

# Klara 400

## Electric Standard

# Mobile Patient Hoist

## User Manual



### Important:

Do not use without having first read this manual

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## 1.0 GENERAL INFORMATION

### 1.1 Standard Symbols and Warning Labels

#### Warnings

Signal words with symbols are used in this manual to highlight hazards or unsafe practices which could result in personal injury or property damage. See the information below for definitions of the signal words and symbols.



#### **DANGER**

Danger indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.



#### **WARNING**

Warning indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.



#### **CAUTION**

Caution indicates a potentially hazardous situation which, if not avoided, may result in property damage or minor injury or both.



#### **IMPORTANT**

Indicates a hazardous situation that could result in damage to equipment or property if it is not avoided.



Gives useful tips, recommendations and information for ease of use.

### 1.2 Intended Use

The Electric Standard Patient Hoist is intended for use in, within an institutional healthcare environment, i.e. hospitals, nursing homes, rehabilitation care, assisted living.

The patient hoist is NOT a transport device. It is intended to transfer an individual from one resting surface to another (such as a bed to a wheelchair).

DO NOT attempt any transfer without approval of the patient's physician, nurse or medical assistant.

The hoists are intended for users who fully understood the content of this manual and is not intended for use by children.

## 1.3 Safety Precautions

### 1.3.1 Assembling the Hoist



#### **WARNING**

DO NOT overtighten the mounting hardware as this will damage the mounting brackets.

### 1.3.2 Operating the Hoist



#### **WARNING**

DO NOT exceed maximum weight limitation of the patient hoist. The weight limitation for the standard hoist is 200 kg.

ALWAYS ensure there is an audible click when mounting battery on the battery charger to confirm proper mounting. Otherwise, injury or damage may occur.

ALWAYS keep hands and fingers away from moving parts to avoid injury.

Although two assistants are recommended for all lifting preparation and transferring procedures, our equipment will permit proper operation by one assistant. The use of one assistant is based on the evaluation of the health care professional for each individual case.

### 1.3.3 Using the Slings



#### **WARNING**

Use a sling advised by the individual's doctor, nurse or medical assistant for the comfort and safety of the individual being lifted.

DO NOT insert any kind of plastic back incontinence pad or seating cushion between patient and sling material that may cause the patient to slide out of the sling during transfer.

After each wash (in accordance with instructions on the sling), inspect sling(s) for wear, tears, and loose stitching. Bleached, torn, cut, frayed, or broken slings are unsafe and could result in injury, and should be DISCARDED immediately.

DO NOT alter slings.

Be sure to check the sling attachments each time the sling is removed and replaced, to ensure that it is properly attached before the patient is removed from a stationary object (bed, chair or commode).

If the patient is in a wheelchair, secure the wheel locks in place to prevent chair movements that could lead to potential falls.

When connecting slings to the patient hoist, make sure there is sufficient head support when lifting a patient.

#### 1.3.4 Lifting the Patient



##### **WARNING**

When using the hoist, the legs **MUST** be opened to the maximum position and locked before lifting the patient.

The rear castors of the patient hoist **MUST** be kept unlocked when lifting an individual. Locking the castors during lifting procedures could cause the hoist to tip and endanger the patient and assistants. The unlocked castors during lifting procedures will allow the patient hoist to stabilize itself when the patient is initially lifted from a chair, bed or any stationary object.

Specific slings are made for the Electric Standard and Bariatric Patient Hoists. For the safety of the patient, **DO NOT** intermix slings and patient hoists of different manufacturers. Warranty will be voided.

When the patient is elevated a few inches off a stationary surface and before moving the patient, check again to make sure that all hardware or straps are properly connected. If any attachment is **NOT** properly in place, lower the patient back onto the bed and rectify the issue.

Adjustments for safety and comfort should be made prior to moving the patient. Patient's arms should be kept inside of the straps.

During transfer, with patient suspended in a sling attached to the hoist, DO NOT roll castor base over uneven surfaces that could cause the patient hoist to tip over. Use steering handle on the mast at all times to maneuver the patient hoist.

### 1.3.5 Transferring the Patient



#### **WARNING**

When the patient is elevated a few inches off a stationary surface and before moving the patient, check again to make sure that all hardware or straps are properly connected. If any attachment is NOT properly in place, lower the patient back onto the bed and rectify the issue.

Wheelchair wheels MUST be locked before lowering the patient into the wheelchair for transport.

Make sure the wheelchair weight capacity can withstand the patient's weight prior to loading the patient.

Be sure to check the sling attachments each time the sling is removed and replaced, to ensure that it is properly attached before the patient is removed from the bed or chair.

Mast and boom pivot must be tight to ensure safe use of the patient hoist. Bolt must be checked at least every six months in conjunction with periodic maintenance.

### 1.3.6 Performing Maintenance



#### **WARNING**

ONLY qualified personnel should carry out the hoist maintenance.

DO NOT attempt to open the pre-sealed actuator or obtain local service, for it will VOID the warranty and might result in damage. Consult your dealer or manufacturer for further information.

After the first year of operation, the hooks of the swivel bar and the mounting brackets of the boom should be inspected every three months to determine the extent of wear. If these parts become worn, replacement must be made.

After the first year of operation, inspect the swivel bar and the eye of the boom (to which it attaches) for wear. If the metal is worn, the parts **MUST** be replaced. Make this inspection every six months thereafter.

Inspect the castors and axle bolts every six months to check for tightness and wear.

Regular maintenance of patient hoists and accessories is necessary to ensure proper operation. **DO NOT** overtighten mounting hardware. This will damage mounting brackets.

### 1.3.7 Electrical and Earthing



#### **WARNING**

Thoroughly read through the battery/battery charger information prior to installing, servicing or operating your patient hoist.

**DO NOT**, under any circumstances, cut or remove the earthing prong from any plug.

### 1.3.8 Disposal



#### **WARNING**

This product has been supplied from an environmentally aware manufacturer.

