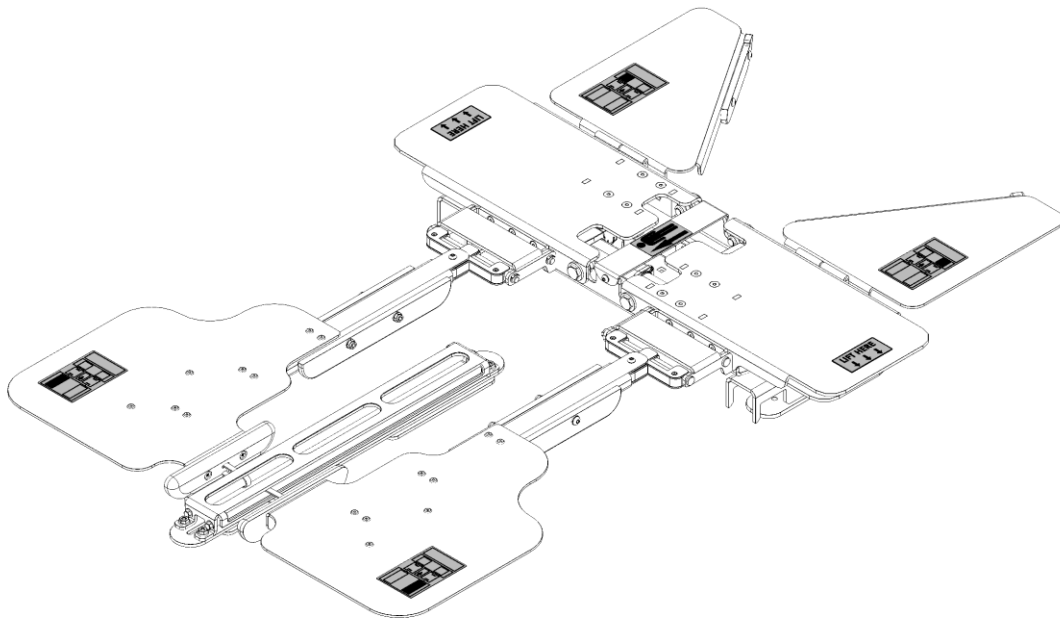




SERVICE AND MAINTENANCE MANUAL SOFT TILT 3



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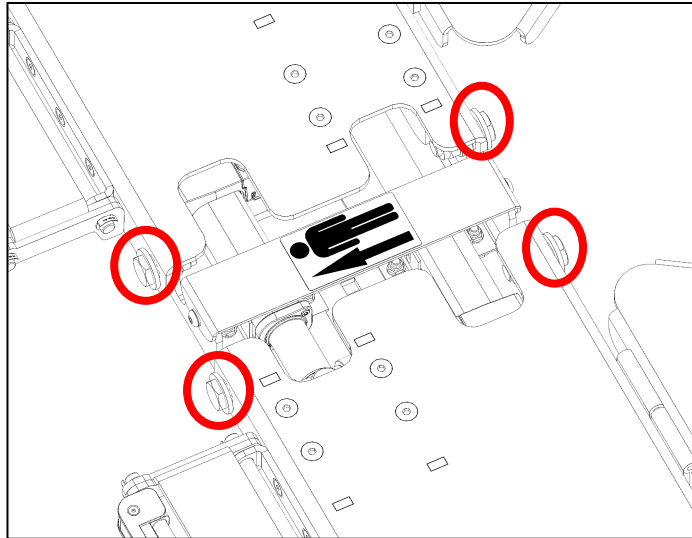
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1 - BASE MODULE

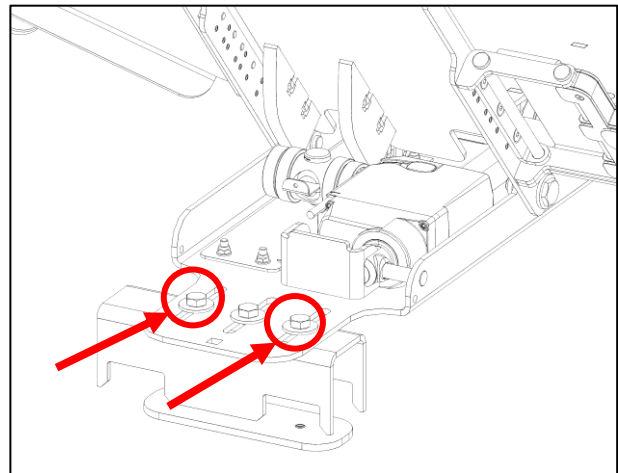
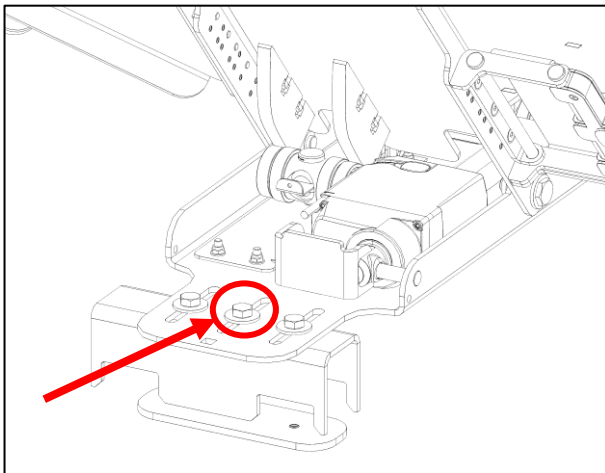
1.1 – BUSHINGS AND BOLTS

Check for significant wear or cracks, check for loose connection.



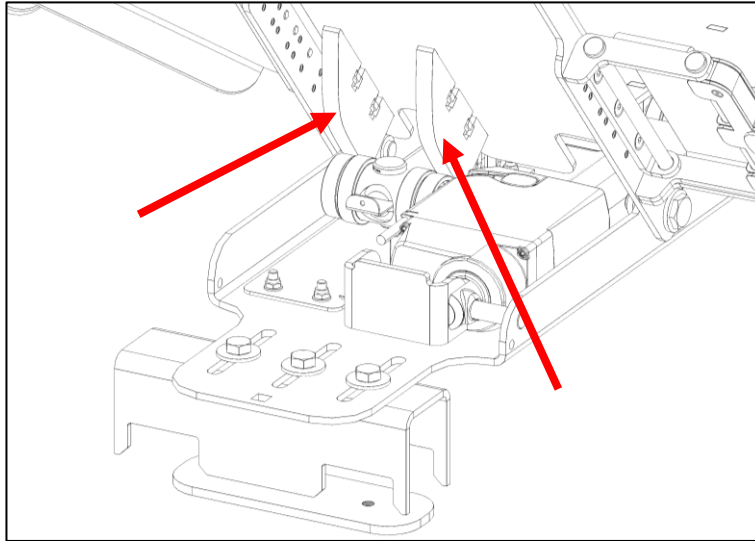
1.2 – MOUNTING PLATES AND BOLTS

Tighten bolts if loosened. Brackets may vary depending on bed model



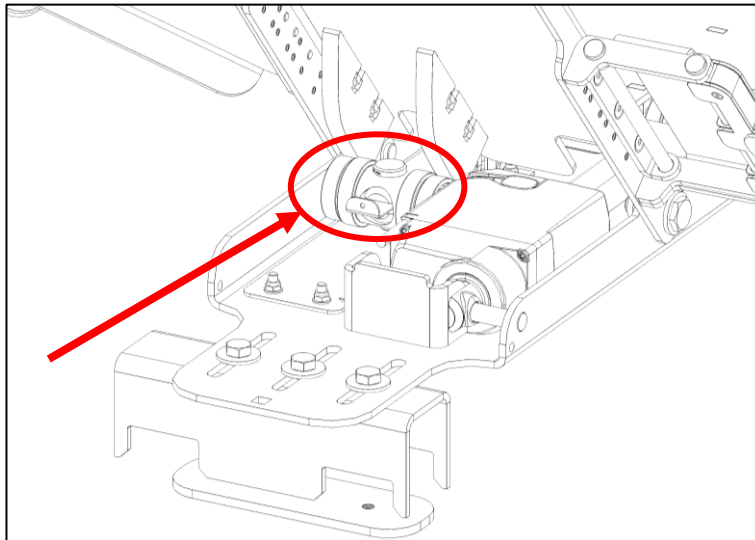
1.3 - LIFTING CURVE PROFILES

Check curves for significant wear or cracks. Tighten bolts if loose.



1.4 – ACTUATOR AND BEARINGS

Check actuator for excessive slack and function. Check bearings for damage and wear.

