

"LIFT MATE" BOAT LIFT MOTOR ASSEMBLY

Assembly and Operating Manual



SHORELINE INDUSTRIES, INC

199 COLLEGE STREET PINE RIVER, MN 56474

Toll Free (888-298-9702) or (218) 587-8700 FAX (218) 587-8704

sales@boatliftmotor.com

LIMITED WARRANTY

Shoreline Industries, Inc. warrants its products shall be free from defects in materials and workmanship for a period of one year from the date of purchase as shown on the customer's invoice. Shoreline's warranty is limited to products purchased new by the original owner and is not transferable.

SHORELINE WILL AT ITS OPTION REPAIR OR REPLACE, WITHOUT CHARGE, OR ALLOW CREDIT FOR ANY SUCH GOODS FOUND ON EXAMINATION BY SHORELINE TO BE DEFECTIVE UNDER NORMAL USE AND SERVICE. THE BUYER'S REMEDIES WITH RESPECT TO DEFECTIVE GOODS SHALL BE EXCLUSIVELY LIMITED AS ABOVE PROVIDED AND IN NO EVENT SHALL THE SELLER BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES OF ANY NATURE. ALL OTHER WARRANTIES, INCLUDING BUT NOT LIMITED TO WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE EXPRESSLY DISCLAIMED.

Shoreline's warranty does not cover damage caused by circumstances outside its reasonable control, including but not limited to, improper use, installation, overloading, accident, neglect or harmful alterations or repairs made by others.

READ THROUGH THE ENTIRE MANUAL

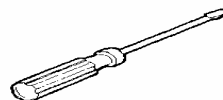
It is recommended to read through the entire manual before beginning your installation.
Follow all steps exactly.

TOOLS NEEDED

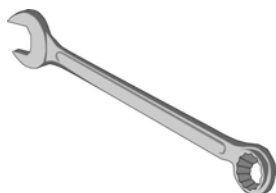
Review the tools needed list here on this page. Gather all tools needed for the assembly of your unit before starting the installation steps.



Adjustable Wrench



Flat Head Screwdriver



**5/16" 1/2" and 15/16"
Open End Wrenches**



Safety Glasses

ACCESSORIES/OPTIONS



20 FT. BATTERY CABLE
25 FT. BATTERY CABLE FOR PONTOONS
30 FT. BATTERY CABLE FOR PONTOONS



VMC – VINYL MOTOR COVER
Dresses up the motor and matches canopy color.
Available in six colors; burgundy, gray, tan, green,
white & blue.



REMOTE CONTROL ADD-ON KIT
Turns any Lift Mate into a “keyless remote” like
your automobile.

PONTOON KIT
3 ft. wheel extension. Moves the wheel away from
the winch.

TO ORDER
CALL TOLL FREE
1-888-298-9702
TODAY

PACKING LIST

INSPECT SHIPMENT

Your boat lift motor was shipped complete in one carton. Use care when handling the carton. Remove all items from your shipping carton. Check all items against the packing list below. Note any items lost or damaged in shipment. Note any damage to the shipping carton. Refer to the exploded view and parts list in the back of the manual for the part names and numbers of missing or damaged items. Call ShoreLine Industries Toll Free at 888-298-9702 if problems exist.

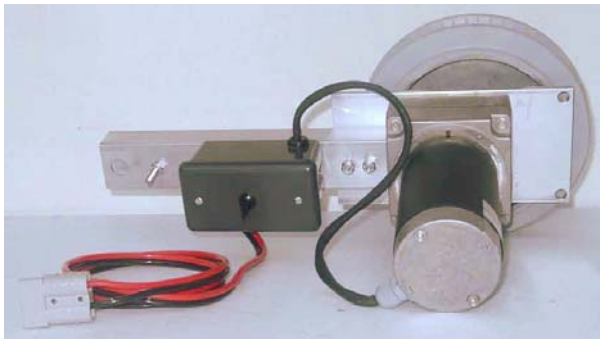
PACKING LIST



● Inner Arm with Bracket



● Outer Arm with Pivot Hole



● 12 Volt Electric Motor OR



● 120 Volt Electric Motor with GFI Outlet Cord



● 15 Foot Battery Cord (12 Volt Motor Only)



● One each Parts Bag Assembly

Containing the following parts:

- One Each 9" Rubber Poly Strap.
- One Each 4" x 5/8" Hex Head Pivot Bolt.
- One Each 5/8" Hex Head Pivot Bolt Nut.
- Two Each 3 1/2" x 5/16" Hex Head Bolt.
- Two Each 5/16" Hex Head Nuts.
- Four Each 5/16" Washers.
- Two Each S-Hooks.
- Two Each 5" Metal Band Clamps.

Do not proceed with assembly until you have a good understanding of part identification.

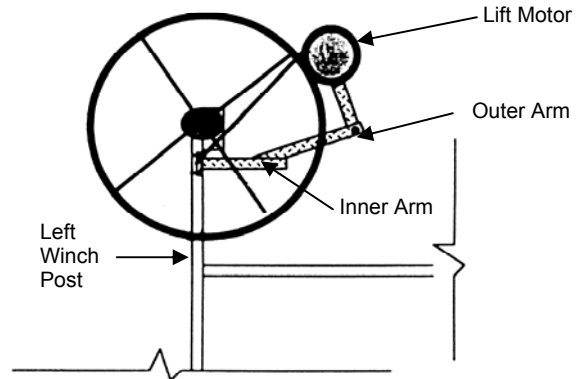
PLAN YOUR INSTALLATION

PLAN YOUR INSTALLATION

The Lift Mate is designed to mount on most manufacturers' boatlifts. As a result of its compatibility with all lifts, your first task is to review your particular lift against the assembly instructions included here.

