

CRITICOOL 6.3 OPERATIONAL TRAINING

UPDATED MAY 2020



INTRODUCTION

CRITICOOL® INDICATION FOR USE



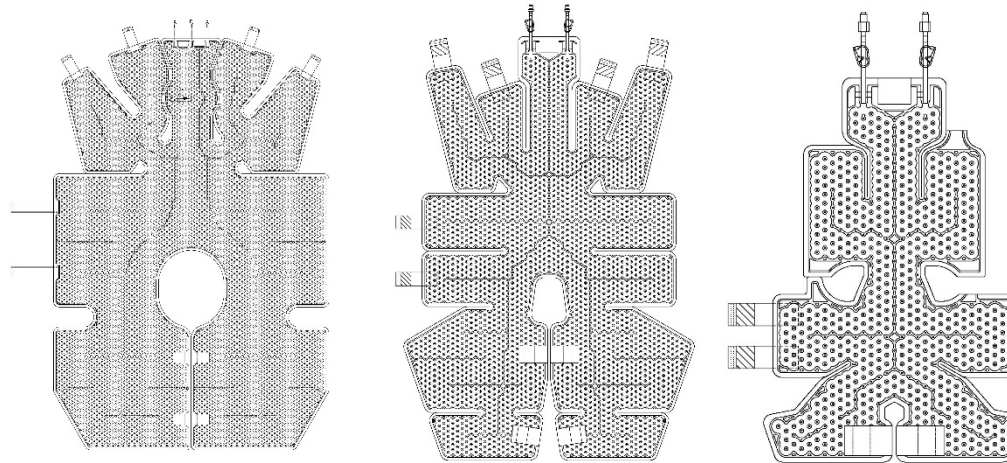
Indication for Use

- CritiCool is a thermal regulating system, indicated for monitoring and controlling patient temperature

CRITICOOL PRODUCT FAMILY



Criticool® Control Unit



CureWrap™ Garments

SIMPLE. PRECISE. EFFECTIVE.

TARGETED TEMPERATURE MANAGEMENT HAS NEVER BEEN EASIER



SET

Select the desired temperature set point



WRAP

Apply the CureWrap garment



COOL

Initiate fast cooling



REWARM

Manage controlled rewarming



SIMPLE. PRECISE. EFFECTIVE.

Every 133 milliseconds

The control unit reads the patient's core temperature through specific probes every 133 milliseconds and adjusts temperature as necessary in order to maintain the physician determined pre-set temperature settings.

Every 0.133 seconds



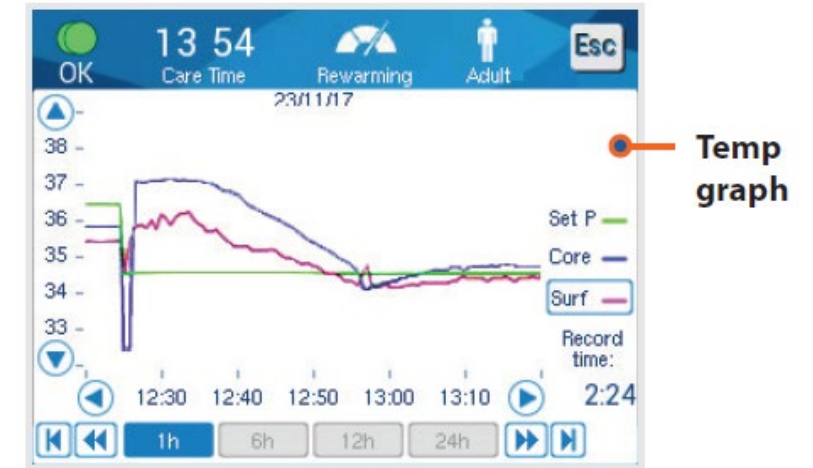
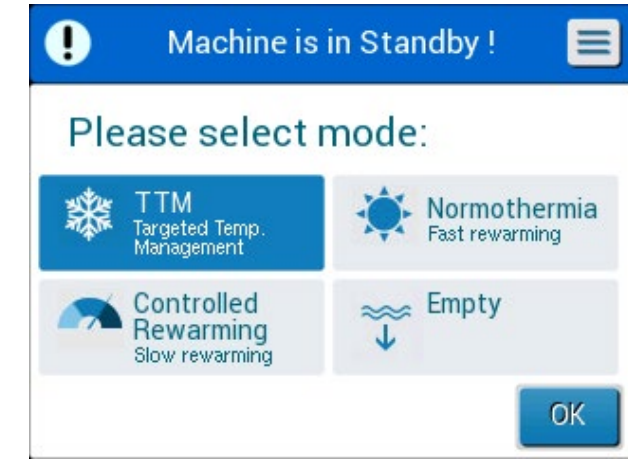
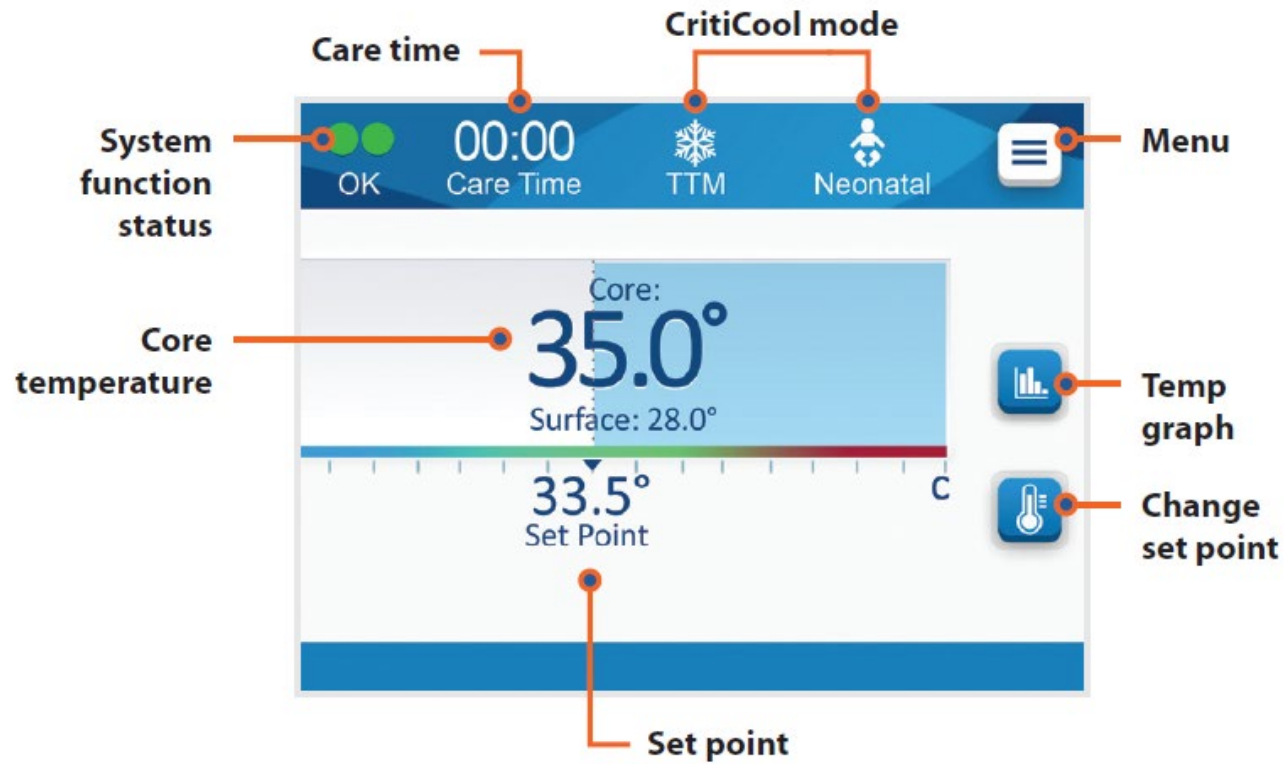
Safe, Precise, and Effective

ADVANCED TEMPERATURE MANAGEMENT

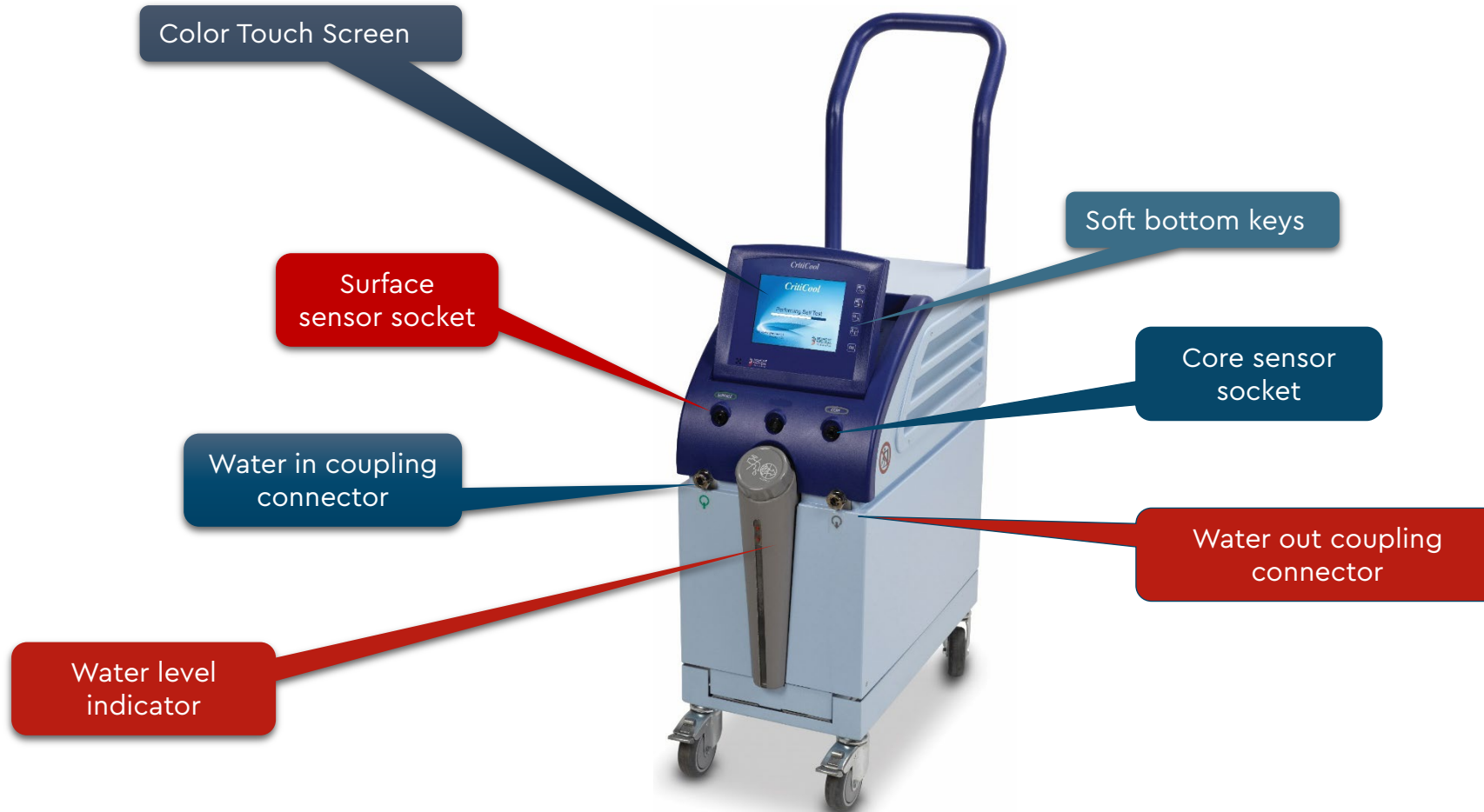
- Precise temperature control as set by the physician
- Full-color, touch-screen display
- Simple, easy to use interface with intuitive controls
- Real-time monitoring and graphical display of temperature measurements
- Quick and easy set up
- Track data using the CliniLogger™



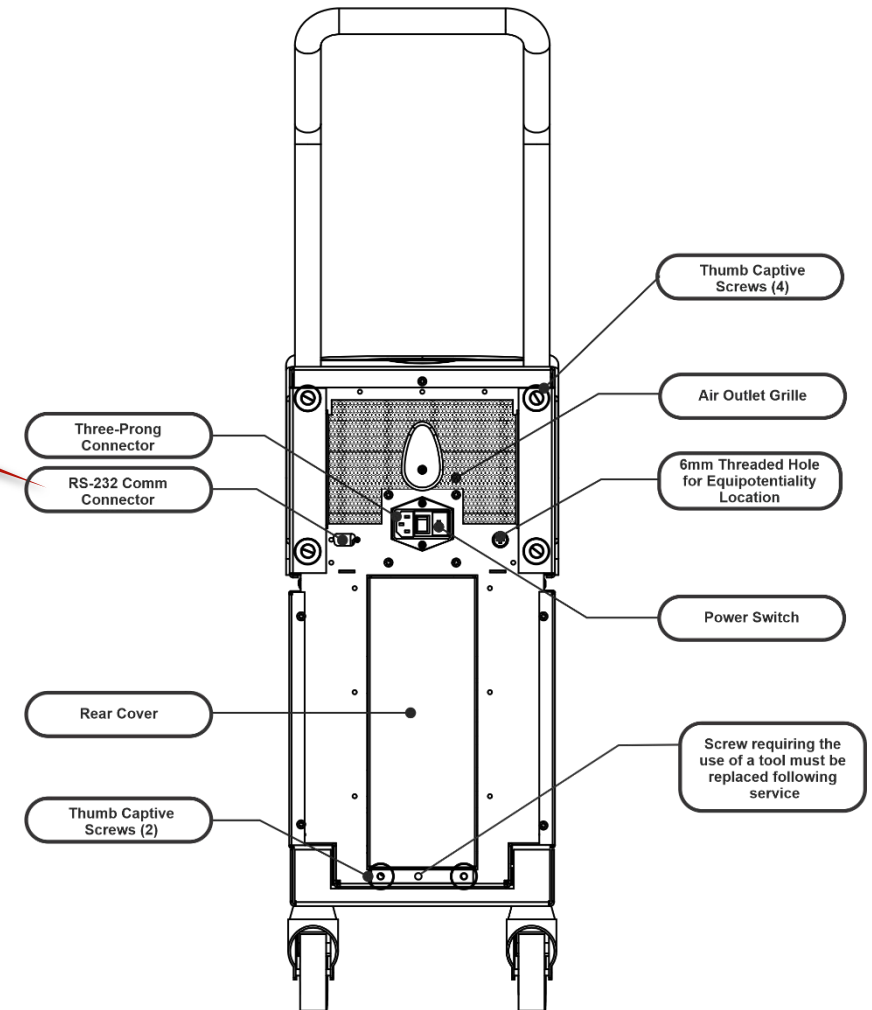
SIMPLE, EASY TO USE INTERFACE



CRITICOOL CONTROL UNIT: FRONT VIEW

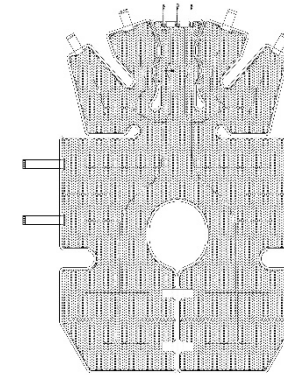


CRITICOOL CONTROL UNIT: REAR VIEW

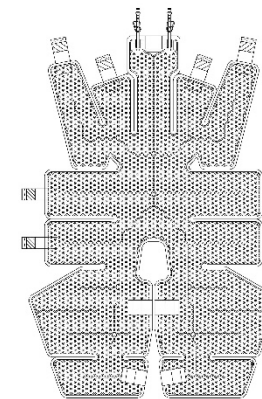


CUREWRAP – SELECTING THE WRAP

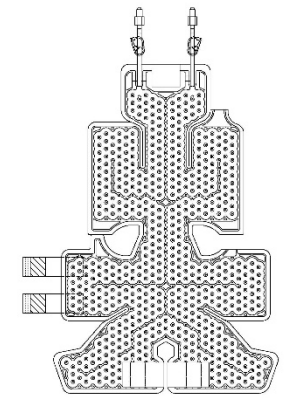
	Type	Part Number	Number of Wraps per Package	Patient Height / Weight	Wrap Length / Width (m)
Single Size	Adult	508-03500	8	168-180 cm (Over 66")	2.030/1.354
	Infant	508-03518	8	2.5 to 4 kg (5.5 to 8.8 lb)	0.659/0.448
		508-03521	8	4-7 kg (8.8/15.5 lb)	0.698/0.602
Pediatric Assortments	Pediatric (Small)	PEDSM008	8 (multi-size)	(x4) 2.5 to 4 kg (5.5 to 8.8 lb) (x4) 4-7 kg (8.8/15.5 lb)	0.659/0.448 0.698/0.602
	Pediatric (Medium)	PEDMD008	8 (multi-size)	(x4) 7-11 kg (15.5/24.3 lb) (x4) 79-91 cm (31/36")	0.981/0.628 1.118/0.740
	Pediatric (Large)	PEDLA008	8 (multi-size)	(x4) 91-104 cm (36/41") (x4) 104-122 cm (41/48")	1.225/ 0.841 1.390/1.054
	Pediatric (X-Large)	PEDXL008	8 (multi-size)	(x4) 122-135 cm (48/53") (x4) Over 135 cm (Over 53")	1.582/1.119 2.030 /1.354



