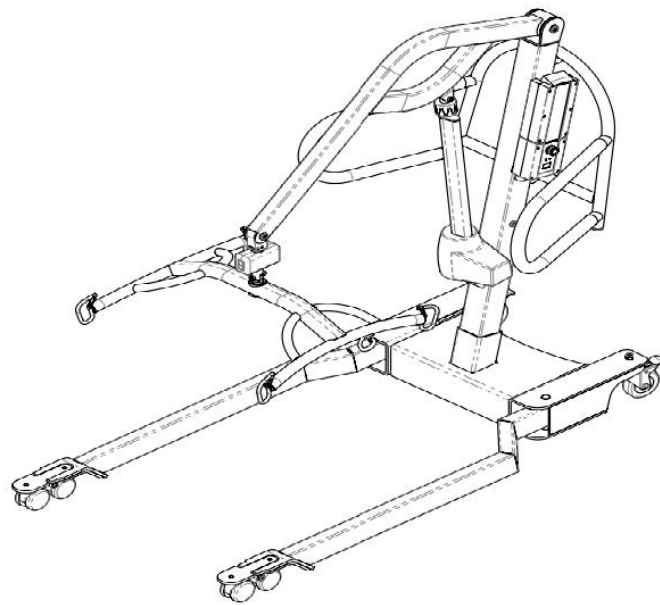


# **FREE SP:RIT**

## **850 PRO**

TRUE BARIATRIC 850 LB. PATIENT LIFT



USER MANUAL

## **Free Spirit Bariatric Patient Lift**

**MODEL #FS850**

FOR SAFE OPERATION, PLEASE READ THIS MANUAL BEFORE OPERATING

# Table of Contents

1. Introduction .....	3
2. Product Description.....	4
3. Assembly Instructions.....	5
4. Disassembly Instruction.....	7
5. Components Identification .....	9
6. Safety Precautions .....	10
7. Operation Suggestions .....	12
9. Key Symbols .....	15
10. Cleaning .....	16
11. Maintenance & Servicing.....	17
12. Electromagnetic Compatibility (EMC).....	18
13. Key Specification .....	20
14. Sling Compatibility .....	21
15. Warranty .....	22

# Introduction

The **FS850 FREE SPIRIT BARIATRIC PATIENT LIFT** is a battery powered electric patient lift, aimed to give and promote safe patient handling and transferring for both the patient and caregiver. The hoist has a maximum weight capacity of 850 lbs and features a power operating base to provide effort-free operation of the lift legs.

The FS850 is a bariatric lift with a 4-point cradle and is designed to be used in conjunction with suitable bariatric sling. Each lift is completely assembled, checked and load tested before being packed and shipped. A user manual is supplied with each lift and should be kept safely for future reference. It is strongly suggested to read this instruction manual before operation.

Lift must be maintained properly and periodically. Please refer to the maintenance schedule included in this manual. If you are not sure what your country's servicing requirements are, please check with your dealer and/or a local government agency.

**WEIGHT CAPACITY: 850 LBS**

# Product Description

## **PURPOSE OF THIS LIFT**

To assist lifting and transferring of a resident from one resting location to another especially those who are not able to move by him or her self.

## **INTENDED USERS**

Any mobility restricted user whose weight is below the maximum lift capacity limit. Only a professional caregiver and/or fully trained operator is to operate the lift and fit the sling.

## **INDICATIONS**

To assist in the lifting and/or transferring of a mobility-impaired patient due to an injury, physical disability or medical condition.

## **INTENDED PATIENT POPULATION**

The Intended Patient Population is mobility-impaired patients (up to maximum patient weight capacity) requiring assistance to be lifted and/or transferred over a short distance.

## **PROHIBITED INDICATIONS**

- Operator who is not familiar with patient lift.
- Patient exceeds maximum patient weight limit.
- Patient sling is not compatible with FS850 Patient Lift.
- To use for transporting patients.

Other contraindications may be relevant which are specific to the individual and/or environment of use.

We recommend that when transfer of a patient is such risk assessed and conducted safely over a short distance only. FS850 is a bariatric patient lift and we suggest that it be safely operated by 2 appropriately trained and experienced caregivers. It is also the responsibility of each facility or caregiver to ensure that the lift is only operated without additional assistance, if circumstances safely allow, by someone who has the following condition: (a) has thoroughly studied and understood the instructions for use for both the lift and any accessories; (b) has adequate training and experience to determine that the lift may be safely operated without additional assistance; and (c) can operate the lift without assistance. The FS850 Mobile Patient Lift is suitable for patients in sitting or recumbent positions.