Device contains lead acid batteries. **DO NOT** dispose of batteries in normal household waste. They **MUST** be taken to a proper disposal site. Contact your local waste management company for information.

This product may contain substances that could be harmful to the environment if disposed of in places (landfills) that are not appropriate according to legislation.

Please be environmentally responsible and recycle this product through your recycling facility at its end of life.

### 1.3.9 Radio Frequency Interference



#### **WARNING**

Most electronic equipment is influenced by Radio Frequency Interference (RFI). CAUTION should be exercised with regard to the use of portable communication equipment in the area around such equipment. If RFI causes erratic behavior, PUSH the Red Power Switch OFF IMMEDIATELY. DO NOT turn the Power Switch ON while transmission is in progress.

## 1.4 Life Expectancy

The life expectancy of the hoist is eight years, presuming that the product is used daily and in accordance with safety instructions and maintenance instructions stated in this manual.



## 2.0 TECHNICAL SPECIFICATION

### 2.1 Patient Hoist

<b>Klara 400 Electric Standard Hoist</b>	
Height at Sling Hook-up - MAX	67"
Height at Sling Hook-up - MIN	17.8"
Base Width OPEN	40"
BASE Width Closed	25"
Base Height (Clearance)	4.5"
Base Length	48"
Caster Size (Front/Rear)	3"/ 5"
Weight Capacity	200 kg
Weight IN Carton	54 kg
Weight OUT of Carton	47 kg
Battery	24V DC
Charger Input	100-240V AC
Accessories	Standalone Battery Charger
Battery Status	Light Indicator
Approx. Lifts per Charge (Varies depending upon load and stroke)	100-200 Cycles per charge
Warranty Electronics	1 Year

## 3.0 EQUIPMENT ASSEMBLY

### 3.1 Unpacking the Patient Hoist

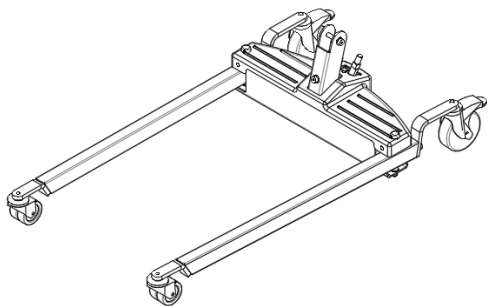


#### WARNING

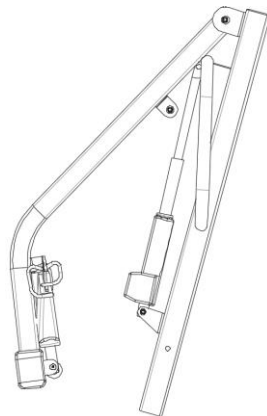
To avoid injury, DO NOT attempt to remove the hoist from the carton without assistance.

- I. Unpack the components from the shipping carton.
- II. Upon unpacking your patient hoist, the package should contain all of the following components.
- III. Examine exterior of the patient hoist for nicks, dents, scratches or damages. Inspect all components.

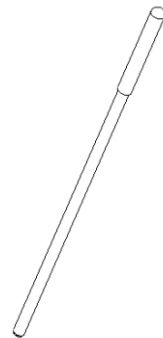
Main component provided in the package:



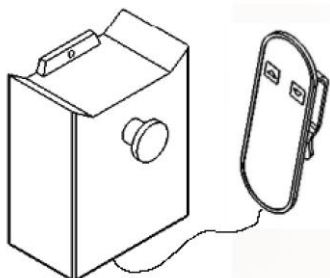
Lift Caster Base x 1



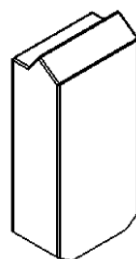
Boom/Mast assembly x 1



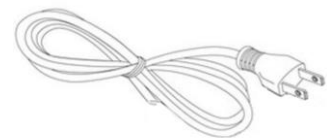
Shifter Handle x 1



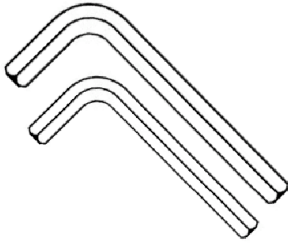
Control Box & Hand Pendant x 1



Battery x 1

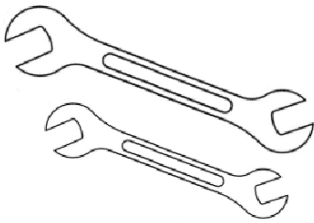


Charging Power Cord x 1

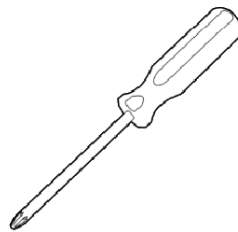


Allen Wrench x 2  
(size M8 & M10)

**YOU SHOULD PREPARE THE FOLLOWING TOOLS FOR THE LIFT ASSEMBLY:**



Wrench x 2 (size M8 & M10)



Crosshead Screwdriver x 1  
(For Bariatric Lift Only)

**i** Not all items provided in the carton are shown in the above. Pinch guards, bolts, washers and nuts are fastened to their intended locations and therefore omitted from the illustration.

**!** **IMPORTANT**

Store the repackaged patient hoist in a dry area. Do not place other objects on top of the repackaged patient hoist.

**i** Unless the hoist is to be used immediately, retain boxes, containers, and packing materials for use in storing until use of patient hoist is required.

