

Cirrus[®] Service Manual

Pinnacle[®] Service Manual



tollos
Lightening the Load of Care



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Serial Number: _____

Please have your serial number available when contacting Tollos for service. Please include your serial number in all communications with Tollos.

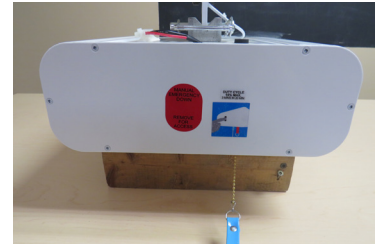
Symbols

	WARNING, CAUTION, IMPORTANT		DANGER
	AC Adapter Label		General Product Label
	Read Manual Label		Marking on the Hand Controller
	Fuse Label		Cirrus 750 Label
	Duty Cycle Label		Pinnacle 1000 Label
	Maximum Weight Labels		6-pt Spreader Bar
	On/Off Label		6-pt Bariatric Spreader Bar
	Manual Emergency Down Label		Sling Sizing Guide Label
	Remove for Access to Manual Emergency Down		Manual Emergency Crank Label

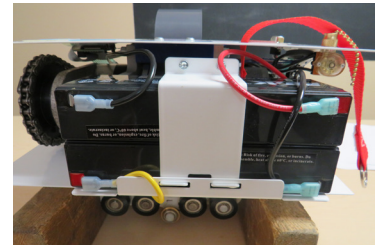
Tools needed:

- #1 Robertson screwdriver
- 9/64" Allen wrench

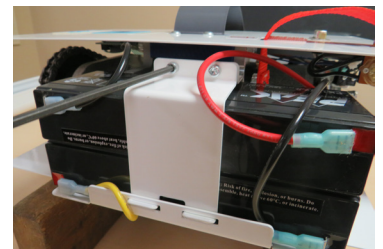
1. Using a #1 Robertson screwdriver, remove the 3 screws from both the front and back of lift.



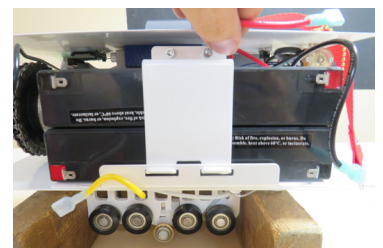
2. Remove all cables leading to the batteries.
NOTE: Make a note of where the battery connections are.



3. With a 9/64" hex key, remove all both screws holding the battery bracket in place. Remove the bracket.



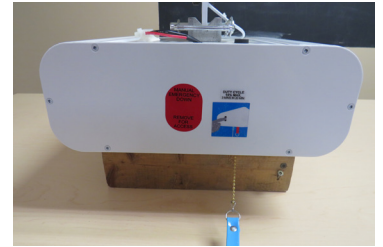
4. Batteries can now be removed. Replace with #5004-113 12V, 2.6ah batteries. Reverse steps 1-4 to complete installation.



Tools needed:

- #1 Robertson screwdriver
- Wire cutters
- Utility knife
- Isopropyl alcohol

1. Using a #1 Robertson screwdriver, remove the 3 screws from both the front and back of the lift.



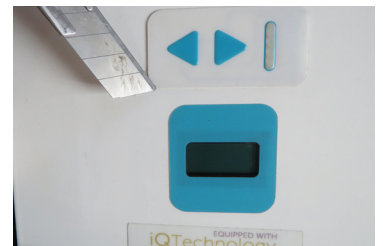
2. Using wire cutters, cut away the tie strap holding the touchpad ribbon.



3. Disconnect the touchpad from its wiring harness.



4. Use a utility knife to get under the touchpad and carefully peel the touchpad off the lift.



NOTE: When replacing the touchpad, ensure the surface of the shroud is clean. Wipe with isopropyl alcohol.

NOTE: Do not bend or fold ribbon cable. Faulty connections will result.



WARNING: Do not use too much force applying the touchpad. Excess force will result in reduced life expectancy and malfunction.

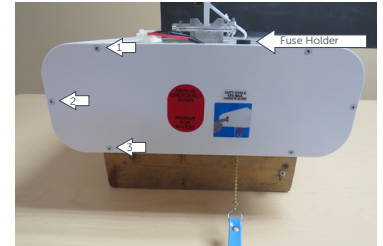
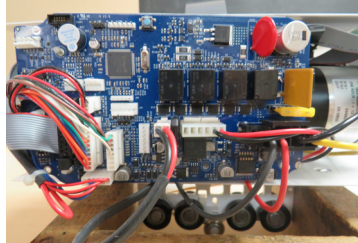
Tools needed:

- #1 Robertson screwdriver
- Wire cutters
- Needlenose pliers
- Zip ties (x2)

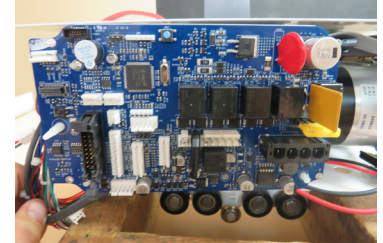
1. Using a #1 Robertson screwdriver, remove the 3 screws from both the front and back of the lift.

2. Remove all plug connectors from the circuit board.

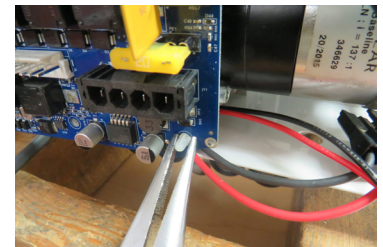
Before



After

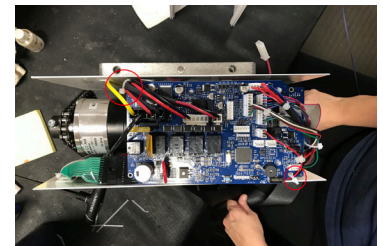
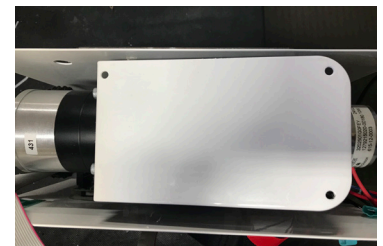


3. Cut the 2 zip ties that are holding the electrical harness to the board.



4. Using needlenose pliers, pinch the 3 nylon board supports to allow for removal of the circuit board. Reverse steps 1-4 to complete installation.