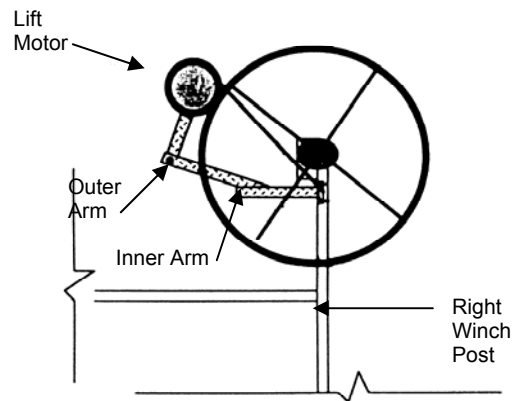
Review the following bullets. Do not proceed with the installation until you have a general understanding of how you are going to install your unit.

- The Lift Mate mounts onto the winch lift post. Locate the winch post on your lift. See Fig. 2 & 3.
- Stand on your dock in front of your lift. Determine if your winch lift post is a left mount or a right mount. See Fig. 2 & 3.
- Note that the Lift Mate motor is mounted so that it is between the left and right lift posts. See Fig. 1, 2, & 3.
- Also note that the motor rests against the lift wheel at roughly the 10 or 2 o'clock position. This allows the weight of the motor to rest against the wheel and aid in traction. See Fig. 1, 2, & 3.
- Note that when properly mounted on the winch post of the lift, the Lift Mate rubber traction wheel is closest to the dock and the motor is closest to the boat. See Fig. 4.
- The motor has two drain holes. The motor is correctly mounted when the drain holes are on the bottom side of the motor. Rainwater will seep into the motor if the motor is mounted with drain holes on top.



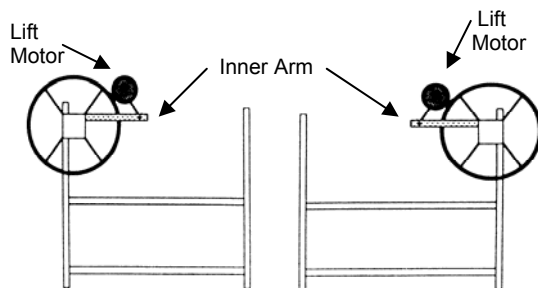
Left Winch Post Installation
As viewed from Dock

FIG. 2



Right Mount Winch Post Installation
As viewed from Dock

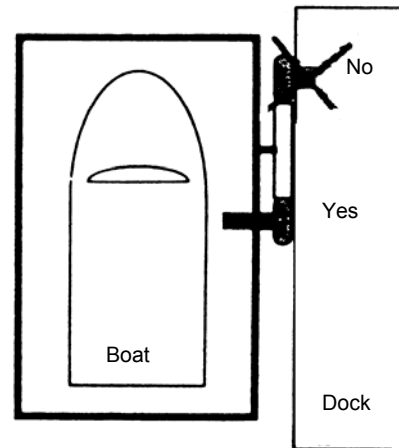
FIG. 3



Left Winch Post Right Winch Post

Correct position of lift motor is between the left and right lift posts in roughly the 10 or 2 O'clock position

As viewed from the dock. **FIG. 1**



Correct position of lift motor is when the rubber traction wheel is closest to the dock and the lift motor is closest to the boat

5

FIG. 4

STEP 1: INSTALL INNER ARM WITH BRACKET ONTO WINCH POST

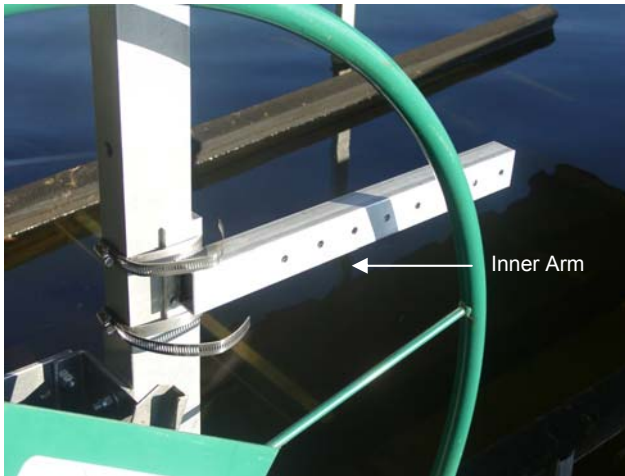


FIG 6: Left Winch Post Installation View

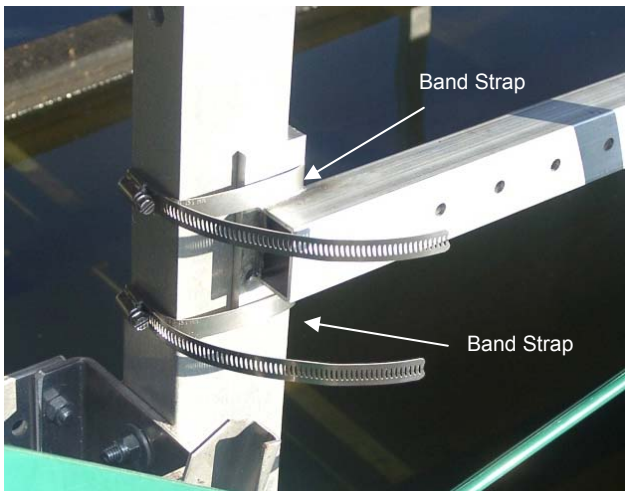


FIG 8: Left Winch Post Installation View

INSTALL INNER ARM

1. Determine which type of mount you have—a left post install or a right post install. Then refer to the left or right install photos as you are installing the arm.
2. Mount the inner arm with bracket to the winch post. In this case it is just above the winch box. See Figs. 6 or 7 depending on which type of post mount.

