



**BATTERY OPERATED PATIENT LIFT
MODELS: MDS400SA & MDS600SA
OWNER'S MANUAL**



All components
Latex free

Revised 4/5/07

Thank you for choosing a Medline Lift!

To better serve you, please record the following information:

Supplier Name: _____

Telephone: _____

Serial #: _____

Date of Purchase: _____

INSPECT YOUR MERCHANDISE

Upon receipt of your Medline Lift, verify that all merchandise is complete and free from any shipping damage. Refuse delivery if the package 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 Medline:

Medline Industries, Inc.
One Medline Place
Mundelein, IL 60060-4486
1-800-MEDLINE

PACKAGE CHECKLIST

- Base/Mast knocked down preassembled
- U shaped boom assembly
- Knee pad unit
- Carton with gray Control Box and mounting bracket
- Carton with actuator/motor
 - Carton containing the following:
 - Knee pad brackets and mounting kit
 - Charger
 - Hand Control
 - Plastic bag with fasteners and black plastic bolt cover caps
 - Owners Manual
- Storage Accessory Bag

EXPLOSION CHART OF MEDLINE MDS400/600 SA

- ① Base-
- ② Mast-
- ③ Control Box-
- ④ Pendant-
- ⑤ Actuator-
- ⑥ Lifting Boom-
- ⑦ Kneepad Assembly-
- ⑧ Footrest-
- ⑨ Brake

Each lift has warning labels applied.

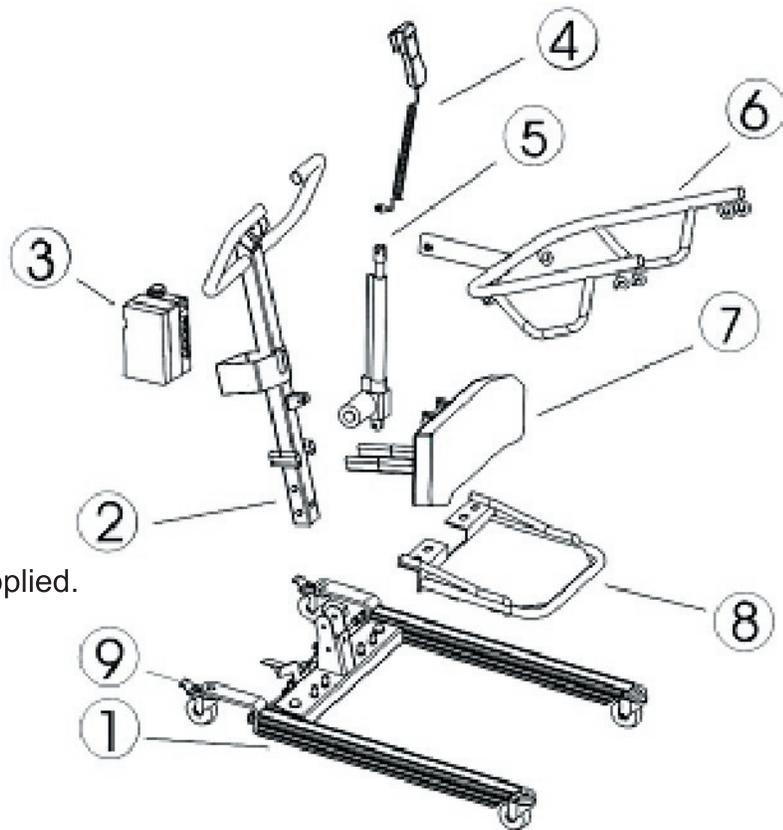
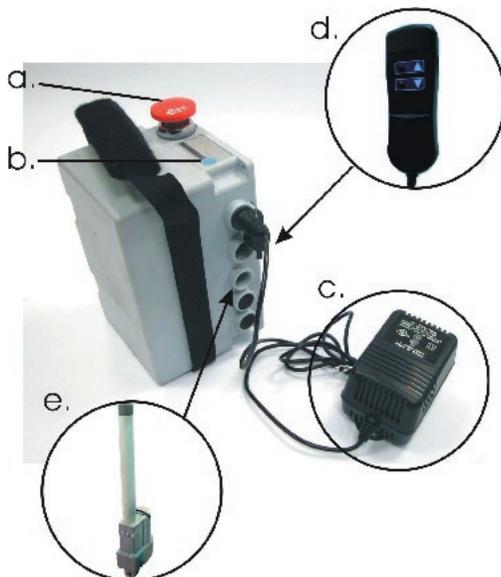