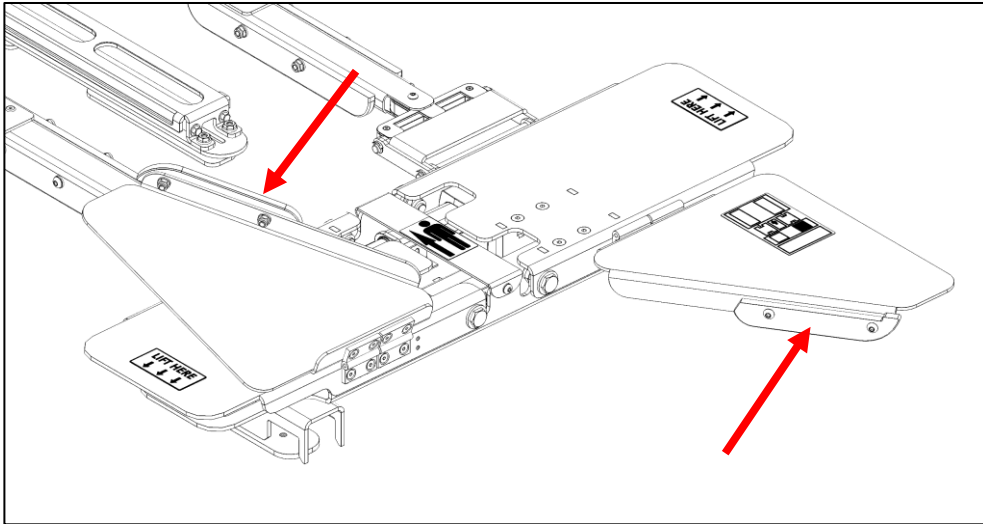


For actuator replacement guide, please see section [5 - Actuator replacement](#)

2 - LEG SECTION

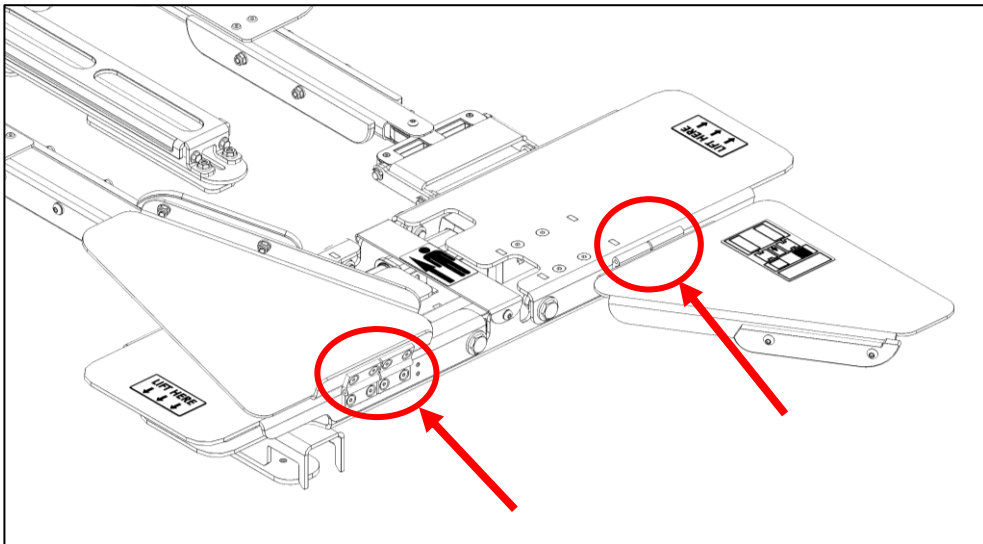
2.1 – PLASTIC AND BOLTS

Check for significant wear or cracks, check for loose connection.



2.2 – HINGES

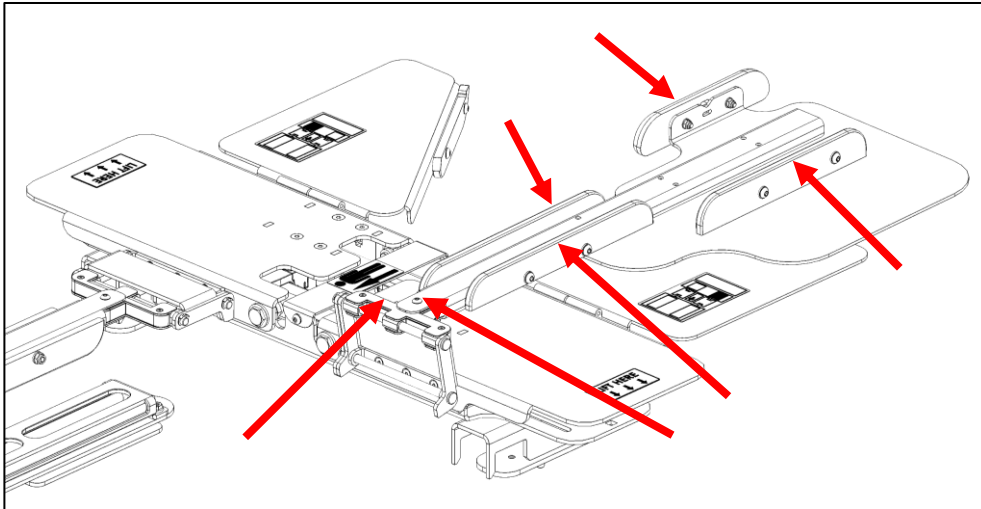
Check for significant wear or cracks, check for loose connection.



3 – BACK SECTION

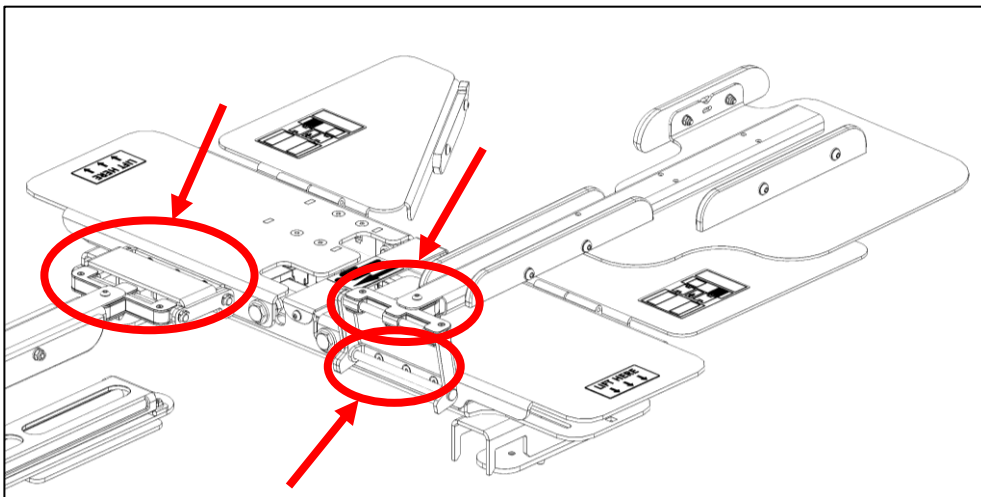
3.1 – PLASTIC AND BOLTS

Check for significant wear or cracks, check for loose connection.



3.2 – HINGES

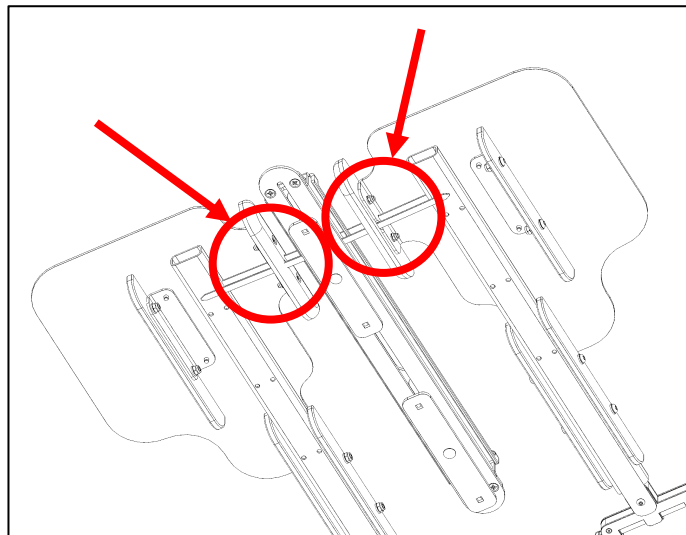
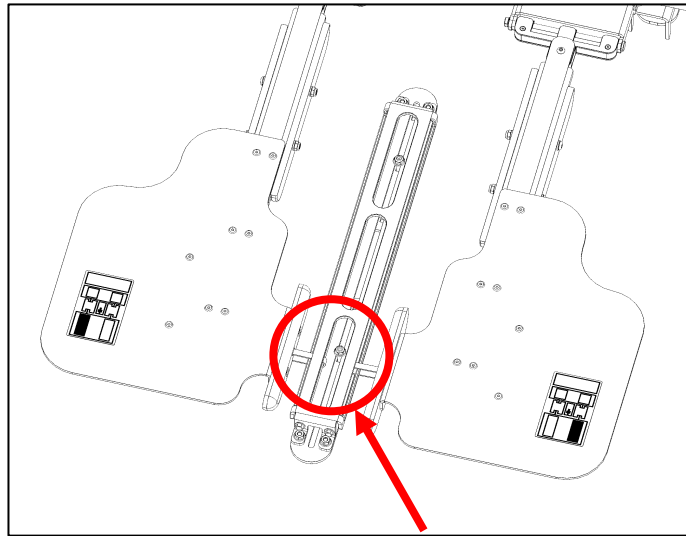
Check for significant wear or cracks, check for loose connection.



4 – BACK STABILIZER SECTION

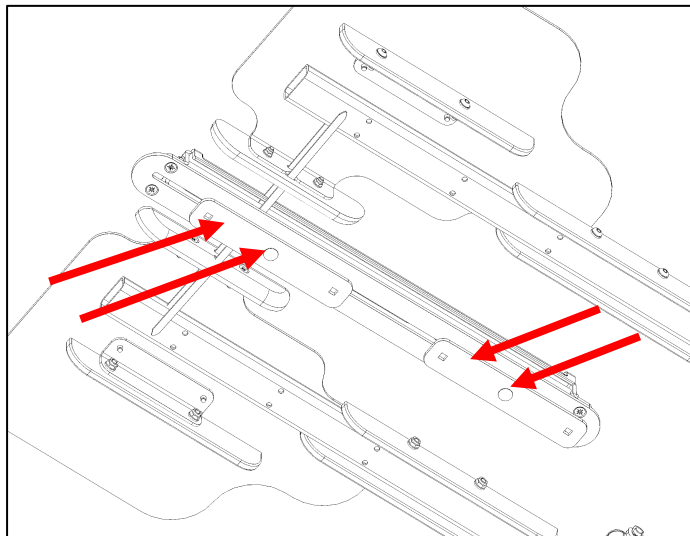
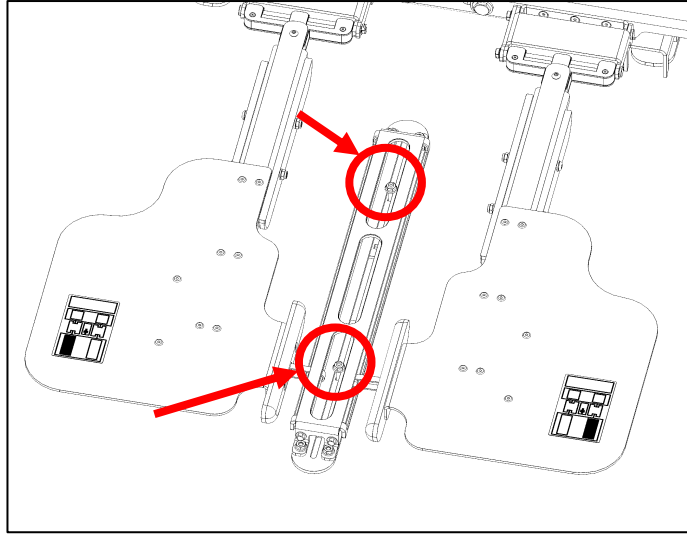
4.1 – ZIP TIE

Check for significant wear on zip tie. Replace if worn significantly.



