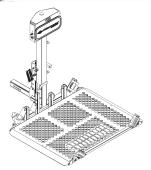


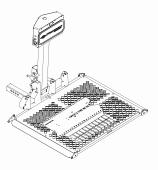
## Installation and Owner's Manual



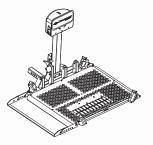
AL500 Universal Power Chair Lift Capacity: 350 lbs



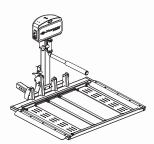
AL100 Universal Scooter Lift Capacity: 350 lbs



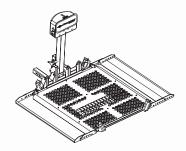
AL550 Automatic Power Chair Lift



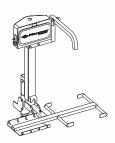
AL300 Universal Power Chair / Scooter Lift Capacity: 350 lbs



AL 560 Auto Hold Down P.C. Lift Outside Lift Capacity: 350 lbs



AL301XL Extra Wide Power Chair / Scooter Lift Capacity: 350 lbs



AL030 Power Tote for Manual Wheelchairs



AL010/050 Micro Power Chair / Micro Scooter Lift Capacity: 135 lbs



### Read manual thoroughly before attempting to install or operate lift.

This manual has been provided to assist you with lift installation and operation. For further assistance please contact your authorized Harmar Mobility dealer or Harmar's Technical Services department.

Tel: 800.833.0478 Fax: 866.234.0478

Email: tech@harmar.com

n	ea	10	1
	Ca	16	ш

Serial Number:

Your Universal Outside Lift was factory preassembled to require little assembly before installation. Box contents should include:

#### AL500

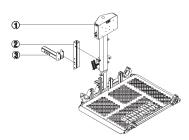
#### Package Check List Main lift body (# 1) Hitch Post (# 2) Hitch Adapter (# 3) Anchor Plate Hardware pack

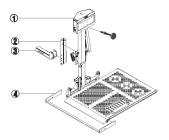
#### AL100

#### Package Check List Main lift body (# 1) Hitch Post (# 2) Hitch Adapter (# 3) Spreader Bar (# 4) Hardware pack

#### **Hardware Package**

Contents Include: Vehicle Wiring Harness Required Fasteners Keys Black tie wraps Instruction Manual







DO NOT LIFT FROM MOTOR COVER

#### AL550

Package Check List Main lift body (#1) Hitch Post (#2) Hitch Adapter (#3) Hardware pack



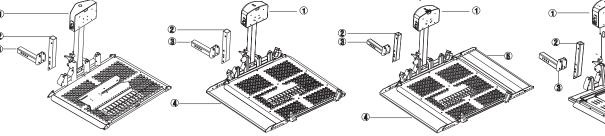
Package Check List Main lift body (# 1) Hitch Post (# 2) Hitch Adapter (# 3) Spreader Bar (# 4) Hardware pack



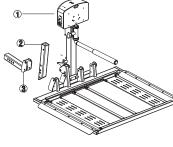
Package Check List Main lift body (# 1) Hitch Post (# 2) Hitch Adapter (# 3) Rear Wheel Craddle (# 4) Front Wheel Craddle (# 5) Hardware pack



Package Check List Main lift body (# 1) Hitch Post (# 2) Hitch Adapter (# 3) Hardware pack

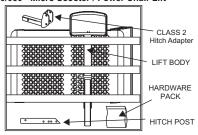


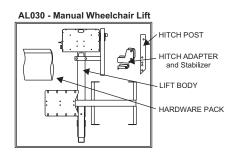




#### AL010/050 - Micro Scooter / Power Chair Lift

THE AL010/050'S PLATFORM HAS BEEN LEFT OFF FOR A DECREASE IN PACKAGE SIZE, ALLOWING NEXT DAY SERVICE / NON-FREIGHT SHIPPING. ATTACH TO LIFT AT PIVOT BOLT (SEE EXPLODED VIEW FOR REFERENCE)



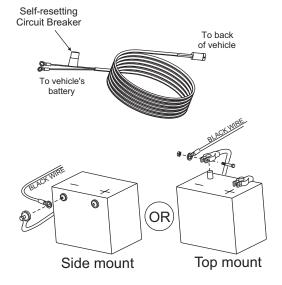


Be sure and check the contents of the box against the package check list to be sure that all parts are included with the lift that are required for proper installation. If any parts are missing or if any damage is noted, immediately contact the distributor from which you purchased your lift. **DO NOT attempt to install or use the lift with any missing or damaged parts.** 

## Vehicle Wiring Harness Installation Instructions



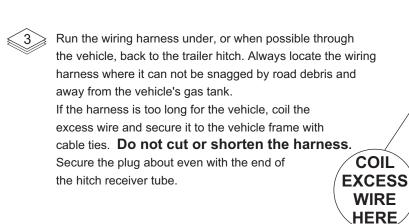
Unwind the harness and lay it flat. One end of the harness has a black plug . This end of the harness goes to the back of the vehicle.

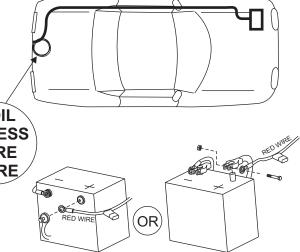


## 2

## BEGIN ROUTING THE VEHICLE HARNESS AT THE BATTERY

Attach the black wire to the negative terminal on the battery. **Do not attach the red wire yet.** 





Top mount



Attach the red wire to the positive terminal on the battery.



Wire in a Standard 4-contact female flat trailerconnector to the vehicles' taillights. This will provide power for the motor cover light.



Side mount

Important Reminder: Never attempt to attach the wire harness to a secondary power source. The harness requires direct connection to the battery.

**Caution:** Route the harness away from the exhaust system, brake lines, fuel lines, gas tank, pinch points, and sharp edges. Locate the wiring harness where it can not be snagged by road debris.

To install an Outside Lift on a vehicle, the vehicle must be capable of accepting a Class 2 or Class 3 hitch. If you are unsure about the vehicle and hitch compatibility, contact a local hitch installer or the web sites below. The vehicle should also be wired with standard 4 post trailer wiring.

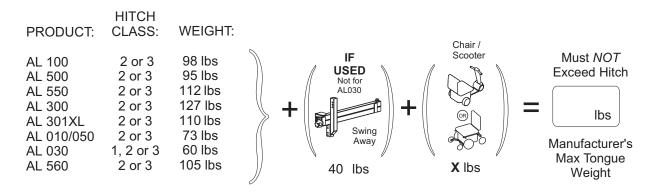
Listed below are three websites of hitch companies that can be used as a reference www.hitch-web.com, www.reeseprod.com, or www.draw-tite.com

Be sure to recommend a hitch installer that is reputable, insured, and capable, as their work has a direct reflection on the customers perception of a properly installed mobility lift.

#### Important Note: Not every vehicle is capable of having a hitch installed

**Remember.** Calculate the weights of the lift, mobility device, and where applicable the swing away option, being certain that the total weight does not exceed the recommended tongue weight of the hitch. Different types of hitches are capable of bearing different amount of tongue weight.

The lift manufacturer suggests the installer observe the vehicles and *Gross Vehicle Weight Ratings* Restrictions.



*Important Note:* Some states have very strict license plate obstruction laws, so be sure to familiarize yourself with the local and state laws.

*Important Note:* Assure the receiver tube of the hitch is parallel to the ground. This is not a recommendation, but rather a requirement.

If the hitch is not installed properly, it will affect the functioning of the lift.

Some vehicles will require that the rear suspension be supplemented. The manufacturer recommends the installer contact a suspension specialist for additional technical support.

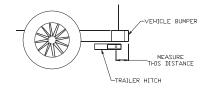
A vehicle with a Class 3 (Class 2 requires optional accessories) hitch and standard 4 post trailer wiring is ready for installation of the lift.

## Hitch Adapters

AL123
Standard Class 3

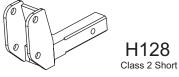
A Hitch Adapter is the part of the lift that plugs into a vehicle's trailer hitch. Several hitch adapters are available to fit the needs of differnet vehicles. When selcting a Hitch Adapter you should determine the hitch class and measure the bumper distance.

**Bumper distance** is the length from the trailer hitch's bolt hole to the rear most point on the vehicle.



AL 126 Standard Class 2





Hitch class is usually printed on the trailer hitch, however it can also be determined by measuring the inside of the receiver on the trailer hitch.

Class 2 hitches measure 1-1/4" x 1-1/4"

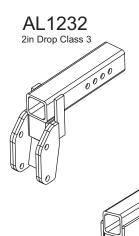
Class 3 hitches measure 2" x 2"

Once you have determined the hitch class and bumper distance, refer to the diagram below to select the proper hitch adapter.
As always, Harmar Mobility's trained personnel will be glad to assist you in selecting the proper hitch adapter.

Hitch Class	Bumper Distance	Bumper Distance	Bumper Distance
Class II	0"-7.5"	7.5"-10"	10"-13.5"
	AL126	AL127	
Class III	AL123	AL125	AL125

Shorter adapters available for shallow hitches.

Drop adapters available for higher than normal vehicles.



