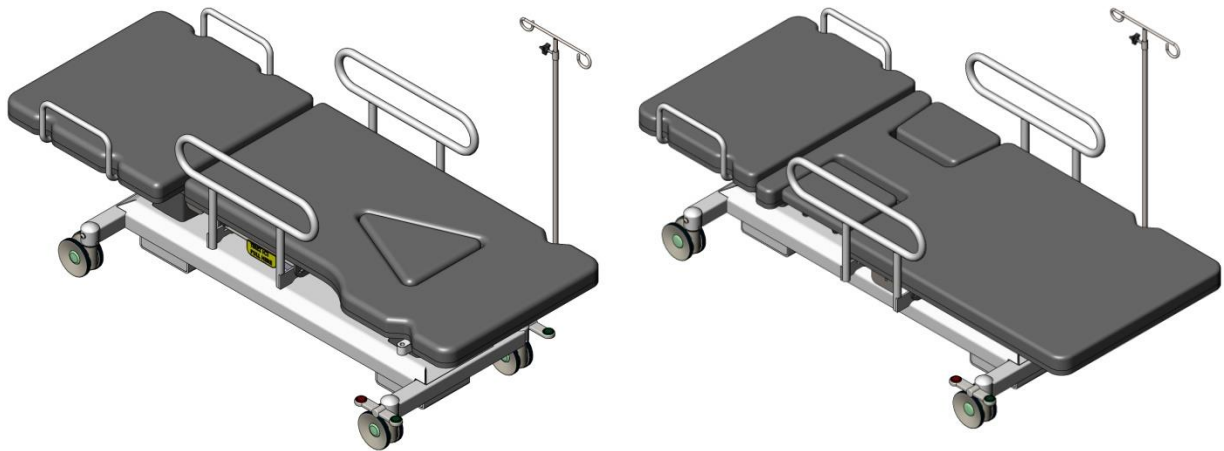


OPERATION MANUAL

Revision: R1
Serial # 1020121 and +

ECHO-FLEX™ 5002 5002



ECHO-FLEX

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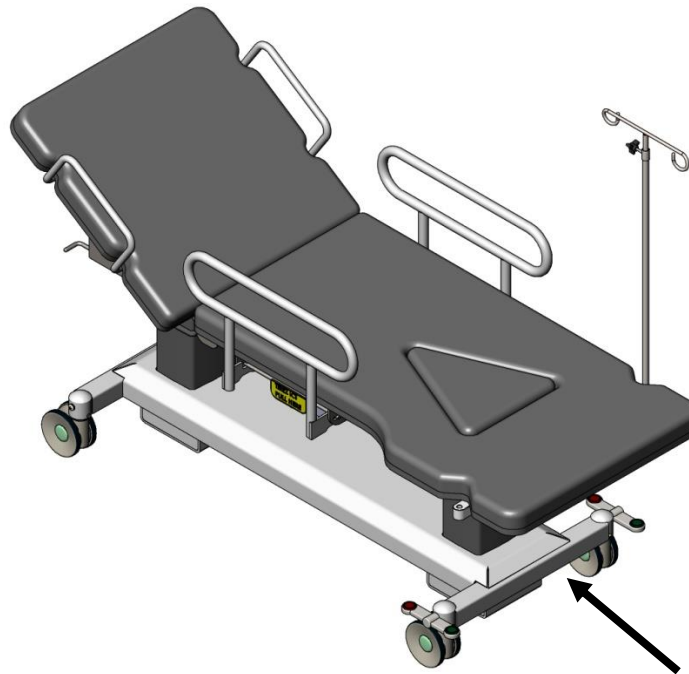
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1. CONTACT US

Before contacting us, make sure to have the following information ready:

- **7-digit serial number (example: 1234567);**
- **Model number or name (example: 5002).**

This information is available on label located on base of the table.



Phone 1-877-247-7494
 418-247-3986

Email information@umanomedical.com

Web www.umanomedical.com





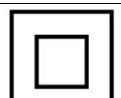




Address Umano Medical Inc.
 230, boul. Nilus-Leclerc
 L'Islet, QC
 G0R 2C0
 Canada

2. INTENDED USE

ECHO-FLEX table is an electric table that can be adjusted to different position. It is designed to support a patient during medical examination or procedure. It is intended to be used by qualified medical personnel in a medical environment, such as hospitals, clinics, and doctor's offices.















3. SYMBOL IDENTIFICATION

The following symbols and their definitions are used throughout this manual.

Symbol	Definition
	WARNING. Alerts the user to a situation that, if not avoided, could result in death or serious injury. It may also describe potential serious adverse reactions and safety hazards.
	Warning, risk of electrical shock.
	It is mandatory to consult this manual before use.
	Protective earth (ground).
	Electrical protection, class II device, double insulation.
	Electrical protection, type B applied part.
	No sitting.
	No stepping.
	This device contains electrical and electronic components that may pose a risk to the environment. According to the WEEE (Waste from Electrical and Electronic Equipment), the electrical system and accessories should not be disposed of as unsorted municipal waste. Check with your local authorities for disposal of these components.

