



tollos®

EQUIPPED FOR LIFE

iQ Technology™

Steady-Aid® 3500/4500/7500 Series User Manual

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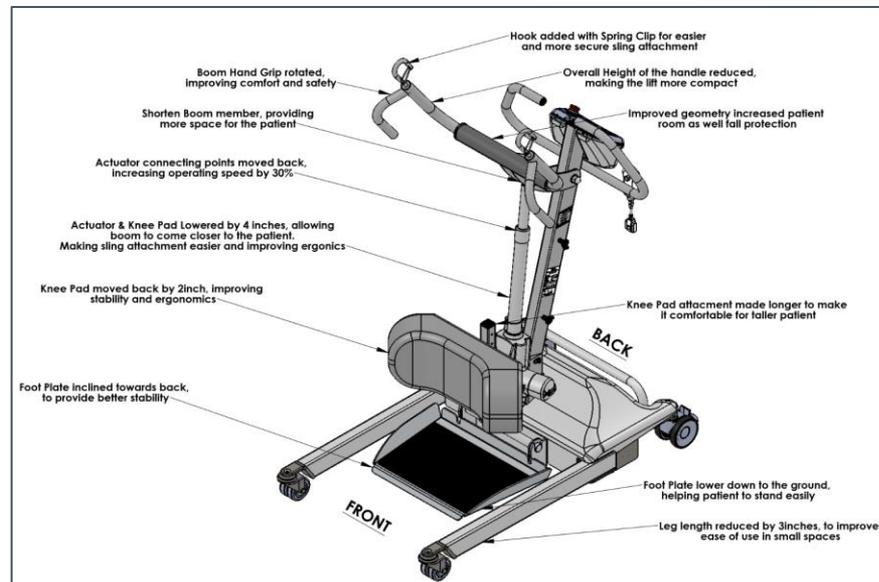
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# Getting Familiar with the SteadyAid®

The SteadyAid® 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 put in place by the facility. Additional help may be necessary when using the lift. Patients or residents should be at least 20% weight-bearing to use the lift.

Lift features include ing rear casters, adjustable legs, removable footplate, adjustable knee pad, battery charge indicator and an onboard rechargeable battery system. Model 3500X Aid has a max load limit of 350 lbs, 4500X is 450 lbs and 7500X is 750 lb capacity.



# Safety Information



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



Improper use of the lift can cause injury. Use the lift only for the purpose described in this manual.  
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.



Assistants can cause injury or be injured. Maintain control of the lift, operate the controls, and direct any assistants.  
Improper maintenance, including without limitation, improper actuator inspection and replacement, can cause serious injury. Maintain the lift only as described in this manual.



Improper parts and service can cause injury. Use only Tollos parts and Tollos approved items on the lift.



Do not exceed weight capacity of lift model—3520X is 350 lbs, 4520X is 450 lbs, and 7520X is 750 lbs.



Visibly inspect sling prior to each use to ensure sling is the correct type, size and design to handle lifting; the sling is not damaged, torn, worn, discolored or past its useful life; 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 lifting. Never leave a resident unattended in a lift.

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

# Mobile Lift Leg Positioning



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



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

# Operator Skills & Training

- Operators need a working knowledge of resident- handling procedures.
- Operators need the ability to assist the resident.
- Follow the training program designed by your training officer.
- Read the Steady Aid User's Manual.
- Practice with the lift before using it in regular service.
- Test each trainee's understanding of the lift.
- Keep training records. Use the convenient form located in the User's Manual.

# Using the SteadyAid®

## Before Placing the Lift in Service:

- Require all personnel who will work with the lift to read the Users' Manual
- Assign appropriate personnel to confirm that the lift operates properly.

## General Guidelines for Use:

- Using the lift requires a minimum of one trained operator. Additional help may be necessary for some procedures, policies or circumstances.
- Follow standard resident-handling procedures when operating the lift.
- Stay with the resident at all times.

(The term “resident” is used interchangeably with “patient”)

Use only for residents/patients who can support at least 20% of their weight (or such higher percentage as the customer has determined).

**DO NOT EXCEED WEIGHT CAPACITY OF YOUR MODEL.**

# Using the SteadyAid®

## On/Off – Emergency Stop Switch

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 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 button down.