Adult



Pediatric



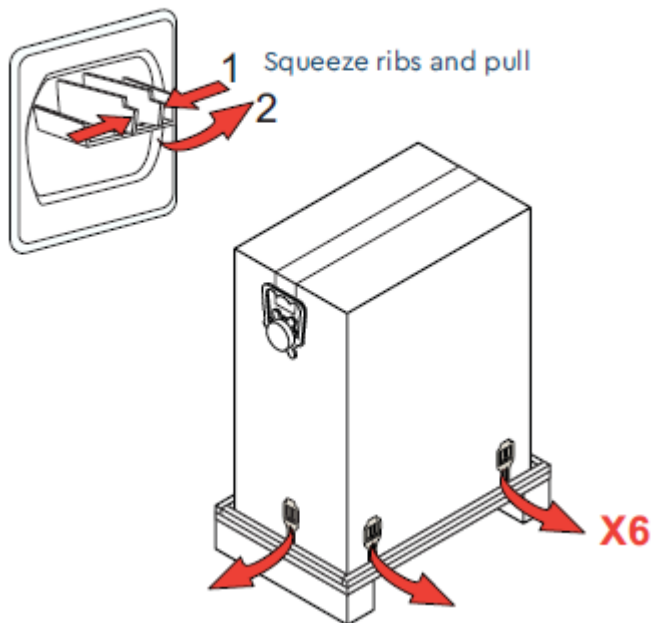
Infant



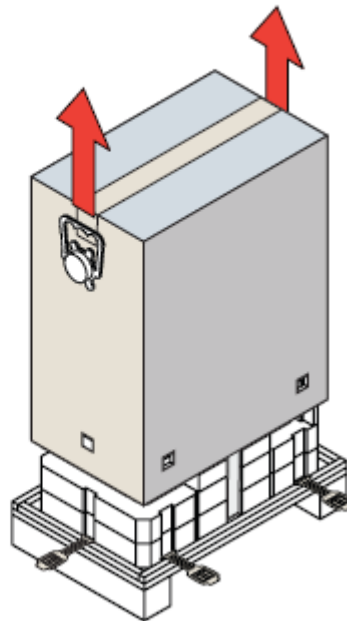
SETTING UP CRITICOOL

UNPACKING CRITICOOL

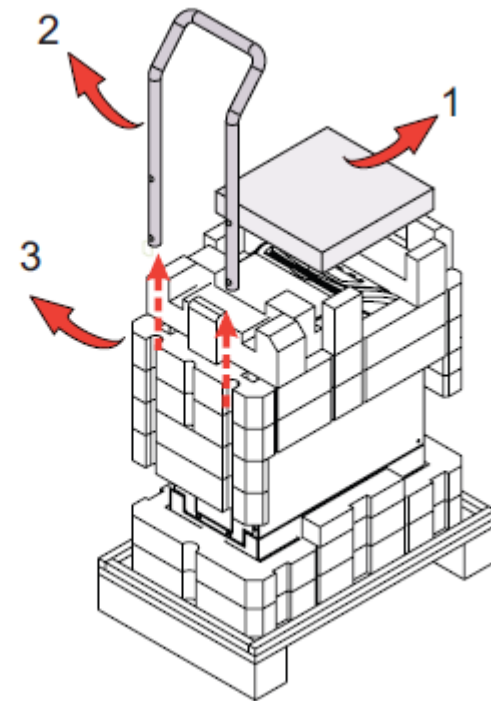
1 DO NOT OPEN FROM THE TOP



2



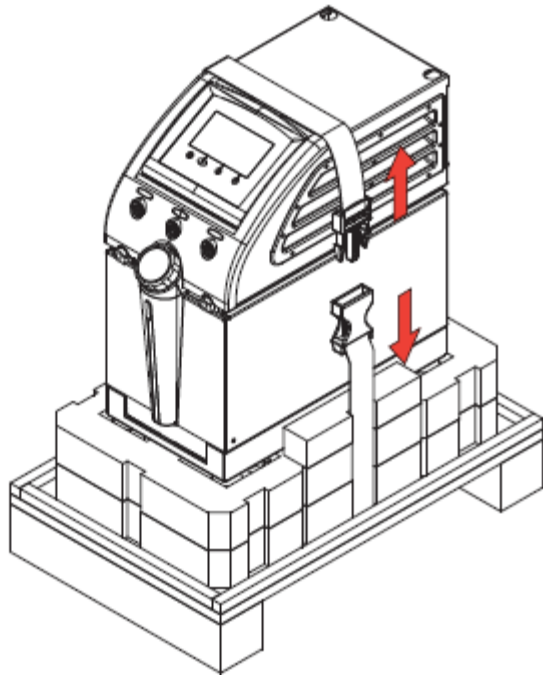
3



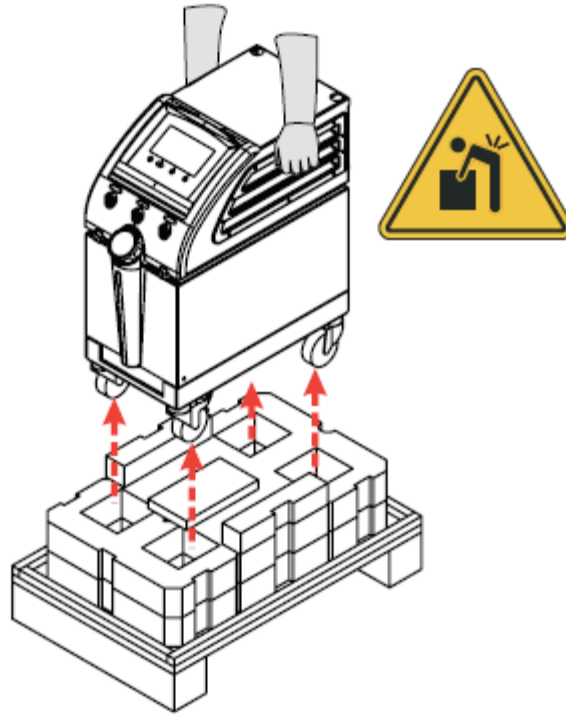
Keep the original box

UNPACKING CRITICOOL

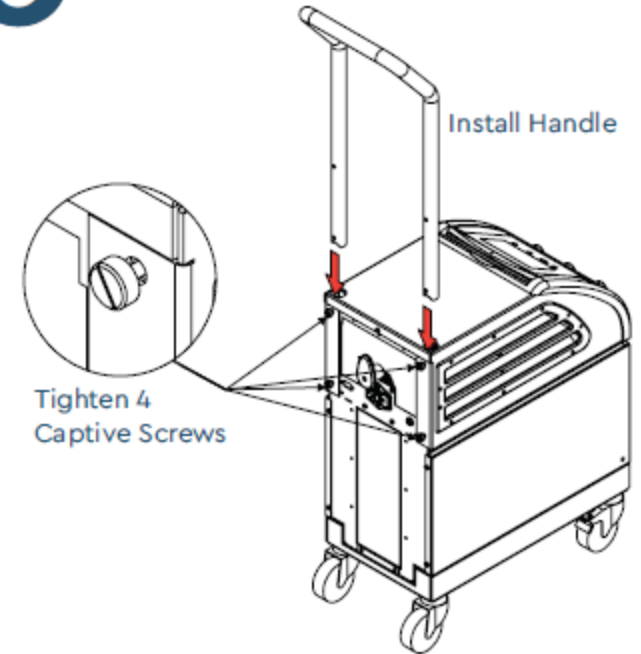
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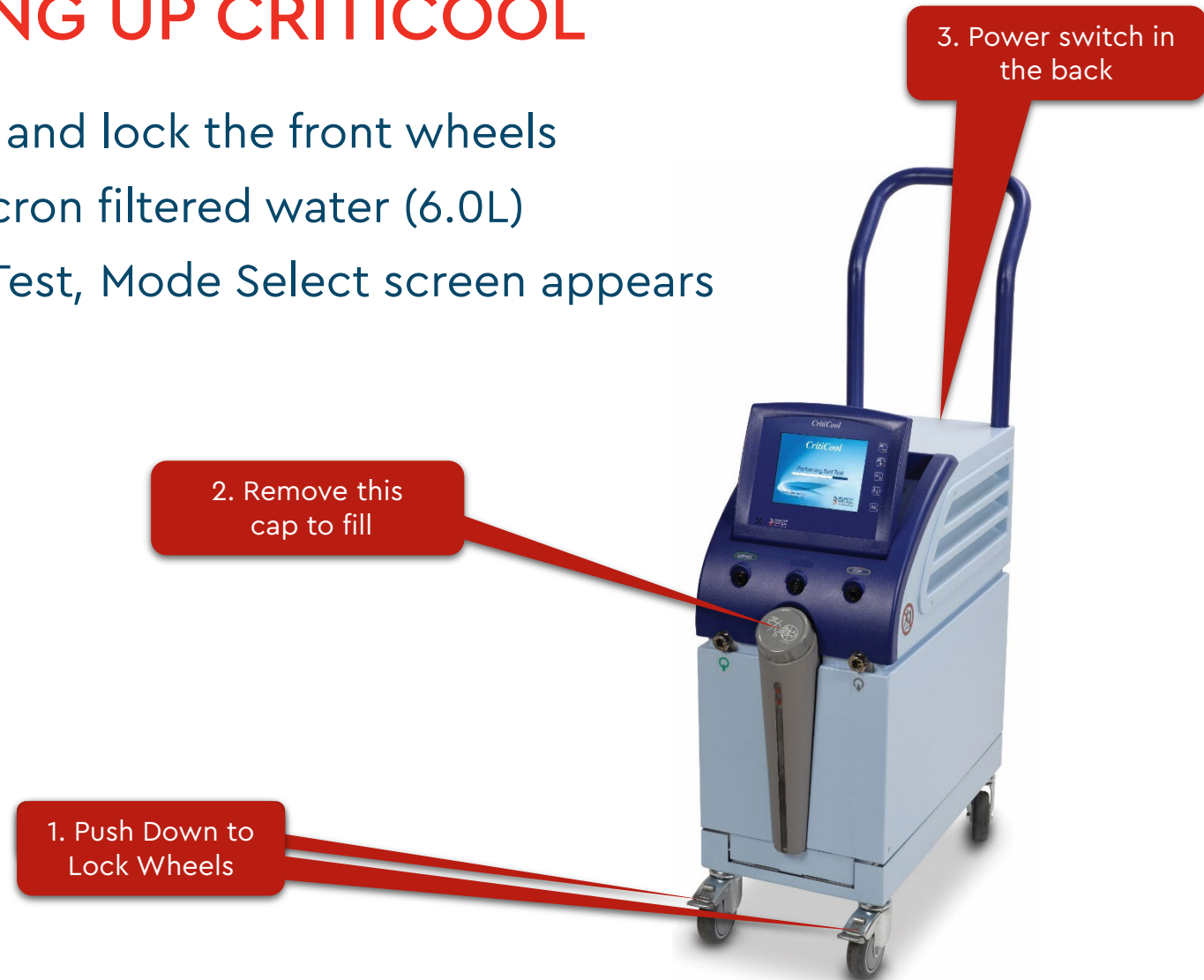


6



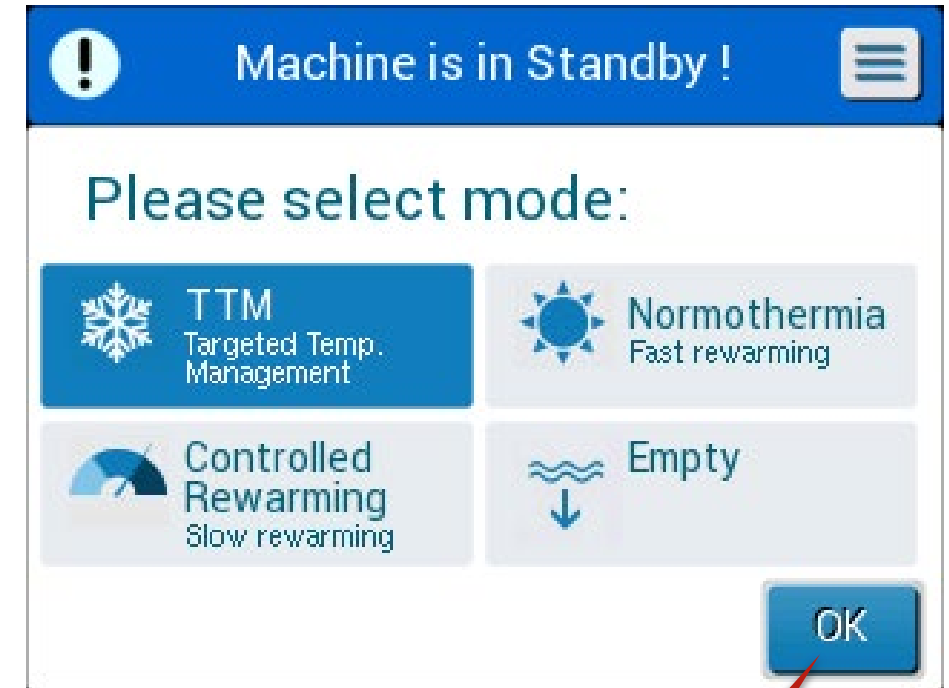
STEP BY STEP: TTM – SETTING UP CRITICOOL

1. Place the CritiCool unit near the bed and lock the front wheels
2. Fill tank with sterile water or 0.22 micron filtered water (6.0L)
3. Power ON switch - after a short Self Test, Mode Select screen appears



STEP BY STEP: TTM – SETTING UP CRITICOOL

1. After self test is complete, the start up Mode Select screen appears.
2. Push **OK** to select **TTM** mode (default Mode)
3. CritiCool is now cooling and circulating the water internally



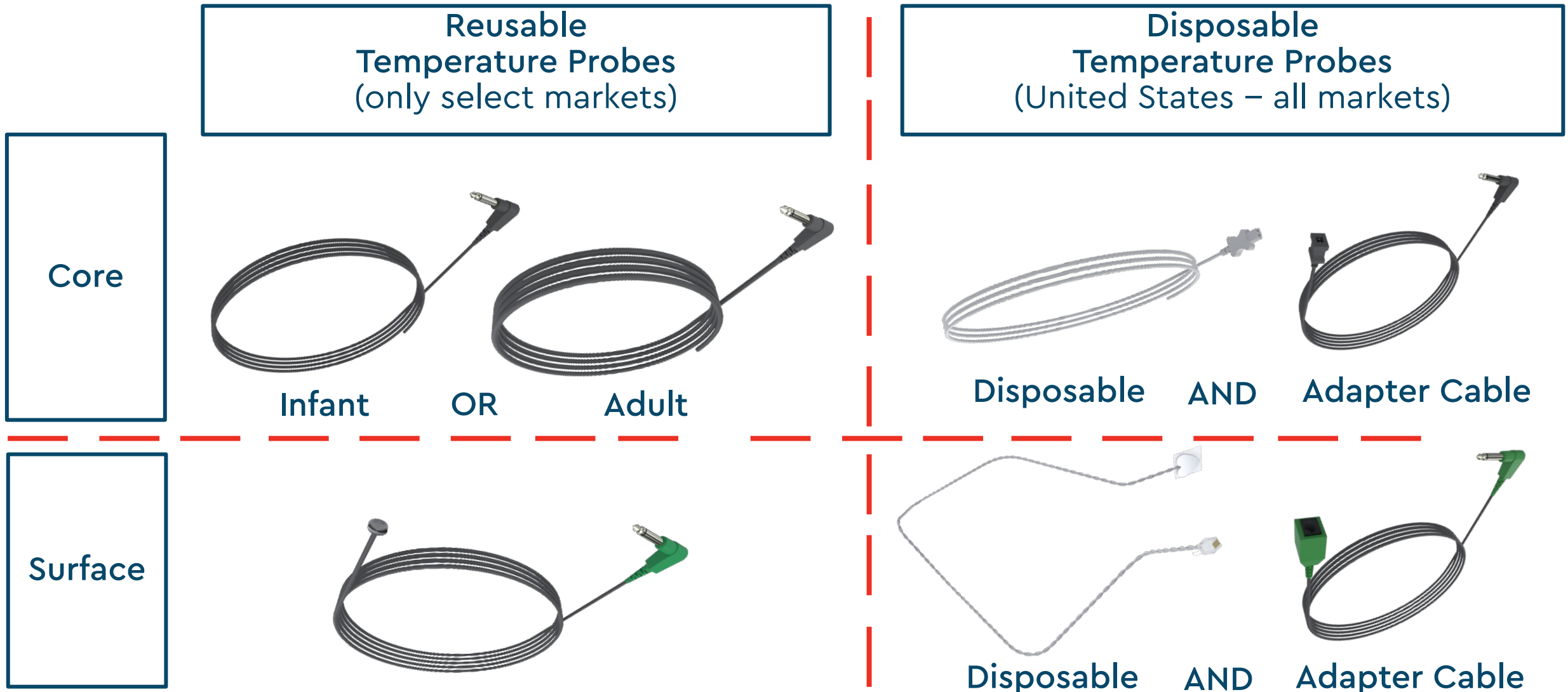
Touch OK to
start TTM

STEP BY STEP – SETTING UP CUREWRAP

1. Place the appropriate CureWrap on the bed or underneath patient
 - See CureWrap Instructions For Use



CHOICE OF TEMPERATURE PROBE TYPE

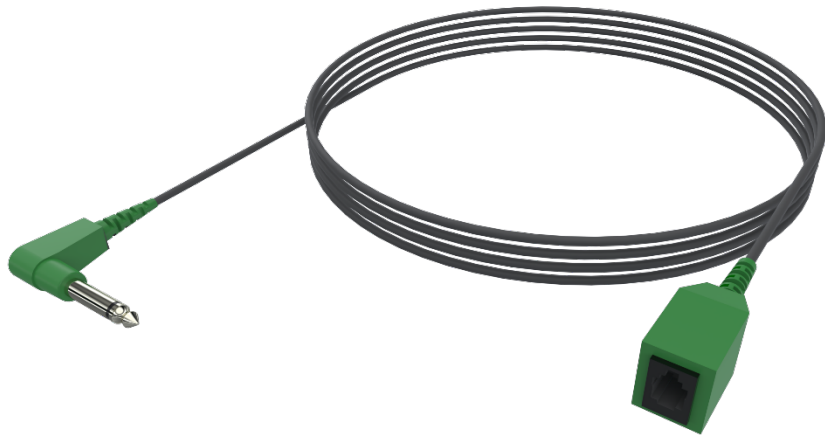


STEP-BY-STEP: SETTING UP CRITICOOL

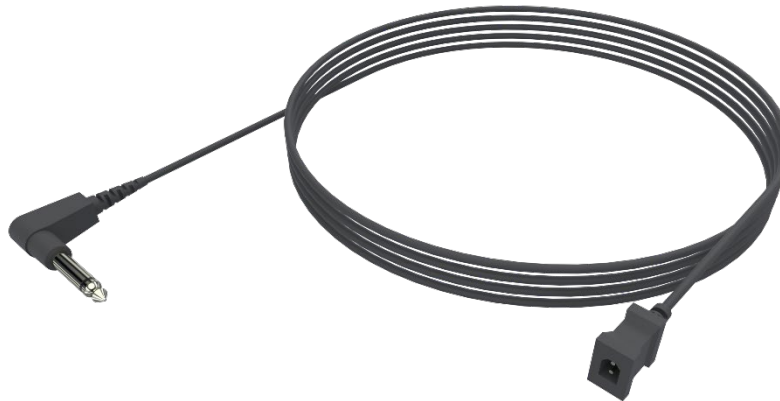
For use with Disposable Probes:

- Connect **Core** cable to the **Core** socket and **Surface** cable to the **Surface** socket

SURFACE on left
Green color coding



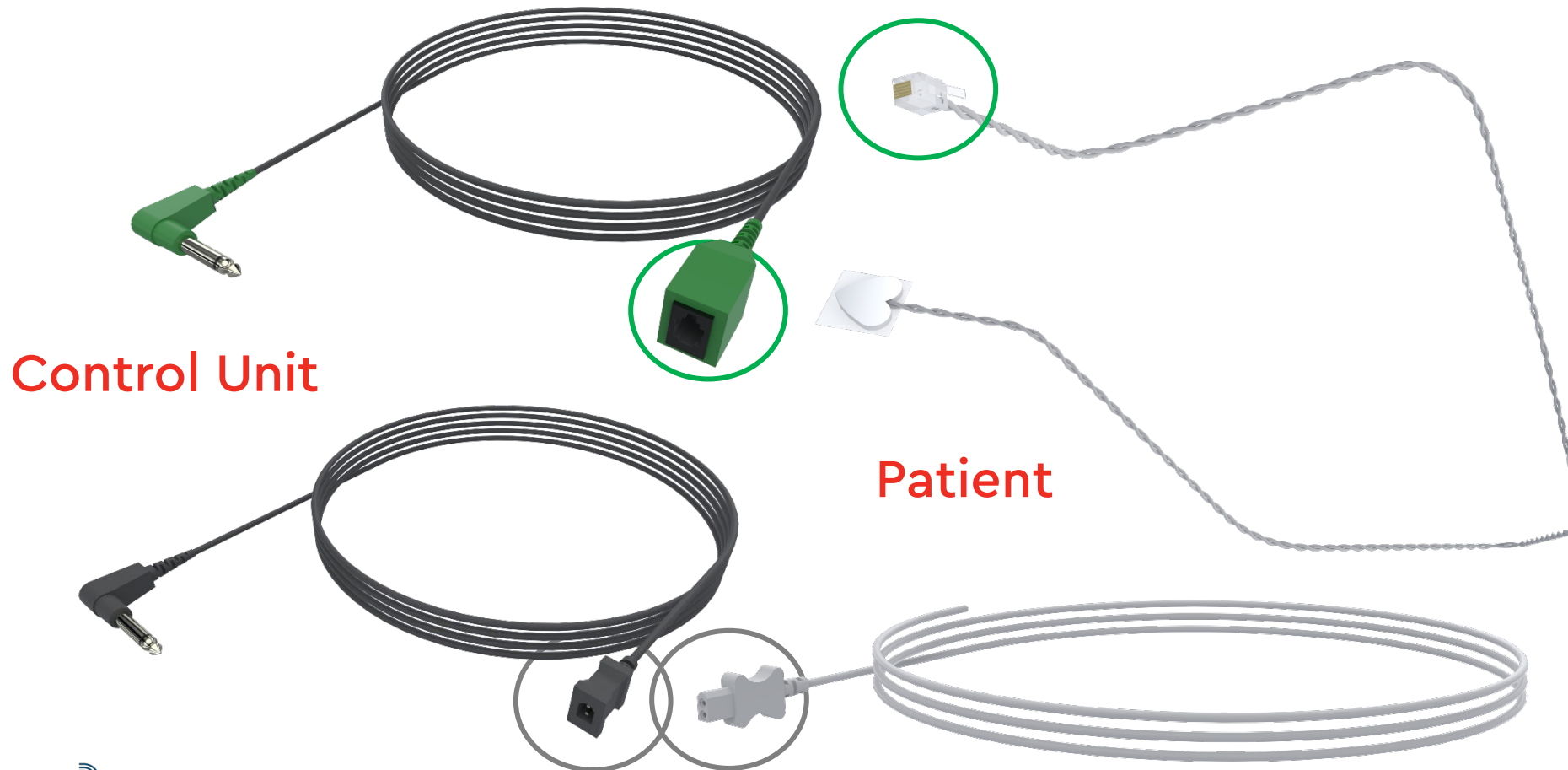
CORE on right
Gray color coding



Cables shown above are representative only.

STEP-BY-STEP: SETTING UP THE PATIENT

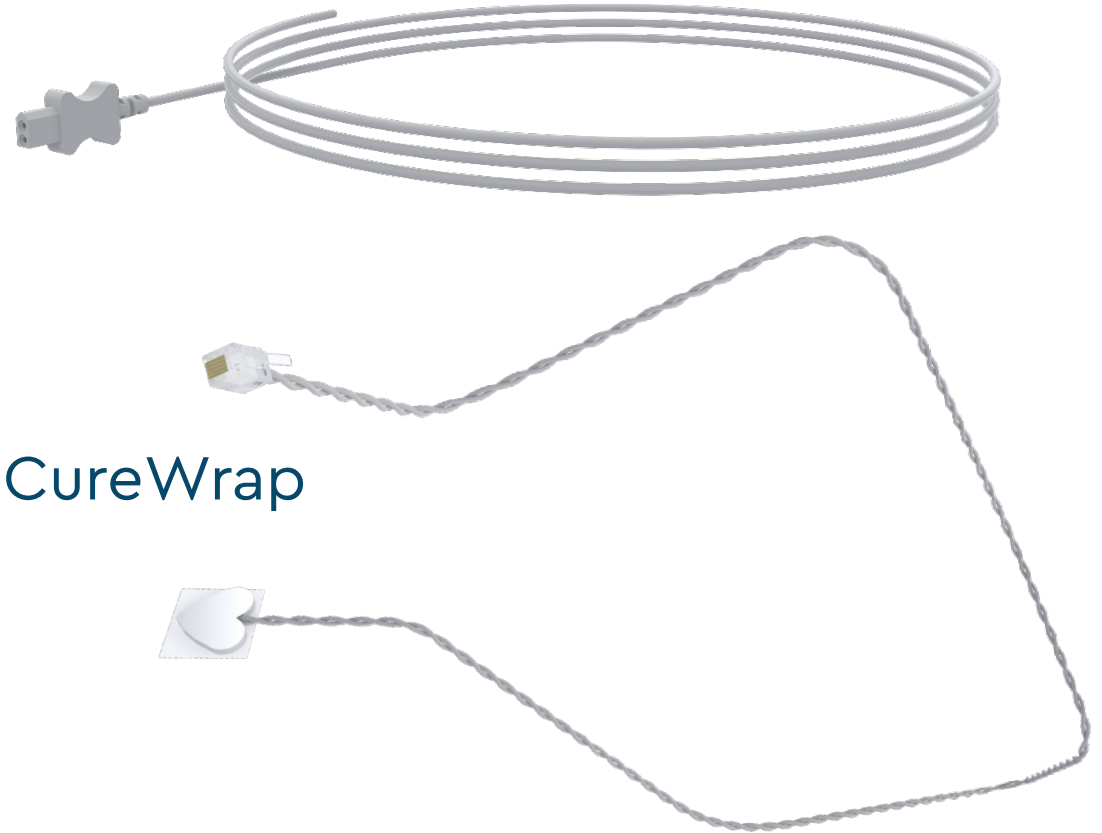
- Connect Core sensor to the Core Adapter Cable and the Surface sensor to the Surface Adapter Cable



STEP-BY-STEP: SETTING UP THE PATIENT

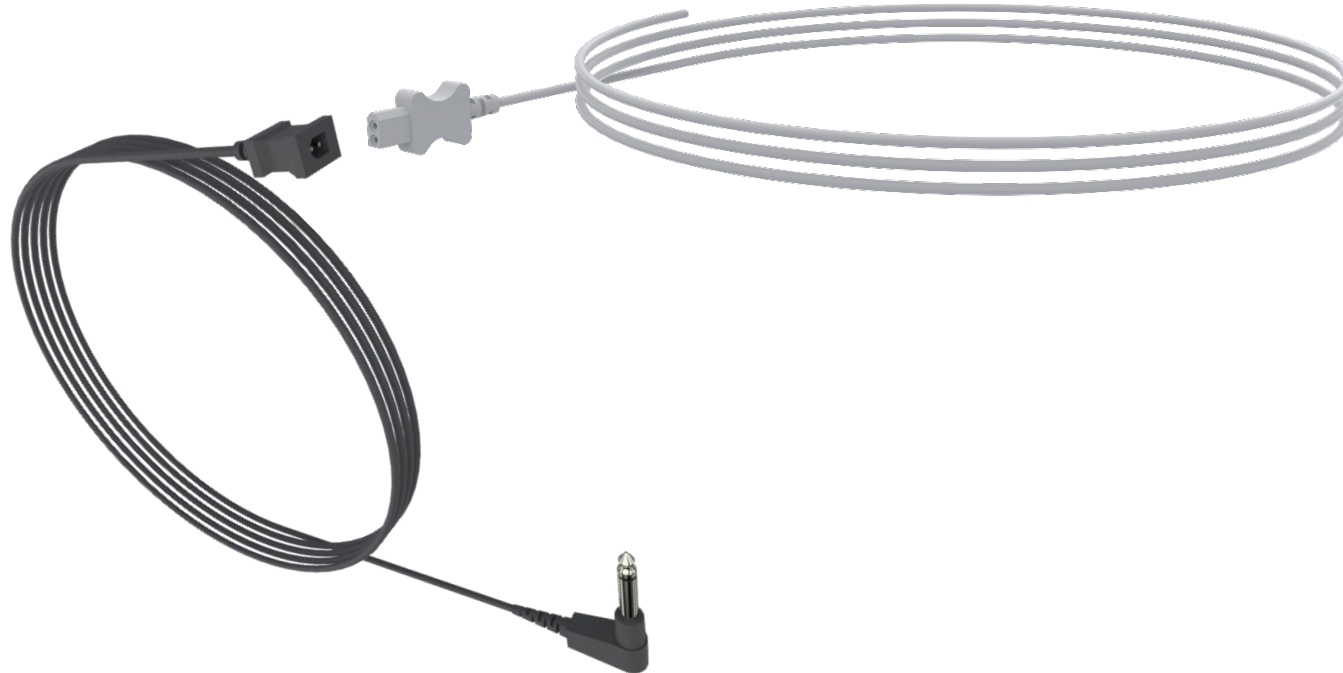
Insert Core sensors into the patient and position the Surface sensor on the patient skin

- **Core Probe Placement:**
 - Rectal/esophageal
 - 014-00322 or 014-00220
- **Surface Probe Placement:**
 - Do not place skin sensor under the CureWrap
 - Neonates: often by clavicle
 - 014-00321



STEP-BY-STEP: SETTING UP THE PATIENT

- CritiCool cannot thermoregulate without a valid Core readout
 - Therefore, water will not flow into CureWrap until the core probe is connected to CritiCool and the core probe is attached to the patient.



STEP-BY-STEP: SETTING UP CUREWRAP

- Connect metal fittings on blue hose to metal fittings on the front of CritiCool



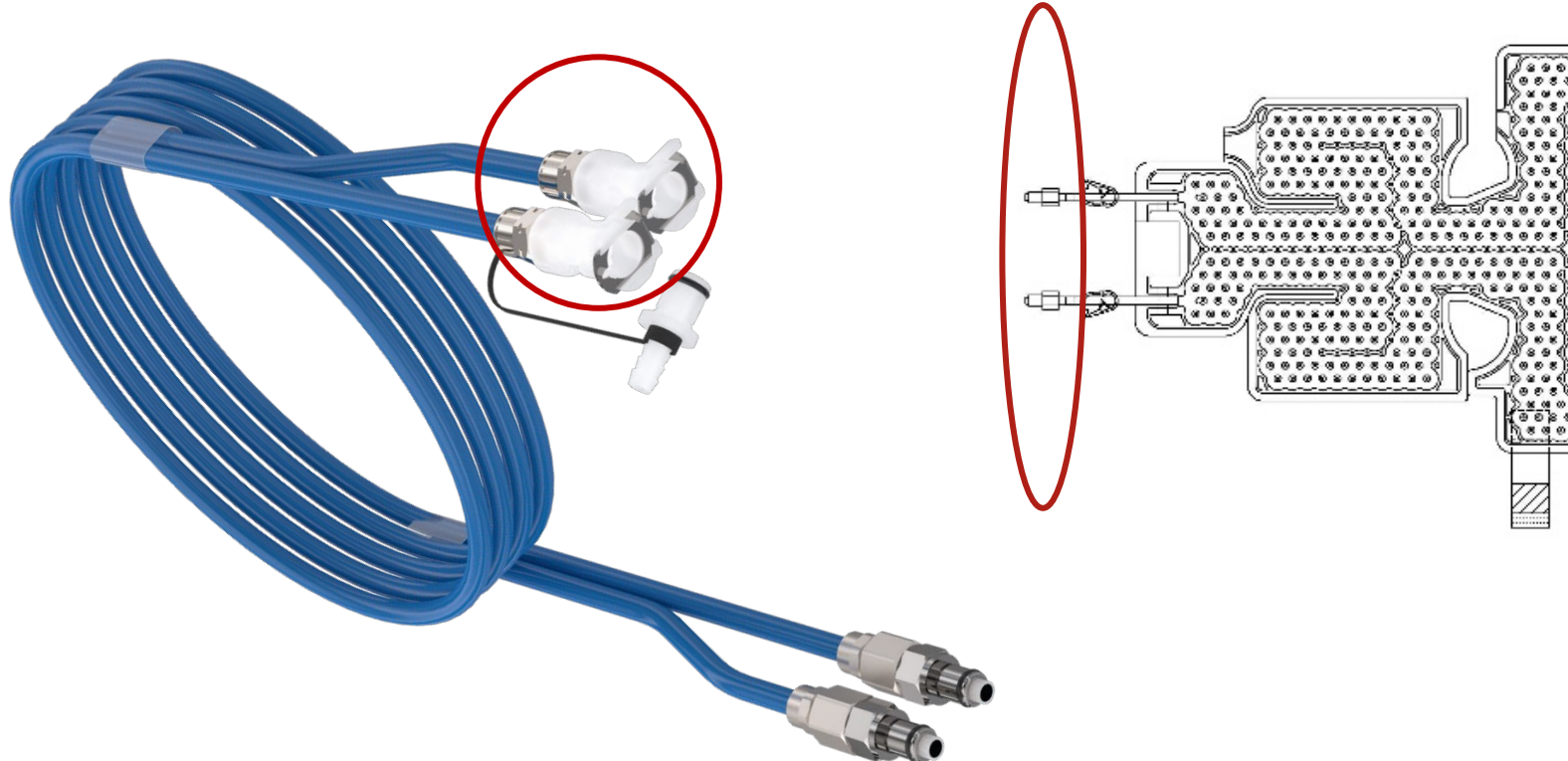
Water in coupling connector



Water out coupling connector

STEP-BY-STEP: SETTING UP CUREWRAP

- Connect plastic ends of blue connecting water hoses to wrap.
 - Wrap should be filled with water prior to wrapping patient
 - Ensure clamps are OPEN



HOSES NEEDED FOR EACH CUREWRAP

	Type	Part Number	Number of Wraps per Package	Patient Height / Weight	Wrap Length / Width (m)
Single Size	Adult	508-03500	8	168-180 cm (Over 66")	2.030/1.354
	Infant	508-03518	8	2.5 to 4 kg (5.5 to 8.8 lb)	0.659/0.448
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	Pediatric (Large)	PEDLA008	8 (multi-size)	(x4) 91-104 cm (36 to 41") (x4) 104-122 cm (41 to 48")	1.225/ 0.841 1.390/1.054
	Pediatric (X-Large)	PEDXL008	8 (multi-size)	(x4) 122-135 cm (48 to 53") (x4) Over 135 cm (Over 53")	1.582/1.119 2.030 /1.354

Uses 2x3 Way Connecting Water Hoses: 200-00147



Uses 2x2 Way Connecting Water Hoses: 200-00109



Uses 2x3 Way Connecting Water Hoses: 200-00147



IF USING CUREWRAP 500-03500 (ADULT/PEDIATRIC XL):

Use the 2x3 Way Water Connecting Tubes

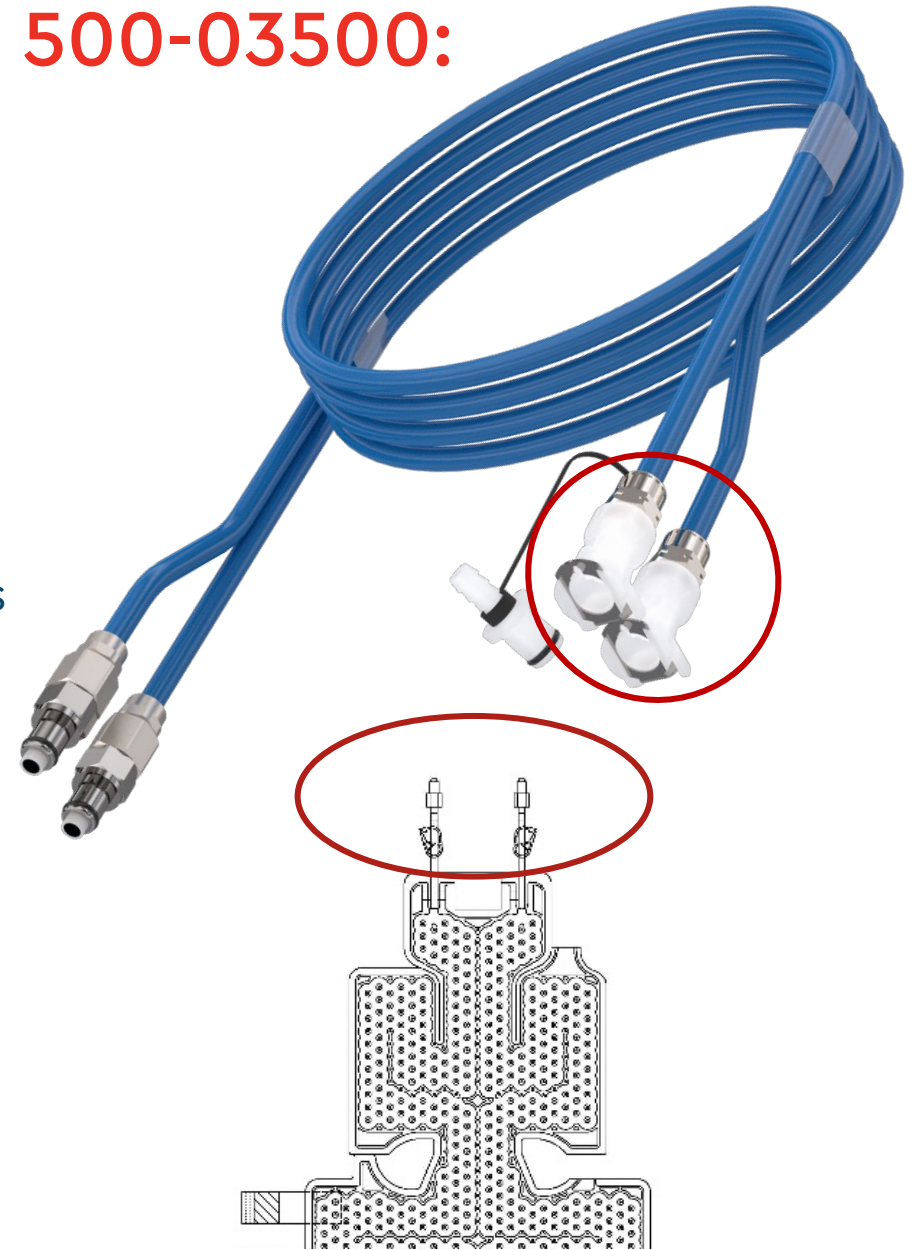
- The 2x3 way Connecting Water Hoses (200-00147) are needed for 500-03500
- 500-03500 is sold in two different boxes of CureWraps:
 - 508-03500 (includes eight 500-03500 CureWraps)
 - PED-XL008 (includes four 500-03500 and four 500-03548 CureWraps)
- 500-03500 has 3 connectors to the CureWrap.
- The 2x3 Way Hoses are included in all Adult Accessory Kits or can be ordered separately.



