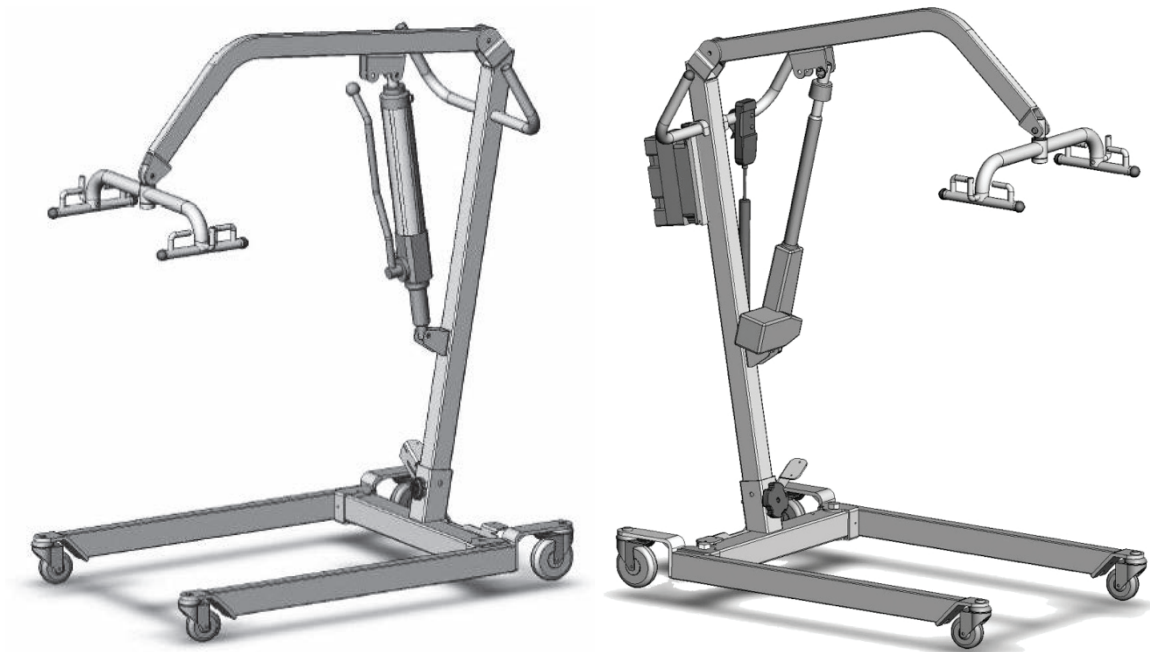


# Alliance™ Hydraulic Patient Lifts



**Models: 1900 / 1908**

**Operator and  
Assembly  
Instructions**

Thank you for choosing the Alliance Hydraulic Lift.

To better serve you, please record the following information:

Dealer Name: \_\_\_\_\_

Telephone: \_\_\_\_\_

Serial #: \_\_\_\_\_

Date of Purchase: \_\_\_\_\_

## **INSPECT YOUR MERCHANDISE**

Upon receipt of your Chattanooga Alliance Hydraulic Lift, verify that all merchandise is complete and free from any shipping damage.

Refuse delivery if the packaging appears to be badly damaged. If the merchandise is received damaged or is missing components, contact the shipping company immediately and file a claim.

For further assistance, contact your local dealer or Product Support at the following:

1-800-494-3395 USA  
chattproductsupport@djoglobal.com

DJO, Inc.  
1430 Decision Street  
Vista, CA 92081 USA  
T: 1-800592-7329 USA  
DJOGlobal.com

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## SAFETY

The Chattanooga Alliance Series of full body patient lifts reflect innovative state of the art design to increase patient mobility. Your Chattanooga Alliance patient lift will provide years of service if it is properly maintained as any piece of electric/mechanical equipment.




Pay careful attention to the following important information regarding the care, maintenance, and operation of the patient lift. Carefully read these instructions before assembling the patient lift, or attempting to lift a patient with the device.

Always keep the Operator's Instructions Manual available with the lift.

## DEFINITIONS & SYMBOLS

In this manual, the user refers to the patient or resident and may be used interchangeably at different times. Caregiver refers to the operator or person who is assisting with the transfer.

Symbols used in this manual and their meanings:

	Warning! Failure to heed this warning may result in damage to the product or serious injury to the operator and/or patient.
	Important instructions! Read and understand the instructions in the manual before using the product.
	Note! Important information concerning the product and its safe, correct usage follows.