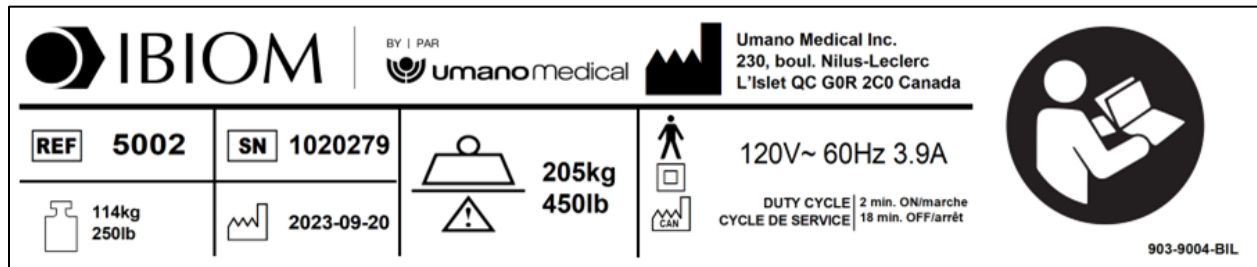
4. WARNINGS

	MANDATORY. Read, understand, and retain this manual before using Umano Medical's products. This manual must be available to anyone who will use Umano Medical's products.
	WARNING. ECHO-FLEX™ table is designed for indoor use on flat surfaces.
	WARNING. Always lock casters before the patient sits on the table.
	WARNING. Never use the central locking system while the table is in motion.
	WARNING. Do not use ECHO-FLEX™ table for any purpose other than the intended use.
	WARNING. Do not modify this equipment without Umano Medical's authorization.
	WARNING. Do not use in oxygen-rich environment.
	WARNING. Do not use in MRI environment.
	WARNING. Do not use in wet environment.
	WARNING. Do not use for CPR or X-ray procedures or with defibrillator.
	WARNING. Never exceed safe working load of 450lb or 205kg on table. This load includes the weight of the patient and the accessories.
	WARNING. Never exceed safe working load of 150lb or 68kg on cardiac cutout.
	WARNING. Never exceed safe working load of 150lb or 68kg on positioning cushion.
	WARNING. Never exceed safe working load of 25lb or 11kg on IV pole.
	WARNING. Never exceed safe working load of 25lb or 11kg on arm board.
	WARNING. Do not sit on backrest.
	WARNING. Do not sit on surgical armrest.
	WARNING. Always lower table to the lowest position before the patient sits on the table.
	WARNING. Do not leave patient unattended.
	WARNING. Do not use ECHO-FLEX™ table as a transport stretcher to move the patient from one room to another or one floor to another.
	WARNING. To ensure proper operation of the chair, maintenance must be done as described in this manual.
	WARNING. Read the warnings in the various sections of this manual.
	WARNING. Do not roll the table over the power cable or hand control cable.
	WARNING. Keep all cables out of reach of children.
	WARNING. Keep all cables away from moving parts of the table.
	WARNING. Do not move the table by pulling on the hand control, the power supply cable, or any other cable.
	WARNING. Never use the table if the power cable or any other cables are damaged.
	WARNING. Keep all cables away from heat sources.

	WARNING. Always make sure you have enough clearance around the table before activating the various movements to avoid collisions with the surroundings and people.
	WARNING. The patient should only sit on the table from the side.
	WARNING. Do not place hands and other body parts near the various locking mechanisms or moving parts.
	WARNING. Once security rail is closed, make sure it is securely locked.
	WARNING. Once cardiac cutout is closed, make sure it is securely locked.
	WARNING. Once the positioning cushion is in the desired position, make sure it is securely locked.
	WARNING. Always raise security rail once the patient is in place.
	WARNING. Do not drop the security rail or cardiac cutout when lowering them.
	WARNING. Never exceed duty cycle of 2/18 (2 minutes ON and 18 minutes OFF).
	WARNING. Medical staff must instruct the patient on how to adjust the table.
	WARNING. If the patient is not able to adjust the table himself, the hand control must be placed out of the patient's reach.
	WARNING. Do not place hands and other body parts near the various moving parts when the table is adjusted to position.
	WARNING. Defective or damaged batteries may leak acid and proper precautions must be taken during handling and transportation.
	WARNING. Never open the battery case, as the cell or circuit may be damaged and excessive heat may develop.

5. LABEL

The product identification label is located on the product base. This image and the information contained herein are for reference purposes only.



















Symbol identification

	Manufacturer's name and address
	Product code or name
	7-digit serial number
	Product's weight
	Date of manufacture (YYYY-MM-DD)
	Maximum safe working load (maximum patient weight)
	Made in Canada
	Type B applied part
	Double electrical insulation
	Mandatory to read the operation manual
	Required voltage (120V), alternating current
	Current frequency (60Hz), maximum amperage (3.9A)
	Maximum activation time followed by minimum deactivation time

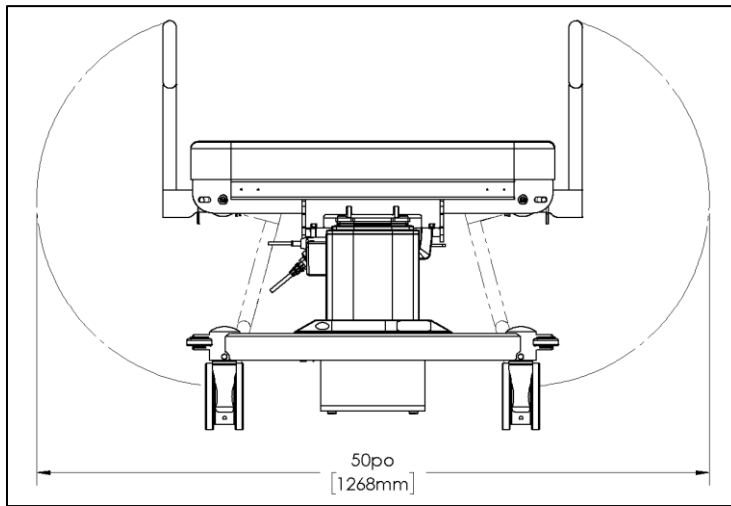
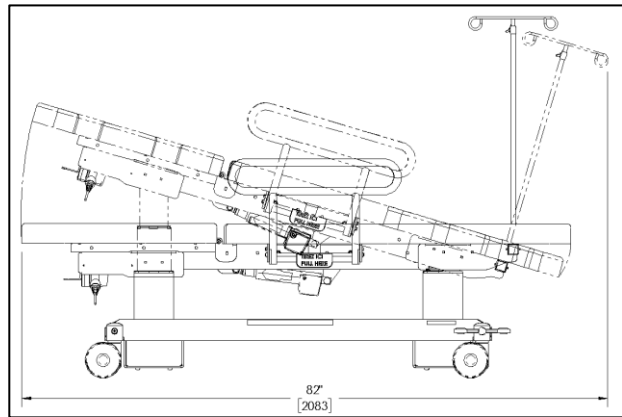
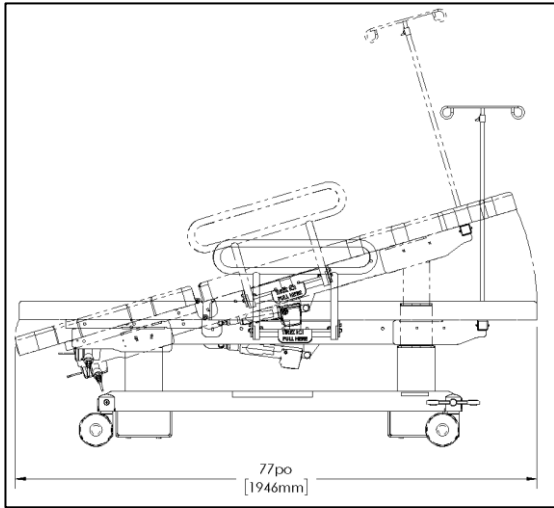
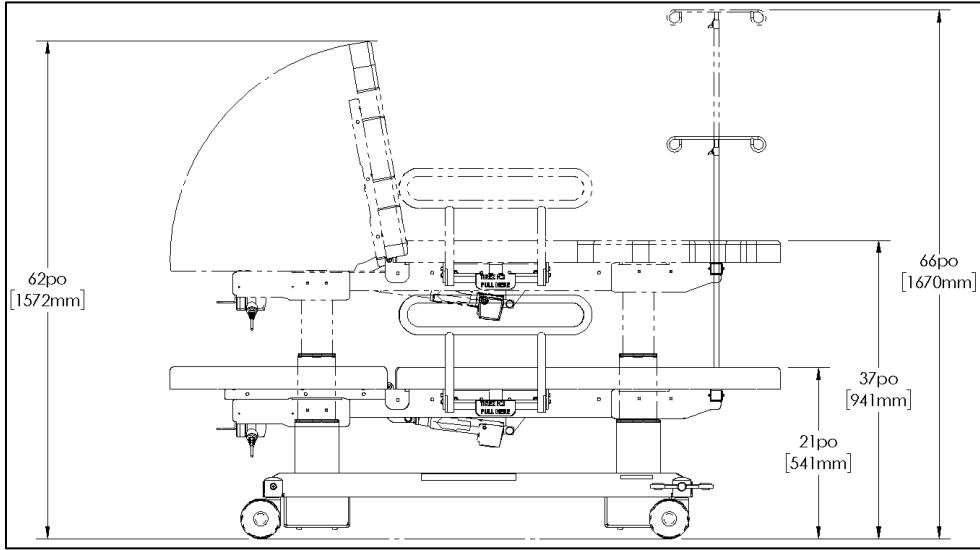
6. OPERATION INSTRUCTIONS

