Econo Lift 4500# & 6500# V-Hull & Pontoon Parts, Assembly and Installation Guide

ECONOLIFT Boat Hoist 800-524-7161 • 573-346-7161 www.econolift.com





Thank You for Choosing Econo Lift!

Please take a moment to read and understand this simple guide.

About Us

Since 1984, Econo Lift has been providing quality boat lifts at a fair price. We strive to treat our customers the same way we would expect to be treated if we were buying a boat lift. Let us add you to our Nationwide list of satisfied customers, you'll be glad you did!.

Econo Lift uses only the highest quality materials in its boat hoists. We use a totally enclosed polyeth-ylene tank for more stability in open or high traffic water situations and durable, completely galvanized metal parts. That's why the Econo Lift boat hoist is the most dependable, yet affordable boat hoist available today. We also offer a rough water kit that minimizes lift movement in your dock to help aid the life and reduce the noise of your lift. Also available is a front mounted lift where attaching to the sides of the boat slip is not possible. From PWC's to Cruisers, Econo Lift can keep it up for you!

Contact Us

Toll Free: 800-524-7161 ECONO LIFT Boat Hoist Local: 573-346-7161 P.O. Box 377 Web: www.econolift.com Camdenton, Mo 65020

Web: www.econolift.com Camden E-Mail: steve@econolift.com

Index

Warnings & Precautions
V-Hull Parts Reference Drawing 4
Pontoon Parts Reference Drawing 5
V-Hull Parts Reference Table 6
Pontoon Parts Reference Table7
Required Tools & Hardware Lists 8
Assembly Instructions9
Installation Instructions

IMPORTANT SAFETY RULES

Read, understand and follow all rules and instructions carefully before assembling, installing or using your Econo Lift Boat Hoist.

A WARNING!

- To reduce the risk of injury, do not permit children to use this product. Children must stay away from this product and electrical cords.
- Assembly, installation and operation by adults only.
- Risk of electric shock. Connect only to a grounding type receptacle, this product is provided with a ground fault circuit interrupter. If replacement of the plug or cord is needed, use only identical replacement parts.
- Always unplug this product from the electrical outlet before removing, cleaning, servicing or making any adjustment to the product.
- The unit is provided with a ground-fault circuit interrupter (GFCI). To test the GFCI, push the test button. The GFCI should interrupt power. Push the reset button, power should be restored. If the GFCI fails to operate in this manner. The GFCI is defective. If the GFCI interrupts power to the Control Unit without the test button being pushed, a ground current is flowing, indicating the possibility of an electric shock. Do not use this Control Unit. Disconnect the Control Unit and have the problem corrected by a qualified service representative before using.
- Do not bury the electrical cord. Locate the cord where it will not be damaged by lawn mowers, hedge trimmers and other equipment.
- To reduce the risk of electric shock, replace a damaged cord immediately. Use a qualified electrician to replace the cord
- To reduce the risk of electric shock, do not use extension cords, timers, plug adaptors or converter plugs to connect unit to electric supply; provide a properly located outlet.
- Do not attempt to plug in or unplug this product while standing in water or when your hands are wet.
- Do not use an appliance leakage current interrupter (ALCI) in place of a GFCI since the ALCI will not protect people.
- Do not operate this product when boat is occupied.
- Do not exceed the weight limit this product was designed to lift.
- To reduce the risk of entrapment hazard, never operate boat hoist if components are loose, broken, cracked, damaged or missing. Replace loose, broken, damaged, cracked or missing components immediately.
- Never play or swim near boat hoist. Your body or hair may be trapped causing permanent injury or drowning.
- To prevent equipment damage and risk of injury, always turn Control Unit off and close safety valve before servicing boat hoist or leaving boat on hoist for an extended period.
- Hazardous Pressure. Improper tank safety valve assembly could cause the safety valve to blow off and cause serious injury, property damage or death.
- This product is intended to be used only for the purposes described in the manual!