**WARNING!**

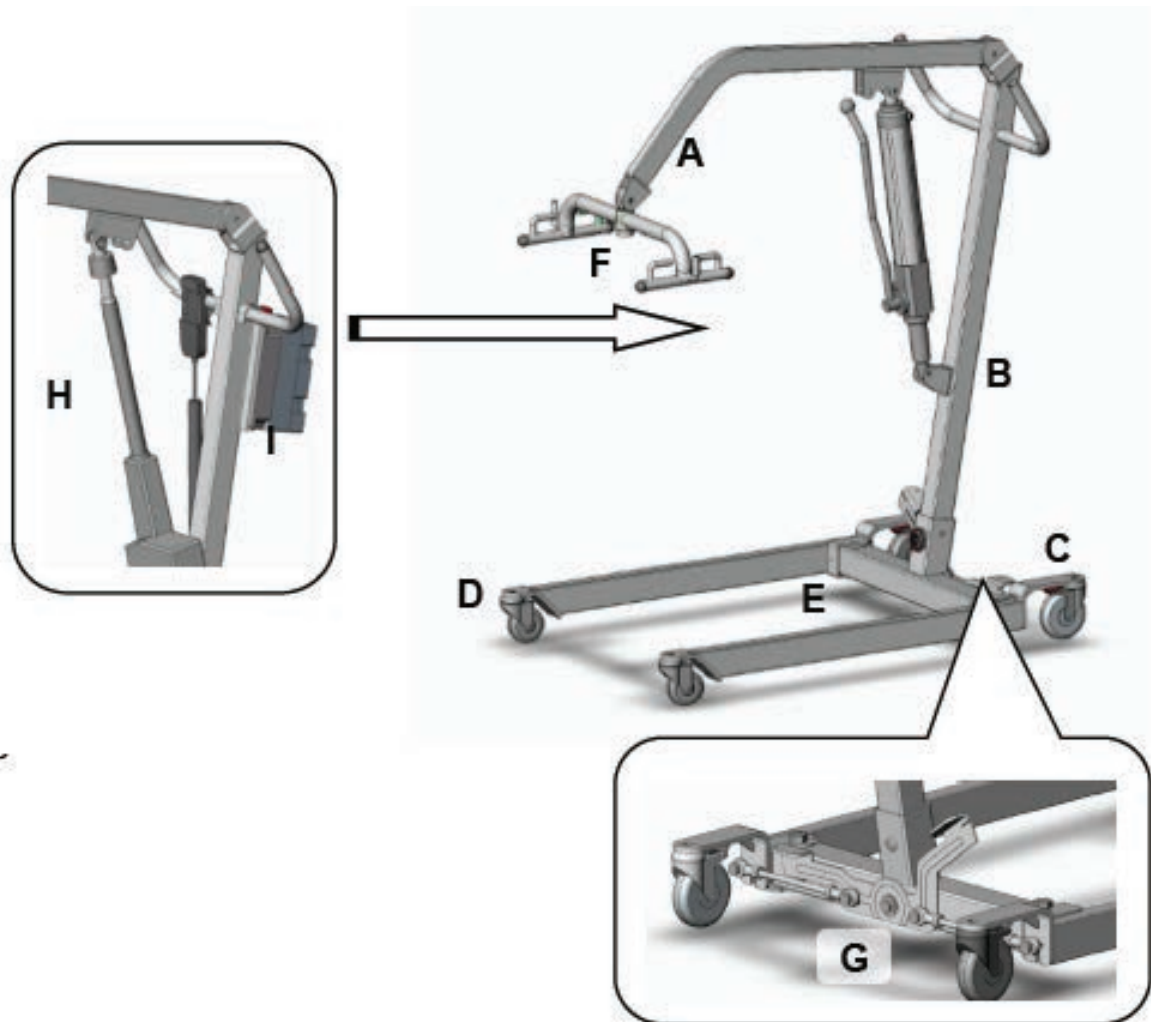
Before attempting to lift anyone, please practice operating the lift. Prior to the actual lift and transfer procedure, read and study the instructions for proper and safe operation of the patient lift. Be able to explain the entire lifting procedure to the patient as well as answer any questions they may have concerning the procedure.

- MAXIMUM Weight Capacity: 400 pounds
- NEVER exceed the maximum lifting capacity indicated on the patient lift or any accessory used in conjunction with the lifter.
- Take special care with users that cannot provide assistance while being lifted. I.e. patients who are comatose, spastic, agitated, or otherwise severely handicapped.
- DO NOT attempt to lift and transfer a patient without their nurse or doctor's prior approval.
- DO NOT place any objects between the sling and the patient. I.e. cushion or padding, etc.
- DO NOT use slings that are not specifically designed tested or approved for use on Chattanooga Alliance patient lifts.
- DO NOT lock caster brakes during lifting.
- Close the base before moving the patient lift.
- ALWAYS keep the suspended patient centered between the base legs.
- DO NOT attempt to roll the lift and casters over floor obstacles when in use.
- DO NOT use patient lift for transportation.
- NEVER interfere with a lift and transfer in process unless instructed to do so.
- NEVER leave the patient unattended during lifting.
- DO NOT attempt to repair or replace parts and components that are not designed, tested or approved for use on Bestcare patient lifts.

## COMPONENTS

Alliance Hydraulic Lift Model Numbers:

- Model 1900 Hydraulic Lift: Retrofit to Battery by ordering the Battery Upgrade Kit, Part Number 1910
- Model 1908 Hydraulic Lift: Model 1908 comes with the Battery Kit installed.
- Model 1910 Battery Upgrade Kit:



- A. Boom
- B. Mast
- C. Caster w/ Brake
- D. Front Caster
- E. Base
- F. Spreader Bar
- G. Foot pedal
- H. Actuator
- I. Control Box for Battery
- J. Hydraulic Pump for Model 1900\*

\*Interchangeable with Battery actuator available with the Battery Upgrade Kit.

