

## Ultralift™ 3510/7510 Series

### Owner's Manual



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# General Information

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## About the product

The Ultralift™ has been designed with ease of use in mind. The following instructions will allow any caregiver to perform safe and easy resident transfers. The lift is intended for professional use by one trained operator. This should not replace any current policies or procedures in place by the facility. Additional help may be necessary when using the lift. Please note that the Ultralift™ is designed to perform all types of lifts. It can also be used as a bath lift in many situations. When used as a bath lift, we recommend using a Tollos® mesh bath sling. Ensure your model does not exceed weight capacity: 3510X is 600 lbs. and 7510X is 750 lbs.



# General Information

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## Safety Information



**WARNING:** Untrained operators can cause injury or be injured. Permit only trained personnel to operate the lift. Improper operation can cause injury. Operate the lift only as described in this manual.



**WARNING:** Do not exceed weight capacity of lift.



**WARNING:** Helpers can cause injury or be injured. Maintain control of the lift, operate the controls, and direct any helpers.

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Improper maintenance including, without limitation, improper actuator inspection and replacement can cause serious injury. Poor lift condition can cause serious injury. Maintain the lift only as described in this manual.

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Improper parts and service can cause injury and void of warranty. Use only Tollos® Medical parts and Tollos® Medical approved items on the lift



**WARNING:** Visibly inspect sling prior to each use to ensure sling is the correct type, size and design to handle lifting. Ensure the sling is not damaged, torn worn, discolored or past its useful life (i.e. single patient for a disposable sling); that the sling's straps are correctly attached to the spreader bar, and that the sling is tested with resident in it at a few inches over bed or chair prior to actual transferring to proper operation. At same time, visibly inspect spreader bar to ensure all bolts are tight. Never leave a patient unattended in a lift.



**WARNING:** An actuator failure may cause serious injury. Comply with actuator service inspections requirements.



**WARNING:** Electric shock can cause death or serious injury. Charge the lift batteries only as described in this manual.

# General Information

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## Safety Information



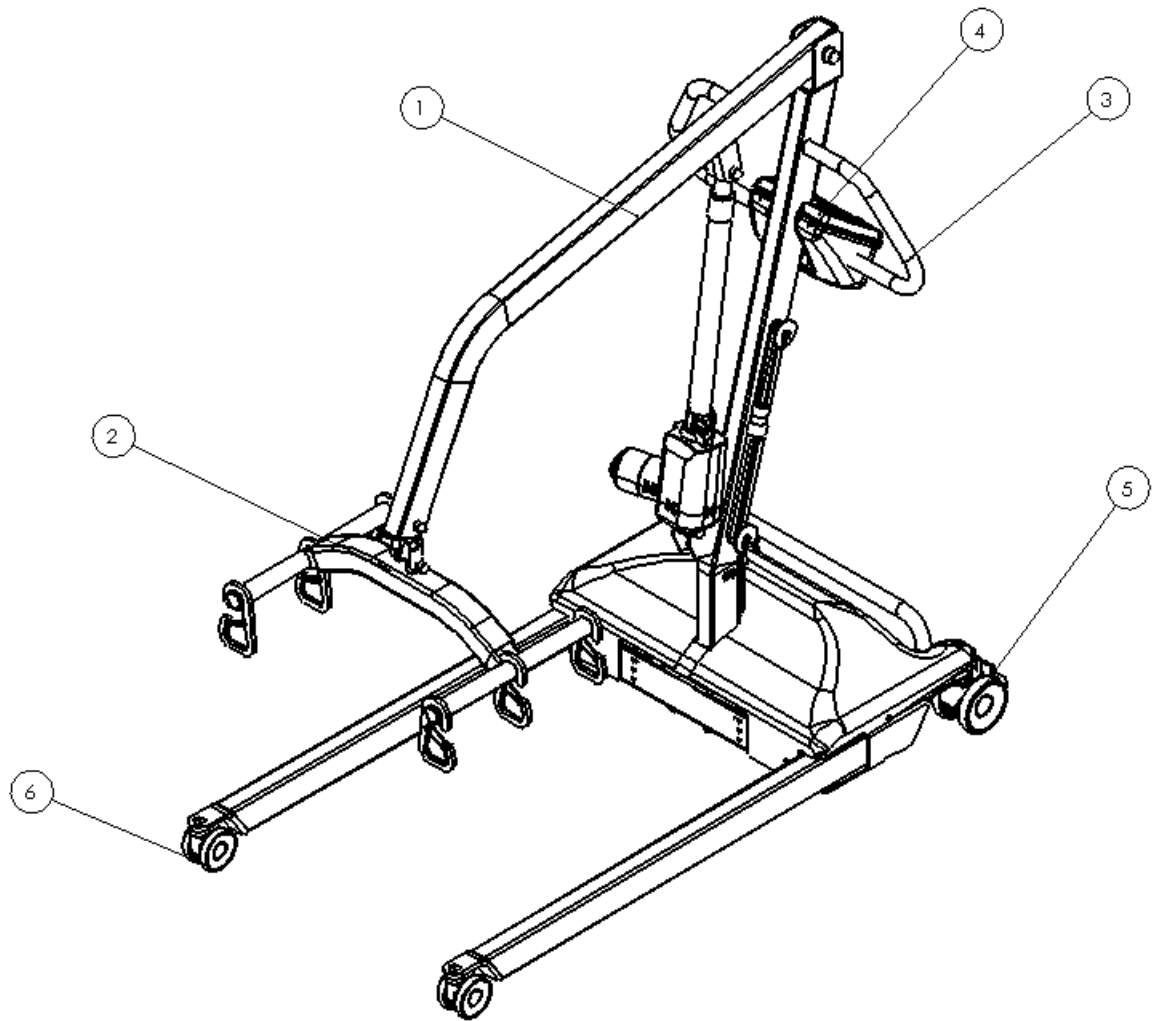
**WARNING:** Improper use can cause the lift to tip when transporting a resident if the lift makes a sudden stop during forward motion. This can cause injury if the resident falls.