NOTE: Save all nylon mounting board supports for the new board.
(Nylon mounting board supports: part no. 1008-963)

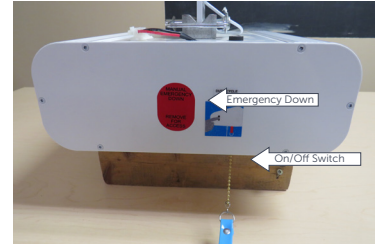


On/Off Switch

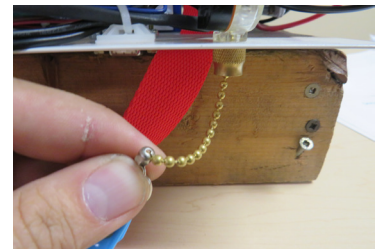
Tools needed:

- #1 Robertson screwdriver

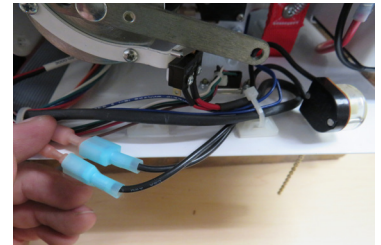
1. Using a #1 Robertson screwdriver, remove the 6 screws holding the front plate in place.



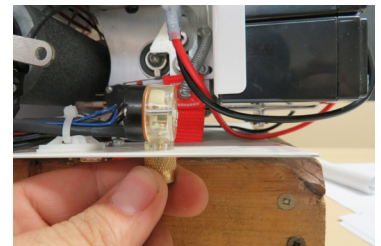
2. Remove blue strap.



3. Unplug the on/off switch from the wiring harness.



4. While holding the top of the switch inside the lift, twist the brass knurled end outside of the lift to remove.



Reverse steps 1-2 to complete installation of new switch.

NOTE: When connecting the new switch to the harness, the cable connects just complete a circuit. The switch cable and the harness cable aren't connected in any particular sequence. It doesn't matter which connector on the switch cable is attached an opposite harness cable.

Lift Strap

Tools needed:

- Drill, R1 bit
- 1/8" Allen wrench
- 3/16" Allen wrench
- 5/32" Allen wrench
- Pliers or flat-head screwdriver
- Blue Loctite™

1. Using the drill with the R1 bit, remove 12 case screws from the end of the lift.

2. Remove end and side panels.

3. Remove one of the battery leads.

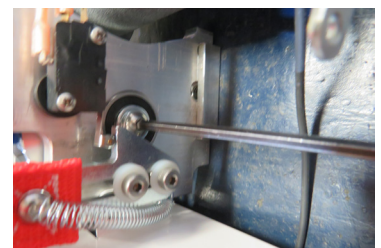
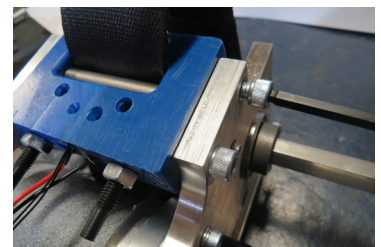
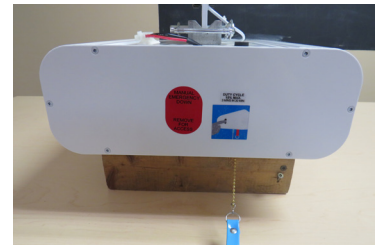
4. With a 1/8" Allen wrench, remove 4 screws securing the bottom panel of the lift.

5. Remove the bottom panel.

NOTE: Remove all electrical connections from circuit boards & cut zip ties.

6. With a 3/16" Allen wrench, remove the belt guide block from the frame. Remove the block pin to fully separate.

7. Using a 5/32" Allen wrench, remove the screw from the end of the belt spool shaft. Lift the red strap and move level out of the way so the screws can be removed.

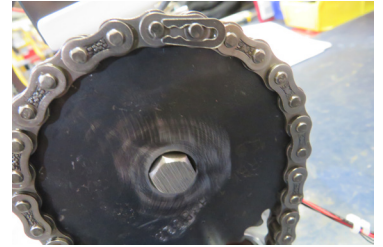


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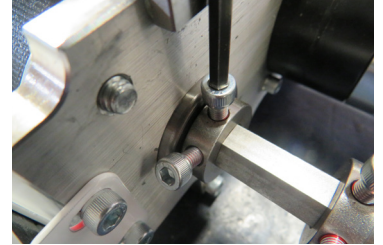
Lift Strap (cont.)

tollos

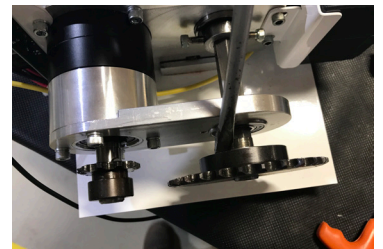
8. Using pliers or a flat-head screwdriver, gently pop off the master link from the drive chain.



9. With the 5/32" Allen wrench, loosen the set screws on the shaft collar.



10. With the flat screwdriver, gently tap on the motor spool support to drive the shaft out of the spool.



11. Remove the belt spool assembly through the top hole (where the belt guide block was).



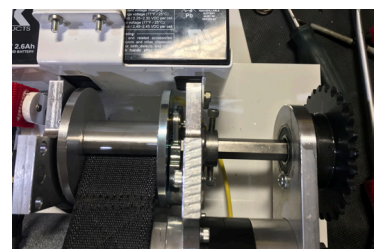
12. Remove the damaged strap.