6.1 Installation

	WARNING. Always ensure there is sufficient clearance around the table before activating the various movements to avoid collisions with the environment, equipment and people.
	WARNING. ECHO-FLEX™ table is designed for indoor use on flat surfaces.
	WARNING. Always lock casters before the patient sits on the table.
	WARNING. Never use the central locking system while the table is in motion.
	WARNING. Do not leave patient unattended.
	WARNING. Do not use in oxygen-rich environment.
	WARNING. Do not use in MRI environment.
	WARNING. Do not use in wet environment.
	WARNING. Do not use for CPR or X-ray procedures or with defibrillator.
	WARNING. Do not roll the table over the power cable or hand control cable.
	WARNING. Keep all cables out of reach of children.
	WARNING. Keep all cables away from moving parts of the table.
	WARNING. Do not move the table by pulling on the hand control, the power supply cable, or any other cable.
	WARNING. Never use the table if the power cable or any other cables are damaged.
	WARNING. Keep all cables away from heat sources.
	WARNING. Never exceed duty cycle of 2/18 (2 minutes ON and 18 minutes OFF).

ECHO-FLEX™ table is delivered fully assembled and ready for use. The table must be unpacked and inspected upon receipt to ensure that there has been no damage during transport.

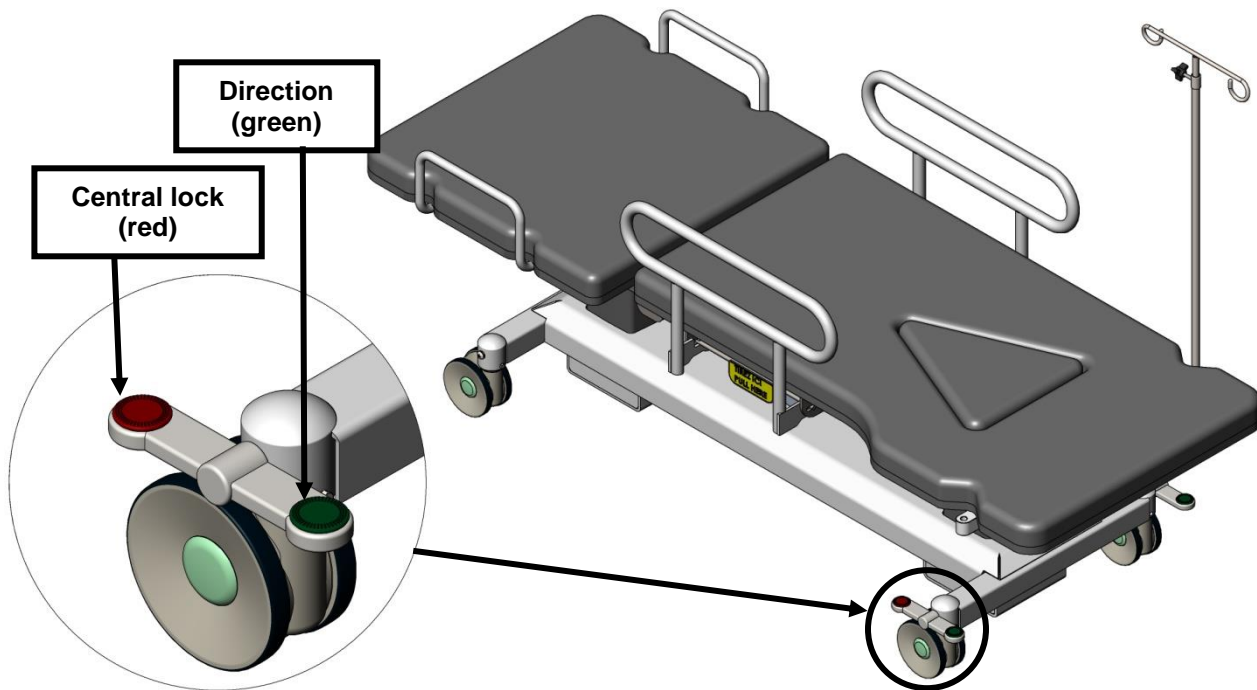
1. Position table to desired location. **IMPORTANT:** Make sure you have enough space around table to avoid collisions between its surroundings in ALL POSITIONS. Dimensions show maximum space needed. Dimensions may be less than the one indicated below depending on options.



2. Once in place, install all accessories (IV pole, arm board, if applicable).
3. Once in place, lock all wheels.
4. Remove any remaining packaging from the product. Example: Protective plastic on the hand control cable.
5. Connect the power cord.
6. Perform an operation test to ensure that everything is working properly.

6.2 Central and direction lock

	WARNING. Always lock casters before the patient sits on the table.
	WARNING. Never use the central locking system while the table is in motion.
	WARNING. Do not move the table by pulling on the hand control, the power supply cable, or any other cable.
	WARNING. Always make sure you have enough clearance around the table before activating the various movements to avoid collisions with the surroundings and people.
	WARNING. Do not use ECHO-FLEX™ table as a transport stretcher to move the patient from one room to another or one floor to another.



Central lock mechanism can be engaged with pedal located on both sides of table. Pedal needs to be triggered by foot to one of the 3 positions:

- Red: all 4 casters are locked.
- Neutral: all casters unlocked and free to roll.
- Green: 1 caster is aligned to the axis of the chair and 3 are unlocked.

