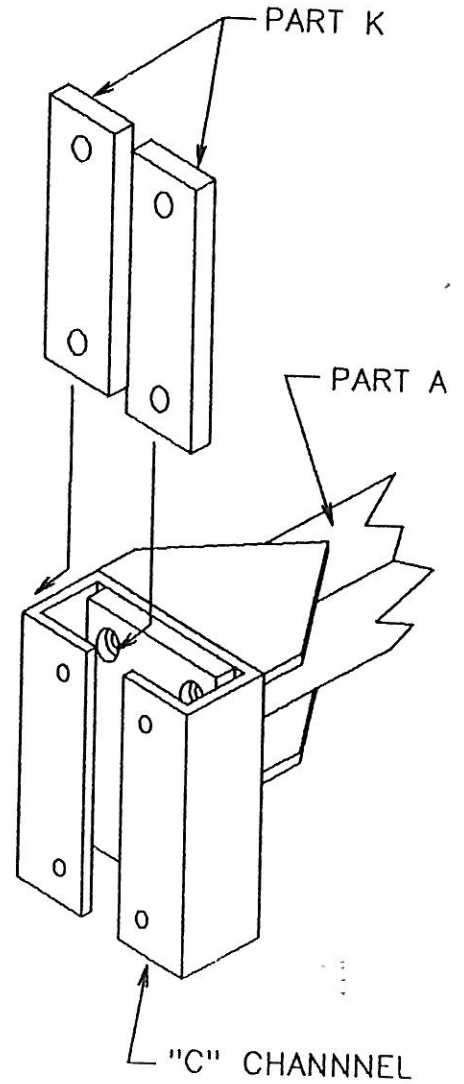
**# 1** Attach each part J (wide pad) to each part A (end section) as shown using 1/4" x 1 1/2" carriage bolt, 1/4" lock washer and 1/4" nut.

**Note:** Head of carriage bolts **must** fit inside of bored hole and be **below** surface of part K.



# 2 Attach each part K (narrow pad) to part A (end section) as shown. Use a 1/4" x 1 1/2" carriage bolt, 1/4" lock washer and 1/4" nut.

**Note:** Head of carriage bolts **must** fit inside of bored hole and **below** surface of part K.

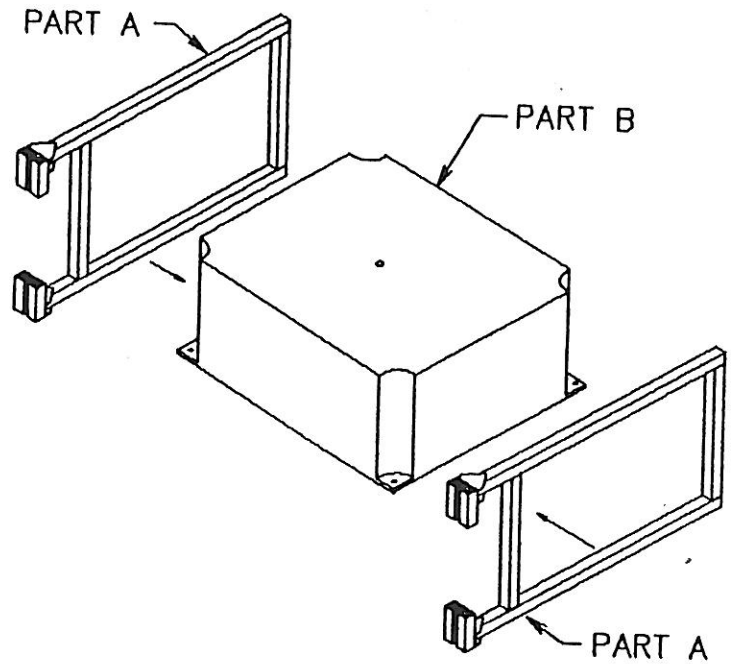




**# 3** Attach each part A (end section) to part B (tank) as shown. Use a 3/8" x 4" hex bolts, 3/8" fender washer, 3/8" flat washer and 3/8" lock nut.

**Note:** Flat washers go between bolt head and part A. Fender washers go between lock nuts and Part B.

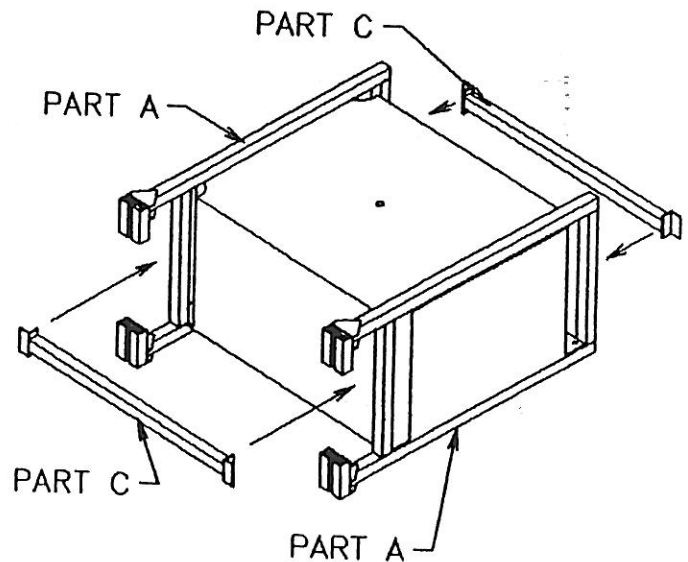
**Note:** Do not fully tighten yet.



**# 4** Attach part C (side tube) to each part A as shown. Use a 3/8" x 3" hex bolt, 3/8" flat washer, 3/8" lock washer and 3/8" nut.