# Assembly Instructions

## CARTON CONTENTS

Place the carton in a clear working area and open carefully without damaging contents. The carton would contain:

- FS850 bariatric mobile patient lift
- Mast+ Boom
- Base with legs, Push handle
- Cradle
- Scale (optional)
- Control box with charging function
- Hand control
- Battery pack
- Charging cable

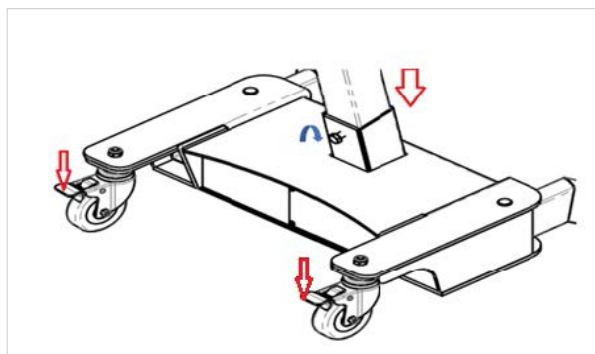
**WARNING:** The FS850 Patient Lift is a heavy device and will need to be lifted with care. You may need assistance to lift the product from the carton to protect against damage and injury.

**A.i** Remove all the parts from the carton and place on the floor, taking care to protect the surface from damage.

**ii.** Place the base in a clear area and engage rear castors brakes.

**iii.** Fit the mast and boom assembly into the base socket.

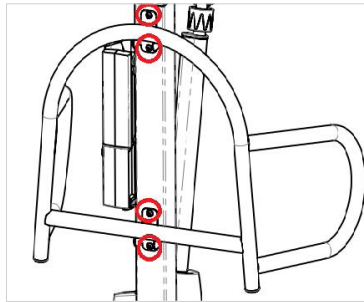
**iv.** Tighten the bolt clockwise on the base socket.



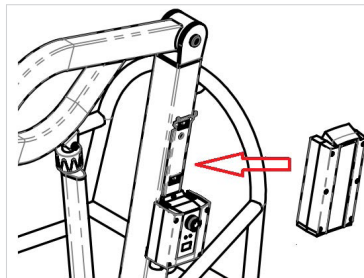
**WARNING:** Avoid trapping fingers. Keep fingers away from the end of the mast when inserting into the base socket. The electric leg operation will not function unless the mast is fully and properly engaged.

# Assembly Instructions

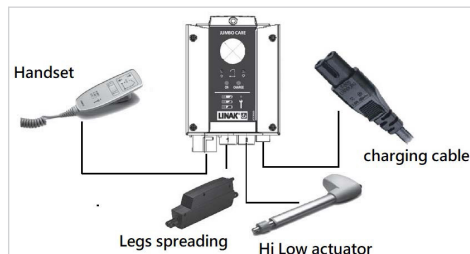
**B.** Line up the handle assembly from the rear of the mast using the four bolts provided.



**C.** Fit battery pack to the control box of lift and make sure the latch holding the battery pack in place is fully engaged, release the emergency stop button clockwise before operation.



**D.** Plug the handset and actuator cables into the bottom of the controller following the instruction as below.

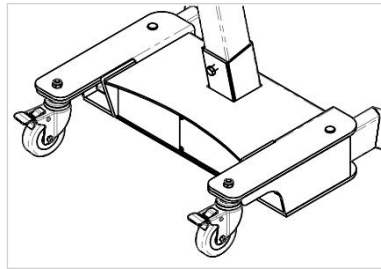


# Disassembly

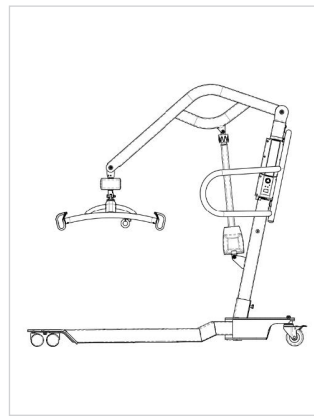
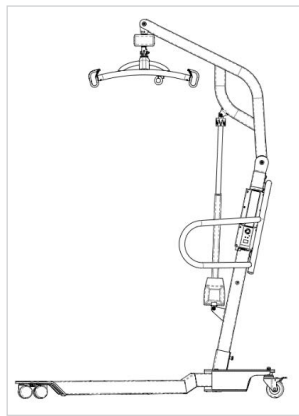
The lift should not be disassembled unless for service, repair or transport if necessary. If disassembly is required, simply follow the assembly instructions in reverse sequence by a qualified and skilled engineer .