AL1236

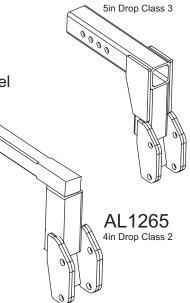
6in Drop Class 3

AL125

Class 3 Extra long

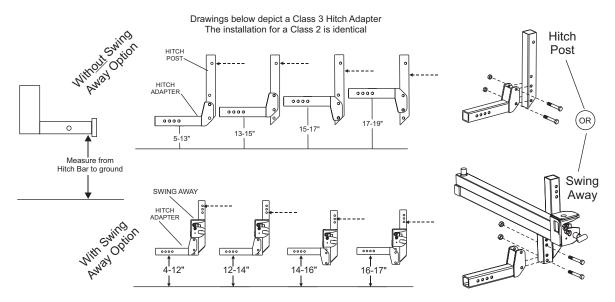
H124

Class 3 Short

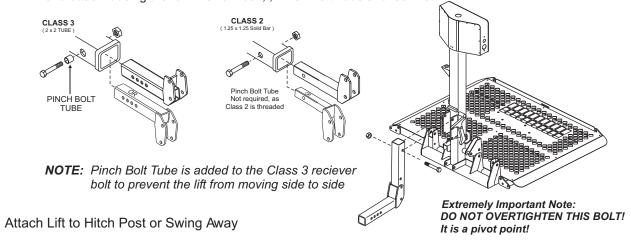


AL1235

In order to determine how to assemble the Hitch Post and Hitch Adapter, the distance from the bottom of the hitch to the ground must be measured. Determine which set of holes to use to bolt together the Hitch Post and Hitch Adapter. Use the 1/2" x 3-1/2" bolts and nuts provided and tighten.

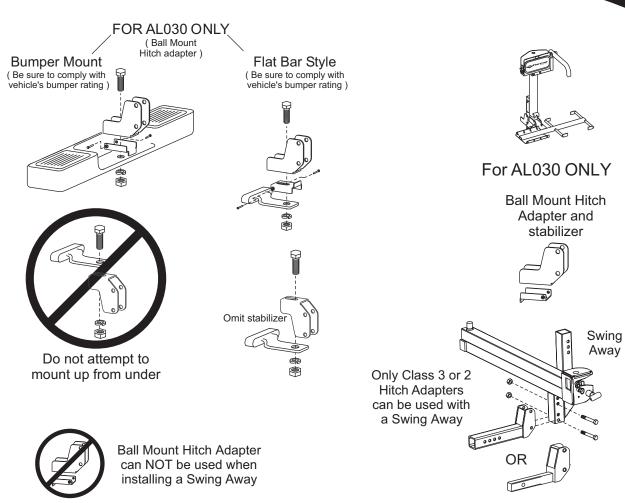


Once you have determined the proper adjustment for the Hitch Post or Swing Away and have attached it to the Hitch Adapter, insert the adapter into the hitch receiver and attach it using the 1/2" x 3-1/2" bolt, , Pinch Bolt Tube and lock nut.

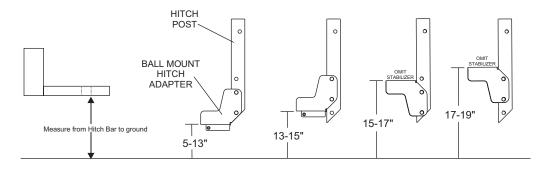


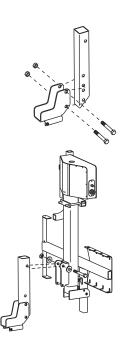
Valuable Installation Hint! (Using Caution), Once the lift is placed behind the vehicle, plug the power cord into the harness that you have installed on the vehicle. Turn the key on and use the toggle DOWN switch to raise the motor box. Continue to power the lift until the mounting holes in the lift are even with the top hole in the Hitch Post. Attach the lift to the post using the supplied 1/2" bolt with lock nut and washers. Using this method will allow you to attach the lift without physically having to lift the unit and hold it while the bolt is inserted.

Route the lift power cord down the lift away from its moving parts and potential pinch points. The cord should follow along the post and be secured with zip ties provided to allow the lift to operate without disconnecting the power cord.



#### Drawings below depict a Ball Mount Hitch Adapter The installation for a Class 2 or 3 Hitch Adapter can be used and is identical





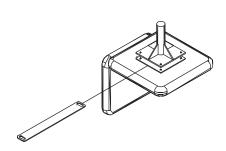
THERE ARE 2 OPTIONS ON HOW TO ATTACH
THE STRAP HOOKS TO THE CHAIR
THAT ARE INCLUDED WITH THE LIFT.

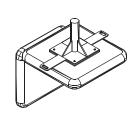
#### **ANCHOR PLATE:**

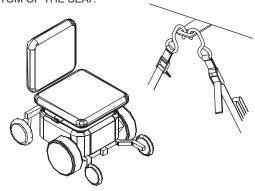
THE ANCHOR PLATE IS A FLAT PLATE THAT IS 20" LONG WITH A SLOT IN EACH END. THIS PLATE WILL WORK WITHANY CHAIR OR SCOOTER THAT HAS A CENTER SEAT POST AND ATTACHES TO THE BOTTOM OF THE SEAT.
ATTACH THE ANCHOR PLATE BY THE FOLLOWING STEPS:

THE ANCHOR PLATE SHOULD EXTEND ABOUT 1-1/2" OUT FROM THE SIDE OF THE CUSHION. THIS WILL ALLOW THE USER TO ATTACH THE STRAP HOOKS TO THE ANCHOR PLATE TO SECURE THE CHAIR TO THE LIFT.

- 1. REMOVE SEAT FROM THE CHAIR.
- 2. LOOSEN THE SCREWS THAT ATTACH THE PLATE TO THE BOTTOM OF THE SEAT.ALLOW ENOUGH ROOM TO SLIDE THE ANCHOR PLATE BETWEEN THE SEAT AND SEAT PLATE.
- 3. ATTACH THE ANCHOR PLATE IN THE CENTER OF THE SEAT PLATE WITH THE HOLES ON EACH END EXTENDING EVENLY ON EACH SIDE OF THE SEAT.
- 4. RE-TIGHTEN THE SCREWS THAT HOLD THE SEAT PLATE TO THE BOTTOM OF THE SEAT.
- 5. REPLACE THE SEAT ON THE CHAIR.



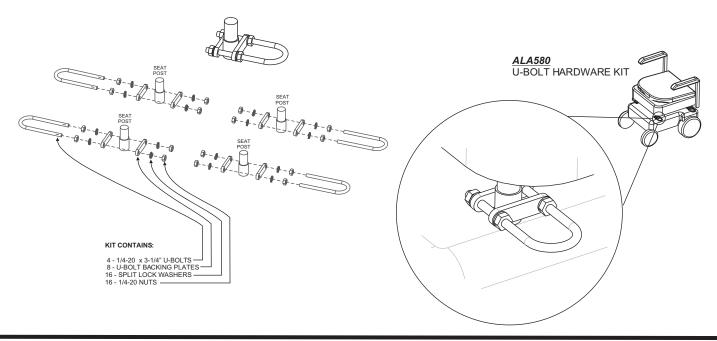




#### **ANCHOR U-BOLTS:**

THE U-BOLTS ARE TO BE USED WITH POWER CHAIRS OR SCOOTERS THAT DO NOT HAVE A CENTER SEAT POST. ON THIS TYPE OF CHAIR, THE SEAT IS NORMALLY ATTACHED TO A TUBULAR FRAME. ATTACH THE U-BOLTS, TWO ON EACH SIDE, TO THE FRAME AS SHOWN BELOW. MAKE SURE THAT THE LOOP EXTENDS TO THE OUTSIDE OF THE CHAIR TO ALLOW THE STRAP HOOKS TO BE ATTACHED BY THE END USER.

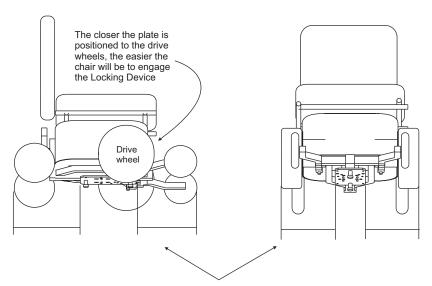
EACH TYPE OF CHAIR WILL DIFFER SLIGHTLY AND THE PLACEMENT OF THE U-BOLTS WILL DIFFER BETWEEN DIFFERENT MODELS AND MANUFACTURERS. PLACE THE ANCHOR U-BOLTS TOWARDS THE CENTER OF THE SEAT IF POSSIBLE. BECAUSE OF THE DIFFERENT TYPES OF SEATS, YOU MAY BE FORCED TO ATTACH THE ANCHOR U-BOLTS MORE TOWARDS THE FRONT OR REAR OF THE SEAT, BUT WE RECOMMEND ATTACHMENT AS CLOSE AS POSSIBLE TO THE CENTER OF THE SEAT.



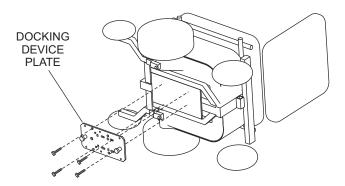
### AL550 only

#### CHOOSING A LOCATION and MOUNTING THE DOCKING DEVICE PLATE

WARNING: Do not attempt to use this automatic lock down device on any folding, or take apart chairs unless recommended by Harmar.



Find approximate center of the chair



DO **NOT** USE SPACERS HERE

SPACERS BELONG UNDER THE STATION ON THE PLATFORM

Use existing holes where ever possible.

