

# Alliance<sup>™</sup> Full Body Patient Lifts



# Models:

# Legacy Series

1902 - 400 lb
1924 - 500 lb
1904 - 600 lb

**Performance Series** 

1926,1925 - 400 lb 1922,1923 - 500 lb 1921,1920 - 600 lb

Operator Instructions

#### Thank you for choosing Chattanooga Alliance Patient Lift!

b better serve you, please record the following informatior	1:
Dealer Name:	
Telephone:	
Serial #:	
Date of Purchase:	

# **INSPECT YOUR MERCHANDISE**

Upon receipt of your Patient 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.
i	Important instructions! Read and understand the instructions in the manual before using the product.
Í	Note! Important information concerning the product and its safe, correct usage follows.

# **PRODUCT FEATURES**

### **Description & Applications**

Designed to provide the perfect combination of patient safety, weight capacity and maneuverability. This lift is manufactured to meet the needs of the general patient population in hospitals and nursing homes. Caregivers appreciate the ease of operation and patients are reassured by the stability and overall comfort provided.

- 400, 500, and 600 lb safe working loads
- Heavy duty multi tilt spreader bar
- Low base
- Digital scale accessory
- Emergency lowering device

#### *Please Note the Following:*

- Special care must be taken with users/patients who cannot themselves provide assistance while being lifted. (i.e. patients who are comatose, spastic, agitated, or otherwise severely handicapped.)
- The patient lift should be used solely for transferring a user/patient from one utility (beds, chairs, toilets, etc.) to another. The patient lift should not be used for transporting or moving any patient from one location to another location.
- During lifting or lowering, whenever possible, always keep the base of the lift in the widest position.
- The base of the lift should be closed before moving the lift.
- Do not roll casters over any object while the user/patient is in the sling.
- Do not lock casters during lifting.
- While being lifted in a sling, always keep the user/patient centered over the base and facing the caregiver operating the lifter.
- Never leave the user/patient unattended during lifting.

The Full Body Lift allows a person to be lifted and transferred safely, with minimum physical effort provided by the caregiver. Before attempting to lift anyone, please practice operating the lift. Also prior to actual lifting, explain the lifting procedure to the user/patient.



Prior to assembly, unpack all parts from the shipping carton and check for any missing parts. Contact you dealer immediately if a part is missing.

# **SPECIFICATIONS & OPTIONS**

Control Box	Legacy-Series	Performance-Series	
Input Voltage	220-240VAC 50Hz / 110- 120VAC 60Hz	220-240VAC 50Hz  / 110-120VAC 60Hz	
Output Voltage	24 VDC	24 VDC	
Battery Pack	24 VDC 5AH	24 VDC 5AH	

Specifications	400 Lb.	500 Lb.	600 Lb.
Maximum Safe Load Capacity	400 Lb.	500 Lb.	600 Lb.
Max. height of spreader bar	68″	75.4″	81″
Min. height of spreader bar	28″	22.4″	27″
Base closed external width	26″	26″	27.6″
Base open external width	37″	41″	38″
Base height clearance	4.7″	4.5″	4 .5″
Mast height	48″	49.8″	50.1″
Overall length	40″	47″	49.6″
Dual front casters	No	Yes	Yes
2 Point Spreader Bar	Optional	Yes	Optional
6 Point Spreader Bar	Yes	Optional	Yes
Emergency Release	Yes	Yes	Yes
Weigh Scale	Optional	Optional	Optional

\*Chattanooga is committed to continuous improvements of our products therefore the specs, dimensions, and features listed above are for guidance only and subject to change without prior notice.

