

OPERATION MANUAL

Revision: R1

TREATMENT CHAIR HEMA+



HEMA+

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1. TO CONTACT US

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

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

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




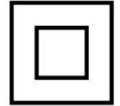



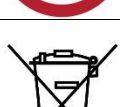
Phone	1-877-247-7494 418-247-3986
Email	information@umanomedical.com
Web	www.umanomedical.com
Address	Umano Medical Inc. 230, boul. Nilus-Leclerc L'Islet, QC G0R 2C0 Canada

2. INTENDED USE

HEMA+ chair is AC powered treatment chair that can be adjusted to different position. It is designed to support a patient during a 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. SYMBOLS

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.
	Electrical protection, class II device, double insulation.
	Electrical safety, type B applied part.
	No sitting.
	No stepping.
	This device contains materials that are potentially hazardous to the environment. In accordance with directive on waste electrical and electronic equipment (WEEE), HEMA+ electrical system and accessories should not be disposed as unsorted municipal waste. Check with your local authorities for disposal of these components.

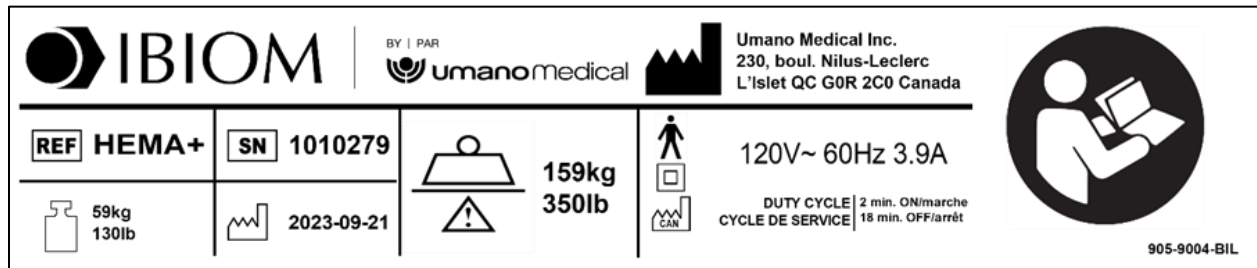
4. WARNINGS

	<p>MANDATORY. Read, understand and retain this manual before using Umamo Medical products. This manual must be available to anyone who will use Umamo Medical products.</p>
	<p>WARNING. HEMA+ chair is designed for indoor use on flat surfaces.</p>
	<p>WARNING. Always lock casters before the patient sits in the chair.</p>
	<p>WARNING. Never use the central locking system to stop the chair while it is in motion.</p>
	<p>WARNING. Do not use HEMA+ chair for any purpose other than the intended use.</p>
	<p>WARNING. Do not modify this equipment without Umamo Medical's authorization.</p>
	<p>WARNING. Do not use in oxygen rich environment.</p>
	<p>WARNING. Do not use in MRI environment.</p>
	<p>WARNING. Do not use in wet environment.</p>
	<p>WARNING. Do not use for CPR or X-ray procedures or with a defibrillator.</p>
	<p>WARNING. Never exceed the safe working load of 350lb or 159kg on HEMA+ chair. This load includes the weight of the patient and the accessories.</p>
	<p>WARNING. Never exceed the safe working load of 75lb or 34kg on the armrests. This load includes the weight of the patient and the accessories (example: retractable shelf in option).</p>
	<p>WARNING. Never exceed the safe working load of 10lb or 4.5kg on retractable shelf installed on the armrests.</p>
	<p>WARNING. Do not sit on backrest.</p>
	<p>WARNING. Do not sit on leg rest.</p>
	<p>WARNING. Do not sit on armrests.</p>
	<p>WARNING. Always ensure that the armrests are locked in place before use.</p>
	<p>WARNING. Do not leave patient unattended.</p>
	<p>WARNING. Do not use HEMA+ chair as a transport stretcher to move the patient from one room to another or one floor to another.</p>
	<p>WARNING. To ensure proper operation of the chair, please perform the recommended maintenance.</p>
	<p>WARNING. Read the warnings in the various sections of this manual.</p>
	<p>WARNING. Do not roll the chair on the power cable or the hand control cable.</p>
	<p>WARNING. Keep all cables out of the reach of children.</p>
	<p>WARNING. Keep all cables away from moving parts.</p>
	<p>WARNING. Do not move the chair by pulling on the hand control, the power supply cable or any other cable.</p>
	<p>WARNING. Never use the chair if the power cable or any other cables are damaged.</p>
	<p>WARNING. Keep all cables away from heat sources.</p>

	WARNING. Always ensure there is sufficient clearance around the chair before activating the various movements to avoid collisions with the surroundings and people.
	WARNING. Never exceed duty cycle of 2/18 (2 minutes ON and 18 minutes OFF).
	WARNING. Medical personnel must instruct the patient on how to adjust the chair.
	WARNING. If the patient is not able to adjust the chair by himself, the hand control must be placed out of the patient's reach.
	WARNING. Never place hands or other body parts near moving parts when the chair is adjusted.
	WARNING. Always lower the chair to its lowest position before the patient sits in the chair.
	WARNING. Always take appropriate measures to avoid injuries when handling accessories (shelf, armrest, etc.).
	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

