Service Guide for an Over Discharged LiFT Pack

This guide describes the steps required to restart a Flux LiFT Pack™ that has been over discharged and will not charge when plugged in. This guide is applicable to models S3, S5 and S7.

Required Tools/Parts	Quantity	Notes
Philips Screwdriver or Impact Driver	1	Impact driver is recommended. Necessary drivers include #3 Phillips and Torx heads.
Loctite Threadlock (Blue)	0.5mL	
Jumper cable/wire	1	A cable rated for transmitting 25 Amps (min.) with lugs or alligator clips.
Volt meter	1	

1. Make sure the breaker switch is closed. If it is open you will see a yellow tab that must be folded in.

2. Remove the power cable storage box shown in Figure 1. The power cable storage box can be removed by unscrewing the four (4) countersunk Philips head screws.

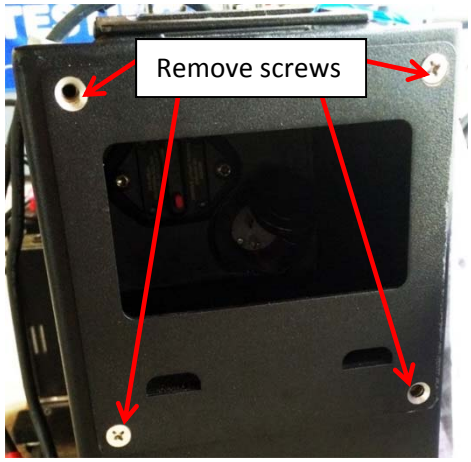

Figure 1: Cable storage box. Remove the four screws to pull the box out of the battery enclosure.

3. Pull the cable storage box out of the case. It is not necessary to disconnect the breaker and power inlet; the cable storage box can be suspended by the cables during this process.

4. Locate the latching relay which is mounted on two posts shown in Figure 3.

Figure 2: Latching relay inside the LiFT Pack.

5. Attach the jumper cable to each of the latching contactor posts which will create a short across the contactor and allow charging of the battery. Using a volt meter, measure the pack voltage at the Anderson connector. If the pack shows 0V please contact Flux Power Technical Support, if the pack shows a voltage greater than 0, continue.

6. Connect the LiFT Pack to a 110V outlet using the provided extension cable. The electronics will boot up within a few minutes and close the latching contactor. When you hear the contactor close, remove the alligator clips/jumper cable. If the jump is not removed from the contactor posts during charging, it may cause damage to the battery.

7. Monitor the pack voltage as it charges. The voltage should increase rapidly at first, and then slowly once it reaches approximately 25V. A fully charged pack will read 28V+. If the pack voltage stops below this point and will no longer rise, one of the lithium-ion cells may be damaged and cannot take a charge. In this case, please contact Flux Power Technical Support for further instructions.

8. Leave the LiFT Pack connected for charging and balancing.

9. It is recommended that you verify that all eight (8) cells are above 2.8V by using the Flux Power Pack Monitor software. For more information on this, please contact Flux Power Technical Support.

10. Reinstall the cable storage box. Apply Loctite Threadlocker to the four (4) base screws and four (4) cable storage box screws.

If you are unable to restart the LiFT Pack after following these instructions, please contact Flux Power Technical Support.

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