DIAGRAM OF CONTROL BOX



- a. Emergency Reset/ Stop Button
- b. Battery Testing Button
- c. Charger (plug into top hole)
- d. Handset (plug into second hole from top)
- e. Actuator (plug into third hole from top)

SAFETY INSTRUCTIONS

The Medline MDS400SA and MDS600SA reflects innovative state of the art design to increase user mobility. The MDS400SA and MDS600SA will provide years of service if it is properly maintained, as any piece of electrical/mechanical equipment requires.

Please pay careful attention to the following important information regarding the care, maintenance, and operation of the Medline MDS400SA and MDS600SA Battery Operated Patient Lift. Carefully read the instructions before assembling the lifter, or attempting to lift any user with the device.

PLEASE NOTE THE FOLLOWING:

- Residents who cannot provide assistance themselves while being lifted due to being comatose, spastic, agitated or otherwise severely handicapped, should not be lifted with this or any other stand assist lift. As always, a doctor or certified practitioner should determine the proper lifting device for all residents/patients/users.
- The Medline MDS400SA or MDS600SA should be solely for transferring a resident to or from a wheelchair, bed, commode, shower chair, floor or 90 degree rotation. The lift should not be used for patient transportations between rooms, etc. in lieu of a wheelchair or gurney.
- During lifting or lowering, whenever possible, always keep the base of the lift in the widest position *with the casters locked*.
- The base of the lift should be closed before moving the lift.
- Do not roll casters over any object while the resident is in the sling.
- The safe working load for the MDS400SA is 400 lbs. The safe working load for the MDS600SA is 600 lbs. Never attempt to lift anyone whose weight exceeds the safe working load of the lift being used. Always insure the person being lifted has both feet firmly placed on the foot plate and knees up against the kneepad prior to lifting.

The Medline MDS400SA or MDS600SA allows a resident to be lifted and transferred safely with minimum physical effort required by the caregiver. Before attempting to lift anyone, please practice operating the lift and read this manual completely. Also prior to actual lifting, explain the lifting procedure to the resident.

WARNING!

Do not attempt to transfer a resident without prior approval of the resident's nurse or doctor. Also, do not transfer without having studied the instructions and practiced operating the lift several times. Together with the resident's doctor, nurse, or medical attendant, select a Medline sling that is both practical and comfortable. The sling selected should be one that serves the needs of the resident, while providing the resident with optimal safety. Never interfere with the lift, unless instructed by the attendant who should be experienced in the use of the Medline MDS400SA or MDS600SA. Never operate the lift unless you have been properly trained on all procedures and safe handling methods.

WARNING!

Medline slings are specially designed for use on Medline Lift equipment. For optimum performance use only Medline stand assist slings. **USE OF NON MEDLINE SLINGS IS UNSAFE AND MAY RESULT IN INJURY TO THE RESIDENT OR CAREGIVER.**

WARNING!

Do not put anything (e.g. cushion, pad, etc) between the resident and the sling. This may cause the resident to slide out of the sling and cause injury.

WARNING!

Avoid personal injury by making sure children or pets are away from the Medline MDS400SA or MDS600SA while it is in use.

WARNING!

Avoid personal injury by making sure all extremities (such as fingers, arms, legs, or feet) are clear of the lift mechanism while it is in operation.

WARNING!