	Name and address of the manufacturer
	Product code or name
	7-digit serial number
	Product's weight
	Date of manufacture (YYYY-MM-DD) format
	Maximum safe load (maximum patient weight)
	Made in Canada
	Type B applied part
	Class II equipment (double electrical insulation)
	Obligation to read the operation manual
	Required voltage (120V), alternating current
	Frequency (60Hz), maximum amperage (3.9A)
	Maximum activation time followed by minimum deactivation time

6. OPERATION INSTRUCTIONS

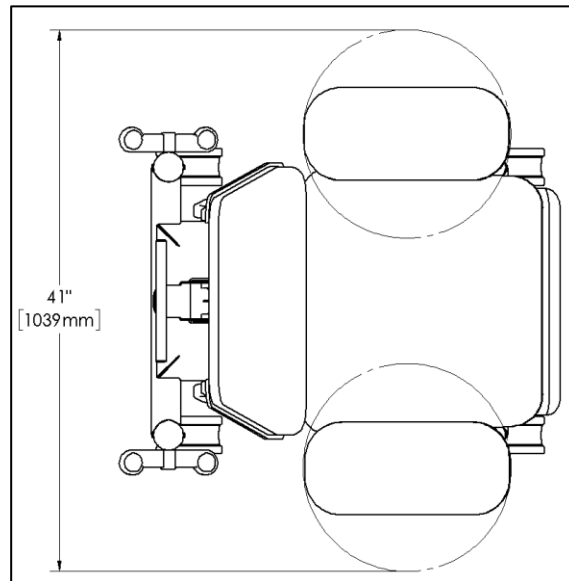
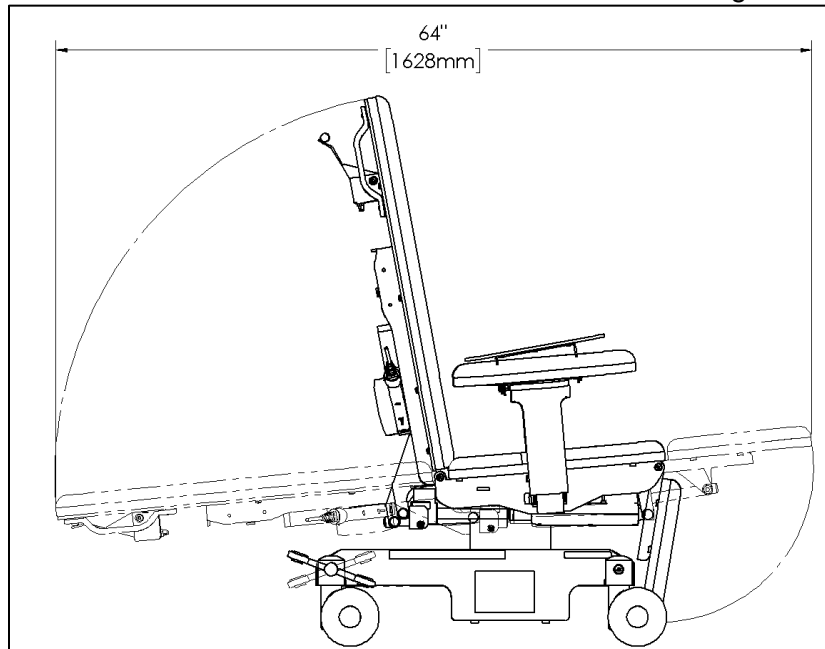
6.1 Setting up the chair

	WARNING. Always ensure there is sufficient clearance around the chair before activating the various movements to avoid collisions with the surroundings and people.
	WARNING. HEMA+ chair is designed for indoor use on flat surfaces.
	WARNING. Always lock casters before the patient sits in the chair.
	WARNING. Never use the central locking system to stop the chair while it is in motion.
	WARNING. Do not leave patient unattended.
	WARNING. Do not use in an 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 chair on the power cable or the hand control cable.
	WARNING. Keep all cables out of the reach of children.
	WARNING. Keep all cables away from moving parts.
	WARNING. Do not move the chair by pulling on the hand control, the power supply cable, or any other cable.
	WARNING. Never use the chair 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).

The chair is delivered assembled and ready for use. The chair must be unpacked and inspected upon receipt to ensure that there has been no damage during transport.

1. Once the chair is unpacked and positioned in the desired location, install all accessories (armrests, shelf if applicable).