**Note:** Flat washers go against bolt head and the lock washers go against nuts.

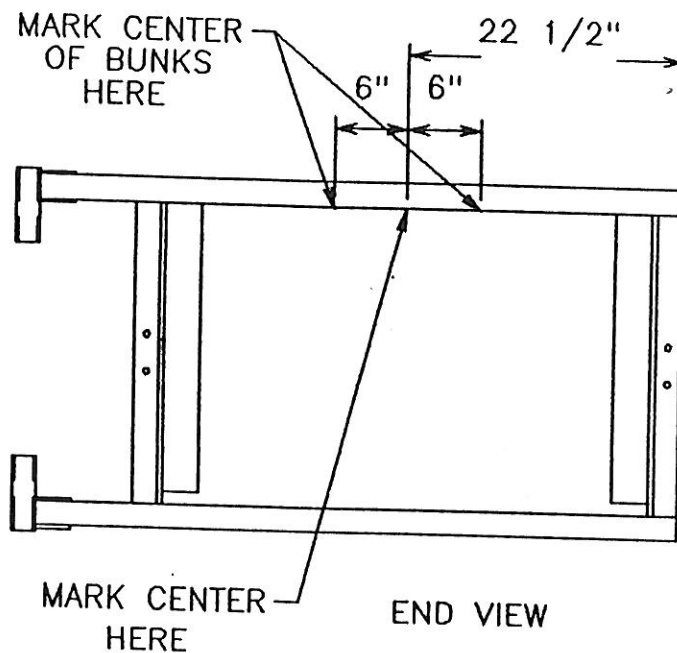
**Note:** Do not fully tighten yet.



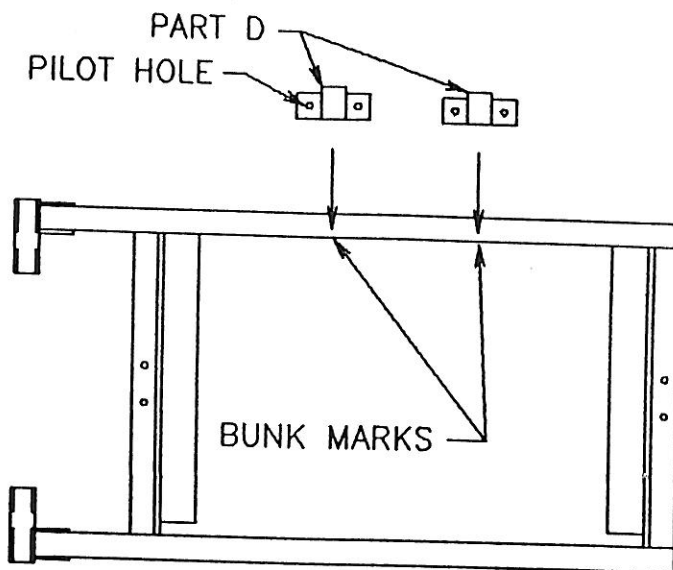
**# 5** Draw a line on each part A top tube  $22\frac{1}{2}$ " from outside end of each part A as shown. This is the center of the lift.

**# 6** Determine how far apart the centers of each part D (bunk pocket) must be and divide by two. Measure this distance in each direction from the marks made in step # 5 on each part A.

**Note:** Bunk height and spacing are very important. Lift will not function properly unless personal watercraft is fitted properly on bunks and bunks are attached correctly to lift.

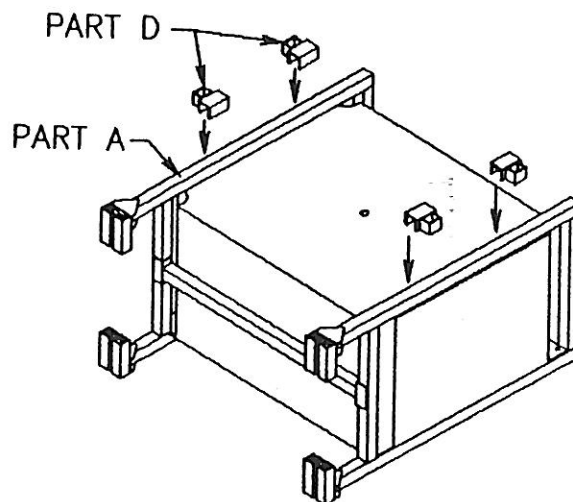


**# 7** Place centers of part D (bunk pocket) over marks made in step # 6 as shown. Pockets on each part D should face away from lift as shown.



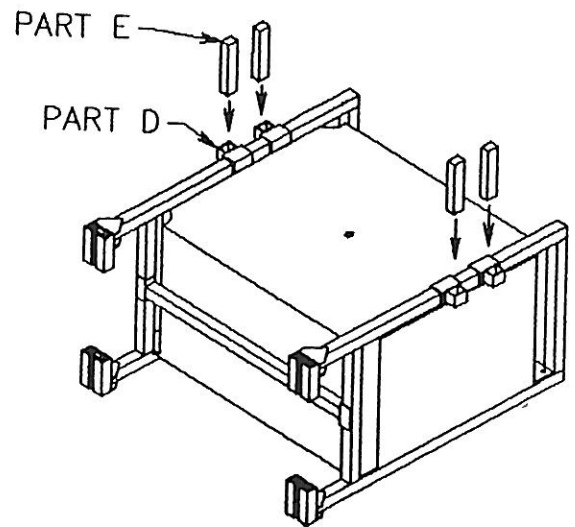
**# 8** Use holes in each part D as pilot holes and drill 7/16" diameter holes through the top tubes of each part A. Attach each part D to each part A using 3/8" x 3 1/2" hex bolt, 3/8" lock washer and 3/8" nut.

**Note:** Tighten bolts snug. Do not over tighten and crush tubes.

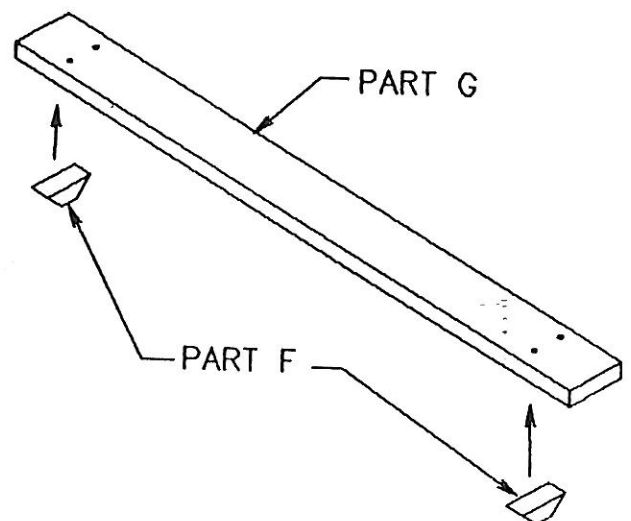


**# 9** Attach each part E (bunk leg) to each part D. Use 3/8" x 3" hex bolt, 3/8" lock washer and 3/8" nut. Tighten nuts firmly in place.

**Note:** All four E parts need to be the same height. Position as low to lift as possible while allowing clearance for Personal Watercraft.