NOTE: *The position of the inner arm will vary from lift to lift. Refer to the miscellaneous drawings/photos on pages 11-13 for specific arm positions on the different types of lifts on the market today.*

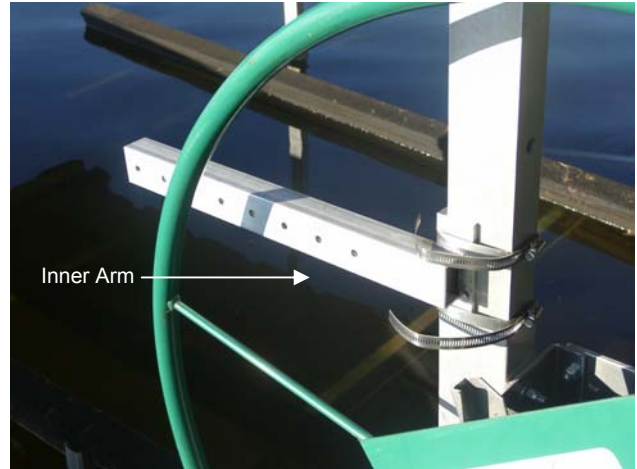


FIG 7: Right Post Winch Post Installation

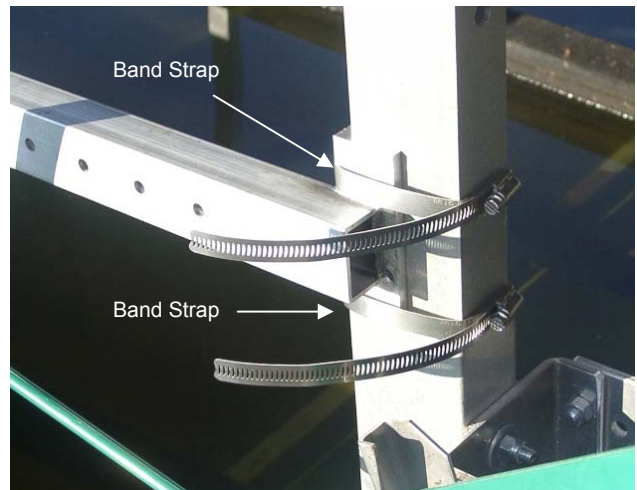


FIG 9: Right Winch Post Installation

3. Fasten the inner arm with the two band straps over the angle bracket. Mount one band strap on top of bracket. Mount the other band strap on bottom of bracket. See Figs. 8 or 9.
4. Tighten just enough to hold bracket in place. Further adjustment will occur in a later step.

STEP 2: INSTALL OUTER ARM ONTO INNER ARM

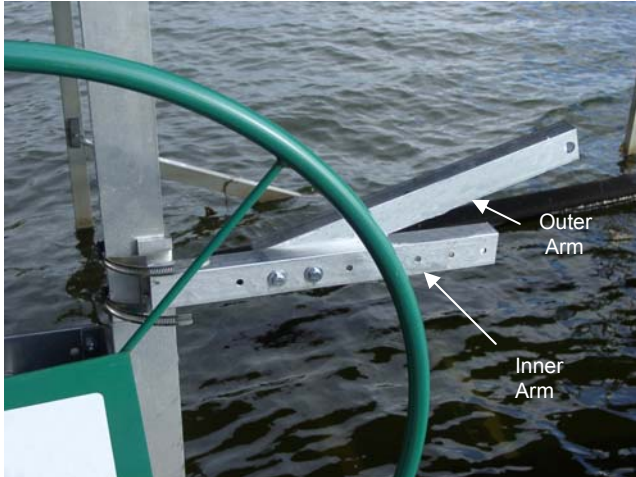


FIG 10: Left Winch Post Installation View

INSTALL OUTER ARM

The outer arm can be installed in a variety of configurations. See Fig 12. The outer arm is the transition piece between the inner arm and the lift motor. In the next step, you will mount the lift motor in roughly the 10 or 2 o'clock position. The outer arm position will dictate the lift motor's final position against the wheel.

Note: There may be some trial and error that occurs during this step and the next one.

1. Review Fig. 12. The outer arm can bolt on in a variety of positions. The end goal is to mount the lift motor arm (next step) onto this arm and have the motor's rubber wheel touching the lift wheel at roughly the 10 or 2 o'clock position.

Note: On some installs, the arm may need to be positioned downward so the motor is mounting in the 2 or 4:00 o'clock position.

2. View the miscellaneous drawings/photos on pages 10-12 for specific arm positions on the different types of lifts on the market today. By utilizing the nine holes in both the inner arm and outer arm, you can adjust the length and angle positioning of the arms to fit almost any boatlift. The 4 holes in the outer arm will place the outer arm at 15° or 45°.

3. Bolt the outer arm **behind** and to the inner arm using the (2) 5/16" x 3 1/2" bolts, nuts, and washers. See Fig. 10. The pivot hole on the outer arm should be at least 3", but not more than 8" from the outer edge of the winch wheel.

Note: On some installs, the outer arm may need to go in front of the inner arm. If your boat lift requires a shorter arm length than our standard holes allow, drill (2) 5/16" holes where needed in and lowering the arms will help.



FIG 11: Right Winch Post Installation View

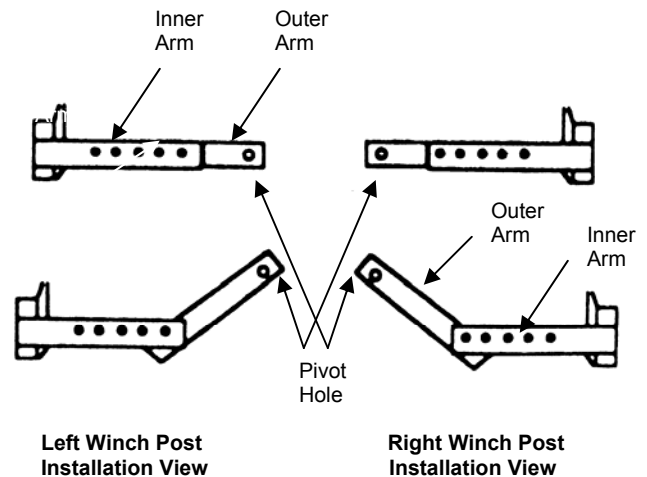
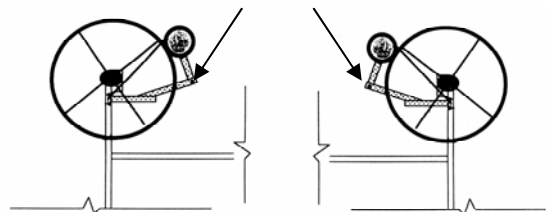


FIG. 12



The Outer Arm can be installed in many configurations. The outer arm is the transition piece between the inner arm and the lift motor. In the next step, you will mount the lift motor in roughly the 10 or 2 o'clock position. The outer arm position will dictate where the lift motor's final position will be.