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To ensure that the lift will not incur this situation, ensure that when transporting the lift's path is free from obstruction (bed legs, furniture, other medical equipment, etc)



## Parts Designation

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### Legend

1. Boom
2. Spreader Bar
3. Handle Bar
4. Control Box
5. Rear Casters
6. Front Casters

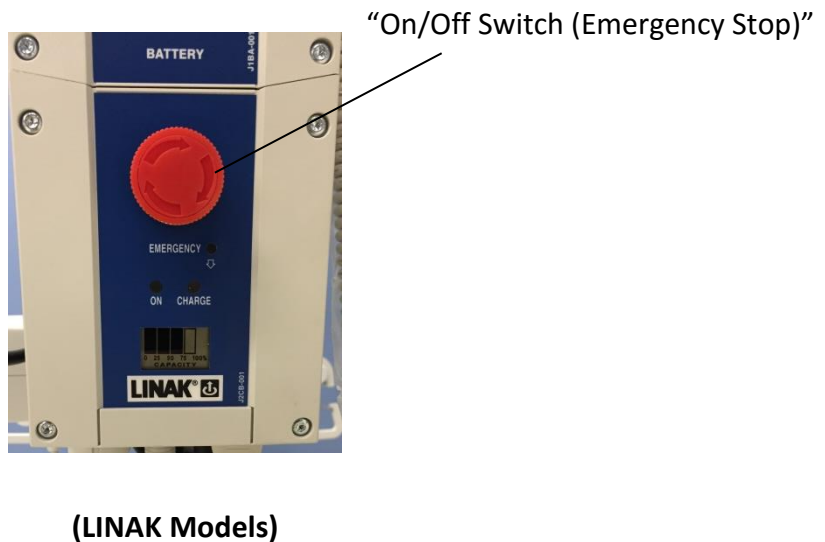
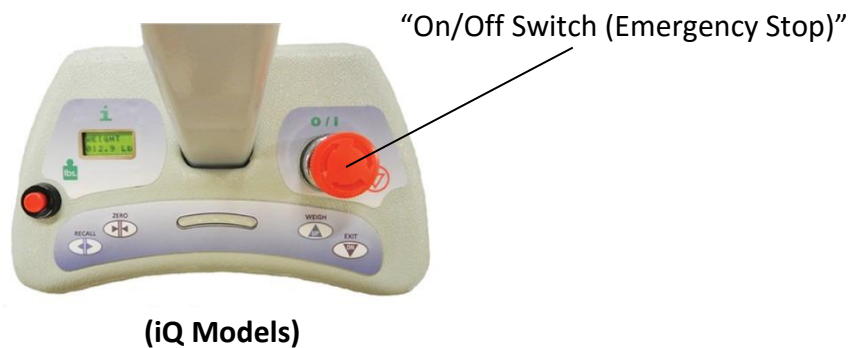
# Product Description

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## Functions

### On/Off Switch (Emergency Stop)

To turn power on, rotate the red button to the right (clockwise) a quarter of a turn. This will allow the button to pop upward. Then press any function button. Simply push the red button down to turn power off. This switch is also used in the case of an emergency. The lift can be stopped immediately by pressing the red button down.