If too little or no holes exist, holes need to be drilled. Remove power chair's batteries, and use plate as a template.

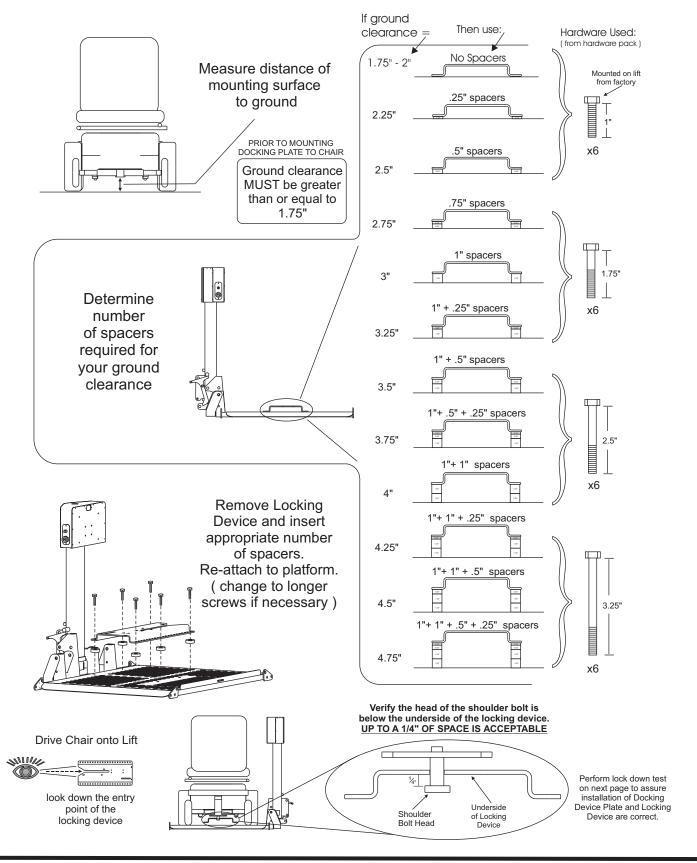
Drill as required.

Attach to chair using supplied hardware.

4---1/4-20 x 1.00" HHCS 4---1/4-20 Nylock Nut ATTACHED TO PLATE

## AL550 only

#### SETTING DOCKING DEVICE HEIGHT



### **AL100**

#### SETTING HOLD DOWN FOOT HEIGHT

With platform on the ground, drive scooter onto platform, from left (driver's side ) to right, until the rear wheels are located in the rear wheel spreader bar assembly. Stop when the rear tires contact the ramp on the platform.

Raise the platform on either lift until the motor's clutch is heard (top of travel). Loosen both nuts on hold down arm, and thread the Hold Down Foot down to the scooter's deck. Lower Platform about 1-2 inches. Thread Hold Down Foot down once again to scooter's deck. Raise Platform. Verify Hold Down Foot places adequate pressure on scooter.

**DO NOT** adjust the leg so far down that the top of the threaded rod does not protrude through the top of the pivot tube. Once the foot is adjusted to the proper position, tighten the jam nut to lock it in place.

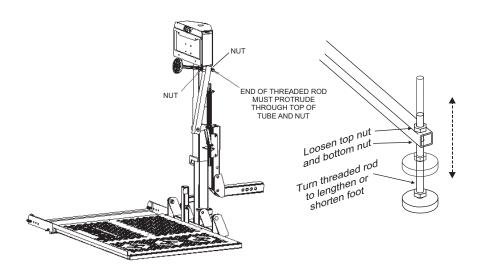
Once the lift is properly adjusted, lower the platform to the ground and raise it back to the transporting position. Repeat this several times to make sure all parts are operating properly and that the scooter is properly secured. Next, remove the scooter from the lift and using the toggle switch, cycle the lift completely up and down to make sure that all parts are in working order and the lift folds up when it is empty.

**Caution:** On some scooters, it may be necessary to temporarily move the steering tiller forward to clear the hold down arm as it lowers into the lock down position.

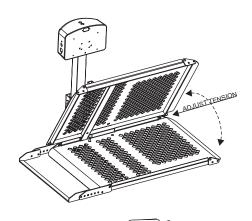
**Caution:** Some scooters have pneumatic (air inflated) tires. If your scooter has this type tire, be sure the tires are properly inflated. Improper inflation of the tires will change the deck height of the scooter and therefore change the amount of clamping force the hold down arm places on the scooter. The scooter can fall off of the lift if not properly secured.

**Caution:** Be sure to instruct the end user not to enter steep driveways straight on. Enter and leave at an angle to the street so that your lift platform does not drag on the ground.

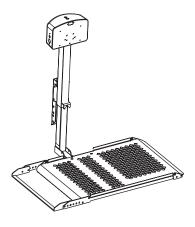
**NOTE**: Drive the scooter off in REVERSE When the scooter is clear of the platform, raise the platform by pushing up on the UP/DOWN switch.

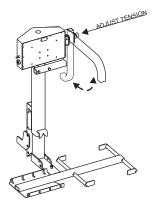


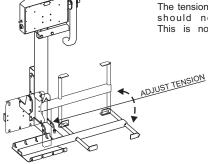
#### AL010/050 and AL030 PIVOT POINT ADJUSTMENTS



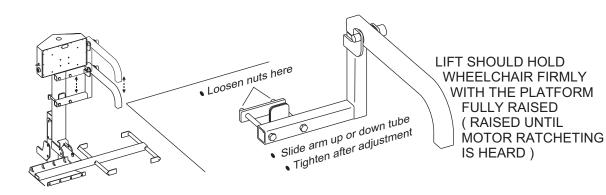
The hinge points are equipped with tensioning washers. The amount of force required to move these parts is determined by the tension of these washers. To adjust, simply loosen or tighten the bolt and nut located by w/ arrows. The tension is set at the factory and should need no adjustment. This is noted for reference only.