13. Insert the new strap as shown.

NOTE: Make sure the belt is facing up and the belt spool assembly is properly positioned.

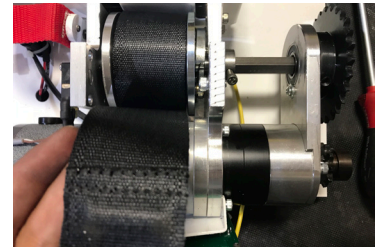
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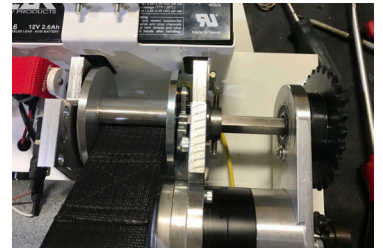
Lift Strap (cont.)

14. Place the shaft back into the spool and reassemble.

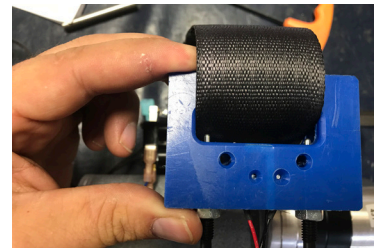
NOTE: Use Blue Loctite on the shaft collar screws, the spool shaft screw, and the hex bushings.



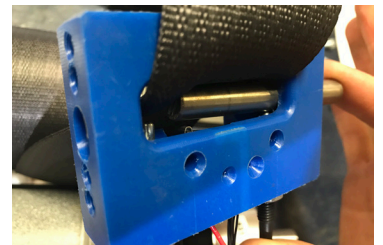
15. Wind up the belt by moving the large sprocket towards the motor.



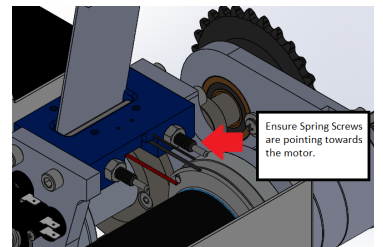
16. Insert the end of the new belt through the belt guide block.



17. Move the pin through the block. Make sure the plunger pin is on one side of the shaft pin and the belt is on the other. A screwdriver may be necessary to move the plungers out of the way of the pin.



18. Ensure belt block is replaced in the correct orientation. Black plunger screws should be pointed towards the motor as shown. Use new chain and link provided in the service kit.



Reverse the procedure to complete reassembly of the lift.

NOTE: Thoroughly test the lift to ensure proper and safe function.



CAUTION: Previously used/old chain links and clips should not be reused due to possible mechanical damage to the holding chain clip and the cyclical fatigue that the chain link has endured during its operation.

Two sets of messages can be displayed, depending on whether the lift is in normal operation mode or charging mode.

Normal Operation

During normal operation, the lift will display the current action and the number of times that action has been performed during the life of the lift.

There are four possible actions:

LIFT UP: ##### - Lifetime-accumulated number of Lift Up movements.

LIFT DN: ##### - Lifetime-accumulated number of Lift Down movements.

TRAVEL L: ##### - Lifetime-accumulated number of Traverse Left movements.

TRAVEL R: ##### - Lifetime-accumulated number of Traverse Right movements.

Charging Mode

During the charging period, the display will toggle through several predefined messages. The message changes every 7.5 seconds.

TTL CYCL: ##### - Lifetime-accumulated number of up/down cycles. Please note, this number will be different from the numbers displayed for LIFT UP and LIFT DOWN.

TTL HRS: ##### - Lifetime-accumulated number of hours the lift has operated; defined as the number of hours the motor (lifting or traversing) has been operating.

CHARGES: ##### - Lifetime-accumulated number of times the batteries have been charged.

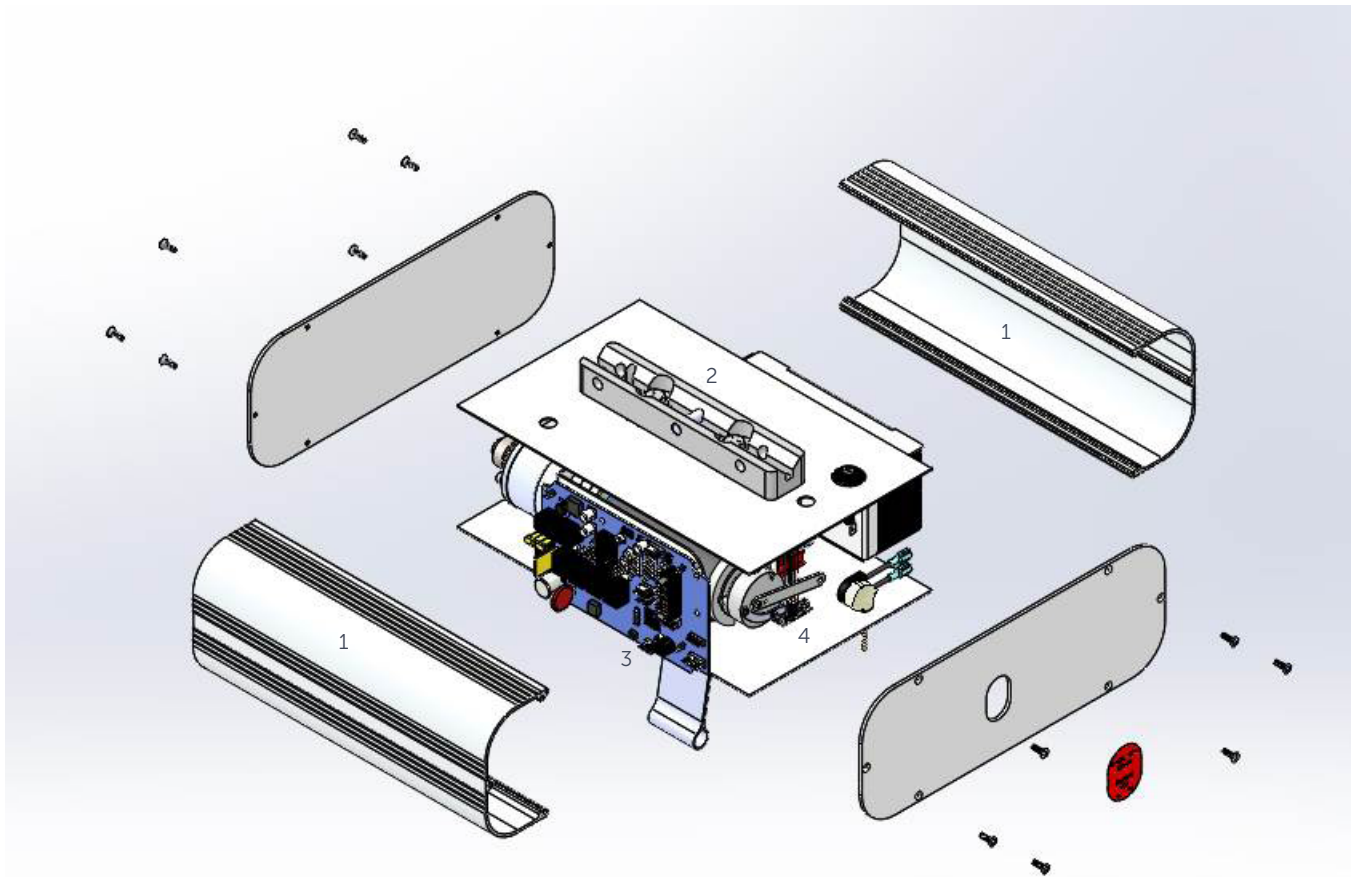
BATT CAP: % - Current level of charge in the batteries; displays as a percentage in increments of 10%.