Avoid personal injury and possible damage to the MDS400SA or MDS600SA by making sure the maximum weight limit is not exceeded.

WARNING!

Replace any worn 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 resident and caregiver. Medline is not responsible for any consequence resulting from the use of non-Medline Lift parts and components.

WARNING!

Avoid personal injury by making sure the electrical connector is disconnected before conducting any electrical inspection. Contact your dealer if any electrical problem is detected.

WARNING!

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.

CAUTION

Avoid damage to the MDS400SA or MDS600SA by keeping foreign objects from coming into contact with the lift mechanism or other lift moving parts.

ALWAYS CHECK THE FOLLOWING BEFORE LIFT OPERATION:

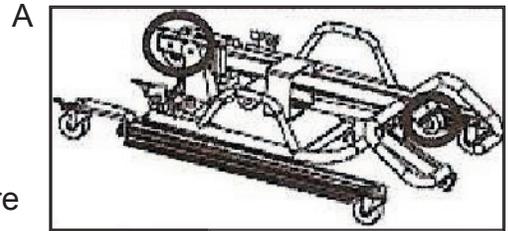
- The base legs are fully engaged from the stowed position
- The mast is fully locked and bolted securely into position
- The base legs open and close properly using foot pedals
- The red emergency stop/reset button is in the up (operating) position
- The hand remote has been tested and the lift up/down functions work smoothly
- The nuts, bolts and fasteners are secure

ASSEMBLY INSTRUCTIONS

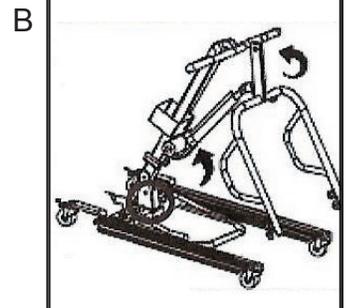
WARNING!

The lift is heavy. Therefore, avoid injury and DO NOT attempt to remove the lift from the box without any assistance. Exercise care when unpacking and assembly to avoid injury and pinching fingers between components. Read the owners manual carefully prior to unpacking and ask for assistance if you are unsure of proper procedures. A set of special wrenchs is supplied with each lift for assembly; or standard adjustable wrenchs or socket sets may be used.

Open the box and take the lift out. The base and the mast are partially assembled when taken from the box. Unscrew nuts and bolts at the top and the bottom of the mast. See A where circles are drawn.

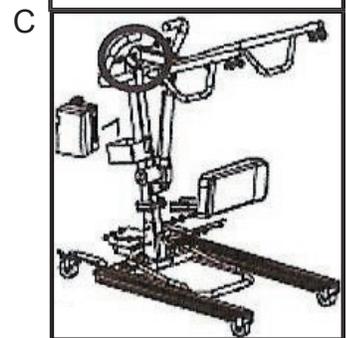


With one hand on the mast, and another on the lifting boom, stand the mast up. (B)



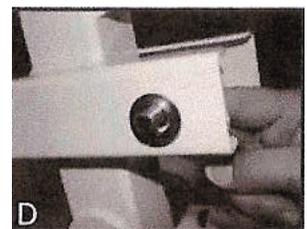
Secure the mast to the base with the supplied bolts and nuts and hand tighten them. See B where circle is drawn.

Attach the lifting boom to the top of the mast with the supplied nut and bolt, placing the large nylon washers on each side of the lifting boom. See C where circle is drawn. Attach the actuator with the supplied pins and safety rings to the bracket on the mast and the bracket on the bottom of the lift boom as shown in (C)



Use a wrench to fully tighten all nuts and bolts on the lifting boom, the mast, and the base.

Attach the kneepad assembly to the mast by feeding a bolt through each side hole and adding a washer to each bolt. (D)



Put a knob on each side of the mast and turn clockwise two times to allow the knob to hang loosely. (E)

Slide the two L-shaped arms into the mast, allowing each bolt head to connect into the arm openings. Hand tighten each knob until secure. (F)



Secure the battery control box in the square metal holder on the back of the mast and plug the actuator and pendant cables to the control box.