### **PARTS LISTS**

Here are the Parts Lists for the following Patient Lifts:

- 400 lb
- 500 lb
- 600 lb

# Parts List for 400 lb

- 1. Boom
- 2. Mast
- 3. Base
- 4. Spreader bar w/ Sling hooks
- 5. Pendant / Hand Control
- 6. Actuator
- 7 Control box and Battery Pack (control box and battery pack may vary depending on if it is a Legacy or Performance electronic system. The location of the electronics remain the same.)
- 8 Rear Caster w/ Brake
- 9. Front caster

# Parts List for 500 lb

- 1. Boom
- 2. Mast
- 3. Base
- 4. Spreader bar w/ Sling hooks
- 5. Pendant / Hand Control
- 6. Actuator
- 7 Control box and Battery Pack (control box and battery pack may vary depending on if it is a Legacy or Performance electronic system. The location of the electronics remain the same.)
- 8 Rear Caster w/ Brake
- 9. Front dual casters





# PARTS LISTS (CONT)

# Parts List for 600 series

- 1. Boom
- 2. Mast
- 3. Base
- 4. Spreader bar w/ Sling hooks
- 5. Pendant / Hand Control
- 6. Actuator
- 7 Control box and Battery Pack (control box and battery pack may vary depending on if it is a Legacy or Performance electronic system. The location of the electronics remain the same.)
- 8 Rear Caster w/ Brake



# **STEP BY STEP ASSEMBLY**

# Step 1

- Engage the brakes.
- Remove the bolts from the bottom of the mast and base.
- Pull the Mast to an upright position.
- Re-insert the bolts into the holes at bottom of the mast and tighten the nuts.



# Step 2

- Attach boom to top of mast.
- Re-insert the bolts into the holes at bottom of the mast and tighten the nuts.



# Step 3 SPREADER BAR ASSEMBLY FOR 400 lb & 600 lb

- Attach the spreader bar to the boom and insert pin.
- Insert keeper ring to secure spreader bar to boom.



#### SPREADER BAR ASSEMBLY FOR 500 lb

- Attach the spreader bar to the boom and insert pin.
- Insert keeper ring to secure spreader bar to the boom.



Step 4

# ACTUATOR ASSEMBLY FOR 400 lb

#### Α.

- Attach the bottom of Actuator to the bracket on the Mast and insert pin.
- Insert keeper ring through hole in pin to secure base of actuator.



# В.

- Attach the top of the Actuator to the bracket on the Boom and insert pin.
- Insert keeper ring through hole in pin to secure actuator to upper bracket.



# ACTUATOR ASSEMBLY FOR 500 lb & 600 lb

- Α.
- Attach the bottom of Actuator to the bracket on the Mast and insert pin.
- Insert keeper ring through hole in pin to secure base of actuator.



# В.

- Attach the top of the Actuator to the bracket on the Boom and insert pin.
- Insert keeper ring through hole in pin to secure actuator to upper bracket.



#### **Step 5** Control Box Installation for Performance Series

- Install the control box.
- Slide the control box over and onto the metal tab mounted at the bottom of the Mast.
- Line up the control box with the hole at the top of the mast and insert the screw to hold the control box in place.
- Secure the control box by turning the lock mechanism into the lock position.







#### **Control Box Features:**

- Smart charging function for longer battery life
- Battery capacity indicator on battery pack
- Soft start and stop for lifting actuator
- Soft and Hardware over-current protection
- Actuator's Over-duty protection with sign on LCD
- Emergency stop button interrupts the power supply to the actuator and makes the actuator stop immediately in case of sudden danger
- Internal charger
- LCD-display showing battery capacity and indication when the battery needs recharging.
- Audible alarm for low battery capacity
- Standard protection class: IP 66
- Pulling-proof design to lock the AC plug

**Step 7** Tighten all nuts and make sure lift is sturdy before use.

# **CONTROL BOX OPTIONS**

# **Option 1 - Control Box LCD Indicators**

Low Batt.		
KG !	Overload	
	Battery Volume	
ß	Overused	
low battery	Battery Low (Blink)	

ltem	Capacity	Function
	90%	Battery is charged to around 90%
	70%	Battery is charged to around 70
	50%	50% Battery Capacity Remaining Charge batteries immediately.
•	25%	25% Battery Capacity Remaining Charge batteries immediately.
	10%	Battery is charged to around 10% Buzzer beeps / Only lowering possible
Low Batt.	0%	Power off

# **CONTROL BOX OPTIONS**

# **Option 2 - Emergency Stop for Performance Electronics Only**

Emergency stop button interrupts the power supply to the actuators and makes the actuators stop immediately in case of sudden danger.

press RED button

turn RED button clockwise





NOTE: It is strongly recommended that the button is pressed down when the lift will not be used for over three days to maintain optimal battery life and performance.