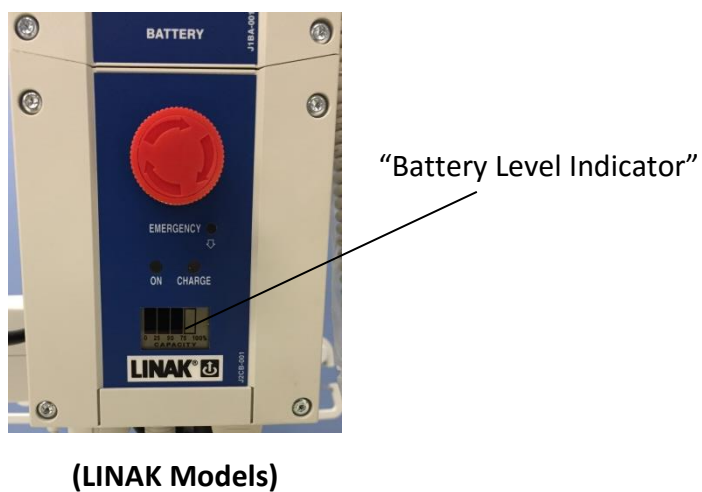
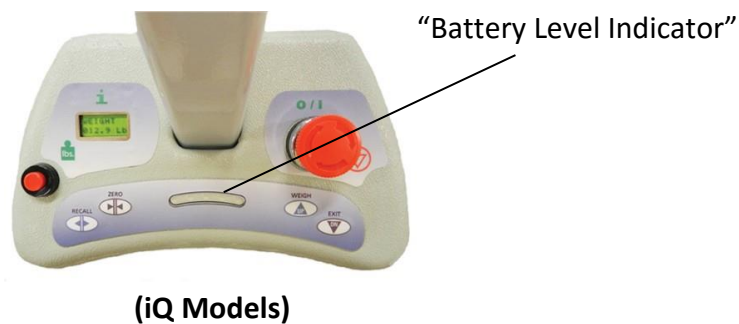
# Product Description

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## Battery Level / LED Display

The 5 LED display on the Mast Control Box provides two types of information to the caregiver.

- When the lift is on but not in operation, it displays battery capacity. The reading should always be in the “green zone”. If the level falls between yellow and red, an alarm will sound and the lift should be charged immediately. The “Smart Charge” battery charger included with you lift makes overcharging impossible. Batteries will become permanently depleted if frequently drained into the yellow or red zones.
- By using the “smart” electronics, the battery percentage and any history of low charges can be seen. This can address non-charging compliance issues.
  - When the lift is in operation, on models prior to March 2011, the display will automatically switch to show load as a percentage of lifting capacity.



# Product Description

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## Legs Opened or Closed (iQ Models Only)

Using the base widening controls to the left of the battery indicator, press the Open button to widen the base. Press the Close button to close the base. Base widening is to navigate objects like a wheelchair, rather than for stability



## Raising and Lowering a Patient (iQ Models Only)

Using the boom controls to the right of the battery indicator, press the "UP" button to raise the boom. Press the "DN" button to lower the boom



# Product Description

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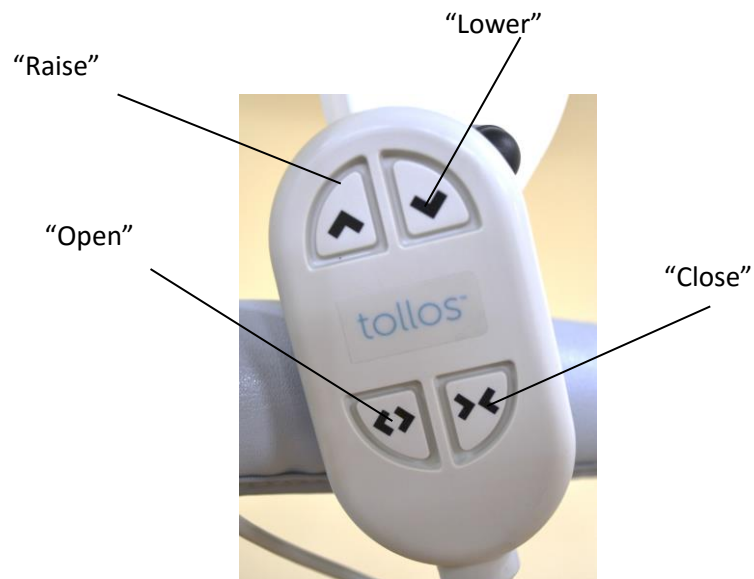
## Weigh Scale (iQ Models and Internal Scale Option only)

To enter weigh scale mode, press and then release the red button. (Page 14 for details)



## Hand Control

Press the upper left button on the pendant to raise the boom. To lower the boom, press the upper right button. To widen the lift base, press the lower left pendant button. To close the base, press the lower right hand pendant button.



# Product Description

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## iQ Technology(Optional)



The Ultralift™ is equipped with iQ Technology® that provides very useful data to assist with maintenance, training and compliance. An explanation of these is set forth below:

### Explanation of LCD Display Message

Three sets of messages are displayed depending upon the lift being in normal operation, when a specific button is pushed or when being charged.

#### 1. Lift On but not in Operation:

During idle periods while lift is on, the LCD display will scroll through the following 7 indicators every 7.5 seconds:

**TTL CYCL: #####** - Accumulated cycles of the lift defined as upwards travel of more than 12 inches followed by downward travel.