4.2 – MOUNTING PLATES AND BOLTS

Check for damage, tighten if loose



5 - ACTUATOR REPLACEMENT

Linak motor. Power: 2500 N. IP x6



5.1 - TOOLS



Pliers

3 mm Allen key

5.2 - REPLACEMENT OF ACTUATOR

(For earlier versions, please see video guide: <https://youtu.be/4VX9TnXypj4>)



STEP 1: REMOVE BOTH SCREWS (1, 2) AND LIFT UP CENTER BRACKET (3)

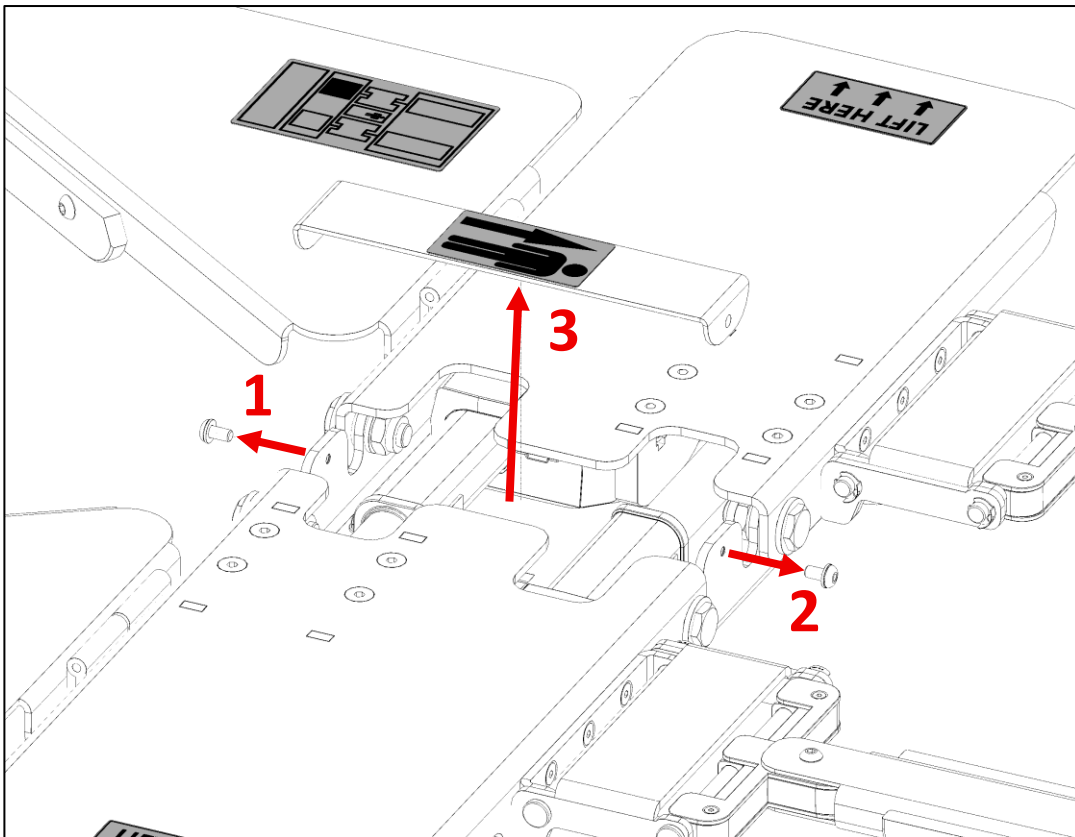
STEP 2: LIFT UP BOTH CENTER WINGS (1) BY USING THE HAND CONTROL, LEAVING THE ACTUATORS IN THEIR SHORTEST STATE.

STEP 3: ON THE OPPOSITE SIDE OF THE AFFECTED ACTUATOR, PULL OUT THE RED SAFETY PIN LOCK (1), THEN PULL UP THE SAFETY PIN (2) AND LASTLY PULL OUT THE BEARING ASSEMBLY (3)

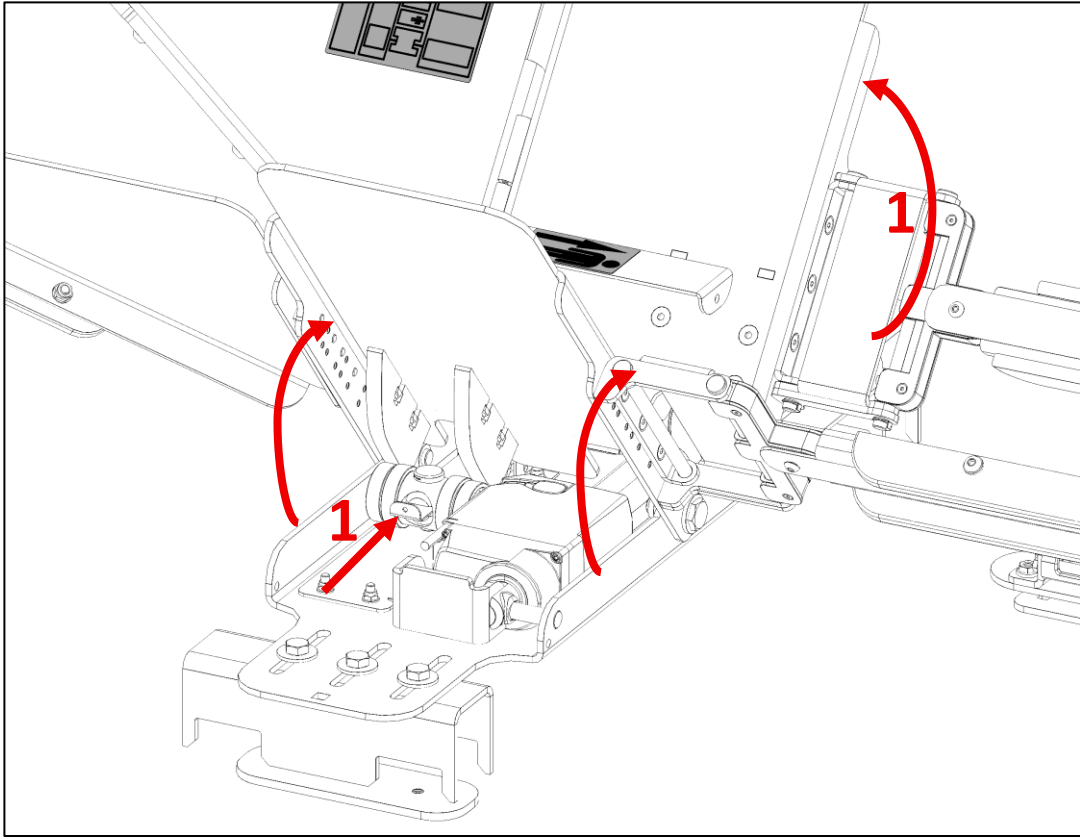
STEP 4: ON THE ACTUATOR SIDE, PULL OFF THE TWO RETAINER RINGS (1) (USE PLIERS IF NECESSARY), THEN PULL OUT THE ACTUATOR AXLE THROUGH THE SIDE OF THE CARETURNER (2)

STEP 5: LASTLY, UNPLUG THE CABLE FROM THE ACTUATOR (1), GENTLY LIFT UP THE BACK END OF THE ACTUATOR (2) AND SLIDE IT BACKWARDS (3) ABOVE THE WELDED HOLDING BRACKET.