IF USING A CUREWRAP OTHER THAN 500-03500:

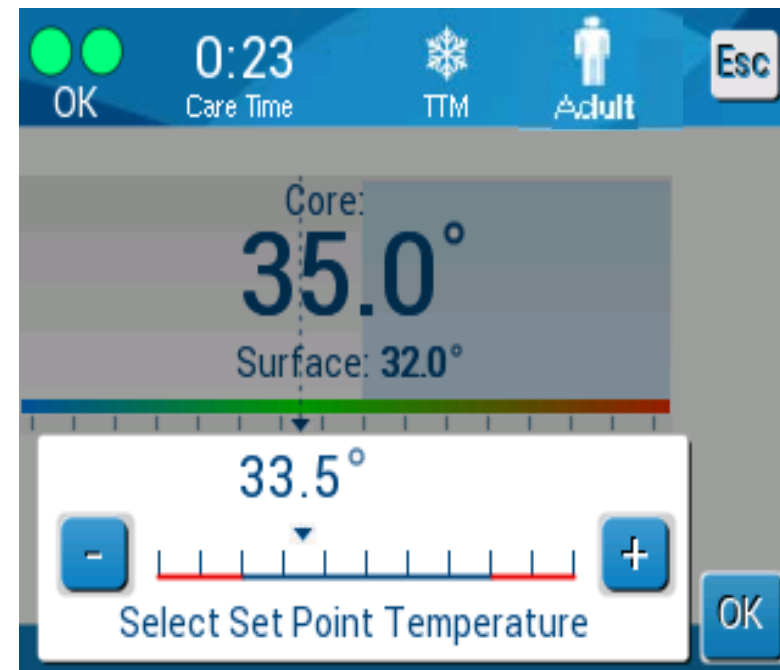
Use the 2x2 Way Water Connecting Tubes

- The 2x2 way Connecting Water Hoses (200-00109) are needed for all wraps other than 500-03500.
- All wraps except 500-03500 have 2 connectors to the CureWrap.
- The 2x2 Way hoses are included in all Infant Accessory Kits or can be ordered separately.



STEP-BY-STEP: TTM

- The default Set Point (SP) Temperature is **33.0°C in Adult Mode**
 - The Default Set Point temperature for Adult Mode can be adjusted in Settings
- The default Set Point (SP) Temperature is **33.5°C in Neonatal Mode**
- If required, change the SP temperature by using the Set Point soft key on the screen



SECURING THE CUREWRAP AROUND THE PATIENT

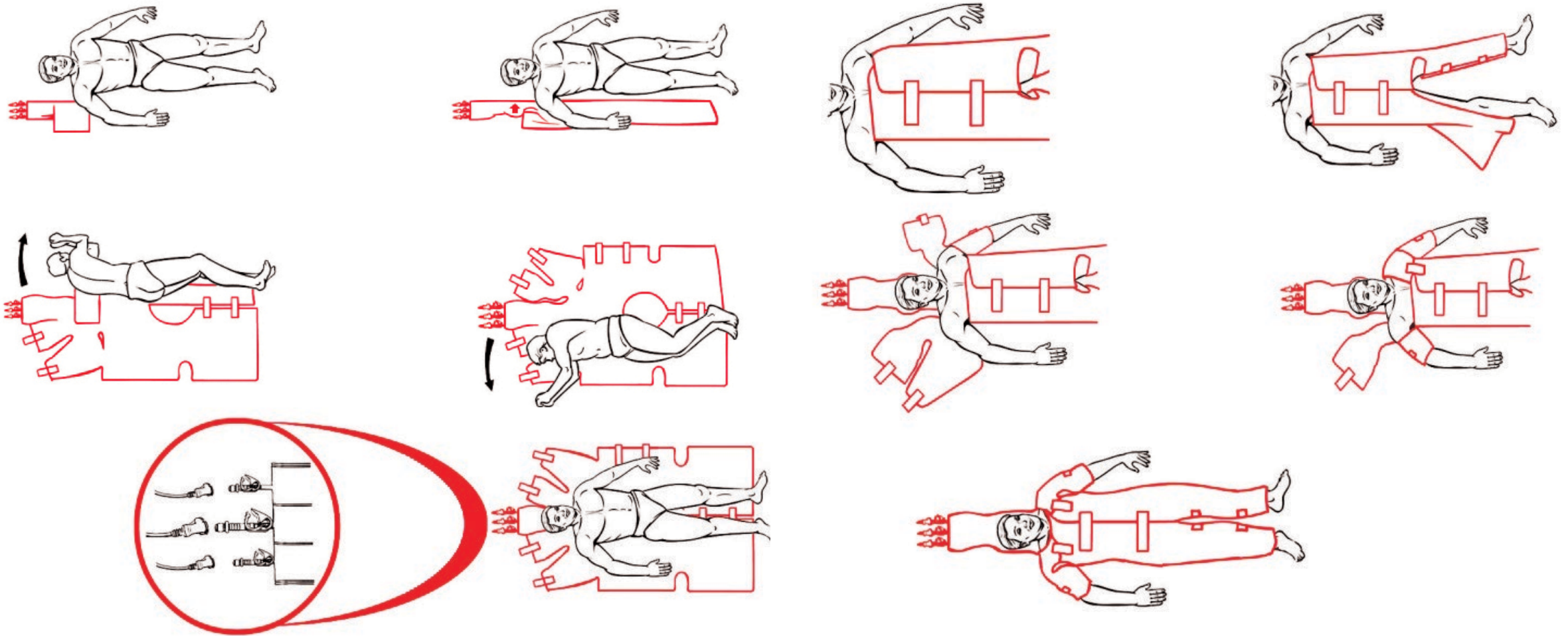
1. Confirm that CureWrap is filled with water
2. Secure CureWrap on the patient (see CureWrap Instructions For Use)

Note:

- Ensure clamps to the wrap are open
- Ensure CureWrap fits loosely; there should be a finger's width space
- Do not use the CureWrap to lift the patient
- Avoid handling the CureWrap with sharp objects
- Constant clicking sound may indicate water obstruction
 - Check to ensure the clamps are open and water is allowed to flow to CureWrap and that water is flowing



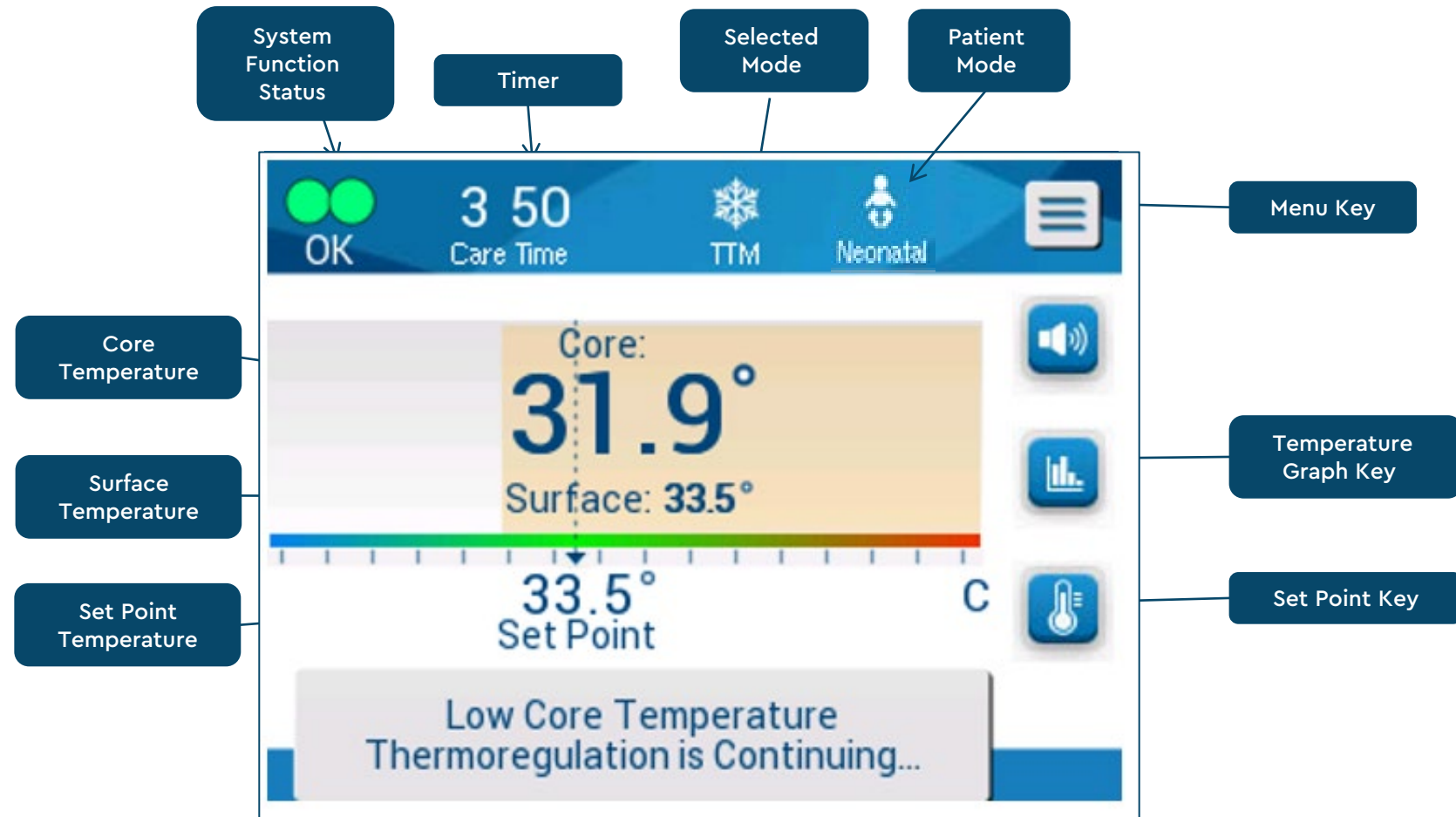
SECURING THE CUREWRAP AROUND THE PATIENT



Model 500-03500 CureWrap shown

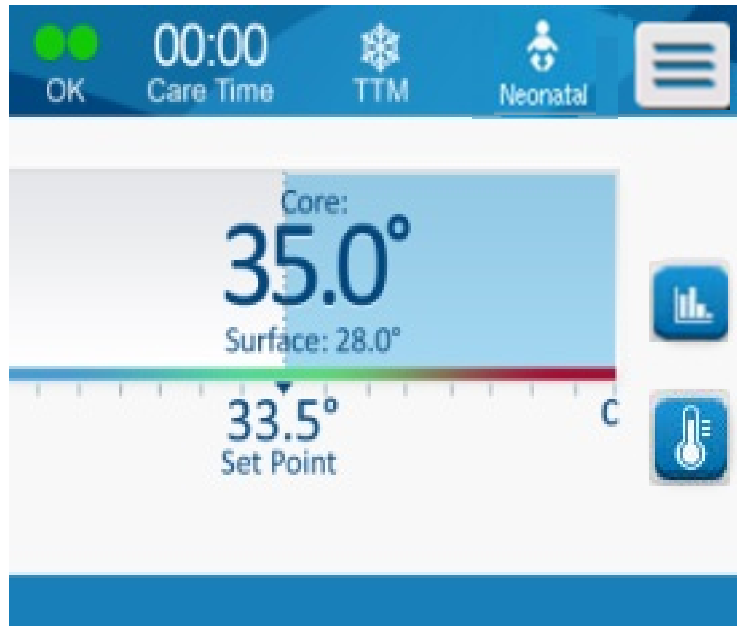


MAIN OPERATION SCREEN



CRITICOOL TOUCHSCREEN

Touch Keys



- 5.7" large operational touch-screen
- 5 soft keys
- Power soft key

Soft Button Keys



Main Menu / Escape



Alarm tone ON/OFF



Show graph / Up Arrow



Open Settings panel / Down Arrow



Accept changes

MENU OPTIONS

Touch the **Menu Icon** / **Soft Button Key**



Drop Menu will appear with the following options:



← Once the Menu drop down ESC icon appears, touch it to return to previous screen

SELECT SET POINT TEMPERATURE

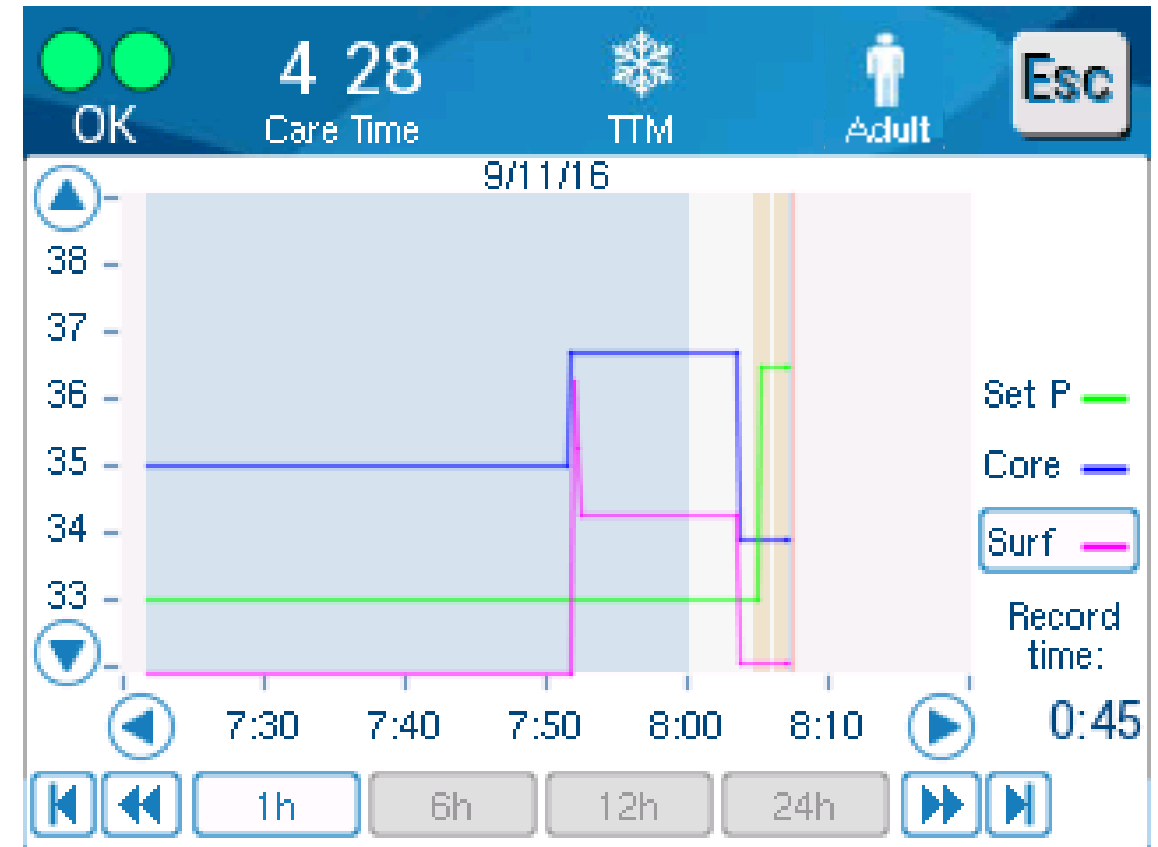
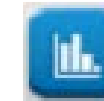
Set Point = Patient's Target Temperature

- The CritiCool cools/warms the patient to reach and maintain the preset **Set Point**
- TTM default set-point:
 - **33.0°C** for Adult Mode
 - **33.5°C** for Neonatal Mode
- To change the Set Point:
 1. Touch the Set Point Icon/button
 2. Use **+/-** to select the desired **Set Point**
 3. Press **OK** to confirm