**TTL HRS: #####** - Accumulated number of hours the lift has operated. This is defined as the number of hours the motor (lifting and traversing) has been in operation.

**CHARGES: #####** - Accumulated number of times the batteries have been charged

**CHARGE PERC: %** - The current level of charge in the battery. This is displayed as a percentage in increments of 10% from 0% to 100%.

**LOW CHRГ: #####** - Accumulated number of times the batteries have experienced a very deep discharge (means lift is not being charged enough and batteries will be permanently depleted and may cause early replacement)

**SERVС IN: #####** - Number of lift cycles remaining before service is required. This resets after service.

**SERVС CHK: #####** - Indicates a switch is stuck on a hand control or touch pad.

#### 2. Dynamic Messages. These only occur when the specific switch is pressed.

Lift Up: ##### Life accumulated number of Lift Up movements.

Lift Dn: ### Life accumulated number of Lift Down movements.

# Product Description

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## 3. Charging Message:

CHARGE PERC: % Display the current level of charge in the battery. This is displayed as a percentage in increments of 10%.

## 4. Service Requirements

LCD will show a number of cycles until service is needed.

# Product Description

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## Scale Operation

### Internal Scale Option



**WARNING:** The integrated scale is not approved to determine mass in medical practice, including the weighing of patients in connection with health monitoring.

### ENTER WEIGH MODE

1. Press the **RED** button once and release
2. Display reads “Weigh Mode”

### ZERO SCALE

1. Press **ZERO** button and release.
2. Place sling on spreader bar and press **ZERO** to subtract weight of sling
3. Display reads 0.0 lbs 0.0 kg
4. Repeat if scale does not read 0.0 lbs 0.0 kg
5. 4 quick BEEPS confirms scale is zero'ed

### WEIGH RESIDENT

1. Attach sling and lift resident free of bed or chair until the resident has steadied.
2. The battery indicator will flash a single green LED.
3. Once the resident has steadied, 3 short BEEPS indicate weight has been recorded.
4. Battery indicator will light up 3 green LED's solid.
5. Display will show weight of resident.
6. A short press of the red button will reweigh the resident

### EXIT WEIGH MODE

1. Press and Hold RED button until BEEPS and release.  
(Or Turn lift off and on to exit weight mode.)

### RECALL WEIGHT

1. Enter Weigh Mode and press **RECALL** to recall last weight recorded



# Product Description

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## Safety Features

In the event the actuator will not retract and the resident is suspended, raise a bed or chair high enough to safely support the resident to allow you to detach the sling. If this is impossible, then position the resident over a bed or chair and gently lift upward on the red emergency down lever until the actuator starts to retract. Release the lever when the resident is supported enough to safely detaches the sling.

It will be helpful to raise the bed or chair to the highest position, reducing the amount of travel time needed by the emergency lowering feature.

For Ultralift™, there will rarely be enough weight on the actuator from the resident/patient so additional downward pressure may need to be applied to the boom to begin lowering.



# Product Description

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## Battery

### Battery Charging

1. Choose a suitable, safe location to place the lift near an AC power outlet.
2. Lock the rear casters.
3. Extend the power cord and plug into a 110V AC power outlet.
4. Ensure battery level indicator green lights are flashing sequentially.
5. Charge the lift for at least four hours before returning it to service. (If batteries have been completely depleted).
6. Batteries are fully charged when all three green lights remain lit.
7. Once charging is complete, unplug the AC cord from the wall receptacle.
8. Relocate the AC cord to its storage area on the lift.
9. NOTE—Lift cannot be run on low batteries or these will be permanently depleted. If there are charging issues where batteries appear to be failing, use the “Smart Electronics” in this tutorial to identify if the lift has been used at a low charge and/or to identify how much the lift has been charged.



**IMPORTANT:** Never move the lift while it is being charged. Doing so will result in damage to the lift. The lift should be charged whenever it is not in use.



**IMPORTANT:** Fully discharging the batteries reduces battery life. Charge the batteries regularly.

### Charging the removable battery

1. If your lift is equipped with a removable battery pack system, remove the depleted battery from the lift by lifting it straight up and then pulling it away from the lift.
2. Replace with a fully charged battery.
3. Charge depleted batteries by mounting in the wall mounted charging station.



# Lifting a Patient

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## Raising a patient

1. If the patient is being lifted from a wheelchair or transfer chair or be, make sure brakes on the chair or bed are locked.
2. Turn the ON/OFF switch to the “ON” position (Large red button “up”).
3. Using either the hand controller or the override button located on the control panel, press the “down” button until the boom of the lift is in the lowest possible position.
4. Decide in what position the patient should be in when lifted.
5. To lift the patient in a seated position, use a shorter set of loops at the shoulders and a larger set of loops at the legs. This places the resident’s head higher than their legs.  
(Patient must have some upper body strength to be in seated position or risk of falling out is possible.)
6. To lift in a reclined position, use a longer set of loops at the shoulders and a shorter set of loops at the legs. This will allow the resident’s head to be level with their legs
7. Attach the back loops to the hanger by slipping the right back loop over the right back hook and the left back loop over the left back hook.