6.3 Hand control buttons and lights

	WARNING. Always make sure you have enough clearance around the table before activating the various movements to avoid collisions with the surroundings and people.
	WARNING. Always lock casters before the patient sits on the table
	WARNING. Always lower table to the lowest position before the patient sits on the table.
	WARNING. The patient should only sit on the table from the side.
	WARNING. Do not leave patient unattended.
	WARNING. Medical staff must instruct the patient on how to adjust the table.
	WARNING. If the patient is not able to adjust the table himself, the hand control must be placed out of the patient's reach.
	WARNING. Do not place hands and other body parts near the various locking mechanisms or moving parts.
	WARNING. Never use the table if the power cable or any other cables are damaged.
	WARNING. Keep all cables away from moving parts of the table.

Hand control buttons

Button	Function
A	Raise the backrest (tilt)
B	Lower the backrest (tilt)
C	Move up table
D	Move down table
E	Trendelenburg
F	Reverse trendelenburg
G	Simultaneous movements : lower the backrest and activate trendelenburg (emergency position)

Buttons

Button	Function
A	Move up table
B	Move down table
C	Raise the backrest (tilt)
D	Lower the backrest (tilt)
E	Trendelenburg
F	Reverse Trendelenburg

Hand control lights	
Light	Function
K	Battery level light (BA16 battery in option)
	3 full lights: 70% to 100% of capacity
	2 full lights: 20% to 70% of capacity
	1 flashing light: 0% to 20% of capacity
	1 flashing light + beep sound: 10% or less of capacity
0 light: battery discharged or without battery	
L	Service light (see troubleshooting section)
M	Light to indicate that the table is powered by a wall outlet.

Double foot control

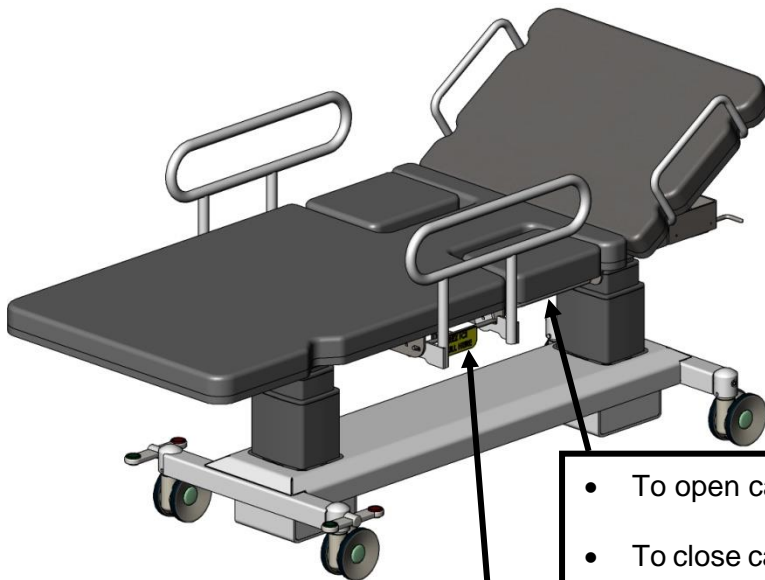
Button	Function
A	Move up table
B	Move down table
C	Raise the backrest (tilt)
D	Lower the backrest (tilt)

Triple foot control

Button	Function
A	Move up table
B	Move down table
C	Raise the backrest (tilt)
D	Lower the backrest (tilt)
E	Trendelenburg
F	Reverse Trendelenburg

6.4 Security rail and cardiac cutout

	WARNING. Never exceed safe working load of 150lb or 68kg on cardiac cutout.
	WARNING. Do not place hands and other body parts near the various locking mechanisms or moving parts.
	WARNING. Once security rail is closed, make sure it is securely locked.
	WARNING. Once cardiac cutout is closed, make sure it is securely locked.
	WARNING. Always raise security rail once the patient is in place.
	WARNING. Do not leave patient unattended.
	WARNING. The patient should only sit on the table from the side.
	WARNING. Do not drop the security rail or cardiac cutout when lowering them.

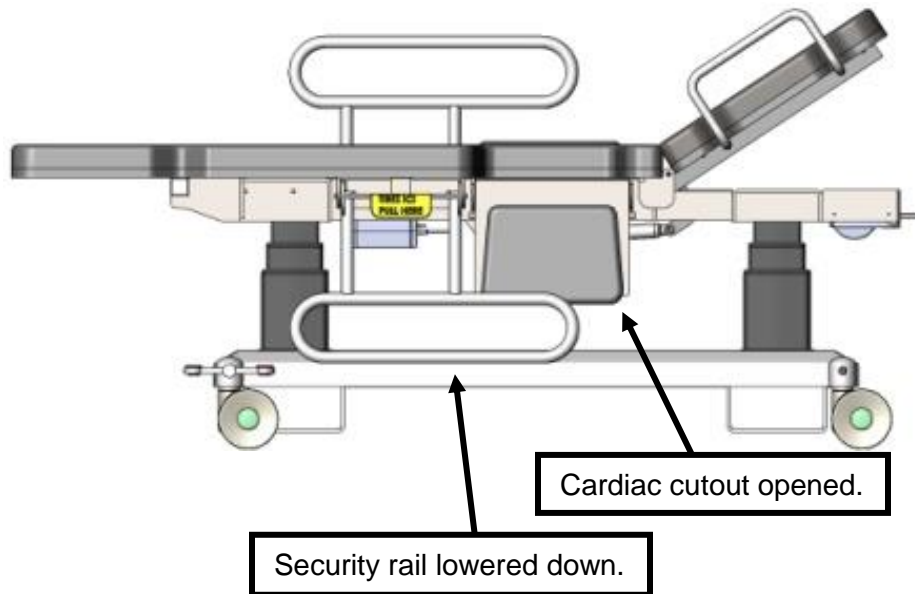
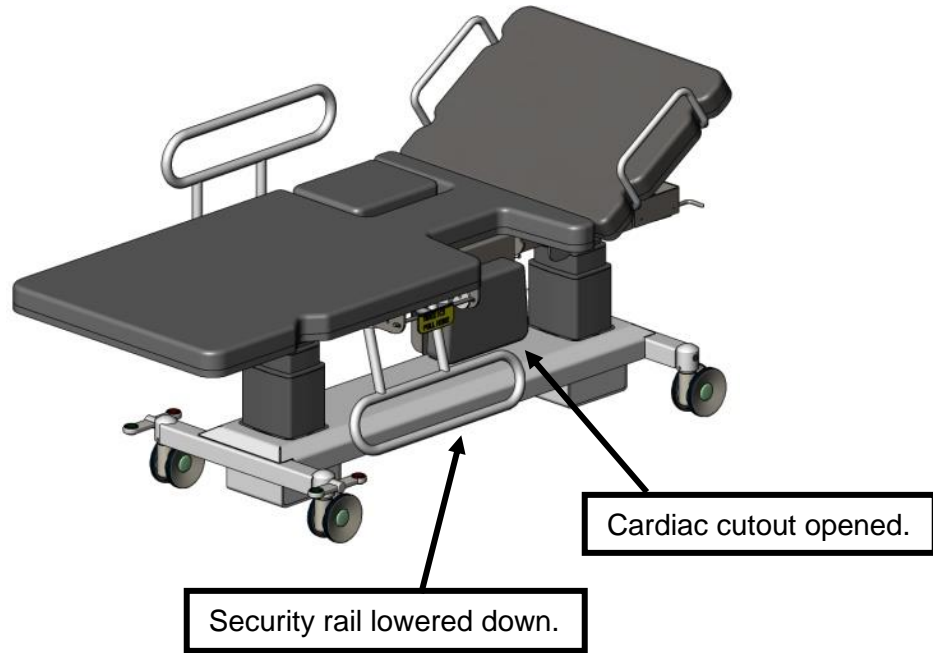