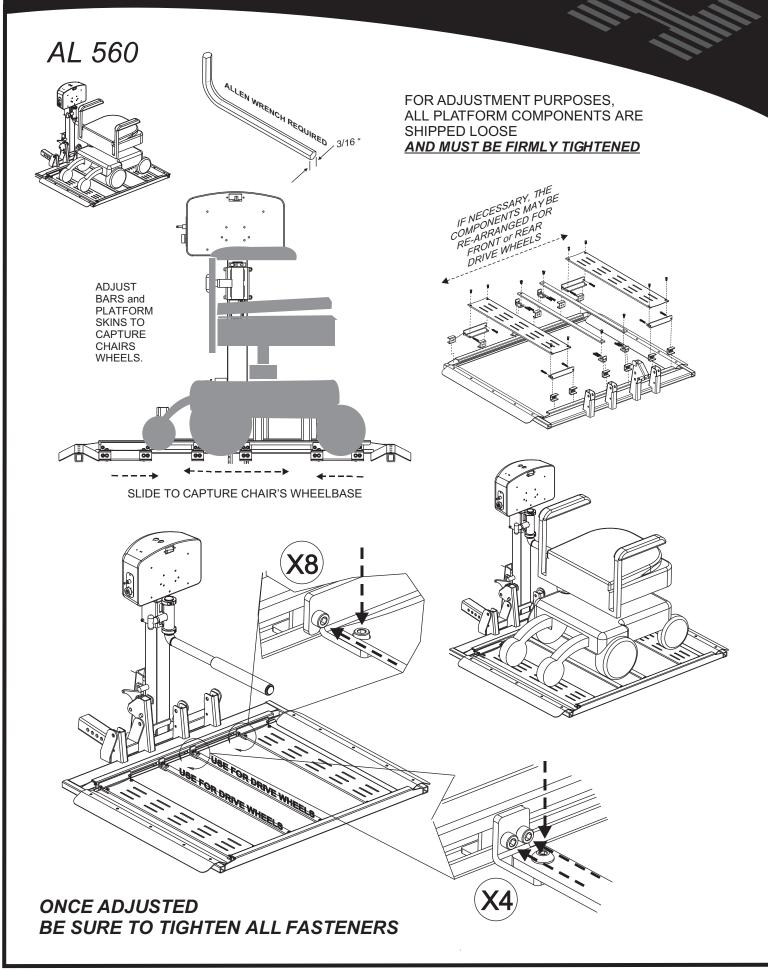


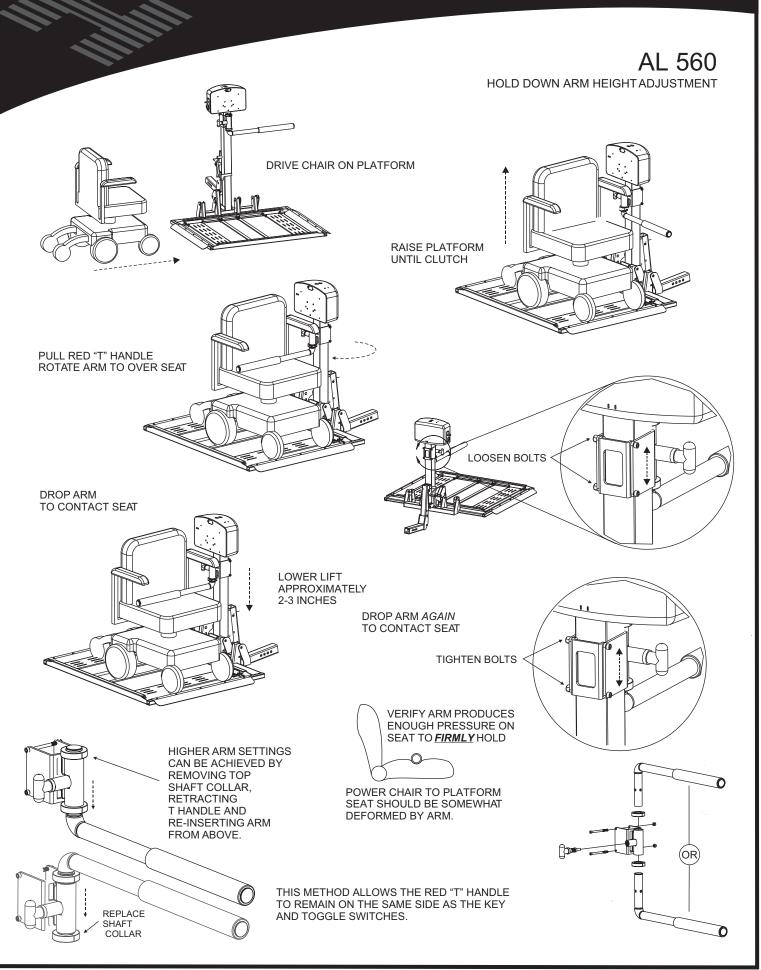




#### AI030 HOLD DOWN ARM ADJUSTMENT



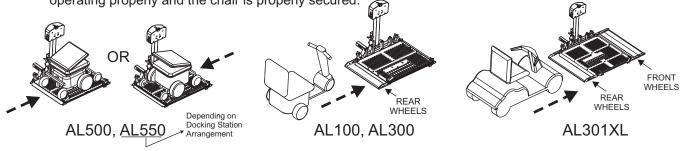




#### **General Operating Instructions:**

Turn the key switch to the ON position. With the toggle switch, raise and lower the platform as needed. Pushing the switch downward will cause the platform to lower. The platform will first unfold to the horizontal position, then continue lowering to the ground. Release the UP/DOWN toggle switch just as the platform reaches the ground. Do not attempt to raise the rear of the vehicle with the lift or damage could be done to your lift or vehicle.

Drive the chair/scooter onto the platform as close to the center of the platform as possible. Follow the instructions for securing the chair/scooter onto the lift. Raise the platform to the transporting position. Now lower the platform to the ground. Repeat this action to make sure all parts are operating properly and the chair is properly secured.



Next, remove the chair/scooter from the lift and using the toggle switch, cycle the lift completely up to make sure that all parts are in working order and that the lift folds up when it is empty.

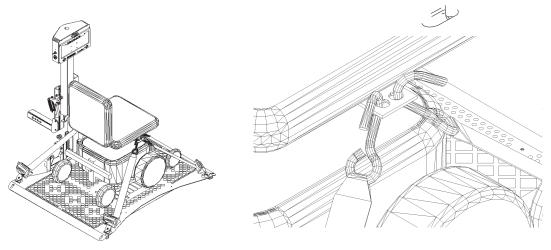
**Make absolutely sure the chair/scooter is properly secured** by the locking mechanisms. Be sure everything is in proper working order before transporting any chair/scooter.

CAUTION: Keep hands and feet out from under the platform as it raises and lowers.

**CAUTION:** Before driving off with the chair/scooter on the lift, make sure that the chair/scooter is firmly held down on the platform.

**CAUTION:** When driving with the chair on the lift, instruct the end user to slow down for potholes, speed bumps, railroad tracks, etc. The lift could be damaged by this type or similar abuse. Lifts are subjected to excessive loads imposed by rough driving.

**CAUTION:** Be sure to instruct the end user, do not enter steep driveways straight on. Enter and leave at an angle to the street so that the lift platform does not drag on the ground.



To unload the power chair, simply turn ON the power switch and push the UP/DOWN toggle switch to the down position. Hold the switch down until the platform just touches and is level to the ground. Press the red release button on the Anchor Strap Base to release the tension and unhook the strap from the chair. Continuing to press the button, allow the strap to retract until the hook reaches the housing. Repeat this step on each corner until all four straps are released. Drive your power chair off the lift platform. When the power chair is clear of the platform, raise the platform by pushing up on the UP/DOWN switch.

To bring the lift in the empty, stowed position, hold the UP switch. The platform will start up in the horizontal position. During its travel upward, the platform will fold up into the stowed or vertical position. Hold the switch until the platform travel stops automatically.

**Courtesy Note:** You may wish to advise the end user to remove the key from the power switch to avoid any tampering with the lift.

#### Special Note:

The lift features 1 of 2 Manual overrides (both in the same location) If the vehicle or lift loses power, simply remove the caution sticker from the top of the motor box. TURN KEY OFF, and REMOVE 2 PRONG WIRING FROM THE LIFT TO AVIOD INJURY SHOULD POWER SUDDENLY BE RESTORED. Some lifts require a 3/8" socket, others require a 1/2" socket. Turn the wrench clockwise to raise the lift and couter clockwise to lower.

(If the lift does not operate properly, immediately take it to the local dealer. DO NOT attempt to modify the lift in any way!)

Do not attempt to move the vehicle without the lift in the stowed or travel position. Any attempt to move the vehicle without the lift fully up may cause damage to the lift, power chair, scooter or vehicle.

The **AL100** is shipped with the Spreader Bar Assembly already attached to the back of the platform on the lift. You must rotate it down until the hole in the side bracket lines up with the open hole on the attachment point on the platform. The Spreader Bar should be flat on the ground at this point. Tighten the bolts where the Spreader Bar Assembly attaches to the platform.

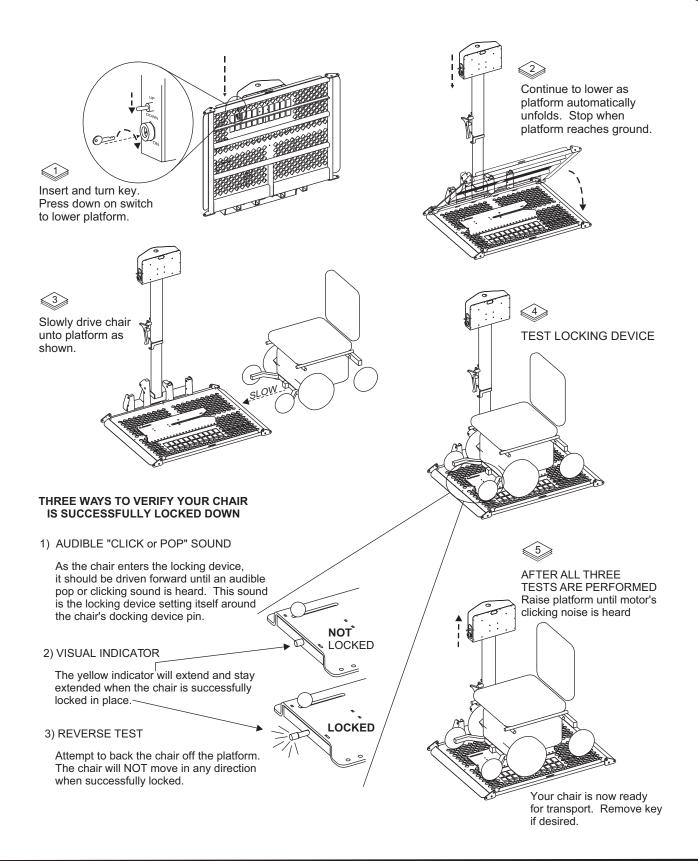
Load the scooter on the center of the platform. Adjust the spreader bar according to the size of the scooter that is being transported on the lift. Forward for smaller scooters and back for larger scooters. Make sure that all fasteners on the Spreader Bar Assembly are tightened before attempting to use the lift.

With the toggle switch, raise the platform with the scooter on it. You will notice that as the lift reached the top, the hold down arm with the foot will lower to the deck of the scooter. The foot should put pressure down on the deck of the scooter to secure it in place while traveling. If the foot does not reach the scooter, unthread the adjustable leg until the foot rests securely on the deck of the scooter.

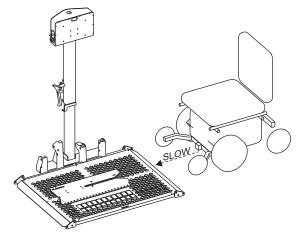
Thread the Adjustable Hold Down Foot onto the hold down arm. To begin, thread the rod completely into the arm. Lower the platform to the ground and place the scooter to be used on the lift and using the toggle switch, raise the platform and scooter up until it reaches the traveling position (all the way up). The lifting motor has a clutch mechanism that will stop the lift when it reaches the top. You will hear a clicking sound when the lift is at the top. Release the switch at this time.

