

Introduction

This troubleshooting guide references devices manufactured during different time frames. It is important to know the manufacture date and serial number of your device during the troubleshooting process or when calling customer service. To determine the year of manufacture, refer to the first six (6) digits of your TMM Series Stretcher-Chair's serial number – these represent the date the chair was manufactured.

If you are utilizing an electronic copy of this document, words that are **bold, blue and underlined** represent links to other pages in the document and/or links to web pages outside of this document. Simply click on the words to follow the links.

Our Customer Service Department can be reached by any of the following methods:

Email: techservice@wincomfg.com

Phone: 352-854-2929 or 800-237-3377 (Toll Free U.S. Only)

Fax: 352-854-9544

Hours of Operation: Monday – Friday, 8:30 am – 5:00 pm ET

GENERAL ISSUES

The following list can help troubleshoot general issues with your TransMotion Medical device. Click on any of the following headings to see more information.

1. [Battery Testing \(Page 3\)](#)

- a. Low or exhausted batteries is the most common cause for a TransMotion Stretcher-chair to not perform. Once the battery has been eliminated as a cause to the issue, continue troubleshooting.

2. [Stretcher-Chair has no functions \(Page 4\)](#)

- a. Follow this link if you have completed the battery testing above and are confident the battery is not the issue yet the device has no functions.

3. [One or more functions have stopped functioning \(Page 5\)](#)

- a. Follow this link if one or more portions of the device is working but some are not moving.
- b. If the Stretcher-chair is an X-Series chair, the manufacture date is prior to February of 2012, and the leg, back or seat tilt functions are not working, see [“X-Series Chair built prior to February of 2012”](#).

4. [Tall \(T\) chair is not going to full height \(Page 6\)](#)

- a. Follow this link if the chair is not raising as high as it should. NOTE: This is for Tall version chairs only. Tall version chairs should raise to approximately 40” from the floor to the top of the seat pad.

5. [TMM3 \(Video Fluoroscopy\) Chair will not go down \(Page 7\)](#)

- a. Follow this link if the TMM3 version chair will go up but not down and all other functions are working properly

6. [X-Series Chair will not tilt or only tilt in one direction \(Page 8\)](#)

- a. Follow this link if you have an X-series Chair (seat tilt feature) will not tilt or only tilt in one direction.

BATTERY TESTING

For “B” battery powered chairs, determine if the battery on the device is charged and in good working condition.

- Using a voltage meter, check the voltage of the battery. A fully charged battery should have a reading of over 26 volts.
- The green light on the pendant will turn to amber if the battery is near or below 24.6 volts.
- If the battery is showing a charge of above 24.6 volts but the chair is not functioning, the battery testing protocol can be used to determine if the battery is in need of replacement. The battery testing protocol can be found by following this link: ["B" Battery Testing Protocol](#)

For “A” (AC Powered) chairs, ensure the device is plugged into a working 120V outlet.

- AC powered chairs require working batteries even when plugged into an AC outlet
- For testing AC Powered chairs built during or after February of 2012 email techservice@wincomfg.com and request the installation and maintenance manual (IM TMS-1066-03). This manual describes how to change the battery pack but can also be used to remove the pack to test the batteries.
- For testing AC powered chairs built **prior to February of 2012** follow this link: ["AC" Battery Testing Protocol](#)

Once you have determined that the battery is charged and in good working condition, use the following instructions to continue troubleshooting the device or return to the ["General Issues"](#) page.

STRETCHER-CHAIR HAS NO FUNCTIONS

1. Trace the cord from the pendant back to the control box and look for any signs of cuts or pinch points in the cable. If the cord is damaged at any point, replace the pendant.
2. Does your TMM Series Stretcher-Chair have an old or new style pendant?



OLD STYLE



NEW STYLE

3. If your TMM Series Stretcher-Chair has an older style pendant, we recommend purchasing a new pendant. Visit the [Technical Service & Parts page](#) of our website or contact Our [Customer Service Department](#) for the appropriate part number and / or pricing.
4. If another pendant is available, plug the working pendant into the control box and test the functions of the device. NOTE: Pendants from other TMM Series Stretcher-Chairs may be able to be used to troubleshoot the issue. Both devices must have the same or similar control boxes.
5. If switching pendants resolved the issue, contact our [Customer Service Department](#) for a replacement pendant.
6. If another pendant is not available, the issue may be either the pendant or the control box. A replacement pendant and control box may be purchased together. Unused items may be returned for a refund (please refer to section 6 of [Winco Mfg., LLC's Terms & Conditions.](#))
7. Once the item(s) are received, plug the new pendant into the control box and test the functions of the stretcher-chair.
8. If the replacement pendant did not resolve the issue, remove and replace the control box. Control box installation and maintenance instructions should be included with the new control box. If the instructions are not available, you may download a copy via the [Product Resources Page](#) of our Website or by contacting our [Customer Service Department](#).