## On-board Lift Controls

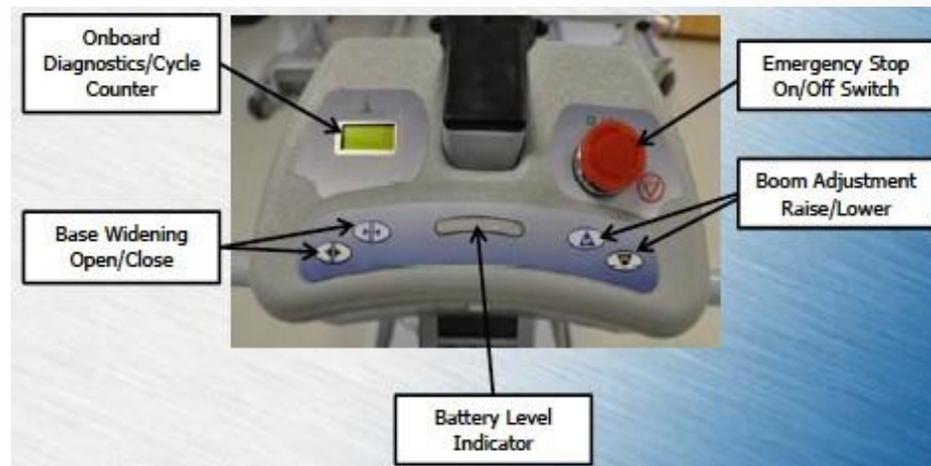
The lift has two sets of boom and base widening controls. One set is located on the lift's control panel. The other is in the remote control.

## Boom Operation

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.

## Base Widening Operation

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.



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# Using the SteadyAid®

## Hand Pendant Lift Controls:

The second set of the boom and base controls are on the hand held pendant. To operate the hand pendant, press the upper left button to raise the boom and the upper right button to lower the boom.

To widen the lift base, press the lower left pendant button. To close the base, press the lower right hand pendant button.



**Boom Adjustment  
Up/Down**

**Base Widening  
Open/Close**

# Using the SteadyAid®

## 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 your lift makes overcharging impossible. Batteries will become permanently depleted if frequently drained into yellow or red.

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 voltage being used for lifting capacity.

***Important—fully discharging batteries reduces battery life. Charge batteries regularly.***

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**Battery Level Indicator**

# Using the SteadyAid®

## Service Warnings / LED Display:

The SteadyAid with its iQ Technology® will display service requirements. The lift is preset to prompt service every 1,000 lifts and shut down after 6,000 lifts. The lift will also identify at any time when the next service is due.

After 975 lift cycles, an intermittent visual warning will flash every five seconds. This will consist of the lights scrolling across—red, then yellow, then green, then off for five seconds until it begins scrolling again.

After 1,000 cycles, a continuous visual warning will flash with the above scrolling continuously. See Service and Maintenance below to reset the 1,000 cycle warning.

After 6,000 cycles, the lift will shut down for actuator replacement and major service.



# Using the Emergency Lowering Feature

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 detach 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.

Occasionally, there will not be enough weight on the actuator (resident very light) and some additional downward pressure may need to be applied to the boom.

For SteadyAids®, 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.



**Emergency  
Lowering  
Feature**

**Actuator**

# Using the Optional Scale Feature

- Hook the desired harness on boom of the lift while it is empty.
- Depress “ZERO” button on scale and stand free of lift. Wait for “0.0” reading on scale (about 5 seconds).
- Proceed with patient transfer as outlined in “Using the Lift” section.
- When patient is free of chair and other obstacles, depress the “WEIGH” button. Record reading.

NOTE: DO NOT PRESS “ZERO” WHEN WEIGHING.

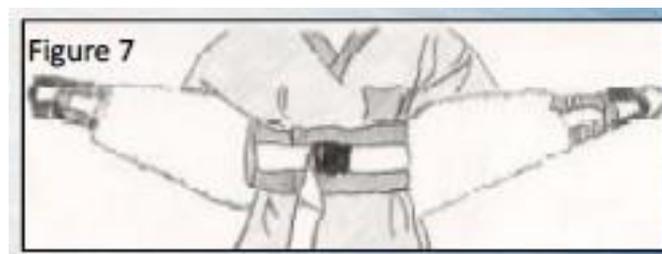
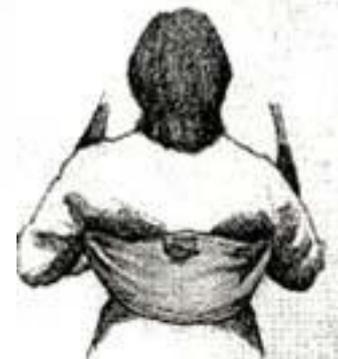
# Raising the Resident

Turn the ON/OFF switch to the “ON” position (large red button “up”). Using either the hand controller or the override button located on the control panel, depress the “down” button until the boom of the lift is in the lowest possible position. IF the resident is being lifted from a wheelchair or transfer chair or bed, ensure breaks on the chair or bed are locked.