FIG. 13

STEP 3: INSTALL MOTOR ARM ONTO OUTER ARM

INSTALL MOTOR ARM

1. Run the 5/8" pivot bolt thru the pivot hole in the motor arm with threads away from dock. See Fig. 14.
2. Run the 5/8" bolt thru the pivot hole in the outer arm and lightly screw on 5/8" nut. See Fig. 14. The motor arm should be in front of the outer arm. See Fig. 14.
3. Rotate the motor up and over the pivot so motor's rubber traction wheel rests on the boat lift wheel. See Fig. 14.
4. The lift motor's rubber traction wheel should be touching the lift wheel at roughly the 10 or 2 o'clock position. See Fig. 14. If the motor is not positioned correctly review *Step 2 : Install Outer Arm Onto The Inner Arm* on the previous page. Adjust the angle of the outer arm until the motor rests near the 10 or 2 o'clock position on the lift wheel. See Figs. 12 & 13.
5. Firmly tighten the band clamps on the winch post using a 5/16" wrench. See Fig. 14.

Note: Lift up on the arms while tightening the band clamps. This will allow you to firmly tighten the clamps.

6. Tighten the 5/8" nut until it just touches the back side of the outer arm. See Figure 15.

Note: Do not over tighten the nut. The wheels will not align if over tightening occurs.

Note: Each boat lift will have a different sized space at the pivot point. Some lifts will have no space. See Fig. 15. Even if there is some space between the motor arm and the outer arm where it pivots, the grooved rubber traction wheel should follow the boat lift wheel and not jump off. If you feel you need spacers, purchase large nylon washers at your local hardware store and place them between the arms and over the pivot bolt.

6. Hook one end of the black rubber poly strap into the top hole of the motor plate towards the winch post. Fasten the other end to the open end of the inner or outer arm or directly onto the winch box. See Fig. 16.