LOW CHRG: ##### - Lifetime-accumulated number of times the batteries have experience a very deep discharge.

SERV IN: ##### - Displays the number of lift cycles remaining before service is required.

A.S.: % - Displays the lifespan of the lift, takes into account number of lift cycles and patient weight.

TTL LR: ##### - Active when lift is in transverse mode; tracks the number of times the lift has been moved.



1. Lift Shroud
2. Quick Release Trolley
3. Control Board
4. Drive Chain

Ceiling Lift Inspection Checklist



Date: _____ Model #: _____

Facility: _____ Serial #: _____

Location: _____

In Warranty? Yes No

D.O.P. _____ TTL Cycle: _____

Belt	OK - N/A	Replace/Fix	Comments
Cloth belt: stitching, fraying, folding, cuts			
IC Belt: weld, folding, cuts, exposed metal strands (see Notes, pages 13-16)			
Trolley (if applicable)	OK - N/A	Replace/Fix	Comments
Inspect wheel motion for free movement			
Inspect wheel for visible damage/ flat spots			
Inspect trolley drive wheel chain power (traverse only)			
Smart Technology	OK - N/A	Replace/Fix	Comments
Scroll through functions			
Reset PM alert			
Check for low charge			
Service in			
Operations	OK - N/A	Replace/Fix	Comments
Test upper limit switch			
Test lower limit switches			
Test manual express down			
Test lifting with load			
Check noise level			
Ensure gear box alignment			
Grease brass gear/ worn gear motors only			
Electrical	OK - N/A	Replace/Fix	Comments
Test battery output			V reading:
Test charge output (26-28 volts)			V reading:
Test continuous charge (if applicable)			
Test touch pad functions			
Test hand control functions			
Inspect wiring harness			
Inspect circuit board			
Inspect all electrical connections			
Fasteners	OK - N/A	Replace/Fix	Comments
Re-insert track end stop (if applicable)			
Check spread bar side arm nuts (drilled & pinned)			
Check all spreader bar retaining clips			
Inspect multi-thrust pin (if applicable)			
Ensure nuts/bolts are all present and secure			
Miscellaneous	OK - N/A	Replace/Fix	Comments
Test scale (if applicable)			
Ensure all components are present			
Inspect for visual damage			
Inspection sticker			

Inspected by: _____ Next recommended inspection: _____

1. Reset PM Alert

Press and hold the three buttons on the hand control (up, down, bottom left). Turn off motor by pulling on the blue on/off cord. While holding the three buttons, turn on the motor by pulling the blue on/off cord. There will be two short beeps to confirm reset and the display will read "SERVICE RESET".

2. Test Lifting with Load

Batteries must be fully charged. Lifting strap should not be extended to more than 3-4 feet (914 mm - 1219 mm) from the floor and then lifted 19.5" (495 mm) for the Cirrus 750lb (340 kg) lift, or 12" (305 mm) for the Pinnacle 1000lb (454 kg) lift.

3. Test Battery Output

- a. Use 12V battery capacity analyzer
- b. Batteries should be fully charged before testing
- c. Test each battery individually by attaching the leads directly to it
- d. They must show a minimum of 12.6V to pass.

4. Test Charger Output

a. Continuous Charge Rail Test:

1. Shut motor off and move lift along track. If motor goes blank, there is a break in the track.
2. Or use the CC Test Trolley with light. Run the Test Trolley along the track and the light should stay lit.

b. End Chargers:

1. Shut down the motor, push into charger, charge cycle should begin. (Charge cycle shown by 1-3 flashing green lights [depends on charge level], then solid green once charge is complete.)
2. Or use the CC Test Trolley with light. Run the Test Trolley along the track and the light should stay lit.

IC Belt Inspection Details

Specific to lift straps, users should take the following steps to reduce risk:

- Routinely inspect all straps for signs of excessive wear or damage.
 - ▶ Refer to the pictures on the following pages as examples of wear/damage conditions requiring replacement.
- Discontinue use of any lifts with straps that show signs of excessive wear or damage.
- Service your facility's Pinnacle or Cirrus lift(s) by removing and replacing worn or damaged straps with new straps. Contact Tollos for assistance if needed.
- Educate staff to visually inspect the strap with each use, with instructions to not use lifts with visibly worn straps and to alert lift maintenance personnel of any concerns.
- As well as having staff inspect the belts before each use, it is recommended that maintenance or biomed staff (this function varies in different facilities) inspect straps on a regular basis as determined by facility use but at least semi-annually.

