

# The StorageLift

## Owner's Manual



### **WARNING - PUT SAFETY FIRST**

Before attempting to assemble the StorageLift, read and understand the proper assembly procedures and safety precautions outlined in this manual.

**NOT COMPLYING WITH THE PROCEDURES AND PRECAUTIONS OUTLINED IN THIS MANUAL WILL INVALIDATE THE WARRANTY AND MAY RESULT IN PERSONAL INJURY OR DEATH.**

If you have any questions about assembly, installation, operation or suitability of this product, contact an authorized dealer or StorageLift directly at 1-888-538-9991 (toll free) or email [info@storagelift.net](mailto:info@storagelift.net)

This manual provides information to help you to assemble the StorageLift, safely. It is assumed that people assembling the unit are familiar with the use of basic hand-tools and are familiar with general practices for assembling and using mechanical devices.

Additional help and replacement parts are available through your local dealer.

## Safety Tips

The StorageLift is safe to assemble, load, and operate, provided that you heed the warning labels, read and follow the instructions in this manual, and use normal caution for assembling mechanical devices.

<p><b>⚠ DANGER</b></p> <p>Serious injury or property damage can result if the StorageLift is used before familiarizing yourself with the Owner's manual and with the manufacturer's operating procedures and safety precautions listed to the right.</p>	<p><b>⚠ CAUTION</b></p> <ul style="list-style-type: none"> <li>• Maximum distributed weight: 1,000 lbs per platform.</li> <li>• Center the loads (weight forward of center on the top platform).</li> <li>• Secure the loads by chocking the wheels or strapping the loads.</li> <li>• Inspect cable for fraying and pulleys for wear before each use.</li> <li>• Lubricate winch and pulleys yearly or every 5-10 uses, whichever comes first.</li> <li>• Ensure safety chain is engaged when the upper platform is raised.</li> <li>• Move the unit manually on a debris free, smooth surface.</li> <li>• Bottom platform has no head clearance.</li> <li>• Lock casters and make sure lower platform is empty before engaging the winch.</li> </ul>	<p><b>⚠ WARNING</b></p> <p>Do not sit or stand on or behind the unit while upper platform is being raised or lowered. Keep hands &amp; feet clear of moving parts.</p>
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### WARNING

- Do not stand behind the unit and keep all hands and feet clear of the StorageLift while the upper platform is being raised or lowered.
- Keep hands and feet clear of moving parts.

### CAUTION

- Each platform is rated for a maximum distributed-load of 1000 pounds; do not exceed the maximum load. Overloading the StorageLift will void the warranty and could cause structural failure.
- Center the loads (weight forward of center on the top platform).
- An unsecured load can shift and cause structural failure or crushing injury. Secure all loads on the StorageLift. The tie-down channels in the upper platform are designed to accept the hooks in tie-down straps. The wheels on all wheeled vehicles should be chocked.
- Inspect cable for fraying and pulleys for wear before each use.
- Lubricate the winch and pulleys yearly or every 5-10 uses, whichever comes first.
- Ensure that the safety chain is in place when the upper platform is in the raised position.
- Move the unit, manually, on a debris-free, smooth surface. Do not attempt to tow it.
- The lower platform has no head clearance. Do not sit or ride on a vehicle while loading it onto the lower platform.
- Lock casters and ensure that the lower platform is empty before engaging the winch.
- Unload the StorageLift before transporting.

## Assembling the StorageLift

The StorageLift is relatively simple to assemble, provided that you have the appropriate tools and you follow the assembly instructions. Please read and understand the complete assembly instructions before beginning to assemble the unit.

### ***Before Assembling the StorageLift***

Before assembling your Storage Lift unit, unpack it and ensure that you have all of the required parts, shown in the diagrams preceding each set of assembly instructions. If any parts are missing or damaged, please contact Storage Lift at 1-888-538-9991 (toll free) or email [info@storagelift.net](mailto:info@storagelift.net) .