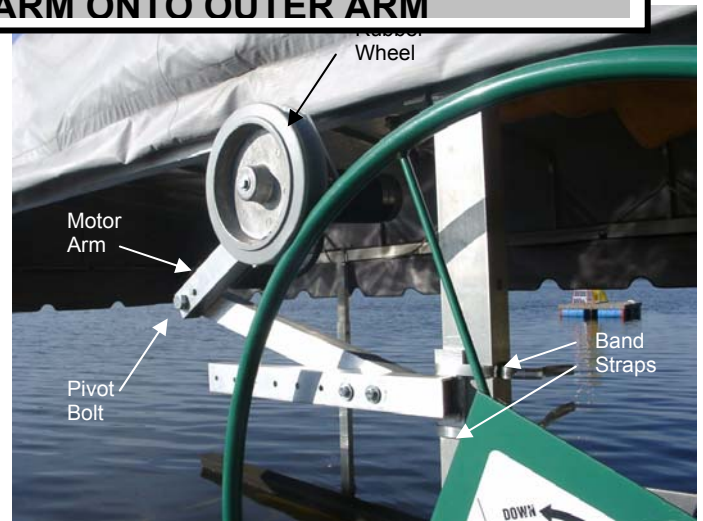


FIG. 14

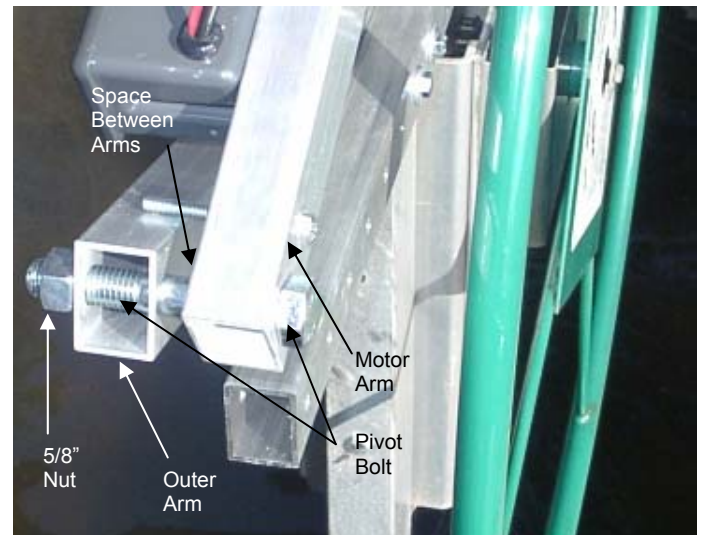


FIG. 15

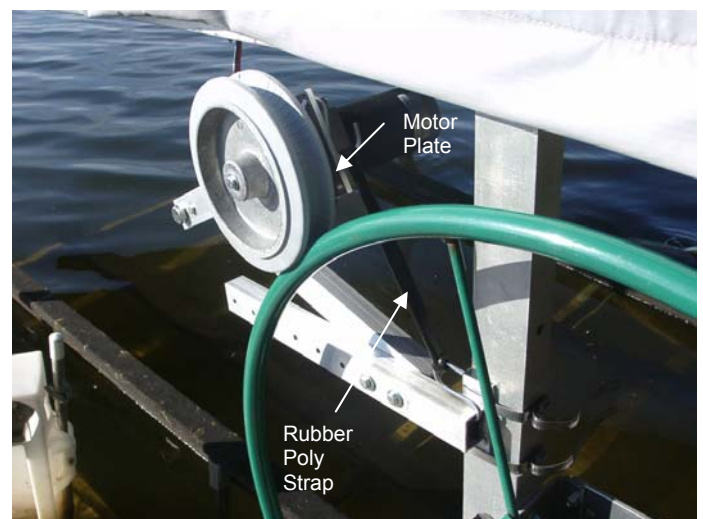


FIG. 16

STEP 4: ELECTRICAL REQUIREMENTS

12 VOLT BATTERY WIRING:

We recommend that you hook the harness to the boat battery on the 12 volt Lift Mate. The boat motor is charging the battery all the time. It is unlikely that the lift motor would drain the battery so you cannot start your boat. Some use a separate 12v battery on the dock. Try to hide the 15' cable in the boat by running it along the side channels, or below the seats, or under the pontoon deck, or under the carpet. See Fig. 17 & 18.

Longer cables (pontoon kits) are available at Shoreline Industries. Refer to the parts list in the back of the manual, the options list in the front of the manual, or call Shoreline Industries at 1-888-298-9702.

Mate the two plastic quick connects and lightly attach the two lead ends (one with a circuit breaker attached) to the battery poles. See Fig. 18. Flip the motor switch "up" to see that the lift wheel rotates in the "up" direction. If not, reverse the leads at the battery and tighten down. See Fig. 17 & 18.

Note: The 12 volt motor is reversible by just changing the leads at the battery.

The 60 AMP circuit breaker is attached to one of the lead ends for safety. See Fig. 18. This breaker must attach to the + pole.

110 VOLT WIRING

This unit uses a 110 volt 15 amp service. Make sure the unit is connected to an outlet having the same configuration as the plug. No adapter should be used with this unit.



Caution: Before plugging in your unit make sure it will be connected to a supply circuit that is protected by a circuit breaker.

Check with a qualified electrician if the grounding instructions are not completely understood or you are in doubt as to whether the motor is properly grounded.



Caution: Always properly connect and ground your unit. An improper connection can cause an electrical shock resulting in severe injury or death. If you are unsure of the proper electrical connections or grounding procedures, contact a qualified electrician to perform the installation.

To reduce the risk of shock, this unit is equipped with a ground fault interrupter (GFI) plug. See Fig. 19. The GFI plug must be plugged into a matching outlet that is properly installed and grounded in accordance with all local codes and ordinances.

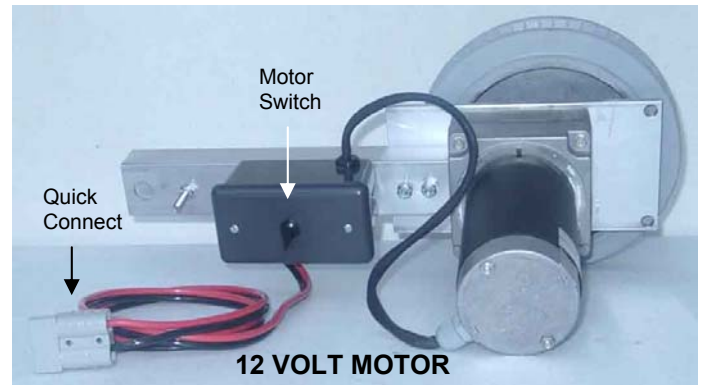


FIG. 17

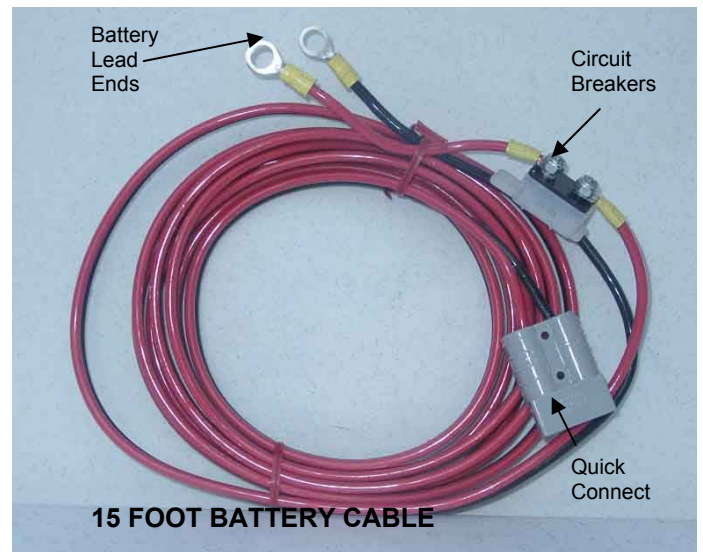


FIG. 18

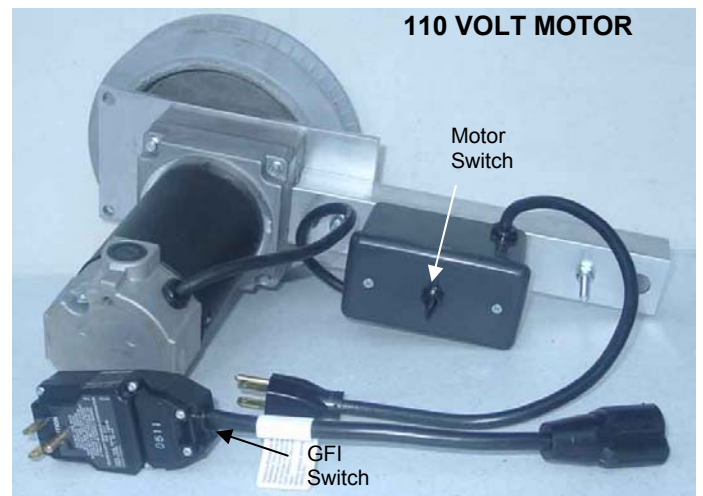


FIG. 19

OPERATING, MAINTENANCE AND STORAGE INSTRUCTIONS

ON/OFF SWITCH

The Lift Mate has a rocker style on/off switch.