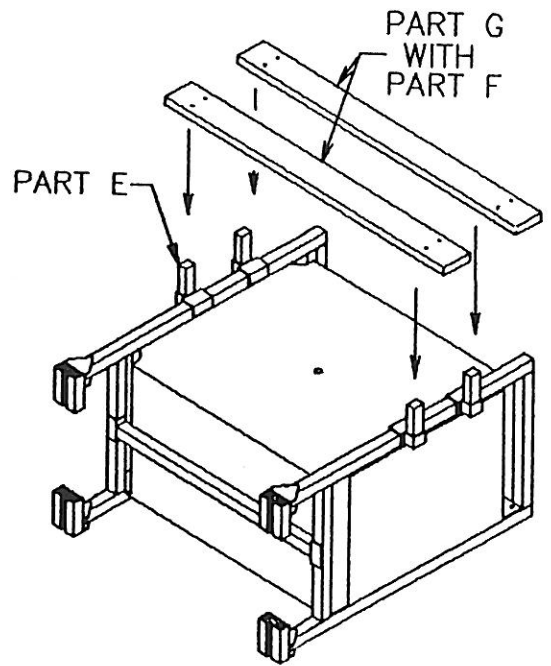
**# 10** Attach each part F (bunk channel) to each part G (bunk board) as shown. Use 3/8" x 2" hex bolt, 3/8" flat washer and 3/8" nut.



### CAUTION

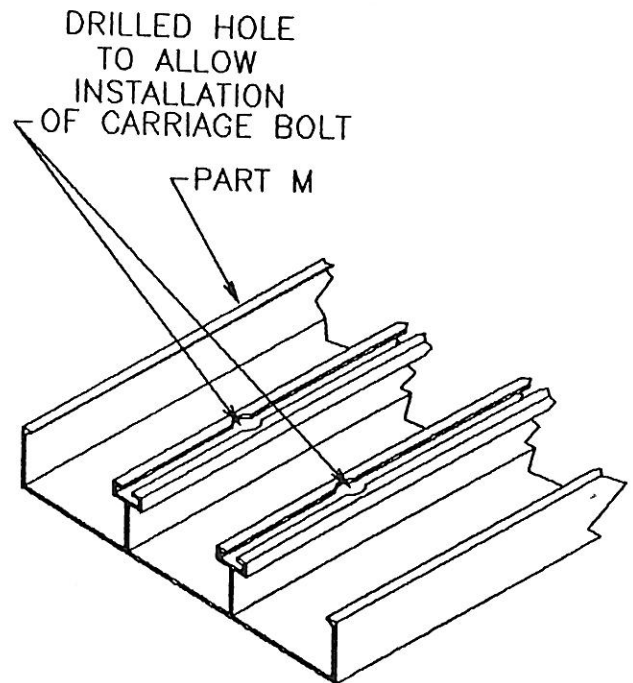
Secure bunk boards and channel very tight! Each bolt head must be positioned **below** surface of bunk board. Not doing this **will** result in scratching or gouging of boat hull!

**# 11** Attach each part F and G (bunk board & channel) to each part E as shown. Use 3/8" x 2 1/2" hex bolt, 3/8" lock washer, and 3/8" nut. Adjust the angle of each part G to desired position and secure firmly in place.



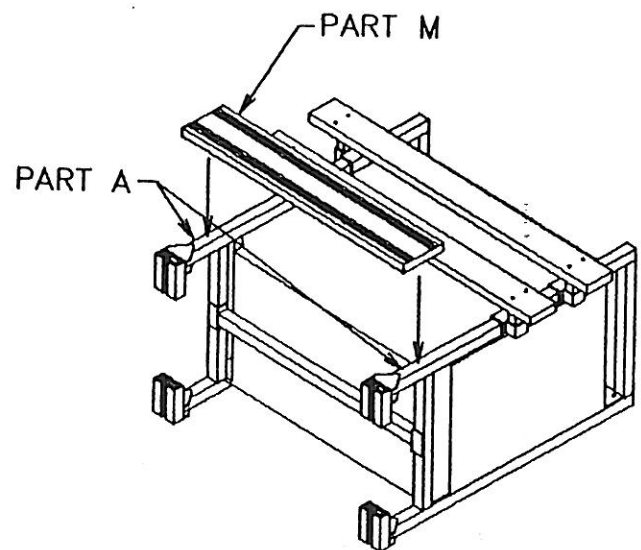
**# 12** Secure all attached nuts and bolts that are not already firmly tightened at this time.