## ALLIANCE 1900 ASSEMBLY OVERVIEW

1. Carefully unpack box while saving box and packaging.
2. Follow owner's manual for assembly and use of Alliance 1900.
3. Lock wheels to keep Base stationary.
4. Slide Mast into square sleeve located at rear and center of Base.
5. Fasten the Mast to the Base with the Bolt, Washer, and Black Hand Nut provided. Tighten and secure the Mast by hand.
6. Fasten Boom to Mast using the Bolt, Washer, and Black Hand Nut provided. Tighten and secure the Mast by hand.
7. Attach Spreader Bar to Boom with Keeper Pin and key ring provided.
8. Attach bottom Hydraulic piston rod to the Mast with Keeper Pin and key ring then attach top Hydraulic piston rod to the Boom in the same fashion. See picture below.



NOTE: Turn the lift "ON" by turning the red "RESET" button clockwise. Turn the lift "OFF" by pressing down the "RESET" button.

## ALLIANCE 1908 ASSEMBLY OVERVIEW

1. Carefully unpack box while saving box and packaging.
2. Follow owner's manual for assembly and use of Alliance 1908.
3. Lock wheels to keep Base stationary.
4. Slide Mast into square sleeve located at rear and center of Base.
5. Fasten the Mast to the Base with the Bolt, Washer, and Black Hand Nut provided. Tighten and secure the Mast by hand.
6. Fasten Boom to Mast using the Bolt, Washer, and Black Hand Nut provided. Tighten and secure the Boom by hand.
7. Attach Spreader Bar to Boom with Keeper Pin and key ring provided.
8. Attach Electric Actuator bottom end to the Mast with Keeper Pin and key ring then attach Electric Actuator top end to the Boom in the same fashion. See picture below.
9. Hang Control Box on Lift Handle Bars and plug in the Electric Actuator, Hand Control and Charger.



NOTE: Turn the lift "ON" by turning the red "RESET" button clockwise. Turn the lift "OFF" by pressing down the "RESET" button.

## ASSEMBLY DETAILS



**WARNING!** Do not attempt to remove the lift from the box without assistance. The Lift is approximately 75 lbs. Avoid injury!

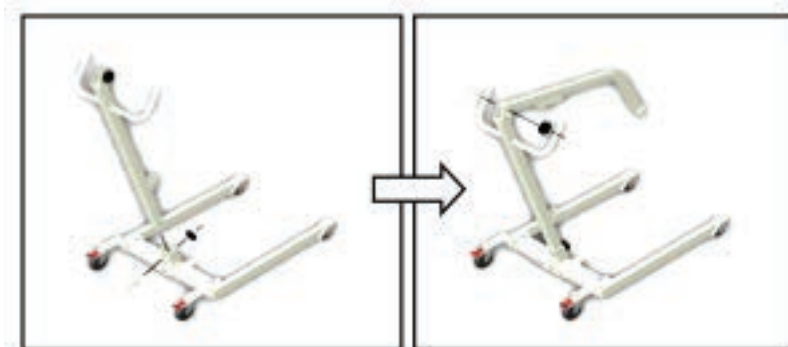
Assemble the Patient Lift in accordance with the following instructions:



**NOTE:** Instructions for the assembly of both models 1900 and 1908 are the same except where noted.



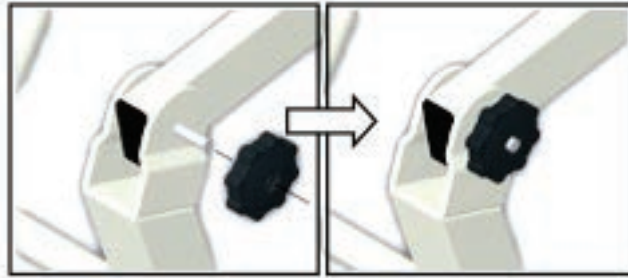
1. Install the Mast into the square sleeve located at the rear and center of the Base. Tighten the black plastic hand nut by hand. The Carriage bolt head should slide into the SQUARE slot.





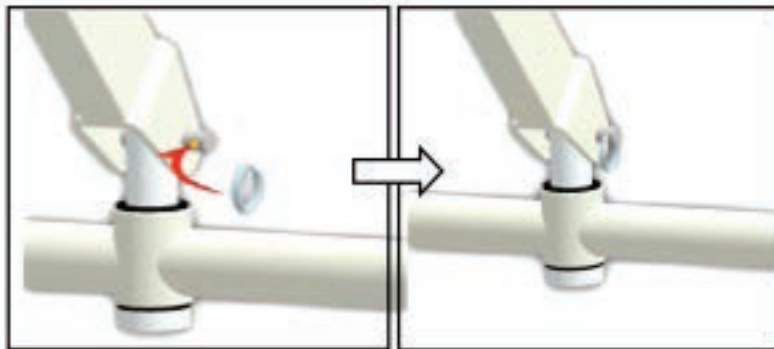
## ASSEMBLY DETAILS (CONT'D)

2. Install the boom between the brackets at the top of the Mast. Fasten with hex bolt, washer, and black plastic hand nut.



Hex Bolt head goes on the side with the small lock screw pre-installed.