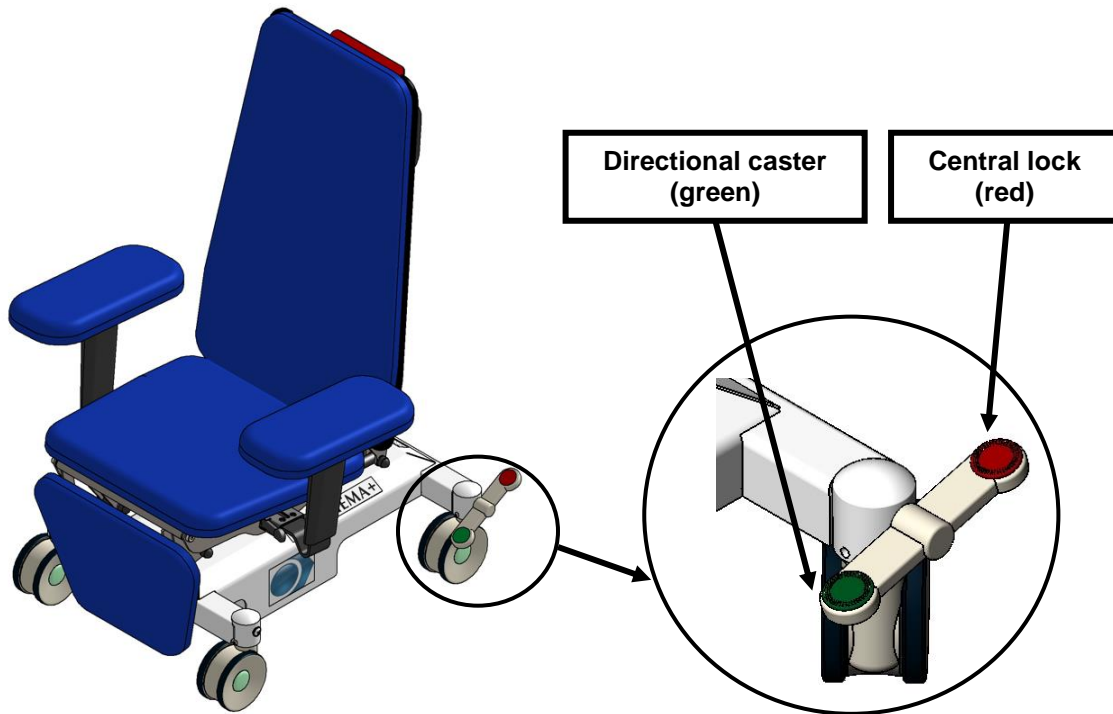
2. Position the chair in the desired location. **IMPORTANT:** Make sure you have enough space around the chair to avoid collisions between its surroundings in ALL POSITIONS.



3. Once in place, lock all the casters.
4. Remove any remaining packaging from the product. Example: Protective plastic on the hand control cable.
5. Connect the power cord to a wall socket.
6. Perform a test run to make sure that everything is working properly.

6.2 Central and directional caster

	WARNING. Always lock casters before the patient sits in the chair.
	WARNING. Never use the central locking system to stop the chair while it is in motion.
	WARNING. Do not move the chair by pulling hand control, power cable, or any other cable.
	WARNING. Always ensure there is sufficient clearance around the chair before activating the various movements to avoid collisions with the surroundings and people.



The central lock system can be operated by one of the pedals located on each side of the chair. The foot pedal is simply pressed into one of the 3 positions:

- Red: all 4 casters are locked;
- Neutral: all casters are unlocked;
- Green: 1 caster is locked in the axis of the chair and 3 are unlocked.

6.3 Chair adjustments

	WARNING. Always ensure there is sufficient clearance around the chair before activating the various movements to avoid collisions with the surroundings and people.
	WARNING. Always lock casters before the patient sits in the chair.
	WARNING Always lower the chair to its lowest position before the patient sits in the chair.
	WARNING. Do not leave patient unattended.
	WARNING. Medical personnel must instruct the patient on how to adjust the chair.
	WARNING. If the patient is not able to adjust the chair by himself, the hand control must be placed out of the patient's reach.
	WARNING. Never place hands and other body parts near moving parts when the chair is adjusted.
	WARNING. Never use the chair if the power supply cable or any other cable is damaged.