**#13** Insert the head of four 1/4" x 2 3/4" carriage bolts into slot of part M (aluminum step) as shown.



NOTE END COVER OF STEP NOT SHOWN FOR CLARITY

**#14** Attach part M to part A using 1/4" x 2 3/4" already attached and 1/4" lock washers and 1/4" nuts.

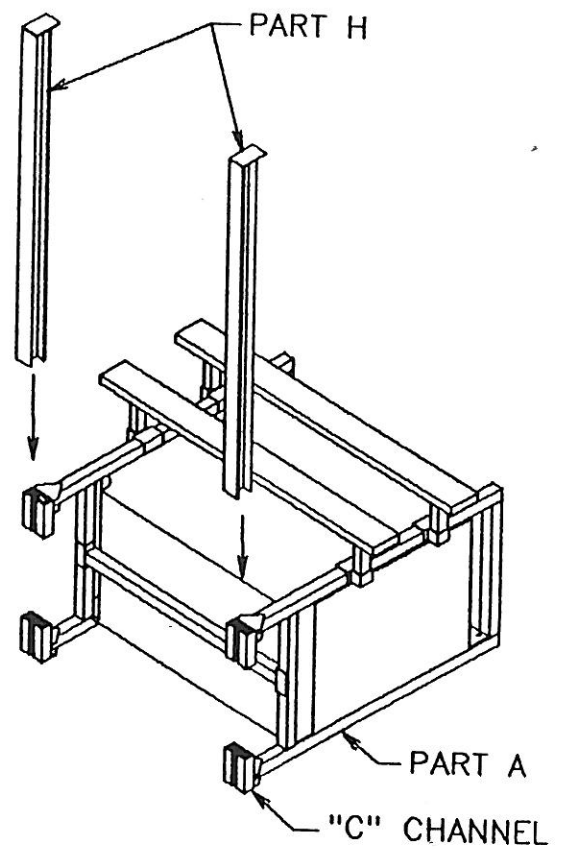


## WARNING

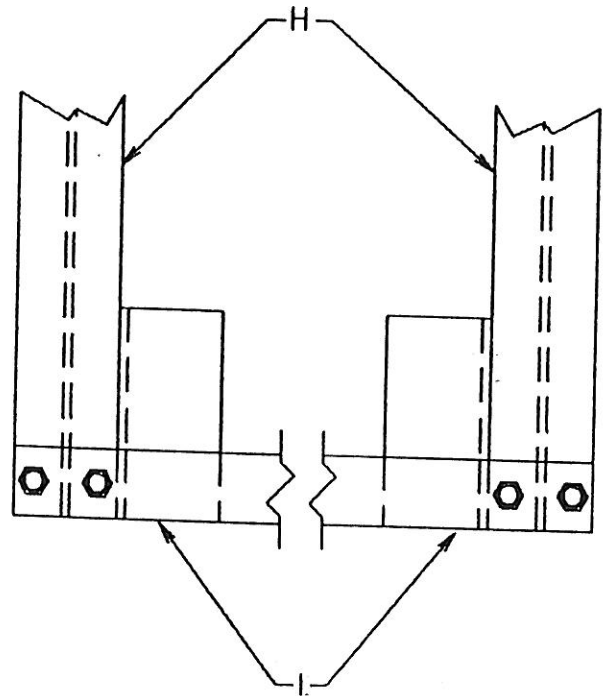
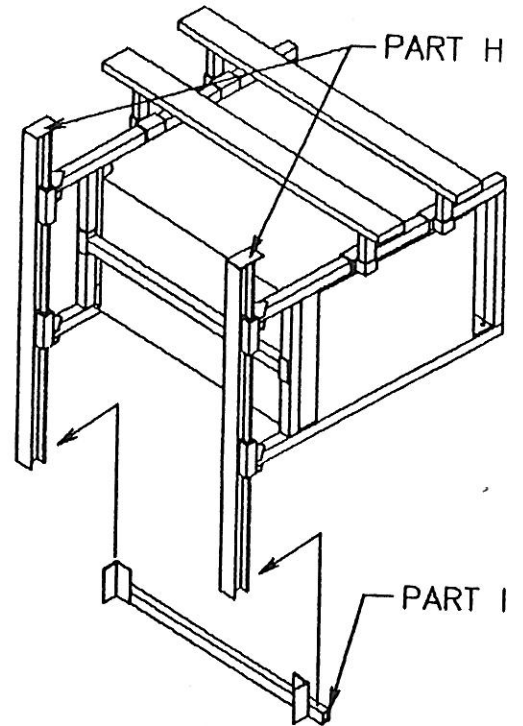
Do not stand on lift except where steps are provided. Lift parts are slippery, especially when wet. The lift could sink or you could slip and fall! **A falling or slipping injury could cause you to drown!!!**

**# 15** Insert each part H (I-beams) through opening of part A as shown.

**Note:** The part H side that has holes drilled in it is the side that slides through the A parts.



**# 16** Attach part I (down stop) to each part H (I-beam) as shown. Use 3/8" x 2 1/2" hex bolt, 3/8" lock washer and 3/8" nut.



PART H MUST BE MOUNTED  
TIGHTLY TO ANGLE OF PART I  
TO ELIMINATE TWISTING OF PART H

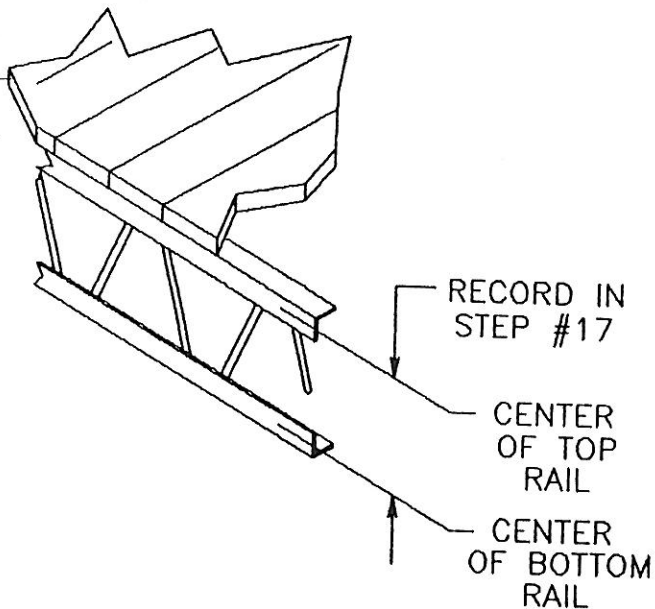


**# 17** Measure dock rail for installation of lift.  
Measure from center line of top rail to center line of bottom rail.

Record Measurement Here: \_\_\_\_\_

**Note:** Double check your measurements for accuracy. Be sure all measurements are made straight down or across as needed.

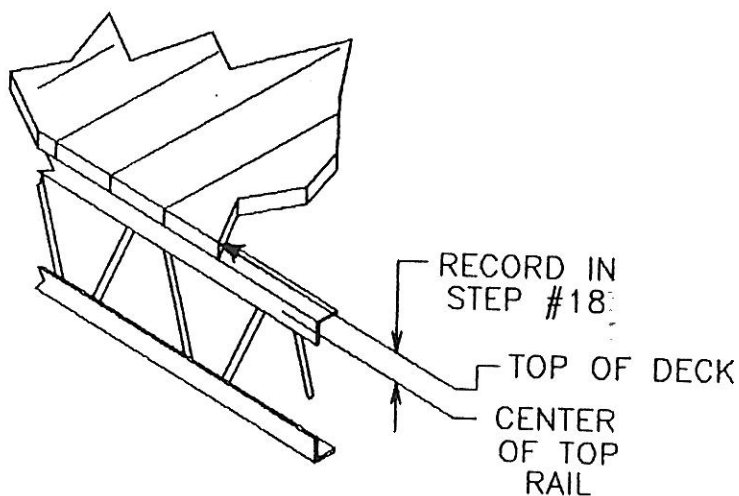
**Note:** See diagram at right.