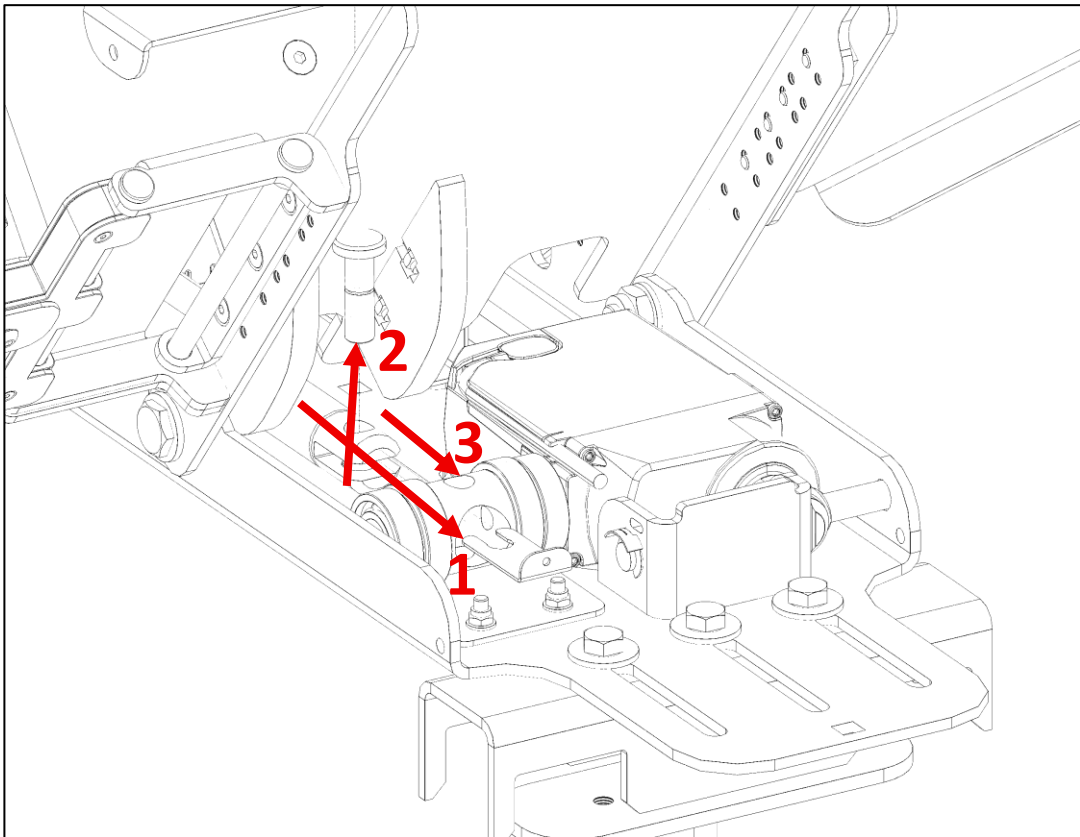
STEP 1



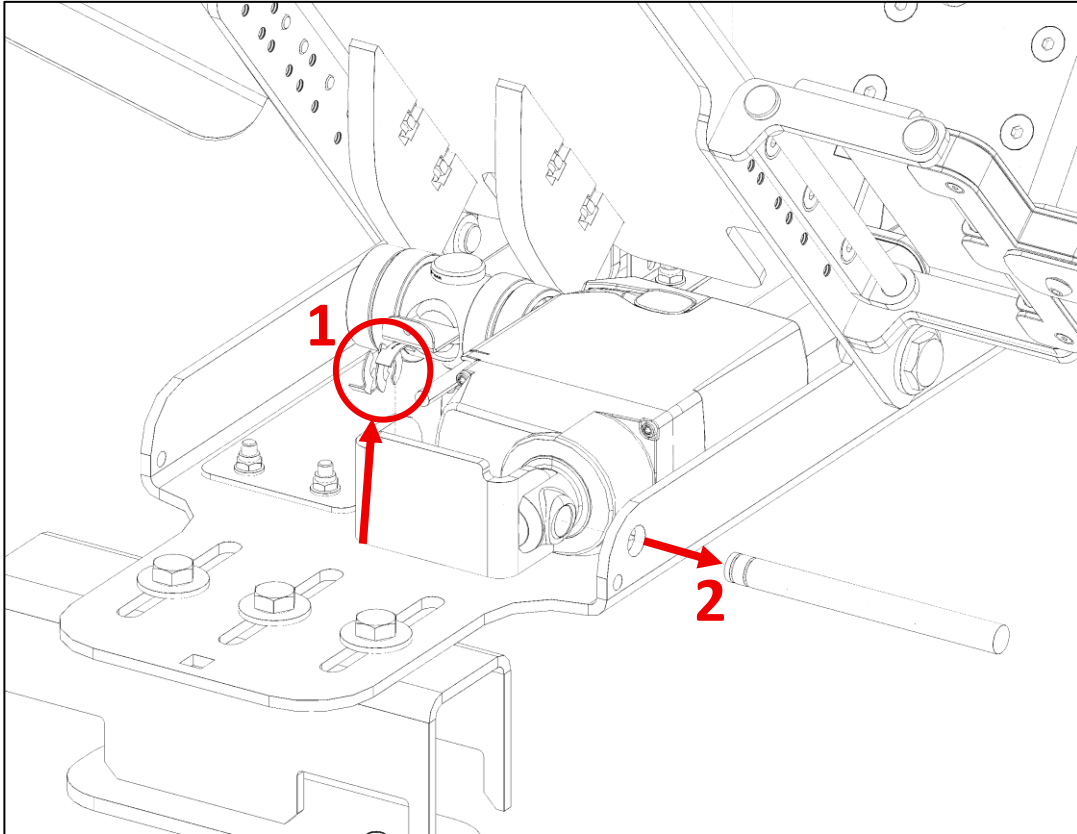
STEP 2



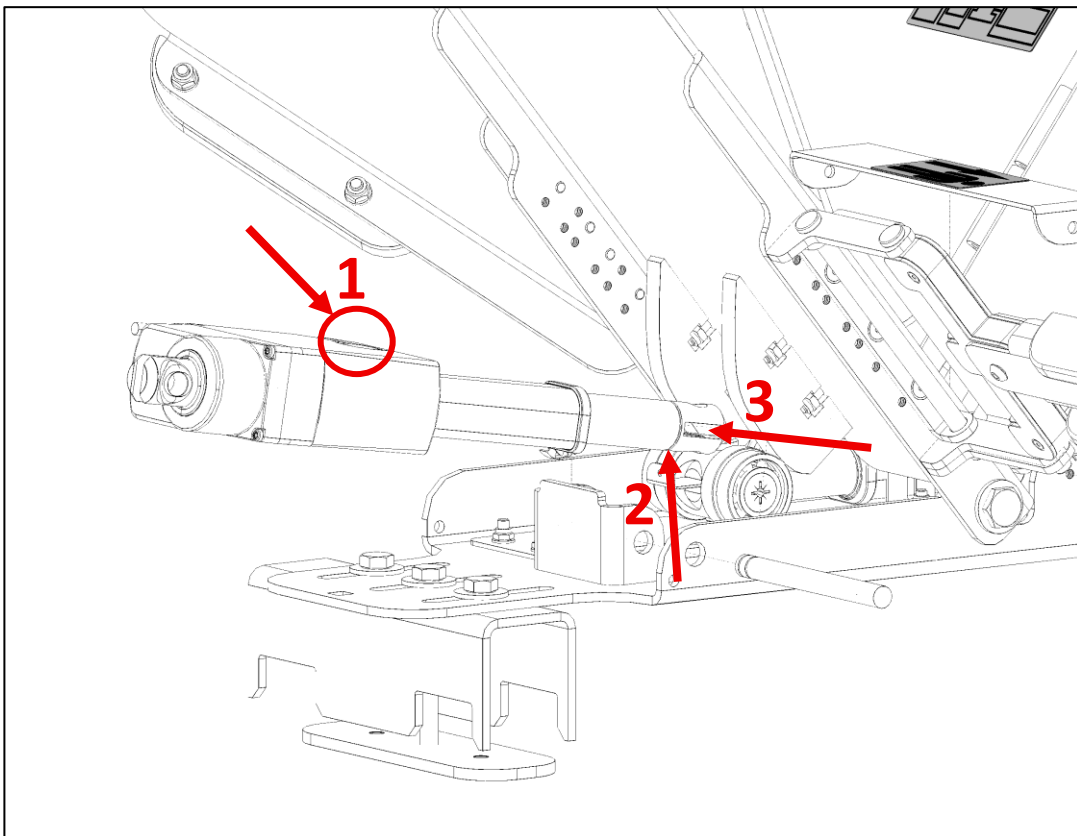
STEP 3



STEP 4



STEP 5



6 - CONTROL BOX

6.1- FUNCTION TEST

When using the system for the first time, a test needs to be performed, to make sure that it works as intended. A test also needs to be performed every time a control box is being replaced. When making the test, make sure that no one is lying on the Soft Tilt:

Step 1: Turn the system on

Step 2: Activate the manual function (see the user manual for further information)

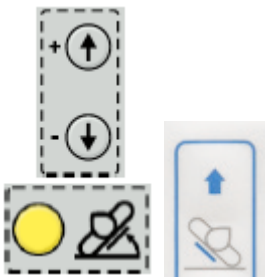
Step 3: Make sure that when pressing up or down on the hand control then this is what the Soft Tilt is doing.

Step 4. Also make sure that while the wings are up and you press the on/off button on the control box then both wings go flat, into a horizontal position

In case the Soft Tilt works opposite than what it is supposed to (when pressing down on the hand control, it goes up, and vice versa):



Change the direction of the actuators. This is done by entering the SETUP mode on the control box (see description below). Once the change has been made on the control box, then run the test again without a person lying on the Soft Tilt, and make sure the Soft Tilt works as intended.

Step 1: Enter SETUP mode on the control box, by simultaneously pressing the following 4 buttons on the control box and the hand control, for 5 seconds:



Step 2: The display shows: SE— and after 2 x BEEP, the display shows: 00— or 01—





Step 3: Use the arrows ( or ) to increase or decrease the value on the display



Step 4: Choose **value 5**, and press the time button, to confirm the choice:



Step 5: Use the arrows ( or ) to choose between 0 or 1, that defines the two different motor directions.

As an example: If the motordirection is wrong at the display shows 0, then change it to 1 and confirm the choice by



pressing the time button , and afterwards press RIGHT UP on the hand control.

Alternatively: If the motordirection is wrong, and the display shows 1, then change it to 0, and confirm the choice by



pressing the time button: , and afterwards press RIGHT UP on the hand control

Step 6: Test that the change has been done correctly. Activate the manual mode on the control box and make sure that when pressing up or down on the hand control, then the wings on the Soft Tilt dose the same. Also make sure that when you press on/off on the control box, both wings go flat, into a horizontal position.