## PLEASE CHECK THE FOLLOWING BEFORE OPERATION

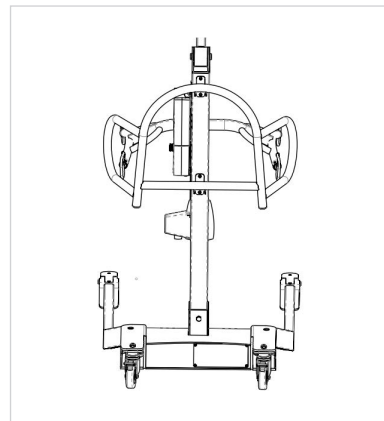
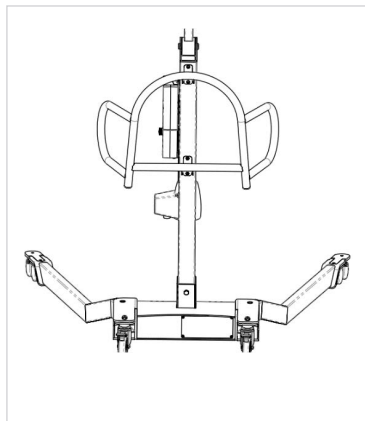
**A.** The mast is fully engaged and fixed into correct position.



**B.** Make sure the boom rises and lowers normally. (This is done via the handset).

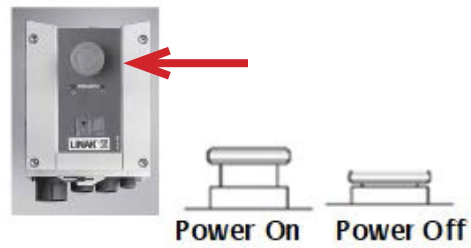


**C.** The legs of the lift open and close normally. (This is done via the handset).



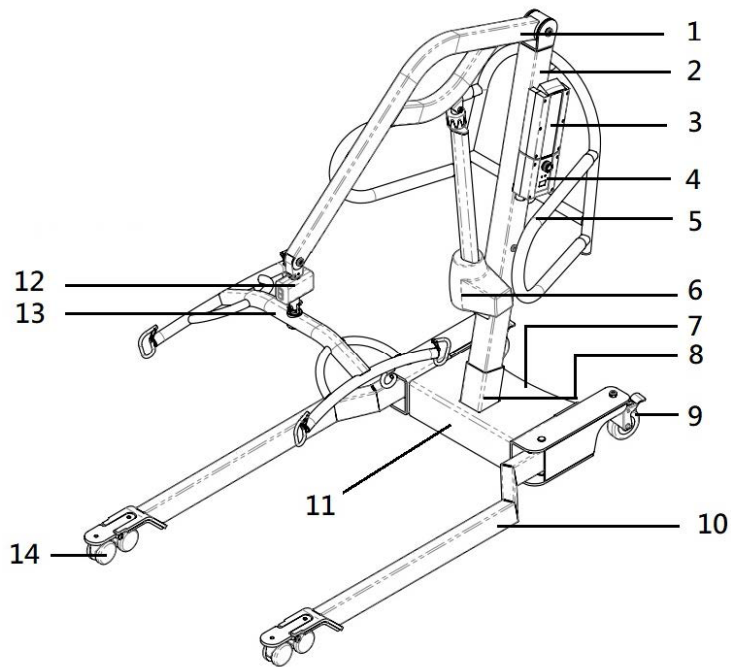
## Disassembly

**D.** The red Emergency Stop Button is located on the front face of the control box and is activated by pressing in. This will cut all power to the lift and only be reset by twisting the button clockwise and releasing.