**IMPORTANT:** Lift resident/patient 1-2 inches over bed or chair, stop and then check that all straps, sling fabric and loops are secure and ensure the patient is comfortable.



**IMPORTANT:** Wrong sling size can allow patients to fall out.



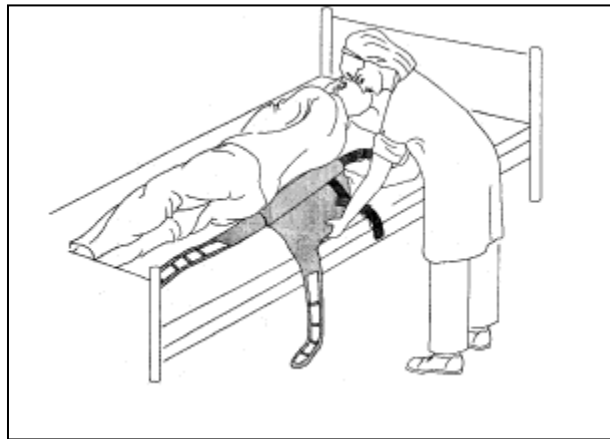
**IMPORTANT:** Read separate sling user guide for information on selecting, attaching and using lift with slings.

# Lifting a Patient

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## Lowering a Patient to a Bed

1. Roll the legs under the bed, and position the resident over the bed. Ensure bed wheels are locked.
2. Raise the bed rail on opposite side of bed (if applicable)
3. Lower the resident slowly to the bed. Once the resident is fully supported by the bed and the sling loops become slack enough to be unhooked from the side bars, disconnect the sling from the lift.
4. Log rolls the resident away from you. Roll the exposed half of the sling in half
5. Lay the resident flat again , then roll them toward you and remove the sling
6. Lay the resident flat again. Raise the bed rail on your side of bed (if applicable)



**IMPORTANT:** There will always be enough battery power to lower a patient in case the batteries are exhausted with a patient in the lift. This is an equipped safety feature of this lift.

# Lifting a Patient

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## Lift Legs Position

Legs **SHOULD** be opened at the following times:

- To allow access around chairs, toilets or other impediments.
- To increase stability particularly with heavier patients.
- So it is recommended to have legs open when lifting or lowering if possible though not required except as set forth below;

Legs **MUST** be opened at the following times:

- For use with a walking harness
- For patients who are active or swing around in the lift.



**WARNING:** FAILURE TO ADHERE TO THE FOLLOWING PRECAUTIONS ON MOBILE LIFT LEG POSITIONING CAN RISK SERIOUS INJURY TO BOTH PATIENTS AND MEDICAL STAFF.

## Transporting a Patient

1. Roll the lift on a smooth, unobstructed surface when transporting a resident. (Larger wheel castors are easier to push but harder to fit under low beds.)
2. Have an attendant steady the resident during transport.
3. Move the lift by grasping the push handles and pushing in the desired direction.
4. Do not move lift by pushing or pulling boom.
5. It is sometimes best to allow the resident's feet to rest on the base, if possible, for added feeling of security during transporting.
6. Slings are supplied with side handles to aid in stabilizing during transporting.

# Maintenance & Care

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## Maintenance Information

Ultralift™ 3510/7510 Series are subject to wear and tear. Inspect and adjust the lift upon receiving. Daily, monthly, and yearly inspections and adjustments are to be done by a qualified technician. Inspections are required to uncover signs of damage, wear, or potential failure. Inspections should be recorded and include, but not limited to, the date, model and serial number, findings, corrective measures, date of inspection, name, and signature of the person performing the inspection. Should an inspection uncover any issues that could cause an accident and/or injury, the lift is to be removed from service immediately. The lift shall remain out of service until it's repaired by qualified personnel. All inspection records should be saved for future reference.



**WARNING:** MAINTENANCE AND SERVICE MUST BE DONE BY A QUALIFIED TECHNICIAN, FULLY TRAINED IN SERVICING PROCEDURES BY Tollos®

## Service Warning

The Ultralift™ with its iQ Technology® will display service requirements.