## 3.2 Assembling the patient hoist

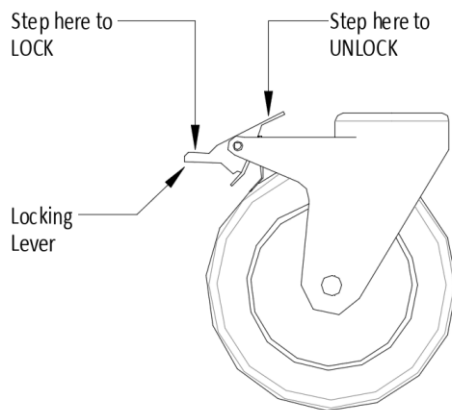


### WARNING

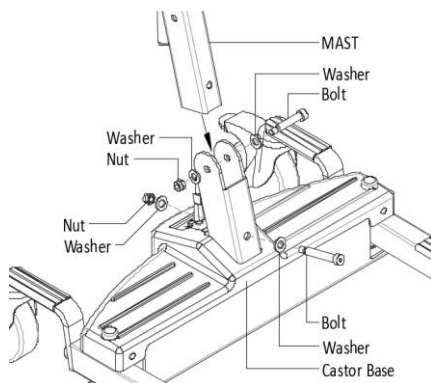
Use only parts supplied by the manufacturer for assembly. The base legs, the mast, boom, actuator assembly and the swivel bar are manufactured to specifications that assure correct alignment of all parts for safe operation.

### 3.2.1 Assembling the mast to the base

1. Step on the locking levers to lock the two rear castors at the base.



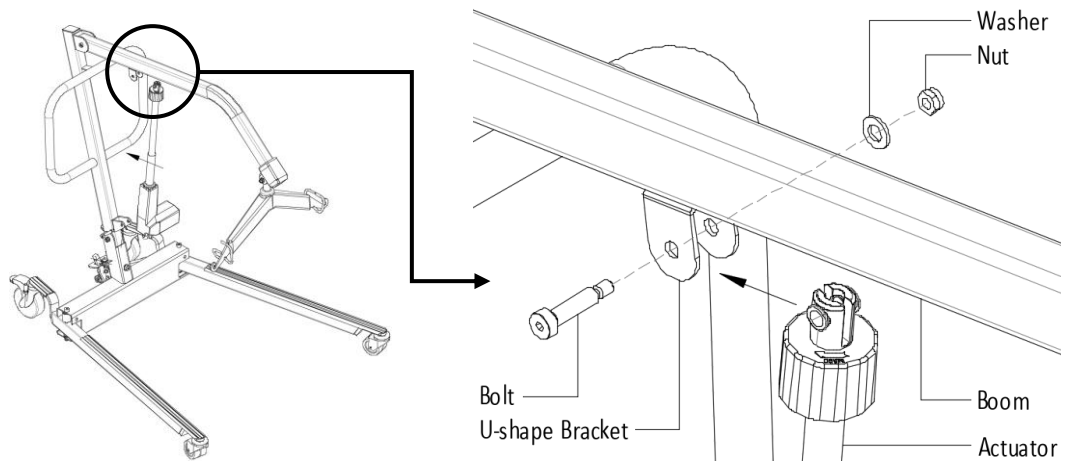
2. Remove the shoulder bolt, washer and nut fastened to the base of the mast.
3. Position the mast in an upright position and place the mast over the U-shape cut-out of the base.
4. Insert shoulder bolt with washers through the base and mast.
5. Secure with nut.



### 3.2.2 Assembling the electric actuator to the boom

**i** The bottom of the actuator assembly will be preassembled to the mast mounting bracket.

1. Remove the shoulder bolt, washer and nut fastened to the boom mounting bracket.
2. Lift-up on the boom and place it on your left shoulder.
3. Rotate the boom actuator shaft extension until it lines-up with the mounting holes in the boom assembly.
4. Align the holes of the boom assembly mounting bracket with those of the boom actuator and insert the bolt. Secure with nut.



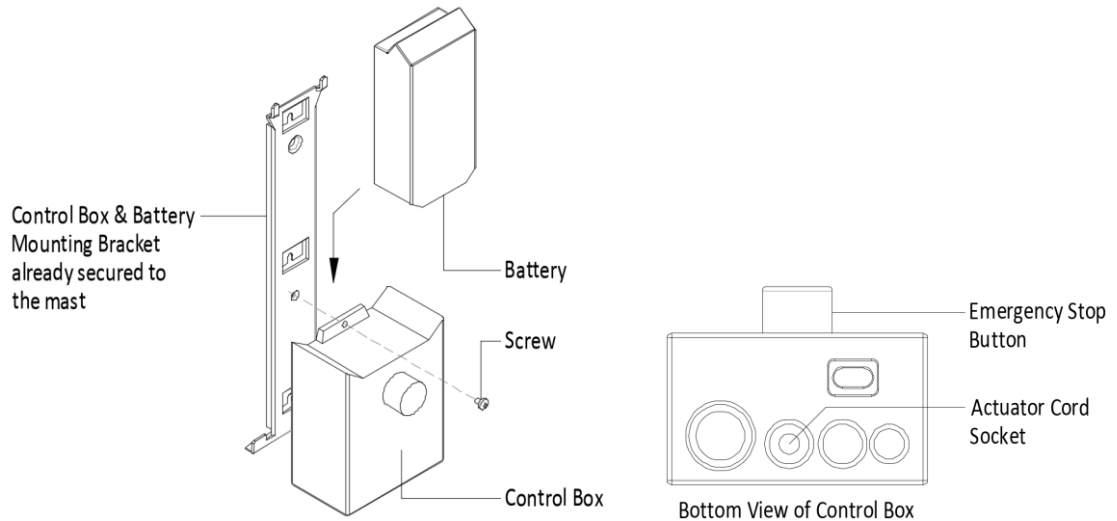
**i** Be sure that the bolt is completely through the holes of the boom assembly mounting bracket and the actuator assembly. The boom assembly will pivot easily if the mounting hardware is aligned properly when the boom assembly is secured.

### 3.2.3 Assembling the control box to the mast

1. Temporarily remove the screw on the mast mounting bracket for the control box.
2. Secure the control box onto the mounting bracket on the mast with the screw.
3. Plug in the electrical cable from the actuator to the bottom of the control box.
4. Slide the battery onto the mounting bracket above the control box. Make sure there is an audible click.