**# 18** Measure from top of deck to center line of top rail.

Record Measurement Here: \_\_\_\_\_

**Note:** See diagram at right.



**# 19** Subtract 1 1/2" from measurement made in step # 18.

Record Measurement Here: \_\_\_\_\_

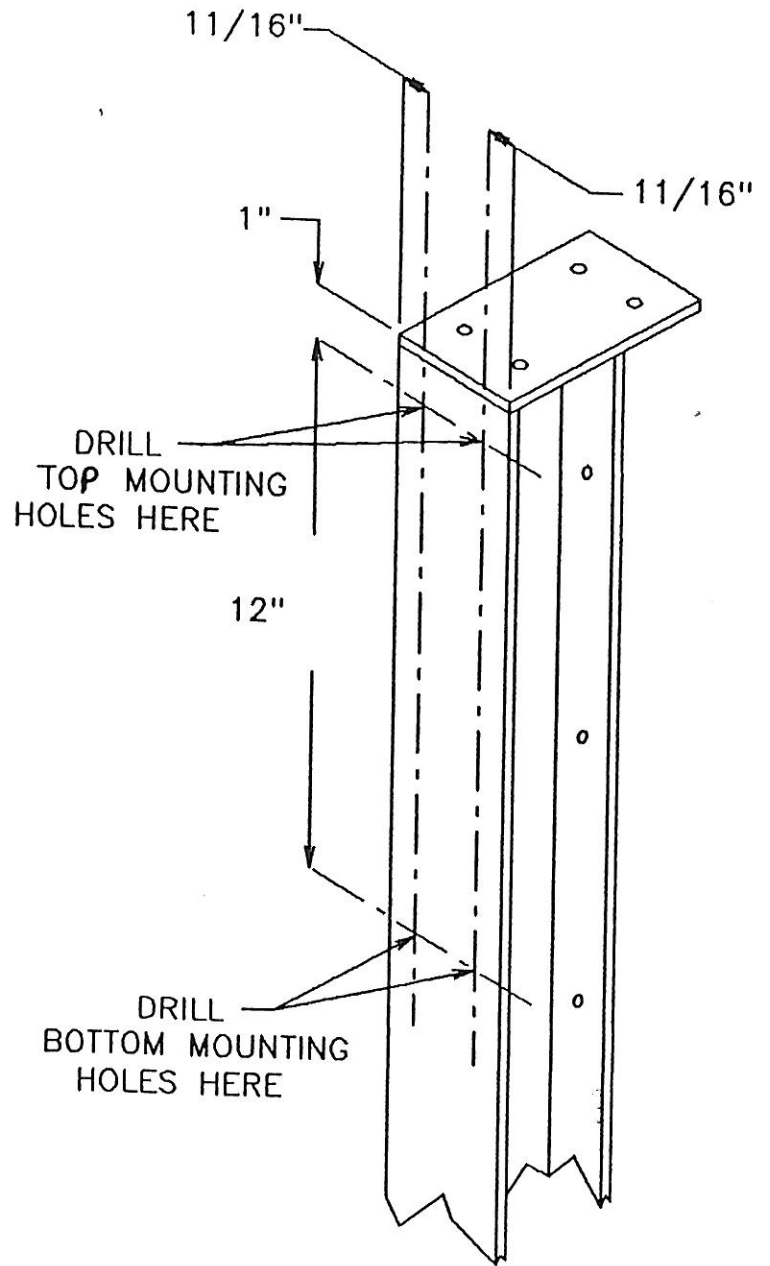
**Note:** The 1 1/2" is subtracted so a top step can be installed on lift flush with dock surface.

**# 20** Measure down from the top of each part H (I-beam) the distance you recorded in step # 19. Then measure in 11/16" from both sides of each part H. Make a mark at each of these points. These two marks are for your top mounting holes.

**# 21** Measure down from marks made in last step, the distance you recorded in step # 17. Then measure in 11/16" from both sides of each part H. Make a mark at each of these two points. These two marks are holes for bottom mounting.

**EXAMPLE:** Step # 17 measurement 12"  
 Step # 18 measurement 2 1/2"  
 Step # 19 measurement 1"

\*\*\* You would measure down 1" from top of part H and 11/16" from side edge and make marks for top mounting holes. Then measure down from the top mounting holes 12" and 11/16" in from side edge and make marks for bottom mounting holes.



EXAMPLE ONLY

**# 22** Drill 7/16" holes in each part H where you made the four marks per part.

## POSITIONING & ATTACHING LIFT

**# 1** Attach hose to tank using hose clamp. Plug open end of hose with boat plug so air can not escape.

**# 2** Put lift in water being sure air can not escape from float tank. Float lift into mounting position.

### CAUTION

Before placing lift in water be sure air cannot escape from hose or any connection. Air in floats must be trapped so lift does not sink! If air is allowed to escape, float will take on water and lift will sink! Check buoyancy while lift is in shallow water to avoid lift sinking in deep water!