1. Hold the switch up to raise the lift.
2. Hold the switch down to lower the lift.



Caution: Stay clear of all moving parts during raising and lowering of the lift. There are exposed moving parts that can pinch fingers, causing serious injury.

If the motor wheel chatters or slips during operation, it is just a matter of adding more tension. Adjust the existing rubber strap to increase tension or add additional straps.

During a rain or when the wheels are wet from dew or spray, you will most likely experience slippage. The operator may need to assist the big lift wheel by turning on the lift's crank knob.



Caution: It is recommended to disconnect the power to Lift Mate when not in use.

MAINTENANCE

The Lift Mate is basically maintenance free with the exception of periodic inspections. It is recommended to periodically inspect the complete unit. Refer to the following Inspection List:

Caution: It is recommended to disconnect the power to Lift Mate when performing maintenance procedures.

1. Tighten all hardware.
2. Inspect rubber traction wheel for proper alignment. Align if required.
3. Inspect motor brushes and replace as needed.
Caution: It is recommended to disconnect the power to Lift Mate when performing maintenance procedures
4. Inspect rubber poly strap for proper tension. Repair or replace as needed.
5. Inspect electrical connections for worn or frayed connections. Repair or replace as needed.

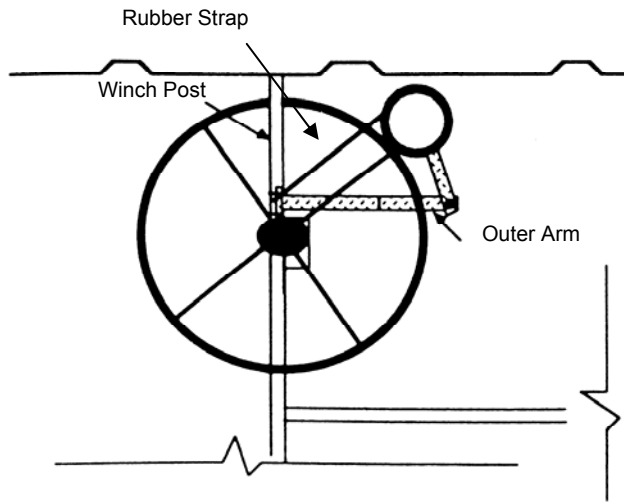
OFF SEASON STORAGE

It is recommended to remove the motor from the outer arm and store in a dry place during the off season.