All types of lifting straps, including IC straps, are prone to wear and require eventual replacement.

Tollos recommends replacement of any straps showing signs of excessive wear or damage, or at 10,000 cycles, whichever occurs first.

ILLUSTRATIONS

Illustrations 1-4 are examples of IC straps showing signs of normal wear and no structural damage. These straps are safe to continue to use as long as they have not exceeded 10,000 cycles. If the inspected straps are at 10,000 or more lift and lower cycles, then replace the straps.

NOTE: The images below were taken during service activities and the clasp is not shown in the correct position. The correct location of the clasp is just below the fold, shown with the red line on the picture furthest to the right.)

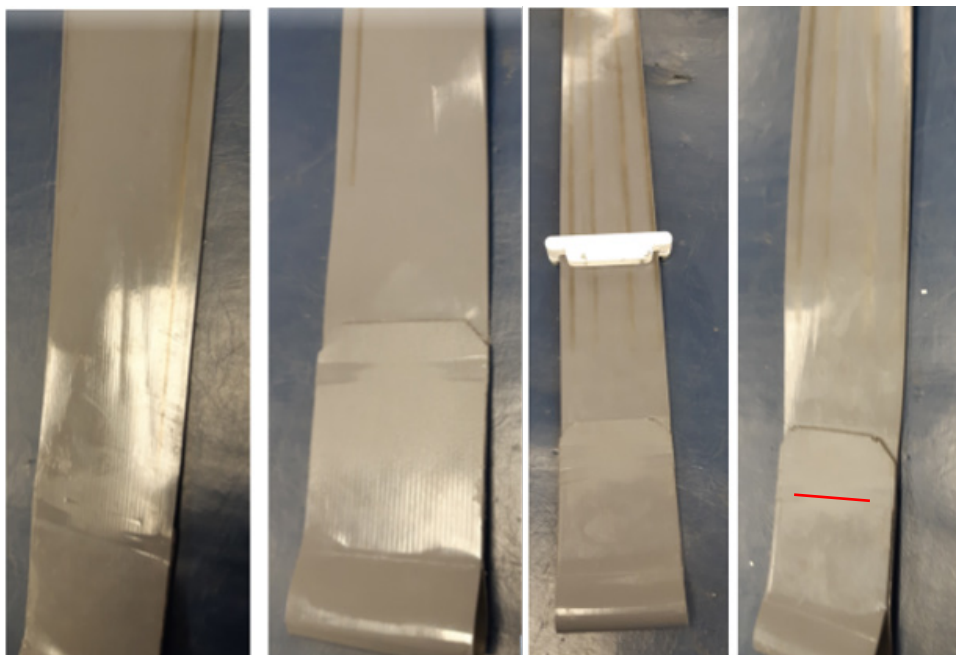


Illustration 1

Illustration 2

Illustration 3

Illustration 4

Illustration 5 is an example demonstrating wear to the point that the load bearing internal steel cables are showing. Replace any straps that are worn to this point.

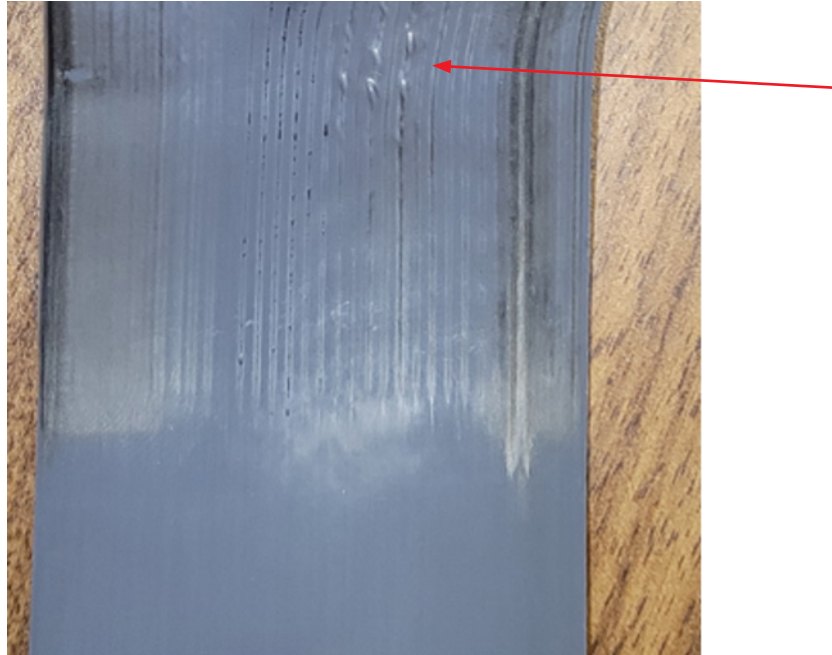


Illustration 5

Illustrations 6-8 demonstrate creasing. If creasing is deep, sometimes coupled with cracks, or if the strap has exceeded 10,000 cycles the strap must be replaced.



Illustration 6



Illustration 7



Illustration 8

Illustration 9 demonstrates physical damage. Do not use a lift with a damaged strap, and immediately replace any straps found to have physical damage.



Illustration 9

Illustrations 10 and 11 demonstrate a specific type of physical damage – damage to the edge of the strap. Replace any straps that have this type of damage. (Note that illustration 10 also demonstrates significant creasing.)

