

# CHILLCORE™ CASE

The Therapeutic Hypothermia Induction Case  
OWNERS MANUAL & WARRANTY INFORMATION



PATENT # 8061149



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# CHILLCORE™ CASE

## Presentation Overview

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- Getting Started
- Adjusting Internal Temperature
- Ambient Air Reading
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- IMPORTANT Battery Information
- IMPORTANT Safety Information
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# BASIC COMPONENTS



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# GETTING STARTED

## Plugging it in.

Plug the unit in using either 110 or 12V power.

Turn on the case and allow the battery to charge for **8 to 10 hours** prior to initial use.



On/Off Switch

Power Plug In



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# GETTING STARTED

## Initial Charging - 8 to 10 Hours

During the initial charging, check to make sure that the LCD Battery symbol is flashing in right side of control panel display.

Close the lid and allow approximately 30 minutes for the case to reach the default temperature of 35 degrees.



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# GETTING STARTED

## Cold Plate



Place your pre-chilled items into the case. All liquids to be chilled must be in contact with the cold plate.

Ensure the base is not overstuffed. Items that protrude over the black neoprene seal will interfere with the proper sealing of the case and will not allow the cooling chamber to achieve an adequate seal.



Cold Plate



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# GETTING STARTED

## Cold Plate

Each ChillCore Case includes an insulated pressure-infused 1000mL IV bag. This bag allows solution to remain cool during rapid infusion.

When storing the pre-filled pressure infused bag in the cooling chamber, be sure to expose the internal fluid bag prior to placing it next to the cold plate. Cooling of the IV fluids will not be as effective if the IV bags are not placed directly against the cold plate.



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# ADJUSTING TEMPERATURE

Control Panel Display

**NOTE:** When the ChillCore Case is turned on, it will begin cooling (or warming) to the factory set default temperature of 35 degrees F. The default temperature can be adjusted by the end user.

To adjust temperature, simultaneously hold down the pre-set button and push desired temperature button either higher or lower.



**NOTE:** Your ChillCore case will maintain your desired temperature +/- 1.5 degrees to approximately 60 degrees off surrounding temperature.



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# AMBIENT AIR READING

Control Panel Display

The ChillCore Case will take a continuous reading of the surrounding air temperatures.

Pressing the AMBIENT button on the control panel will display the ambient air temperature.



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# SMART SENSOR

Your ChillCore Case is equipped with a smart sensor that will determine the difference between the interior and exterior air temperatures and adjust the internal temperature accordingly.

If the case is taken into a warmer or colder environment, the smart sensor will automatically sense the change in the exterior air temperature and turn on at 25% power to compensate for the exterior air temperature change.



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# BATTERY LEVEL & MAINTENANCE

The ChillCore Case provides the percent of battery level remaining either by looking at the LCD display or by simply pressing on the “Battery Level” Button on the control panel display. When the case is charging, and below a full charge, the battery symbol will flash.

If battery display bars are not present, this is due to the battery falling below 9.4 Volts. Leave the case plugged into the power and you should start to see bars on the display within approximately 30 minutes.



Prior to initial use, run the case and charge the batteries for a minimum of 8-10 hours before placing in service.

If storing the ChillCore case for an extended period, you must plug in and run for 24 hours at least once per month.

ChillCore contains Lithium Polymer batteries.



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# BATTERY LEVEL & MAINTENANCE

If the battery display bars are present but not flashing this would indicate that the batteries are not charging in this mode. This can be caused by the following:

- 1 - AC/DC Power is not reaching the case
- 2 - Battery is already above 11.7 Volts and will not initiate a charge cycle until it goes below this number.
- 3 - When the battery is below 9.4 Volts, leave the unit connected to the power for approximately 30 minutes.



To Remedy:

Unplug the case, wait several minutes and plug the case back in.

At this point you should start to see the battery indicators start to flash.



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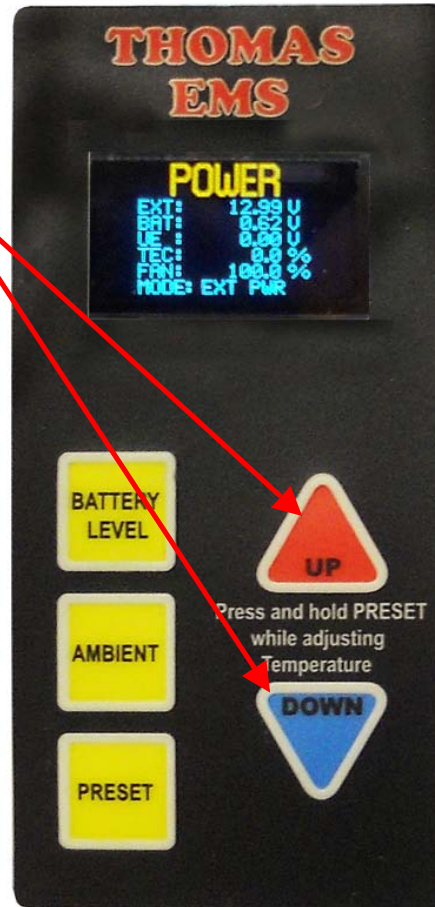
# POWER & PERFORMANCE ANALYSIS