3. Install spreader at the end of the Boom and secure it in place with steel pin and key ring.



- The Alliance Hydraulic Patient Lifts come in either the manual hydraulic operation (1900) or the battery powered operation. (1908)

If you have purchased the 1900, you can upgrade to a Battery Powered Lift by contacting your dealer to order the Battery Upgrade Kit Part Number 1910.

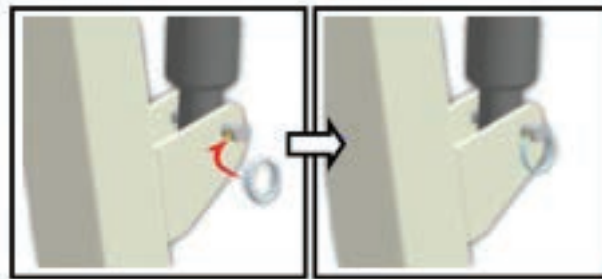
- The Alliance Patient Lift is ready to use as soon as the Hydraulic Pump or Battery Actuator is installed and the connections between the Base & Mast, Mast & Boom, and Boom & Spreader bar are secured.
- No tools are necessary to assemble the lift. Assembly can be accomplished with the supplied hardware. If you have any questions contact your dealer.

## ASSEMBLY DETAILS (CONT'D)

### 4. Installation of Hydraulic Pump or Battery Actuator.



- Attach bottom piston of either the Hydraulic Pump or Battery Actuator by sliding it between the Mast brackets. Secure with steel pin and key ring.

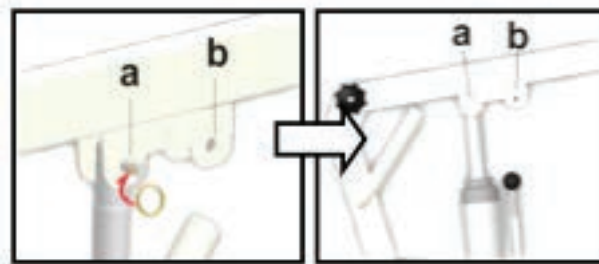


- Both Hydraulic Cylinder and Battery Actuator attach to the SAME bottom bracket.
- Attach the bottom end of the of the Hydraulic pump or Actuator between the Boom bracket and secure with steel pin and key ring.

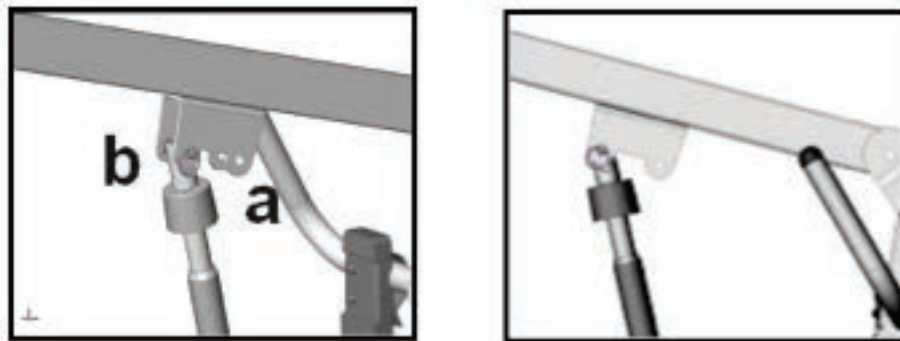
## ASSEMBLY DETAILS (CONT'D)

5. The top end of the Hydraulic Cylinder must be attached to the Boom bracket slots nearest the Mast. The Actuator must be attached to the Boom bracket farthest away from the Mast. This is indicated by the label next to the Boom bracket.

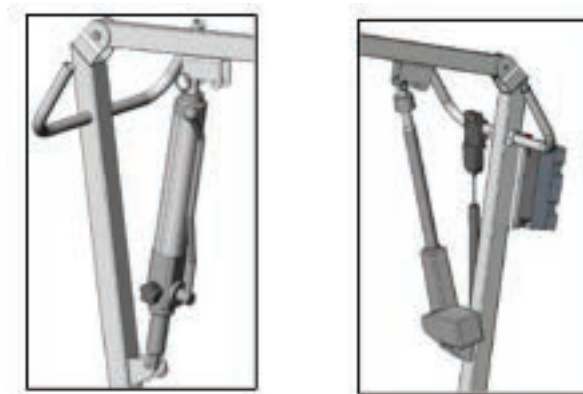
- Hydraulic Cylinder shall be installed at position: a



- The Battery Actuator shall be installed at position: b



- Incorrect installation may result in damage to the equipment or pose a safety risk.