Assemble the StorageLift on a flat surface (floor) measuring at least sixteen (16) feet by fourteen (14) feet. The area should be free from obstructions and should be well-lighted.

### **Required Tools and Materials**

The following tools and materials are required to efficiently assemble the StorageLift:

- One untreated 2 x 8 x 12-foot (minimum) board (for assembling three loading ramps)
- A variable-speed drill
- A ratchet wrench with 9/16-inch and 3/4-inch sockets and a socket extender
- A 3/4-inch wrench
- A 9/16-inch wrench
- A 3/8-in. drive, 5/8-in.socket
- 1/2-inch drill bit (used in assembling the loading ramps)
- Gloves

### **Safety Tips**

Assemble the unit safely. Assembling most metal devices and using power tools exposes a person to some risk of injury that can be avoided by heeding any warnings, by following the written instructions, and by using simple construction precautions:

- Wear safety glasses at all times
- Read and understand all instructions provided with any power tools to be used
- Wear gloves when handling extruded aluminum parts to avoid cuts from sharp edges and burrs
- Work in a well-lighted area
- If you kneel on the floor while assembling the unit, kneepads may make the process more comfortable

### Assemble the Lower Platform

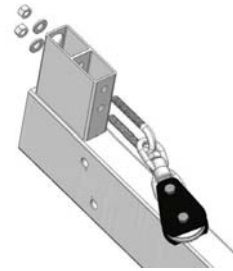
In assembling the StorageLift lower platform, first the upright support and mainframe angle supports are attached. Then, the single pulleys are installed.

**Alexandria Storage Lift**

Item Number	Part Number	Part Description	QTY
1	20-030	LOWER PLATFORM	1
2	20-018	MAIN FRAME ANGLE SUPPORT ASSEMBLY	2
3	20-004	FRONT UPRIGHT SUPPORT	1
<b>Hardware Bag 1</b>			
4	10-063	INNER TUBE SPACER	4
5	50-021	HEX HEAD BOLT, 1/2-13 x 5.50" GR 5 ZINC	4
6	50-032	WASHER, 1/2" ZINC SAE	20
7	50-017	NUT, NYLON LOCK-1/2"-13 GR. 5 ZINC	10
8	50-020	HEX HEAD BOLT, 1/2-13 x 4.00 GR 5 ZINC	6
9	40-027	2" TUF TUG SHEAVE BLOCK, 1000# WITH SWIVEL	1
10	40-026	2" TUF TUG SHEAVE BLOCK, 1000# WITH CHAINLINK	1
11	40-015	U-BOLT, 3/8"-16	2
12	50-011	WASHER, 3/8"-16 ZINC	4
13	50-031	NUT, NYLON LOCK-3/8"-16 GR. 5 ZINC	4

### Step 1

Attach a Single Pulley with swivel (40-027) to the upper end of one of the Main Frame Angle Support Assemblies as shown in the figure to the right. This assembly will be used on the side of the StorageLift where the winch is to be mounted.



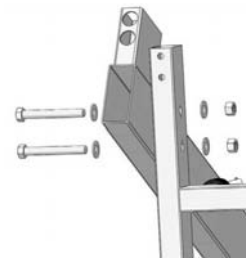
**Note:** Do not over tighten the nuts. The pulley must be able to swing freely on the U-Bolt.

### Step 2

Using  $\frac{1}{2}$  x 4-inch bolts with washers, bolt the Front Upright Support (20-004) to the front of the lower platform assembly (20-030).

### Step 3

Using  $\frac{1}{2}$  x 4-inch bolts with washers, bolt the upper end of the Main Frame Angle Support Assembly to the Upright Support



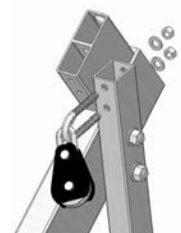
### Step 4

Repeat Step 3 to attach the second Main Frame Angle Support Assembly to the Upright Support and the lower platform on the other side.