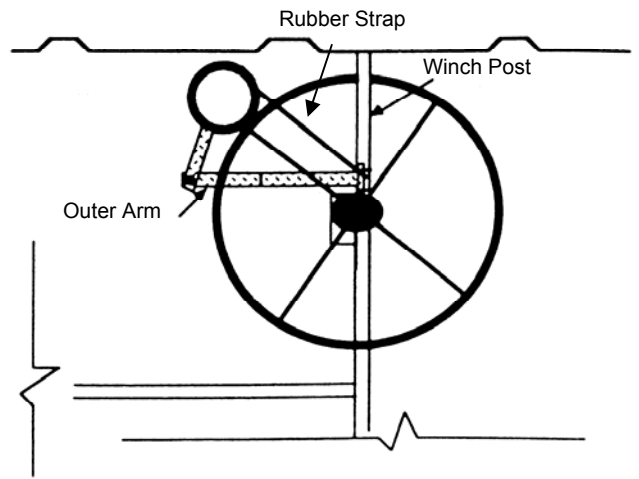


FIG. 20

Rectangular Lift With Canopy

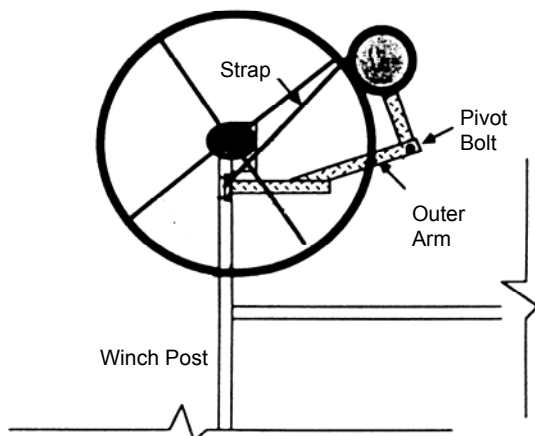


Left Winch Post Installation

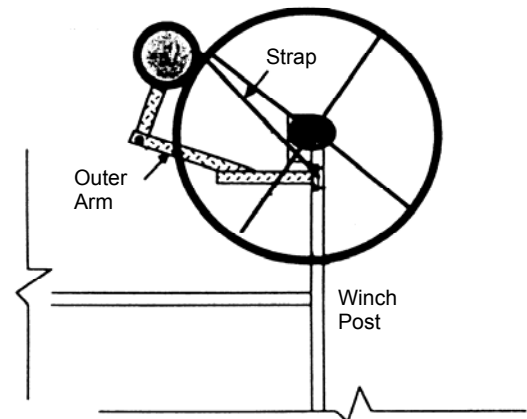


Right Winch Post Installation

Rectangular Lift Without Canopy

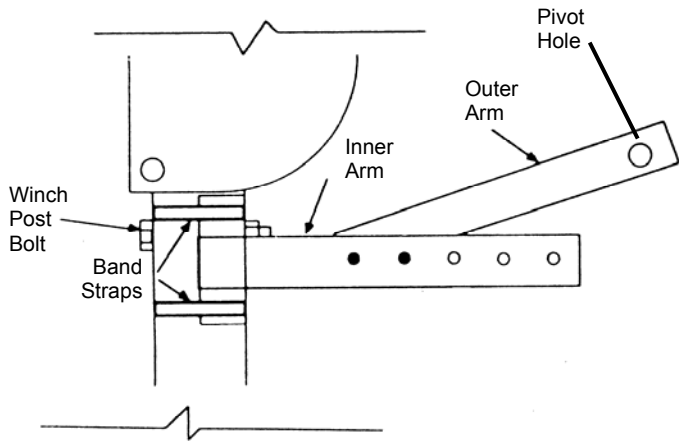


Left Winch Post Installation

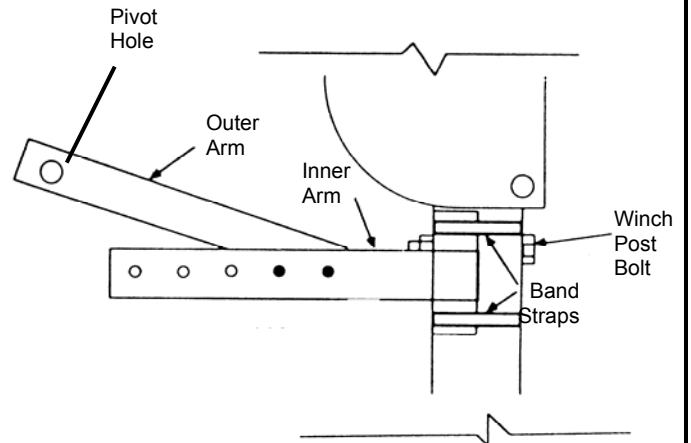


Right Winch Post Installation

Aluminum Shore Station

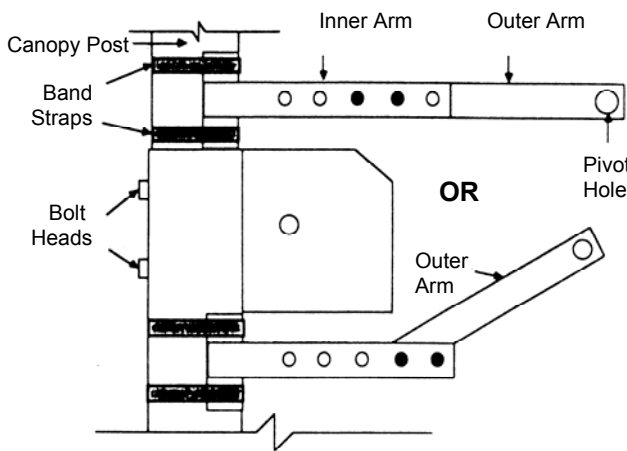


Left Winch Post Installation

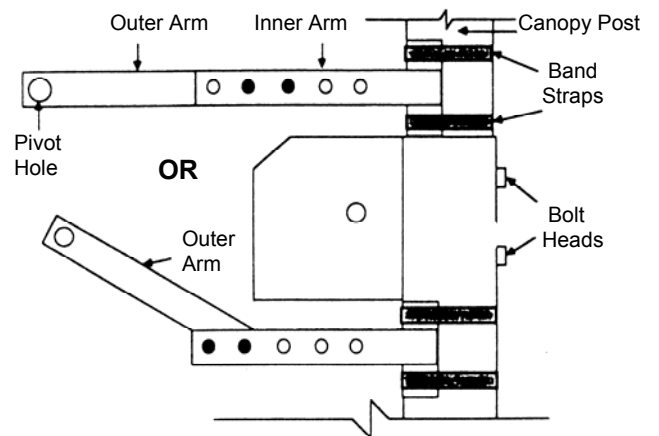


Right Winch Post Installation

ShoreMaster Aluminum Platform Hoists

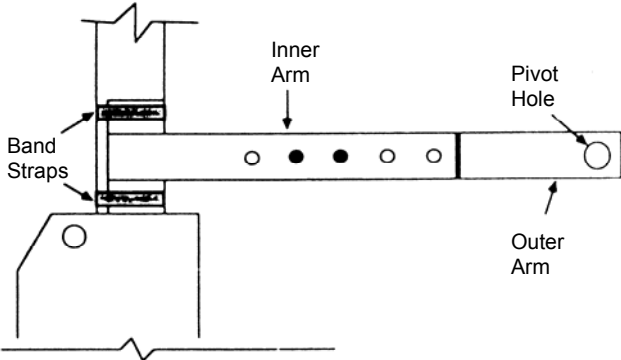


Left Winch Post Installation

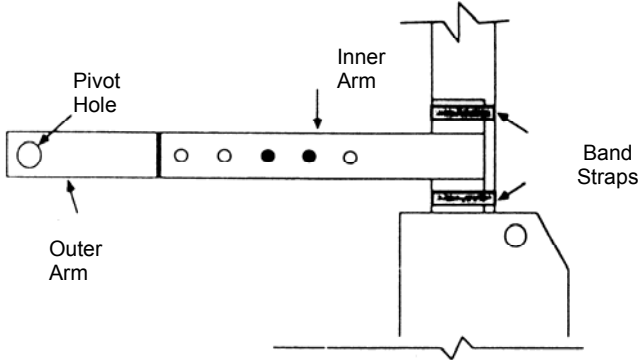


Right Winch Post Installation

Steel Shore Station

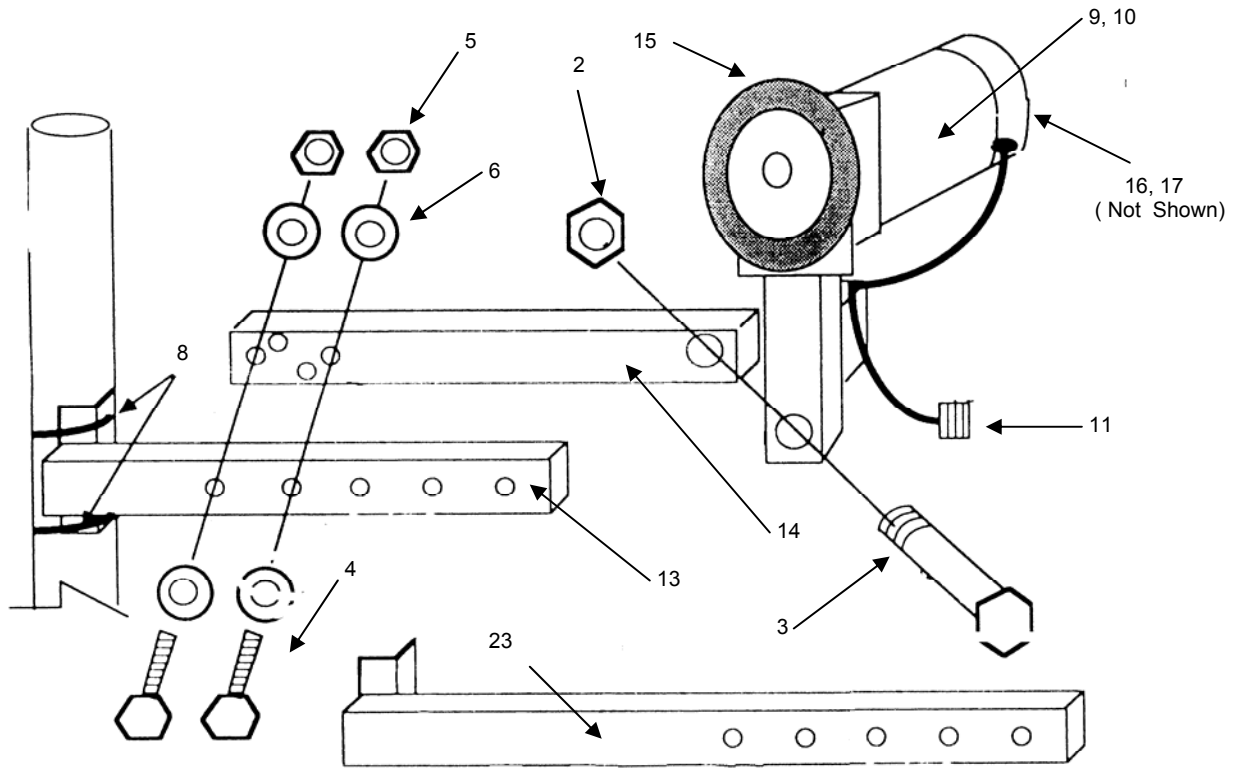


Left Winch Post Installation



Right Winch Post Installation

Problem	Cause	Remedy
<i>Motor will not run</i>	<ol style="list-style-type: none"> 1. Not connected to power source. 2. GFI button tripped. 3. Wiring and connections corroded, worn, or frayed. 4. Motor brushes worn, corroded, or need replacing. 	<ol style="list-style-type: none"> 1. Connect to power source. 2. Push in reset button on GFI. 3. Repair or Replace. 4. Repair or Replace.
<i>12 volt Motor rotating in the wrong direction</i>	<ol style="list-style-type: none"> 1. Cable leads at battery are reversed. 	<ol style="list-style-type: none"> 1. Reverse cable leads at battery.
<i>110 volt Motor rotating in the wrong direction</i>	<ol style="list-style-type: none"> 1. Call manufacturer. 	<ol style="list-style-type: none"> 1. Call manufacturer.