- HARNESS POSITIONING:

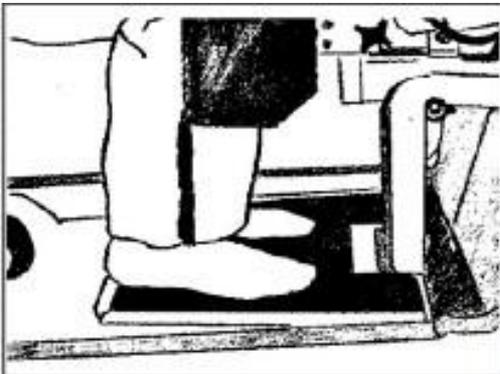
1. Lean the patient or resident forward and position the harness with the washing label to the top with the harness at low back level.
2. Wrap the harness around the patient and attach in front by snapping the buckle together. Ensure the harness is square by pulling forward on the two top sections to extend out equally. The front safety strap should be below the sternum level. Tighten the safety strap by pulling on the free end so that the harness is adjusted to the point where it fits snugly around the chest.

*NOTE: The safety strap is designed as a safety feature to prevent injury to the patient should a sudden loss of muscle control occur during the lift.*



# Raising the Resident

3. Using the base adjustment system, widen the base of the lift.
4. Move the lift in closer to the patient or resident and place the feet on the foot plate. The back of the patient or resident's heels must rest against the raised lip of the foot plate and the bottom of both feet must rest firmly on the surface of the footplate.
5. Move the lift closer to the patient so that both knees come into contact with the padded knee support. The top of the knee pad should contact the legs just below the knee caps. Brakes should be locked while lifting and unlocked when lowering.



## POSITIONING USING HARNESS WITH LEG SUPPORT

6. If using harness with leg support, bring the leg loops up through the patient or resident's legs straight up to the attachments on the lift.
7. Instruct the patient or resident to hold onto the handlebars.
8. Just before lifting, be sure to communicate to the patient or resident the process that is about to take place. Make sure that he/she understands that they are about to be raised into a standing position. Instruct the patient or resident to assist by leaning back into the sling.

# Raising the Resident

9. Press the “UP” control button using either the hand pendant or the on-board control so that the patient or resident is about to be lifted from the seat of the chair. At this point, stop the lifting motion by releasing the “UP” button and re-tighten the safety strap on the harness if any noticeable slackening has occurred or any other slippage occurs. Once secure, continue to raise the patient or resident to desired level. The patient or resident can now be transported to the desired location. In order to facilitate maneuvering of the lift, the base of the lift may be closed.



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

# Lowering the Resident

1. If lowering into a mobile chair or bed, ensure that the brakes of the chair or bed are engaged.
2. Widen the legs of the lift as necessary. Legs are put in widest position to fit around objects, not for stability.
3. Move the lift close to the chair so that the back of the patient/resident's knees almost touch the seat of the chair.
4. The brakes should be UNLOCKED during this transfer.
5. Press the "down" button using either the hand controller or the on-board controls until the patient/resident is comfortably seated.
6. Continue to lower the boom until the sling has enough slack to allow it to be unhooked from the lift.
7. Unhook the sling from the lift and move the lift away from the patient.
8. Undo the front of the harness and remove it from behind the patient.

# Ambulating

In addition to performing seat-to-seat transfers, the SteadyAid® can also be used as a rehabilitation device providing assisted ambulation and gait training. Prior to using the lift for this function, simply remove the foot plate and knee pad.

The patient or resident can now safely practice walking without the possibility of incurring injury due to a fall to the floor.

Legs can be widened to facilitate walking.

For lifting or lowering, refer back to prior sections.

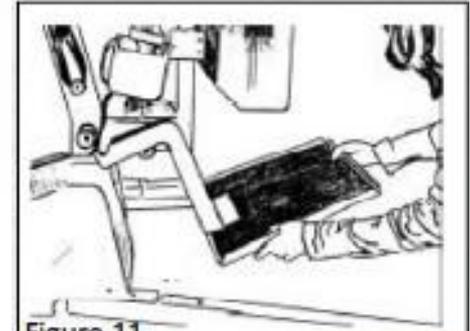


Figure 11



Figure 12



The SteadyAid® 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: #####** Aggregate accumulated number of hours (actually, minutes) the lift has operated. This is defined as the number of hours the motor (lifting and traversing) has been operating.