# Components Identification



#	DESCRIPTION
1	Boom
2	Mast
3	Battery
4	Control Box
5	Pushing Handle
6	Lifting Actuator
7	Base
8	Mast Accepting Adapter
9	Rear Castor with Brake
10	Legs
11	Leg Spreading Actuator Inside Base
12	Weight Scale
13	Cradle
14	Front Castor

# Safety

Please read carefully and follow the safety precautions described below before operation. The operation of the FS850 patient lift is simple and straightforward. Following these few basic safety precautions will make lifting operations easy and safe.

**NOTE:** Information which you should pay special attention.

**WARNING:** Disregarding warnings in this user manual highlighting potential hazards could lead to injury or possibly death.

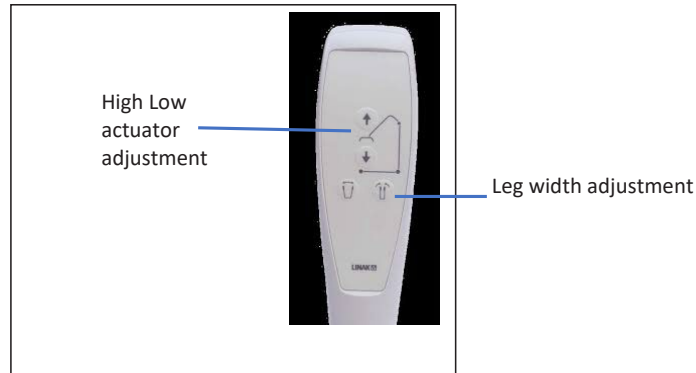
**CAUTION:** Disregarding cautions in this user manual highlighting potential hazards could lead to equipment damage or function failure

- DO NOT lift a patient if you are not trained and competent to do so.
- ALWAYS carry out the daily check list before using the lift.
- DO NOT exceed the safe working load of the lift.
- ALWAYS plan your lifting operations before starting.
- ALWAYS familiarize yourself with the operating control and safety features of this lift before lifting a patient.
- DO NOT use a sling unless it is recommended for use with the FS850 lift.
- ALWAYS check the sling is suitable for the particular patient and is of the correct size and capacity.
- ENSURE sling loops are pulled completely through spring clips and rest securely on spread bar hooks.
- NEVER use a sling which is frayed or damaged.
- NEVER use a sling that is overdue.
- ALWAYS fit the sling according to the instructions provided (user instructions).
- ALWAYS check the safe working load of the lift is suitable for the weight of the patient, do not operate the lift exceeding weight limit.
- When the patient is 2.4" / 6 cm above the lifting surface (ex:bed,chair) check all sling connection points to ensure all are secure before lifting to a higher location.

## Safety

- 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 lock the wheels when lifting from the floor.
- Please operate the lift with the pushing handle provided by at least 2 trained caregivers. Never push a loaded lift at speeds, which exceed a slow walking pace (0.5m/sec).
- Never push the lift over uneven or rough surface. Particularly when loaded with patient.
- Never attempt to push/pull a loaded lift over a floor obstruction.
- NEVER force an operating/safety control. All controls are easy to use and do not require excessive force.
- Never park a loaded lift on sloping surface.
- Never use electric lifts in a shower or in rain.
- Never use or store in a wet or corrosive environment: shower, bath or pool locations.
- Never charge batteries in a bathroom, shower room or other wet environments.
- Never place or store batteries under direct sunlight or near a heat source.
- This lift is for patient lifting. DO NOT use it, or allow it to be used, for any other purpose.
- Never bump the lift down steps, loaded or unloaded.
- Never attempt to negotiate a loaded lift on a slope, which exceeds 1:12 (approx. 5°)
- Never attempt to negotiate a slope without a second helper being present.
- Never use a loaded lift on thick pile carpet.
- Never operate the lift with loose or missing parts or fasteners.
- Inspect all precautionary labels on the lift. Order and replace if cannot be easily read.
- Do not keep where the hoist can be interfered with by children or pets.
- Do not use outside of temperature and humidity limit.
- Do not put the battery on a conductive surface.

# Operation Suggestions



Please refer to following indication to operate lift.

## ACTUATOR ADJUSTMENT

The legs on the FS850 are available with powered adjustable width. The legs can be opened to access around armchairs or wheelchairs. For transferring and navigating narrow doorways and passages the lift legs should be in the closed position. Electric leg adjustment is achieved by pressing the appropriate buttons on the handset. The legs will be locked automatically whenever the hand control switch is released.