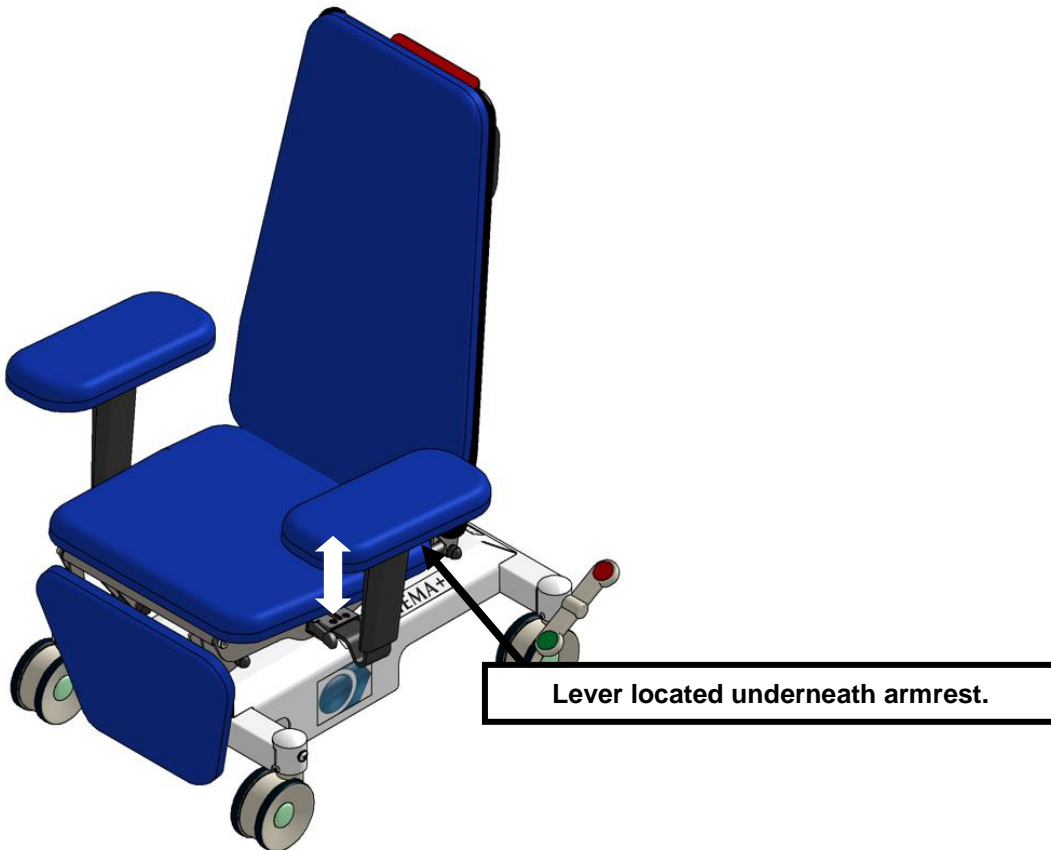
Commande à main

Bouton	Fonction
A	Simultaneous movements: raise backrest and lower leg section.
B	Simultaneous movements: lower backrest and raise leg section.
C	Raise chair
D	Lower chair

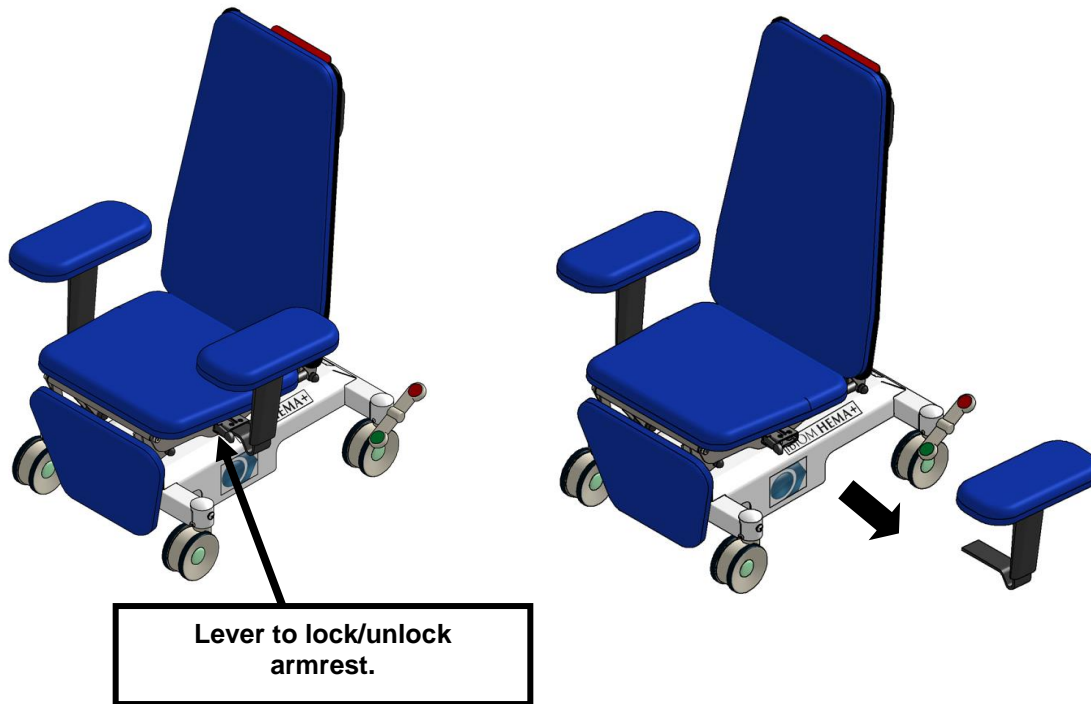
6.4 Armrests

	WARNING. Never exceed the maximum safe load of 75lb or 34kg on the armrests. This load includes the weight of the patient and the accessories (example: retractable shelf in option).
	WARNING. Never exceed the maximum safe load of 10lb or 4.5kg on retractable shelf installed on armrests.
	WARNING. Do not sit on the armrests.
	WARNING. Always ensure that the armrests are locked in place before use.
	WARNING. Do not leave the patient unattended.
	WARNING. Medical personnel must instruct the patient on how to adjust the chair.
	WARNING. Always take appropriate measures to avoid injuries when handling accessories (shelf, armrest, etc.).

Use the small lever under the armrest to adjust the height.