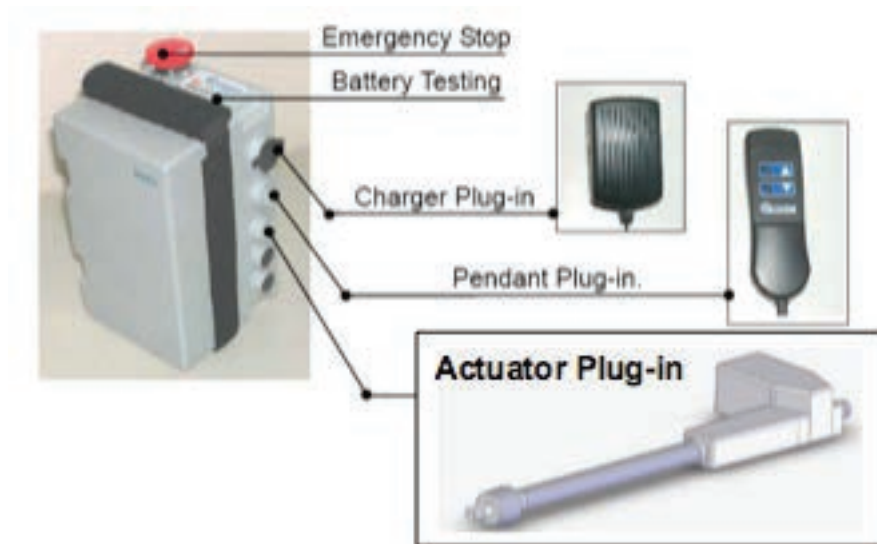
- After installing the Hydraulic Cylinder, the assembly of the Hydraulic powered lift is complete. The following assembly instructions apply to 1908 and Battery Upgrade Kit users only.

## ASSEMBLY DETAILS (CONT'D)

6. Install the Control Box and Hand Control. These instructions apply to Model 1908 and Battery Upgrade Kit owners only.

- Attach the Control Box hangers to the Control Box
- Hang the Control Box by the hangers on the handlebars of the lift.
- Insert the Hand Control plug into the second port from the top.
- Insert the Actuator Plug into the third port from the top
- For the Actuator to function properly, the plug must be inserted all the way in the first port until the Black O-ring is no longer visible.
- The first port is used for the Charger and the remaining ports are unused.

Diagram of Control Box:



7. Install the Spreader Bar as in the following picture.



## MAINTENANCE AND INSPECTION CHECK LIST

The operator of the lift is to inspect the lift in the following areas before each use.

- Check all bolts for tightness.
- Make sure the base can be easily widened, and that all lift parts are in place.
- Make sure all casters turn freely, and that the caster brakes can be engaged.
- Make certain all necessary items (i.e. slings, wheel chairs, etc.) are accessible and ready for use.
- Check No Tool Hand Nuts also.
- At least once a month, the lift should be thoroughly inspected by a person qualified to recognize any signs of wear, and looseness of bolts or parts.
- Replace any worn parts immediately.
- To lubricate, place a drop of oil on the following points: Top of Mast, Spreader Hinge, and Caster Axles, after the patient lift is assembled, and every month thereafter.

### Checking The Battery:

1. Check batteries by pressing the Battery Testing Button (blue circle with a battery sign) on the control box.
2. Batteries are fully charged when all lights on the Battery Indicator are "ON".
3. Charge batteries when Indicator shown only one "GREEN" light.
4. Do not use the lift when no "GREEN" light is shown. Charge the batteries immediately.
5. Replace batteries when frequent charging is needed.

### Battery Indicator Lights:

RED	AMBER	GREEN	GREEN	GREEN	NOTES
ON	ON	ON	ON	ON	Fully charged
ON	ON	ON	OFF	OFF	Need charge
ON	ON/OFF	OFF	OFF	OFF	Charge immediately, don't use lift
OFF	OFF	OFF	OFF	OFF	Bad batteries or bad connection

## WARNING BUZZERS

The Control Box has a buzzer that provides information on the status of the batteries and the lift.

To stop the buzzer, push down the RESET button or press the Battery Indicator.

BUZZER TYPE	INDICATION	NOTES
2 beeps/sec	Low Battery (red/amber lights on)	Charge batteries immediately
3 beeps/sec	Low Battery (red light on)	Charge batteries immediately.
6 beeps/sec	Very Low Battery (no light on)	Charge batteries immediately.
3 beeps every other second	Bad Battery (no light on)	Replace batteries
3 long beeps	Overloaded. Batteries are charged but lift does not lift.	Exceeded maximum load capacity.

### Charging the Batteries:

1. Ensure the power is switched "ON" (the red "RESET" button should be up).
2. Insert charging plug into charging port on the Control Box.
3. Plug charger to power supply.
4. All lights of battery indicator should be "ON" while charging.
5. It takes approximately 2-3 hours to fully charge the batteries from one green light.
6. It takes approximately 7-9 hours to fully charge the batteries from the red light.
7. Do not leave the batteries charging for an extensive period of time. This will shorten the life of the batteries.
8. Do not let the batteries run down to the last red light. This might shorten the life of the batteries or damage the batteries.
9. Unplug the charger first before using the lift.

### Important Notes On Charging Batteries:

- Push lift to charging location and charge the batteries with the charger provided. Avoid unplug hand control and motor from control box. Frequent plug/unplug of the hand control and motor into/from the control box may damage the control box.
- Do not charge batteries over 12 hours.