Plug in the charger to initially charge the control box.

Make sure the lift is sturdy and secure before use.

NOTE:

Prior to using the Medline MDS400SA or MDS600SA for the first time, charge the batteries for 12 hours.



MAINTENANCE & INSPECTION CHECKING LIST

The operator of the lift is to inspect the Medline MDS400SA or MDS600SA before each use. Check all bolts for tightness. Make sure the base can be easily opened, and that all lift parts are in place. Make sure all casters turn freely, and that the caster brakes can be engaged. Make certain all necessary items (i.e. slings, wheel chairs, etc.) are accessible and ready for use. See the instructions below to check the battery capacity and appropriate re-charge levels.

At least once a month, the lift 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 MDS400SA or MDS600SA is serviced and every month thereafter:

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

CHECKING BATTERY CAPACITY

Check batteries by pressing the Battery Indicator (blue circle with battery sign on top of control box) or by pressing up or down on the remote. The status of the battery is indicated by colored LED lights and is listed in the following table:

RED	AMBER	GREEN	GREEN	GREEN	STATUS
ON	ON	ON	ON	ON	FULLY CHARGED
ON	ON	ON	OFF	OFF	NEEDS CHARGE
ON	ON/OFF	OFF	OFF	OFF	CHARGE IMMEDIATELY. DO NOT USE THE LIFT.
OFF	OFF	OFF	OFF	OFF	BAD BATTERIES OR BAD CONNECTION.

CHARGING THE BATTERIES

- Make sure the battery box red reset/emergency stop button is “ON” (i.e. the red button is up).
- Insert the charger into the charging socket on the battery box (the top slot).
- Plug the charger to the power supply.
- All LED indicator lights should be “ON” while charging.
- When only one green LED indicator light is illuminated, the batteries require approximately 7-9 hours to be fully charged.
- A complete initial charge should take approximately 12 hours. Subsequent recharges should take 4 hours or less. Do not charge the batteries over 12 hours to avoid premature charger wear. Charging longer than 12 hours will not affect battery life.
- Unplug the charger FIRST before using the lift.
- Replace the two internal batteries when frequent charging is required.

The Medline MDS400SA or MDS600SA will not operate while the batteries are being charged.

IMPORTANT NOTES ON CHARGING

Push lift to an appropriate location and charge the batteries with the charger provided. 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.

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

- Check that boom is firmly attached to mast.
- Make sure the boom is straight with no bends or deflections.
- Check all sling hooks for excessive wear.

Mast

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

Base & Foot Pedals

- Make sure the base legs open freely.
- 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 seated in metal holder on back of mast securely.
- Check that actuator is firmly attached to boom and mast with holding pins.
- Check that actuator cord is firmly inserted into the third hole from the top of the control box.
- Operate hand control or push battery indicator to check battery levels and charge if required.
- Attempt upward and downward lift to ensure actuator working properly.
- 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.

DO NOT OPERATE LIFT UNLESS ALL MAINTENANCE POINTS PASS INSPECTION

WARNING:

- ALWAYS plan your lifting operations before commencing.
 - ALWAYS carry out the daily check list before using the lift.
 - ALWAYS familiarize yourself with the operating control and safety features of a lift before lifting a patient.
 - DO NOT use a sling unless it is recommended for use with the lift.
 - ALWAYS check if the sling is suitable for the particular patient and is of the correct size and capacity.
 - NEVER use a sling which is frayed or damaged.
 - ALWAYS fit the sling according to the instructions provided.
 - ALWAYS check the safe working load of the lift to be sure it is suitable for the weight of the patient.
- ALWAYS carry out lifting operations according to the instructions in the user manual.
- NEVER disconnect or bypass a control or safety feature because it seems easier to operate the lift.
 - DO NOT lift a patient with the caster brakes on. Always let the lift find the correct center of gravity.
 - 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 (1.9 miles/hour, 2.6 foot/second).
 - 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 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.
 - YOUR lift is for patient lifting. DO NOT use it, or allow it to be used for any other purpose.
 - DO NOT bump the lift down steps, loaded, or unloaded.
 - DO NOT attempt to negotiate a loaded lift on a slope.
 - ALWAYS check that the hoist is not charging before moving as the electrical connection may be damaged.
 - 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”.
 - NEVER lift with the legs in the closed/transport position. The closed position is for storage and transport only.
 - 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 braked casters, which can be applied 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 resident.