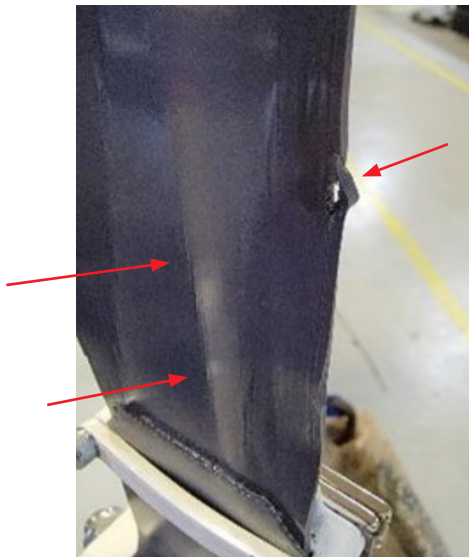


Illustration 10



Illustration 11

Illustrations 12-14 demonstrates the exterior appearance of a strap with severe damage to the load bearing steel cables internally. An x-ray of this strap is included to show the internal damage that corresponds to the exterior appearance. The close-up image of the opposite side shows the broken cable ends visible through the polyurethane covering. (Note, this strap also demonstrates severe creasing.)



Illustration 12

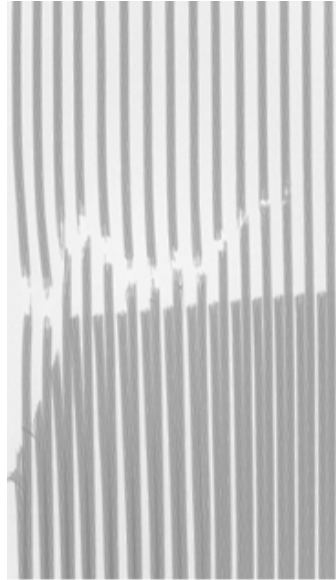


Illustration 13

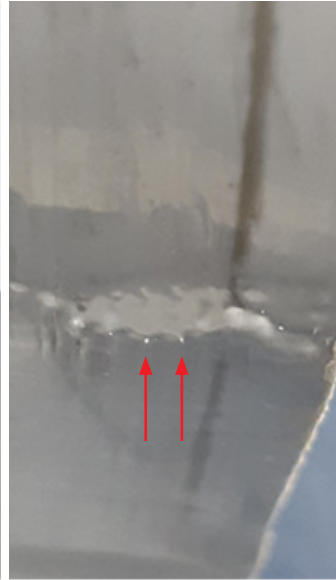
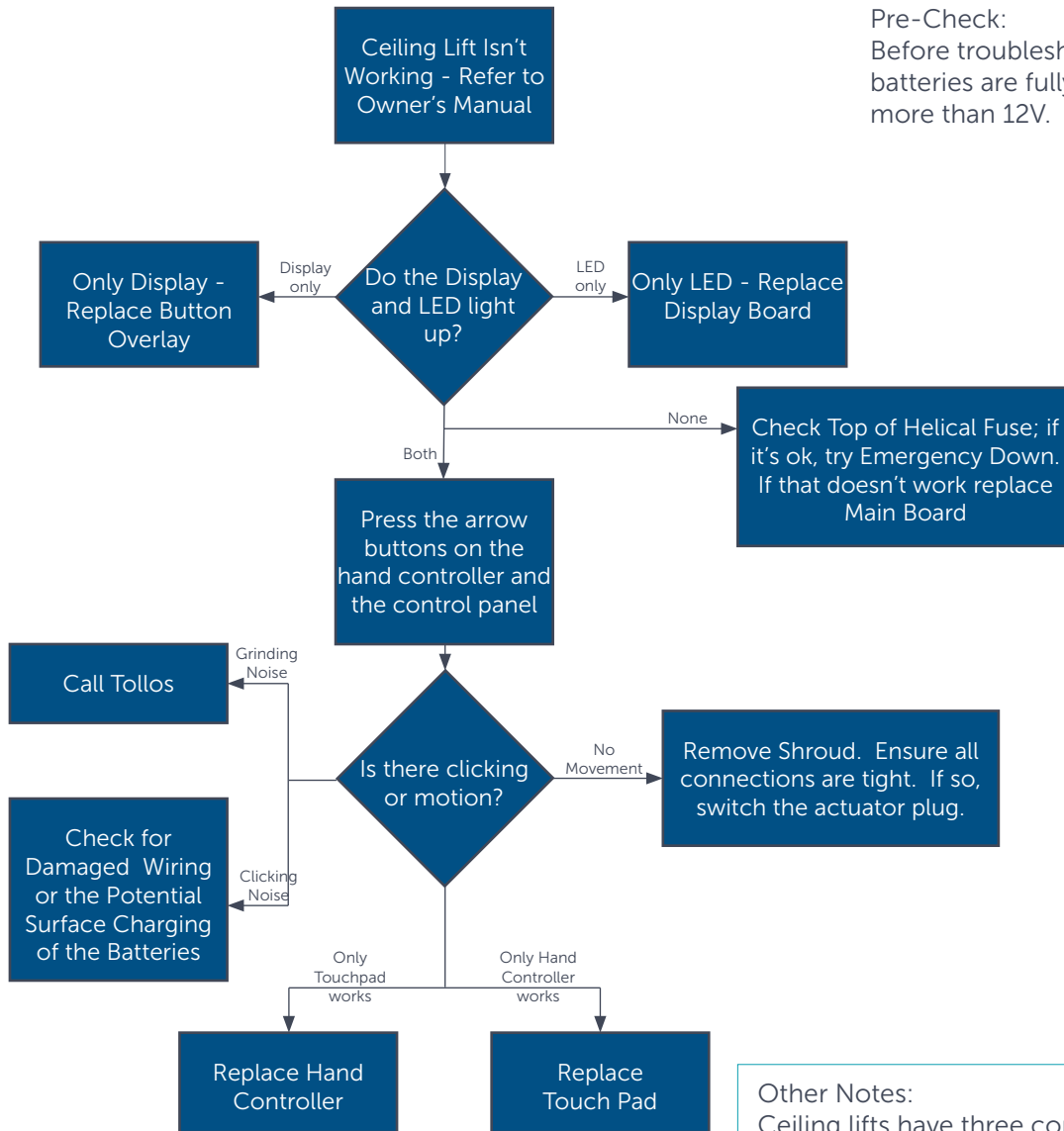


Illustration 14

Pre-Check:
Before troubleshooting, ensure batteries are fully charged and read more than 12V.