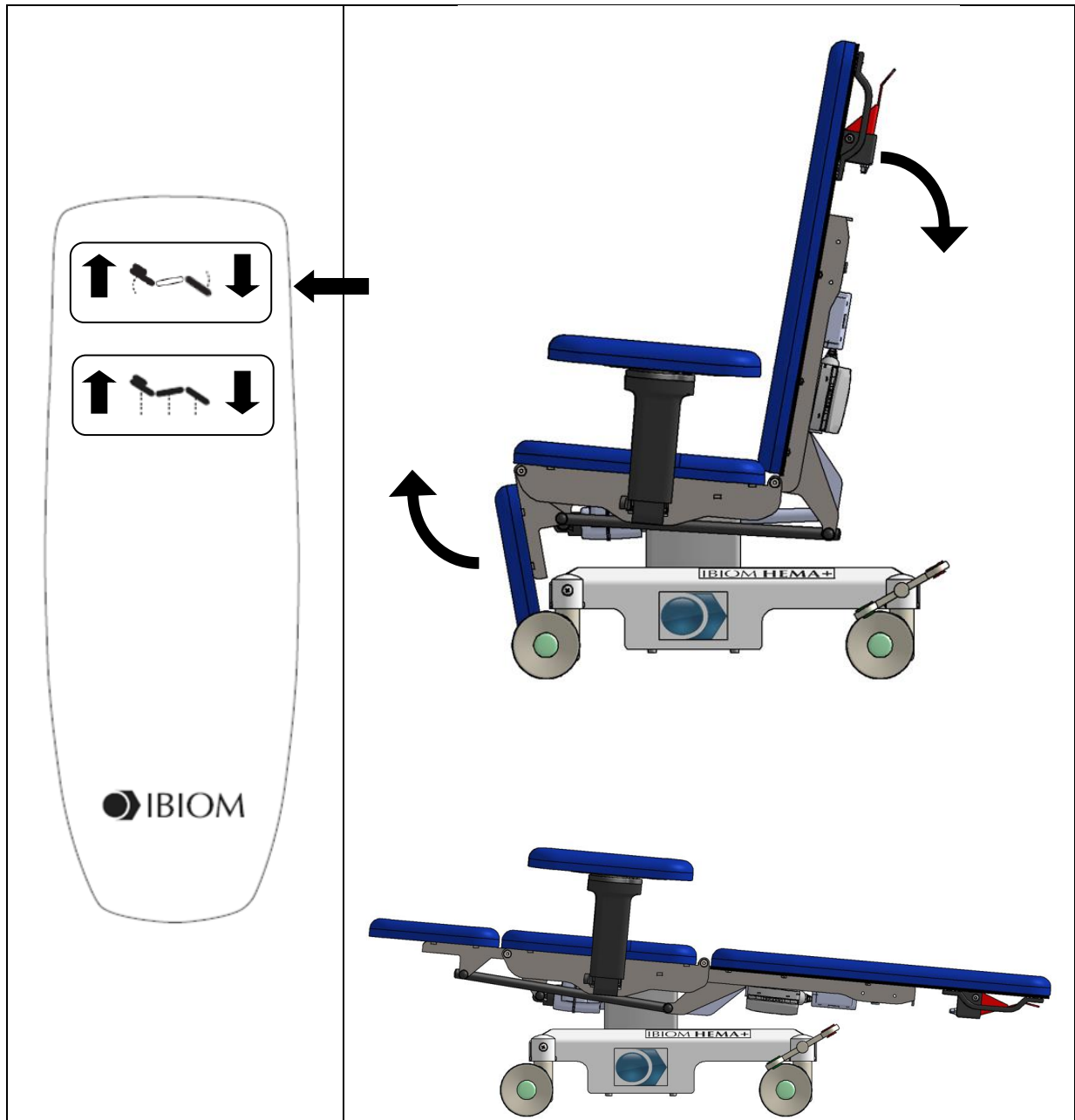
To remove the armrest, rotate the lever at the base of the armrest to unlock it. Remove the entire armrest.



6.5 Electric emergency position

	<p>WARNING. Do not use HEMA+ chair as a transport stretcher to move the patient from one room to another or one floor to another.</p>
	<p>WARNING. Always ensure there is sufficient clearance around the chair before activating the various movements to avoid collisions with the surroundings and people.</p>

