



# BATTERY OPERATED PATIENT LIFT

450 LB CAPACITY PORTABLE PATIENT LIFT  
OWNER'S MANUAL

Product is not made with natural rubber latex.



Photos within this manual are shown with OPTIONAL gait training arms.

MDS450EL

## TABLE OF CONTENTS

MEDLINE MDS450EL DETAIL CHART .....	3
SAFETY INSTRUCTIONS .....	4
GENERAL GUIDELINES .....	4
GENERAL WARNINGS! .....	4
OPERATIONAL WARNINGS! .....	4
PERSONAL INJURY WARNINGS! .....	5
CAUTIONS .....	5
ASSEMBLY INSTRUCTIONS .....	5
SETTING UP THE BATTERY PACK .....	11
OPERATING INSTRUCTIONS .....	12
OPERATING WARNINGS! .....	12
SLING USE WARNINGS! .....	13
OPERATING CAUTIONS .....	13
BATTERY OPERATION .....	15
ELECTRICAL EMERGENCY LOWERING .....	16
MANUAL EMERGENCY LOWERING MECHANISM .....	16
EMERGENCY STOP .....	16
LIFTING TECHNIQUES .....	17
TRANSFER FROM BED .....	17
TRANSFER FROM WHEELCHAIR .....	17
LIFT A PATIENT FROM THE FLOOR .....	18
MAINTENANCE & INSPECTION .....	19
TROUBLESHOOTING .....	21
LIMITED WARRANTY .....	22
MEDLINE PATIENT LIFT MAINTENANCE RECORD .....	23

## MEDLINE MDS450EL DETAIL CHART

- A. Spreader Bar – 6 Point Cradle
- B. Boom
- C. Mast
- D. Base
- E. Actuator
- F. Control Box
- G. Front Casters
- H. Rear Casters with Brake
- I. Push/Steering Handle
- J. Battery pack
- K. Control Box/Battery Pack Mounting Bracket
- L. Hand Control



## SAFETY INSTRUCTIONS

TO ENSURE YOUR SAFETY IN USING THIS MEDLINE PATIENT LIFT, ALL WARNINGS AND SAFETY INFORMATION AND ALL INSTRUCTIONS MUST BE FOLLOWED. FAILURE TO DO SO MAY RESULT IN SERIOUS BODILY INJURY OR DAMAGE TO THE EQUIPMENT.

### GENERAL GUIDELINES

The Medline patient lifts are not intended to be used for transporting patients between locations. They should solely be used to transfer patients from/to a wheelchair, bed, commode, shower chair, or floor.

Select a sling that will properly fit the patient and have the appropriate weight capacity.

**NEVER EXCEED THE LIFT'S SAFE WORKING LOAD CAPACITY OF 450 LBS.**

### GENERAL WARNINGS!

- ⚠ DO NOT use this product without first completely reading and understanding these instructions.
- ⚠ NEVER operate the lift unless you have been properly trained on all procedures and safe handling methods. **PRACTICE** using the lift prior to performing actual patient lifting so that you are familiar with its operation.
- ⚠ ALWAYS replace any worn or non-functioning parts only with genuine Medline Lift parts. Medline Lift parts are not interchangeable with parts from other patient lift brands. Using other patient lift parts on Medline Lift products is unsafe and may result in serious injury to patient and caregiver. **Medline is not responsible for any consequence resulting from the use of non-Medline Lift parts and components on Medline lifts, or for Medline parts being used on other brand lifts.**
- ⚠ Service and repair of Medline Lift equipment should be performed only by Medline or by an authorized dealer. **Medline is not responsible for any consequence resulting from any unauthorized service or repair.**

### OPERATIONAL WARNINGS!

- ⚠ DO NOT attempt to transfer a patient without prior approval of the patient's nurse or doctor.
- ⚠ ALWAYS, (except when lifting a patient from the floor) while lifting or lowering a patient, maintain the base unit legs spread to the widest position and ensure that the casters are unlocked.
- ⚠ ALWAYS, when lifting a patient from the floor, maintain the base unit legs spread to the widest position and ensure the casters are locked.
- ⚠ ALWAYS close the base unit prior to moving the patient lift.
- ⚠ DO NOT roll patient lift over objects such as raised carpet bindings, door frames, or any uneven surfaces that could create an imbalance of the lift with the patient suspended in a sling.
- ⚠ ALWAYS keep the patient centered over the base and facing the operator/caregiver.