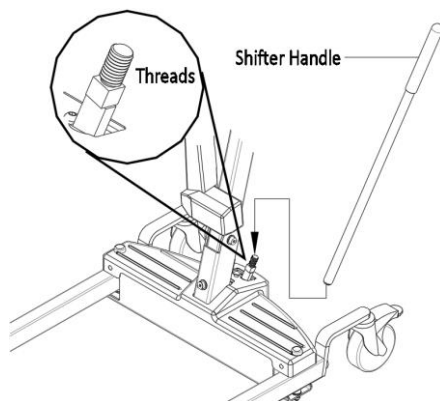
## ! IMPORTANT

The emergency stop on the control box must be **PRESSED IN**, when mounting the battery. If not, the internal fuse will blow.



### 3.2.4 Installing the shifter handle

1. Line-up the shifter handle opening with the threaded connector at the base.
2. Turn the shifter handle clockwise and securely tighten into the base.



## 4.0 EQUIPMENT OPERATION

### 4.1 Operating the patient hoist

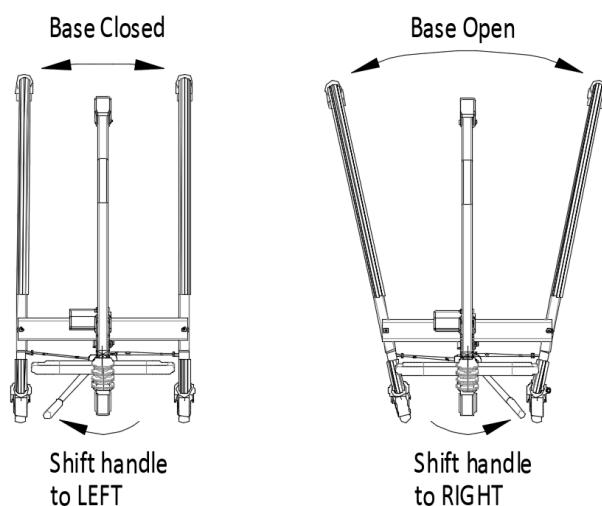
#### 4.1.1 Closing/Opening the Legs of the hoist base

Stand at the rear of the hoist and grasp the shifter handle. Swivel the shifter handle to open and close the base legs.



#### **WARNING**

The shifter handle **MUST** be positioned completely into its mounting slot. **DO NOT** use the patient hoist until shifter handle is properly seated and the legs of the patient hoist are locked in place. Otherwise, injury and/or damage may occur.



### 4.1.2 Using the hand pendant control

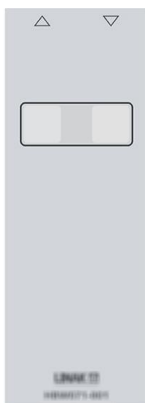


#### **WARNING**

The rear castors of the patient hoist should not be locked when lifting an individual. Locked castors could cause the hoist to tip and endanger the patient and assistants. It is recommended that the rear castors be left unlocked during lifting procedures to allow the patient hoist to stabilize itself when the patient is initially lifted from a chair, bed or any stationary object.

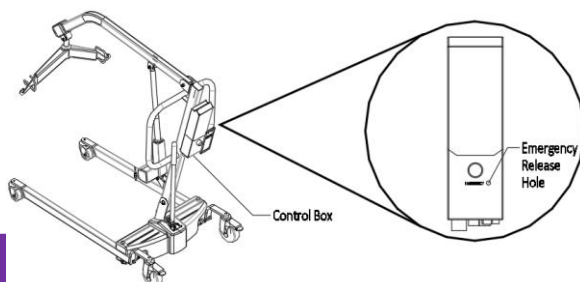
To raise the patient hoist, press the boom UP button (▲up arrow) to raise the boom and the patient.

To lower the patient hoist, press the boom DOWN button (▼down arrow) to lower the boom and the patient.



### 4.1.3 Activating the Emergency release

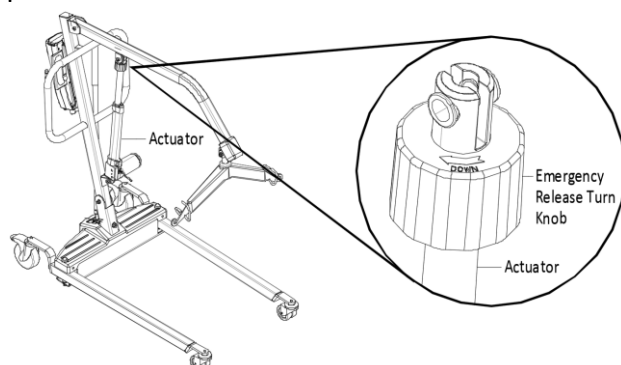
The emergency release enables the actuator to retract without the use of hand pendant. To activate the emergency release, insert a pen into the hole labelled “emergency” on the control box of the hoist and push down on the boom at the same time. The actuator will only retract while under load and the mechanical Emergency release is engaged. The release hole is labelled with the word EMERGENCY spelled out in white.





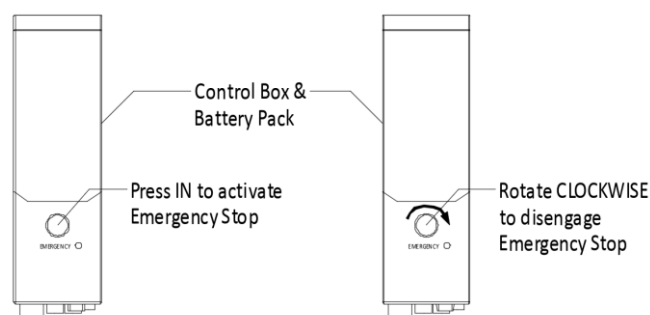
### 4.1.4 Activating the Mechanical Emergency Release

The mechanical release enables the actuator to retract without power. To activate the emergency release, continue to rotate the emergency release knob clockwise, at the top of the actuator. The weight of the patient should bring the lift down, otherwise pull down the boom at the same time.