6.2 - Inspection

*ERRORS ON THE SCREEN (CHECK USER MANUAL FOR THE ERROR CODES).
CABLES SQUEEZED OR BROKEN, LOOSE CONNECTION BETWEEN THE CABLES.
LOOSE SUPPORT FRAME.*

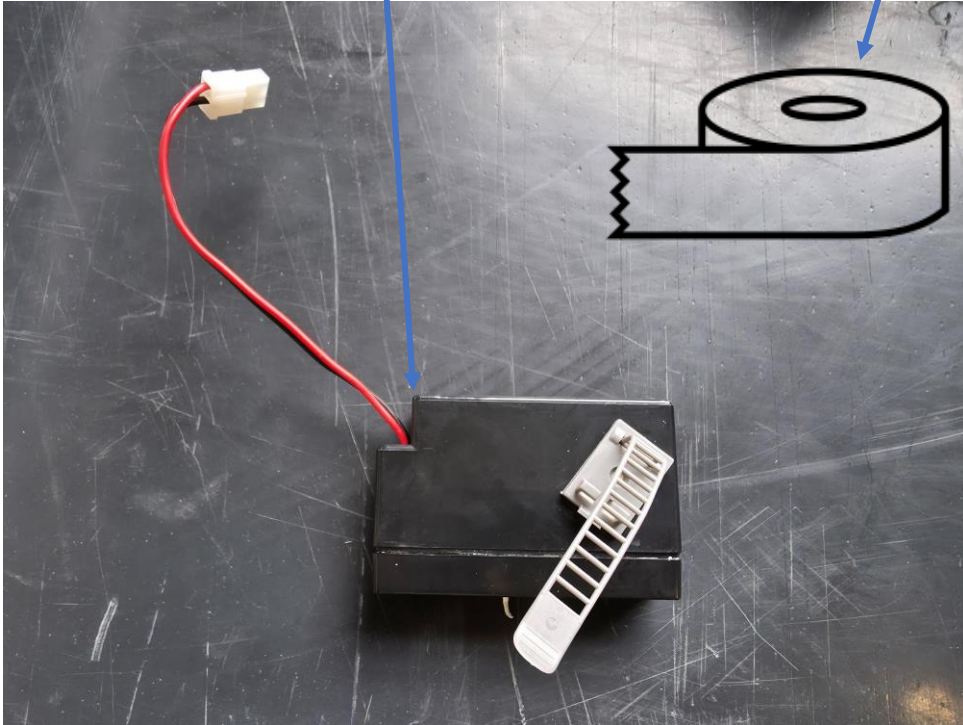
6.3 - TROUBLESHOOT THE ELECTRICAL SYSTEM

- *IF THE ELECTRICAL SYSTEM DOES NOT WORK TRY TO CHANGE THE CONTROL BOX FROM ANOTHER SOFT TILT IF IT IS POSSIBLE TO CHECK IF THE CONTROL BOX IS FAULTY.*
- *IF E01 IS SHOWN ON THE CONTROL BOX DISPLAY, CHECK THE LEFT MOTOR CABLE (MARKED WITH NUMBER 2) FOR DAMAGES AND CONNECTION TO THE MOTOR AND CONTROL BOX. SWITCH THE RIGHT AND LEFT MOTOR CABLES AT THE CONTROL BOX, IF THE ERROR CODE IS THE SAME THERE IS SOMETHING WRONG WITH THE CONTROL BOX, ELSE SOMETHING MIGHT BE WRONG WITH THE LEFT MOTOR.*
- *IF E02 IS SHOWN ON THE CONTROL BOX DISPLAY, CHECK THE RIGHT MOTOR CABLE (MARKED WITH NUMBER 1) FOR DAMAGES AND CONNECTION TO THE MOTOR AND CONTROL BOX. SWITCH THE LEFT AND RIGHT MOTOR CABLES AT THE CONTROL BOX, IF THE ERROR CODE IS THE SAME THERE IS SOMETHING WRONG WITH THE CONTROL BOX, ELSE SOMETHING MIGHT BE WRONG WITH THE RIGHT MOTOR.*
- *RESET THE SYSTEM.*

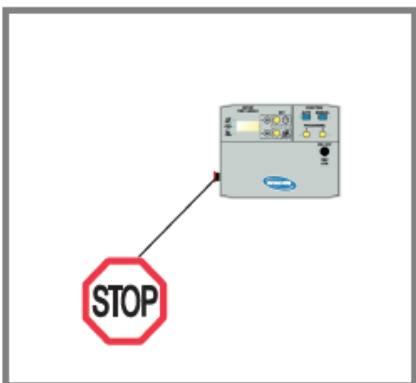
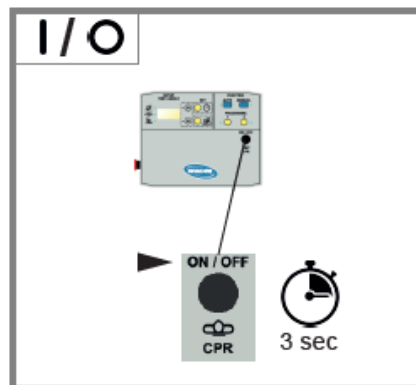
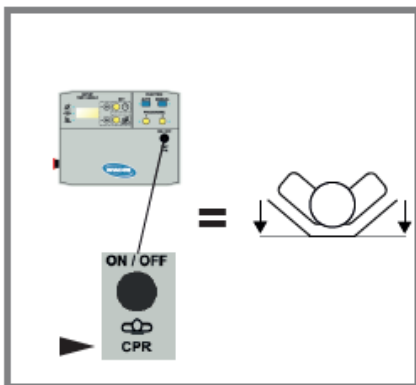
7 - EXCHANGE OF CONTROL BOX BATTERY

Replacement battery x 1

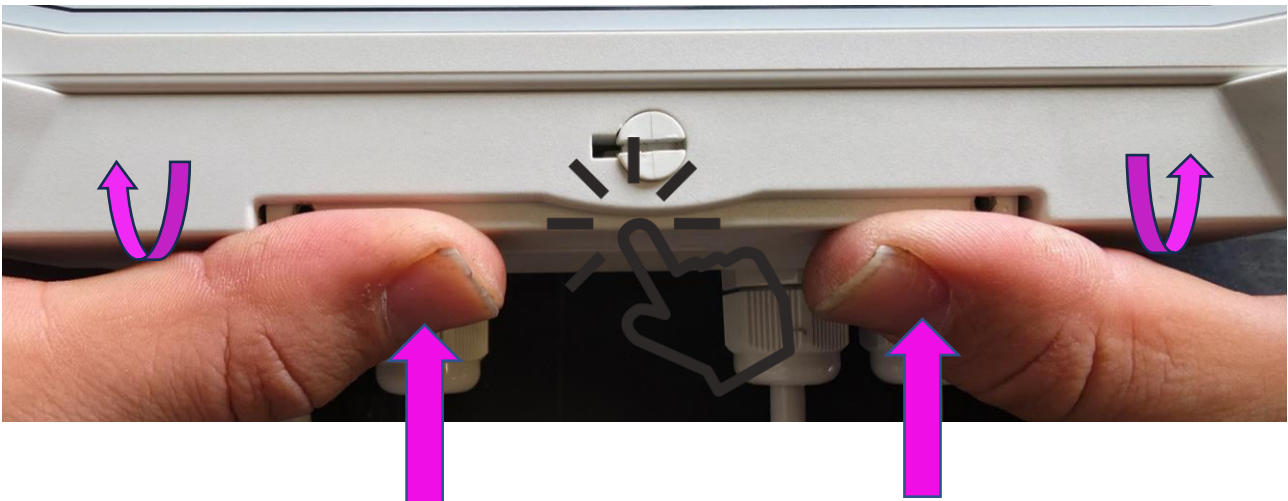
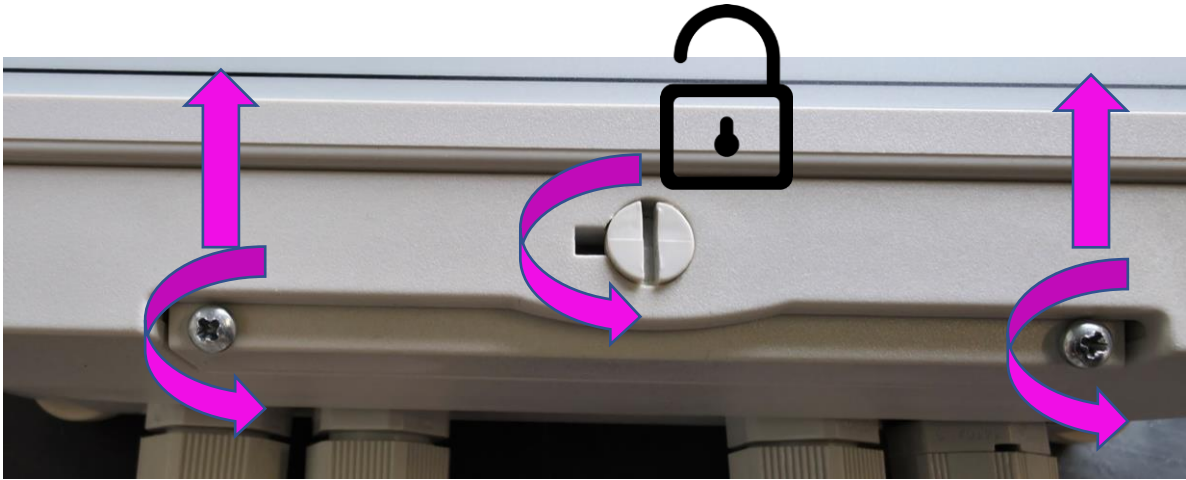
Double-Sided Tape strip x 2