**# 3** Use a vise grip to clamp each part H to dock rails in desired location.

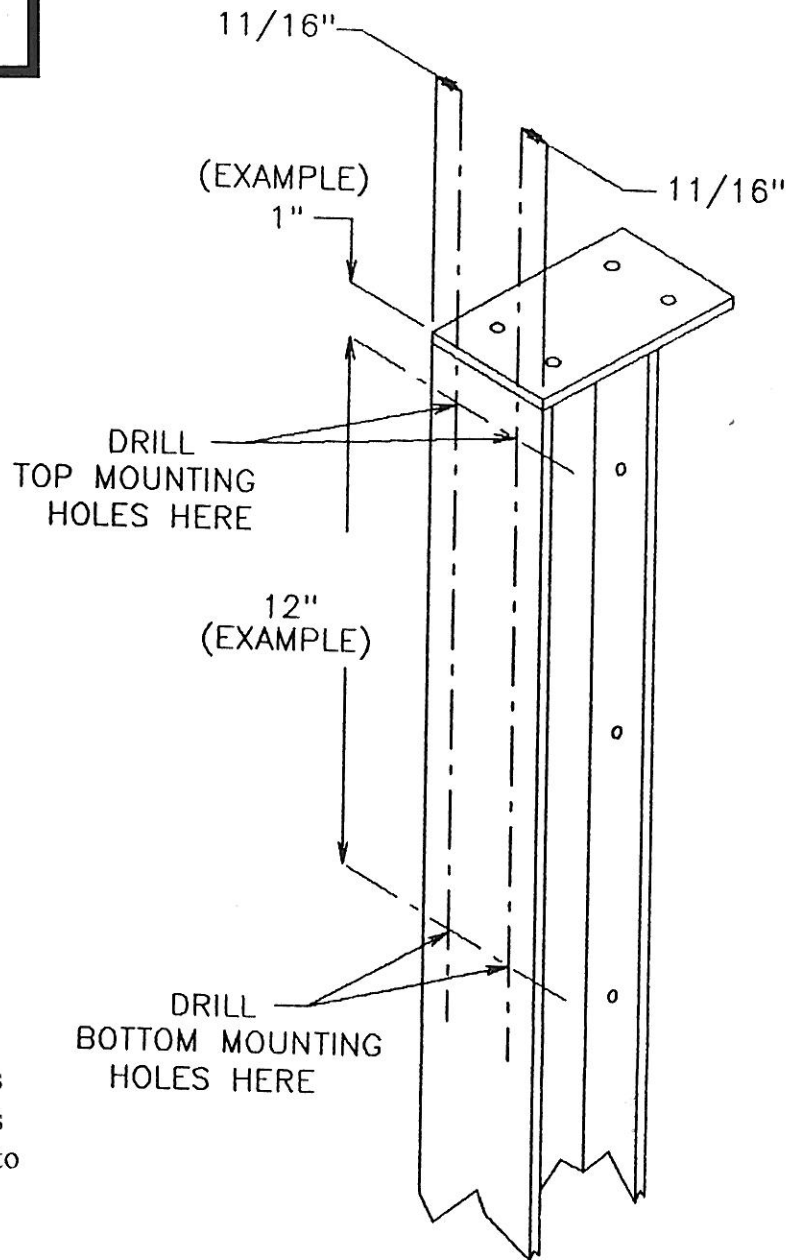
**Note:** Further secure lift with ropes. Vise grip may not hold lift completely!

## CAUTION

Be accurate when attaching each I-beam to dock rail. They must be parallel and square to each other. Not doing this will result in difficulty when raising and could cause rapid wear of lift parts!

**# 4** With each part H firmly secured in position, use pilot holes in each part H and drill a  $7/16$ " hole through your dock rail.

**# 5** Mount the lift and each part H to dock rail as shown. Use eight  $3/8$ " x ?? hex bolts, lock washers and nuts. These are hardware items you will need to supply.



EXAMPLE ONLY

**# 6** Determine what height lift must be when fully raised. Attach part L (up stop) to each part H as shown. Use 3/8" x 1 1/2" hex bolt, lock washer and nut.

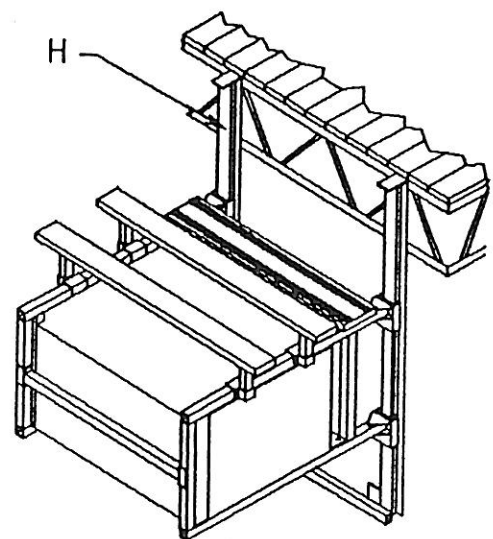
**Note:** Each part L should attach to each part H by using holes directly above each part A when you have the lift in fully raised position.

**# 7** Attach each part N (wood step) to each top plate of part H as shown. Use 3/8" x 3" hex bolt, flat washer and nut.

**#8** Make sure every bolt, washer, nut, pin and clamp on boat lift is tightened and in proper place.

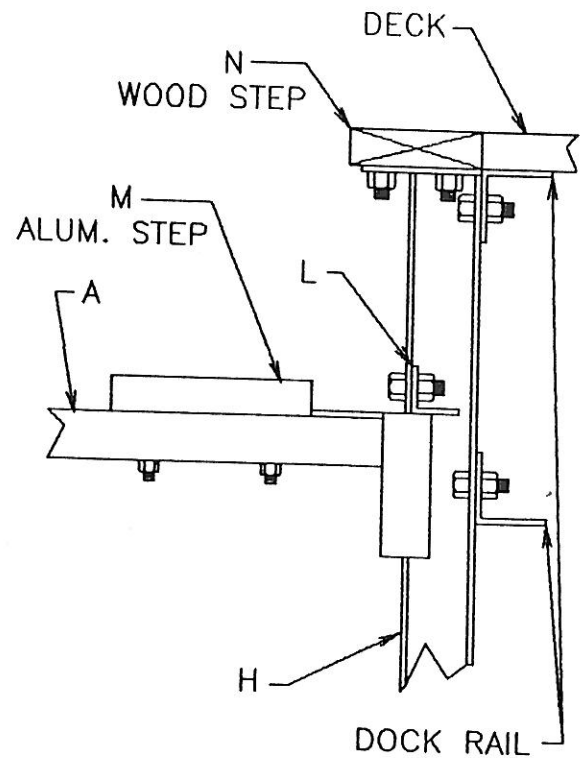
### CAUTION

Loose or missing bolts, washers, nuts, pins or clamps could cause damage to your lift, dock or boat! Be sure all items are secured in place. At least every three months, check and retighten.

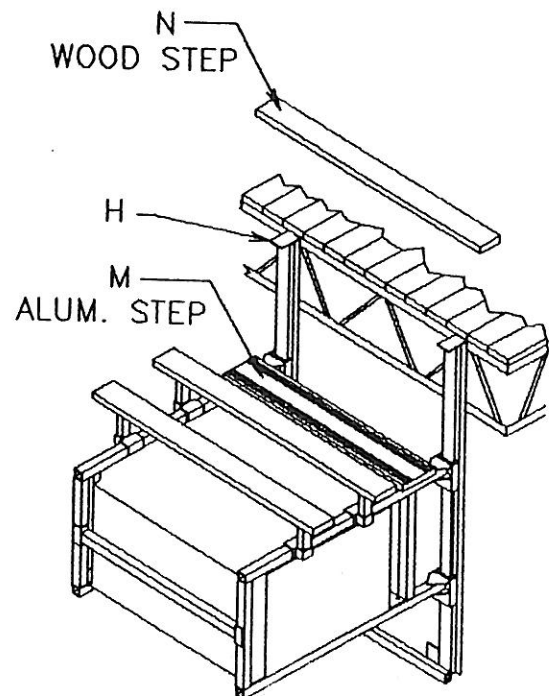


## POSITIONING & ATTACHING BLOWER BOX

**# 1** Place part P (blower box) on dock with hose fittings facing lift. Drill  $7/32$ " holes through frame of blower box as shown. Secure in place with #14 x  $1\ 3/4$ " Phillips head screws as shown.