You may now continue troubleshooting your device or return to the ["General Issues"](#) page.

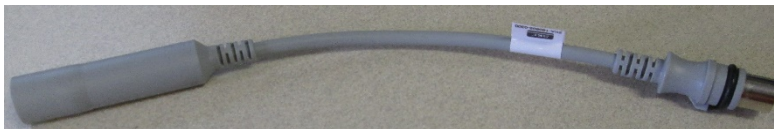
ONE OR MORE FUNCTIONS HAVE STOPPED FUNCTIONING

1. At this point, one of three possible components may have failed: the control box, the actuator / motor, or the pendant.
2. Access the control box in the base of the chair.
3. Refer to the control box wiring diagrams by following this link: [“Control Box Wiring”](#).
4. Determine the ports on the control box that operate the functioning and non-functioning sections of the chair.
5. Switch the plugs in these two ports
 - Example for KOM control box: if the back section of the chair is not working and the leg section of the chair is working, switch the cords in ports #2 and #3.
6. The buttons on the pendant will now be switched. The buttons that controlled the non-functioning portion of the chair will now be controlling the functioning portion of the chair.
 - Following example from step 5: the buttons for the back section on the pendant will now be controlling the leg section and the buttons for the leg section will now be controlling the back section.
7. If the motor is now working, then you have eliminated the motor as the possible failed component.
8. If the motor is still not working, then the motor has likely failed and may need to be replaced. If this is an X-Series chair built prior to February of 2012, additional troubleshooting can be done by following this link: [X-Series Chair built prior to February of 2012](#). If this is not an X-Series chair built prior to 2012, visit the [Technical Assistance & Parts page](#) of our website or contact Our [Customer Service Department](#) for the appropriate part number and / or pricing.
9. If the motor is not the failed component, then the issue is either the control box or the pendant. If another pendant is available, plug it into the control box of the non-working device to test the functions. If the alternate pendant is still not working or if another pendant is not available, a replacement pendant and control box may be purchased together. Unused items may be returned for a refund (please refer to section 6 of [Winco Mfg., LLC’s Terms & Conditions](#).)
10. Once the item(s) are received, plug the new pendant into the control box and test the functions of the stretcher-chair. If the replacement pendant did not resolve the issue, remove and replace the control box. Control box installation and maintenance instructions should be included with the new control box. If the instructions are not available, you may download a copy via the [Product Resources Page](#) of our Website or by contacting our [Customer Service Department](#).

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TALL (T) CHAIR IS NOT GOING TO FULL HEIGHT

1. Tall lift columns have two (2) actuators inside the tower that function simultaneously to raise and lower the stretcher-chair, however each actuator is controlled by individual ports on the control box.
2. First make note of which section of the column is not moving. This could be the lower section or the upper section.
3. Refer to the control box wiring diagrams by following this link: "[Control Box Wiring](#)"
4. For KOM control boxes, switch the cords in ports #1 and #4. For VCU control boxes switch the cords in ports #1 and #2.
5. Use the pendant to raise and/or lower the chair.
6. If the section of the column that was not functioning is now functioning, the problem is either in the button on the pendant or the port in the control box. Call or email technical service for part number and price.
7. If the same section of the column is still not working and the chair has a KOM control box, then the issue is likely in the column. Call or email technical service for part number and pricing. If the chair has a VCU control box, then continue to step #8.
8. VCU control boxes require adapter cables for the columns. One of these adapter cables may be faulty, pinched, or severed. Inspect the cables for damage. See picture of cable below. Call or email technical service for part number and price if cable is damaged.



9. If the cables appear to be in good condition, switch the column cables in the adapter cables.
10. If the same section of the column is not working, the issue is in the column. Call or email technical service for part number and price.
11. If the section of the column that was not functioning is now functioning, the problem is in the adapter cable. Contact Our [Customer Service Department](#) for the appropriate part number and / or pricing.

You may now continue troubleshooting your device or return to the "[General Issues](#)" page.