### PERSONAL INJURY WARNINGS!

- ⚠ DO NOT place anything between the patient and the sling (e.g. cushions, incontinence pads, etc). Doing so could cause the patient to slide out of the sling and cause injury from falling.
- ⚠ KEEP all extremities (such as fingers, arms, legs, or feet) clear of the lift mechanism while it is in operation. Care must be taken to avoid pinch points when the lift is being operated.
- ⚠ DO NOT exceed the weight capacity of 450 lbs for this lift.
- ⚠ DO NOT allow children or pets near the patient lift while it is in use.
- ⚠ USE ONLY Medline slings on Medline patient lifts. **Use of non-Medline slings could be unsafe and may result in injury to the patient or caregiver.**
- ⚠ INSPECT the slings prior to each use. **DO NOT** use a sling that has worn thread or frayed straps.

### CAUTIONS

KEEP foreign objects from coming into contact with the lift moving parts while in operation.

Prior to performing a lift, arrange all necessary items (lifts, slings, commode chair or wheel chair, etc.) for a smooth and safe lift procedure. The patient being transferred should be positioned in the center of the bed before being lifted, as well as when he/she is returned to the bed.

## ASSEMBLY INSTRUCTIONS

The Patient Lift is packaged in one box. Remove the contents from the carton.

### HOW TO ATTACH THE MAST TO THE BASE UNIT:

1. Place the base unit flat on the floor.



2. Orienting the mast so that the push handles lean toward the legs, insert the mast into the bracket.

3. Insert the U-shaped support bracket by sliding the long bolt through the holes and hand-tightening the nut on the other end.

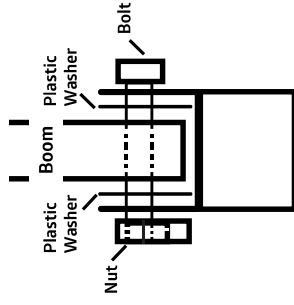


4. Insert the remaining bolts into the mast and base unit bracket. Ensure the connections are tight.



### HOW TO ATTACH THE BOOM TO THE TOP OF THE MAST:

1. Remove the bolt and 2 white plastic washers from bracket at the top of the mast.
2. Insert the end of the boom into the bracket at the top of the mast.
  - a. Place 1 of the white plastic washers on each side of the boom
  - b. The washers go between the mast bracket and the boom as shown in the diagram below.



3. Insert the bolt through the mast bracket and the boom and screw the nut on.

### HOW TO ATTACH THE ACTUATOR

Attach the actuator to the mast and the boom.

1. Rotate the boom up & back out of the way as shown.

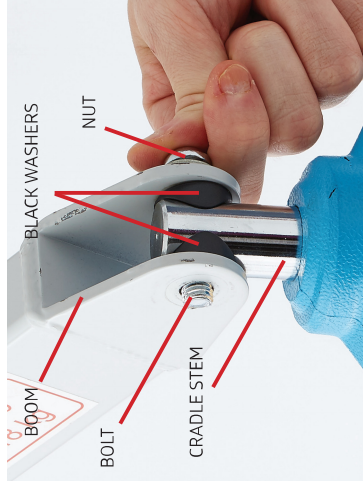


2. Orient the actuator with the motor at the lower end.
3. Align the motor to the bracket on the mast and insert the pin, then firmly insert the c clip into the groove at the end of the pin.
4. Align the top of the actuator to the bracket on the boom. Insert the pin and firmly attach the C Clip.
5. Insert the pin and firmly insert the C Clip into the groove at the end of the pin.



## HOW TO ATTACH CRADLE TO THE BOOM:

1. Align the top of the cradle assembly to the bracket at the end of the boom.
  - a. Place 1 of the plastic washers on each side of the cradle pin.
  - b. The washers go between the boom bracket and the cradle pin as shown in the diagram below.



2. Insert the bolt, attach the nut and tighten.



## HOW TO ATTACH THE CONTROL BOX AND BATTERY TO THE MAST:

The control box mounting bracket will be mounted using 1 bolt at top and 1 bolt with locking nut at bottom.

Note: in the next step, the control box bracket does NOT hook into this slot on the adapter. It will just rest up against it.