## **AL550**

#### LOADING THE POWER CHAIR

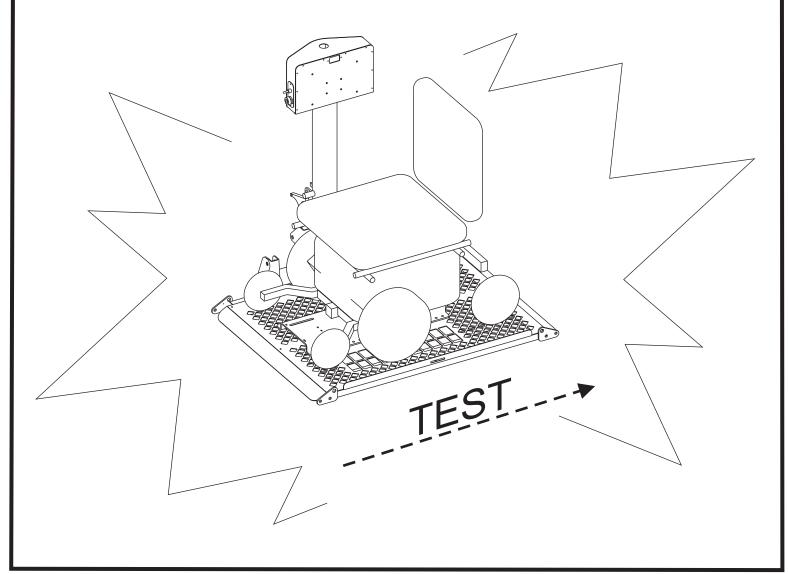


#### VERIFY THE CHAIR HAS BEEN LOCKED INTO THE DOCKING STATION BY ATTEMPTING TO DRIVE CHAIR OFF IN REVERSE



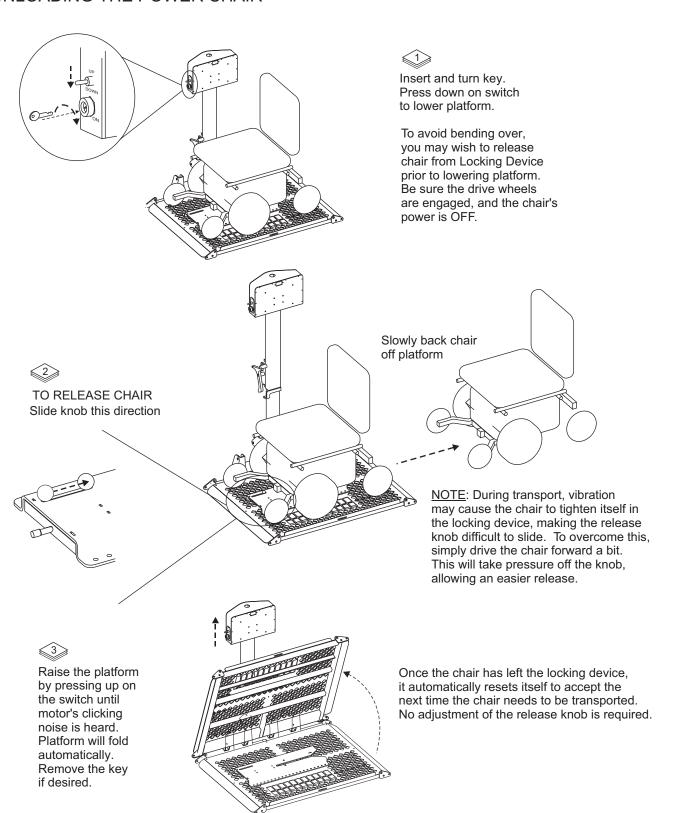
THE DOCKING STATION WILL

"CLICK" or "POP" AND The YELLOW
INDICATOR WILL EXTEND
BUT THE MOST EFFECTIVE WAY
TO ASSURE THE SAFETY OF YOUR \
POWER CHAIR IS TO PERFORM
THE REVERSE TEST EACH TIME
YOUR POWER CHAIR IS LOADED



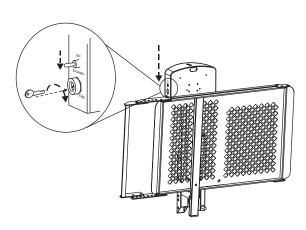
## AL550

#### UNLOADING THE POWER CHAIR

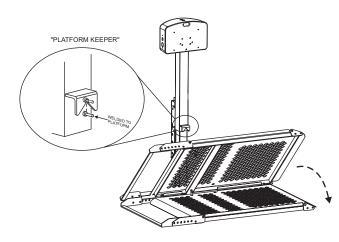


## AL 010 / 050

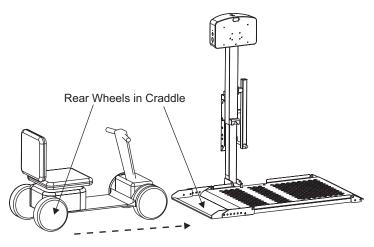
LOADING A SCOOTER



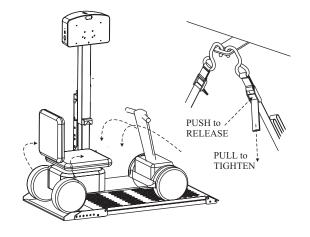
Insert Key and switch to "ON" position Press down on Toggle switch momentarily.



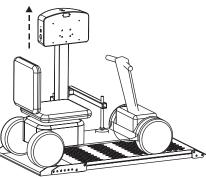
Once platform has been lowered at least an inch, unfold the platform. Continue lowering to the ground.



3 Drive scooter onto platform as shown.



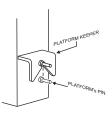
Strap the scooter down using the 4 straps located on each corner of the platform.



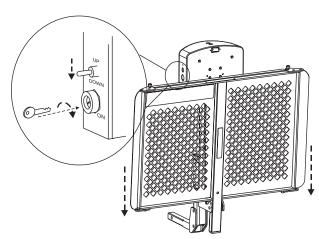
Raise platform until hold down foot depresses scooter's deck or until lift's motor ratchets.

To remove the scooter and prepare the lift for unloaded travel, follow above steps in reverse order and reverse the direction of the arrows.

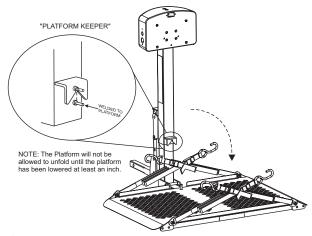
Lift should be raised with the platform folded and until the lift's motor ratchets. Verify that the platform keeper has engaged the platform's pin.



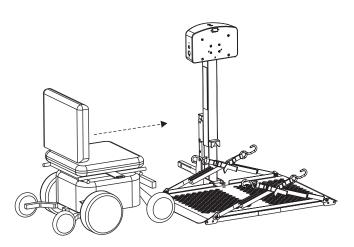
## AL 010 / 050 LOADING A POWER CHAIR



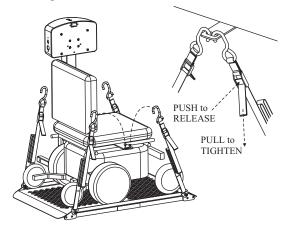
Insert Key and switch to "ON" position Press down on Toggle switch momentarily.



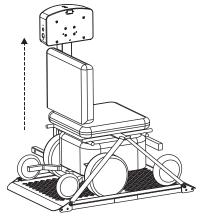
Once platform has been lowered at least an inch, unfold the platform. Continue lowering to the ground.



Drive chair onto platform as shown.



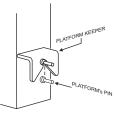
Strap the chair down using the 4 straps located on each corner of the platform.



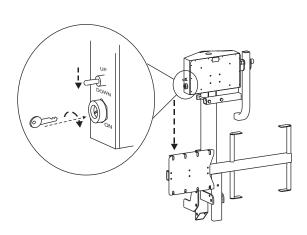
Raise platform with toggle switch, until motor's ratchet sound is heard.

To remove the chair and prepare the lift for unloaded travel, follow above steps in reverse order and reverse the direction of the arrows.

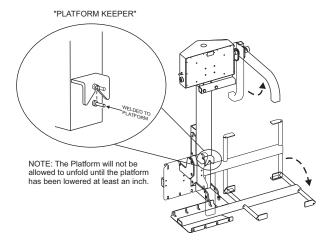
Lift should be raised with the platform folded and until the lift's motor ratchets. Verify that the platform keeper has engaged the platform's pin.



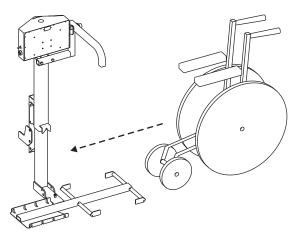
## AL030 LOADING THE WHEELCHAIR



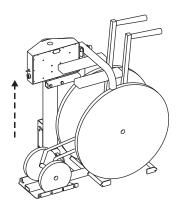
Insert Key and switch to "ON" position Press down on Toggle switch momentarily.



Once platform has been lowered at least an inch, unfold the platform. Continue lowering to the ground. Raise hold down arm.



Roll folded chair onto platform as shown.



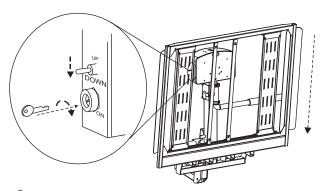
Raise the lift until hold down arm has contacted wheelchair's arm rests.

To remove the chair and prepare the lift for unloaded travel, follow above steps in reverse order and reverse the direction of the arrows.

Lift should be raised with the platform folded and until the lift's motor ratchets. Verify that the platform keeper has engaged the platform's pin.