# Maintenance & Care

## Safety/Maintenance Inspection Checklist

Component	OK - N/A	Replace - Fix	Reason - Comments
<b>ACTUATOR</b>			
Inspect lift actuator collar (SKF actuators only)			
Inspect actuator mounting points for cracks or defects			
Inspect actuator inner and outer tube for any damage			
Inspect actuator housing for any damage			
Inspect actuator for excessive noise			
Inspect actuator for convulsive movement			
Does actuator guide tube sway or deflect when extended			
Test lift actuator anti-entrapment			
Test lift actuator Emergency Down function (Linak)			
<b>IQ TECHNOLOGY</b>			
TTL CYCLE			
HOURS			
CHARGES			
LOW CHARGE			
SERVICE IN			
<b>OPERATIONS</b>			
Test caster locking function			
Test caster maneuverability			
Inspect leg opening actuator			
Test leg open / close function			
Inspect tie rod - weld base			
Inspect foot plate dowel pins (if applicable)			
Inspect knee pad - block			
Inspect foot pedal (if applicable)			
<b>ELECTRICAL</b>			
Test scale (if applicable)			
Test battery output (12-13 volts each)			Voltage readings:
Test charger output (26-28 volts)			Voltage readings:
Test touch pad or panel functions			
Test hand control functions			# pins:    # fns:
Inspect A/C Cord			
<b>FASTENERS</b>			
Are all nuts and bolts tight and present?			
Inspect boom / mast pivot joint tightness			
<b>MISCELLANEOUS</b>			
Grease all pivot joints			
Are all components present?			
Is there any visual damage?			
Inspection sticker			

# Trouble Shootings

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Problem	Solutions
The lift does not operate	<ul style="list-style-type: none"><li>• Make sure the lift is not plugged in</li><li>• Check the On/Off button. Twist E-Stop button to turn on</li><li>• Test Hand Control. If no functions, replace</li><li>• Charge the battery</li></ul>
Lift does not charge	<ul style="list-style-type: none"><li>• Check the wall outlet</li><li>• Ensure AC cord is plugged into the charger</li><li>• Check connections on battery terminals</li></ul>
Raising or lowering / Opening or closing legs not working	<ul style="list-style-type: none"><li>• Make sure the lift is charged.</li><li>• Check actuator clevis for breaks. If broken, replace actuator.</li><li>• Test hand control. If no functions; replace.</li></ul>

# Warranty

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## Limited Warranty

Tollos® warrants that its products are free from defects in materials and workmanship under normal use as specified in the operations manual for two (2) years or 15,000 cycles whichever comes first from the original purchase date. Labor is warranted for one year. The general warranty period does not include the following components, which have specific warranty periods:

- Actuators (two years, but no freight or labor after the first year),
- Batteries (ninety days),
- Upholstered parts, i.e., knee pads, head protectors (one year),
- All electrical components including circuit boards, touch pads, hand controls and scales (one year)

The warranty period for repaired or replaced products continues the original warranty coverage period which started from the original date of purchase.

## Exclusions

Warranties will be in effect if the product has undergone standard preventive maintenance by a certified technician and the preventive maintenance is documented to have occurred at no more than yearly intervals. This limited warranty applies only to the Tollos products sold in the United States and Canada, and does not apply to equipment that has been damaged or rendered defective because of:

- Acts of God, accident, misuse, neglect or abuse
- Use of parts not manufactured or old by Tollos
- Modification without the written permission of Tollos
- Service by anyone other than Tollos or a Tollos authorized agent
- Transit, neglect, misuse, power surge or operating environment
- Excessive wear and use (over 10,000 cycles per year)
- Failure to operate in accordance with manufacturer's guidelines or any other improper operation or maintenance, or
- Any other cause not directly and primarily caused by defective material, workmanship or design.

# Warranty

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Service performed as a result of these conditions will be subject to charges for labor, transportation, shipping and replacement parts. Examples of misuse include, but are not limited to cracked hand controls, cracked shrouds, electrical wires pulled from the unit and others.

## Warranty Process

Customers can be in contact with Tollos via phone or Email to inquire whether a product is under warranty.

- Phone: 1-888-363-7224
- Email: customerservice@tollos.com

Tollos shall determine whether and how the Warranty applies including whether it shall:

1. Request the original purchaser ship the product prepaid freight to Tollos for inspection and determination of warranty coverage,
2. Ship replacement parts to authorized service personnel for replacement,
3. Make some other arrangement, or
4. Deny warranty coverage.

Before a product or component that is believed to be faulty is returned interaction with a Tollos service expert must take place to diagnose the issue and receive further instruction on processes to perform to rectify the problem.

If it is determined that the product or component is to be returned to Tollos the following conditions must be met:

- A RA (return authorization) is required and will be supplied by Tollos,
- The product must be in its original packaging or packed sufficiently well so that no further damage to the product or component can occur during shipping.
- A shipping address will be provided by Tollos.

Products will be repaired at no cost if the product is under warranty. The company will repair the product with new or refurbished to be functionally equivalent to new parts. All parts replaced in the performance of service shall become the property of Tollos. The product cannot be exchanged with a new product and the product cannot be refunded.



## Warranty

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Replacement products or components will be invoiced as a replacement product or component, including freight. Upon receipt of parts by Tollos, authorized to be returned, the replacement product or component will be fully credited if it is determined that the component is under warranty. This determination is at the sole discretion of the company.