**CHARGES: #####** Aggregate 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: #####** Aggregate 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.

## **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:**

As noted above, after 975-1,000 lift cycles, the lift will flash an intermittent then constant visual alert through flashing lights. After 6,000 lifts, the lift will automatically shut down for actuator replacement (may be required sooner depending upon usage and maintenance) and major service.

# Charging the Battery

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.

Fully discharging the batteries reduces battery life. Charge the batteries regularly.

# Charging the Removable Battery

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



# Cleaning the SteadyAid®

## **Disinfecting the Lift:**

Wipe all surfaces of the lift with standard hard surface disinfectant. Follow the disinfectant manufacturer's directions. Tollos recommends inspecting the lift for obvious damage as it is disinfected.

## **Cleaning the Lift:**

Remove the sling and follow the attached cleaning instructions. Clean all surfaces of the lift with a damp, soft cloth and a mild detergent. Use a stiff-bristled brush if necessary. Wipe the lift using a damp cloth. Dry the lift with a towel.



# Maintaining the SteadyAid®

The lift requires regular maintenance. Set up and follow a maintenance schedule. The following chart represents minimum maintenance.

	Each Use	As Needed	Each Month
Disinfecting	●		
Cleaning		●	
Inspecting		●	●

## Inspecting the Lift and Sling

Have your service technician use the lift checklist monthly and annually.

**Visually inspect sling before each use to ensure the sling is in good condition with no cuts or frayed edges. Ensure proper size sling is used.**

Make sure that all screws, nuts, bolts and pins are present and securely in place.

**Follow all actuator inspections monthly and annually. Test with normal load to replicate actual usage conditions.**

See Safety & Maintenance Checklist for detailed inspection items.



**Actuator failure may cause serious injury. Follow actuator inspections/requirements.  
Harness failure may cause serious injury. Inspect harness before each lift.**

# Maintaining the SteadyAid®

## Resetting 1,000 Lift Cycle Service Prompt Alarm

1. Press the E-Stop.
2. With the E-Stop pressed, press and hold the Up, Down, and Legs Close buttons on the control panel.
3. Release the E-Stop.

The audible alarm will now reset.

After 6,000 cycles, the reset must be performed by Tollos authorized personnel.

# Important Actuator Information

It is important that regular service and maintenance checks are performed on the patient lifts and the actuators to avoid the risk of accidents and personal injury from occurring and that the actuators and control systems are replaced before they wear out or malfunction.

Tollos® recommends that actuators used in patient lifts are subjected to a full service inspection by a tollos authorized technician when it has run 10,000 lift cycles or after a period of three years operation depending on the design and usage. The actuator should be visually checked daily and quarterly and inspected annually per the inspection items in the attached checklist, and without limiting that, to ensure there is no excess play, noise, vibration or bending and all bolts are secure. **If the actuator were used for 10,000 lift cycles at full load (which is unusual), it should be replaced.**

ISO, Tollos and the actuator manufacture (Linak) all test actuator at maximum load which is significantly in excess of most actual lifting needs. Therefore, the useful life of the actuator, assuming the facility has mostly 300lb residents versus 600lb residents and/or it is just lifting high enough to clear the bed and not raise more than 12-18", will be much longer than 10,000 cycles assuming no abuse, proper maintenance, not full load and not full span lifting.

# Maintenance for Actuator

## **Valid for all LINAK products.**

The LINAK products must be cleaned at regular intervals to remove dust and dirt and inspected for mechanical damage, wear and breaks.

The LINAK products are closed units and require no internal maintenance.

Only type IP66 is waterproof and type IP66W tolerates being washed in tunnels.

The LINAK products must be Ip66 washable when cleaning in wash tunnels. Make sure that the plugs are correctly fitted with O-rings before washing.

**O-rings:** When individual parts are replaced in a LINAK IP66 or IP66 washable system, the O-rings on all parts, may be replaced at the same time. On control boxes with a replaceable mains fuse, the O-ring in the fuse cover must be replaced every time the cover has been removed. The O-rings must be greased in water free Vaseline when replacing them. Make sure that the counterpart - the socket - is clean and undamaged.

## **Valid for all LINAK actuators and lifting columns.**

Actuator/lifting columns must be inspected at attachment points, wires, piston rod, cabinet, and plugs, as well as checking that the actuator/lifting columns function properly. To ensure that the pre-greased inner tube remain lubricated the actuator must only be washed down when the piston rod is fully retracted.