## OPERATING INSTRUCTIONS

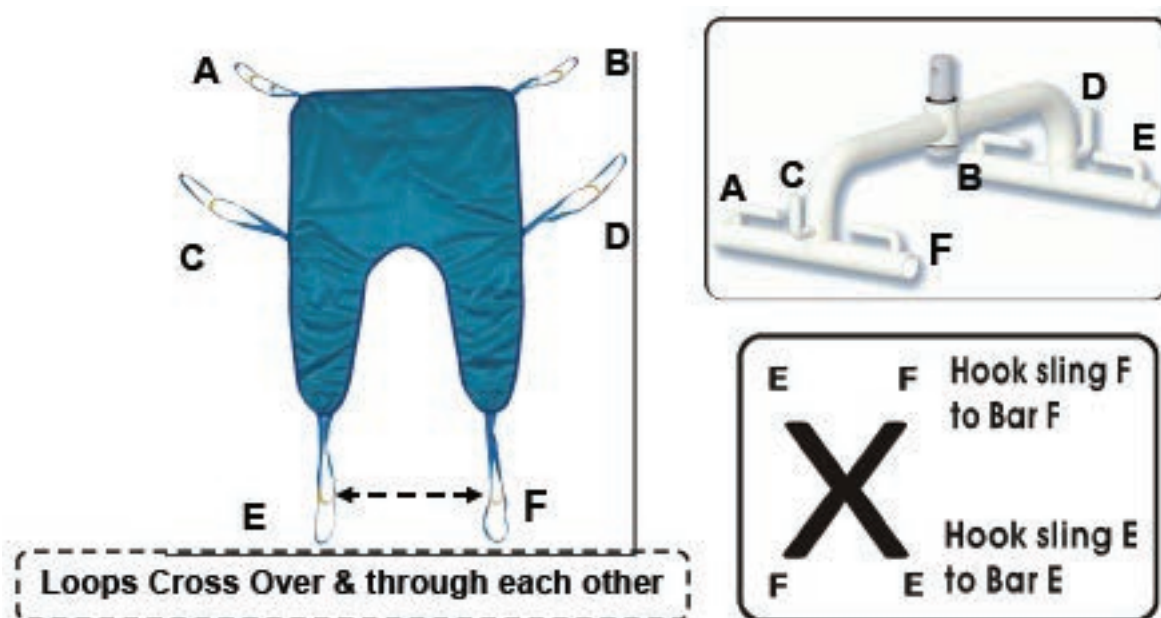
### MAINTENANCE SCHEDULE

Item	In the Beginning	Monthly	Every 3 Months
Boom & Spreader Bar: Check connections between 1) Boom and Spreader Bar 2) Boom and Mast for improper or loose connection, or wear. 3) Check the Boom for bending and deflection.	X  X	X  X	
Mast: 4) Check the Mast for bending or deflection. 5) Check the steering bar for damage or loose screws.	X X	X X	
Base & Foot Peddle: 6) Check bolts and nuts for loose connections. 7) Check casters and axle bolts for tightness. 8) Check rubber parts on the casters for deflection. 9) Apply grease to caster ball bearings as needed.	X X X	X X	X X
Cleaning: 10) As needed.			X
Actuator & Control Box: 11) Confirm the control box is firmly affixed to the mast. 12) Confirm the Actuator is firmly affixed to the Boom and the Mast. 13) Verify the actuator and the control box have a solid connection. 14) Confirm the Battery Indicator has least 2 green LED lights illuminated prior to use.	X X X X	X X X X	
Slings & Sling Hardware: 15) Check sling for wear. 16) Check sling hardware every time before use.	X X	X X	

## SLING APPLICATION

To place the patient in a sling:

- Roll patient onto the opposite side and position the patient on the flat section of the sling. This will allow to unroll the remainder of the sling from the other side of the patient.
- Once the sling has been positioned centrally, feed the leg sections under the thighs and draw the sections up between the thighs. Raise and lower the head of the bed if this function is available.
- Move the lift slowly towards the patient, and position the spreader bar over the patient's chest.
- Attach Loops to Spreader Bar:
  - Notice Loops on sling attach to Spreader Bar Hooks A & C and B & D as shown below.
  - The Bottom two Loops E and F are connected to opposite Hooks on the Spreader Bar after passing one Loop through the other.



- Check the sling's central positioning by comparing the lengths of the leg sections when they are drawn forward.
- If the leg sections are not equal in length, reposition the sling.
- From between the legs, gently pull the sling up the inner thigh. Ensure the leg sections are positioned midway under the thighs to provide good support and greater comfort.



## TRANSFER FROM BED

- See the Sling Application section for directions on how to place the patient in the sling.
- While lifting, unlock the wheels and spread the base while lifting. Use the foot pedal to control the base width.
- Lift the patient above the bed by using the Hand Control or Hydraulic pump handle.
- If transferring the patient into a wheelchair, use the foot pedal on the lift to widen the base width.
- Pull lift away from bed.
- Position patient over the wheelchair or chair then lower the patient onto the chair.



**Note:** Reverse the above procedures when returning the user/patient to bed. There must always be at least one caregiver present when lift is in use.

## TRANSFER FROM SEATED POSITION TO SEATED POSITION

- See the Sling Application section for directions on how to place the patient in the sling.
- While lifting, unlock the wheels and spread the base while lifting. Use the foot pedal to control the base width.
- Lift the patient above the wheelchair or chair by using the Hand Control or Hydraulic pump handle.
- Pull lift away from the wheelchair or chair.
- Position patient over the wheelchair or chair then lower the patient onto the chair. Always close base before transferring patient. Foot pedals control base width.