If the lifting belt lowers but does not raise, the issue could be the limit switch. Replace the belt block assembly.

Other Notes:
Ceiling lifts have three components that could cause power-related issues: the board, the battery, or the helical fuse.

1. Check the batteries with a multimeter.
2. Check the board by inspecting the automotive fuse. Then try to use the manual Emergency Down function.
3. Check the helical fuse on the outside of the lift.
4. Look for a charge light (either orange or green) to ensure the lift is getting power.

Ceiling Lifts

Cleaning

Clean the components of the lift, tracks, & rails with a mild, non-abrasive detergent. Wipe exterior surfaces with a damp cloth, ensuring no excess moisture infiltrates the lift or any of its components. Dry with a towel. The interior surfaces of the tracks & rails should be cleaned with a dry duster, such as a Swiffer duster with an extendable handle or similar, at a frequency determined appropriate by the facility, but at least quarterly.

Disinfecting

Disinfect Tollos lifts, IC Belts, spreader bars, tracks and/or rails using a hospital-grade, non-corrosive disinfectant. Follow the disinfectant manufacturer's instructions and facility disinfection protocols. Guard against excess liquid infiltrating the lift housing, spreader bar pivot points, or openings in the tracks/rails.

When cleaning & disinfecting the ceiling lift belt, bring the spreader bar down to the floor, exposing the entire length of the belt. Inspect for damage. With cloth belts look for cuts or fraying. On IC Belts look for cuts, kinks, nicks, or visible steel cabling. Following disinfection, please allow the belt to dry completely before raising the spreader bar.

Tollos Recommends:

- Non-corrosive hydrogen peroxide; i.e. Clorox Hydrogen Peroxide Disinfectant Cleaner, or similar,
- Bleach-based disinfectants in a 1% concentration; i.e. Dispatch Hospital Cleaner Disinfectant with Bleach, or similar,
- Cloth lift belts may be cleaned with a solution of up to 10% hydrogen peroxide, or similar (do not use bleach), or
- Whole room disinfection systems utilizing ultraviolet light or hydrogen peroxide mist.

User Recommendations:

- Ensure that products containing phenols are not used in any concentration.
- Protect slings, harnesses, and cloth lift belts from contact with any bleach solution.

During cleaning & disinfection, inspect the lift & hardware for signs of wear and tear.

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2. **Delivery FOB Customer's Destination.** For all shipments involving Equipment, delivery is Customer's destination. All risk of loss or damage from shipping, theft, mysterious disappearance, fire or any other cause, including without limitation any use or misuse, is the responsibility of Customer thereafter. Tollos will make reasonable efforts to meet any delivery schedule quoted but shall not be responsible for failure to meet such delivery schedule, regardless of the reason for such failure. Tollos will ship Equipment according to Customer's reasonable shipping instructions. If no reasonable method is specified, Tollos will select the method. Equipment shall not be shipped by Tollos or returned by Customer by U.S. mail. Customer will pay or reimburse Tollos for all delivery and handling charges.
3. **Title.** Title to Equipment will pass to Customer upon delivery and receipt of payment in full by Tollos. [Acceptance of Equipment by Customer will occur upon delivery.] Customer hereby grants to Tollos a first priority security interest on the Equipment and all proceeds thereof, which shall expire only upon Customer making payment in full to Tollos for the Equipment. Customer authorizes Tollos to file financing statements covering the Equipment in any jurisdictions Tollos deems appropriate.
4. **Limited or No Warranty; Limitation on Damages.** Tollos warrants that the Equipment manufactured by Tollos and sold to Customer hereunder shall be free from any defects in material or workmanship and in conformity with Customer's written specifications, if any, for a period of one (1) year after delivery. Notwithstanding the preceding, the following shall be excluded from any warranty by Tollos: (a) Equipment damage or malfunctions resulting from accident, negligence, misuse, or unauthorized repair or alteration; (b) failure to provide reasonable and necessary maintenance as described in any operating manual accompanying the Equipment; (c) rust or corrosion; (d) interface of unauthorized parts, accessories, or supplies with the Equipment; (e) any unauthorized repair or alteration, including of cosmetic nature performed on the equipment by a party other than an authorized Tollos representative; (f) unreasonable or excessive use of the Equipment; (g) use or interface of any finished products, including, but not limited to, slings, straps, belts, and/or spreader bars, that are not assembled at Tollos' factories, or are assembled using unauthorized, imported, or used parts; or (h) Customer's use and interface of unauthorized replacement products, including parts from a secondary market.

If Tollos represents, but is not the manufacturer of the Equipment, warranties, if any, are only those offered by the original Equipment manufacturer. EXCEPT AS EXPRESSLY SET FORTH IN THE CONTRACT, TOLLOS DISCLAIMS ANY AND ALL WARRANTIES EXPRESSED OR IMPLIED; INCLUDING ANY WARRANTY OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE OR THAT THE EQUIPMENT DOES NOT INFRINGE UPON ANY PATENT OR PROPERTY RIGHT OF ANY THIRD PARTY. The remedies in the General Terms and Conditions are Customer's sole and exclusive remedies. Customer acknowledges that Tollos has based its pricing on the limitations set forth in this section 4.

5. **Indemnity.** Customer will defend, indemnify, and hold harmless Tollos and its subsidiaries, affiliates, successors and assigns, its directors, officers, shareholders, and employees from and against any loss, injury, death, damage, liability, claim, deficiency, action, judgment, interest, award, penalty, fine, cost, fees (including import and export customs fees), or expense (including reasonable attorney and professional fees and costs, and the cost of enforcing any right to indemnification hereunder and the cost of pursuing any insurance providers) ("Claims") arising out of or occurring in connection with: (a) any misuse or modification of the Equipment by Customer or its employees or agents, (b) any act (or failure to act) by Customer or its employees or agents in contravention of any safety procedures or instructions provided to Customer or its employees or agents, (c) Customer's, or its employees' or agents', failure to store, install, operate, or maintain the Equipment in accordance with any instructions or manuals or (d) Customer's use and interface of unauthorized replacement products, including parts from a secondary market.