OPERATING INSTRUCTIONS

NOTE: Turn the lift “ON” by turning the red “RESET” button clockwise until it pops up. Turn the lift “OFF” by pressing down the “RESET” button.

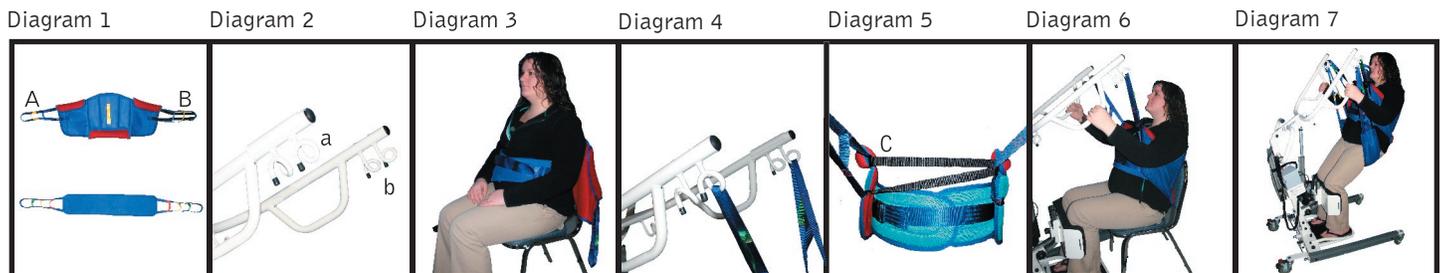
Preparation Before Lifting

1. Press the UP or DOWN button on the hand control once. Check if the battery indicator lights are on. To proceed with lifting, make sure there is at least one green light. Batteries are fully charged when three green lights are shown.
2. After the battery indicator lights went out, push the UP button and the DOWN button on the hand control and ensure that the lift is operating correctly.
3. Position the the base of lift around or under the object.
4. Widen the base and engage the caster brakes.

Fitting Medline Stand Assist Sling

SAFETY NOTE: The Medline Stand Assist sling is not suitable for patients who have involuntary postural control.

1. Always check sling safe working load versus person to be lifted.
2. Position sling behind the back with the two red pads under the arms and the single red lumbar pad against the small of the back.
3. Make sure the adjustment strap is on the outside.
4. Cross the chest belt over and secure using the buckle adjusting for comfort as required.
5. Place loops A&B through black strap C forming an “H” in front of person as in Diagram 5.
6. Attach loops A&B to the corresponding pig tail hooks a&b on the lift boom as in Diagrams 1&2
7. Person must grasp handles, and have feet securely on foot platform with knees against kneepad.
8. Person must keep arms outside of all loops while looking up at a slight angle as in Diagram 6.
9. Correct lift position and loop attachments as shown in Diagram 7.



Transfer From Bed

- Fit sling as described in “Fitting Medline Stand Assist Sling” above.
- Push lift towards patient. Open the base of the lift. Apply the brakes in both rear casters.
- Position patient’s feet on the foot platform and knees against the knee pad.
- Attach the sling straps to the hooks.
- Have the patient’s hands holding the handles. For patients who cannot hold the handles, have them hold their arms around the chest.
- Press the “UP” button on the hand control.
- Before the patient’s body is lifted from the bed, stop and make sure the sling is secured and patient’s knees are against the knee pad.
- The patient should be comfortable with the pressure under the arms. If not, adjust the sling and try another loop option to release pressure.