**Note:** Reverse the above procedures when moving the patient to another seated position. There must always be at least one caregiver present when lift is in use.



**Note:** Reverse the above procedures when moving the patient to a different seated position.

## TROUBLESHOOTING GUIDE

The following list of encountered problems and solutions will assist you in determining what may be causing your patient lift not to function as designed. If you have a problem occurring that is not listed below please contact your dealer for help.

Do not attempt to repair components or parts on your lift as this may invalidate your warranty or cause further problems that may result in patient injury. Stop using your lift immediately if it is not functioning correctly or any warning beeps are heard.

I need to re-charge my batteries often or they fail to hold a charge when I charge them.

- Replace the 2 internal batteries as they are at the end of their life cycle.
- Batteries should be changed every 18-24 months depending on usage.

When I plug my charger into the control box I see no lights on the battery indicator?

- Check to make sure the red re-set button is in the up position.
- Check to make sure the charger is firmly in the control box and plugged into a wall socket.
- Replace your charger as it is at the end of its life cycle.
- If your charger is transmitting current then you need to replace your PCB board in the control box.

My actuator makes a clicking sound when I attempt to use my lift.

- Check to make sure the actuator plug is pushed into the control box so the O Ring is not visible.
- Your actuator needs to be replaced as it is at the end of its life cycle.
- Your PCB board in the control box may be malfunctioning.

The actuator will either go up or down but not both.

- Replace your hand control as it is at the end of its life cycle.
- Your PCB board in the control box may be malfunctioning.

There is a grinding sound inside the actuator when lifting.

- Replace your actuator as the internal gears are stripped.

The actuator stops and starts while lifting or lowering.

- Replace your batteries as they are at the end of their life cycle.

## TROUBLESHOOTING GUIDE (CON'T)

My lift will not operate even though it shows the batteries are charged.

- Disconnect your charger from the control box as the lift will not work when the charger is attached.
- Check to make sure the hand control is properly inserted to control box.
- Check to make sure your actuator is properly connected to the control box.
- Your hand control needs to be replaced as it is at the end of its life cycle.

My lift will not operate and battery indicator has no lights illuminated.

- Check to make sure the red re-set button is in the up position.
- The internal batteries may not be connected together properly with the connection wires.
- Batteries will no longer hold a charge and must be replaced.
- Your PCB board is damaged and must be replaced.

When lifting I hear 3 long beeps from the control box.

- You are attempting to lift someone heavier than the safe working load.
- Stop the lift and lower safely to bed or chair immediately.

When lifting I hear short beeping sounds from the control box.

- Charge the batteries.
- Replace the batteries if they fail to hold a charge.



### Hydraulic Pump Troubleshooting:

Hydraulic Pump won't lift Boom:

- Turn Release Knob counter-clockwise fully until it stops. Pump handle 5 times. Tighten the valve. The Hydraulic pump should now rise or lower.

Air is trapped in Hydraulic Cylinder:

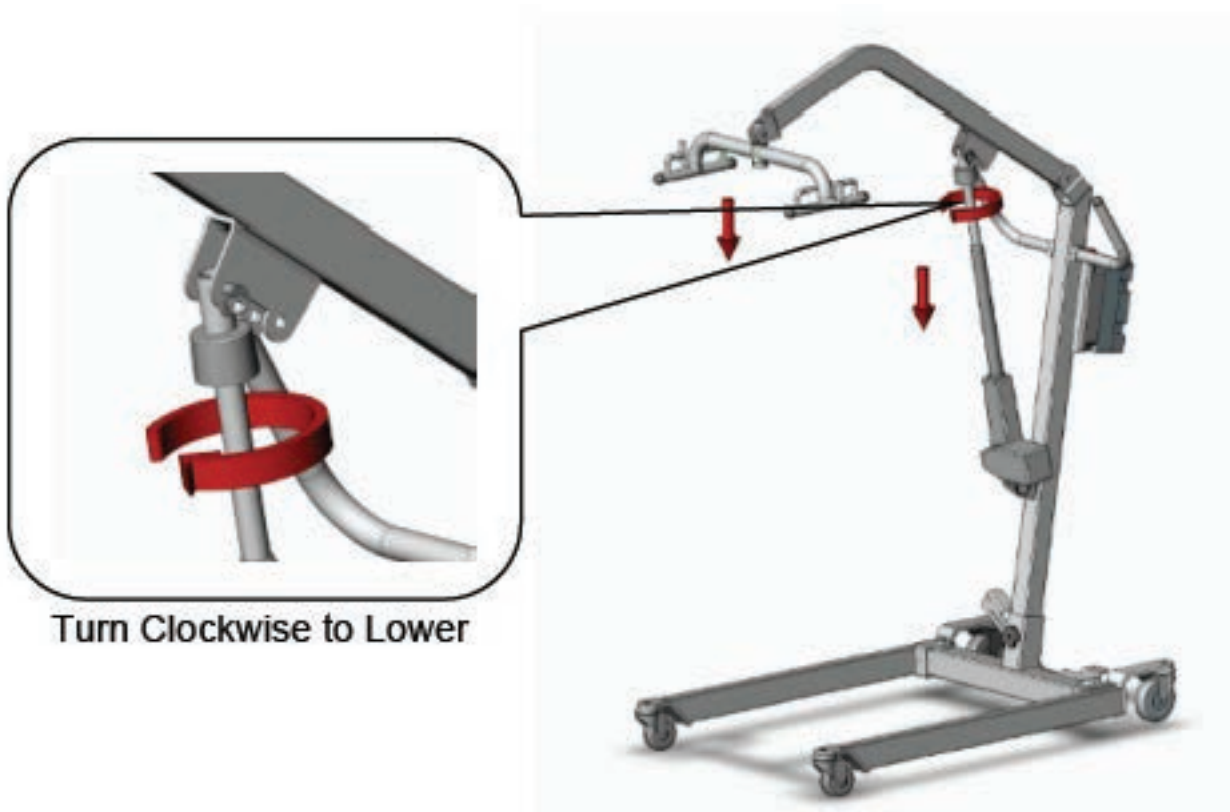
- Turn Release Bolt on top counter-clockwise.
- Let pump return to the lowest position.
- Tighten Release Bolt.