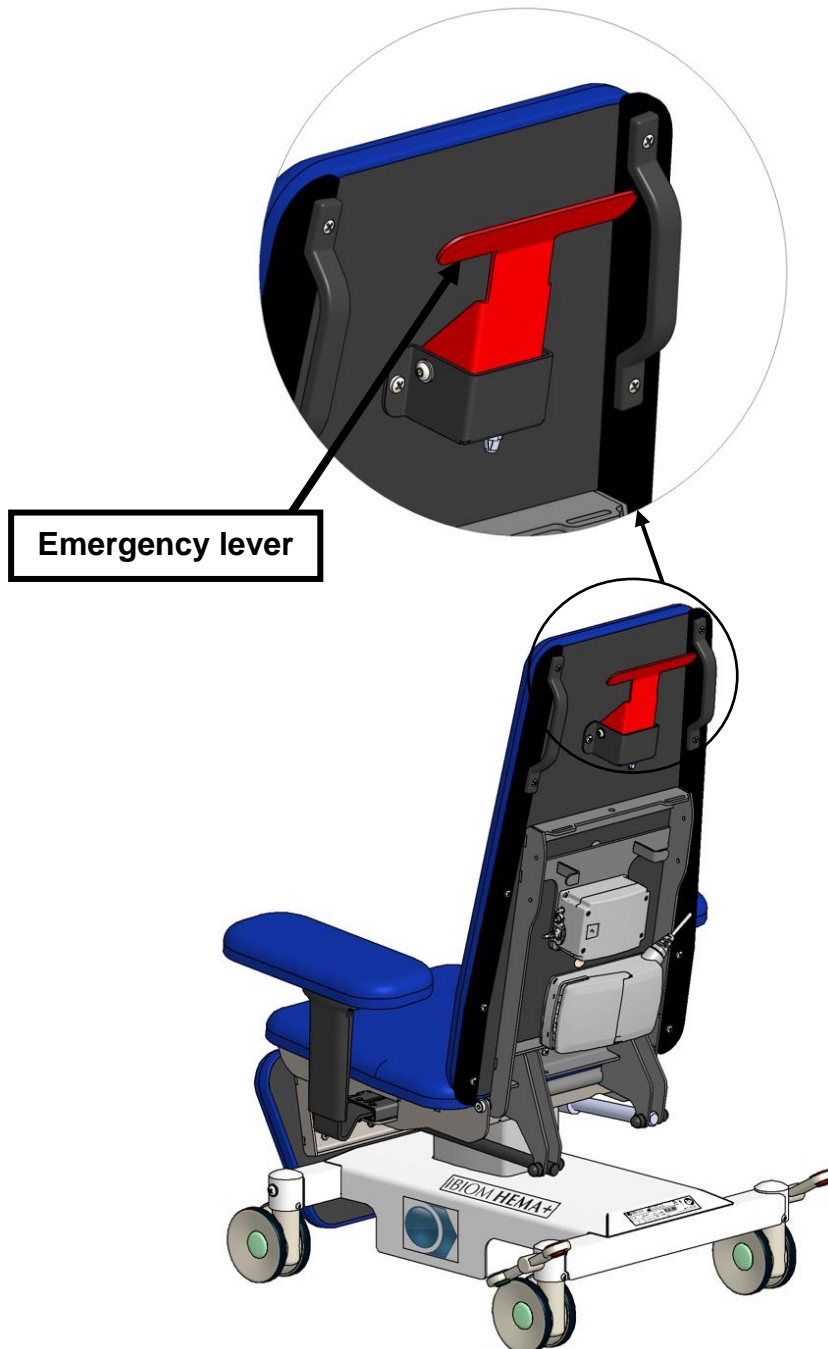
To activate the emergency position (Trendelenburg), press the corresponding button on the hand control. This function lowers the backrest and raises the leg section simultaneously.



6.6 Emergency position – quick release

	<p>WARNING Do not use HEMA+ chair as a transport stretcher to move the patient from one room to another or one floor to another.</p>
	<p>WARNING. Always ensure there is sufficient clearance around the chair before activating the various movements to avoid collisions with the surroundings and people.</p>

To activate the emergency position (Trendelenburg), engage the red lever located at the rear of the backrest and lower the backrest slowly. This function allows the backrest to be lowered and leg section to be raised simultaneously.

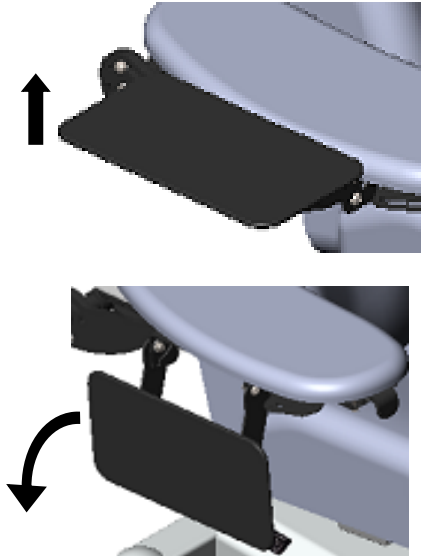


6.7 Retractable shelf






WARNING. Never exceed the maximum safe load of 10lb or 4.5kg on retractable shelf installed on armrests of the chair

1. Lift side shelf slightly.
2. Gently fold down the shelf.
3. Raise shelf 90 degrees and lock it in the open position. It should drop slightly to lock into place.














6.8 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 completely drain the battery. This will damage the battery and reduce its capacity.
- Always allow the battery to stabilize at room temperature before use.
- Never exceed the duty cycle of 2/18. Doing so will damage the battery, reduce its performance and shorten its life cycle.
- 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, recharge as needed.
- The battery can be used when connected to the power supply without risk of damage.
- When the battery beeps, it means that it is low and needs to be recharged.

7. CLEANING INSTRUCTIONS

	WARNING. Always clean the chair between each patient to avoid contamination. Always follow your internal cleaning and infection control procedures.
	WARNING. Clean the chair immediately after any spillage of bodily fluids or any other fluids.
	WARNING. Protect the cushions from sharp and rough objects to avoid damaging them.
	WARNING. Always inspect the cushions to ensure their integrity. A damaged cushion can absorb contaminated liquids. In case of tear or wear, contact Umano Medical to immediately replace the damaged cushion.
	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 the chair.
	WARNING. Any damage to the cushions 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 products or in concentration other than those specified in this section.
	WARNING. Do not use abrasive cleaning products.
	WARNING. Avoid placing hands and other body parts near moving parts when the chair is adjusted.
	WARNING. It is the user's responsibility to ensure that these instructions are in accordance with the institution's internal infection control procedures.