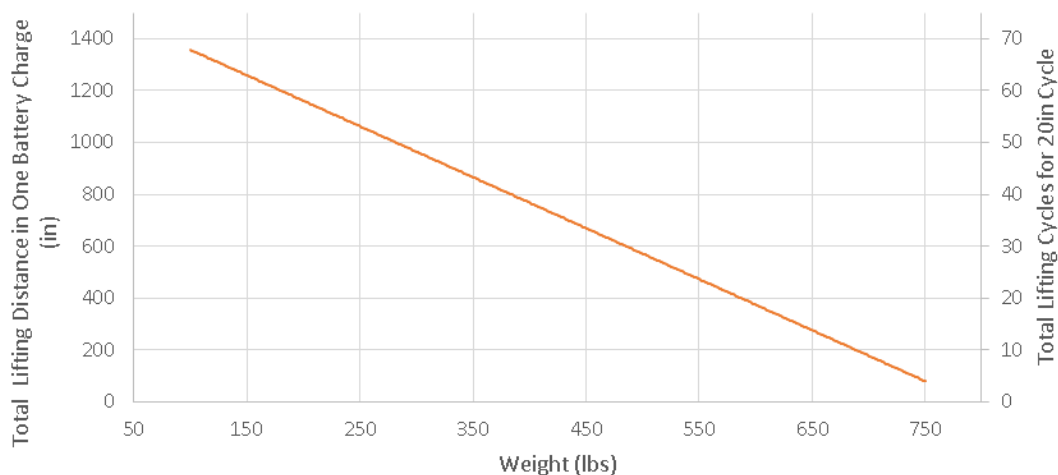
# Technical Specifications

## Product Information

Operation:	Electric Actuator
Safe Working Load:	Model 3510XH: 600lbs (272kgs) Model 7510XH: 750lbs (340kgs)
Front Casters:	100mm or 4" (Optional 3" Low Clearance) (Optional flat base)
Power Source:	Two 12V, 2.6Ah batteries
Charger:	24V CSA/UL Approved
Overall Weight:	Model 3510XH: 144 lbs or 66kg Model 7510XH: 146lbs or 67 kg
Construction:	Rectangular Steel Tubing
Finish	Polyester Powder Coat, Baked
Emergency Stop Switch	Standard
Emergency Up/Down Switch	Standard
Knee Pad	Multi-Position, Adjustable
Removable Battery Pack	Optional
Anti-Free Wheel Safety System:	Standard
Remote Hand Controller:	Standard
Approved Lift:	CSA-Z10535-03
Warranty:	2 Year

## Battery Performance

Ultralift™ Battery Performance

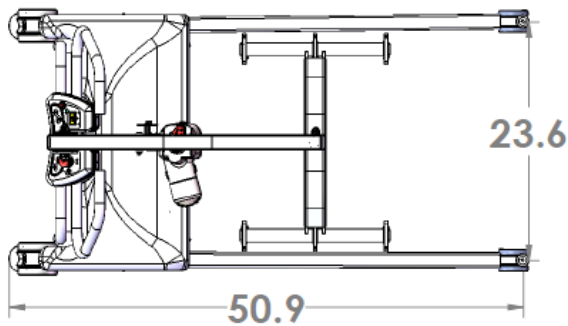


# Technical Specifications

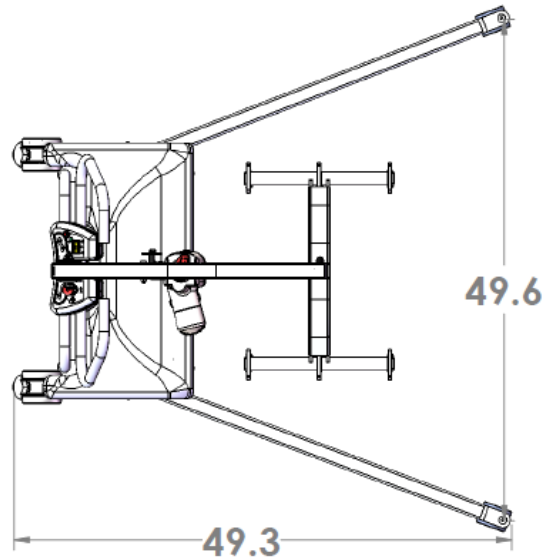
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## Lift Dimensions