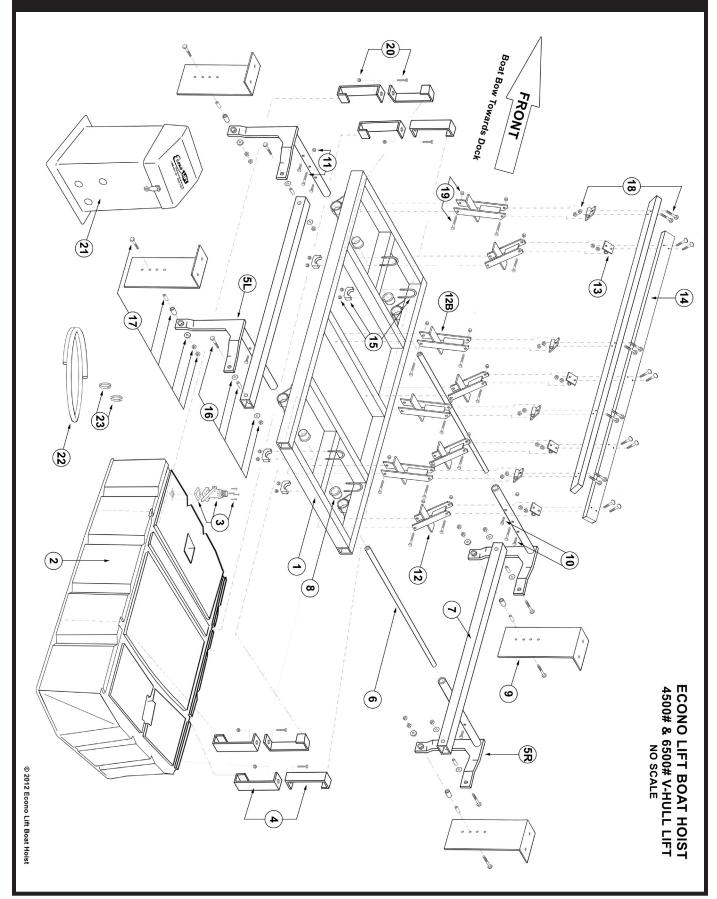
FAILURE TO FOLLOW THESE WARNINGS MAY RESULT IN PROPERTY DAMAGE, ELECTRIC SHOCK, ENTANGLEMENT OR OTHER SERIOUS INJURY OR DEATH.

A CAUTION!

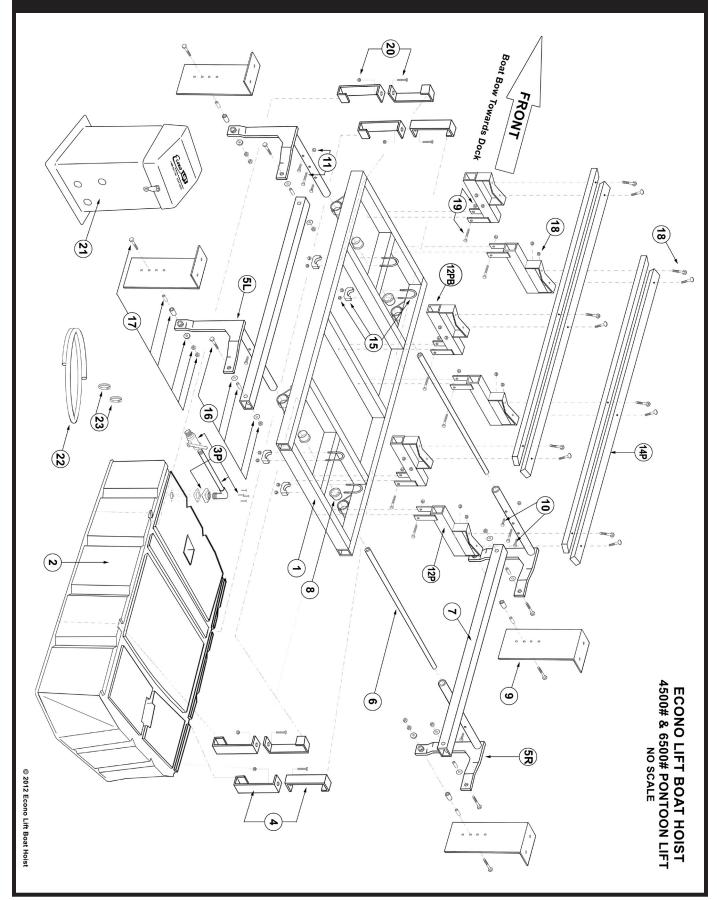
This product is for use with V-Hull or Pontoon Boats only. Do not use with other hull designs without consulting a qualified Econo Lift service representative.