## CASTORS AND BRAKING

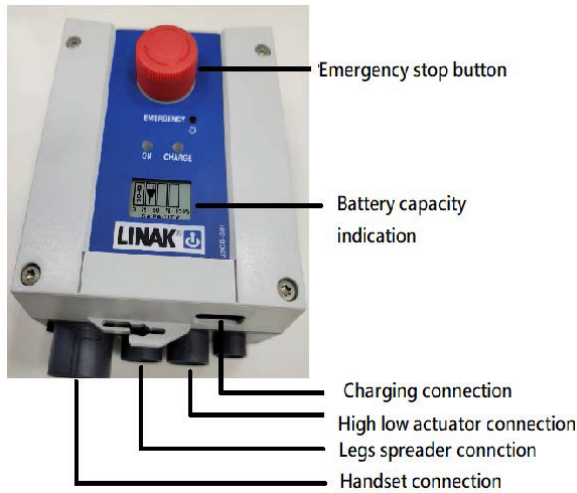
The lift has two rear castors with brake which can be applied when parking. There are 4 swivel front castors without brake for easy operation.

**WARNING:** When lifting a patient, please do not lock the castors. The castors should be kept free and un-braked. The lift will then be able to move to the center of gravity of the lift when there is a patient on the lift. If the brakes are applied, it is possible that the patient will swing to the center of gravity when being lifted and this may prove disconcerting and uncomfortable to the patient. The lift may also tilt over and cause injury to the patient.

# Operation Suggestions

## RAISING AND LOWERING THE BOOM

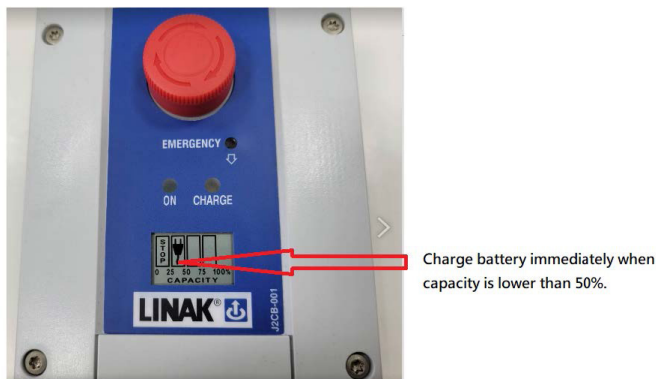
Patient can be lifted or lowered by the installed powerful electric actuator, which is controlled by a simple handset. The handset has totally 4 buttons, 2 buttons on the upper part are for up and down. The actuator will stop automatically at the limit of travel in both directions controlled by limit switches inside the actuator. The hand control plugs into the left socket at the bottom of the control box. There is a hook on the back of the hand control, which allows it to be hung on the pushing handle when not in operation.



Smart/Safety Control Box ^

## BATTERIES

The batteries are protected from deep discharge by a lower voltage alarm. This will sound when the batteries need to be recharged while the hand control is being operated. It will not sound independently of the hand control being operated.



**WARNING:** Please pay attention to this alarm. Complete the lifting operation and charge the battery pack immediately.

## Operation Suggestions

To avoid possible permanent damage to the battery, the battery should be placed on charge as soon as the display indicates the half capacity battery symbol.

### CHARGING INSTRUCTIONS

Battery can be charged directly through the control box. Connect cable to the socket on the right side of control box. Please engage emergency button before charging. Charging will not be possible when emergency button is depressed. Charging is automatic and will fully charge the batteries over a period of approximately 5 hours.

**NOTE:** The battery will not be overcharged if left connected to the power supply.

- a. Green Light - Indicates main power is on.
- b. Green light +Orange Light – Indicates battery is being charged.
- c. Green light indicates battery is fully charged.

**NOTE:** It is recommended that the battery be charged immediately upon receipt.

Please note that lift can't be operated when battery is being charged. To return the lift to service, when battery is being charged on control box, simply unplug the cable from control box.

If the battery has not been used for more than 3 months, please charge the battery periodically. Please follow the charging instructions closely. Please pay attention to the following points to prolong the life of your batteries.






