## AL 560

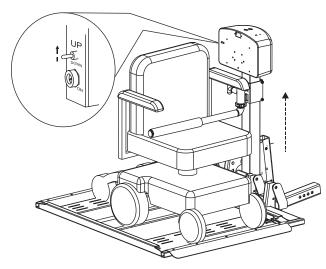
#### LOADING A POWER CHAIR



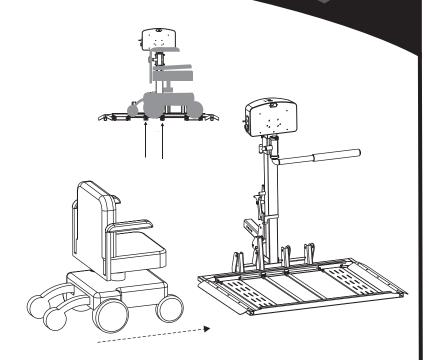
Insert Key and switch to "ON" position Press down on Toggle switch and the platform will unfold. Continue to lower until platform reaches the ground and becomes level.



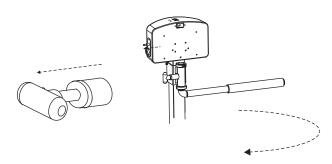
Rotate the Chair's Inner Arm Rest upwards and out of the way of Hold Down Arm.



Press "UP" on toggle to raise Platform until ratchet sound is heard. Hold Down Arm will squish seat, and lock Power Chair in place. If desired, rotate arm rest back to original location.



Drive the Chair onto the platform taking care to stop when the drive wheels fall between the bars in the platform.



Pull the RED "T" Handle while rotating the Hold Down Arm. Release "T" Handle to allow arm to lock in position.



Turn "OFF" and remove Key if desired

Your Power Chair is now ready for transport.

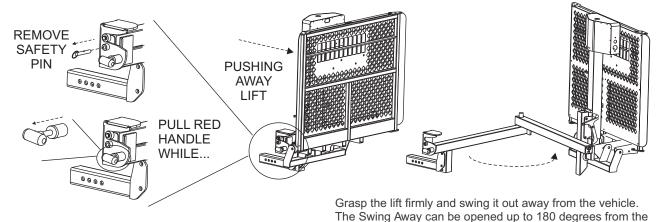
To remove the chair and prepare the lift for unloaded travel, follow above steps in reverse, and reverse direction of the arrows.

### Operating the Swing Away

closed position to allow full access to the rear of the vehicle.

Many scooter and chair owners require access to the rear of a vehicle. To accomplish this a Swing Away option is added to the lift installation. This allows the complete lift to be conveniently and easily swung away from the back of the vehicle and allow easy access to the trunk or lift gate. The Swing Away option can be purchased from any authorized dealer and added at any time.

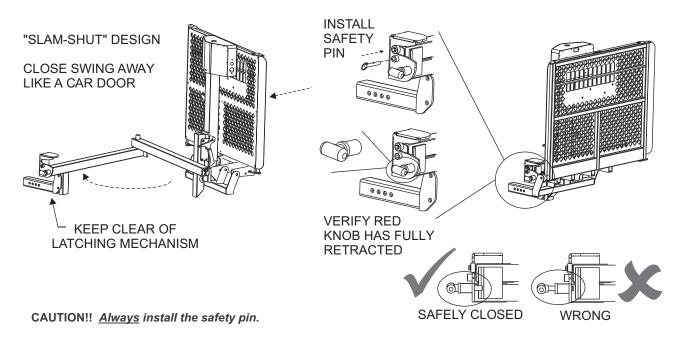
#### **OPENING THE SWING AWAY:**



IMPORTANT!! NEVER OPERATE THE SWING AWAY WITH THE CHAIR or SCOOTER ON THE LIFT!!
This will cause damage to the Swing Away, lift and potentially cause damage to the vehicle and the chair!!

CAUTION!! Always insure that the vehicle is on level ground before attempting to open the Swing Away. Failure to do so may result in the operator losing control of the lift causing damage to persons and property.

#### **CLOSING THE SWING AWAY:**



## Safety & Maintenance

Caution: Keep hands away from PINCH POINTS.

As with most mechanical objects, the hinge point of a moving part creates a pinch point. Be sure to not to stick fingers or extremities at or near these points.

Inspect the condition of your lift often. **If any parts are worn or damaged DO NOT USE THE LIFT**. Immediately contact the dealer you purchased the lift from for repairs.

Caution: Keep feet and any other objects out from under the platform as it lowers.

**Caution:** Some chairs and scooters have pneumatic (air inflated) tires. If your chair/scooter has this type tire, be sure the tires are properly inflated. Improper inflation of the tires will change how the unit fits on the platform and therefore change the amount of clamping force on the chair/scooter.

**Caution:** Before driving off with your chair or scooter on the lift, make sure that the chair/scooter is firmly held down on the platform.

**Caution:** When driving with your chair or scooter on the lift, slow down for pot holes, speed bumps, railroad tracks, etc. **Your lift could be damaged by abuse if subjected to excessive loads imposed by rough driving.** 

**Caution:** Do not enter steep driveways straight on. Enter and leave at an angle to the street so that you lift platform does not drag on the ground.

**Caution:** Do not attempt to move the vehicle with the lift platform in the down position. If moved this way, the lifting mechanism will be damaged.

WARNING! This lift is not meant for human transport. Chair/Scooter must be unoccupied before operating lift.

These lifts are for chair and scooter transport only. **Do not** attempt to transport any other vehicles or materials on the lift other than what it is designed for.

#### MAINTENANCE:

The Universal outside lift has been designed to be as trouble free as possible for the owner.

The maintenance schedule is no exception.

Every 30 days oil the pivot points on all moving parts.

During winter and under dirty and dusty conditions, re-grease the inside square tube every 30 days. Lower the platform to the ground and clean the square shaft with mineral spirits, WD-40 or any good solvent. Once clean, grease the square shaft with a high-grade water-resistant grease, such as boat trailer wheel bearing grease.

NOTE: Your lift was assembled at the factory with Slick 50 "ONE GREASE".

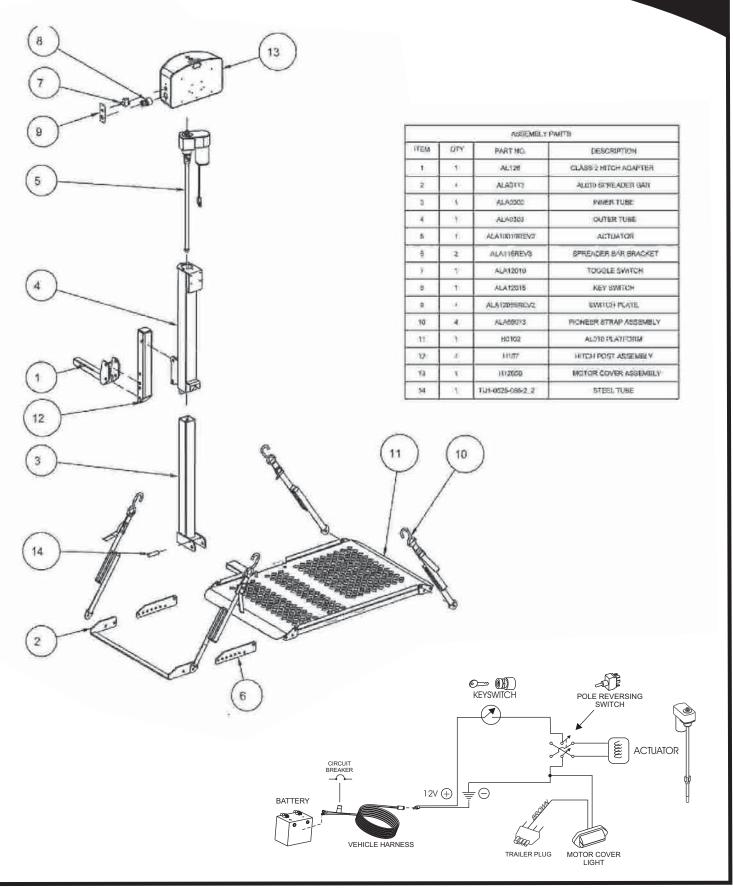
Check for paint chips and touch up any bare metal with a good gloss black enamel or lacquer to inhibit rust. This may be necessary more frequently when subjected to salt air or road salt.

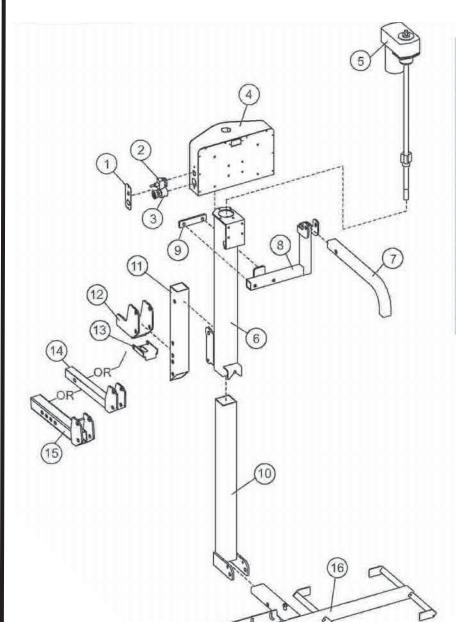
#### Warranty:

This lift is covered by a three year factory warranty on materials and workmanship. Contact your local dealer for more information.