**# 2** Unplug open end of part Q (15' hose). Attach to blower box barbed fitting using hose clamp as shown.



**# 3** Attach O parts as shown. Use #12 x 1" Phillips head screws to attach to P parts (mounting plate).

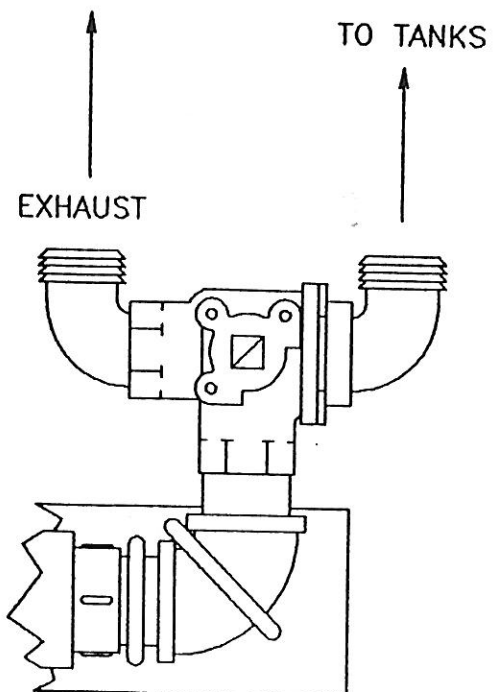
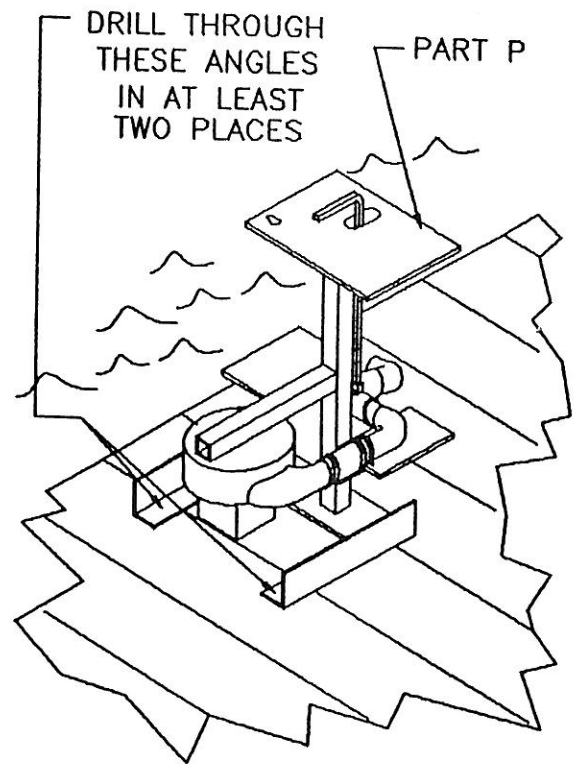
## WARNING

Do not plug blower box in until it is completely assembled. Uncovered and unprotected electrical parts with electricity running through them are a potential hazard. **DIRECT CONTACT BY YOU WITH LIVE ELECTRIC WIRES OR PARTS COULD CAUSE DEATH BY ELECTROCUTION!**

**# 4** Plug G.F.I. (supplied with lift) directly into proper electrical receptacle. Do not use extension cord between G.F.I. and receptacle. Then plug blower box electrical cord, with proper extension cord if necessary, into **GROUND FAULT INTERRUPTER**,

## WARNING

Shore or dockside electrical receptacle **MUST** be protected with an approved **GROUND FAULT INTERRUPTER** switch. Not following this step could cause **DEATH BY ELECTROCUTION**. Only a properly trained electrical technician should hook up blower box and power source.



## LOADING OF WATERCRAFT

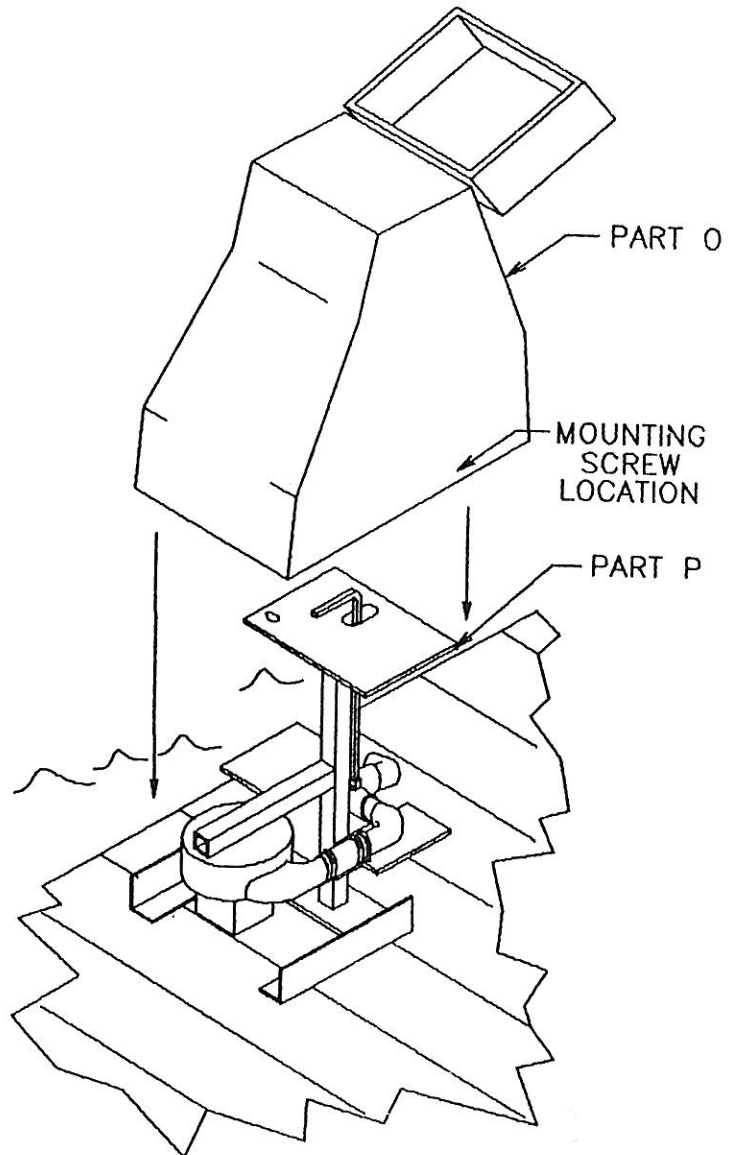
**# 1** Estimate center of gravity. This is the point you want in the very middle of your lift when positioning your craft before raising.