# Table of Actuators Life

**NOTE: This table is based upon Maximum Weight Load. In practice, very few facilities operate lifts at maximum load; therefore, the useful like will likely be longer.**

Continue with normal use

Consider replacing actuator

The actuator ought to be replaced

Number of lifts a day	The age of the actuator measured in years									
	1	2	3	4	5	6	7	8	9	10
1	365	730	1,095	1,460	1,825	2,190	2,555	2,920	3,285	3,650
2	730	1,460	2,190	2,920	3,650	4,380	5,110	5,840	6,570	7,300
3	1,095	2,190	3,285	4,380	5,475	6,570	7,665	8,760	9,855	10,950
4	1,460	2,920	4,380	5,840	7,300	8,760	10,220	11,680	13,140	14,600
5	1,825	3,650	5,475	7,300	9,125	10,950	12,775	14,600	16,425	18,250
6	2,190	4,380	6,570	8,760	10,950	13,140	15,330	17,520	19,710	21,900
7	2,555	5,110	7,665	10,220	12,775	15,330	17,885	20,440	22,995	25,550
8	2,920	5,840	8,760	11,680	14,600	17,520	20,440	23,360	26,280	29,200
9	3,285	6,570	9,855	13,140	16,425	19,710	22,995	26,280	29,565	32,850
10	3,650	7,300	10,950	14,600	18,250	21,900	25,550	29,200	32,850	36,500
11	4,015	8,030	12,045	16,060	20,075	24,090	28,105	32,120	36,135	40,150
12	4,380	8,760	13,140	17,520	21,900	26,280	30,660	35,040	39,420	43,800
13	4,745	9,490	14,235	18,980	23,725	28,470	33,215	37,960	42,705	47,450
14	5,110	10,220	15,330	20,440	25,550	30,660	35,770	40,880	45,990	51,100
15	5,475	10,950	16,425	21,900	27,375	32,850	38,325	43,800	49,275	54,750
16	5,840	11,680	17,520	23,360	29,200	35,040	40,880	46,720	52,560	58,400
17	6,205	12,410	18,615	24,820	31,025	37,230	43,435	49,640	55,845	62,050
18	6,570	13,140	19,710	26,280	32,850	39,420	45,990	52,560	59,130	65,700
19	6,935	13,870	20,805	27,740	34,675	41,610	48,545	55,480	62,415	69,350
20	7,300	14,600	21,900	29,200	36,500	43,800	51,100	58,400	65,700	73,000
21	7,665	15,330	22,995	30,660	38,325	45,990	53,655	61,320	68,985	76,650
22	8,030	16,060	24,090	32,120	40,150	48,180	56,210	64,240	72,270	80,300
23	8,395	16,790	25,185	33,580	41,975	50,370	58,765	67,160	75,555	83,950
24	8,760	17,520	26,280	35,040	43,800	52,560	61,320	70,080	78,840	87,600
25	9,125	18,250	27,375	36,500	45,625	54,750	63,875	73,000	82,125	91,250
26	9,490	18,980	28,470	37,960	47,450	56,940	66,430	75,920	85,410	94,900
27	9,855	19,710	29,565	39,420	49,275	59,130	68,985	78,840	88,695	98,550
28	10,220	20,440	30,660	40,880	51,100	61,320	71,540	81,760	91,980	102,200
29	10,585	21,170	31,755	42,340	52,925	63,510	74,095	84,680	95,265	105,850

October 7, 2004



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**SUBJECT: SERVICE, MAINTENANCE & LIFETIME OF ACTUATORS ON PATIENT LIFTS**

For more than 20 years LINAK has produced actuator systems for a wide range of applications.

More recently, LINAK has learned of a few cases in which accidents involving patient lifts occurred as a result of using an actuator not being in compliance with the relevant standard and LINAK's specifications. Consequently, LINAK feels compelled to stress the importance of actuators in patient lifts not being subject to heavier lifts and/or a greater number of lifts than warranted by the standard.

The actuators specially designed for use in patient lifts comply with the patient lift Standards (norm) EN10535. This Standard requires the actuator to satisfy 10,000 full stroke cycles under varying load conditions. Under normal conditions, the actuator can be used for a minimum of 10,000 full stroke cycles provided it is used in accordance with LINAK's specifications. These specifications can be found on the actuator label or if they are not there anymore, please consult the relevant data sheet on [www.linak.com](http://www.linak.com). Obviously the number of cycles and loads the actuators are subject to depends on the design of the actual patient lift and the circumstances under which it is used, for example it may be used for heavy institutional lifting or for relatively low duty cycle lifting in a home.