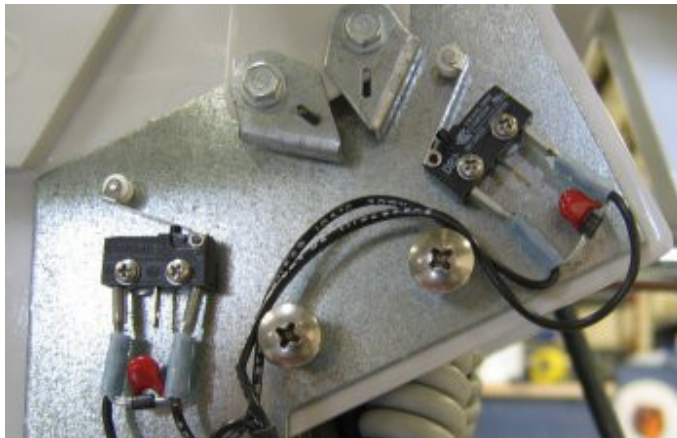
TMM3 (VIDEO FLUOROSCOPY) CHAIR WILL NOT GO DOWN

1. TMM3 chairs are designed so the chair seat cannot be lowered while the upper portion of the chair is rotated. The upper portion of the chair must be in line with the base for the chair to be lowered.
2. If the seat cannot be lowered, rotate the upper portion of the chair then back to straight with the base again and attempt to lower the chair.
3. If step #2 did not fix the issue, find the limit switch under the seat of the chair and ensure that it is not activated (the button is not pushed in).
4. If the limit switch appears to be working properly, access the control box in the base of the chair and unplug the cord in port #4. **WARNING! This will disable the limit switch allowing the chair to be lowered while the seat is rotated. Severe damage to the chair may occur while lowering the seat while in the rotated state. This should only be disabled temporarily for troubleshooting only!**
5. With port #4 unplugged, attempt to lower the chair slightly.
6. If the chair goes down, the limit switch is faulty and requires replacement. Call or email technical service for part number and price.
7. Plug the cord back into port #4.
8. If the column still does not go down, follow this link to [“One or more functions have stopped functioning”](#) to continue troubleshooting the chair.

You may now continue troubleshooting your device or return to the [“General Issues”](#) page.

X-SERIES CHAIR WILL NOT TILT OR ONLY TILT IN ONE DIRECTION

1. The tilt feature on X-series chairs is limited to a certain amount of tilt forward and backward depending on other included features.
2. The amount of tilt is controlled by limiting switches behind a small cover on the left side (patient's left) of the chair under the seat section. See Picture below
3. One of these limit switches may not be working properly. If one of the switches is fixed in the actuated position, the tilt motor will not move in that direction.
4. Using a Phillips head screwdriver, remove the cover and attempt to manually actuate the switches.
5. An audible click should be able to be heard when the switch is activated and released.
6. If the one of the switches is not de-activating (button is not "popping" back up), then the switch is faulty and needs to be replaced.
7. Call technical service for part number and price.



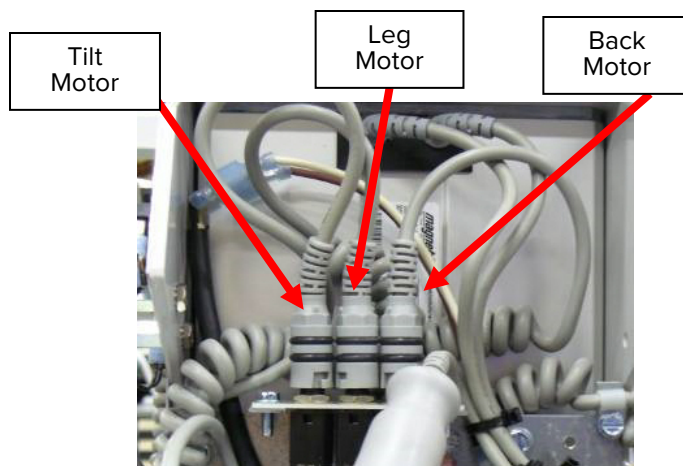
WARNING! – THE DEGREE OF TILT IS SET AT THE FACTORY AND SHOULD NOT MODIFIED. MODIFYING THE AMOUNT OF TILT MAY CAUSE INTERFERENCE BETWEEN COMPONENTS ON THE CHAIR CAUSING DAMAGE TO THE COMPONENTS OR THE DEVICE.

You may now continue troubleshooting your device or return to the [“General Issues”](#) page.