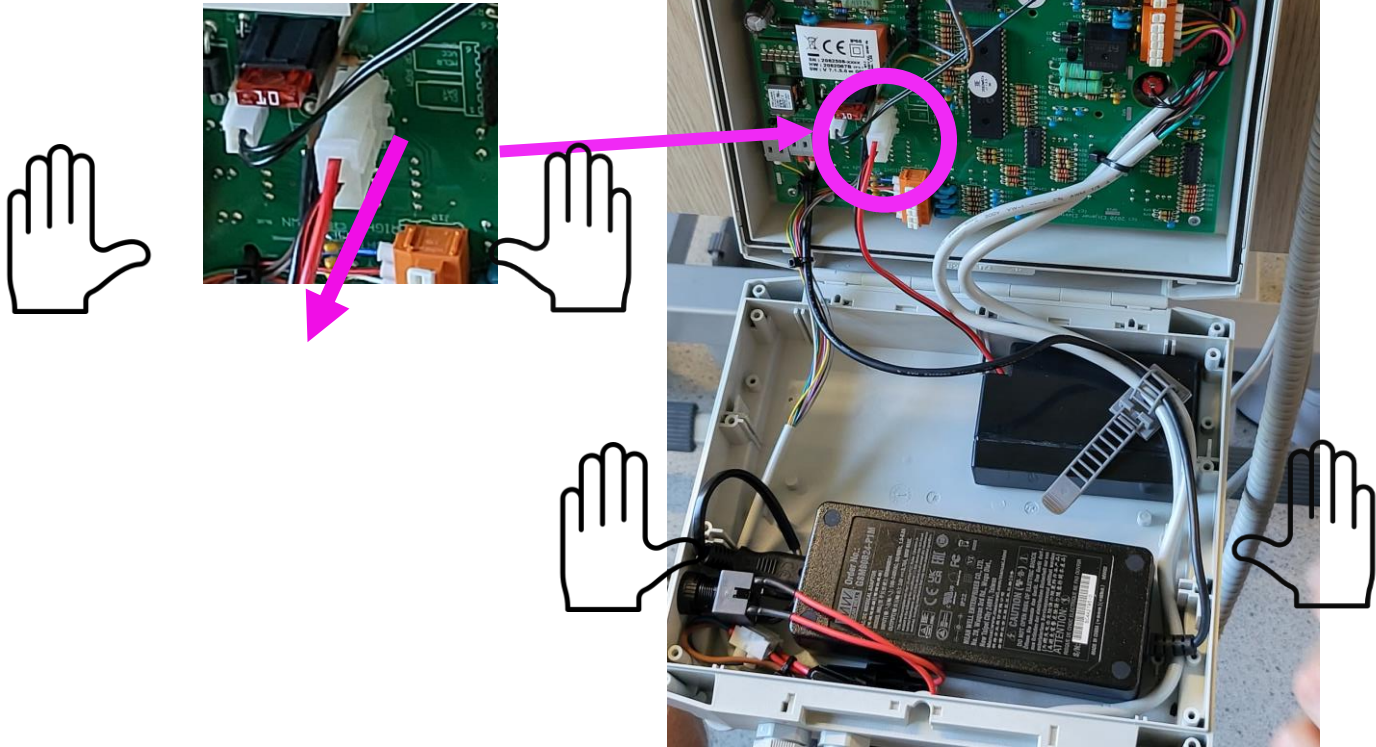
7.1 – TURN OFF AND DISCONNECT THE CONTROL BOX



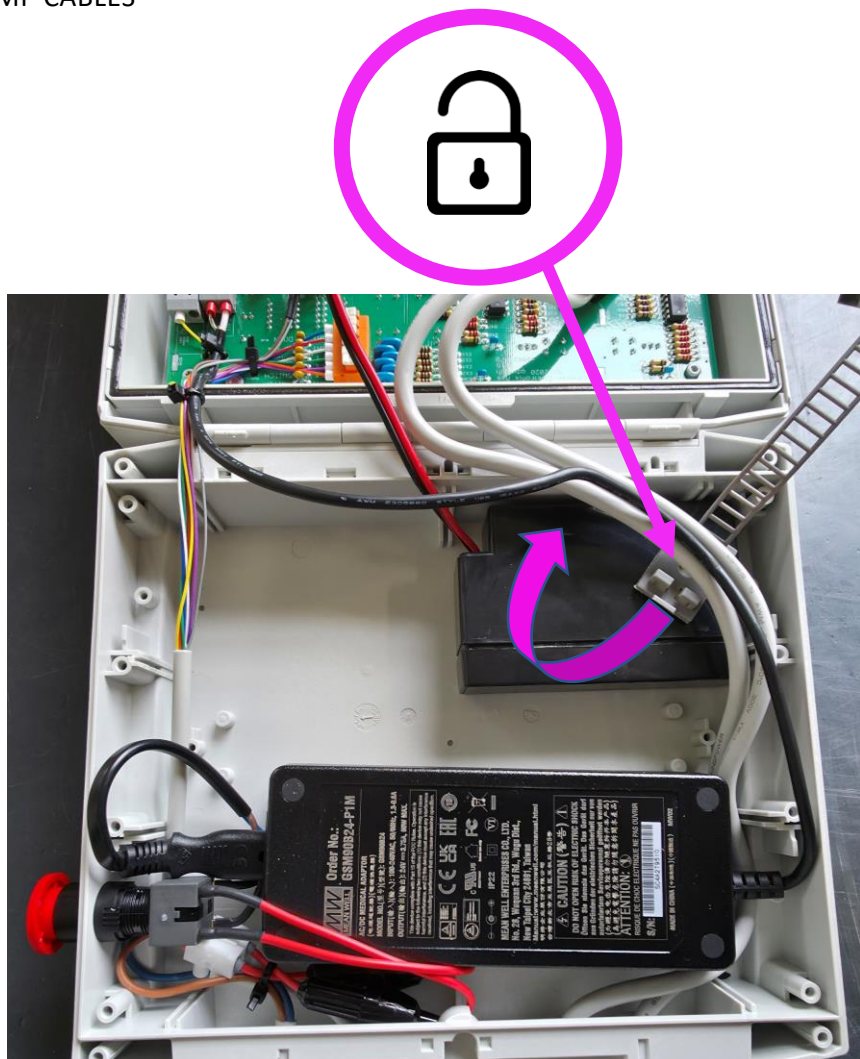
7.2 – OPEN THE BOX FROM BELOW



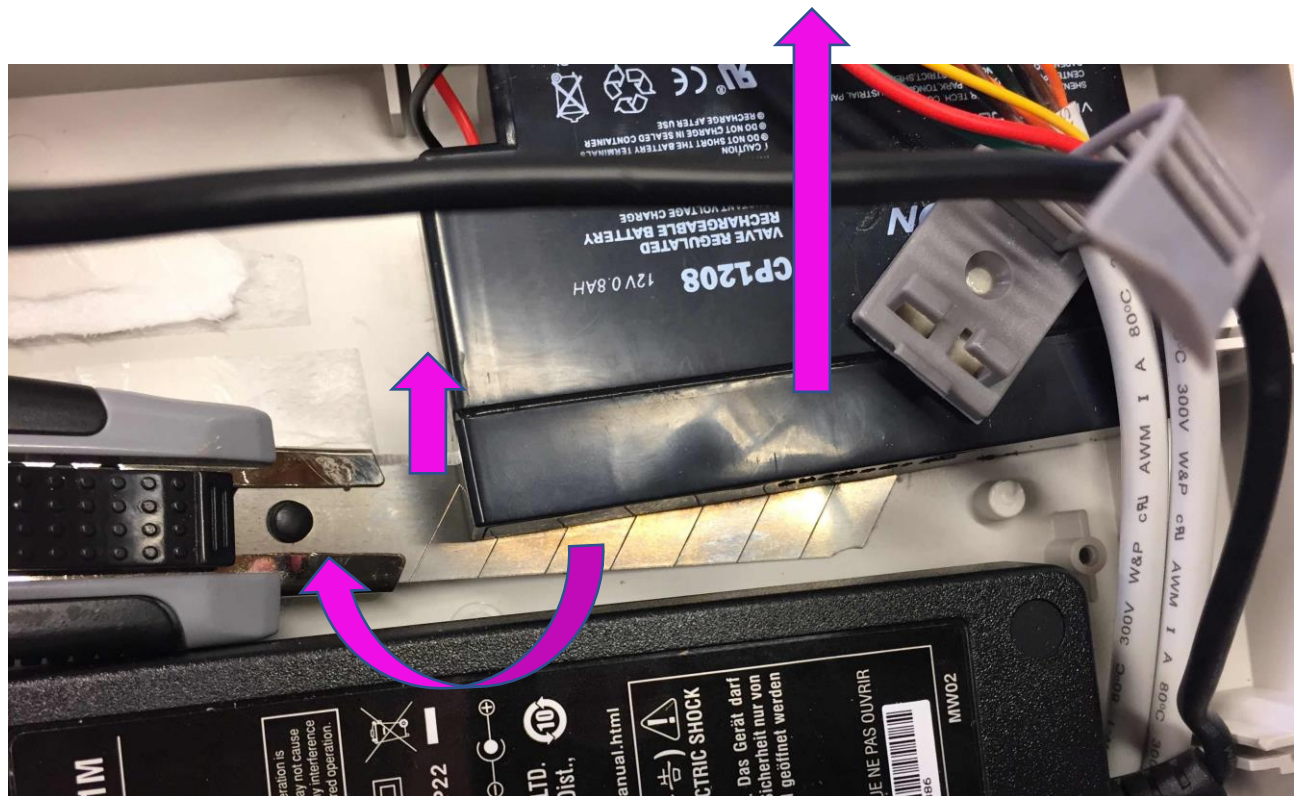
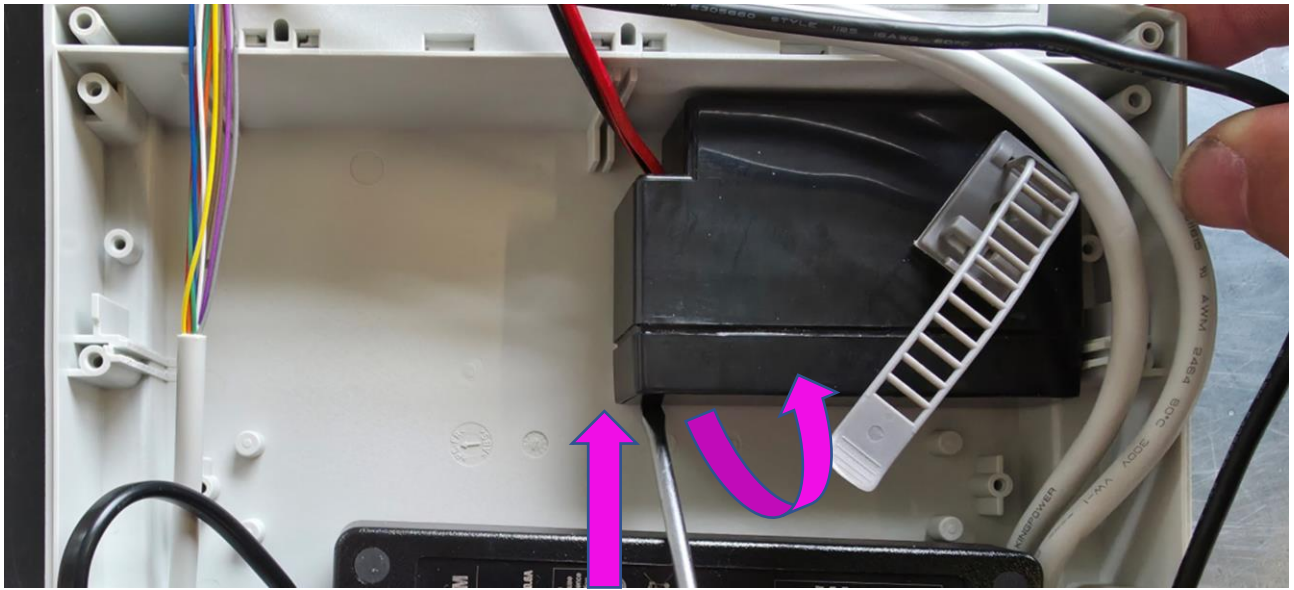
7.3 – DISCONNECT THE BATTERY