### 4.1.5 Activating the emergency stop

Press the RED/ORANGE emergency button on the control box to stop the boom assembly and patient from raising or lowering. Rotate the RED/ORANGE emergency stop button clockwise to disengage the emergency stop.



## 4.2 Charging the Battery

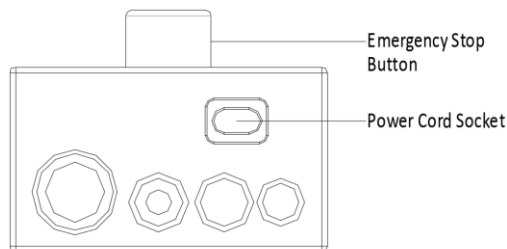
### 4.2.1 Charging the battery with power cable

1. Use the charging cord provided in the carton, plug the pins into an appropriate grounded electrical socket.
2. Insert the other end of the power cable into the corresponding socket on the side of the control box.

- The indication light on the hand pendant will illuminate to indicate the battery is being charged.



The lift will not be operable whilst the battery is being charged. Keep the hoist castors locked and hoist stationary.



Bottom View of Control Box

#### 4.2.2 Mounting a Wall Charger

The wall charger is an accessory and should be ordered separately.

- Position the battery charger with mounting bracket on the wall at the desired location.
- With a pencil, mark the middle hole position.
- Measure down 6 1/2 inches from the pencil mark and drill one mounting hole.
- Install the bottom mounting screw until there is an approximate 1/8-inch gap between the screw head and the wall.
- Install the battery charger with mounting bracket onto the bottom mounting screw.
- Drill the remaining two mounting holes.
- Install the two remaining mounting screws through the mounting bracket and into the wall. Tighten securely.
- Plug the battery charger into the wall electrical outlet.
- Verify that ON is illuminated.



#### **IMPORTANT**

The emergency stop on the control box must be activated, button PRESSED IN, when mounting the battery. If not, potential power surge could damage the control box.

## 5.0 LIFTING THE PATIENT

### 5.1 Preparing the hoist for use

#### 5.1.1 Positioning the hoist for use

1. With the legs of the base open and locked, use the steering handle to push the patient hoist into position.
2. Lower the patient hoist for easy attachment of the sling.



#### **WARNING**

The legs of the hoist must be in the maximum open position and the shifter handle locked in place for optimum stability and safety. If it is necessary to close the legs of the hoist to maneuver the hoist under a bed, close the legs of the hoist only as long as it takes to position the hoist over the patient and lift the patient off the surface of the bed. When the legs of the hoist are no longer under the bed, return the legs of the hoist to the maximum open position and lock the shifter handle immediately.

#### 5.1.2 Prepare the Sling at Lying Position

1. Carefully and gently roll the patient on their side. The sling seat should be folded lengthwise and placed under the patient so that the lower edge of the seat is slightly below the back.
2. Roll the patient back onto their other side and pull the sling seat so that it unfolds under the patient. Then pull the leg loops forward and under the patient's thighs. The loops should come through the patient's legs. Then cross the loops.
3. With the boom of the hoist lowered, place the straps of the sling over hooks of the swivel bar.



### 5.1.3 Prepare the Sling at Seated Position



#### **WARNING**

Where the patient is seated in a wheelchair, the wheels **MUST** be locked when putting on the sling.

1. Lean patient forward and set the folded sling behind the patient's back. Set the sling as far down as possible until it touches the back of the seat.
2. Open the sling, pull the bottom loop section of the sling under patient's thighs then cross the loops.
3. With the hoist in position and boom lowered, place the straps of the sling over hooks of the swivel bar.



## 5.2 Lifting/Moving the Patient



### WARNING

Before lifting or transferring the patient, the base legs **MUST** be locked in the open position for optimum stability and safety. **DO NOT** engage the rear locking castors when patient is in the hoist.

1. Using the steering handle, push the patient hoist underneath the bed.
2. With the sling securely attached to the hoist, press the UP ( ▲ ) button to raise the patient above the bed. The patient should be elevated high enough to clear the bed and their weight supported by the hoist.



### WARNING

When the patient is elevated a few inches off the surface of the bed and before moving the patient, check again to make sure that all hardware or straps are properly connected. If any attachment is **NOT** properly in place, lower the patient back onto the bed and rectify the issue.

3. When the patient is lifted from the bed (with the patient's head supported), he/she will be raised to a sitting position.
4. When the patient is clear of the bed surface, swing their feet off the bed.
5. Using the steering handle, move the hoist away from the bed.
6. When moving the patient hoist away from the bed, turn the patient so that he/she faces assistant operating the patient hoist.
7. Press the DOWN ( ▼ ) button lowering patient so that his feet rest on the base of the hoist, straddling the mast.
8. With both hands firmly on the steering handle, pull the patient hoist away from the bed and then push it from behind.

## 5.3 Transferring the patient



### WARNING

When the patient is elevated a few inches off a stationary surface and before moving the patient, check again to make sure that all hardware or straps are properly connected. If any attachment is **NOT** properly in place, lower the patient back onto the bed and rectify the issue.

**WARNING**

Before lifting or transferring the patient, the base legs **MUST** be locked in the open position for optimum stability and safety. **DO NOT** engage the rear locking castors when patient is in the hoist.

### 5.3.1 Transferring the patient from and to a car



It is recommended that two assistants to help transferring a patient from a car to a wheelchair.

1. To transfer a patient away from a car, with the first assistant supporting the patient, the second assistant lower the boom of the patient hoist until the hooks of the swivel bar are even with the roof of the car.
2. Attach the sling to the swivel bar.
3. Lift the patient up off of seat until straps are taut.
4. Turn patient with sling until legs are outside of car.
5. Lift up on legs with one hand and tilt the patient back with the other hand.
6. The second assistant should pull the patient hoist away from the car until the patient is completely clear of the door frame.
7. Release the patient back to his/her normal sitting position in the sling.
8. Place patient in wheelchair, refer to [Transferring the patient to a wheelchair](#) section of this manual.
9. To transfer a patient to the car, reverse the above steps.