# Troubleshooting Guide

The lift does not operate	Check the power supply. The wiring harness ( both wires ) must be run directly to the battery. Attaching the black ( ground ) wire to the frame of the vehicle is NOT considered a reliable ground. Run the lift from a shop battery and not through the vehicle wiring harness. If this solves the problem, check the vehicle wiring harness for bad connections or broken wires. NOTE: Each lift is equipped with a manual motor override located on the top of the motor box. Simply remove the cap and use a 3/8" socket to manually operate the lift.  CAUTION!! Make sure the key is in the "off" position and no power is connected to the lift. SERIOUS INJURY MAY OCCUR IF POWER RESUMES DURING MANUAL OPERATION OF THE LIFT!
The motor does not lift the platform completely when in use.	Check the wire connections at the battery. Apoor connection will cause the motor to run slow and have less lifting capacity. Run the lift from a shop battery and not through the vehicle wiring harness. If this solves the problem, inspect the entire length of the vehicle harness for breaks, or worn insulation. A good supply of power will ensure full lifting capacity.
The motor works intermittently	Check the ground and power wire making sure that it is securely attached to the battery of the vehicle. Grounding the lift to any other location may cause loss of ground and intermittent loss of power. Check the wires leading to the toggle switch in the motor housing box.  All connections must be securely on the switch.
The platform or hold down arm is not holding upright or is too hard to move.	Check the tension of the pivot point bolts. Two tight, and the movement will be to too hard. Too loose and the part will not stay in the desired position. Tighten or loosen bolts until platform and/or hold down arm operates with some resistance.
There is a ratcheting sound when the lift is all the way up or down.	This is a normal sound. It is the clutch activating when the lift reaches the end position. This sound should only occur when the toggle switch is being pressed and the platform is at its highest and lowest point.
The license plate light does not work.	This light runs from the 4 prong trailer plug located on the vehicle wiring harness that powers the lift. Most hitch installers will install this type of wiring when the hitch is installed. If no such plug exists, it may be wired directly to a tail light or license plate light.
What do I do with the extra length of wire leading to the motor of the lift?	This wire is there in case a Swing Away Option is used with the lift. If a Swing Away is not installed, coil the extra wire and zip tie it to the frame of the lift out of the way of any moving parts. We recommend leaving the wire in case a Swing Away is added to the lift at a later time.
The lift does not reach the ground when lowered completely.	Check the attachment of the Hitch Adapter to the Hitch Post on the back of the lift. The normal range of operation for the lift is 5 to 18 inches to the bottom of the hitch. Any higher vehicles will require a custom bracket.
The lift bottoms out when going over bumps or in driveways.	Check the attachment of the Hitch Adapter to the Hitch Post on the back of the lift. The normal range of operation for the lift is 5 to 18 inches to the bottom of the hitch. The lift should be installed at the highest position possible. Enter driveways at an angle
I have lost my keys.	Contact the dealer where the lift was purchased. If they do no have extra keys in stock, they can get them from the manufacturer.

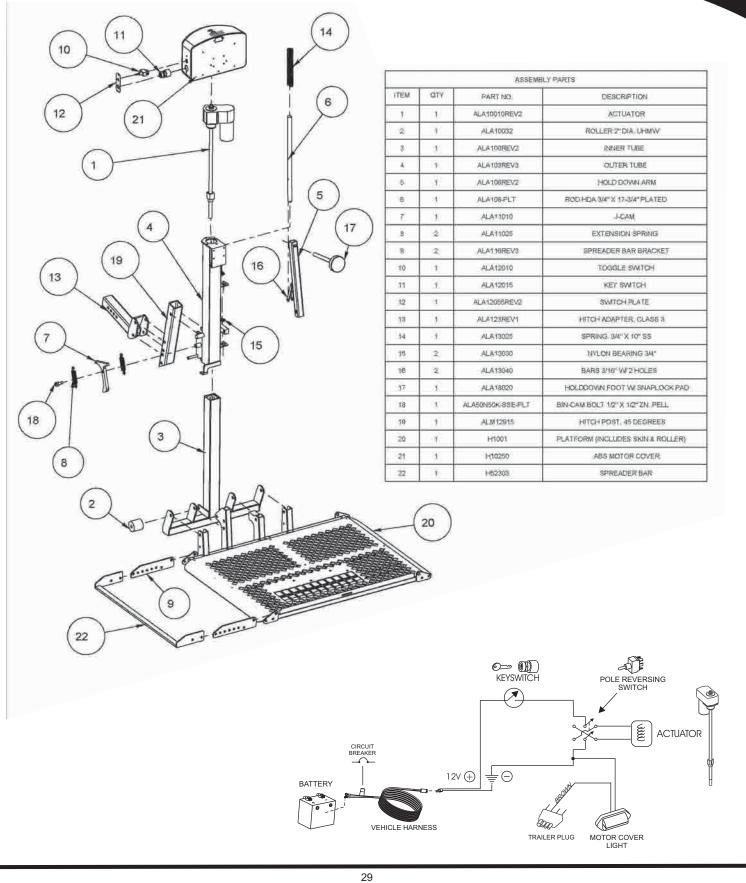


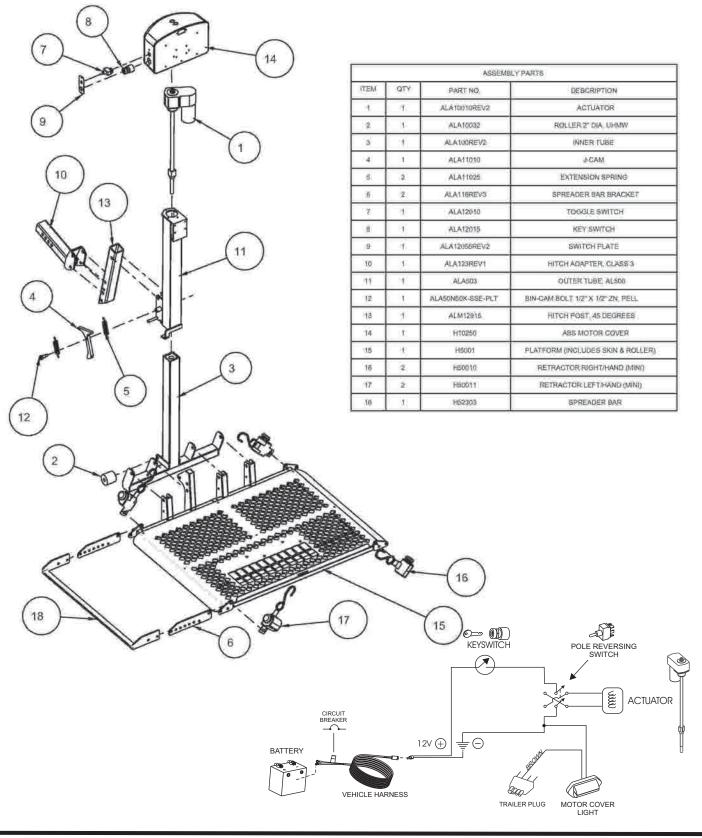


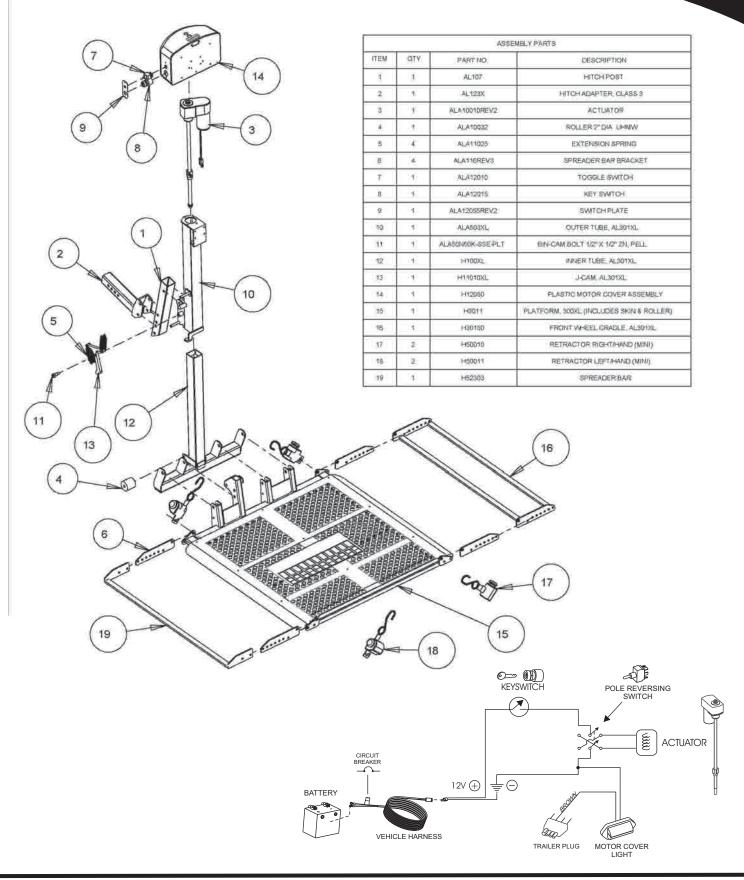
ITEM#	DESCRIPTION	PART#	
1	SWITCH PLATE	ALA12055	
2	TOGGLE SWITCH	ALA12010	
3	KEY SWITCH	ALA12015	
4	MOTOR COVER	ALA12050	
5	ACTUATOR	ALA10010	
6	OUTER TUBE - AL030	ALA0303	
7	HOLD DOWN ARM - AL030	ALA0305	
8	HOLD DOWN ARM MOUNT	ALA0307	
9	HOLD DOWN ARM BACK PLATE	ALA03020	
10	INNER TUBE AL010 / AL030	ALA0300	
11	11 HITCH POST		
12	12 CLASS 1 HITCH ADAPTER		
13	13 CLASS 1 STABILIZER		
14	14 CLASS 2 HITCH ADAPTER		
15	15 CLASS 3 HITCH ADAPTER		
16	16 PLATFORM - AL030		