7.1 Recommended cleaning products

- Disinfectant containing sodium hypochlorite (bleaching product) diluted to a maximum concentration of 0.5%. Always rinse with clean water and dry with a clean cloth.
- Disinfectant containing hydrogen peroxide diluted to a maximum concentration of 0.5%. Always rinse with clean water and dry with a clean cloth.
- Disinfectant containing alcohol diluted to 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.

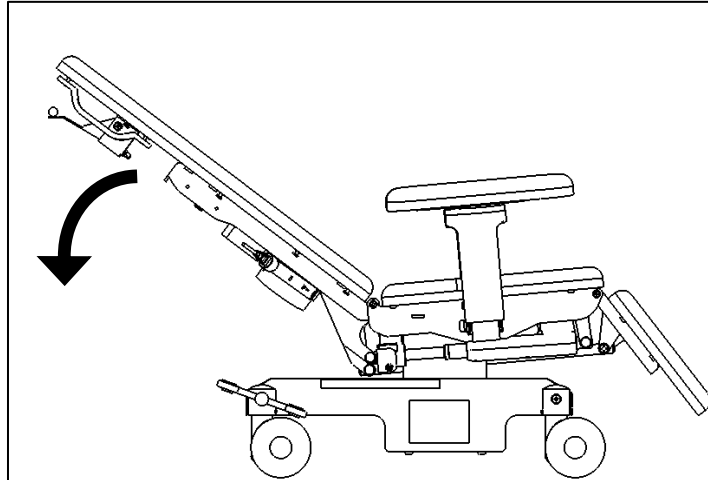
Notes:

- Always test the cleaning product in an inconspicuous place to verify its effect on the surface being cleaned.
- Always follow the cleaning products manufacturer’s recommendations.
- Clean spills as soon as possible to prevent penetration and becoming a permanent stain.

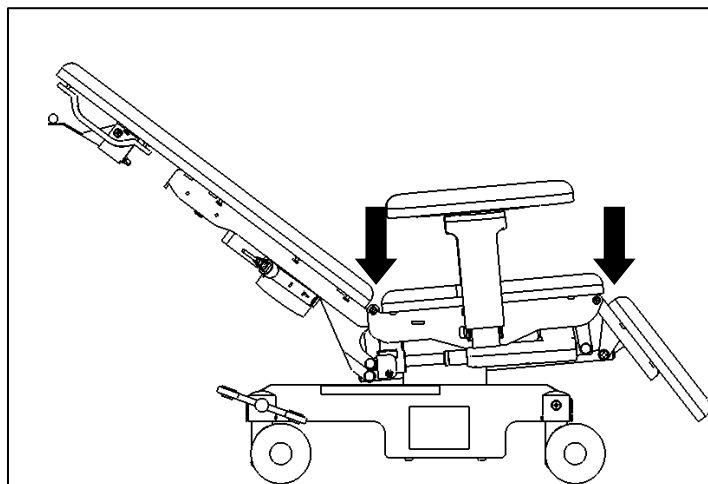
7.2 Cleaning procedure

Procedure for effective cleaning of surfaces and openings.

1. Lower the backrest to approximately 45 degrees.



2. Clean all the cushion surfaces, including surfaces in the openings between the backrest and the seat and between the seat and leg section. **IMPORTANT:** Allow the surfaces to dry before raising them.



- NOTE: In case of a major spill, it is possible to dismantle all the cushions for complete cleaning. Please contact Umano Medical for further details.
3. Clean the armrests.
 4. Clean all parts that may be contaminated and/or that are in contact with the patient, i.e., the shelf, handles, chair base, etc.

8. SPECIFICATIONS

8.1 Technical data



Width without armrest	20 in / 51 cm
Width with armrest¹	32 in / 82 cm
Length in prone position	64 in / 163 cm
Backrest	32 in / 81 cm
Seat	18.5 in / 47 cm
Legrest	12 in / 30 cm
Length in sitting position	33 in / 84 cm
Armrest dimensions¹	6.5 x 15 in / 16.5 x 38 cm
Armrest adjustments	Rotating
	Adjustable in height
	Removable
Operation	<ul style="list-style-type: none"> • 2 function hand control (height and emergency position).
Adjustable backrest	0° à 85° (0° = Trendelenburg).
Adjustable legrest	0° à -105°, synchronized with the backrest
Adjustable height	16 to 26 in / 41 to 66 cm
Emergency position (Trendelenburg)	-5° with hand control -5° with emergency quick release lever (option)
Capacity	350 lb / 159 kg
Wheel diameter	5 in / 12.7 cm
Weight¹	130 lb / 59 kg
Cushion cover	Vinyl <ul style="list-style-type: none"> • Waterproof • Anti-microbial • Stain resistant² • 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 Inc. reserves the right to change specifications without notice.