**#2** Position craft with best estimate of center point. Raise while watching the top of lift. If it is not level stop raising. Lower lift and reposition until lift raises level as shown.

### CAUTION

Improper positioning could cause damage to watercraft. Position properly every time you raise craft.

**WARRANTY DOES NOT  
APPLY IF DAMAGE IS  
CAUSED BY IMPROPER  
LOADING!!**





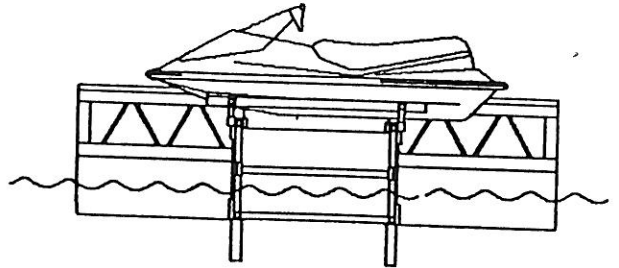
## OPERATION AND USE

### **-Raising Lift-**

**# 1** Make sure craft is properly positioned before raising. Turn valve handle to UP position then flip toggle switch to ON position.

**Note:** Always watch craft for level raising.

**# 2** When desired position is reached, turn valve to OFF then turn toggle switch to OFF.



### **-Lowering Lift-**

**# 1** Turn valve to DOWN position. When lift lowers enough for craft to float freely then turn valve back to OFF.

## CAUTION

**DO NOT** leave lift in fully lowered position for over 12 hours or during heavy wave activity. Docks are not designed to support full weight of boat lift. "Air up" lift to avoid damage to dock or lift.

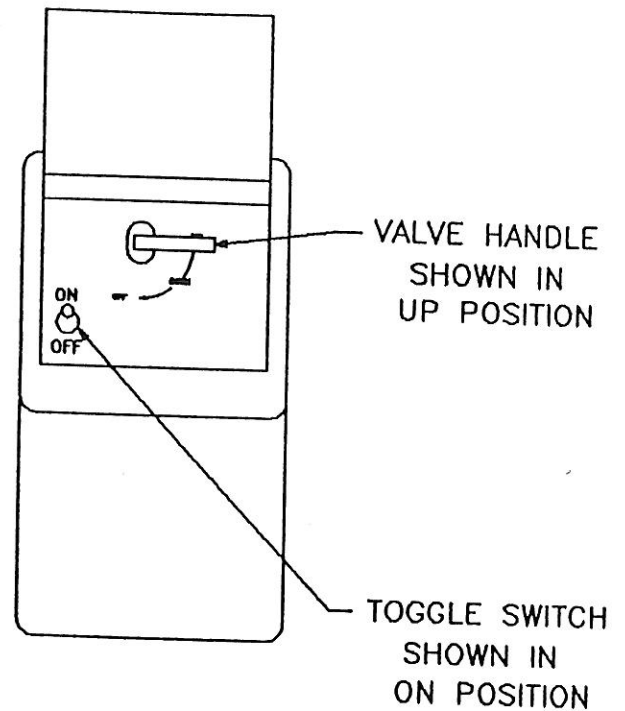
## STORAGE (winterizing)

**\*\*\*ShoreMaster does not warrant this product against any damage caused or related to ice!!!**

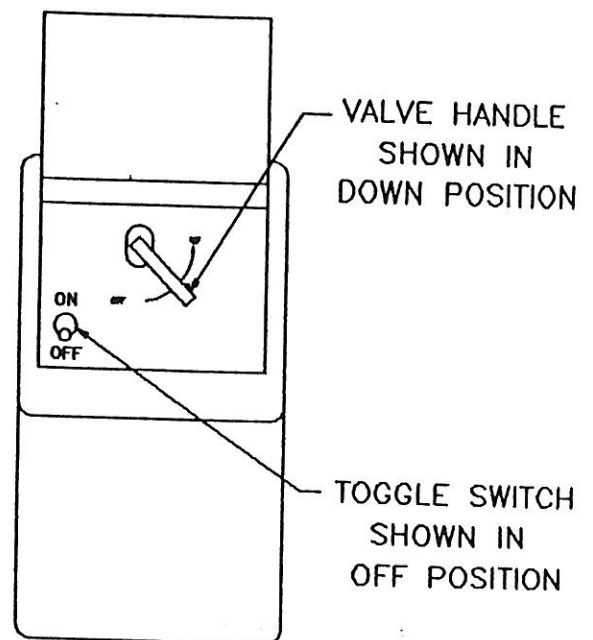
**# 1** In areas that **do not** experience winter ice cover, ice flow or severe winter storms, your lift can likely remain in water year around. Find out what is common in your area. If you normally leave your dock or lift in during winter, than you could also leave your ShoreMaster floating lift in.

### CAUTION

Ice can severely damage a dock, lift or watercraft. Do not leave dock, lift or craft in water if ice damage is possible.



**# 2** Drain all water from hoses and blower box. This will prevent water from freezing and breaking these parts.



**# 3** Hose openings and blower box openings should be plugged to prevent rodents from entering openings and possibly damaging these parts.

## **SERVICE** (maintenance)

**# 1** Inspect bolts, nuts, washers, pins, hoses, hose clamps, bushings, and power cords every three months for damage, wear or loose connections. Tighten or replace parts as needed.

**# 2** Inspect lift frame and dock bracket assemblies every three months for unusual wear, damage, or bent parts. Replace or repair as needed.

**# 3** Inspect float tank for leaks or loose fittings. If tank requires repair contact your local dealer or ShoreMaster for instruction.

**# 4** ShoreMaster dealers usually offer service visits. Please contact them if you are unable or unwilling to perform maintenance or service to lift.