X-SERIES CHAIR BUILT PRIOR TO FEBRUARY OF 2012

Note: This portion of the troubleshooting guide should only be followed after performing the [“ONE OR MORE FUNCTIONS OF THE STRETCHER-CHAIR HAVE STOPPED FUNCTIONING”](#) portion of this guide and the motor has been determined as the issue.

1. X-series chairs built prior to February of 2012 include two (2) additional phono jack plugs under the seat section at the back of the chair. Trace the pendant cord until it enters the cover at the back of the chair. Remove this cover to reveal the plugs. There are 3 plugs in series behind the cover. These plugs control the tilt, leg, and back motors.
2. These 3 plugs may be interchanged to determine the faulty part in the chair.



3. Note which motor is currently functioning and which is not currently functioning.
4. Unplug the motor that is not functioning and plug this motor into the port for the functioning motor.
 - Example: if the leg motor is **not** functioning and the back motor **is** functioning, switch the plugs in the middle and far right ports. The buttons for the leg section on the pendant should now operate the back section.
5. If the motor that was not functioning before is still not functioning, then the issue is with the motor. Call technical service for part number and price.
6. If the motor that was not functioning before is now functioning, then the motor is not the issue.
7. Check for damaged or disconnected wires leading to the faulty plug.
8. Call technical service for further instructions and part number and price.

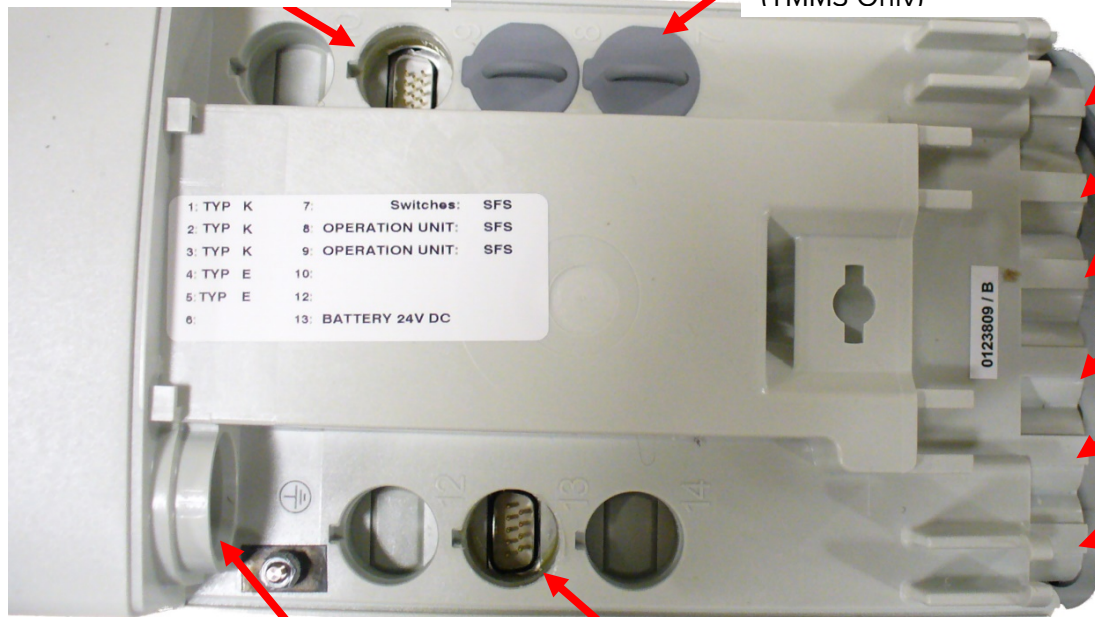
You may now continue troubleshooting your device or return to the [“General Issues”](#) page.

Control Box Port Diagrams (KOM control box diagram on next page):

VCU Control box (ALL X-series Chairs) or (Non-X chairs built during or after February of 2012)

Port # 10 – Pendant (pendant extension on X-series chair)

Port # 7 – Limit Switch (TMM3 Only)



Port # 6 – Not used

Port # 5 – Tilt Motor (X-Series Only)

Port # 4 – Leg Motor

Port # 3 – Back Motor

Port # 2 – Column (Only used with Triple column)