- Engage the lift “UP” button until the resident has been lifted and clear of the bed surface.
- Transfer to another object can be done at this position without the patient attending a full standing position.
- Release the brakes, close the base, and pull the lift away from the bed.
- Lower the patient to the object intended.
- Reverse the above procedures when lowering the patient to the bed.

Transfer from Wheelchair

- Fit sling as described in “Fitting Medline Stand Assist Sling”.
- Push lift towards patient. Open the base of the lift to go around the chair. Apply the brakes in both rear casters.
- Position patient’s feet on the foot platform and knees against the knee pad.
- Attach the sling straps to the hooks.
- Have the patient’s hands holding the handles. For patients who cannot hold the handles, have them hold their arms around the chest.
- Press the “UP” button on the hand control.
- Before the patient’s body is lifted from the chair, stop and make sure the sling is secured and patient’s knees are against the knee pad.
- The patient should be comfortable with the pressure under the arms. If not, adjust the sling and try another loop option to release pressure.
- Press the “UP” button until the patient’s body has completely left the chair.
- Transfer to another object can be done at this position without the patient attending a full standing position.
- Release the brakes, close the base, and pull the lift away from the bed.
- Lower the patient to the object intended.
- To lift patient in a standing position, continue to lift until the patient’s knees are locked in a standing position.
- At the standing position, patient’s knees may move away from the knee pad.
- Release the brakes, close the base, and pull the lift away from the bed.
- Lower the patient to the object intended.
- Reverse the above procedures when lowering the patient to the bed.

LIFT SPECIFICATION CHART

ITEM NUMBER	WEIGHT CAPACITY	SPREADER BAR MAXIMUM HEIGHT	SPREADER BAR MINIMUM HEIGHT	BASE CLOSED EXTERNAL WIDTH	BASE CLOSED INTERNAL WIDTH	BASE OPEN EXTERNAL WIDTH
MDS400SA	400 lbs.	68”	33”	26.5”	22”	37”
MDS600SA	600 lbs.	68”	33”	26.5”	22”	37”
ITEM NUMBER	BASE OPEN INTERNAL WIDTH	BASE HEIGHT	MAST HEIGHT	OVERALL LENGTH	UNIT NET WEIGHT	LOCKABLE CASTERS
MDS400SA	32.5”	4.5”	40”	40”	117 lbs.	Yes
MDS600SA	32.5”	4.5”	40”	40”	122 lbs.	Yes