1 May vary depending on options.

2 If cleaning instructions are followed.

8.2 Electrical characteristics

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 (optional)	Rechargeable lead acid sealed type
Battery capacity (optional)	1.3 Ah
Protection class (IP)	Control box: IPX6 Actuator: IPX4 Lifting column: IPX6 Hand control: IPX4 Battery: IPX6
Duty cycle	Intermittent 2/18 Max 2 minutes on 18 minutes off

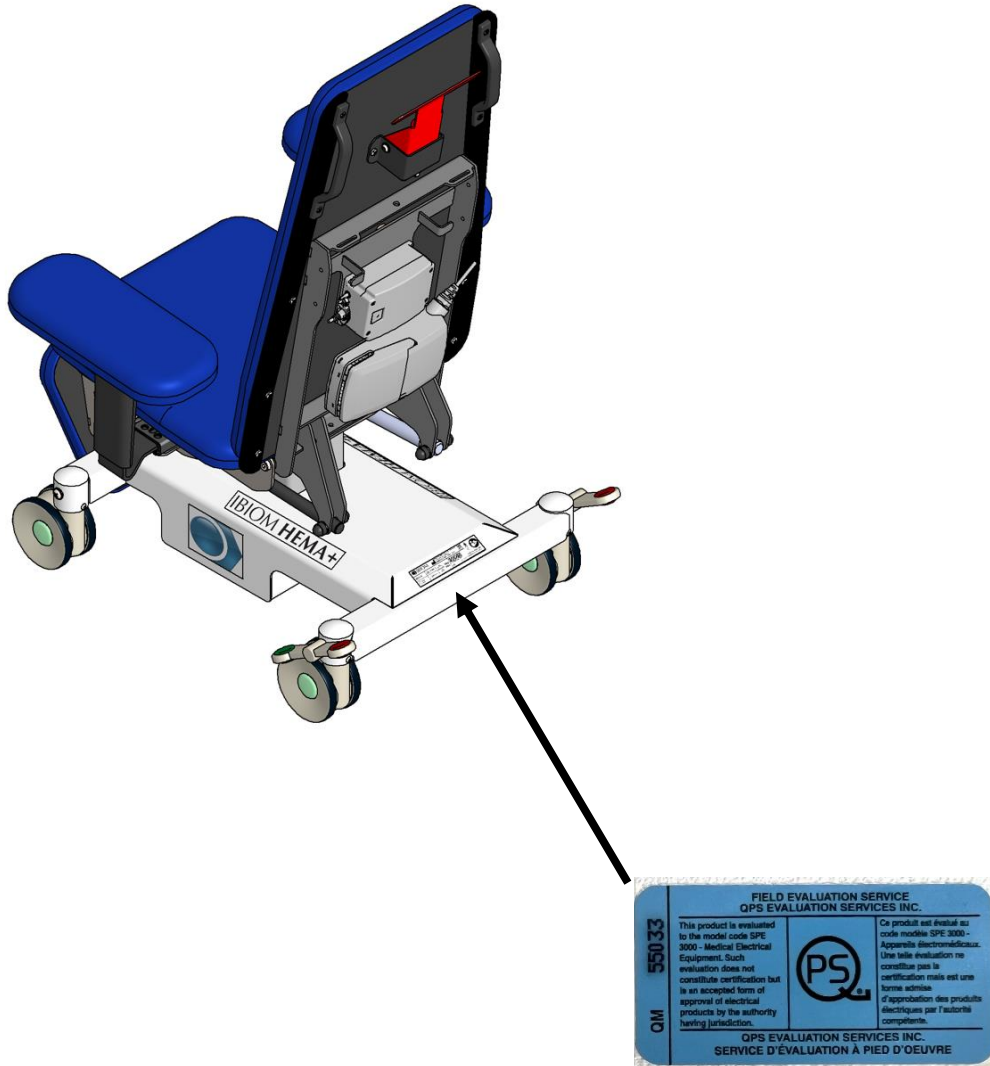
Umano Medical Inc. reserves the right to change specifications without notice.

8.3 Environmental conditions

Conditions	Temperature	Relative humidity	Pressure
Normal condition	5 °C to 40 °C	20% - 80%	70-106 kPa
Storage	-10 °C to 50 °C	20% - 80%	70-106 kPa
Transport	-10 °C to 50 °C	20% - 80%	70-106 kPa

8.4 Certification

This product is certified according to CSA SPE 3000 standard for electrical medical device except contrary indication. The label is located on the base of the product.



9. WARRANTY

The Umano Medical treatment chairs 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 be done by qualified personnel only.
	WARNING. This equipment contains electronic components that may cause environmental damage. Please dispose of this equipment properly in accordance with the regulations in force in your region.

- Before disposal, properly clean equipment 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 scrap
Metal structure	Scrap metal
Battery pack	Batteries
Plastic parts	Plastic Waste
Mattress	Scraps of foam, textiles, wood

11. MAINTENANCE

See service manual.

12. TROUBLESHOOTING

Problem	Verification	Cause	Corrective
No movement is working.	Fast beep with green light off on the control box.	The battery is low and the equipment is not connected to the wall socket.	Connect the equipment to the wall. 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 light off on the control box.	The equipment is not connected to the wall socket.	Connect the equipment to the wall outlet. If the problem persists, continue to the next cause.
		The wall socket is defective.	Make sure there is power in the electrical outlet. If the problem persists, the control box is defective.

13. SPARE PARTS

See service manual.



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