### Step 5

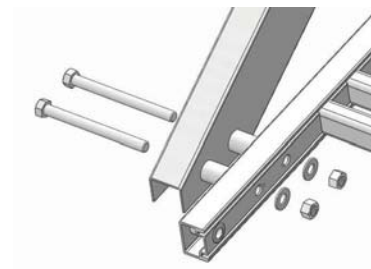
Attach the Single Pulley with chain link (40-026) to the Upright Support on the non-winch side. See diagram at right for placement.

**Note:** Do not over tighten the nuts on the U-Bolt. The pulley must be able to swing freely on the U-Bolt.



### Step 6

Using two 1.00 o.d. x 1.56 in. tube spacers (10-063) to separate lower end of the left Main Frame Angle Support Assembly from the rear of the Lower Platform Left Side Rail as shown, bolt the two assemblies together using two  $\frac{1}{2}$  x 5.5-in. bolts (50-021) with washers, as shown.



### Step 7

Repeat the procedure in Step 6 to attach the lower end of the right Main Frame Angle Support Assembly to the rear of the Lower Platform Right Side Rail.

### Assemble the Upper Platform

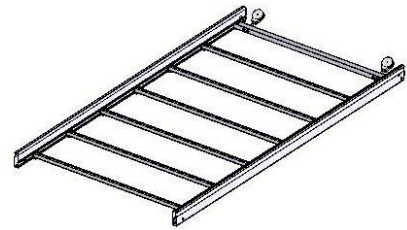
Attach double pulleys to the StorageLift upper platform and, then, attach the upper platform to the previously assembled lower platform with the pivot supports.



Item Number	Part Number	Part Description	QTY
1	20-029	UPPER PLATFORM	1
2	20-003	UPRIGHT PIVOT SUPPORT-FRONT	1
3	20-005	UPRIGHT PIVOT SUPPORT-REAR	1
<b>Hardware Bag 2</b>			
4	50-019	BOLT, HEX HEAD-1/2"-13 X 3.750" - 1" THREADS GR. 5 ZINC	8
5	50-032	WASHER, 1/2" ZINC SAE	40
6	50-017	NUT, NYLON LOCK-1/2"-13 GR. 5 ZINC	8
7	40-021	TUF TUG DOUBLE SHEAVE PULLEY WITH SWIVEL	2
8	40-015	U-BOLT, 3/8"-16	2
9	50-011	WASHER, 3/8"-16 ZINC	4
10	50-031	NUT, NYLON LOCK-3/8"-16 GR. 5 ZINC	4
11	40-024	PLASTIC END CAP	2

## Step 8

Using U-Bolts (40-015), attach two Double Pulleys (40-021) to the upper platform Front Cross Member using washers and nuts. Tighten the nuts on the U-bolts so that approximately 1/8-inch of the U-Bolt thread shows beyond the nut and the pulley can move freely on the U-bolt.

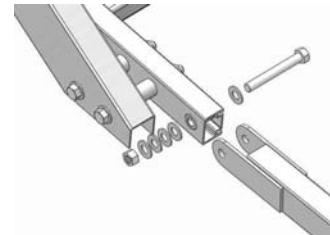


**Note:** The plywood covering the upper platform has been intentionally omitted from the drawing at right in order to show the location of the pulleys more clearly.

## Step 9

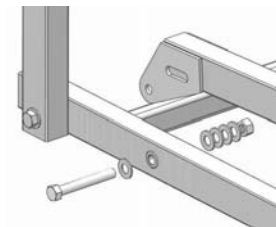
Using 1/2 x 3.75-inch bolts and nuts, bolt the Rear Upright Pivot Support ends to the back end of the Lower Platform Side Rails as shown. Use **five washers** for each bolt. Tighten the bolts until the washers just spin freely.

**Note:** Insert the bolts from the inside of the platform.



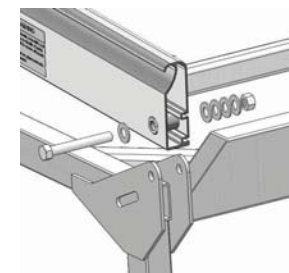
## Step 10

Using 1/2 x 3.75-inch bolts and nuts, bolt the Front Upright Pivot Support to the assembled lower platform side rails as shown. Use **five washers** for each bolt. Tighten the bolts until the washers just spin freely.