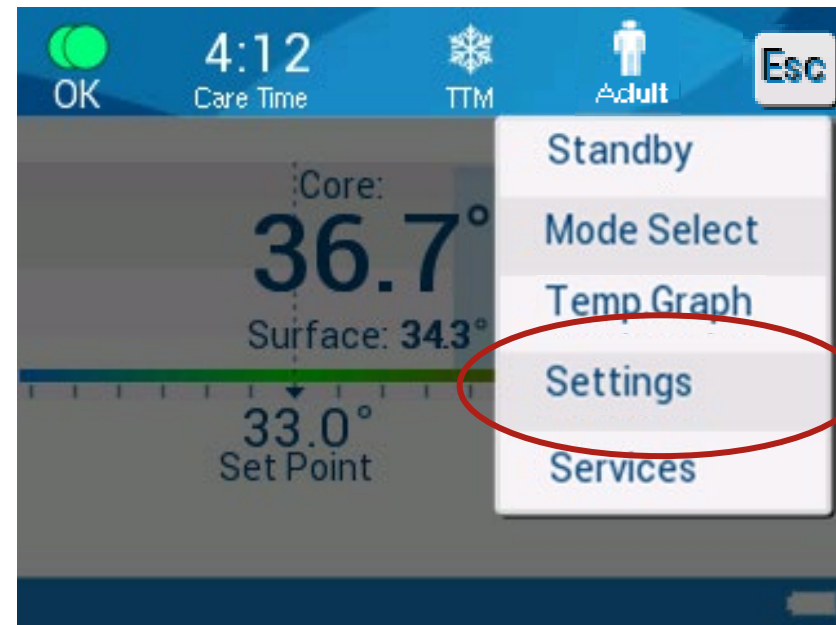
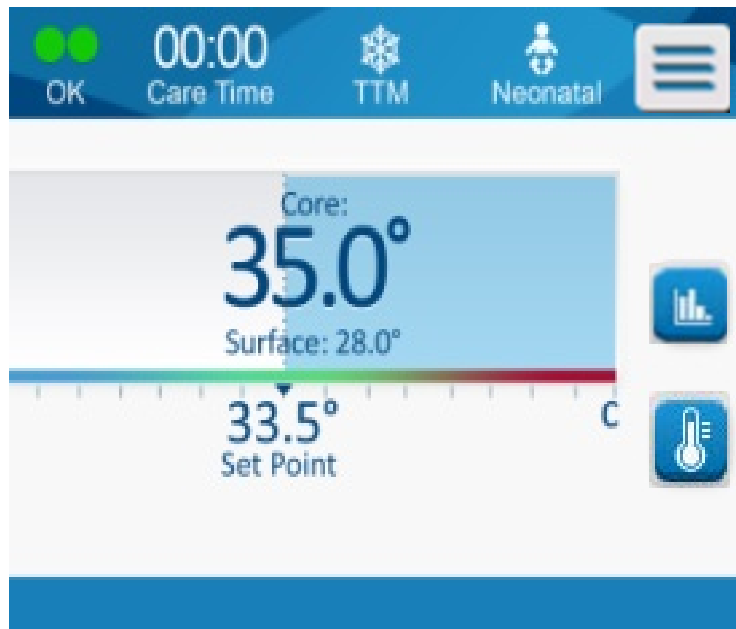
TEMPERATURE GRAPH

- Use the Temp Graph icon / soft key to enter a Graphic Display of the current or last case temperature data
- CritiCool displays the current case temperature data
- 1 hour, 6 hours, 12 hours and 24 hours displays are available
- Last case data is saved until next patient is connected
- Press **ESC** to return to main screen



SETTINGS SCREEN – PASSWORD PROTECTED

- Password for the Settings Screen: ____ (Enter once trained; See slide 38)



SETTINGS SCREEN – PASSWORD PROTECTED

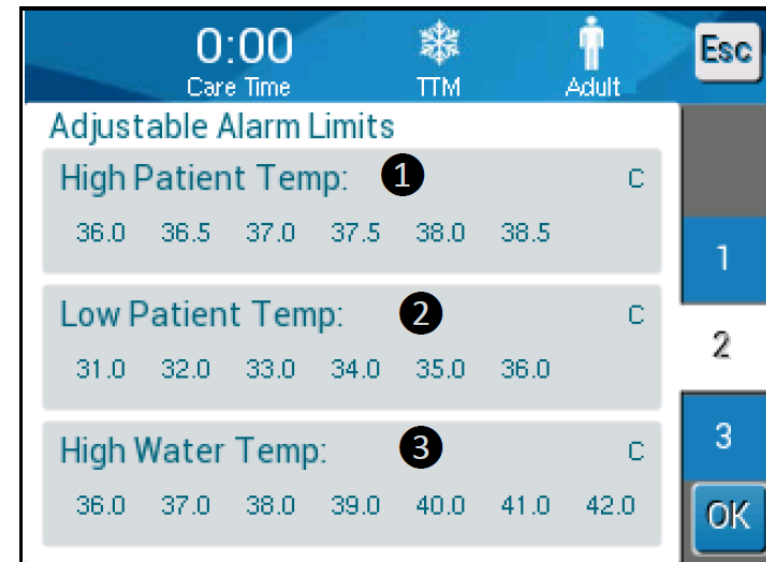
- There are **Four** Screens in the Settings mode
- Push **OK** to confirm and return to main screen
- The CritiCool keeps the last setting to the next power up
 - The default/last selection is highlighted

Screen #1 – General Settings



Screen #1 - General Settings interface. The top bar shows 'OK', '4 17 Care Time', 'TTM' (with a snowflake icon), 'Adult' (with a person icon), and 'Esc'. The main area has three sections: 'Neonatal' and 'Adult' tabs (with 'Adult' selected), 'Language: English', and 'Default SP: 33.0 34.0 35.0 36.0' (with '34.0' highlighted). Below this is 'Degree: C F' (with 'C' highlighted) and 'Rewarming Step: 0.05 0.1 0.15 0.2 0.25 0.3 0.4 0.5' (with '0.2' highlighted). A vertical navigation bar on the right has buttons '1', '2', and '3', with '2' circled in red. An 'OK' button is at the bottom right.

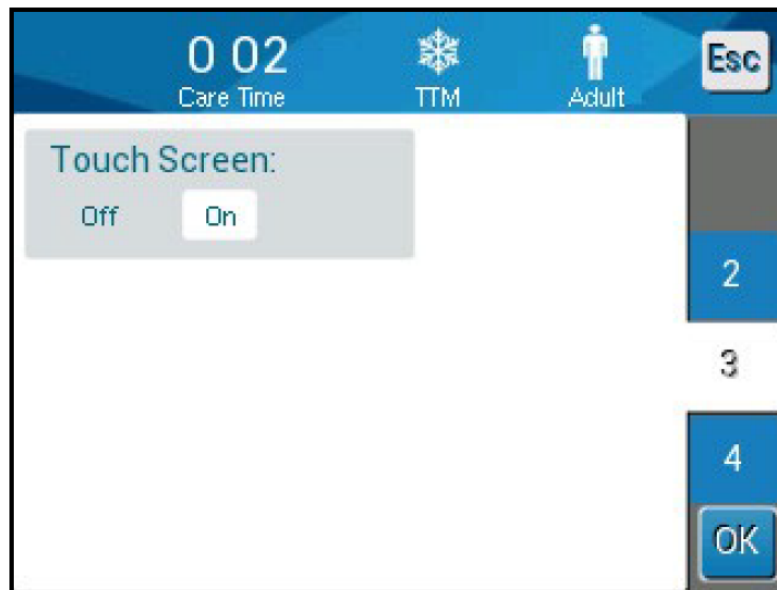
Screen #2 – Setting Alarm Limits



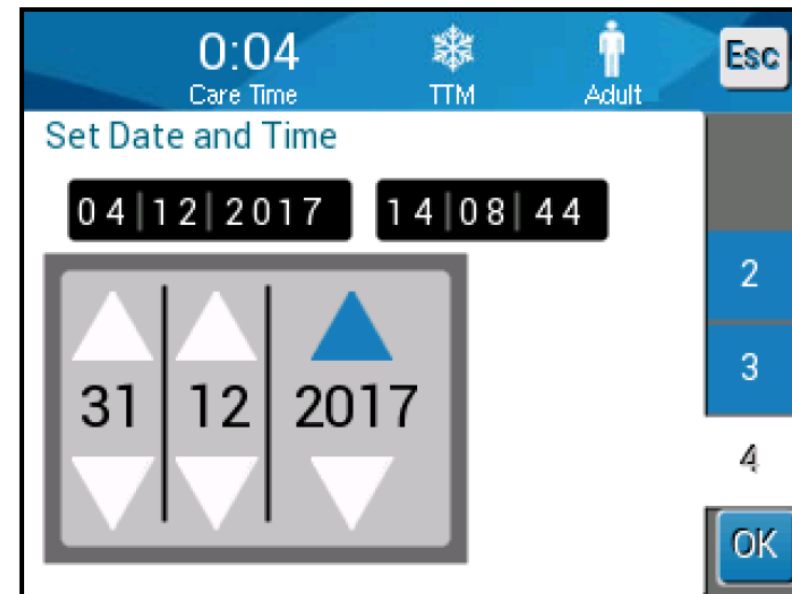
Screen #2 - Setting Alarm Limits interface. The top bar shows '0:00 Care Time', 'TTM' (with a snowflake icon), 'Adult' (with a person icon), and 'Esc'. The main area is titled 'Adjustable Alarm Limits' and has three sections: 'High Patient Temp: 1' with values '36.0 36.5 37.0 37.5 38.0 38.5' (with '37.5' highlighted), 'Low Patient Temp: 2' with values '31.0 32.0 33.0 34.0 35.0 36.0' (with '34.0' highlighted), and 'High Water Temp: 3' with values '36.0 37.0 38.0 39.0 40.0 41.0 42.0' (with '40.0' highlighted). A vertical navigation bar on the right has buttons '1', '2', and '3', with '2' highlighted. An 'OK' button is at the bottom right.

SETTINGS SCREEN – PASSWORD PROTECTED

Screen #3 – Touch Screen ON/OFF



Screen #4 – Set Date and Time



PASSCODE FOR SETTINGS SCREEN

- Enter into:
 - Settings section 4-18 in CritiCool User Manual
 - Appendix A at the end of the CritiCool User Manual

Settings

The settings panels consist of three pages of default settings for the system.

NOTE: The settings is password protected and is available from a Belmont Authorized Representative. Only authorized personnel may change the settings.

The passcode for the Settings screen is _____.

To pre-configure the settings:

1. From the Menu panel choose **Settings**.
2. Enter the password. The Settings window appears.
3. Touch the page numbers to move between the pages.

APPENDIX A: Belmont Medical Technologies CUSTOMER SERVICE REPRESENTATIVE

WARNING!!! The following details are necessary to contact your Belmont Medical Technologies representative. Keep this form with the User Manual for ease in case your CritiCool® device is in need of service.

Representative Name:	
Company Name:	
Address:	
Telephone No:	
Fax:	
E-mail:	

CritiCool® Passcode for the Settings Screen:



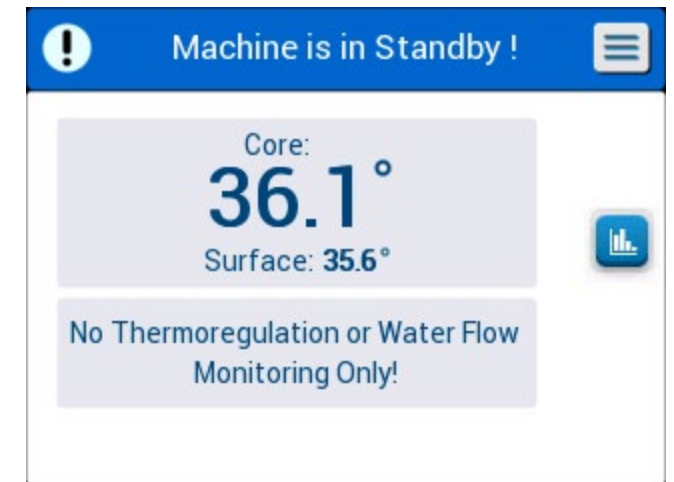
STANDBY MODE

To turn on Standby mode:

1. Touch **MENU** icon/button
2. Select **Standby**
 - Water flow to the CureWrap will stop
 - CureWrap will deflate
 - CritiCool will continue to monitor patient's temperature (as long as core temperature probe in place)

To resume thermoregulation:

1. Touch **MENU** icon/button
 2. Select **OPERATE**
- Turn on Standby mode to stop the water flow to the wrap:
 - End of therapy, before disconnecting the CureWrap



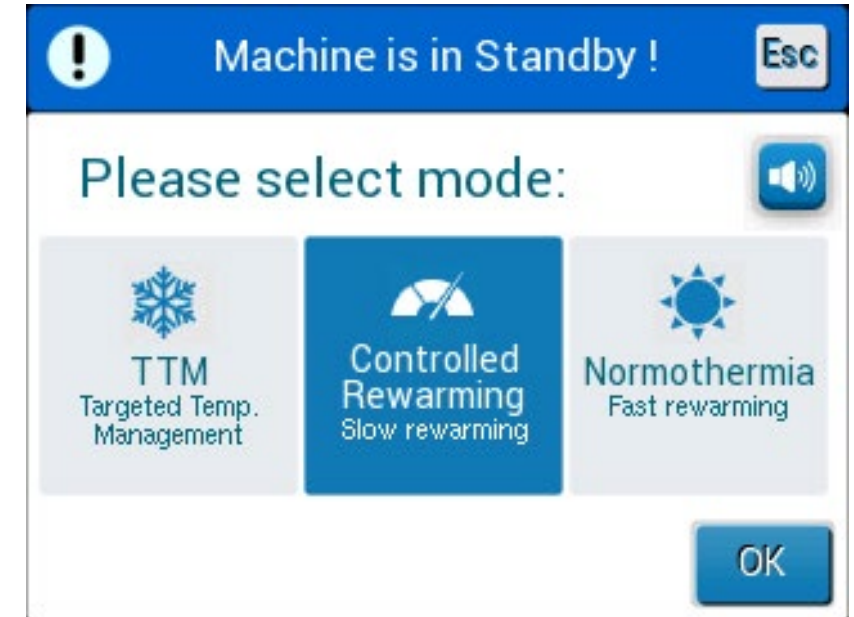
SELECT MODE

Mode Selection:

- **TARGETED TEMPERATURE MANAGEMENT (TTM)**
The default mode for body thermoregulation
- **CONTROLLED REWARMING**
Use this mode for slow re-warming
- **NORMOTHERMIA**
Use this mode for fast warming and Normothermia Management

To select/change a mode:

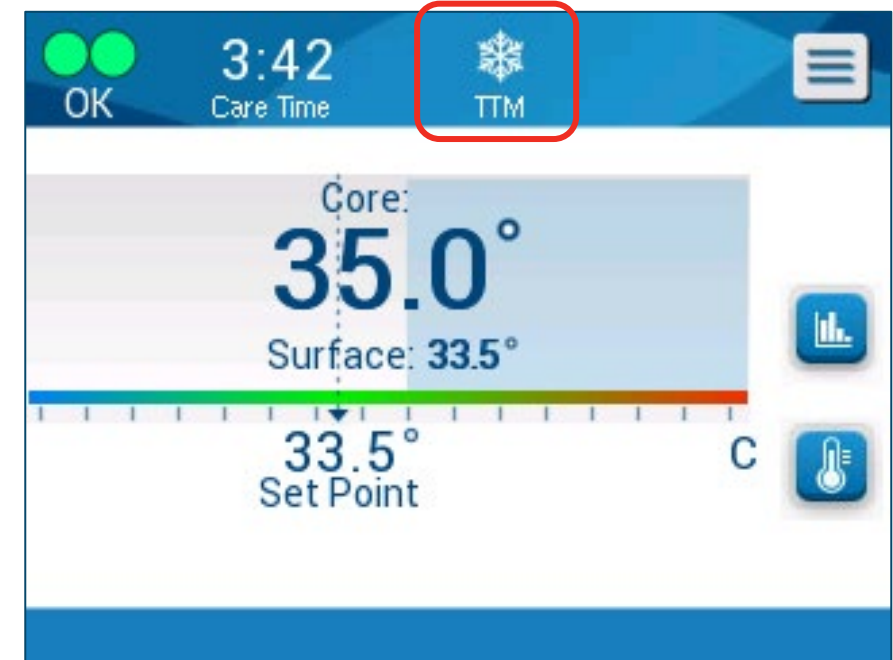
1. Touch the **MENU** icon/button
2. Select **MODE SELECT**
3. Touch the desired mode
4. Touch **OK** to confirm



TARGETED TEMPERATURE MANAGEMENT

TTM – The default mode

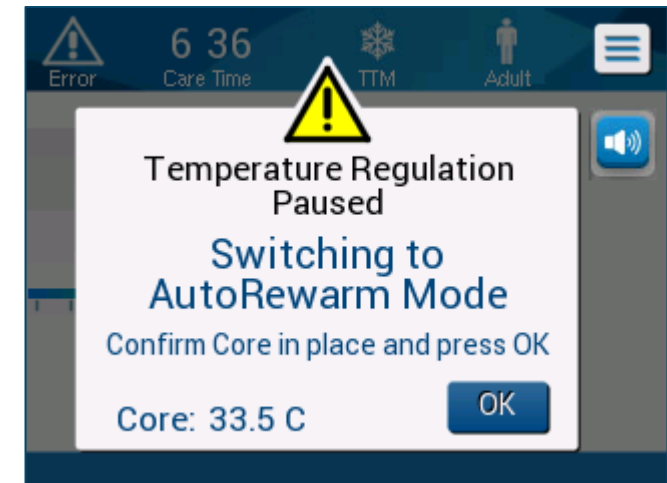
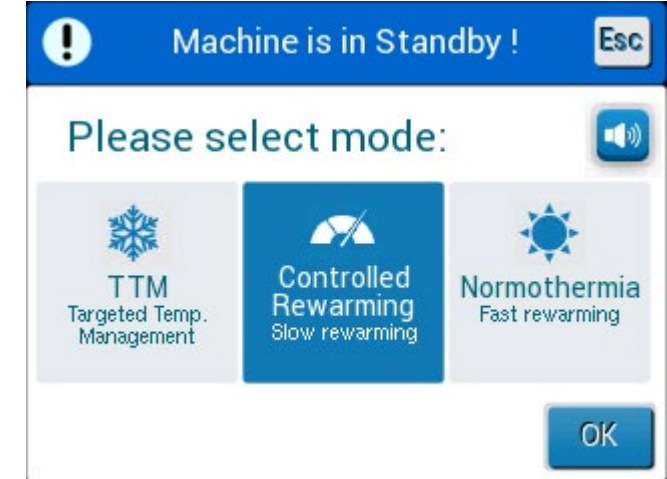
- Use this mode:
 - To reach a preset set point
 - To maintain patient temperature
 - For manual re-warming