TROUBLESHOOTING CHART

SYMPTOMS	COMPONENTS CONCERNED	POSSIBLE CAUSES	ACTION	SOLUTION
The actuator is installed and a clicking sound is audible.	Actuator Actuator and PCB	Actuator plug is not sealed properly into control box. Actuator is defective or completed its life cycle. Control box is defective.	Test control box on another Medline lift.	Firmly plug the actuator plug into control box. Replace actuator if control box is good. Replace PCB if control box is bad.
The actuator will either go up or down, but not both.	Hand Control or PCB	Hand control or control box defective.	Test hand control on another Medline lift.	Replace PCB if hand control is good. Replace hand control if it is bad.
The actuator makes a grinding sound while lifting, but works fine without a load.	Actuator	The internal gear is stripped likely due to overloading	Stop using the lift.	Repair or replace the actuator.
The actuator stops and starts during lifting or lowering.	Batteries	Bad batteries	Check battery indicator. Confirm if lights drop quickly to red light.	Replace batteries.
The lift will not operate even though battery indicator shows charge.	Control Box	Charger still plugged in. Poor connection between control box and hand control, or defective hand control. Poor connection between actuator and control box.		Unplug charger. Plug hand control firmly into control box, or replace hand control. Plug actuator cord firmly into control box.
The lift will not operate and battery indicator has no lights illuminated.	Control box and battery	Control box may be in "off" position. Internal batteries may be loose from their connections. Batteries are in need of being charged. Batteries are dead and won't hold a new charge.		Turn the red emergency stop button until it pops up to the "on" position. Check inside control box to ensure batteries are connected. Use the charger to charge the batteries making sure the red emergency stop is in "on" or "up" position. Replace the two internal batteries.
During charging the battery, indicator is not illuminated and won't charge.	Control Box Charger	The red emergency stop button is in "off" or "down" position. The charger is defective or at end of it's life cycle.		Turn the red emergency stop button until it pops up into the "on" position. Inspect the charger for damage and replace if required.
The battery indicator indicates need for frequent charging and/or lift loses power.	Batteries	The internal batteries are at the end of life cycle.		Replace the two internal batteries.
The lift will not operate and there is no clicking sound or light when hand control was pressed.	Hand Control	The hand control is loose/ defective or at the end of life cycle.	Check battery indicator.	Replace the hand control if battery indicator shows full charge.
Two beeps per second audible from control box, and lift runs slowly/ stops/ starts.	Batteries	Low battery charge level.		Charge the batteries.
Three beeps per second audible from control box with only red light illuminated and lift stops.	Batteries	Low battery charge level.		Charge the batteries immediately.
Six beeps per second audible from control box with no lights illuminated.	Batteries	Extremely low battery charge level.		Charge the batteries immediately.
Three beeps every other second audible from control box and lift won't operate.	Batteries	Battery life cycle.		Replace the batteries.
Three long beeps and lift stops during lift.	Working Load	Lift is overloaded.		Stop the lift immediately and lower patient.

LIMITED WARRANTY

The Medline MDS400SA or MDS600SA you purchased is guaranteed by Medline to be free from defects in material and workmanship under normal use and service. The warranty period for this product is three years for the base and frame assembly and three years for the electronic components including the actuator. Internal replacement batteries are warranted for twelve months.

This warranty shall be voided upon transfer of ownership of this product. Medline agrees to repair or replace this product, at our discretion and at no charge, within the warranty period provided the product is delivered to Medline or its Authorized Service Center in its original packaging or equivalent; is fully insured with all shipping charges prepaid; and that Medline consents the unit is defective. The repaired or replacement unit shall be warranted for a period equal to the balance of the defective unit's warranty period. A handling charge of \$50.00 will be applied to any returned product proven to be NOT defective. For warranty service, please contact the dealer from whom you purchased your Medline Lift product. You may also contact Medline at **1-800-MEDLINE** should warranty service not be available from your dealer. NOTE: You must never return the product to your dealer or to Medline at any time without the verbal consent of either party. To ensure the best service to our customers, Medline requires the following information to be included with the returned unit:

1. Model Name/Number and Serial Number on the packaging.
2. Proof of purchase, i.e. copy of the original invoice from either Medline or its dealer.
3. A Return Authorization number (RA#) obtained by calling Medline prior to the return of the product. The RA# must be clearly indicated on the outside of the packaging;
4. A detailed description of the problem and its symptoms on a note.

This warranty shall not apply to any product which has been repaired or altered in any way so as, in our judgment, to affect its functionality and durability, nor to any product subject to abuse, misuse, negligence or accident, improper maintenance, improper installation, nor to any product used with other parts, components and/or accessories with quality and/or specifications not compatible with this product. This warranty does not cover products that have been impaired by occurrences considered Acts of God over which Medline has no control. This warranty shall also be voided if any required periodic maintenance, if applicable, has not been properly performed on this product.

This warranty and the aforementioned remedies presented are exclusive and in lieu of all other express or implied warranties. No other representatives or claims shall be binding or obligate Medline in any way. Any warranty applicable to this product is limited to the aforementioned period indicated. In no event shall Medline be liable for any special, incidental, or consequential damages; loss of revenue; or cost of replacement goods; resulting from the use or malfunction of this product to the associated equipment on which and with which it is used. This warranty gives specific legal rights and you may be entitled to other rights that vary from state to state.