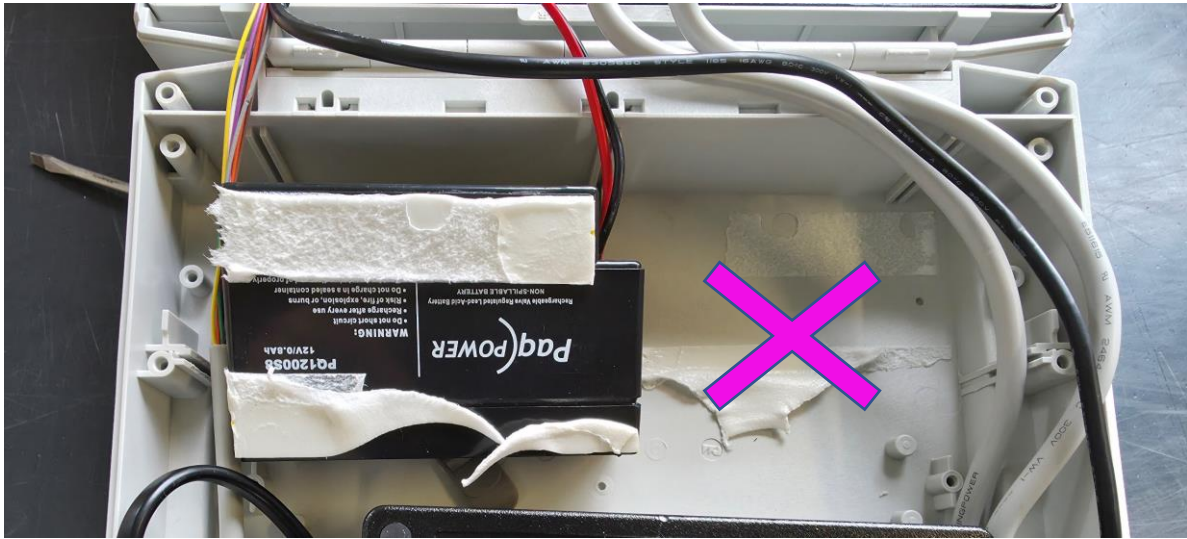
7.4 – UNCLAMP CABLES



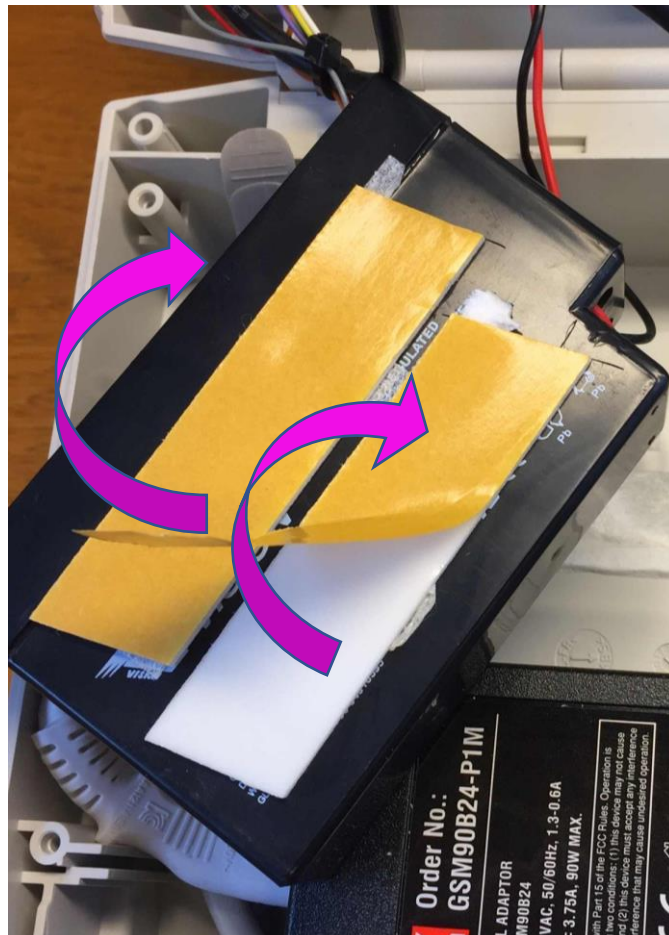
7.5 – GENTLY LIFT UP AND RELEASE BATTERY FROM DOUBLE-SIDED TAPE



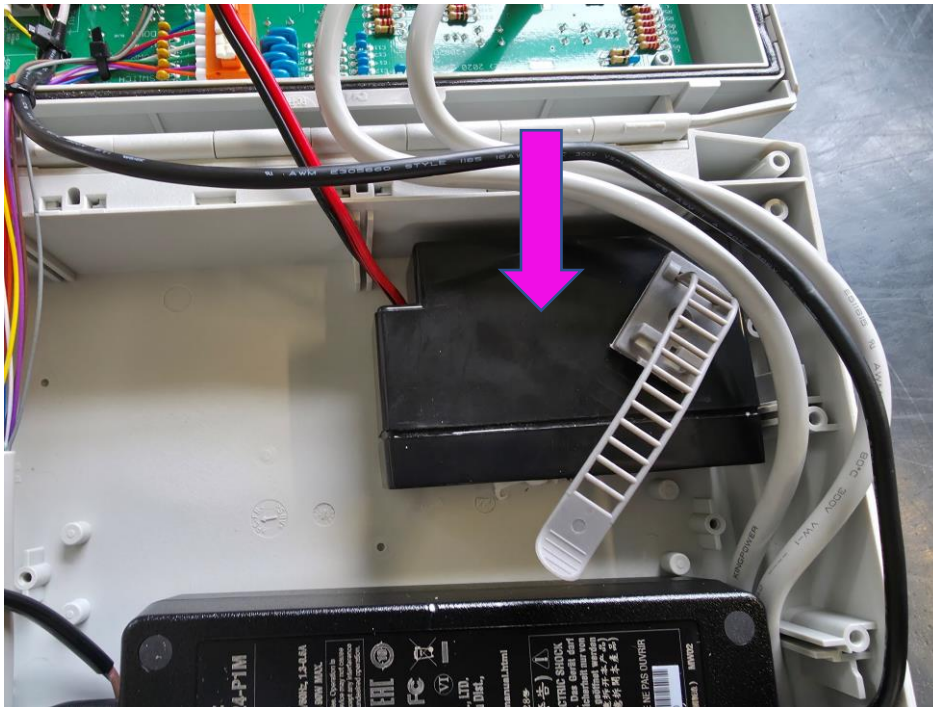
7.6 – REMOVE EXCESS DOUBLE-SIDED TAPE FROM THE BOX



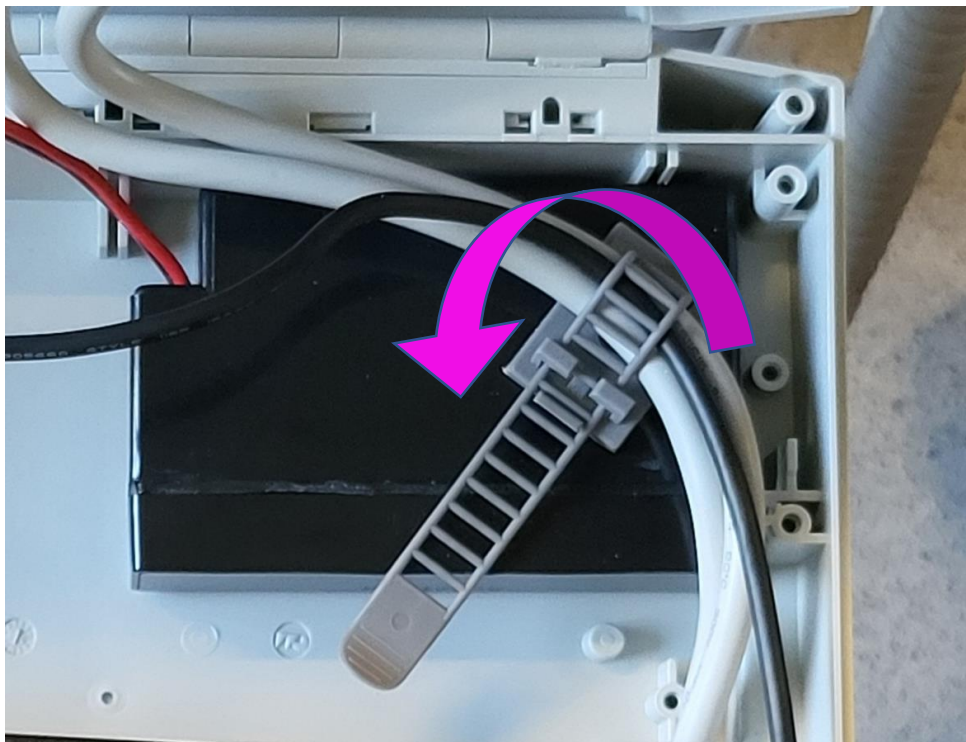
7.7 – REAPPLY FRESH DOUBLE-SIDED TAPE TO THE NEW BATTERY