CONTROLLED REWARMING

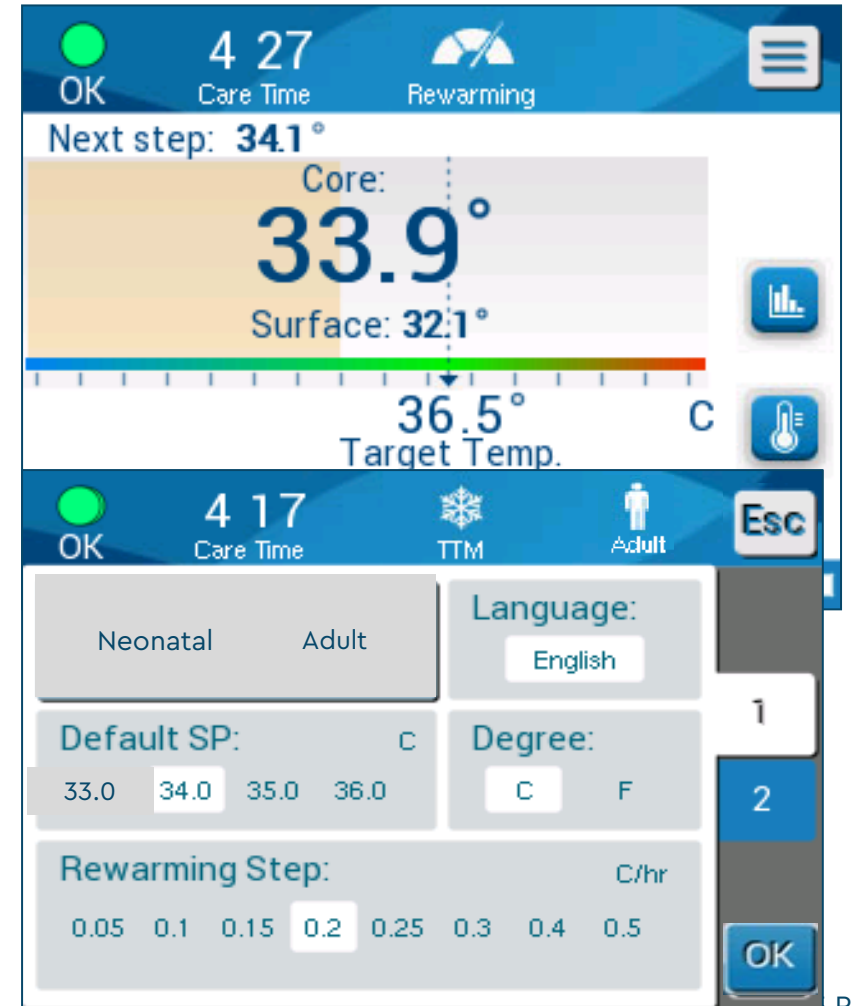
An automatic patient re-warming mode with steps per hour that are preset according to the hospital protocol in the Settings screen

1. Select **Controlled Rewarming** and push OK to confirm
 - *"Temperature Regulation Paused"*
 - *"Switching to AutoRewarm Mode"* messages appear
 - While these messages appear, the Rewarming has not started yet!
2. Push OK to confirm **Core** temperature probe is in place and start the rewarming process



CONTROLLED REWARMING – CONTINUED

- The CritiCool will reach the *Target Temp.* gradually by raising patient temperature according to the rewarming step per hour chosen in Settings
- Rewarming step per hour can be preset in the *SETTING* screen
- Rewarming step default: **0.2°C/hour**
- Rewarming step range: **0.05-0.5°C/hour**
- Target Temperature default: **36.5°C**
- Target Temperature range: **30°C to 40°C**
- Use the Target Temperature Touch/Soft Key to select a different target

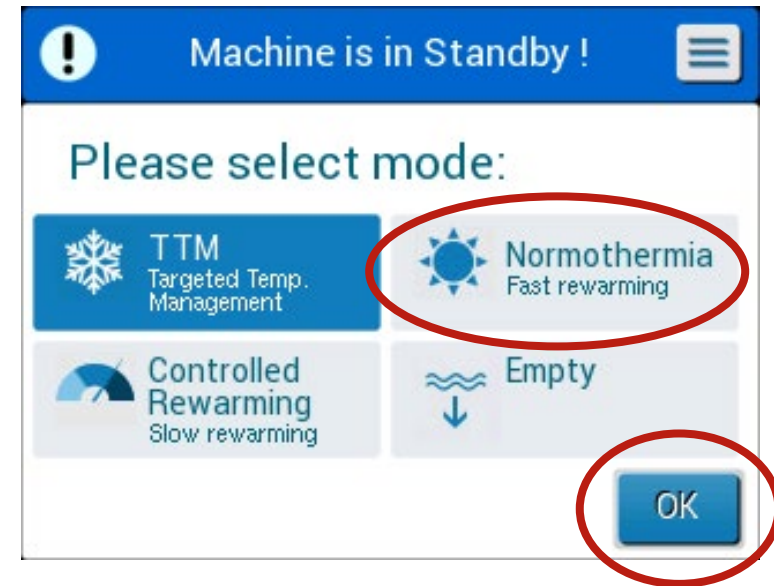


NORMOTHERMIA MODE

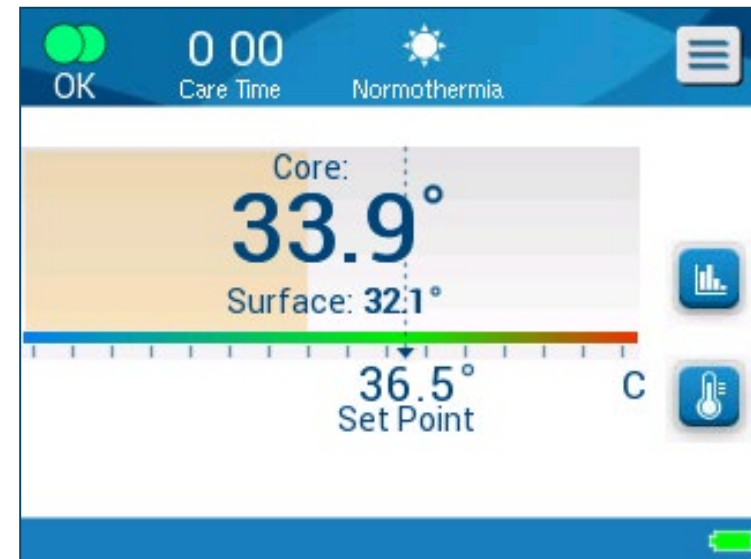
- Select Normothermia for fast rewarming

Note:

- This mode is used for fast rewarming
- It has **no** rewarming steps
- Algorithm aims to bring patient to the target temperature as quickly as possible



- The CritiCool warms the patient to reach and maintain the selected *Set Point*



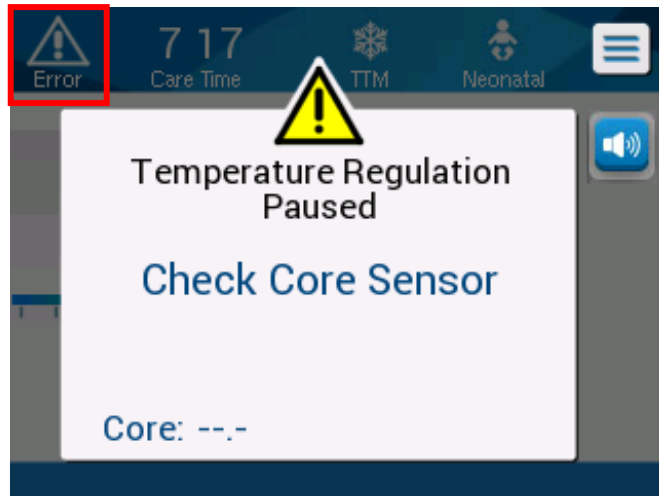



MESSAGES AND TROUBLESHOOTING

MESSAGES & TROUBLESHOOTING

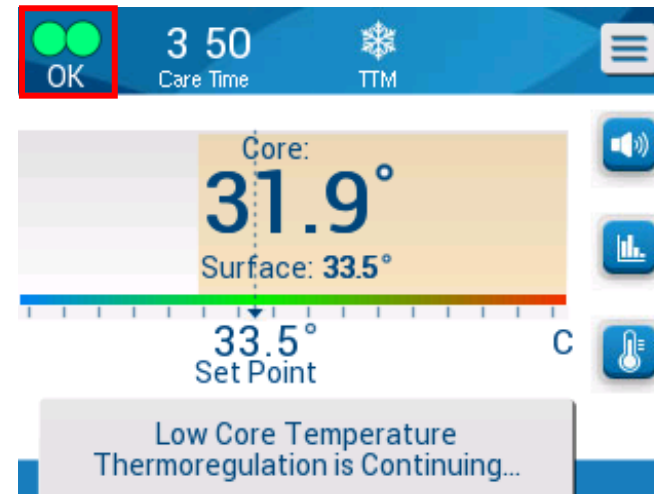
The CritiCool uses two types of messages:


Error Message



- Alarm sound
- Error Message screen
- Troubleshooting guidelines
- Error icon is on 

Informative Message

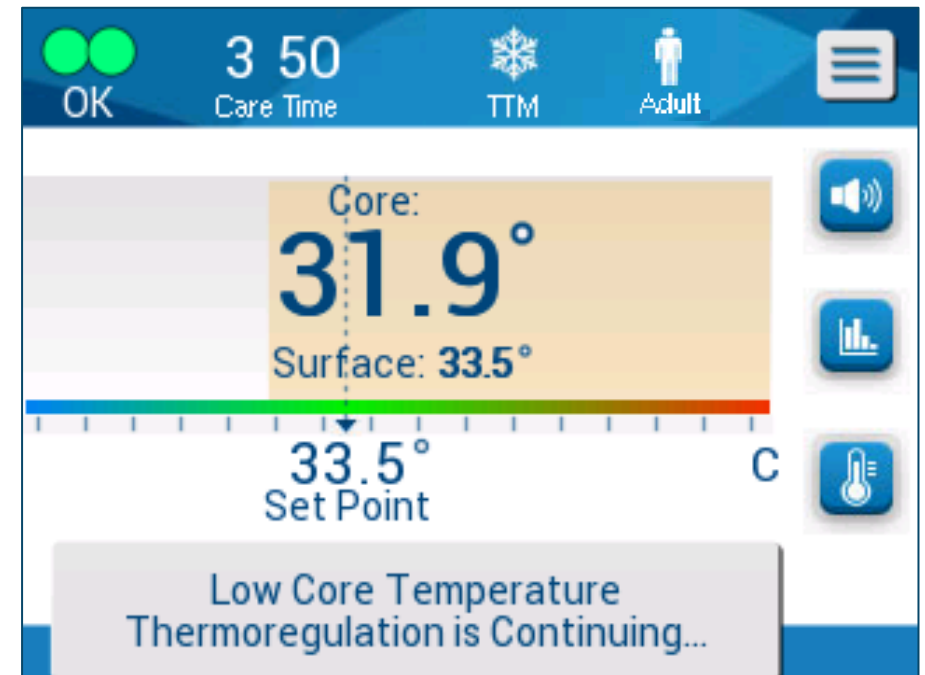


- Alarm sound
- Operation screen
- Thermoregulation continues
- System function status is on 

ALARM MESSAGE #1 (INFORMATIVE MESSAGE)

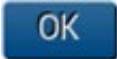
Core temperature is 0.8°C to 2°C lower than Set Point

- Staff awareness to patient's core temperature is needed
- No other action is needed
 - Alarm sound
 - Operation screen
 - Thermoregulation continues
 - System function status is on

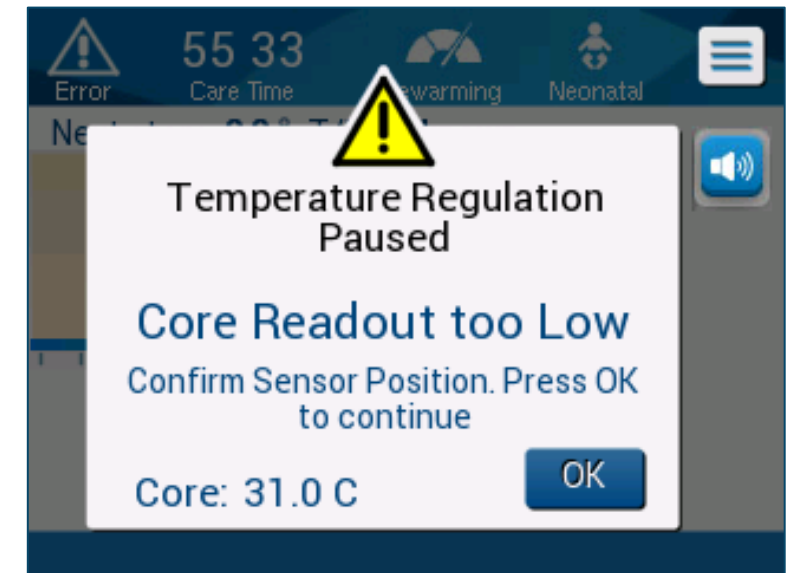


ALARM MESSAGE #2 (ERROR MESSAGE)

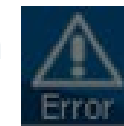
Core Temperature is at least 2°C lower than Set Point or below 31°C, whichever happens first

- **Thermoregulation Paused!**
- **Adult Mode:**
 - Water flow only stops if Core Temp <31°C
- **Neonatal Mode:**
 - Water flow to CureWrap stops
- Check Core temp sensor position and fix if necessary
- Touch  to confirm Core temp. and resume thermoregulation

After the user acknowledges the message on the screen, water will once again flow to the wrap and CritiCool will not alarm for that condition for 30 minutes. If after 30 minutes the alarm conditions apply, it will once again stop water flow and alert the user.



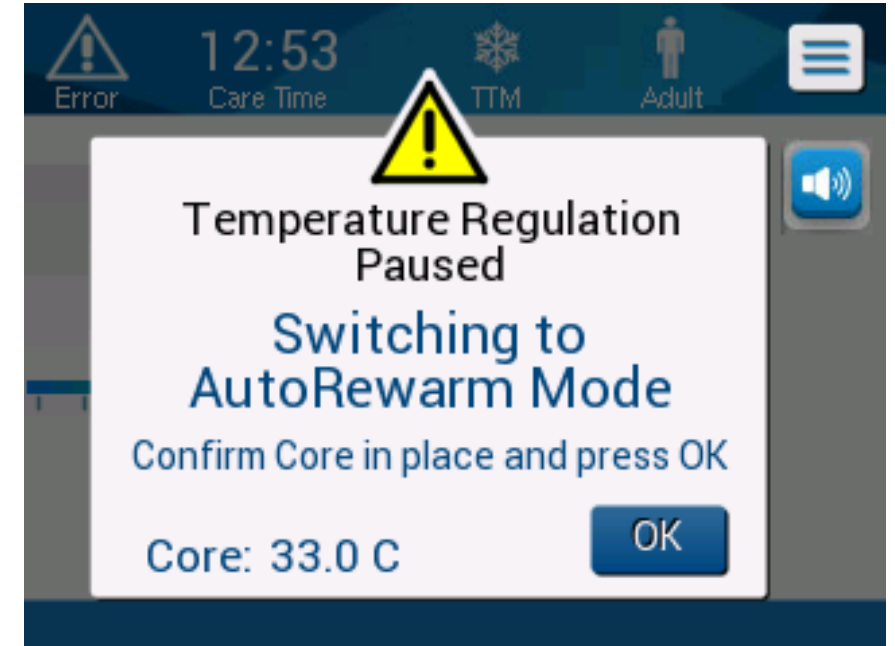
- Alarm sound
- Error Message screen
- Troubleshooting guidelines
- Error icon is on




ALARM MESSAGE #3: THERMOREGULATION PAUSED

When Switching to Controlled Re-warming Mode Patient's Core temperature probe position should be confirmed to initiate the automatic process

- Check Core temp sensor position and fix if necessary
- Touch  to confirm Core temp. and Start Re-warming



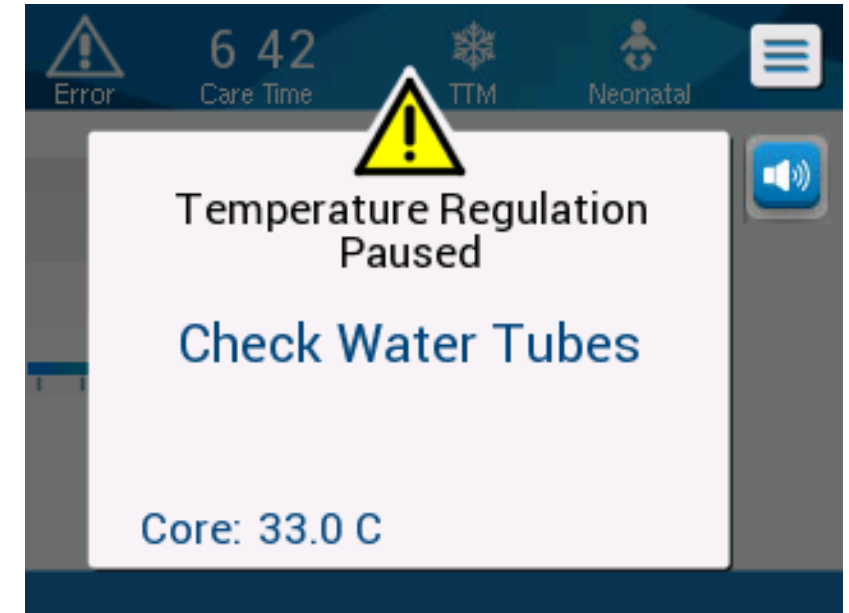
- Alarm sound
- Error Message screen
- Troubleshooting guidelines
- Error icon is on 

ALARM MESSAGE #4: CHECK WATER TUBES

Water flow to the CureWrap is interrupted

- Check the blue hoses are not kinked/bent
- Check that the blue hoses are flat near the CureWrap connections
- Check if the CureWrap is folded

The message will continue until the problem has been resolved.

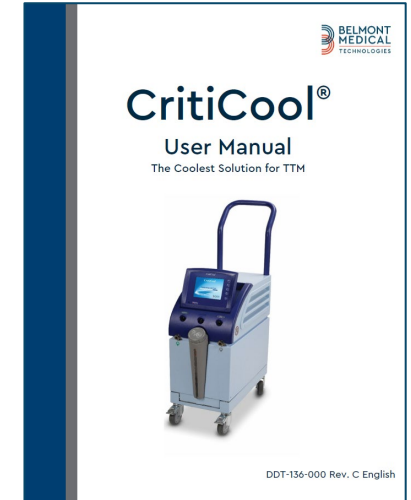


- Alarm sound
- Error Message screen
- Troubleshooting guidelines
- Error icon is on



PRESSURE RELIEF ALGORITHM

- **Initial Phase of Regulation:**
(when patient has yet to reach the target temperature)
 - 12 minutes of water flowing
 - 1 minute of no water flow
- **Steady State:**
(begins when patient reaches the set point temperature)
 - 12 minutes of water flowing
 - 12 minutes of no water flow
- **At Any Point:**
 - Difference of $>0.3^{\circ}\text{C}$ between Set Point and Core Temperature will cause water to flow back into the wrap



CritiCool® Device

The CritiCool® device has a microprocessor that controls the water temperature flowing into the wrap worn by the patient.