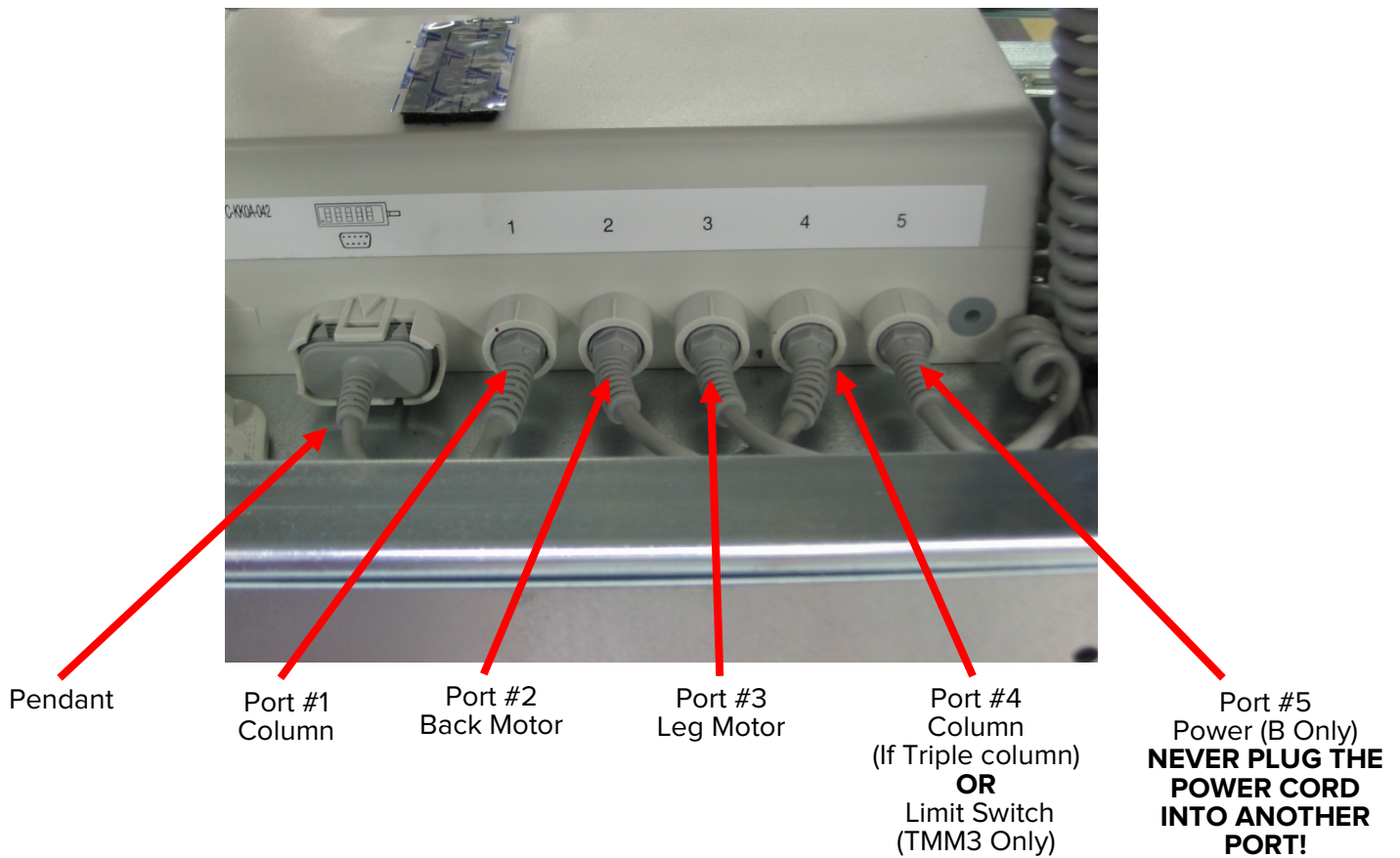
Port # 1 – Column

Power supply (A- Chairs Only)

Port # 13 – Power supply (B- Chairs Only)

Return to one of the following sections: [“Tall \(T\) Chair is Not Going to Full Height”](#), [“One or More Functions Have Stopped Functioning”](#), or the [“General Issues”](#) page.

KOM Control Box (Non-X Chairs built prior to February of 2012)



Return to one of the following sections: “[Tall \(T\) Chair is Not Going to Full Height](#)”, “[One or More Functions Have Stopped Functioning](#)”, or the “[General Issues](#)” page.

RETURN POLICY

All returns or exchanges must be pre-approved by Winco Mfg., LLC

Please refer to section 6 of [Winco Mfg., LLC's Terms & Conditions](#) for additional information concerning our return policy.

When returning parts, please contact our Customer Service Department (customerservice@wincomfg.com or 352-854-2929 for a return material authorization number (RMA).

Return to the ["General Issues"](#) page.