#### **Option 3 - Features of Power Plug**

C-CLAMP:

• when the battery is being charged, insert this C-clamp to secure the power plug

WATERPROOF COVER:

• when control is not being used, the cover should be closed to prevent water ingress.



#### **Option 4 - Remove and Insert Battery Pack:**

REMOVE : press button A and pull out in the up direction (Fig.1)

INSERT:

- put the battery pack all the way down to position as shown in Fig.2
- slide into direction C while having the release button pressed (Fig.3)
- make sure the battery pack won't slide back off by pulling the battery pack without pressing the release button B.



# **CONTROL BOX OPTIONS (CONT)**

#### **For Legacy Series**

Attach the Control Box Hanging Bracket to the Mast and tighten the nuts. Once the bracket is secure, then place the Legacy Electronic Box inside.



# **Control Box Plug-Ins**



#### **Checking the Battery:**

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



# **CONTROL BOX OPTIONS (CONT)**

#### **CHARGING THE BATTERY**

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

#### What Your Battery is Telling You:

RED	AMBER	GREEN	GREEN	GREEN	
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 THE LIFT
OFF	OFF	OFF	OFF	OFF	BAD BATTERIES OR BAD CONNECTION

#### Warning Buzzers

The control box has a buzzer that provides you with information on the status of the batteries and the lift.

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

<b>BUZZER TYPE</b>	INDICATION	NOTE
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.

# Notes on Charging:

- 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**

# PREPARATION BEFORE LIFTING

- Turn on the power by twisting the RED RESET BUTTON clockwise.
  - Press the UP or DOWN button on the hand control once. Check if the battery indicator lights are on.
  - Position the base of the lift around or under the object.
  - Widen the base and engage the caster brakes.



# NOTE:

- Double check all assemblies for tightness and read operating instructions carefully prior to use.
- Do not attempt to use patient lift unless the patient exhibits control over the upper body, strength to grasp the handles, ability to bear some weight and flexibility in knees, hips, and ankles.



- Do not attempt to transfer a patient without prior approval of the person's nurse.
- Also, do not transfer without having studied the instructions and performed several practices in operating the Patient Lift product.
- Together (with the patients doctor, nurse, or medical attendant) select a sling that is both practical and comfortable. The sling selected should be one that serves the needs of the patient, while providing the patient with optimal safety. Never interfere with the lift, unless instructed by the attendant.
- Have a doctor, nurse, or medical attendant (experienced in the use of the Alliance Patient Lifts) present during the first few times the lift is used to transfer a new user.

#### LIFTING A PATIENT WITH A SLING

#### Turn the Patient Lift ON

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

#### Transfer Patient From Bed

- Patient should be in the center of the bed.
- Position patient onto his/her side by rolling patient towards you.
- Roll the sling in half, approximately. The handle on the back section should face outward when the sling is fitted.
- Position the sling under the patient so the commode aperture aligns with the base of the spine and top of the sling close to the neck.
- Roll patient onto the opposite side and position him/her on the flat section of the sling. This will allow you to unroll the remainder of the sling from the other side of the user.
- Once the sling has been positioned centrally, feed the leg sections under the thighs and draw them up between the thighs.
- Raise 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.

# Sling Attachment Intructions - 6 Point Spreader Bar

- Attach Loop A of the sling to Hook A on Spreader Bar
- Attach Loop B to Hook B
- Attach Loop C to Hook C
- Attach Loop D to Hook D





# LIFTING A PATIENT WITH A SLING (CONT)

#### Sling Attachment Intructions - 2 Point Spreader Bar

- Attach Loop A and D of the sling to Hook A on Spreader Bar
- Attach Loop B and C to Hook B



- Lift the user above the bed by using the hand control.
- Pull lift away from bed. Position user over the wheelchair or chair then lower the patient onto the surface.