The decision as to the correct water temperature is based on the desired set point temperature and the actual measured patient temperature (core and surface).

Water flow in the wrap is regulated by timed pauses of the flow during clinical operation.

In TTM and Normothermia modes - during the initial phase of regulation the flow cycle is 12 minutes ON and 1 minute OFF.

In steady state (when the Core Temp is within the Set Point range) the cycle is 12 minutes ON and 12 minutes OFF.

The CritiCool® device is equipped with a handle for easy transport.

DIFFERENCES BETWEEN PATIENT MODES

	Adult Mode	Neonatal Mode
Default Set Point	33.0°C	33.5°C
Adjustable Default	Yes (in Settings Screen 1)	No
Adjustable Default Options	33.0°C, 34.0°C, 35.0°C, 36.0°C	n/a
>2.0°C between Set Point and Core Temperature stops water flow to the wrap	Only if patient core temp <31.0°C	Yes, always*
Patient temp drops below 31.0°C	No water flow to the wrap	No water flow to the wrap

The screenshot shows the CitiCool patient care interface. At the top, there is a status bar with '0 00' (Care Time), 'TTM' (Therapeutic Temperature Management) icon, 'Adult' patient mode icon, and an 'Esc' button. Below this, the interface is divided into several sections:

- Patient:** A section with two buttons: 'Neonatal' and 'Adult'. The 'Adult' button is highlighted.
- Language:** A section with two buttons: 'Eng' and 'Ru'. The 'Eng' button is highlighted.
- Adult SP:** A section with a numeric input field showing '33.0' and a unit selector 'C'. The unit 'C' is highlighted.
- Degree:** A section with two buttons: 'C' and 'F'. The 'C' button is highlighted.
- Rewarming Step:** A section with a numeric input field showing '0.05' and a unit selector 'C/hr'. The unit 'C/hr' is highlighted.

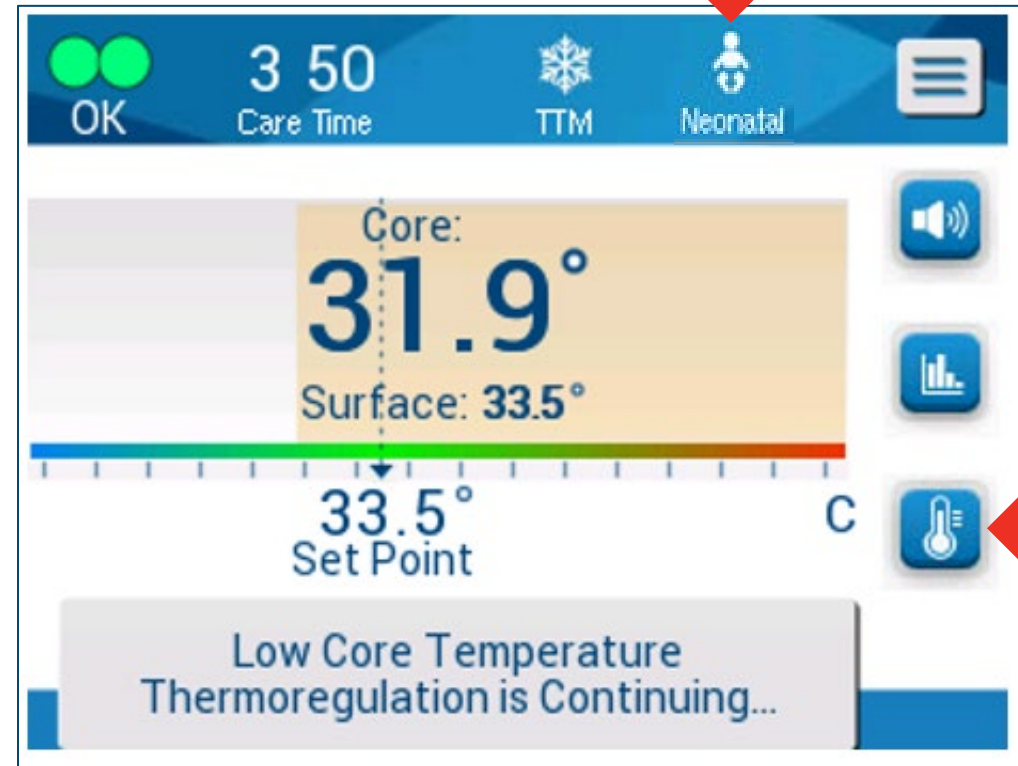
On the right side of the interface, there is a vertical column of buttons labeled '1', '2', '3', and 'OK'.

*After the user acknowledges the message on the screen, water will once again flow to the wrap and CitiCool will not alarm for that condition for 30 minutes. If after 30 minutes the alarm conditions apply, it will once again stop water flow and alert the user.

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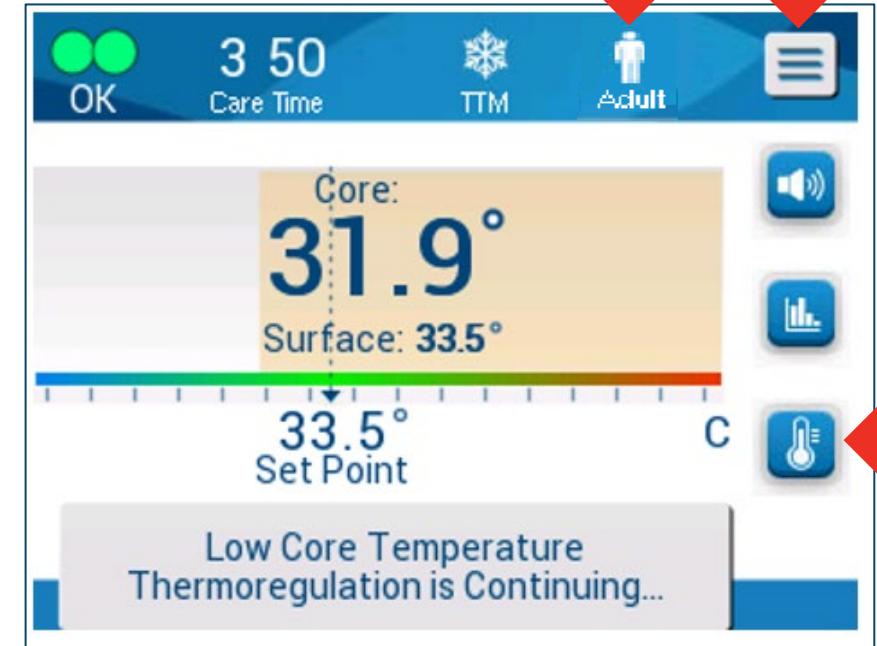
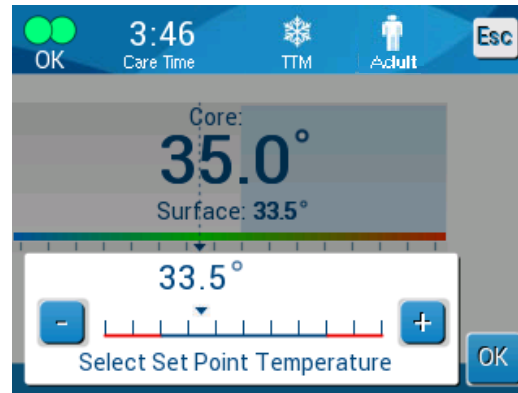
NEONATAL PATIENT MODE

- **Default Set Point: 33.5°C**
(Set point temperature range: 30-40°C)
- To change the set point:
 - Press the thermometer key
 - Choose the desired temperature

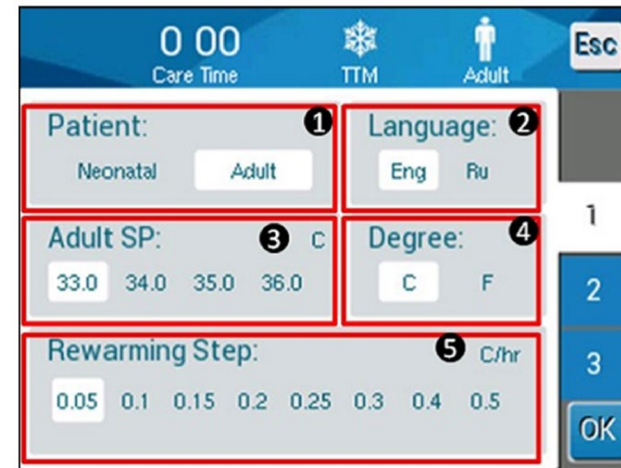


ADULT PATIENT MODE

- Default Set Point: 33.0°C
- To change the set point:
 - Press the thermometer key
 - Choose the desired temperature
 - Select OK(Selection will not be default)



- To change the default set point:
 - Press the MENU button
 - Press Settings
 - Adjust Adult SP by choosing among: 33.0, 34.0, 35.0 or 36.0 (see #3 at right)
 - Select OK(Selection will be default in future)



WATER TEMPERATURE SETTINGS

- Water Temperature Range:
 - 13°C – 40.8°C
- Alarms when water temperature is >42°C or <10°C
 - Default high water temp alarm is 42°C
 - Keep it there
- Automatically stops flowing into wrap if water temperature >42°C
 - CritiCool turns off thermoelectric coolers (TECs) if water temperature >43°C (no water flow)
 - CritiCool shuts off if water temperature reaches 44°C with Halt 3 (no water flow)

The screenshot shows the CritiCool control panel interface. At the top, there is a blue header bar with '0:00 Care Time', a snowflake icon for 'TTM', a person icon for 'Adult', and an 'Esc' button. Below the header, the 'Adjustable Alarm Limits' section is displayed. It contains three rows of settings, each with a list of temperature values and a unit 'C'. The 'High Water Temp' row has values 36.0, 37.0, 38.0, 39.0, 40.0, 41.0, and 42.0. The value 42.0 is circled in red. To the right of the settings are three large buttons labeled 1, 2, and 3, and an 'OK' button at the bottom right.

Setting	Values	Unit
High Patient Temp:	36.0 36.5 37.0 37.5 38.0 38.5	C
Low Patient Temp:	31.0 32.0 33.0 34.0 35.0 36.0	C
High Water Temp:	36.0 37.0 38.0 39.0 40.0 41.0 42.0	C

SOFTWARE V 6.3 PRODUCT UPDATES

- Alarm sound
- Muting alarms
- Icon for muted alarm
- Colors
- Power loss



From:



To:



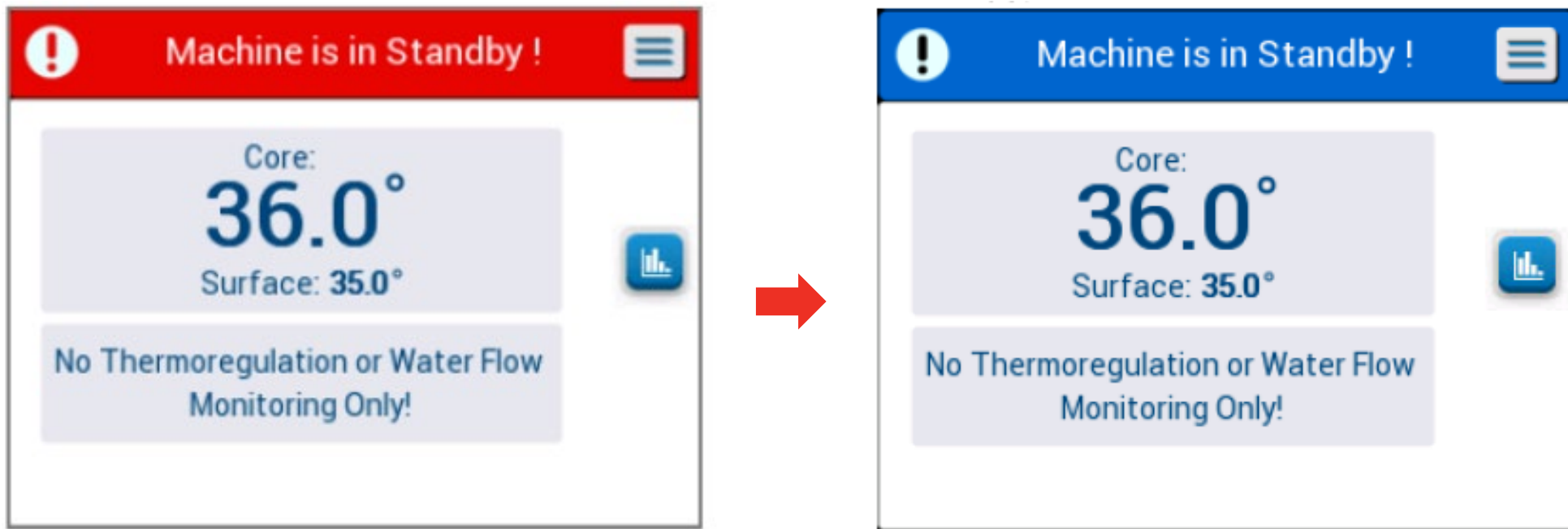
SOFTWARE V 6.3 PRODUCT UPDATES

- Muted alarm icon
- Colors
- Power loss



SOFTWARE V 6.3 PRODUCT UPDATES

- Muted alarm icon
- Colors
- Power loss



POWER INTERRUPTS

- CritiCool Versions 6.2 and earlier:

CAUTION! *Power interrupts affect the functionality of the system, depending on the mode of operation*

- *Interrupts longer than 10 seconds return the machine to the Start-up Screen. A beep is heard when the power is returned to indicate that the machine has returned to the StartUp screen.*
- *Interrupts shorter than 10 seconds return the machine to the mode that was operating before the interruption, but a warning will appear.*

IMPORTANT! *Make sure to read the messages in order to ensure correct reactivation of the machine.*

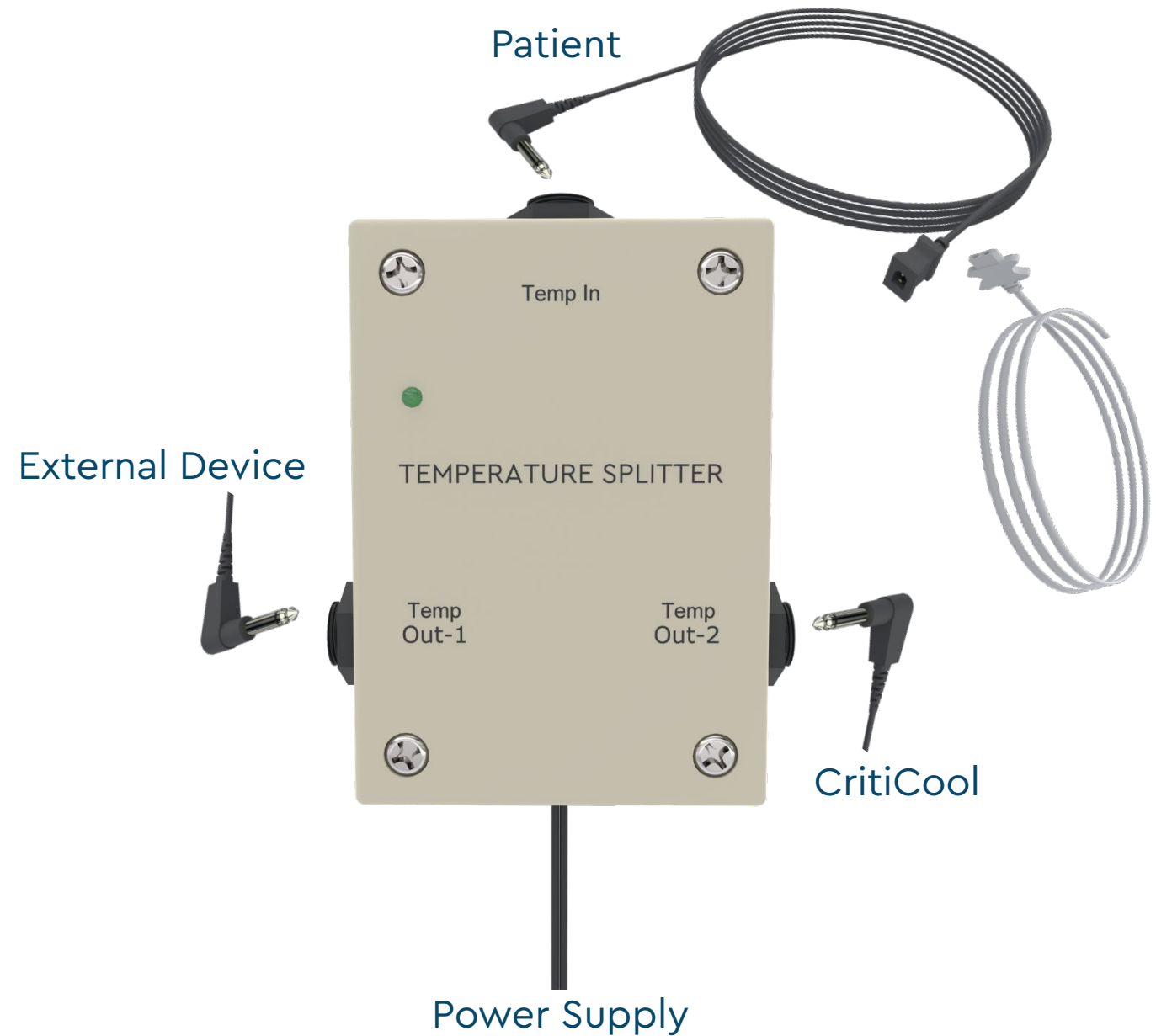


- CritiCool Version 6.3 / After July 2020:

CAUTION! *Power interruptions shorter than 10 minutes return the machine to the mode that was operating before the interruption with a 3 beep alarm.*