1. Insert the bolt into the upper-bracket mounting hole in the mast. Do not tighten it.



2. Hang the bracket on the bolt inserted above.



3. Attach the bottom of the bracket to the adapter with bolt and nut. Nut goes inside adapter.



4. Tighten both bolts.



### HOW TO ATTACH THE CONTROL BOX TO THE MAST.

1. The mounting bracket is attached to the back of the mast.
2. Mount the control box onto the 2 tabs at the bottom of the bracket.



3. Insert the bolt in the top of the control box to fasten it to the bracket.



### ATTACH THE BATTERY PACK TO THE TOP OF THE CONTROL BOX.

4. Set the battery pack onto the top of the control box and snap the top end to the bracket.



### CONNECT THE CABLES TO THE CONTROL BOX

1. Hand control to Outlet 0
2. Actuator for lift arm to Outlet 1
3. Actuator for base width adjust to Outlet 2
4. If Charging, plug the charging cord to Outlet 3



### REMOVING AND INSERTING THE BATTERY PACK

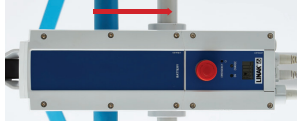
#### TO INSERT:

- Align the battery pack with the top of the control box.
- Slide the battery pack down into position on the control box.
- The battery pack will snap into position as it is inserted.

#### TO REMOVE:

- Grasp the battery pack by squeezing the grey handle at the top of the battery and pull up.

NOTE: To charge the battery pack, refer to "Charging the Batteries" on page 15.



**PERFORM MAINTENANCE & INSPECTION PROCEDURE ON PAGE 19 AFTER ASSEMBLY IS COMPLETE AND PRIOR TO FIRST USE OF THE PATIENT LIFT.**

## OPERATING INSTRUCTIONS

### ALWAYS CHECK THE FOLLOWING BEFORE EACH LIFT OPERATION:

- The base legs are fully engaged from the stowed position
- The mast bolted securely to the base unit
- The red emergency stop/reset button is out (if not, rotate clockwise to release).
- The charging cord is unplugged from the wall outlet
- The hand remote up/down functions operate normally to raise/lower the boom.
- The hand control in/out functions operate normally to open/close the base legs.
- All nuts, bolts and fasteners are tightened securely

### OPERATING WARNINGS!

- ⚠ **DO NOT** operate the lift unless all maintenance items pass inspection. See Maintenance & Inspection section on Page 21.
- ⚠ **ALWAYS** plan your lifting operations before starting.
- ⚠ **ALWAYS** familiarize yourself with the operating control and safety features of a lift before performing a lift operation.
- ⚠ **ALWAYS** check that the patient will not exceed the safe lifting capacity of this lift.
- ⚠ **ALWAYS** follow instructions for lifting as provided in this owner's guide.
- ⚠ **NEVER** disconnect or bypass a control or safety feature to make it easier to operate the lift.
- ⚠ **DO NOT** lift a patient with the casters locked (except when lifting from the floor).
- ⚠ **DO NOT** attempt to maneuver the lift by pushing on the mast, boom, or patient.
- ⚠ **ALWAYS** maneuver the lift with the handle provided.
- ⚠ **ALWAYS** lower the patient to the lowest comfortable position before transfers.
- ⚠ **DO NOT** push a loaded lift at speeds which exceed a slow walking pace.
- ⚠ **DO NOT** push the lift over uneven or rough ground. Particularly if loaded.
- ⚠ **DO NOT** attempt to push/pull a loaded lift over a floor obstruction, which the casters are unable to ride over.
- ⚠ **NEVER** force an operating/safety control. All controls are easy to use and do not require excessive force.
- ⚠ **DO NOT** park a loaded lift on ANY sloping surface.
- ⚠ **DO NOT** attempt to negotiate a loaded lift on a slope.
- ⚠ **DO NOT** use electric lifts in a shower.
- ⚠ **DO NOT** charge an electric lift in a bathroom or shower room.
- ⚠ **DO NOT** lift a patient unless you are trained and competent to do so.
- ⚠ **DO NOT** use, or allow this patient lift to be used for any other purpose than for transferring a patient.
- ⚠ **DO NOT** push/pull the lift down steps, loaded, or unloaded.
- ⚠ **ALWAYS** check that the lift is not charging before moving as the electrical connection may be damaged.
- ⚠ **ALWAYS** place the legs of the lift in the open position to lift or lower a patient. Close the legs to move the lift.