# Note:

Reverse the above procedures when returning the user/patient to bed.

# **MAINTENANCE AND INSPECTION**

The operator of the lift shall inspect the Chattanooga Alliance Lift before each use. Please check the following items on the lift.

- Check all bolts for tightness.
- Make sure the base can be easily widened, and that all lift parts are in place.
- Make sure that casters can be turned freely, and that caster brakes can be engaged.
- Make certain all necessary items (i.e. slings, and wheelchairs, etc.) are ready for use.
- At least once a month, the lift should be thoroughly inspected by a person qualified to recognize any signs of wear and tear, and looseness of bolts or parts.
- Replace any worn parts immediately.
- To lubricate, put a drop of oil on the following points when the lift is placed into service and every month thereafter: Top of Mast, Spreader Hinge, and Caster Axles.

	FIRST RECEIVED	MONTHLY	EVERY 3 MONTHS
BOOM & SPREADER BAR			
Check connections between Boom and Spreader Bar for improper connection, looseness, or wear	Х	Х	
Check connections between Boom and Mast for improper connection, looseness, or wear.	Х	Х	
Check the Boom for bending and deflection.		Х	
MAST			
Check the Mast for bending or deflection.	Х	Х	
BASE & FOOT PEDAL			
Check bolts and nuts for looseness	Х	Х	
Check casters and axle bolts for tightness.	Х	Х	
Check rubber parts on the casters for defletion	Х		Х

# MAINTENANCE AND INSPECTION (CONT)

	FIRST RECEIVED	MONTHLY	EVERY 3 MONTHS
BASE & FOOT PEDAL	-		
Apply grease to caster ball bearings if needed.			Х
Check welding joints for rust and crack.		Х	Х
CLEANING			
AS NEEDED			
ACTUATOR & CONTROL BOX			
Make sure the control box is firmly affixed to the mast.	Х	Х	
Make sure the actuator is secured to the Boom and mast with pins and key rings	Х	Х	
Make sure actuator plug into control box is not loose.	Х	Х	
SLINGS & SLING HARDWARE	•		
Check sling for wear.	Х	Х	
Check sling hardware every time before use.	Х	Х	

# **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 which is not listed below please contact your dealer or technical support for help. Do not attempt to repair or replace components or parts on your lift as this may void 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.

#### **Problems and Solutions:**

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

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

#### 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 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 the batteries or battery pack as they are at the end of their life cycle

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

- Unplug the AC power cord from the control box as the lift will not work when the control box/charger is connected to AC Power.
- Check to make sure the hand control is properly inserted all the way into the control box port.
- Check to make sure the actuator plug is properly connected and inserted all the way into the control box
- Your hand control needs to be replaced as it is at the end of its life cycle



NOTE: If there is problem you could not correct, please contact your dealer for assistance.

#### **EMERGENCY LOWERING MECHANISM**

In case there is a failure with the actuator or electronics and the user is left suspended in midair, please follow the procedures below to safely lower the user to a safer position.

In case of lift failure while using the Chattanooga Alliance Patient Lift 400 Lb., 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 fail to operate while a patient is suspended.
- The device consisting of a plastic collar ring that 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 and safety issues have been resolved.



# **EMERGENCY LOWERING MECHANISM (CONT)**

The following instructions apply to the 500 Lb. & 600 Lb. series **only:** 

- The Quick Release is implemented by a spring loaded lever mounted at the top end collar of the actuator shaft.
- DO NOT attempt to turn the Quick Release mechanism like a knob. This will damage the Quick Release mechanism and actuator.
- Manually activate Quick Release by pulling the RED lever with the arrow symbol in the direction indicated by the arrow towards the opposite red tab. This will de-clutch the actuator and lower the user safely down.

NOTE: When the Quick Release is activated, the boom will not lower itself unless there is weight or force applied in the downward direction.



**NOTE:** The emergency lowering device is intended for use during lift failure. This 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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