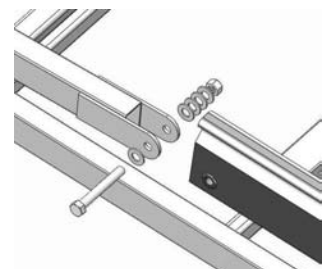
## Step 11

Using 1/2 x 3.75-inch bolts and nuts, bolt the assembled upper platform to the Rear Upright Pivot Support, as shown. Use **five washers** for each bolt. Tighten the bolts until the washers just spin freely.



## Step 12

Using 1/2 x 3.75-inch bolts and nuts, bolt the Front Upright Pivot Support to the assembled upper platform side rails, as shown. Use **five washers** for each bolt. Tighten the bolts until the washers just spin freely.



## Install the Winch

Attach the safety chain and winch, Then, install the lifting cable to complete assembly of the StorageLift.

**Alexandria Storage Lift**

Item Number	Part Number	Part Description	QTY
1	40-014	2000 LB WORM GEAR WINCH	1
2	10-050	RAMP HOOK	3
3	40-005	4000# 3/16 CABLE WITH THIMBLE KIT	1
4	10-064	WINCH MOUNT PLATE	2
5	50-053	SAFETY SNAP HOOK W/LATCH	1
6	50-051	MAIN LOGO LABEL	2
7	50-046	WARNING LABEL	2
8	50-044	PATENT LABEL	2
<b>Hardware Bag 3</b>			
9	40-015	U-BOLT, 3/8"-1.6	1
10	50-055	SCREW, SELF DRILLING-INDENTED HEX WASHER 1/4"-1.5 GR. 5 ZINC	1
11	50-054	WASHER, 9/32" x 1.0" ZINC	1
12	50-049	3/8 LOCK WASHER GRADE 5 ZINC SAE	3
13	50-031	NUT, NYLON LOCK-3/8"-1.6 GR. 5 ZINC	11
14	50-011	WASHER, 3/8"-1.6 ZINC	5
15	50-016	BOLT, HEX HEAD-3/8"-1.6 X 2.25" GR. 5 ZINC	6
16	50-050	BOLT, HEX HEAD-3/8"-1.6 X 3.50" GR. 5 ZINC	3
17	50-037	3/8 SOCKET ADAPTOR	1
<b>Accessory Option - Castor Kit</b>			
18	40-016	800 LB. SWIVEL CASTOR, 4" PHENOLIC WHEEL WITH BRAKE	2
19	40-025	800 LB. SWIVEL CASTOR, 4" PHENOLIC WHEEL NO-BRAKE	4
20	10-054	CASTOR MOUNT STRAP	12
21	50-025	BOLT, HEX HEAD-1/2"-1.3 X 1.250" - GR. 5 ZINC	24
22	50-032	WASHER, 1/2" ZINC SAE	24
23	50-017	NUT, NYLON LOCK-1/2"-1.3 GR. 5 ZINC	24
<b>Accessory Option - Plastic Wearstrips</b>			
25	40-017	PLASTIC WEAR STRIPS	10
26	50-035	#10 WIDE WASHER HEAD PHILLIPS SCREW- 3/4" LONG	40

### Step 13

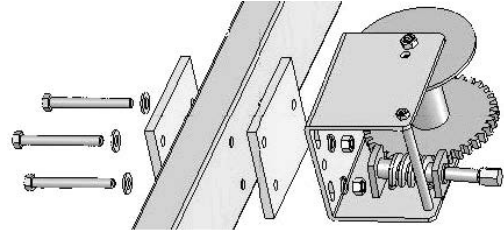
Locate the Safety Chain (50-053) and attach to the Front Upright Support approximately 16-inches down from the top of the support. Use the self-drilling screw (50-055) and washer (50-054) to attach the end of the chain.