These product warnings, instructions and safety rules provided with the product represent some common risks of water recreation devices and equipment and do not cover all instances of risk and danger. Please use common sense and good judgement when involved with any water activity.

Econo Lift 4500# & 6500# V-Hull Parts Reference Drawing



Econo Lift 4500# & 6500# Pontoon Parts Reference Drawing



Econo Lift 4500# & 6500# V-Hull Parts Reference Table

Part Number	Part Description	Quantity
1	Frame	1
2	Tank	1
3	Safety Valve Assembly	1
4	J- Bracket	8
5R	Lift Arm Right	2
5L	Lift Arm Left	2
6	Tie Pipe	2
7	Stabilizer Bar	2
8	Lift Arm Bushing	4
9	Dock Mounting Bracket	4
10	Set Bolt	8
11	Sheer Bolt & Nut	4
12	End Bunk Bracket	4
12B	Middle Bunk Bracket	4
13	Bunk Swivel	8
14	Bunk Board	2
15	Frame Retainer Assembly	4
16	Stabilizer Bar Bushing Assembly	4
17	Dock Bracket Bushing Assembly	4
18	Bunk Swivel Bolt & Nut	8
19	Bunk Bracket Bolt & Nut	16
20	J-Bracket Bolt & Nut	4
21	Control Unit	1
22	10' Hose	1
23	Hose Clamp	2

Econo Lift 4500# & 6500# Pontoon Parts Reference Table

Part Number	Part Description	Quantity
1	Frame	1
2	Tank	1
3P	Safety Valve Assembly	1
4	J- Bracket	8
5R	Lift Arm Right	2
5L	Lift Arm Left	2
6	Tie Pipe	2
7	Stabilizer Bar	2
8	Lift Arm Bushing	4
9	Dock Mounting Bracket	4
10	Set Bolt	8
11	Sheer Bolt & Nut	4
12P	End Bunk Bracket	4
12PB	Middle Bunk Bracket	2
14P	Bunk Board	4
15	Frame Retainer Assembly	4
16	Stabilizer Bar Bushing Assembly	4
17	Dock Bracket Bushing Assembly	4
18	Bunk Board Bolt & Nut	12
19	Bunk Bracket Bolt & Nut	6
20	J-Bracket Bolt & Nut	4
21	Control Unit	1
22	10' Hose	1
23	Hose Clamp	2

IMPORTANT: Never place any part of your body between the lift arms and frame as serious or deadly injury could result. Do not attempt assembly or installation without the help of at least one other person.

TOOL LIST:

9/16" wrench & socket
1/2" wrench & socket
3/4 wrench & socket
Two 15/16" wrenches
17/16" wrench
5/16" nut driver
11/8" hole saw
3/8" drill bit
1/2" drive drill
impact wrench
hammer
water proof sealant
tape measure

BOLT AND HARDWARE LIST:

 $20-\frac{3}{8}$ " x 3" bolts (A). $4 - \frac{15}{16}$ " x $3\frac{1}{2}$ " bolt (E) $4 - \frac{1}{2}$ " x $3\frac{1}{2}$ " bolts (B). 20 - $\frac{3}{8}$ " lock nuts (F) $4 - \frac{1}{2}$ " lock nuts (G) $8 - \frac{1}{2}$ "x1" bolts (C). $8 - \frac{1}{2}$ " washers (H) 4 - Bushing Retainers (D). $4 - \frac{15}{16}$ " washers $4 - \frac{15}{16}$ " locking nuts 2 - #20 hose clamps 1 - flange $4 - \frac{1}{4}$ " x1" SS bolts 1 - gasket $4 - 3\frac{1}{2}$ " arm bushings 1 - safety valve 10' - hose 1 - control unit

4 - lower pivot point bushing ass.