For the purpose of ensuring that the use of the actuator complies with the relevant standard EN10535 and LINAK's specifications, LINAK wishes to point out the importance of regular service and maintenance checks on the actuators. LINAK is not in any way liable for damage as a result of any use of the actuator not warranted by the relevant standard and LINAK's specifications. By the way it is expected that the next revision of the EN10535 Standard (norm) will include statutory service maintenance requirements for patient lifts like we see on other types of lifting equipment.

It is important that regular service and maintenance checks are performed on the patient lifts and the actuators to avoid the risk of accidents and personal injury from occurring and that the actuators and control systems are replaced before they wear out or malfunction. This must be done in order to protect LINAK and our customers good reputation and market position, and bear in mind that service business can be a profitable business.

LINAK recommends that actuators used in patient lifts are either replaced or subjected to a full service inspection at a LINAK approved centre when it has run 10,000 lift cycles or after a period of so many years operation depending on the design and usage. The actuator should be checked within a period of maximum 3 years of operation or more often if used with a high frequency in an institutional environment. We have enclosed a check list that you can use as a guide when assessing your service needs based on your construction and tests. LINAK is able to assist you with developing service maintenance schedules, check lists and basic training of staff.

Should you have any questions to the above, please do not hesitate to call me.

Yours sincerely  
LINAK U.S. Inc.  
Chris Sprigler  
Market Manager

Encl.: A example service checklist

# Safety & Maintenance Checklist

## *Inspect all Pivot joints to ensure they are tight*

1. Boom/mast pivot joint



2. Lifting Actuator top bolt



3. Lifting Actuator bottom bolt



4. Leg / base pivot joint

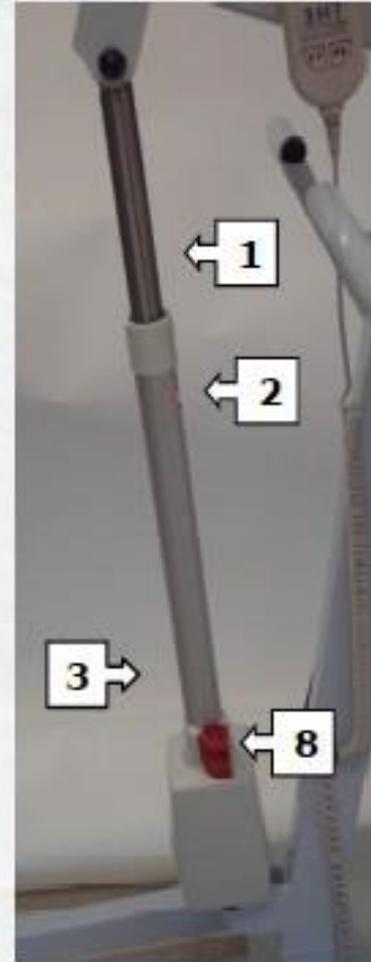


Note: these pivot joints should be greased with White Lithium Grease upon each inspection.

# Safety & Maintenance Checklist

## *Inspect lifting Actuator*

1. Inspect actuator mounting points for cracks or defects.
2. Inspect actuator inner and outer tube for any damage.
3. Inspect actuator housing for any damage.
4. Inspect actuator for excessive noise.
5. Inspect actuator for convulsive movement.
6. Does actuator guide tube sway or deflect when extended?
7. Test the lift actuator anti-entrapment. This feature shuts off power to the actuator when lowering the boom if an obstruction is encountered.
8. Test lift actuator Emergency Down function



# Safety & Maintenance Checklist

## Inspect Knee Pad Assembly

1. Inspect leg strap and buckle condition.
2. Inspect kneepad cover for tears and rips.
3. Inspect knee pad mounting block for damage
4. Inspect pin locking mechanism



## Inspect Casters

1. Ensure caster hardware is tight and secure.
2. Test caster locking.
3. Test caster manoeuvrability.
4. Ensure casters are free of debris and obstruction. Casters should roll smoothly and easily.



# Safety & Maintenance Checklist

## Test Operational Functions

1. Test touch pad functions; up/down & open/close.
2. Test scale functions (if applicable).
3. Test Emergency Stop button. All functions should stop when pressed and resume when opened.
4. Test all Hand Control functions; up/down & open/close.



## Inspect Casters

1. Ensure caster hardware is tight and secure.
2. Test caster locking function.
3. Test caster manoeuvrability.
4. Ensure casters are free of debris and obstruction. Casters should roll smoothly and easily.