- To open cardiac cutout, pull handle.
- To close cardiac cutout, lift up cutout and it will engage automatically. Always make sure it is securely locked.

- To lower security rail, pull handle with one hand and hold security rail with other hand.

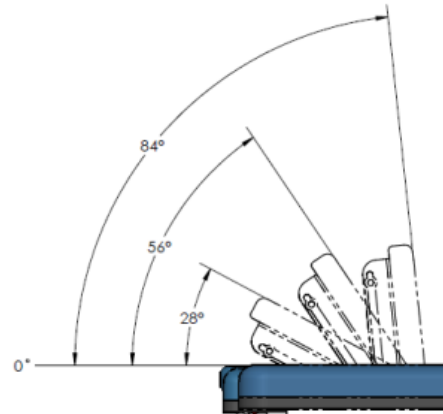
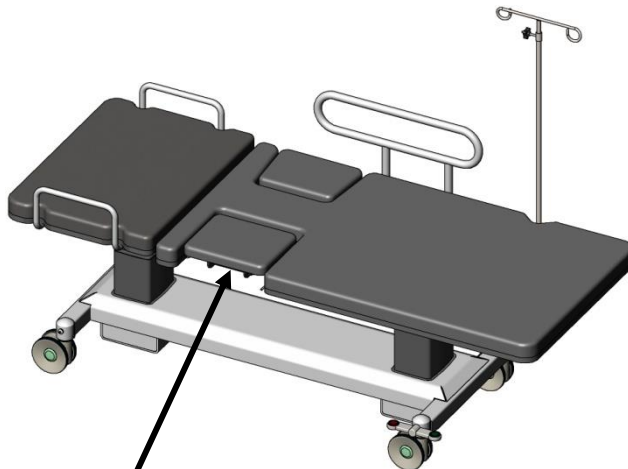
**TIREZ ICI
PULL HERE**

- To move up security rail, lift up rail and it will engage automatically. Always make sure it is securely locked.

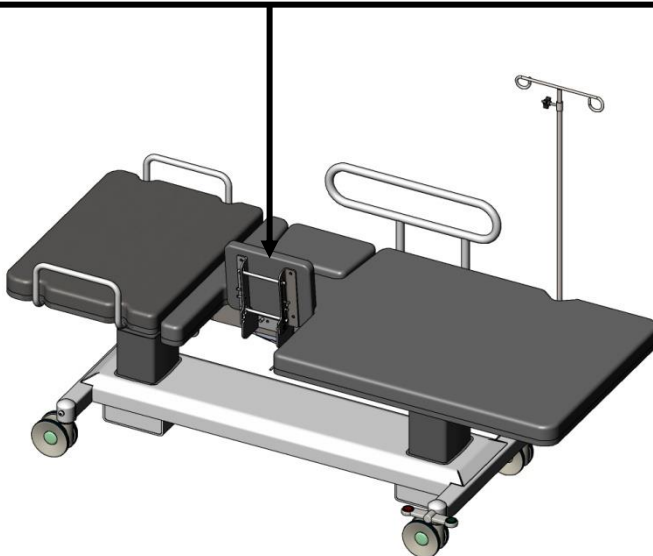


6.5 Positioning cushion



	WARNING. Never exceed safe working load of 150lb or 68kg on positioning cushion.
	WARNING. Avoid placing hands and other body parts near moving parts or locking mechanism.
	WARNING. Once positioning cushion is in place, make sure it is securely locked.
	WARNING. Do not leave patient unattended.