1 - safety valve extension pipe (pontoon only)

ASSEMBLY

Please Note: Numbers inside parentheses () refer to part number, not quantity.

- **Step 1.** Place frame (1) on tank (2). The rear of the frame will be closer to the rear of the tank than the front of the frame to the front of the tank.
- **Step 2.** You will need 8 J-Brackets for 4500# or 10 J-Brackets for 6500# (4) and 4-or 5 3/8x3" bolts (A) with lock nuts to attach the frame (1) to the tank (2). Hook J-Brackets over frame and under tank and connect with the bolts provided. On 6500# lift place 5th set of brackets on rear center. Tighten bolts until the J-Brackets start to flex. **DO NOT OVER TIGHTEN!**
- **Step 3.** Slide Tie pipe (6) through sleeve on frame so both Tie pipes are centered. Slide the right side Arms (5R) on to Tie pipe (6) and left side Arms (5L) onto Tie pipe until they meet in the middle. To determine left from right picture sitting in the boat driving in the slip (well).

IMPORTANT: Never place any part of your body between the lift arms and frame as serious or deadly injury could result. Do not attempt assembly or installation without the help of at least one other person.

ASSEMBLY

Step 4. <u>V-HULL ONLY</u> Place Bunks (14) on frame (1) with Swivels (13) facing up. Place End Bunk Brackets (12) on swivel on each end of board using $\frac{3}{8}$ " x 3" bolts (A). **Please note that End Bunk Brackets are longer.** Place Middle Bunk Brackets (12B) on remaining swivels. Turn Boards and Brackets over so that the Bunk Brackets are directly over frame. Fasten End Bunk Brackets to frame with $\frac{3}{8}$ " x 3" bolts (A). These bolts go though the End Bunk Brackets and under Frame to obtain a clamping fit. Tighten until snug. Fasten **only the center** Middle Bunk Brackets to frame by drilling through frame and bolting with $\frac{3}{8}$ " x 3" bolts. When completed bunks should lean towards center of lift.

Step 4a. **PONTOON ONLY** Pontoon Bunk Brackets (12P & 12PB) are installed by placing boards on frame and drilling boards over frame in the front, back, and middle. This will help line up brackets with frame. Bolt boards to brackets. Mount End Bunk Brackets to frame with $\frac{3}{8}$ " x 3" bolts (A). **Please note that End Bunk Brackets are longer.** These bolts go though the End Bunk Brackets and under Frame to obtain a clamping fit. Tighten until snug. Fasten the Middle Bunk Brackets to frame by drilling through frame and bolting with $\frac{3}{8}$ " x 3" bolts. When completed bunks should lean towards center of lift.

Step 5. Attach Stabilizer Bars (7) to Arms (5R & 5L) with $\frac{1}{2}$ " x $3\frac{1}{2}$ " bolts (B) as shown in diagram. Tighten bolts until snug, and then back off $\frac{1}{8}$ turn so part will rotate.

Step 6. Place $8 - \frac{1}{2}$ " x 1" bolts (C) into Arms as shown. Also place 4- Frame Retainers (15) on each Arm inside of frame next to Lift Arm Bushing (8). If transporting lift after assembly it may be a good idea to tighten these retainers to avoid having Arms slide out when under way.

IMPORTANT: Never place any part of your body between the lift arms and frame as serious or deadly injury could result. Do not attempt assembly or installation without the help of at least one other person.