# Training Record

tollos® Training Record		
Date	Name	Description



# Maintenance Record

				<b>Steady Aid Mobile Lift INSPECTION CHECK LIST</b>	
(888) 220-4566 US (800) 565-7075 Canada		Date:			
Location:		Facility:			
Warranty:		Model #:			
Yes <input type="checkbox"/>		No <input type="checkbox"/>		Serial #:	
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>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					

# Limited Warranty

## Ulralift® and Steady Aid® 3500XH/3520XH Series and 7500X/7510X Series

Tollos warrants that its products are free from defects in materials and workmanship for the period indicated above (depending on product) from the date of purchase (other than electrical components covered as follows) :

Warranty does not include the following items:

Actuators (three years but no freight or labor after first year) Batteries (90 days)

Upholstery (knee pads and head protectors on Steady Aids) is one year All other electrical components including circuit boards, touch pads, hand controls and scales (one year)

During the term of the warranty, parts that are replaceable will be shipped to the customer. Repair parts or replacement products will be furnished on an exchange basis, and will be either new or refurbished to be functionally equivalent to new. All parts replaced in the performance of service shall become the property of Tollos. During the first year only, labor and freight will be provided for repairs required to be made by Tollos or for shipments of replacement parts by Tollos. Tollos may require that parts requested to be honored by this Warranty be shipped to Tollos, freight prepaid by customer in order for Tollos to make such determination.

Tollos shall determine whether and how 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) replace the product, or (4) deny warranty coverage.

### **EXCLUSIONS:**

This limited warranty applies only to the Company sold and used in Canada or United States , and does not apply to equipment that has been damaged or rendered defective as a result of:

- 
- Acts of God, accident, misuse, neglect, or abuse
- Use of parts not manufactured or sold by Tollos
- Modification without the written permission of Tollos

# Limited Warranty (cont)

- Service by anyone other than Tollos or a Tollos authorized agent
- Transit, neglect, power surge or operating environment
- Failure to provide regular maintenance, service or inspections
- 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.

Service performed as a result of these conditions will be subject to charges for labor, transportation and shipping, and parts.

## **SOLE WARRANTY**

THESE EXPRESS WARRANTIES SHALL BE THE SOLE AND EXCLUSIVE WARRANTIES OF TOLLOS WITH RESPECT TO THE LIFTS, TRACKS AND SLINGS ("GOODS") AND SERVICES PROVIDED IN CONNECTION WITH THE GOODS AND SHALL BE IN LIEU OF, AND EXCLUDE, ALL OTHER EXPRESS OR IMPLIED WARRANTIES OF ANY KIND WHATSOEVER, INCLUDING TO THE MAXIMUM EXTENT PERMITTED BY LAW WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. IN NO EVENT SHALL TOLLOS, ITS SUBSIDIARIES, AFFILIATES, AGENTS OR EMPLOYEES BE LIABLE FOR ANY INCIDENTAL, INDIRECT, SPECIAL OR CONSEQUENTIAL DAMAGES IN CONNECTION WITH OR ARISING OUT OF THE WARRANTIES CONTAINED HEREIN OR THE SALE OR FURNISHING OF ANY GOODS, SERVICES OR OTHER ITEMS HEREUNDER, OR ANY THIRD-PARTY'S OWNERSHIP, MAINTENANCE OR USE OF ANY GOODS, SERVICES OR OTHER ITEMS FURNISHED HEREUNDER INCLUDING, BUT NOT LIMITED TO, LOST PROFITS OR REVENUES, LOSS OF USE OF THE GOODS OR ANY ASSOCIATED PRODUCTS, DAMAGE TO ASSOCIATED PRODUCTS, COSTS OF CAPITAL, COSTS OF SUBSTITUTE GOODS OR PRODUCTS, OR CLAIMS OF CUSTOMERS FOR SUCH DAMAGES. IN NO EVENT SHALL TOLLOS, ITS SUBSIDIARIES, AFFILIATES, AGENTS OR EMPLOYEES BE LIABLE FOR THE NEGLIGENCE, GROSS NEGLIGENCE, OR OTHER INTENTIONAL MISCONDUCT OF ANY THIRD-PARTY NOR SHALL TOLLOS BE LIABLE FOR ITS OWN NEGLIGENCE, BUT TOLLOS SHALL ONLY BE LIABLE FOR ITS GROSS NEGLIGENCE, OR INTENTIONAL MISCONDUCT. THE SOLE REMEDY FOR ANY LIABILITY OF TOLLOS OF ANY KIND, INCLUDING, BUT NOT LIMITED TO, GROSS NEGLIGENCE, FRAUD, OR INTENTIONAL MISCONDUCT, WITH RESPECT TO ANY GOODS, SERVICES OR OTHER ITEM OR SERVICE TO WHICH THESE WARRANTIES ARE APPLICABLE OR OTHERWISE, SHALL BE LIMITED TO THE REPAIR OR REPLACEMENT OF ANY GOODS DETERMINED BY TOLLOS TO BE DEFECTIVE HEREUNDER, AND IN NO EVENT SHALL TOLLOS BE LIABLE FOR DAMAGES IN ANY AMOUNT EXCEEDING TOLLOS'S REPLACEMENT COST OF THE CLAIMED DEFECTIVE PRODUCT. TOLLOS WILL NOT BE