TEMPERATURE SPLITTER

- Optional accessory
- Shares patient core temperature with an external device



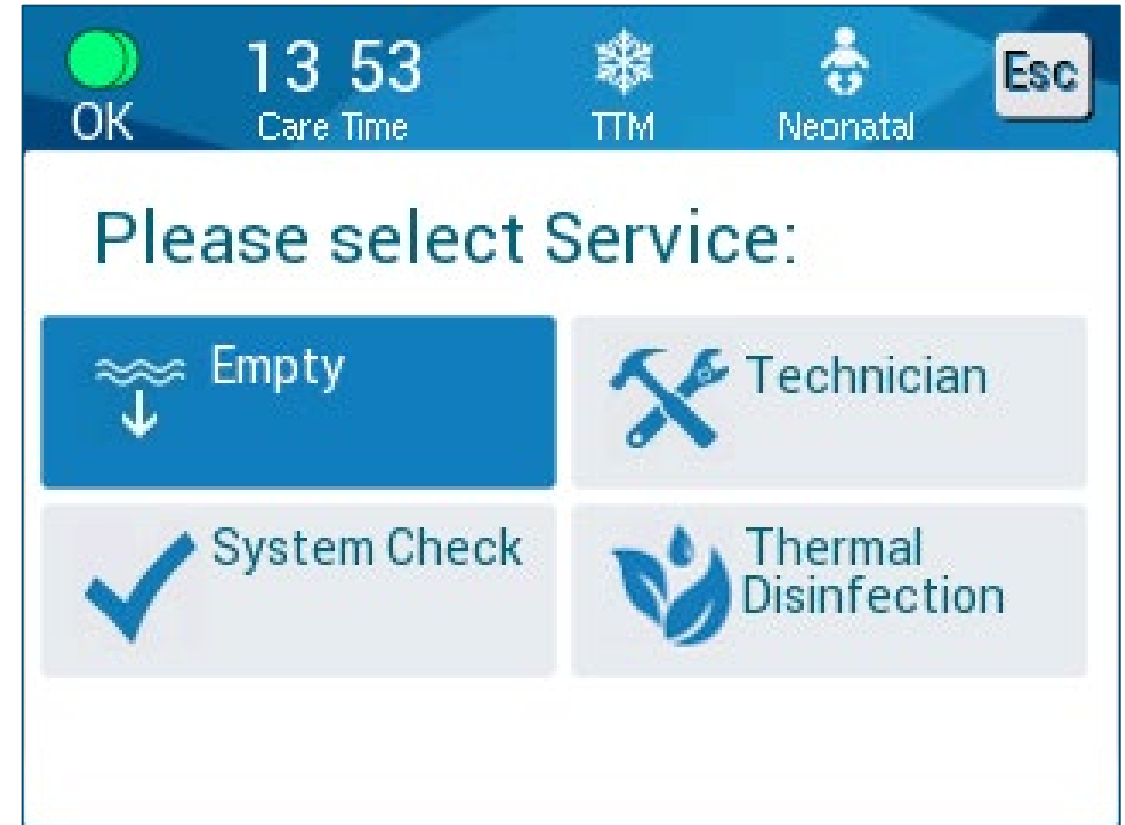


MAINTENANCE

SERVICE SCREEN

- **Empty:**
 - Use this mode to drain the water
- **System Check:**
 - An automatic system check (takes about 10 minutes)
- **Technician:**
 - A password protected screen for certified technicians
- **Thermal Disinfection:**
 - A password protected screen for certified technicians

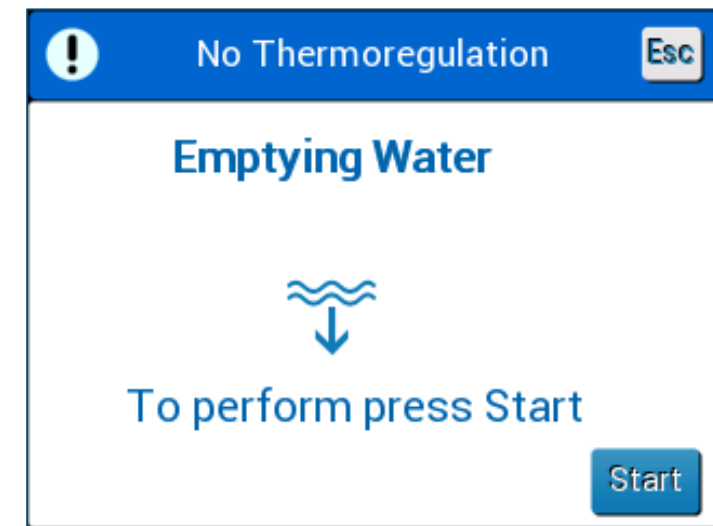
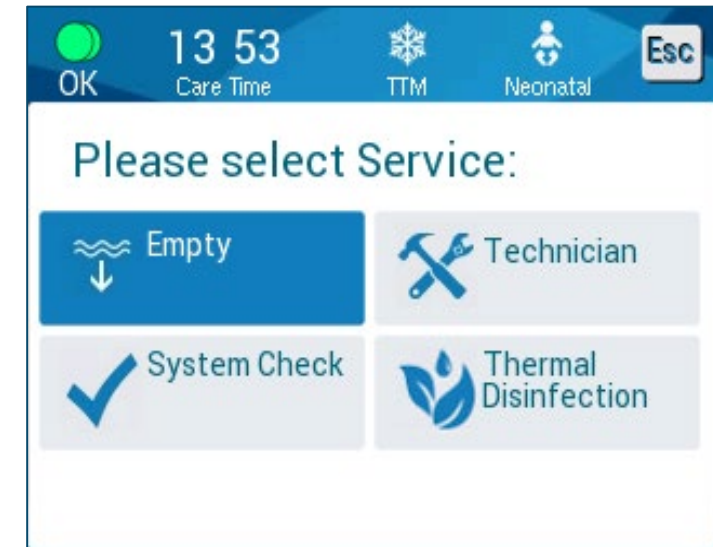
Reference the Service Manual for further instructions.



EMPTYING CRITICOOL

- Select *Service* from the *MENU*
- Select *Empty* and touch *OK* to confirm
- Connect water hoses and make sure the draining plug is connected
- Place water out hose with inserted drain plug into a sink or water receptacle
- Touch *Start* and wait for the message: *"water tank is empty"*
- Clean and disinfect the machine and accessories as per the hospital protocol

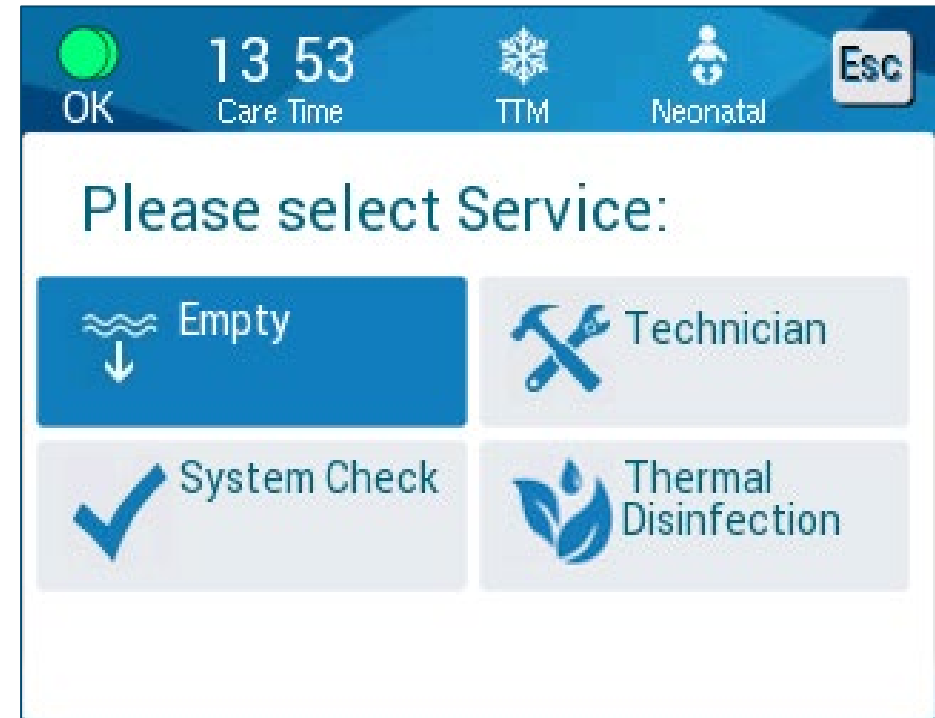
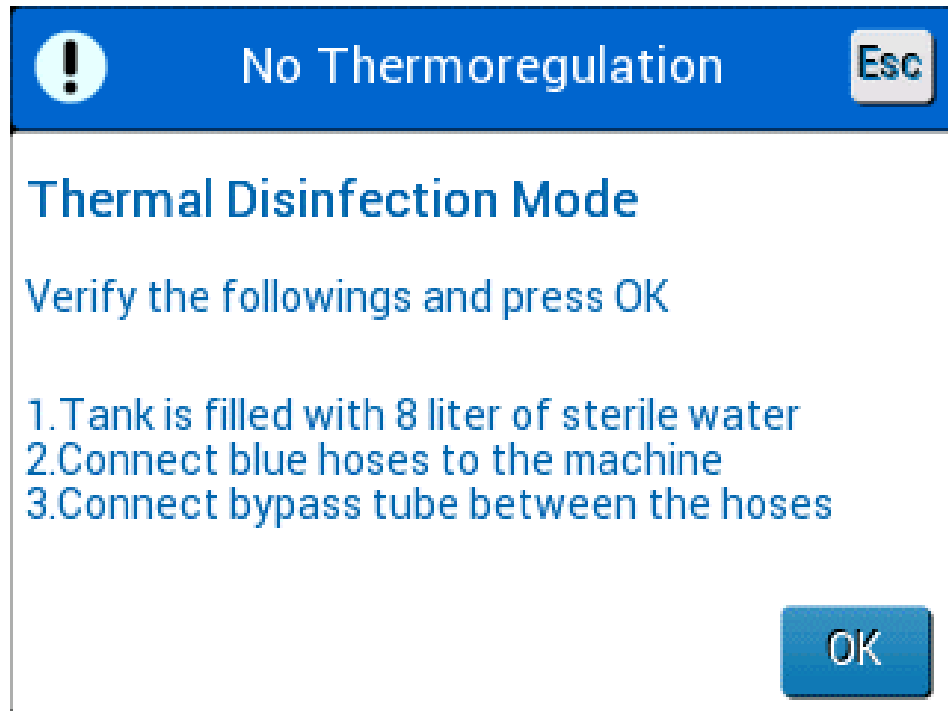
Drain Plug



See user manual for complete instructions.

THERMAL DISINFECTION

- Thermal Disinfection is Password Protected
 - Can only be accessed by a Belmont-trained Biomedical Technician



CARE INSTRUCTIONS:

- Use only 0.22 micron filtered tap water or sterile water
- Before each use, clean surface of device according to instructions in the operator's manual
- After each use or between cases, drop sodium dichloroisocyanurate (NaDCC) tablets into the 6.0 liter (1.6 gallon) water tank as per the NaDCC manufacturer's instructions and run the machine for 30 minutes.
 - NaDCC is sold by many manufacturers
 - US market: Thermofisher Scientific and Sigma Millipore Aldrich
- Perform periodic maintenance once a year by a Belmont Medical Technologies or authorized trained technician only. As part of the annual periodic maintenance, a thermal disinfection cycle will be performed.



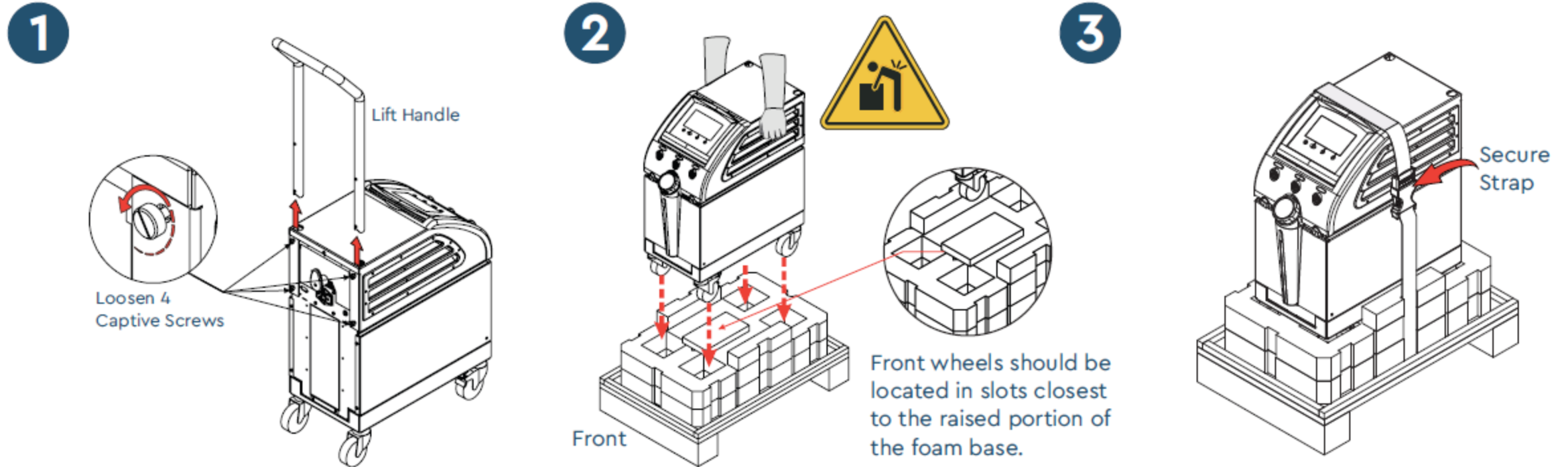
AFTER USE CLEANING

After each operation:

1. Make sure that the system is turned off.
2. Close the clamps on the garment.
3. Remove the garment from patient and disconnect from machine. Dispose the garment.
4. Disconnect the temperature sensors from patient and machine:
 - If they are Disposable Sensors: Dispose of the sensors.
 - If they are Reusable Sensors: They should be cleaned and disinfected/sterilized:
 - Cleaning: Clean the probes with a mild detergent and water.
 - Disinfection: Probes can be disinfected with Alcohol 70% or activated dialdehyde.
 - After cleaning and/or disinfection: the probes should be thoroughly rinsed with water.
 - Sterilization: Probes can be sterilized with Ethylene oxide. Do not autoclave.
5. Drop sodium dichloroisocyanurate (NaDCC) tablets or powder into the 6.0 liter (1.6 gallon) water tank as per the NaDCC manufacturer's instructions and run the machine for 30 minutes.
6. Drain water from water tank (refer to the operator's manual for detailed instructions)
7. Disconnect the Hoses from the machine.
8. Clean the hoses with Ready To Use wipe with Alcohol/ Quaternary Ammonium Compounds (QAC) and store them in a cool and dry place.
9. Clean the external surfaces of the machine:
 - Remove any soil or hard dirt with a dry cloth.
 - Gently clean with a Ready To Use wipe or a cloth soaked in alcohol/ Quaternary Ammonium Compounds (QAC) over the machine.
 - Gently wipe the screen. Do not put physical pressure on the screen.
 - After cleaning let the system dry for 10 minutes.

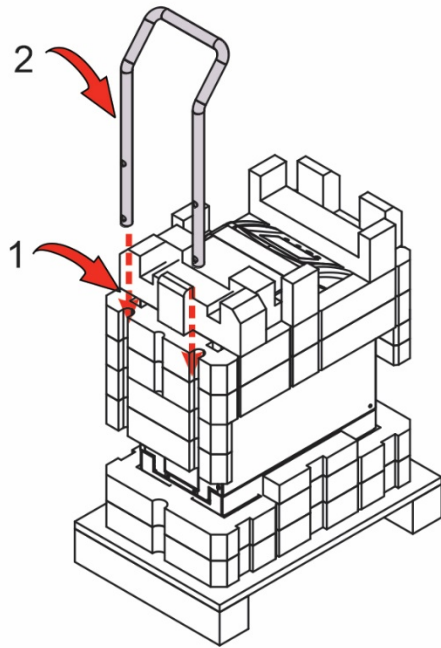


PACKING CRITICOOL FOR SHIPMENT

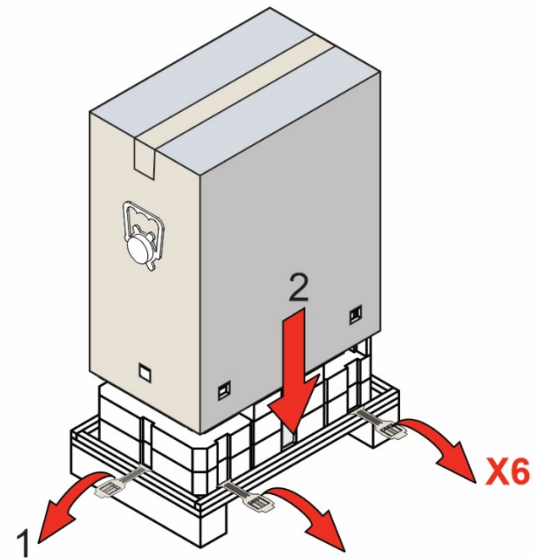


PACKING CRITICOOL FOR SHIPMENT

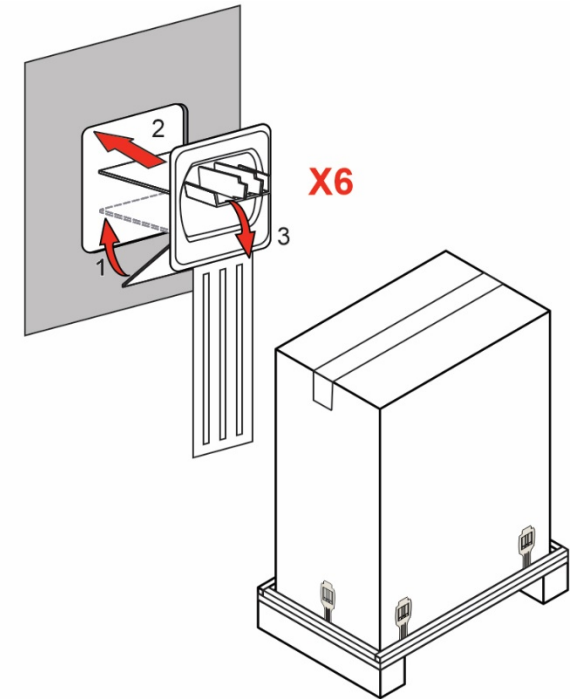
4



5



6



IMPORTANT POINTS

- Use sterile water or 0.22 micron filtered water only
- The CritiCool cannot thermoregulate without a valid Core readout
- CureWrap should be filled with water prior to wrapping and securing on patient
- CureWrap should stay one finger loose on the patient
- Do not use the CureWrap to lift the patient
- Avoid handling the CureWrap with sharp objects





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MEDICAL**

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THANK YOU