### Step 14

Attach the winch to the Main Frame Angle Support on which you previously attached the Single Pulley with swivel (see step 1):

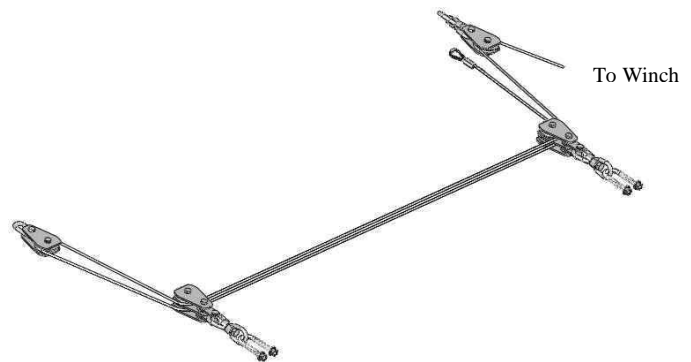
- Attach the Winch (40-014) to the outside of the selected Main Frame Angle Support Assembly using three 3/8 x 3.5-inch bolts with Nyloc nuts, split lock washers (50-049), and two Winch Mounting Plates (10-064).
- Tighten the nuts until the lock washers compress flat. **Do not** over-tighten the nuts to cause the Main Frame Angle Support Assembly to be deformed.



### Step 15

Attach the steel lifting cable (Clip and Thimble Kit, 40-005) to the Front Upright Support, thread it through the pulleys:

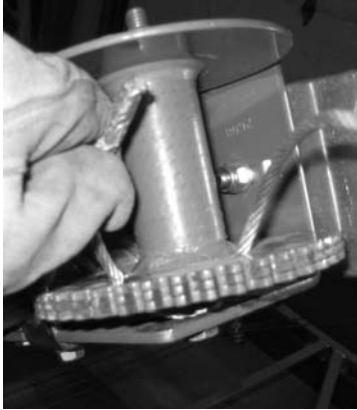
- Unpack the steel lifting cable and extend it to eliminate any kinks.
- Using a U-Bolt (40-015) attach the preformed cable loop to the top of the Front Upright Support on the side that the winch is mounted. **Do not** over-tighten the nuts; the cable loop should move freely on the U-Bolt.
- Use duct tape or similar tape to cover the other end of the cable to prevent fraying.
- Starting from the U-Bolt attaching the cable to the front upright support, thread the cable through the pulleys to the winch in the following order:
  - 1) Through the bottom notch of the upper platform winch-side double pulley.
  - 2) Through the bottom notch of the upper platform non-winch side double pulley.
  - 3) Through the non-winch side single pulley.
  - 4) Through the upper notch of the upper platform non-winch side double pulley.
  - 5) Through the upper notch of the upper platform winch-side double pulley.
  - 6) Through the winch-side single pulley, above the cable loop.
  - 7) To the winch. **Note:** When properly installed, the cable does not rub on itself.



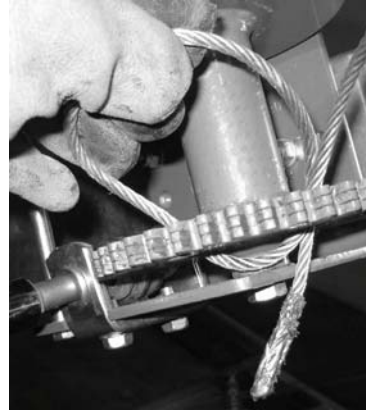
## Step 16

Attach the free end of the cable to the winch spool and wind the cable onto the winch spool using the following cable termination scheme recommended by the winch manufacturer:

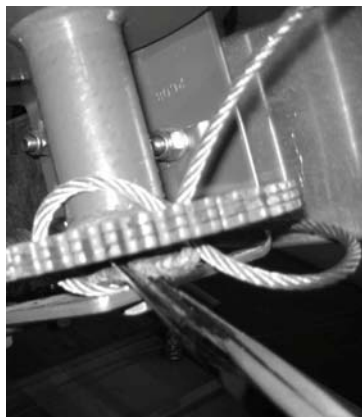
**Note:** A needle nosed pliers is helpful in this process.