### 5.3.2 Transferring the patient for using a commode chair or standard commode

The slings with commode openings are designed to be used with either a commode chair or standard commode.



It is recommended that the sling remain connected to the swivel bar during the patient's use of either the commode chair or standard commode.

1. With the patient correctly positioned on the sling, attached the sling to the swivel bar.
2. The patient should be elevated high enough to clear the commode chair/standard commode and their weight supported by the hoist.
3. With the help of both assistants, guide the patient onto the commode chair/standard commode.
4. Lower the patient onto the commode chair/standard commode leaving the sling attached to the swivel bar.
5. When complete, recheck for correct attachment and then raise the patient off the commode chair.
6. When patient is clear of the commode surface (using the steering handles), move the hoist away from the commode chair/standard commode.
7. To return patient to bed, reverse procedures concerning lifting the patient, operation and sling attachment.
8. To return or place patient in a wheel chair, refer to Transferring the patient to a wheelchair section of this manual.



The hoist is NOT a transport device. Where it is difficult to maneuver the hoist towards the commode or the bathroom facility is too far from the bed, the patient MUST be transported to a wheel chair first.

### 5.3.3 Transferring the patient for using a bath

1. Move the patient from the bed onto the wheelchair, refer to Transferring the patient to a wheelchair section of this manual.
2. The patient should be elevated high enough to clear the wheelchair and their weight supported by the hoist.
3. Lower the patient into the portable bath tub.
4. Disconnect the chains/straps from sling and reattach to the portable bath tub.
5. With the hoist, raise the sides of the portable bath tub.
6. Bathe the patient.
7. To return to the bed, reverse procedures concerning lifting the patient, operation and sling attachments.

### 5.3.4 Transferring the patient to a wheelchair



#### **WARNING**

The wheelchair wheels **MUST** be locked before lowering the patient into the wheelchair for transport.

1. The legs of the hoist (with patient) shall be in open position.
2. Move the wheelchair into position.
3. Ensure the rear wheels of the wheelchair are locked to prevent further movement of the chair.
4. Position the patient over the seat with their face away from seat and their back against the back of the chair.



Use the straps or handles on the side and the back of the sling to guide the patient's hips as far back as possible into the seat for proper positioning.

5. Lower the patient by pressing the DOWN ( ▼ ) button on the hoist controller.
6. With one assistant behind the chair and the other operating the patient hoist, the assistant behind the chair will pull back on the grab handle (on select models) or sides of the sling to seat the patient well into the back of the chair. This will maintain a good center of balance and prevent the chair from tipping forward.
7. Disconnect the sling from the patient hoist.
8. To return to the bed, reverse procedures concerning lifting the patient, operation and sling attachments.



## 6.1 Maintenance Schedule

ITEM	INITIALLY	INSTITUTIONAL INSPECT & ADJUST (MONTHLY)	IN-HOME INSPECT & ADJUST (6 MONTHS)
<b>THE CASTER BASE</b>			
- Base opens/closes with ease	0	0	0
- Inspect for missing hardware	0	0	0
- Inspect castors and axle bolts for tightness	0	0	0
- Inspect castors for smooth swivel and roll	0	0	0
- Inspect and clear debris on castors	0	0	0
<b>SHIFTER HANDLE</b>			
- Smooth operation	0	0	0
- Locks adjustable base when slotted into mounting holes	0	0	0
<b>THE MAST</b>			
- Securely attached to the boom	0	0	0
- Inspect for deformation	0	0	0
<b>THE BOOM</b>			
- Inspect all hardware and swivel bar supports	0	0	0
- Inspected joints for wear	0	0	0
- Inspect for deformation	0	0	0
- Inspect the mast pivot joint. Ensure the bolt is properly secured.	0	0	0
	0	0	0
<b>THE SWIVEL BAR</b>			
- Inspect the bolt/hooks for wear and tear	0	0	0
- Inspect the sling hooks for wear or deformation	0	0	0
<b>THE ELECTRIC ACTUATOR ASSEMBLY</b>			
- Inspect hardware on mast and boom	0	0	0
- Inspect joints with mast and boom	0	0	0
- Inspect for wear and tear. Return to the supplier where damaged	0	0	0
- Cycle to ensure smooth quiet operation	0	0	0
- Check the emergency release operates	0	0	0

ITEM	INITIALLY	INSTITUTIONAL INSPECT & ADJUST (MONTHLY)	IN-HOME INSPECT & ADJUST (6 MONTHS)
<b>SLING AND HARDWARE</b>			
- Check all sling attachments <b>EACH TIME IT IS USED*</b> to ensure proper connection and patient safety	<b>O*</b>	<b>O*</b>	<b>O*</b>
- Inspect sling fabric for wear	<b>O</b>	<b>O</b>	<b>O</b>
- Inspect strap for wear	<b>O</b>	<b>O</b>	<b>O</b>
<b>CLEANING</b>			
- Whenever necessary	<b>O</b>	<b>O</b>	<b>O</b>



For individual home use, a full inspection is required prior to each new user.

Regular cleaning will reveal loose or worn parts, enhanced smooth operation and extend the life expectancy of the hoist. Following the maintenance procedures detailed in the manual to keep your patient hoist in continuous service.

## 6.2 Detecting Wear and Damage

When examining the equipment, attention should be paid to all stressed parts, such as slings, swivel bar and any pivot for slings for signs of cracking, fraying, deformation or deterioration. Replace any defective parts immediately and ensure that the hoist is not used until repairs are made.