### SLING USE WARNINGS!

- ⚠ **ALWAYS** use Medline slings.
- ⚠ **ALWAYS** ensure the sling is the correct size and capacity for the patient being transferred.
- ⚠ **NEVER** use a sling which is frayed or damaged.
- ⚠ **NEVER** exceed the safe lifting capacity of sling that is being used.

### OPERATING CAUTIONS

- **CAUTION:** Keep the batteries fully charged. Place the lift on charge whenever it is not in use. The charger will not allow the batteries to "overcharge."
- **CAUTION:** Never run the batteries completely flat. If the audible warning sounds, complete the lifting operation in hand and place the lift on charge.
- **CAUTION:** Never store the lift for long periods without regular charging throughout the storage period.
- **CAUTION:** Always make sure the main power to the charger is switched off before connecting or disconnecting the charger to or from the lift.
- **CAUTION:** Never leave the charger plugged into the lift with the main power off.
- **CAUTION:** Never disconnect the charger plug by pulling on the cable.
- The lift has two locking casters, which can be locked for parking. When lifting, the casters should be left free and unlocked, so that the lift will then be able to move to the center of gravity of the lift. **DO NOT** apply the brakes because if the brakes are applied, the patient might swing to the center of gravity and this may prove disconcerting and uncomfortable to the patient, or cause the patient to bump the mast.

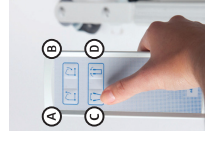
### LOCKING THE WHEELS:

- The rear wheels can be locked for rotation and lateral movement.
- To lock the wheels press the brake lever above the wheel down with your foot. Release the wheels by pressing the top side of the lever.
- During lifting, wheels should remain unlocked so that the lift may shift to the patient's center of gravity.
- The wheels should however be locked if there is a risk for the lift moving into the patient, for example when lifting from the floor.

### OPERATING THE LIFT USING THE HAND CONTROL:

There are 4 buttons with the following functions:

- A. Raise the boom
- B. Lower the boom
- C. Open the legs
- D. Close the legs



## CONTROL BOX/BATTERY PACK



Control Box



Battery Pack

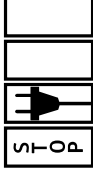
### FEATURES:

- Output voltage: 24 VDC
- Battery rated at 2.9 Amp Hours
- Acoustic battery alarm at approx. 50% battery capacity
- Bayonet lock for locking the handset plug
- Emergency stop button
- LCD-display shows actual battery capacity and indicates when battery needs recharging
- Internal charger
- A fully charged battery should provide approximately 80 to 100 lifts and lowers.

## BATTERY OPERATION

### IMPORTANT NOTES ON CHARGING

Battery charge status can be seen on the LCD display of the control box. The LCD Display: there are 4 bars on the display.



#### CAPACITY

- 4 bars: fully charged
- 3 bars: 50% to 75%
- 2 bars: 25% to 50% - battery pack should be charged.
- 1 bar: 0% to 25% - stop using the lift and charge the battery pack.

For maximum battery life, charge batteries regularly. We recommend charging each night. Maximum charge is obtained after about 6 hours. Once the battery is fully charged, the charger automatically disconnects. Leaving the battery in the charger with the charger plugged in will not damage the battery.

When the battery is being charged, an amber light will be lit on the control box. When this light goes off, the battery is fully charged.

If the amber light stays on for more than 8 hours, the battery probably needs to be replaced.

When the lift is not in continuous use, the emergency stop button should be pressed in to conserve battery power. Make sure the battery is fully charged prior to pressing in the stop button for lift storage.

Avoid unplugging the hand control and motor from the control box. Frequent plugging and unplugging of the hand control and motor to and from the control box may damage the control box.

\*The Medline MDS450EL will not operate while the batteries are being charged.

## CHARGING THE BATTERIES

### BUILT-IN CHARGER ON LIFT:

1. Make sure the battery box red reset/emergency stop button is "ON" (i.e. the red button is out).
2. Insert the charger power cord into the Outlet 4 on the control box.
3. Plug the charger to the power supply wall outlet 3.
4. Check the both lamps light. The yellow light indicates the battery is charging. This will turn off once fully charged. The green light indicates power to the control box.
5. If charging the battery on the lift, unplug the charger FIRST before using the lift.