IN NO EVENT WILL TOLLOS BE LIABLE FOR ANY INDIRECT, SPECIAL, INCIDENTAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES, INCLUDING BUT NOT LIMITED TO ANY LOSS OF REVENUE OR ANTICIPATED PROFITS, LOST DATA, AND COSTS OF PROCUREMENT OF SUBSTITUTE EQUIPMENT, REGARDLESS OF THE FORM OF ACTION,

WHETHER IN CONTRACT, TORT, OR OTHERWISE, EVEN IF TOLLOS HAS BEEN ADVISED OF THE POSSIBILITY OF THE DAMAGES.

6. **[Right of Setoff.** In addition to any rights now or hereafter granted under applicable law and not by way of limitation of any such rights, Tollos is hereby authorized by Customer at any time and from time to time, without notice or demand to Customer or to any other person (any such notice and demand being hereby expressly waived), to set off, recoup, appropriate and to apply any and all funds which may be in the possession of, or which may be owed by Tollos, or its affiliates against any obligation of Customer or Customer's affiliates to Tollos, whether such obligation is liquidated, unliquidated, fixed, contingent, matured or unmatured, and regardless of whether such obligation arises under the Contract or a different agreement between Tollos and Customer or Customer's affiliate.]
 7. **Compliance.** The parties agree to comply with applicable laws and regulations. Tollos may suspend performance if Customer is in violation of applicable laws or regulations. No U.S. government procurement regulation shall be deemed a part of the Contract or be applicable to Tollos unless specifically agreed to in writing by Tollos. Customer agrees to comply with all United States and other applicable laws and regulations regarding the importation, use, sale, and diversion of the Equipment, and assumes responsibility for determining whether any shipment of Equipment requires government authorization or would otherwise violate applicable law. Any included software may only be used strictly in accordance with any applicable license(s). Any party defaulting on any of its obligations hereunder shall pay for all costs, expenses and legal fees incurred by the other party to enforce its rights, whether or not legal action is instituted, including in the case of Tollos, the costs of recovering, repairing or replacing the Equipment.
 8. **Force Majeure.** Tollos shall not be liable for failure to perform, or delay in performance, or delivery of any Equipment or maintenance due to (a) fires, floods, other natural disaster, strikes, or other labor disputes, accidents, sabotage, terrorism, war, riots, delays in transportation or lack of transportation facilities, restrictions imposed by federal, state or local laws, rules or regulations; or (b) any other cause beyond the reasonable control of Tollos.
 9. **Liens.** Customer shall keep the Equipment free from any liens, including without limitation, mechanics' liens, storage, warehouse or other possessory liens, claims or encumbrances, attachments, rights of others and legal processes ("Liens") of creditors of Customer or any other persons until such time as the Customer has paid Tollos in full for the purchase of the Equipment. Customer shall promptly notify Tollos upon receipt of notice of any such Liens affecting the Equipment and Customer shall promptly defend at its own expense Tollos's title to the Equipment from such Liens]
 10. **Export Regulations.** Customer shall not transfer or otherwise dispose of any Equipment or related software, know-how, technical data, documentation or materials furnished by Tollos to any party or in any manner which would constitute a violation of the export control regulations of the United States (now or hereafter in effect). Such export regulations prohibit, without limitation, exports, transshipments or re-exports of Equipment to: (a) such countries or regulations that are subject to U.S. sanctions programs, or (b) to entities or individuals that appear on the U.S. government's (a) Specially Designated Nationals List; (b) Denied Persons List; (c) Unverified List; (d) Debarred List; or (e) Entity List.
 11. **Termination.** In addition to any other remedies that Tollos may have, Tollos may terminate the Contract with immediate effect upon written notice to Customer, if Customer: (a) fails to pay any amount when due under the Contract and the failure continues for five (5) days after Customer's receipt of written notice of nonpayment; (b) has not otherwise performed or complied with any of these terms and conditions, in whole or in part; or (c) becomes insolvent, files a petition for bankruptcy or commences or has commenced against it proceedings relating to bankruptcy, receivership, reorganization or assignment for the benefit of creditors.
 12. **Miscellaneous.** All notices hereunder shall be in writing. Typographic and/or clerical errors may be corrected by Tollos on notice to Customer. The Contract shall be governed by and construed in accordance with the laws of the State of Maryland. Any legal action or proceeding with respect to the Contract shall be brought exclusively in the state or federal courts in Maryland without giving any effect to any choice or conflict of law provision or rule (whether of the State of Maryland or any other jurisdiction that would cause the application of any laws of any jurisdiction other than those of the State of Maryland, and the parties hereby consent to the venue and jurisdiction of such courts. The United Nations Convention on Contracts for the International Sale of Goods shall not apply. To the extent that any provision or a portion of any provision is determined to be illegal or unenforceable, the remainder will remain in full force and effect. Customer may not transfer or encumber any rights hereunder without the consent of Tollos; Tollos may assign or transfer any of its rights or obligations upon notice in connection with a transfer of its business. No waiver by either party of any breach of any provision of the Contract shall be construed as a waiver of any subsequent breach or as a continuing waiver of such breach. Any approval, consent or determination of Tollos shall be given in Tollos's sole and absolute discretion. Time is of the essence. "Including" means "including without limitation."
- Returned Equipment must have a Return Merchandise Authorization Number issued by Tollos within any applicable warranty period and be packaged in original packing materials and shipped prepaid freight to Tollos's designated location. For new Equipment, Tollos may assess a restocking fee.

4810-6593-6042

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