### WARNING:

- The power system's battery, hand control and control box, charging cable, actuator are not to be repaired or opened by unauthorized personnel. (Contact your distributor for warranty and repairs)
- Never touch battery/charger terminals with any metal object.
- Keep batteries fully charged. Place the battery on the control box to be charged whenever it is not in use. If it is convenient to do so, place charge cable on control box every night. The charger inside control box will not make the batteries overcharge.
- Never run the batteries completely exhausted. As soon as there is an audible warning sound, complete the lifting operation in hand and charge battery immediately.
- To avoid possible permanent damage to the battery, the battery should be charged as soon as the display indicates the half remaining battery symbol.
- Never store the battery for long periods without regular charging throughout the storage period. It is suggested to charge battery every 3 months at least.
- Do not leave the battery pack connected with the charger unit unplugged.
- Never disconnect the charging cable by pulling on the cable. Please hold plug when disconnecting the power source.
- Be careful not to trip over the charger cable lead.
- Never charge batteries in wet environment or a bathroom or shower room.

# Key

Please read carefully and follow the safety precautions described below before operation. The operation of FS850 patient lift is simple and straightforward. Following these few basic safety precautions will make lifting operations easy and safe.

**NOTE:** Information which you should pay special attention.

	Type 8 equipment, as per EN 60601 - 1		Unique Device Identifier
	Class 2 equipment (for charger)		Warning
	The disposal of the charging and control box should not be mixed with general household waste.		Maximum user weight
	The disposal of the batteries should not be mixed with general household waste.		Read IFU
	The disposal of the electronics should not be mixed with general household waste.		Importer
	For indoor use		Medical Device
	WARNING, consult accompanying documents		Ingress Protection Rating
	Product Code		Minimum and Maximum Temperature Limit
	Serial Number		Minimum and Maximum Humidity Limit
	Manufacturer		Quantity
	Date of Manufacture		

# Cleaning

- Do not clean electrical connections with water or wet cloth.
- Never wash with pressure any components of the hoist.
- Personal Protection Equipment must be worn during manual decontamination to prevent the risk of infection.
- Deviating from the specified cleaning instructions could cause a biological hazard, especially in multi-user environments, and adversely affect the life and efficiency of the product.

**CAUTION:** It is suggested that periodic cleaning can help prolong the life of the patient lift.

- Ensure the charging cable is unplugged and the battery pack is removed before cleaning.
- Basic cleaning (Routinely or as required; to be carried out by competent personnel):
  - Wipe down with a clean cloth moistened with a mild detergent and dilute with warm water.
  - Wipe surfaces with cold, clean water and a clean cloth, and allow to fully dry before use.
- **Do not use too aggressive detergents and do not use running water to clean.**



# Maintenance & Servicing

The FS850 is designed for minimum maintenance, however some safety checks and procedures are required. The maintenance schedule is detailed below. Daily checks and a major service, inspection and test will ensure the lift is maintained well for a safe working condition. We suggest regular inspection and maintenance. Please refer to the chart below.

Item	Pre-Delivery	Daily	Regularly	Major Service (every 12 months)
<ul style="list-style-type: none"> <li>• Confirm all components are included</li> <li>• Inspect parts for damage in transit</li> </ul>	x			
<b>COMPLETE LIFT</b> <ul style="list-style-type: none"> <li>• General inspection of Lift. Visually inspect the patient lift for external damage or wear, scratches or chips</li> </ul>	x			x
<b>BASE AND CASTORS</b>				
<ul style="list-style-type: none"> <li>• Inspect for missing hardware.</li> </ul>	x		x	x
<ul style="list-style-type: none"> <li>• Base opens/closes with ease.</li> </ul>	x		x	x
<ul style="list-style-type: none"> <li>• Inspect castors and axle bolts for tightness. Make sure they are tightly attached to legs.</li> </ul>	x		x	x
<ul style="list-style-type: none"> <li>• Inspect castors for smooth swivel and rolling.</li> </ul>	x		x	x
<ul style="list-style-type: none"> <li>• Check that castor brakes operate effeciently.</li> </ul>	x		x	x
<ul style="list-style-type: none"> <li>• Overhaul castors and repack with grease.</li> </ul>			x	x
<ul style="list-style-type: none"> <li>• Check tightness of bolt in leg bushes.</li> </ul>				x
<b>MAST</b>				
<ul style="list-style-type: none"> <li>• Mast must be securely assembled with boom</li> </ul>	x			x
<ul style="list-style-type: none"> <li>• Mast must be securely assembled with base.</li> </ul>	x			x
<ul style="list-style-type: none"> <li>• Inspect for bends or deflections.</li> </ul>				x
<ul style="list-style-type: none"> <li>• Check sling hooks for wear or deflection.</li> </ul>	x			x

# Electromagnetic Compatibility (EMC)

Electromagnetic interference (EMI) tests have shown to produce adverse effects on the performance and control of electrically powered devices. EMI can be produced from different sources, such as cellular phones, amateur radio transmitters, microwave signals and emergency vehicle transceivers. The EMI produced from hand-held radios are of special concern.