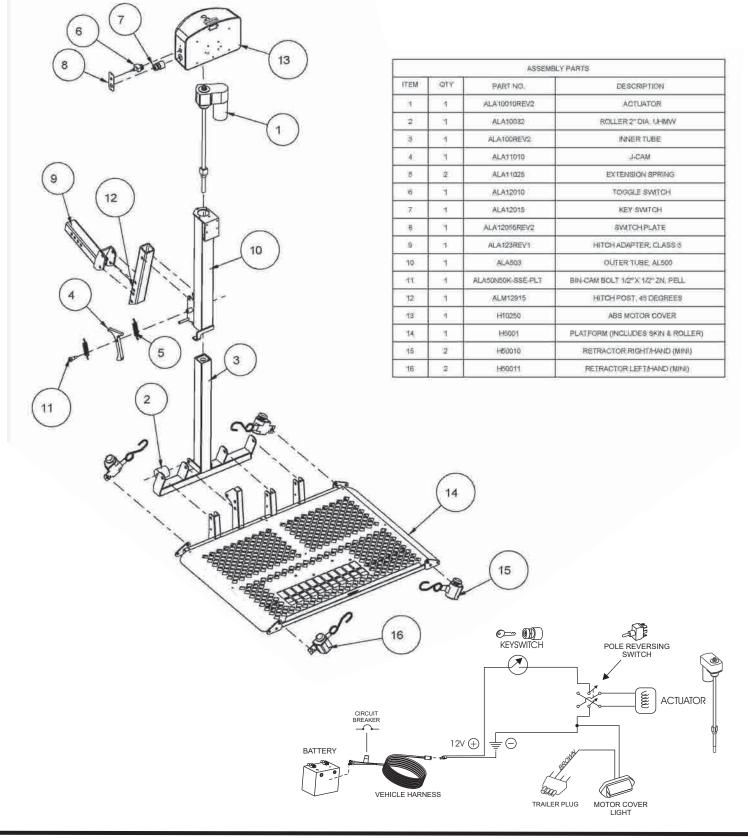
POLE REVERSING SWITCH

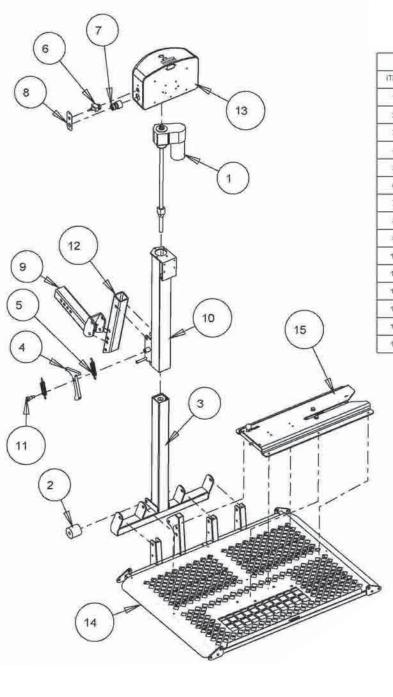
**⊘ ∭** KEYSWITCH



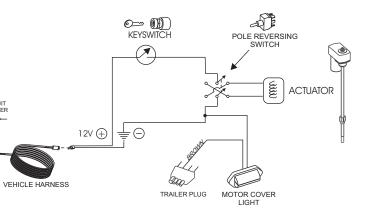


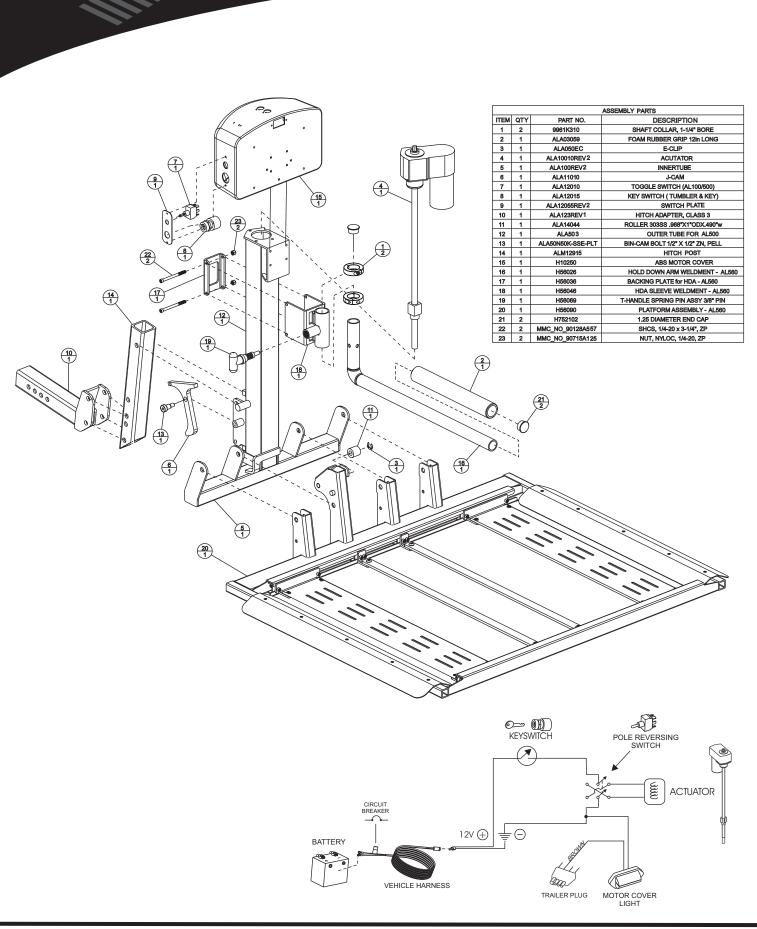


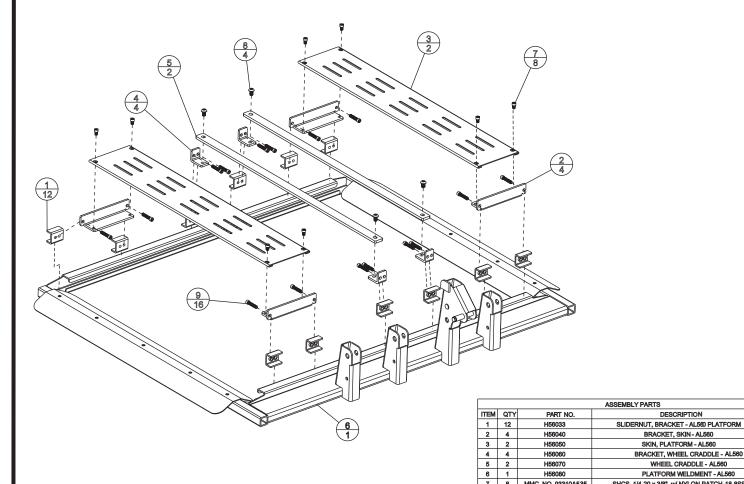




ASSEMBLY PARTS			
ITEM	QTY	PARTINO	DESCRIPTION
191	1	ALA10010REV2	ACTUATOR
2	3	ALA10032	ROLLER 2" DIA: UHMW
3	31	ALA100REV2	INNER TUBE
4		ALA11010	J-CAM
5	2	ALA11025	EXTENSION SPRING
6	1	ALA12010	TOGGLE SWITCH
7	31	ALA12015	KEY SWITCH
8		ALA12055REV2	SWYCHPLATE
.9	4	ALA123REV1	HITCH ADAPTER, CLASS 3
10	1	ALA503	OUTER TUBE
11:	-1	ALASONSOK-SSE-PLT	BIN-CAM BOLT 1/2" X 1/2" ZN, PELL
12	191	ALM12915	HITCH POST_45 DEGREES
13	4	H10250	ABS MOTOR COVER
14	3	H5501	PLATFORM/40X36X11 (INCLUDES SKIN & ROLLER)
15	4.	H5502	AL550 DOCKING STATION, PLATE







H56060

H56070

H56080 8 MMC\_NO\_93310A535 4 MMC\_NO\_93310A578 16 MMC\_NO\_93705A544

BRACKET, SKIN - AL560 SKIN, PLATFORM - AL560

SHCS, 1/4-20 x 3/8", w/ NYLON PATCH, 18-8S BHCS, 5/16-18 x 1/2", w/NYLON PATCH, 18-8S SHCS, 1/4-20 x 1-1/4" w/NYLON PATCH, 18-8S

BRACKET, WHEEL CRADDLE - AL560

WHEEL CRADDLE - AL560 PLATFORM WELDMENT - AL560

## WARNING

YOU MUST HAND WASH OR USE A TOUCHLESS AUTOMATIC CAR WASH TO PREVENT LIFT DAMAGE.

> IF YOU HAVE ANY QUESTIONS REGARDING WASHING A CAR EQUIPPED WITH A HARMAR LIFT PLEASE CALL THE HARMAR TECHNINCAL SERVICES DEPARTMENT