## EXTERNAL CHARGING UNIT CONTROL BOX (WALL MOUNTED):

1. Remove the battery pack from the control box on the lift.
2. Check to ensure the external charging unit (not included) below this title is plugged into a wall outlet.
3. Place the battery pack on the wall mounted charging unit.
4. Check the both lamps light. The yellow light indicates the battery is charging. This will turn off once fully charged. The green light indicates power to the control box.



## ELECTRICAL EMERGENCY LOWERING

In case of a failure of the hand control unit, the lift can be lowered electrically.

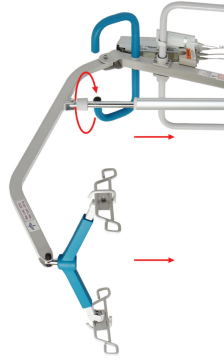
Locate the Emergency on the front of the control box... Using a narrow object such as a ball point pen, press the hole after the word EMERGENCY. The lift should begin to lower electrically. Release when the lift has been lowered sufficiently to remove the patient from the lift.



## MANUAL EMERGENCY LOWERING MECHANISM

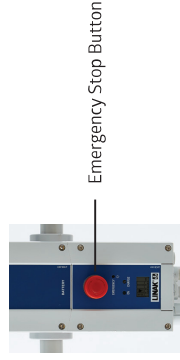
In case of a power failure while using the Medline MDS450EL, please follow this procedure to complete the intended lift and transfer.

The Emergency Lowering Device is located at the top of the actuator shaft. It is intended for use should the actuator fail to operate while a patient is suspended. The device is a plastic collar ring. Turn this clockwise continually until the patient has been lowered.



## EMERGENCY STOP

To Activate: Push the red Emergency Stop Button in on the control box.  
To Reset: Turn the button in the direction of the arrows until the button pops out.



## CAUTION:

**DO NOT USE THE LIFT FOR TRANSFERRING PATIENTS UNTIL ALL FAILURE ISSUES HAVE BEEN SAFELY AND COMPLETELY RESOLVED.**

**The Emergency Lowering Device is intended for lowering only during lift failure. The lift is not to be used to transfer patients using the Emergency Lowering Device once the patient has been safely lowered and removed from the lift.**

Should standard troubleshooting techniques fail to correct the lift and lower functions take the lift out of service and call your dealer immediately for assistance. Do not attempt further lifts until the lift is working properly.

## LIFTING TECHNIQUES

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

## TRANSFER FROM BED

- To start, the patient is laying flat and on their back in the center of the bed.
- Roll the patient onto one side with the assistance of another caregiver.
- Fold the sling in half. The handle on the back section should face outward when the sling is fitted.
- Position the sling under the patient so the commode aperture or "U" shaped cut-out aligns with the base of the spine and top of the sling close to the neck.
- Roll the patient onto the opposite side and position him/her on the flat section of the sling.
- The second caregiver can now pull the remainder of the sling from the other side of the patient so that the sling lays flat.
- Roll the patient onto their back so that they are lying on top of the sling.
- If possible, elevate the head section of the bed.
- Once the sling has been positioned centrally, loop the leg sections under the thighs and draw them up between the thighs.
- Feed one leg section through the loop of the opposite leg section.
- Open the base legs and move the lift slowly towards the patient and position the spreader bar over the patient's chest.
- Lower the cradle to a point where the sling's loops can reach the cradle's hooks and attach the sling to the cradle hooks.
- Lift the patient above the bed by using the hand control.
- Pull lift away from bed and rotate the patient so that they are facing the back of the lift.
- Close the base and slowly move patient over the wheelchair (wheelchair wheels must be locked) or commode, opening the base for stability.
- Then lower the patient onto the surface by pressing the down button.

**NOTE: Reverse the above procedure when returning the user/patient to bed.**

## TRANSFER FROM WHEELCHAIR

- Grasp the sling at each corner of the "U" shape of the commode aperture.
- The sling should be fitted with the loop handle on the back facing outward.
- Help the patient lean forward slightly, then slide the sling down between the chair and the patient's back.
- Position the commode aperture where the buttocks meet the seat.

- Position the sling equally around both sides of the body.
- Draw the leg sections to the front, along the side of the patient's thigh.
- Check the sling's central positioning by comparing the lengths of the leg sections when they are drawn forward.
- Reposition the sling if the leg sections are not equal in length.
- Feed the leg sections under the thighs.
- From between the legs, gently pull the leg sections up the inner thigh.
- Cross one leg loop through the other and then position the lift and attach all sling loops as described in the "from the bed transfer" above.