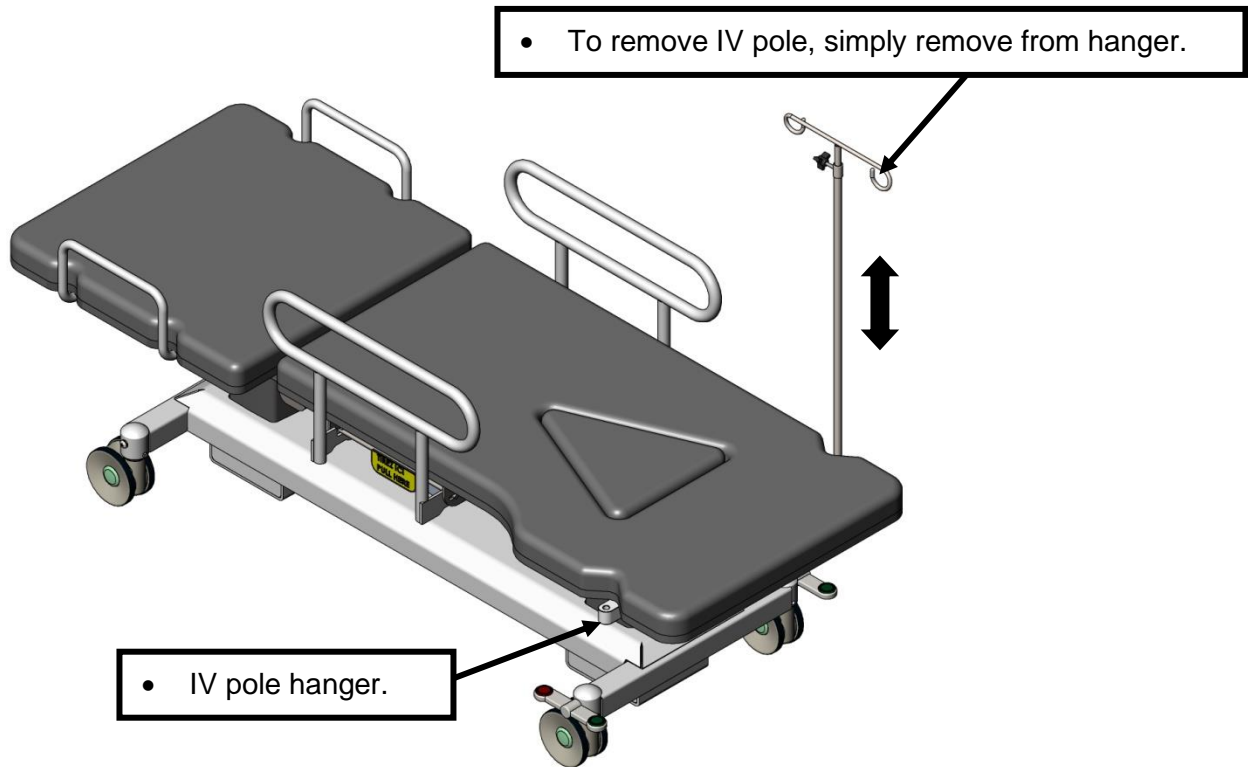


- To lift positioning cushion, pull handle. Move up cushion to one of the 3 positions and release handle and it will lock automatically. **Make sure it is well lock in place before using with patient.**
- To lower cushion, pull handle and lower down cushion to horizontal position and release handle. It will lock automatically. **Make sure it is well lock in place before using with patient.**






6.6 IV pole

	<p>WARNING. Always make sure you have enough clearance around the table before activating the various movements to avoid collisions with the surroundings and people.</p>
	<p>WARNING. Never exceed safe working load of 25lb or 11kg on IV pole.</p>



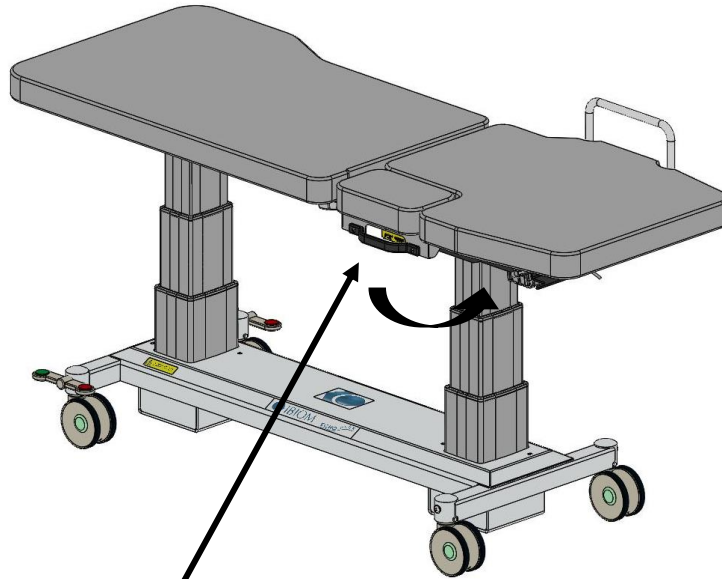
6.7 Rechargeable battery

	WARNING. Never exceed duty cycle of 2/18 (2 minutes ON and 18 minutes OFF).
	WARNING. Defective or damaged batteries may leak acid and proper precautions must be taken during handling and transportation.
	WARNING. Never open the battery case, as the cell or circuit may be damaged and excessive heat may develop.

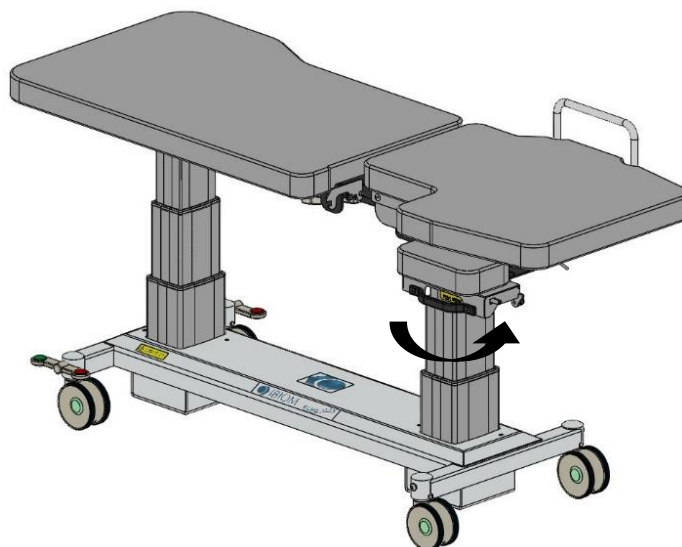
- **CAUTION.** NEVER discharge battery completely. This will damage it and reduce its capacity.
- Always allow battery to settle to room temperature before use.
- Do not exceed duty cycle 2/18 as it will shorten the life and reduce performance of the battery.
- After each day of use, recharge the battery for a period of 8 hours. Simply plug the power supply into the wall socket.
- If battery is not used every day, charge as needed.
- The battery can be used when connected to the power supply without risk of damage.
- Battery light functions: see section 6.3.

6.8 Cardiac cutout in backrest












	WARNING. Never exceed safe working load of 150lb or 68kg on cardiac cutout.
	WARNING. Do not place hands and other body parts near the various locking mechanisms or moving parts.
	WARNING. Once cardiac cutout is closed, make sure it is securely locked.
	WARNING. Do not leave patient unattended.
	WARNING. The patient should only sit on the table from the side.



- To open cardiac cutout, pull handle located under mattress and pivot cutout.
- TIREZ ICI
PULL HERE**
- To close cardiac cutout, pull handle located under mattress, pivot cutout to closed position. It will lock automatically. Make sure it is locked properly.



7. CLEANING INSTRUCTIONS

	WARNING. Always clean the table between each patient to avoid contamination. Always follow your internal cleaning and infection control procedures.
	WARNING. Clean the table immediately after spillage of bodily fluids or other fluids.
	WARNING. Protect mattress cover from sharp and rough objects to avoid damaging it.
	WARNING. Always inspect mattress to ensure its integrity. A damaged mattress can absorb contaminated liquids. In case of tear or wear, contact Umano Medical to immediately replace the damaged mattress.
	WARNING. Do not pressure wash or steam clean.
	WARNING. It is the user's responsibility to wear adequate protective equipment to avoid contamination from bodily fluids or other dirt on table.
	WARNING. Any damage to the mattresses caused by the use of a product other than those mentioned in this section or at a different concentration is not covered by the warranty.
	WARNING. Do not use cleaning products containing other ingredients or at concentrations other than those specified in this section.
	WARNING. Do not use abrasive cleaning products.
	WARNING. Do not place hands and other body parts near the various locking mechanisms or moving parts.
	WARNING. It is the user's responsibility to verify that these instructions are consistent with the facility's internal infection control procedures.