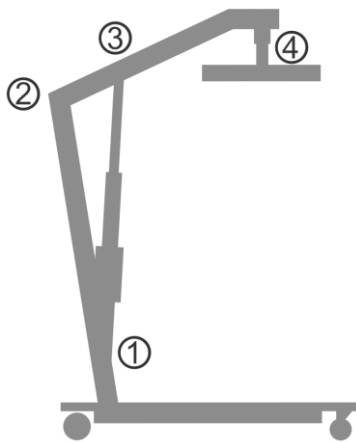
## 6.3 Lubrication

Minimum maintenance is required for the hoists. A check and lubrication every six month should ensure continued safety and reliability.

The hoist and slings should be kept clean and in good working order. Any defect should be noted and reported to your dealer as soon as possible.

The castors **MUST** swivel and roll smoothly. A light grease (waterproof auto lubricant) may be applied to the ball bearing swivel of the castors once a year. Apply more frequently if the castors are exposed to extreme moist conditions.

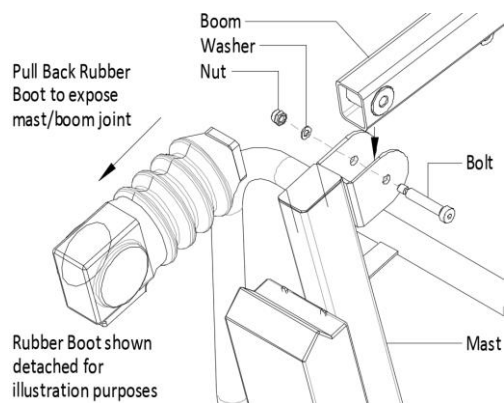
Refer to the below figure for lubrication points. Lubricate all pivot points. Wipe all excess lubricant from the equipment surface.



1. Mast Mounting Bracket
2. Boom/Mast Mount
3. Boom Mounting Bracket
4. Swivel Bar

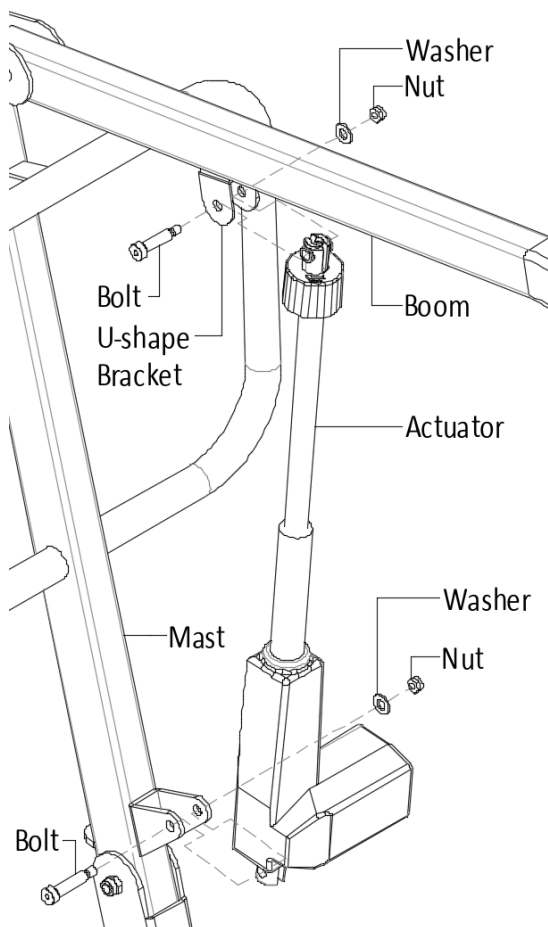
## 6.4 Checking and Tightening Mast Pivot Bolt

1. Pull back the corrugated section of the rubber boot and slide it off the boom to expose the fixings
2. Inspect the pivot point, check that the bolt is through the bracket and the locknut is tight and secure.
3. If needed, do one or more of the following:
  - Tighten locknut and back-off the locknut 1/8 of a turn.
  - Replace the locknut.



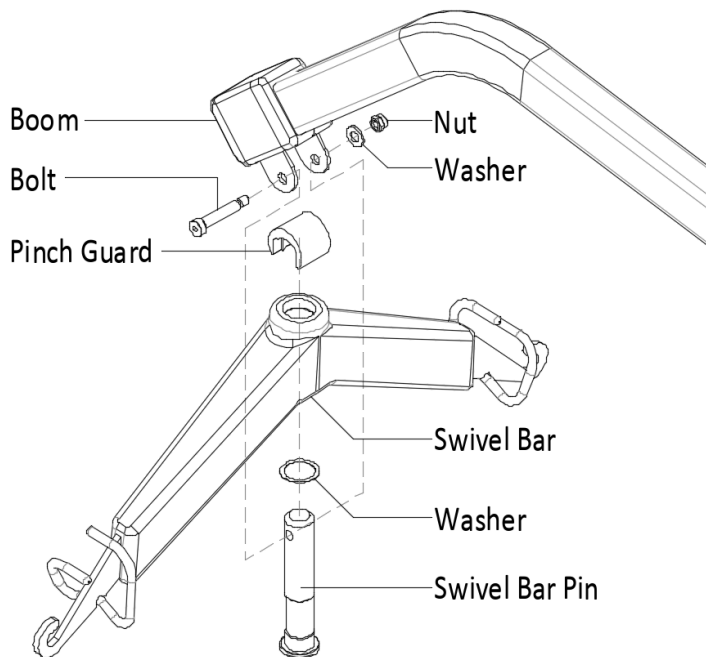
## 6.5 Replacing the Electric Actuator

1. Remove the shoulder bolt, nut, and washer that secure the electric actuator to the mast mounting bracket.
2. Rest the boom on your shoulder and remove the bolt, nut, washer, and plastic bushing from the boom mounting bracket.
3. Remove the electric actuator.
4. Reverse the procedure for new actuator installation.



## 6.6 Replacing the Swivel Bar

- I. The swivel bar comes attached to the boom with bolt, nut, washers, and pinch guard.
- II. Remove existing hardware and replace the hanger bar.