## LIFT A PATIENT FROM THE FLOOR

When discovering a patient lying on the floor...

- ▲ **ENSURE** the patient is not hurt
- ▲ **DO NOT** move the patient, if they are hurt
- ▲ **CONTACT** a clinician to determine the next steps
- Place a pillow under the patient's head.
- Roll the patient onto one side with the assistance of another caregiver.
- Fold the sling in half. The handle on the back section should face outward when the sling is fitted.
- Position the sling under the patient so the commode aperture or "U" shaped cut-out aligns with the base of the spine and top of the sling close to the neck.
- Roll the patient onto the opposite side and position him/her on the flat section of the sling.
- The second caregiver can now pull the remainder of the sling from the other side of the patient so that the sling lays flat.
- Roll the patient onto their back so that they are lying on top of the sling.
- Once the sling has been positioned centrally, loop the leg sections under the thighs and draw them up between the thighs.

- Feed one leg section through the loop of the opposite leg section.
- Open the legs of the lift and move the lift over the patient.
- Lower the cradle over the patient's chest to a point where the sling's loops can reach the cradle's hooks.
- Attach the loops of the sling to the cradle
- Slowly lift the patient, ensuring that they move into a sitting position when in the air.

## MAINTENANCE & INSPECTION

The operator of the lift is to inspect the Medline MDS450EL before each use. Check the following:

- Visually inspect the stand assist and check for external damage or wear
- Check all bolts and nuts are tight
- Check hand control and the lift and leg width movements function properly
- The locks on the rear caster can be engaged/disengaged
- The front casters swivel freely to insure maneuverability
- Batteries have sufficient charge to completely perform the transfer (see instructions on page 12)
- All the necessary items such as the sling and wheelchair, etc. are accessible and ready for use

At least once a month, the stand assist should be thoroughly inspected by a qualified technician to recognize any signs of wear, and/or looseness of bolts or parts. Replace any worn parts immediately.

To lubricate, place a drop of general purpose oil on the following points when the Medline patient lift is serviced and every month thereafter:

- Top of mast bolt connection
- Spreader bar hinge
- Caster axles

## MAINTENANCE SCHEDULE

Always follow the maintenance and cleaning schedule closely and fully while including any specific state regulations should they apply. Keep a log book of maintenance times and work performed or parts replaced.

### PERFORM EACH OF THE FOLLOWING IMMEDIATELY AFTER ASSEMBLY AND MONTHLY THEREAFTER:

#### Boom & Spreader Bar

- Check that spreader bar is firmly attached to boom.
- Check that boom is firmly attached to mast.
- Check for wear on pin securing spreader bar.
- Make sure spreader bar is free to rotate and swing.
- Check sling hooks on spreader bar for excessive wear.
- Make sure the boom is straight with no bends or deflections.

#### Mast

- Check mast is secured and bolted tight to the base.
- Make sure mast is straight with no bends or deflections.

#### Base Unit

- Make sure the lift rolls easily on its casters and the casters are firmly attached to base. If lift won't roll freely check caster surface for wear and replace if required. Lubricate caster axles at each maintenance session.

**Electronic System**

- Make sure control box is firmly attached to the mast.
- Check that actuator is firmly attached to boom and mast.
- Check that actuator cord is firmly inserted into the control box.
- Operate hand control to verify functions.
- Check battery levels and charge if required.
- Make sure the base legs open and close freely.
- Attempt upward and downward lift to ensure actuator working properly.
- Raise the lift with the hand control and then lower using the Electrical Emergency Lower button on the control box.
- Check the operation of the red reset/emergency stop button.
- Listen for any warning beeps during testing and perform troubleshooting as required.

**Slings**

- Check entire sling inventory for fraying, tearing or excessive wear of any kind and replace any worn or damaged slings with new Medline slings.

# TROUBLESHOOTING CHART

If, after going through the chart below, the lift will still not function, call Medline at 1-800-MEDLINE.