INSTALLATION

- **Step 1.** Before installing an Econo Lift you should first determine the length of the boat and the length of the boat slip it is going in. This will help decide where the lift will be positioned in the slip. When measuring a boat start at the transom and measure to the bow. Do not include the swim platform in this measurement, molded or otherwise.
- **Step 2.** The key to locating a lift in a slip or well is to keep in mind that you are trying to balance the boat on the lift so that the weight is evenly distributed. As a rule with a v-hulled boat you want the transom of the boat even with the rear of the lift. With a pontoon however there may be 2 to 3 feet of the boat off the back of the lift to make the lift set level. Unfortunately in this case the best teacher is experience. The rule of thumb is if the boat is 20' go back 20' from the front of the dock to the back dock bracket. This should work from 20' on down. With longer boats you may have to have some of boat off the back of the lift. If you can tell us the length, type, brand of boat and slip size we can usually advise you where to locate the lift in the slip.
- **Step 3**. After you determine where you want to locate the back dock bracket measure from the rear of the back dock bracket 118" (166") to the rear of the front dock bracket. This will put the dock brackets on 118" (166") centers. Attach the dock brackets to dock at the closest point to water level as possible. It is always best to drill through the dock bracket and the dock and attach with no smaller than a 3/8" bolt. Step 3 continued. Attach the top of the dock bracket either in the top with the holes provided or drill your own in the side as close to the top of the bracket as possible with no less than 2-3/8" bolts. All 4 dock brackets should be attached in this manner.
- **Step 4.** Now you are ready to connect the arms to the dock brackets using the lower pivot point bushing assembly $\frac{5}{8}$ " bolts, nuts and washer provided. Tighten all four bolts.
- **Step 5.** Next center the lift in the well by sliding the frame on the arms until the frame is an equal distance from the dock on both sides. To hold the frame centered slide the retainers on the arms against the bushings in the frame that the arms slide through and tighten all four retainers

IMPORTANT: Never place any part of your body between the lift arms and frame as serious or deadly injury could result. Do not attempt assembly or installation without the help of at least one other person.

INSTALLATION

Step 6. Now level the lift using the water as a level. You can step on or bounce the lift down as needed to level it out. Hold lift level by tightening the $\frac{1}{2}$ bolts in arms first in back then in front. This will hold the lift level until the arms are drilled. Each arm MUST have a hole drilled between the set bolts ($\frac{1}{2}$ " x 1") and a $\frac{3}{8}$ " x 3", ($\frac{3}{8}$ " x 3 $\frac{1}{2}$ " on 6500#), bolt placed in arm with a nut securing bolt in the arm.



IMPORTANT: DO NOT PUT BOAT ON LIFT BEFORE DRILLING AND BOLTING ARMS!

Serious damage and/or injury may result!

- **Step 7.** If you did not attach bunks to lift during assembly now is the time. After bunks are on lift, adjust them to match the bottom of the boat or pontoon whichever the case may be. The best way, of course, is to measure off the boat. If the boat is not available measure from the side of the frame to the center of the bracket 18" in the back and 19" in the front for a runabout or proper centers for your pontoon.
- **Step 8**. If you waited to mount valve in tank at the dock do so now. Mount flange and gasket to tank on desired side with $4 \frac{1}{4}$ " x 1" stainless steel bolts. Tighten until snug. Drill $1^{1}/_{4}$ " hole in tank using flange as guide. Put sealant on valve assembly and screw into flange. Do not over tighten. Put hose on top of valve with sealant and #20 hose clamp, tighten securely. Submerge lift and cut hose to fit on lift control unit. Attach hose to control unit using sealant and hose clamp, mount control unit on deck.
- **Step 9.** Pull boat in slip over lift. Hold boat away from front of dock about 12 to 18 inches. Turn control unit on and turn handle to the raise lower position. Be sure to turn handle as far counter clockwise as possible when raising and lowering the lift. As lift comes up it will travel forward in the boat slip so watch the front of the boat to make sure it does not hit dock when coming up. When lift is to desired height or tank is full of air, turn handle \frac{1}{4} turn to left (clockwise) and turn off motor. Turn safety valve at tank off when leaving for an extended period of time.