The EMI waves could cause unintentional movement of the lift, or damage to the controller system. Every electrically powered device has a resistance to EMI. The higher the resistance level the greater the protection. The intensity of the interference can be measured in volts per meter, V/m.

If the mobile patient lift or any alternative equipment is found to be operating abnormally, turn off the piece of equipment that is believed to be causing the interference (if appropriate, as soon as it is safe) to identify the source of the RF energy. Once identified, mitigation measures are to be taken, such as the separation distances being increased and / or the device(s) being re-orientated. If the mobile patient lift continues to operate abnormally, turn off at the mains supply and contact authorized agency.

The warnings listed below are recommended to prevent possible interference with the control system of your mobile patient lift. Your lift, with no modifications, has an immunity level of 20 V/m. For specific emissions and immunity information relating to this mobile patient lift, contact Medacure.

## **WARNING:**

- It is suggested not to operate hand-held transceivers or turn on personal communication devices while the lift is powered on. Avoid use adjacent to or stacked with other equipment where possible. If adjacent use is necessary, the patient lift should be observed to verify normal electrical operation in the configuration in which it is to be used.
- Use of accessories and cables other than those specified or provided by Medacure could result in increased electromagnetic emissions or decreased electromagnetic immunity of the patient lift and result in improper operation or performance.
- Portable RF communications should be used no closer than 30 cm to any part of the mobile patient lift (including its cables), otherwise a degradation in performance could result.

## Maintenance & Servicing

Item	Pre-Delivery	Daily	Regularly	Major Service (every 12 months)
<b>ELECTRIC ACTUATOR</b>				
Check hand control and cycle to ensure smooth and normal operation, lift adjustment on all Lifters, and legs with adjustment.	x	x	x	x
Emergency lowering function both electric and manual mechanical.	x		x	x
Check for wear or deterioration.	x		x	x
Inspect hardware on mast and boom.	x		x	x
Remove dust and dirt from actuator with cloth.			x	x
<b>BOOM AND CRADLE</b>				
Check all hardware and swivel bar supports.	x	x	x	x
Inspect for bending or deflections.	x	x	x	x
Inspect bolted joints of boom for wear.	x	x	x	x
Inspect to ensure that the boom is centered between the base legs.	x	x	x	x
Sling and related.		x	x	x
Check sling and attachment each time to ensure proper connection and patient safety.	x		x	x
Inspect sling material for wear.	x	x	x	x
Clean whenever necessary. Clean the lift per cleaning instructions in the care and maintenance suggestions of this manual.	x	x	x	x
On completion of check and service, arrange repair/replacement of any faulty parts.	x	x	x	x

# Key Specification

Product .....	FS850
Safety Weight Load .....	850 lbs / 385.5 Kgs
Maximum Overall Length .....	53.5" / 1360 mm
Maximum Height at center of cradle .....	84" / 2130 mm
Minimum Height at center of cradle .....	38" / 970 mm
Maximum height at hook .....	69" / 1755 mm
Minimum height at hook .....	23" / 580 mm
Turn diameter .....	77" / 1960 mm
Max external width when legs open .....	51" / 1300 mm
Internal width when legs open .....	46" / 1170 mm
External width when legs closed .....	33.5" / 850 mm
Internal width when legs closed .....	27" / 690 mm
Top height of legs .....	4.3" / 108 mm
Ground clearance .....	0.78" / 20 mm
Front caster without brake .....	3" / 75 mm
Rear caster with brake .....	4" / 100 mm
Net weight .....	260 lbs. / 118 kgs
Gross weight .....	282 lbs. / 128 kgs
Battery Pack weight .....	5.7 lbs. / 2.6 kgs
Control box weight .....	1.3 lbs. / 0.6 kg
Cradle weight .....	17 lbs. / 7.9 kgs
No load speed at hook,up/down .....	20.2 mm/sec
Loading 850 lbs at hook,up speed .....	12.2 mm/sec
Loading 850 lbs at hook,down speed .....	33.7 ,mm/sec
Ambient Working Temperature .....	5° C to +40° C
Storage temperature: .....	10° C to +50° C
Relative humidity: non-condensing .....	20% to 80% -
Height above sea level: Max. ....	3000 meters

# Sling Compatibility

Use only Medacure brand and approved slings that are compatible with the FS850 Patient Lift. Use of any other sling may cause accident or serious injury.