Symptom	Checks	Actions	
Battery will not charge.	Check that the emergency stop button is not pushed in.	Rotate knob in the direction of the arrows. Ensure that the knob pops out.	
	Check Battery Pack is inserted properly.	Re-Insert the Battery Pack.	
	Check that the contact plate of the battery box is not defective or broken off.	Replace the battery Pack.	
	Check power to the wall outlet.	Re-establish power to the wall outlet.	
	Check charging cord is connected properly to the Control Box.	Re-connect the power cord to the Control box.	
	Check fuse inside of Battery Box.	Replace fuse if blown.	
	Check battery > 50 % charge.	Charge battery.	
	Check that the emergency stop button is not pushed in.	Rotate knob in the direction of the arrows. Ensure that the knob pops out.	
	Check the cables to the control box are connected correctly.	Connect cables per instructions in section SETTING UP THE BATTERY PACK on Page 8.	
	Check the charging cable is not plugged into the wall outlet.	Unplug the charging cable from the wall outlet.	
There is a beeping noise.	Check the battery is charged.	Charge the battery.	
	Check the contact plate of the Battery Pack is not defective or broken off.	Replace the Battery Pack.	
	Check that the emergency stop button did not get pushed in.	Rotate knob in the direction of the arrows. Ensure that the knob pops out.	
	Check motor has power.	Use the electrical emergency lowering device to safely lower the patient.	
	Check no power to motor.	Use the mechanical emergency lowering device to safely lower the patient.	
	If lift is elevated, check that it can be lowered using the electrical emergency lowering device.	If the electrical emergency lowering device functions properly, replace the hand control.	
	Test hand control on another lift if possible.	If hand control functions properly on another lift, replace control box. If hand control does not function properly on other lift, replace hand control.	
	The lift cannot be raised/lowered and the legs cannot be opened/closed.	Check the cables to the control box are connected correctly.	Connect cables per instructions in section SETTING UP THE BATTERY PACK on Page 8.
		Check the charging cable is not plugged into the wall outlet.	Unplug the charging cable from the wall outlet.
		Check the battery is charged.	Charge the battery.
Check the contact plate of the Battery Pack is not defective or broken off.		Replace the Battery Pack.	
Check that the emergency stop button did not get pushed in.		Rotate knob in the direction of the arrows. Ensure that the knob pops out.	
Check motor has power.		Use the electrical emergency lowering device to safely lower the patient.	
Check no power to motor.		Use the mechanical emergency lowering device to safely lower the patient.	
If lift is elevated, check that it can be lowered using the electrical emergency lowering device.		If the electrical emergency lowering device functions properly, replace the hand control.	
Test hand control on another lift if possible.		If hand control functions properly on another lift, replace control box. If hand control does not function properly on other lift, replace hand control.	
The lift stops moving when elevated.		Check that the emergency stop button did not get pushed in.	Rotate knob in the direction of the arrows. Ensure that the knob pops out.
	Check motor has power.	Use the electrical emergency lowering device to safely lower the patient.	
	Check no power to motor.	Use the mechanical emergency lowering device to safely lower the patient.	
	If lift is elevated, check that it can be lowered using the electrical emergency lowering device.	If the electrical emergency lowering device functions properly, replace the hand control.	
	Test hand control on another lift if possible.	If hand control functions properly on another lift, replace control box. If hand control does not function properly on other lift, replace hand control.	
	The actuator will either go up or down, but not both.	Check that the emergency stop button did not get pushed in.	Rotate knob in the direction of the arrows. Ensure that the knob pops out.
		Check motor has power.	Use the electrical emergency lowering device to safely lower the patient.
		Check no power to motor.	Use the mechanical emergency lowering device to safely lower the patient.
		If lift is elevated, check that it can be lowered using the electrical emergency lowering device.	If the electrical emergency lowering device functions properly, replace the hand control.
		Test hand control on another lift if possible.	If hand control functions properly on another lift, replace control box. If hand control does not function properly on other lift, replace hand control.
The lift stops moving when elevated.		Check that the emergency stop button did not get pushed in.	Rotate knob in the direction of the arrows. Ensure that the knob pops out.
		Check motor has power.	Use the electrical emergency lowering device to safely lower the patient.
		Check no power to motor.	Use the mechanical emergency lowering device to safely lower the patient.
		If lift is elevated, check that it can be lowered using the electrical emergency lowering device.	If the electrical emergency lowering device functions properly, replace the hand control.
		Test hand control on another lift if possible.	If hand control functions properly on another lift, replace control box. If hand control does not function properly on other lift, replace hand control.