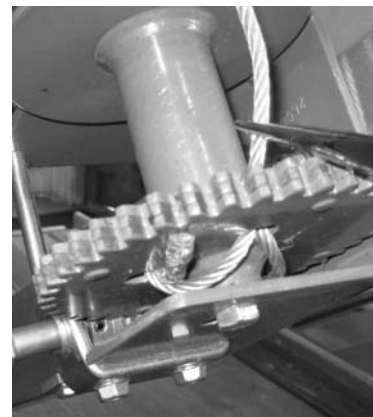
1. Run the free end of the cable from inside the winch spool out through the first hole in the side of the spool and through the second hole in the side of the spool.



2. Run the cable back through the first hole

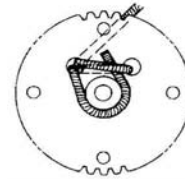


3. Loop the cable around the winch shaft and up under the cable between the two holes on the outside of the winch spool.

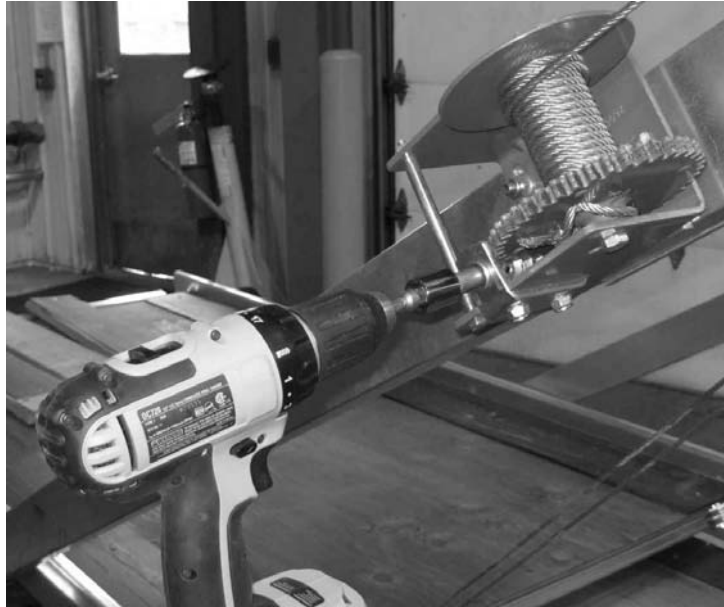


4. Tighten the cable loops to secure the free end of the cable.

The final result should look similar to the manufacturer's diagram at right.



Wind the cable on to the winch spool using a variable-speed drill fitted with a 5/8-inch socket. Keep tension on the cable when first winding it onto the winch spool to ensure that it winds evenly.



**Note:** Some overheating of the winch is normal during the first four or five times that the winch is cycled up and down with the upper platform loaded.

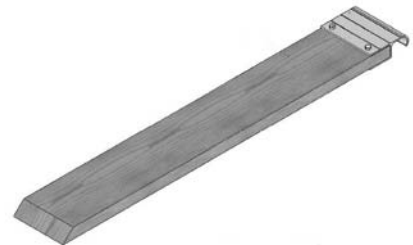
Follow the instructions for **StorageLift Loading and Operating**, later in this manual, to raise the upper platform.

## ***Assembling the Loading Ramps***

Ramps facilitate the loading and unloading process. The StorageLift comes with three ramp hooks which can be bolted to boards to create three loading ramps.

Each ramp hook is designed to be bolted to a 2x8, but a 2x10 or 2x12 can be used, if desired.

The recommended minimum-length ramp is 4 feet. Thus, a single 8-foot plank can be used to assemble two ramps. Cut one end of each ramp at a 45-degree angle so that one end of each loading ramp has a beveled starting slope. Use a ramp hook as a template to drill 1/2-inch holes in the un-beveled end of the plank. Then, bolt the ramp hook to the plank using 3/8 x 2.25-inch bolts, without washers.