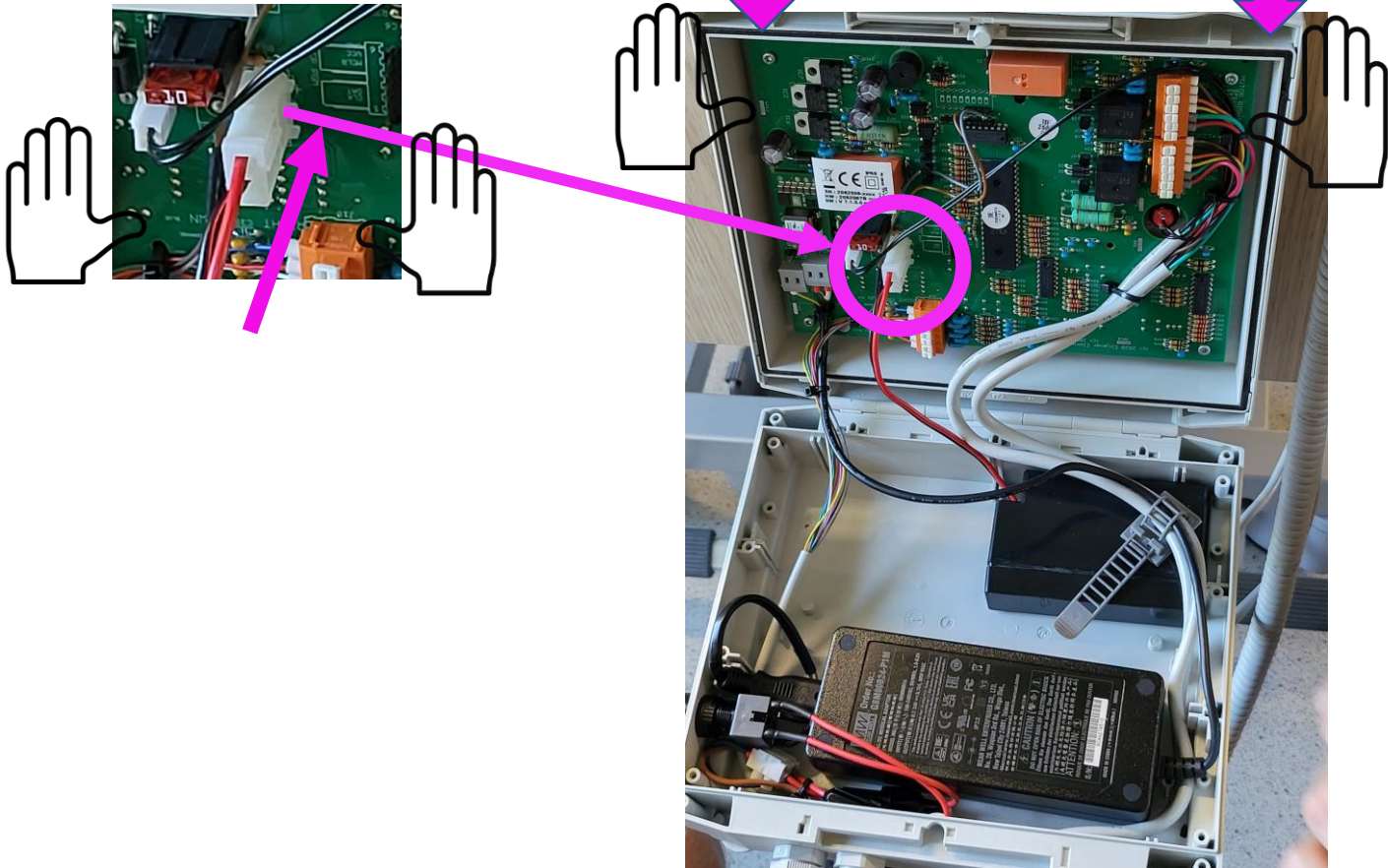
7.8 – POSITION THE NEW BATTERY AND PRESS FIRMLY



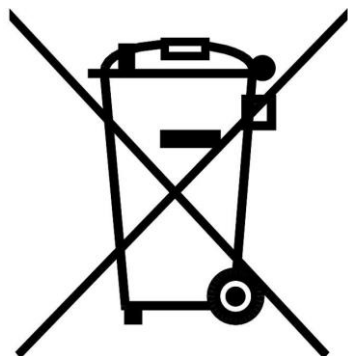
7.9 – RECOLLECT CABLES IN CLAMP



7.10 – RECONNECT THE BATTERY AND CLOSE THE LID



7.11 – CLOSE, LOCK AND SECURE THE BOX



8 - SOFT TILT® 3 – TECHNICIAN Q&A: INSTALLATION & TROUBLESHOOTING

8.1 - THE SYSTEM DOESN'T POWER ON – WHAT SHOULD I CHECK FIRST?

- Check if the system is connected to mains power.
- Ensure the emergency stop is not activated (button must be released).
- Try turning on the system by holding the ON/OFF button for 3 seconds.
- Inspect power cable and control box connection.
- If still not working, check for error codes (see user manual or point 4 below).

8.2 - ONE OR BOTH WINGS DON'T MOVE – WHAT COULD BE WRONG?

- Verify that motor cables are properly connected to the control box (Right & left).
- Check if motor cables are squeezed, broken, or disconnected.
- Make sure no cables are being pinched under the bed or by bed movement.
- Look for error codes E01 or E02 on the display (indicates stoppage or overload on left/right motor).

8.3 - THE BED MOVES FINE, BUT THE SOFT TILT IS UNSTABLE OR MISALIGNED – WHAT SHOULD I CHECK?

- Check that the main module is centered on the bed and mounted correctly.
- Ensure all bolts are properly tightened, including those securing the support plates underneath.
- Verify that all arms (top and bottom) are mounted correctly and secured with the correct bolts.

8.4 - THERE'S AN ERROR MESSAGE ON THE CONTROL BOX DISPLAY – WHAT DO I DO?

- Refer to the User Manual, Chapter 8 for a list of error codes and descriptions.
- Common errors include:
 - E01 / E02 – Motor overload or stoppage (check cable integrity and connections).
 - E03 / E04 – Power failure or low battery (check connection to power and charge battery).
 - E40 – Programming error (incorrect time settings in P1 or P2).

8.5 - I HEAR A BEEPING SOUND – WHAT DOES IT MEAN?

- Beeping usually indicates an active error or low battery warning.
- If the display shows E03 or E04, the system is in battery mode or the battery is low.
- Connect the unit to power and allow 12 hours for full charging.

8.6 - THE WINGS MOVE IN THE WRONG DIRECTION OR DON'T CORRESPOND TO THE HAND CONTROL – WHAT NOW?

- Double-check that the left and right motor cables are connected to the correct ports on the control box (marked 1 and 2 and matching colours).
- Verify that the hand control is connected to port marked 3.
- Try resetting the system (short press ON/OFF button).

8.7 - THE WINGS COLLIDE WITH THE BED OR DON'T MOVE FREELY – WHAT SHOULD I INSPECT?

- Make sure no cables are clinging or hanging on any moving bed parts.
- Move the bed up and down and observe if cables are restricted.
- Check if the long profile at the head end is colliding with the lifting bar of the bed. Check under head end of the bed. Adjust position if needed.

8.8 - THE CONTROL BOX HAS POWER, BUT NOTHING RESPONDS – WHAT NOW?

- Check all cable connections are secure (no loose plugs or pins) – lock ring can be installed correct, but the cable can sometimes not be plugged in correctly.
- Inspect for visible damage on cables, plugs, or connectors.
- Try replacing the hand control temporarily, if available, to rule it out as the fault source.
- If needed, replace the control box after verifying it's not a wiring issue.

8.9 - HOW CAN I CONFIRM THE INSTALLATION WAS DONE CORRECTLY BEFORE HANDING OVER?

- Complete the full installation checklist. (see Soft Tilt Installation Checklist)
- Run manual mode: test left/right wings.
- Run a short program (P1, P2) to verify system response.
- Move the bed through full range to confirm no cable collisions or obstructions.
- Confirm emergency stop, reset, and power-off functions work as intended.

9 - SOFT TILT® 3 – INSTALLATION CHECKLIST

SOFT TILT S/N: _____

Technician: _____ Date: _____ Bed model: _____

Before Installation

- Components checked for damage
 - All parts confirmed present (main module, arms, fixing sets, control box, cover)
 - Stickers/icons verified for correct placement according to installation manual
-

Mounting

- Main module centered – head facing beds head end
 - Module secured with carriage bolts and support plates
 - All bolts properly tightened
-

Cable Setup

- Motor cables routed under bed frame with zip ties or in cable box
 - Long profile checked – no collision with lifting bar from the bed
 - Connections completed:
 - Power supply
 - Hand control
 - Right motor
 - Left motor
 - Motor function tested in manual mode (left/right movement)
-

Install Arms & Cover

- Top and bottom arms mounted
 - Long profile installed and zip tie passed through all arms
 - Zip tie properly tightened and cut
 - Textile cover (a, b or c)
 - a) mounted and mattress secured with Velcro straps OR
 - b) mounted and velcro mattress NOT secured on mattress (EMG situations)
 - c) not mounted
-

Power & Test

- System plugged in and powered ON (button A, hold 3 sec)
 - Manual mode tested (buttons I–L, N, M)
 - Emergency stop and reset function verified
 - Optional: short AUTO program tested
 - Full bed movement tested – no cable obstruction
-

Finalization

- System fully functional
- Installation documented

Signature: _____