# Warranty

This warranty is extended only to the original purchaser who purchases this product when new and unused from Medacure or a dealer. This warranty is not extended to any other person or entity and is not transferable or assignable to any subsequent purchaser or owner. Coverage under this warranty will end upon any such subsequent sale or other transfer of title to any other person.

This warranty gives you specific legal rights and you may also have other legal rights which vary from state to state. Medacure warrants the frame and electronics when purchased new and unused to be free from defects in materials and workmanship as follows; 15 year on frame, 3 year on electronics, 1 year on pendant from the date of purchase from Medacure or a dealer, with a copy of the seller's invoice required for coverage under this warranty. If within such warranty period any such product shall be proven to be defective, such product shall be repaired or replaced, at Medacure's option. This warranty does not include any labor or shipping charges incurred in replacement part installation or repair of any such product. Medacure's sole obligation and your exclusive remedy under this warranty shall be limited to such repair and/or replacement.

For warranty service, please contact the dealer from whom you purchased your Medacure product or Medacure customer service only if purchased from Medacure direct. Provide model number, serial number and the date of purchase and indicate nature of the defect.

DO NOT return products to Medacure without prior consent. Please obtain a return authorization number from Medacure. C.O.D. shipments will be refused; return shipping charges must be prepaid. The defective unit or parts must be returned for warranty inspection using the serial number, when applicable, as identification within thirty days of return authorization date.

LIMITATIONS AND EXCLUSIONS: THE WARRANTY SHALL NOT APPLY TO PROBLEMS ARISING FROM NORMAL WEAR OR FAILURE TO ADHERE TO THE INSTRUCTION MANUAL THAT COMES WITH THE PRODUCT. IN ADDITION, THE FOREGOING WARRANTY SHALL NOT APPLY TO SERIAL NUMBERED PRODUCTS IF THE SERIAL NUMBER HAS BEEN REMOVED OR DEFACED; PRODUCTS SUBJECTED TO NEGLIGENCE, ACCIDENT, IMPROPER OPERATION, MAINTENANCE OR STORAGE; OR PRODUCTS MODIFIED WITHOUT MEDACURE'S EXPRESS WRITTEN CONSENT INCLUDING, BUT NOT LIMITED TO: MODIFICATION THROUGH THE USE OF UNAUTHORIZED PARTS OR ATTACHMENTS; PRODUCTS DAMAGED BY REASON OF REPAIRS MADE TO ANY COMPONENT WITHOUT THE SPECIFIC CONSENT OF MEDACURE; PRODUCTS DAMAGED BY CIRCUMSTANCES BEYOND MEDACURE'S CONTROL; PRODUCTS REPAIRED BY ANYONE OTHER THAN AN MEDACURE DEALER, SUCH EVALUATION SHALL BE SOLELY DETERMINED BY MEDACURE.

THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER EXPRESS WARRANTIES WHATSOEVER, WHETHER EXPRESS OR IMPLIED, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE AND THE SOLE REMEDY FOR VIOLATIONS OF ANY WARRANTY WHATSOEVER, SHALL BE LIMITED TO REPAIR OR REPLACEMENT OF THE DEFECTIVE PRODUCT PURSUANT TO THE TERMS CONTAINED HEREIN. THE APPLICATION OF ANY IMPLIED WARRANTY WHATSOEVER SHALL NOT EXTEND BEYOND THE DURATION OF THE EXPRESS WARRANTY PROVIDED HEREIN. MEDACURE SHALL NOT BE LIABLE FOR ANY CONSEQUENTIAL OR INCIDENTAL DAMAGES WHATSOEVER.

THIS WARRANTY SHALL BE EXTENDED TO COMPLY WITH STATE/PROVINCIAL LAWS AND REQUIREMENTS.