## Attaching the Optional StorageLift Casters

The six casters in the Optional Caster Kit make it easier to move or reposition the StorageLift, even after it has been loaded. The casters can be attached to the lower platform side rails after the unit has been assembled.

**Warning:** Do **Not** attempt to install the casters while there is a load on either the upper or lower platforms.

### Step 1

Ensure that the Storage lift is unloaded and that the upper platform is fully raised and that the safety chain has been fastened to hold it in place.

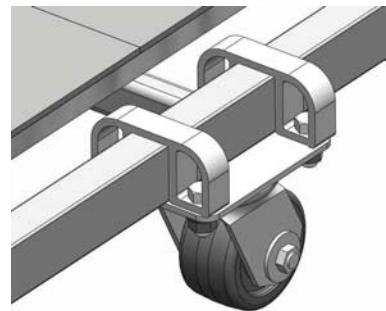
### Step 2

Raise one side of the StorageLift and rest it on a solid object, such as a wooden block, that will hold it raised six to ten inches off the floor without shifting.

### Step 3

Attach the rear, center, and front casters on the raised side of the lower platform. Make sure to mount the swivel caster with brake at the rear of the platform.

- Using  $\frac{1}{2}$  x 1.25-inch bolts (50-025), washers, Nyloc nuts, and two Caster Mounting Straps (10-054), bolt the Swivel Caster with Brake (40-016) to the back of a lower platform side rail, against the Rear Upright Pivot.
- Using the same procedure, bolt a Swivel Caster (40-025) to the lower platform side rail, next to the center cross member.
- Using the same procedure, bolt a Swivel Caster (40-025) to the lower platform side rail, next to the upright support at the front of the StorageLift.



### Step 4

Remove the wooden block, lower the StorageLift onto the installed casters and set the rear caster brake.

### Step 5

Repeat steps 2 and 3 to install the casters on the other side of the StorageLift.

## ***Attaching the Optional Plastic Wear Strips***

The optional plastic wear strips make it easier to load and unload an un-wheeled vehicle, such as a snow mobile. They reduce the friction and protect the plywood and ramps from the carbides or skis.

Plastic wear strips can be installed anytime after the plywood has been attached to the upper and lower platforms. However, if the optional casters are to be installed, the wear strips should only be installed after attaching the casters.

To install the plastic wear strips, position them on the loading ramps and on the sides of the platform plywood and fasten them with #10 Wide Washer Head Phillips screws (50-035).



## StorageLift Loading and Operating Instructions

The assembled StorageLift is easily operated using a variable-speed drill that is fitted with a 3/8 drive adapter and a 5/8-inch socket and operates at a maximum speed of 2000 rpm. StorageLift is not responsible for damage to the drill or to the unit due to improper operation.

Read and follow manufacturer's instructions for operating the variable speed drill. Make sure that you read and understand these StorageLift instructions before attempting to operate the winch to raise or lower the upper platform.

### ***Loading and Unloading the StorageLift Upper Platform***

The StorageLift holds up to a 1000 pound distributed-load on each platform. If both platforms are to be loaded, the upper platform must be loaded first; then it must be raised so that the lower platform can be loaded.

1. Before lowering the upper platform, ensure that the lower platform is clear of objects.
2. Ensure that there is sufficient vertical clearance so that any loads on the StorageLift upper platform will not contact overhead structures when the upper platform is raised.
3. Unlatch the safety chain holding the upper platform in place.
4. Use a variable-speed drill fitted with a 5/8-inch socket to operate the winch and lower the upper platform until the legs rest on the floor. With the upper platform lowered to the floor, it may be loaded or unloaded.

**Note:** If the front end of the StorageLift lifts off the floor while you are attempting to raise the upper platform, stop operation, lower the upper platform to the floor, and shift the load forward on the upper platform before resuming operation.

5. Position the loading ramps, and load or unload the upper platform.

**Note:** When loading the upper platform, ensure that the load is centered on the platform (weight forward of center) and that the entire distributed-load is positioned on the plywood of the platform. Do not let any of the load rest on the aluminum Rear Upright Pivot Support.