If there is any problem you could not solve, please contact the dealer for assistance.

## EMERGENCY LOWERING MECHANISM

In case of lift failure while using the Alliance Patient Lift 1908, please follow the procedures below to safely lower the user:

- The Emergency Lowering Device is located at the top of the actuator shaft.
- It is intended for use if the actuator fails to operate while a patient is suspended. The device consisting of a plastic collar ring should be turned clock-wise continually until the patient has been lowered.
- Contact your dealer immediately if standard troubleshooting techniques do not correct the failure. Do not attempt to lift until all failure issues have been safely resolved.



**Note:** The Emergency Lowering Device is intended for use during lift failure. The Emergency Lowering Device will allow lowering of patients only. Please contact your dealer immediately in case of failure.

## WARRANTY AND RETURN GOODS POLICY

**LIMITED PRODUCT WARRANTY.** Subject to the terms below, DJO, LLC (“Company”) provides the following limited product warranty relating to Chattanooga Alliance Patient Lifts (“Products”).

- Lift frames and spreader bar: 3 years
- Actuator: 2 years
- Parts including casters, control box, PCB, pendant, charger: 2 years
- Batteries: 1 year
- Weigh Scale: 2 years
- Stand Aid all components: 2 years
- Hydraulic pumps: 1 year
- Slings: 6 months

The above warranty periods commence on the date of the original customer purchase of the Product from Chattanooga or an authorized Chattanooga dealer. In the event of a defect in material or workmanship, Company will repair or replace the defective component or the Product, at Company’s option, without charge to customer, and Company shall be responsible for shipping expenses for defective Products that are returned by the customer at Company’s request and for shipping expenses for repaired or replaced Products that are shipped to the customer.

To make a warranty claim, Company’s Customer Care Department or Company’s authorized dealer which sold the Product must be notified of the defect during the applicable warranty period above. Products may not be returned by customer without a return authorization number. Products that are returned for a warranty repair are typically repaired within 30 days from the date the Product is received by Company, Company’s dealer or Company’s certified service center.

This warranty will be void if repairs or Product modifications are made by anyone other than Company, Company’s dealer, or Company’s certified service center.

This warranty does not cover: (1) replacement parts or labor furnished by anyone other than Company, Company’s dealer, or Company’s certified service center, (2) defects or damage caused by labor furnished by anyone other than Company, Company’s dealer, or Company’s certified service center, or (3) any malfunction or failure in a Product caused by abuse, accident or misuse, including but not limited to, the failure to provide required maintenance or any use that is inconsistent with the Product User Manual. Company is not responsible for injury, death or damage resulting from Product modifications or repairs performed by service personnel which have not been authorized by Company. This warranty extends to the original customer and is not transferable. This paragraph states the entire warranty relating to the Product, and Company does not authorize any person or representative to modify this warranty.

COMPANY HEREBY DISCLAIMS ANY OTHER EXPRESS OR IMPLIED WARRANTIES NOT SET FORTH IN THE FOREGOING LIMITED PRODUCT WARRANTY, INCLUDING, BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. COMPANY WILL NOT BE LIABLE FOR ANY INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES OR LOST PROFITS, CAUSED BY ANY PRODUCT DEFECT WHETHER CLAIMS ARE BASED UPON TORT (INCLUDING NEGLIGENCE), WARRANTY, CONTRACT OR OTHERWISE, EVEN IF COMPANY HAS BEEN ADVISED OF SUCH POTENTIAL LOSS OR DAMAGE. TO THE EXTENT THE FOREGOING DISCLAIMERS ARE NOT ALLOWED BY APPLICABLE LAW, ANY IMPLIED WARRANTIES WILL BE LIMITED TO THE DURATION OF THE EXPRESS LIMITED WARRANTY PERIODS APPLICABLE TO THE PRODUCT STATED ABOVE. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, OR THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES SO THE ABOVE LIMITATIONS MAY NOT APPLY TO CUSTOMER.

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