7.1 Recommended cleaning products

- Disinfectant containing sodium hypochlorite (bleach) diluted to a maximum concentration of 0.5%. Always rinse with clean water and dry with a clean cloth.
- Disinfectant containing hydrogen peroxide diluted in a maximum concentration of 0.5%. Always rinse with clean water and dry with a clean cloth.
- Disinfectant containing alcohol diluted in a maximum concentration of 22%. Always rinse with clean water and dry with a clean cloth.
- It is recommended to use “*ready-to-use*” cleaning products.

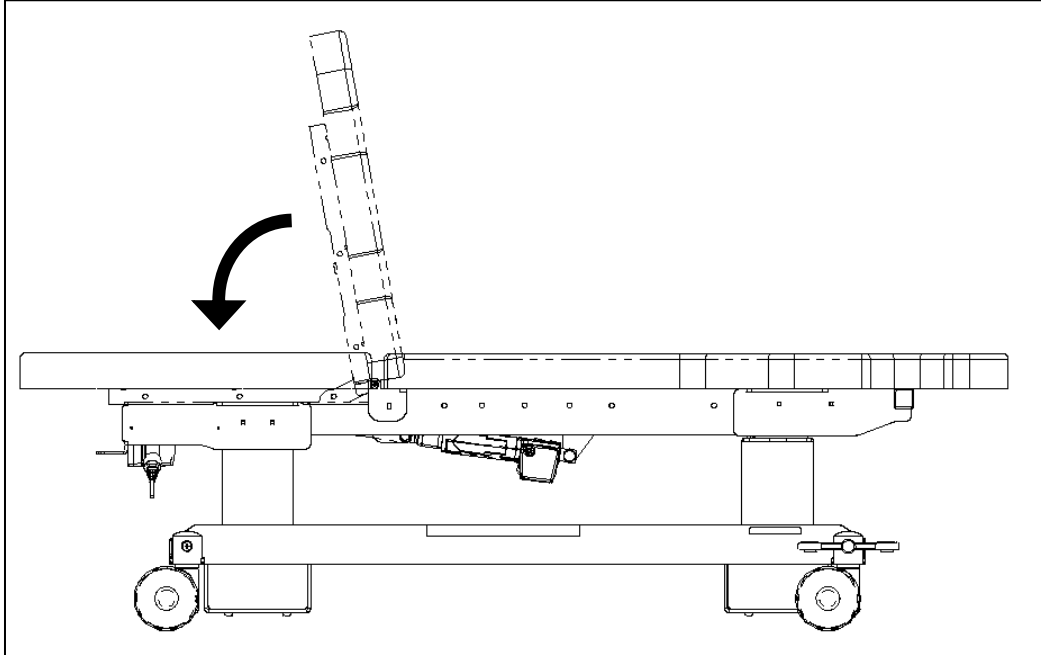
Notes:

- Always test the cleaning product in an inconspicuous area to verify its effect on the surface being cleaned.
- Always follow manufacturer’s cleaning products instructions.
- It is important to clean immediately after a spill to prevent the mattress cover from becoming permanently stained.

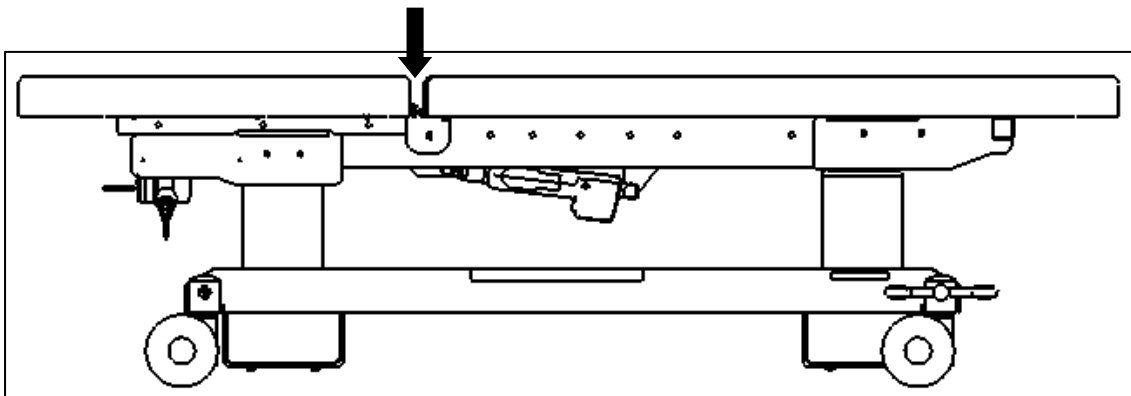
7.2 Cleaning procedure

Procedure for effective cleaning of surfaces and openings.

1. Lower the backrest completely.



2. Clean all mattresses surfaces, including surfaces in openings between the backrest and main section. **IMPORTANT:** Allow the surfaces to dry before raising the backrest.



- NOTE: In case of major spill, it is possible to remove all mattresses for a complete cleaning. Please contact Umano Medical for further details.
3. Clean all parts that may be contaminated and/or that are in contact with the patient, such as security rails, IV pole, handles, table base, etc.

8. SPECIFICATIONS

8.1 Product specifications



Width without security rail	27 in / 69 cm
Width with security rail	31 in / 79 cm
Length	77 in / 196 cm
Operation	<ul style="list-style-type: none"> • 4 functions lighted hand control device (backrest, height, Trendelenburg, reverse Trendelenburg and emergency position). • Foot switch (option). • Button controller (option).
Adjustable backrest	0° to 80°
Adjustable height	21 to 37 in / 53 to 94 cm
Trendelenburg	0 to - 15°
Reverse Trendelenburg	0 to + 15°
Security rail length	24 in / 61 cm
Maximum safe working load	450 lb / 205 kg
Wheel diameter	5 in / 12.7 cm
Weight*	250 lb / 114 kg
Mattress	3 in / 7.6 cm 4 in / 10 cm (option) Semi-rigid polyurethane foam
Mattress cover	Vinyl <ul style="list-style-type: none"> • Waterproof • Anti-microbial • Stain resistant** • Fire retardant <ul style="list-style-type: none"> • FMVSS-302 • CA TB 117-2013 (Section 1-Cover Fabric) • BIFMA Class A • NFPA 260 • UFAC Class 1

Umano Medical reserves the right to change specifications without notice.

* May vary depending on options.