<i>Rubber traction wheel slipping on lift wheel</i>	<ol style="list-style-type: none"> 1. Wet lift wheel. 2. Rubber poly strap not tensioned properly. 3. Incorrectly installed. 	<ol style="list-style-type: none"> 1. Dry off lift wheel. 2. Create more tension by stretching rubber poly strap to a new mounting position. 3. Review installation procedures.
<i>The groove on the rubber traction wheel will not stay in place against the lift wheel</i>	<ol style="list-style-type: none"> 1. Rubber traction wheel not aligned properly. 2. 5/8" pivot bolt nut over tightened. 	<ol style="list-style-type: none"> 1. Review installation procedures. 2. Do not over tighten nut. Install and tighten per installation instructions.



Exploded View

Parts List

	Part Number	Description	Qty
1.	Bungyblck	9" Rubber Poly Strap (Not Shown)	1
2.	508nut000	4 " x 5/8 Hex Head Nut	1
3.	508pvibol	5/8" Hex Head Pivot Bolt	1
4.	5016x3bol	3" x 5/16" Hex Head Bolt	2
5.	5016nut000	5/16 Hex Head Nut	2
6.	5016washr	5/16" Washers	4
7.		NA	0
8.	hoseclamp	5" Metal Band Straps	2
9.	12vhdmrbk	12 Volt Motor Assy.	1
10.	110mtrblk	110 Volt Motor	1
11.	15ftbocab	15 Foot Battery Cable (12 Volt Only)	1
12.	18inchpig/6ipigtail	18" Outlet Cord and 6" GFI Cord (Not Shown)	1
13.	aliarweld	Inner Arm	1
14.	aloutarm	Outer Arm	1
15.	8inwhwkey	Rubber Traction Wheel & Wheel Key	1
16.	12vhdbus	12 Volt Motor Brushes (Not Shown)	1
17.	110vbrush	110 Volt Motor Brushes (Not Shown)	1
		Optional Equipment	
18.	Vmc-----	Motor Cover (Not Shown)	1
19.	110addrem/12vaddrem	Remote Control (Not Shown) (110V or 12V)	1
20.	20ftbocab	20 Ft Battery Cable (Not Shown)	1
21.	25ftbocab	25 Ft Battery Cable (Not Shown)	1
22.	30ftbocab	30 Ft Battery Cable (Not Shown)	1
23.	pontoon-arm	Pontoon Kit	1
24.	overdock	Overdock Kit (not shown)	1