# Limited Warranty (cont)

RESPONSIBLE FOR MEETING ANY FEDERAL, STATE, LOCAL OR MUNICIPAL CODE OR SPECIFICATION (WHETHER STATUTORY, REGULATORY OR CONTRACTUAL), INCLUDING SPECIAL BUILDING OR CONSTRUCTION CODES, UNLESS BUYER SO SPECIFIES IN WRITING AT THE TIME OF ORDER AND AN AUTHORIZED EMPLOYEE OF TOLLOS AGREES THERETO IN WRITING.

THE PARTIES KNOWINGLY AND WILLINGLY WAIVE ANY RIGHT THEY HAVE UNDER APPLICABLE LAW TO A TRIAL BY JURY IN ANY DISPUTE ARISING OUT OF OR IN ANY WAY RELATED TO THESE WARRANTIES OR THE ISSUES RAISED BY THAT DISPUTE.

THE LAWS OF THE STATE OF MARYLAND SHALL GOVERN THE VALIDITY AND CONSTRUCTION OF THESE WARRANTIES AND ALL RIGHTS AND OBLIGATIONS OF, AND DISPUTES BETWEEN OR AMONG, THE PARTIES ARISING OUT OF OR RELATED TO THESE WARRANTIES, WHETHER IN CONTRACT, TORT OR OTHERWISE, WITHOUT REGARD TO THE PRINCIPLES OF CONFLICT OF LAWS OF THE STATE OF MARYLAND. THE PARTIES SUBMIT TO THE JURISDICTION OF ALL STATE AND FEDERAL COURTS SITTING IN THE STATE OF MARYLAND, THE VENUE OF THE CIRCUIT COURT FOR BALTIMORE CITY, AND THE VENUE OF THE U.S. DISTRICT COURT FOR MARYLAND AND ALL ACTIONS AND PROCEEDINGS ARISING OUT OF OR RELATING TO THESE WARRANTIES SHALL BE HEARD AND DETERMINED IN A STATE OR FEDERAL COURT IN MARYLAND.

# Troubleshooting Guide

**Problem:**

Lift does not operate

**Solution:**

1. Make sure the lift is not plugged in.
2. Check the On/Off button. Twist E-stop button to turn on. Test hand
3. control. If no functions; replace
4. Charge the battery

**Problem:**

Lift does not charge

**Solution:**

1. Check the wall outlet
2. Ensure AC cord is plugged into the charger Check
3. connections on battery terminals

**Problem:**

Base widening inoperable

**Solution:**

1. Make sure the lift is charged
2. Check actuator clevis for breaks. If broken, replace actuator Test hand
3. control. If no functions; replace

# Summary of Key Usage

- Ensure patient/resident weight does not exceed lift capacity.
- Ensure patient/resident can support at least 20% of their weight.
- Ensure batteries are properly charged and remain charged
- Ensure lift wheels are unlocked during lifting or lowering
- Ensure wheels of bed or wheelchair are locked during lifting or lowering
- Ensure there are no loose bolts or nuts and the actuator does not wobble, squeak, vibrate or make unusual noise.
- Ensure harness is in good condition (no rips, tears, frays and not over two years old if reusable).
- Ensure harness holds and is secure while resident is only raised an inch or so over surface before further lifting.
- Ensure caregivers are trained and have read and understand the user manual and have demonstrated proper usage.
- Follow all regular maintenance and inspection on lift.

# Repair Parts and Service

To order parts or for professional lift repair, contact Tollos. Tollos (or an approved dealer or agent) are the only personnel authorized to manage, service or repair this product.

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.

PARTS & SERVICE USA: 888-363-7224

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

United States Tollos, Inc.

One Easter Court, Suite J Owings Mills, MD 21117

Phone: 888-363-7224

Fax: 410-363-7708

Canada Tollos, Inc.

75 Dymont Road Barrie, ON I4N 3H6

Phone: 800-565-7075

Fax: 705-733-3432