** If cleaning instructions are followed.

8.2 Electrical specifications

Volt	120 VAC, alternating current
Amperage	3.9A
Actuators	24 VDC, direct current
Frequency	60 Hz
Hospital grade plug	Yes
Electrical protection	 Class II
Applied part	 Type B
Battery type (option)	Rechargeable lead acid sealed type
Battery capacity (option)	1.3 Ah
Protection class (IP)	Control box : IPX6 Actuator : IPX4 Lifting column: IPX6 Hand control: IPX6 Double foot switch: IPX6 Triple foot switch: IP20 Button controller: IPX0 Battery: IPX6
Duty cycle	Intermittent 2/18 Max 2 minutes on 18 minutes off

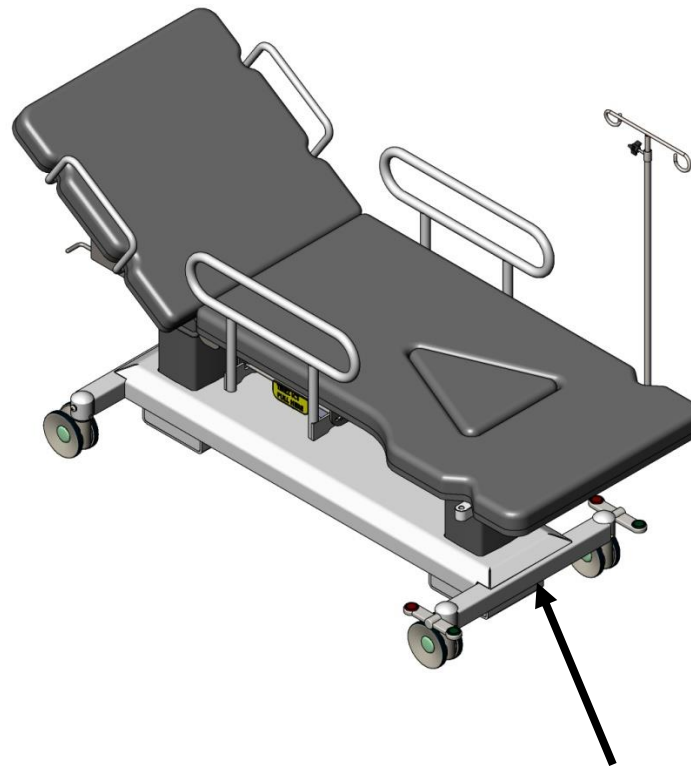
Umano Medical reserves the right to change specifications without notice.

8.3 Environmental conditions

Conditions	Temperature	Relative humidity	Pressure
Normal condition	5 °C to 40 °C	20% - 90%	70-106 kPa
Storage	-10 °C to 50 °C	20% - 90%	70-106 kPa
Transport	-10 °C to 50 °C	20% - 90%	70-106 kPa

8.4 Certification

This products is certified according to CSA SPE 3000 standards for electrical medical equipment unless otherwise specified. Label is located on the base of the product.



9. WARRANTY

The Umano Medical tables are designed for a 10-year service life under normal use, conditions, and with periodic maintenance as recommended in Maintenance Manual.

Shipment receipt

The purchaser should examine the shipment upon receipt. Umano Medical must be notified by the purchaser within 30 days of invoice of any short shipment, or any order-mistake. Apparent shipment damage must be noted on delivery receipt and notified immediately to Umano Medical. A claim in the amount of replacement cost will be initiated with the carrier for the damages incurred. If any damage is found, the purchaser must notify Umano Medical within 15 days of shipment receipt.

Product return

Merchandise cannot be returned without approval from Umano Medical. An authorization number will be provided which must be printed on the packaging of the returned merchandise. Modified or discontinued products are not subject to return.

Limited warranty

Umano Medical warrants to the original purchaser that the products shall be free of structural defects in material and workmanship for a determined period after date of delivery; refer to the purchase documentation for information about the available warranty time periods. Umano Medical's obligation under this warranty is expressly limited to supplying replacement parts and/or service for, or replacing, at its option, any product that is, in the sole discretion of Umano Medical, found to be defective. In addition, Umano Medical warrants for life to the original purchaser that the welds on its products will be free from structural defects. Any repair using non-authorized or non-original parts and any product alteration or modification will void this warranty.

Parts and service

Original service parts are available for the lifetime of the product. Contact Umano Medical at:

Umano Medical Inc.




230 boulevard Nilus-Leclerc, L'Islet QC G0R 2C0 CANADA

T: (418) 247-3986

T: (844) 409-4030

servicing@umanomedical.com

10. WASTE DISPOSAL

	WARNING. Before disposal, clean equipment properly to avoid contamination.
	WARNING. Disposal of this equipment should only be done by qualified personnel.
	WARNING. This equipment contains electronic components that may cause environmental damage. Please dispose of it properly in accordance with the regulations in force in your region.




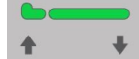


- Before disposal, equipment must be clean properly to avoid contamination.
- The equipment can be disposed of by separating the various components for recycling and/or disposal.
- Always follow local regulations for proper disposal of the various components of the equipment.

COMPONENT GROUP	MATERIAL GROUP
Actuators, lifting column, control box, controls, cables and other electronic components	Electronic waste
Metal structure	Scrap metal
Battery pack	Battery waste
Plastic parts	Plastic waste
Mattress	Foam, textiles, wood

11. MAINTENANCE

See service manual.

12. TROUBLESHOOTING

	Verification	Cause	Corrective action
No movement is working	No green lights on the hand control 	The battery is low or completely drained.	Connect the equipment to a wall socket. Once plugged in, try the movements. If the problem persists, go to the next cause. If the problem is resolved, let the battery charge for 8 hours. (CAUTION: Never allow the battery to drain completely, it could damage it).
	No audible alarm and green power light on the hand control off. 	Equipment not connected to the wall outlet.	Connect equipment to wall outlet. If the problem persists, continue to the next cause.
		Wall outlet is defective.	Make sure there is power in the electrical outlet. If the problem persists, the control box is defective.
 Service light	Yellow light flashing quickly + audible alarm when hand control buttons are pressed.	Control box error.	Press the two buttons at the same time of the second row of the hand control for 10 seconds. If the problem persists, contact Umano Medical. 
 Service light	Yellow light on continuously when hand control buttons are pressed and no movement.	The actuator is over the safe working load.	Actuator capacity exceeded. Decrease the load and the error will be cleared. If the problem persists, contact Umano Medical.
 Service light	Yellow light flashing slowly + audible alarm.	Duty cycle 2min on. / 18 min. off exceeded.	Wait 18 minutes before using the equipment.

13. SPARE PARTS LIST

See service manual.



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