6. After the upper platform is loaded, the load should be securely tied down and wheels should be chocked.
7. Remove the loading ramps and operate the winch to raise the platform to the full, upright position. Take care not to overrun the winch when raising the upper platform.
8. Secure the upper platform safety chain to hold the upper platform in place.

### ***Loading and Unloading the StorageLift Lower Platform***

Ensure that the upper platform safety chain is engaged before loading or unloading the lower platform. Then,

1. Position the loading ramps, and load or unload the lower platform. **Note:** Ensure that the load is centered on the platform and that the entire distributed-load is positioned on the plywood of the platform.
2. After the platform is loaded, the load should be securely tied down and wheels should be chocked.
3. Remove the loading ramps.

## StorageLift Inspection and Maintenance

The StorageLift should be checked each time before raising or lowering the upper platform and any damaged or unusually worn parts should be replaced before proceeding with operation.

- Check cable for frays, corrosion, or breaks at every use.
- Inspect the frame, pulleys, winch, and pivot points for unusual wear, damaged or bent parts. Replace or repair as necessary.
- Lubricate the winch as needed.
- Check and lubricate pulleys to ensure that they are turning freely.
- Check U-bolt nuts to make sure they are not coming too loose (approximately 1/8-inch thread should protrude beyond the bolts).
- Check pivot point bolts to make sure that they are not getting tight. The washers should spin freely. Loosen if necessary.

## Limited Warranty

The StorageLift warrants its products shall be free from manufacturing defects for two (2) years from the date of purchase shown on the customer's invoice. The StorageLift warranty is limited to products purchased new by the original owner and is not transferable.

**THE STORAGE LIFT WILL AT ITS OPTION REPAIR OR REPLACE, WITHOUT CHARGE, OR ALLOW CREDIT FOR ANY SUCH GOODS FOUND ON EXAMINATION BY THE STORAGE LIFT 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 REPAIR WORK MUST BE DONE BY A REGISTERED STORAGE LIFT DEALER.**

The StorageLift warranty does not cover damage caused by circumstances outside the reasonable control of The StorageLift, including but not limited to improper use, installation, overloading, accident, neglect or harmful alterations, repairs made by others, damage by snow or ice, electrolysis, severe weather conditions and Acts of God.

Unauthorized modifications or attachments will void this warranty.

This warranty is limited to products and components manufactured by The StorageLift. Parts and components manufactured by others, such as the winch, are covered by their own manufacturer's warranty.

The StorageLift must receive written notice of a discovered defect covered under warranty prior to the expiration of the warranty. The warranty period shall be for the time specified, beginning from the date of purchase as shown on customer's invoice.

**Your warranty must be registered. Please complete and send the warranty registration on the next page.**

For warranty questions or service, please contact your dealer or contact:

Alexandria StorageLift, Inc.  
401 County Road 22 W  
Alexandria, MN 56308

Tel: (888) 538-9991

Email: [info@storagelift.net](mailto:info@storagelift.net)

## Warranty Registration Information

Name: \_\_\_\_\_ Date of Purchase: \_\_\_\_\_  
 Address: \_\_\_\_\_ Place of Purchase: \_\_\_\_\_  
 City: \_\_\_\_\_  
 State: \_\_\_\_\_ Zip Code: \_\_\_\_\_  
 Telephone: (    ) \_\_\_\_\_



Have you previously owned a StorageLift product?  Yes  No

How did you hear of The StorageLift?  Sports show  Dealer  Newspaper  TV/Radio  Friend/  
 Relative  Magazine  Other \_\_\_\_\_

How was your StorageLift assembled/ installed?  Self  Dealer  
 Other (Please specify) \_\_\_\_\_

Are you likely to recommend StorageLift products to others?  Yes  No

Additional comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Return to:     Alexandria StorageLift, Inc.  
                  401 County Road 22 W  
                  Alexandria, MN 56308