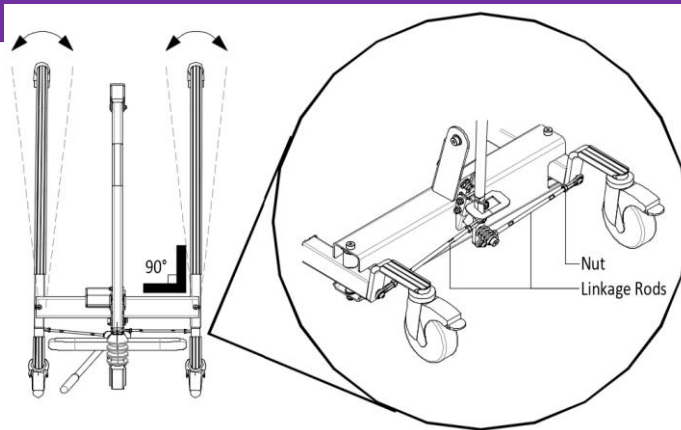
### **WARNING**

After the first year of use, the hooks of the swivel bar and mounting brackets of the boom should be inspected every six months to determine the extent of wear. If these parts become worn, replacement must be made.

## 6.7 Maintaining the Base Adjustment

The base adjustment should not require any attention other than:

1. Check the squareness of the legs when in the closed position.
2. Place a square on the inside of the legs and base to determine the 90° alignment.
3. Loosen the nut on the linkage rod, rotate the linkage rods until 90° alignment is achieved. Tighten the nut.



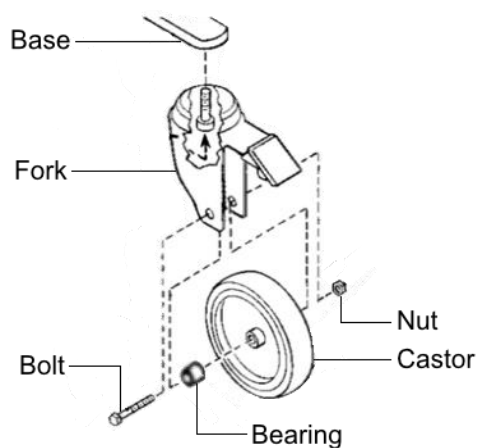
## 6.8 Replacing the Casters/Forks

### 6.8.1 Replacing rear castors

1. Turn and place the hoist on its side.
2. Remove the bolt and nut securing the existing rear castor to the fork.
3. Install the new/existing bearing into the new rear castor.
4. Align the mounting holes in the new rear castor and the fork.
5. Insert the bolt through the fork and new rear castor and tighten with the nut.



When disassembling the rear castors, the bearing will become loose and may fall out of the castor, it can be reused if not worn.

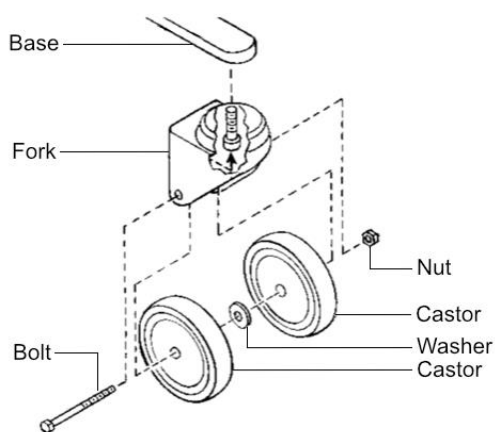


## 6.8.2 Replacing front castors

1. Turn and place the hoist on its side.
2. Remove the bolt and nut securing the existing front castor assembly to the fork.
3. Position the new/existing washer between the two new castors.
4. Align the mounting holes in the new front castor assembly and the fork.
5. Insert the bolt through the fork and the new front castor assembly and tighten with the nut.



When disassembling the front castors, the washers between two wheels will fall out and can be reused, replace if worn.



## 6.8.3 Replacing castor forks

1. Turn and place the hoist on its side.
2. Remove the front or rear castor from the hoist. Refer to Section 6.8.1 and 6.8.2.
3. Unscrew the existing fork from the base.
4. Install the new fork onto the base.
5. Install the front or rear castor onto the hoist. Refer to Section 6.8.1 and 6.8.2.

## 6.9 Cleaning

A soft cloth, dampened with water and a small amount of mild detergent, is all that is needed to clean the patient hoist. The hoist can be cleaned with non-abrasive cleaners. Auto wax or furniture polish will help maintain the sparking finish over a long period of time.

Ensure castors are free of debris.

## 7.0 TROUBLESHOOTING GUIDE

SYMPTOMS	FAULTS	SOLUTIONS
Actuator idle when hand control buttons are pressed.	<p>Battery Low.</p> <p>Hand control or actuator connector loose.</p> <p>RED emergency stop button pressed in.</p> <p>Battery not connected properly to control box.</p> <p>The connecting terminals are damaged.</p> <p>Actuator in need of service or load is too high.</p>	<p>Recharge battery with power cable or wall charger.</p> <p>Ensure tight connection of all connectors to control box.</p> <p>Rotate the emergency button clockwise until it pops out.</p> <p>Dismount and remount the battery to control box.</p> <p>Replace the battery pack. Contract your supplier.</p> <p>Contact your supplier for actuator maintenance.</p>
Patient hoist feels loose.	<p>Mast/Base joint loose.</p> <p>Tie – Rods are loose.</p>	Refer to Section 3.2 & 6.
Casters/Brakes noisy or stiff.	Debris or fluff in bearings	Replace castors.
Noisy or dry sound from pivots.	Needs lubrication.	Lubricate your hoist.
Unusual noise from actuator.	Actuator is worn or damaged or spindle is bent.	Replace the actuator. Contact your supplier.
Lift arms will not lower during a power retraction.	Shoulder bolt at the junction of the boom and mast may not be properly installed.	Tighten the mast and boom pivot bolt.



If problems persist following the above remedial procedures, please contact your dealer or the manufacturer.



DATE	PERFORMED BY	CONDITION REPORT

DATE	PERFORMED BY	CONDITION REPORT