Legs Closed

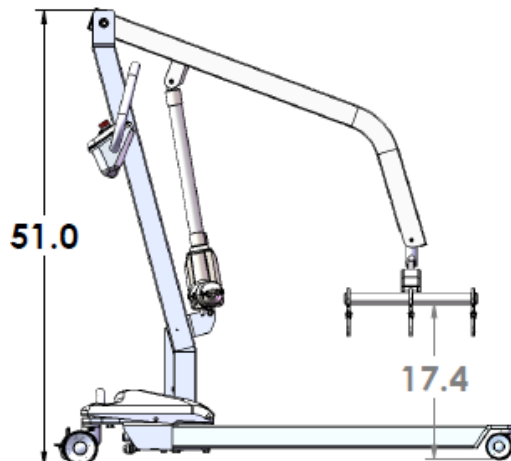


Legs Opened

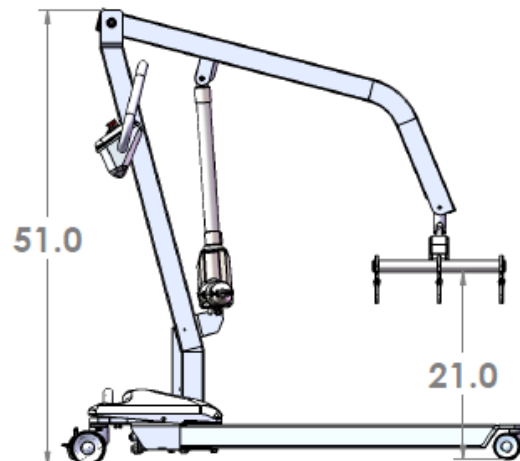


**Ultralift 3510 and 7510, 6 points Spreader Bar**

Boom Retracted



**Ultralift 3510, 6 points Spreader Bar**

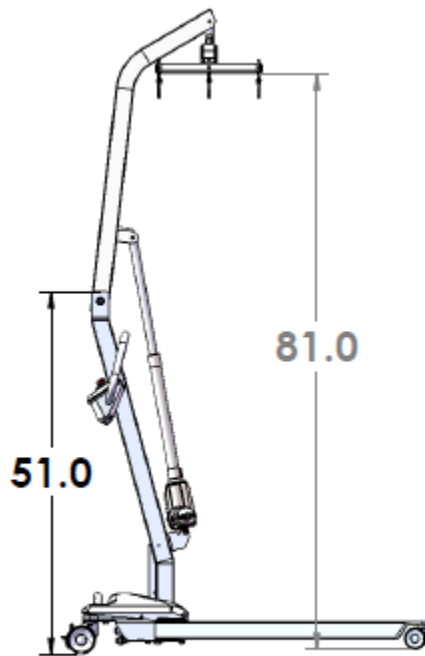


**Ultralift 7510, 6 points Spreader Bar**

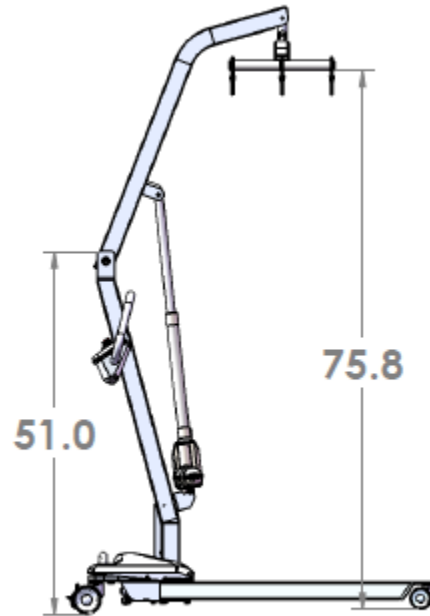
# Technical Specifications

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## Boom Extended



**Ultralift 3510, 6 points Spreader Bar**



**Ultralift 7510, 6 points Spreader Bar**

# Order Template

## ULTRA LIFT

TUL-XXX-XX-XX-XXX-XX



Controls

LR= Controls- FACT (Removable) with Integrated Scale  
LQ= Controls W.S- FACT (Internal) Pendant Controller  
LP= Controls- FACT (Removable)  
LO= Controls- Linak (Removable)  
LN= Controls- FACT (internal)  
LM= Controls- Fact (Internal) with Integrated Scale

Spreader Bar

L03 = 6 Point Pivoting  
L04 = 6 Point Pivoting w/ External Scale  
L05 = 2 Point Pivoting  
L06 = 2 Point Pivoting w/ External Scale  
L07 = 6 Point Pivoting- Bariatric (1000lbs)  
L08 = 6 Point Pivoting- Bariatric w/ External Scale (1000lbs)

Casters

LI= 4in- 3in Casters  
LH = 5-4in Casters  
LG = Caster- Beaver Tail- only with  
Beaver Tail Legs (LA)

Legs

LB= Legs- 600, 750  
LA= Legs- Beaver Tail

Capacity

XXX = 600  
= 750

PCT- TUL-01-REV.3

## Parts & Service

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Customer service and product support are important aspects of each Tollos® product.

For assistance with the lift, contact Tollos® Customer Service.

Please have the serial number of your Tollos® product available when calling Customer Service, and include it in all written communications.

**SERIAL NUMBER** \_\_\_\_\_

If you have any questions about this equipment,  
Please contact Tollos®, Inc. or your local authorized dealer



**One Easter Court, Suite J  
Owings Mills, MD 21117**

Phone: 1-888-363-7224   Fax: 410-363-7708  
customerservice@tollos.com  
www.tollos.com