The ChillCore Case is equipped with a Power Screen that will allow you to see actual battery voltage as well as incoming voltage.

To access this Power Screen, push the “BATTERY LEVEL” and “AMBIENT” arrows simultaneously and the display will switch to power mode.

To toggle through the power mode use the “UP” & “DOWN” buttons.

Press the “BATTERY LEVEL” button to exit.



This screen displays important data such as the unloaded and loaded power currently being delivered to the case, actual battery voltage, heat sink temperature as well as current case activity mode (cooling, heating or idle)



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# DIAGNOSTIC / SETTINGS SCREEN

To access the configuration screen, press both the AMBIENT and PRESET buttons simultaneously for 3 seconds. The screen allows the end user to toggle the case between Celsius and Fahrenheit and to adjust the factory pre-set temperature.

It also allows the end user to set a minimum power threshold limit, whereby the case will turn itself off if the vehicle's battery drops below the set level.



The minimum power threshold limit prevents the vehicle's battery from being drained too low, thereby ensuring that there is always enough battery power to start the vehicle.

To change any of these settings in the diagnostic screen, press the AMBIENT or PRESET button to toggle between lines. Press the UP or Down arrows to adjust these settings to desired preferences.



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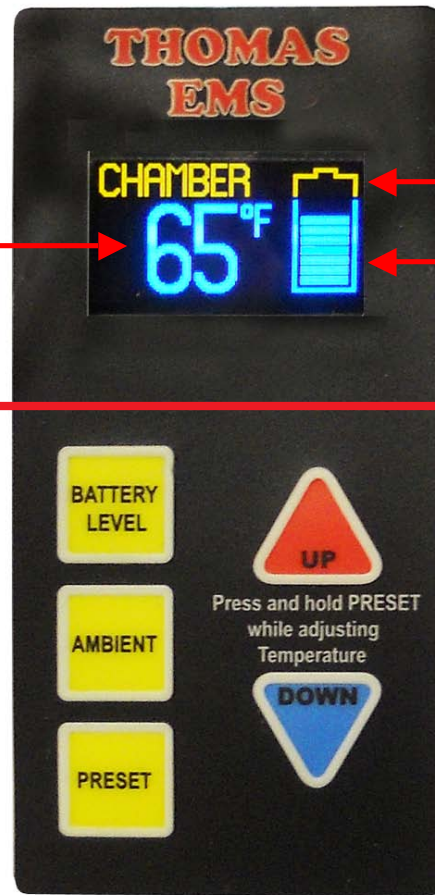
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# CONTROL PANEL REVIEW

## Main Panel

Internal Chamber Temperature  
Or Ambient Air Temperature  
Or % of Battery Charge



Battery diagram indicates the battery level in increments of 10%.

Indicates battery charged. Will not flash when battery is below 9.4V or above 12.5V

See "HOW TO" section for instructions on panel buttons.



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# HOW TO:

View AMBIENT air temperature reading:



Press the AMBIENT button

View internal/chamber air temperature reading:



Press the PRESET button

Adjust the internal temperature:



While holding down the PRESET button



Use the UP or DOWN buttons to adjust temperature

Check External Power:



Press the AMBIENT & BATTERY LEVEL buttons simultaneously.



Press the BATTERY LEVEL Button to return to main screen.



Use the UP or DOWN buttons to toggle through power mode



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# HOW TO:

## Show Battery Level:



Press the BATTERY LEVEL button

## Access Power & Performance Screen:



Press the AMBIENT & BATTERY LEVEL buttons simultaneously.



Press the BATTERY LEVEL Button to return to main screen.

## Check Battery Voltage:



Press the AMBIENT & BATTERY LEVEL buttons simultaneously.



Press the BATTERY LEVEL Button to return to main screen.



Use the UP or DOWN buttons to toggle through power mode



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# BATTERY ACCESS PROCEDURE 1-3

1. Tools needed: #2 Phillips screwdriver.
2. Turn off unit, remove external power.
3. Open the lid of the Chillcore.



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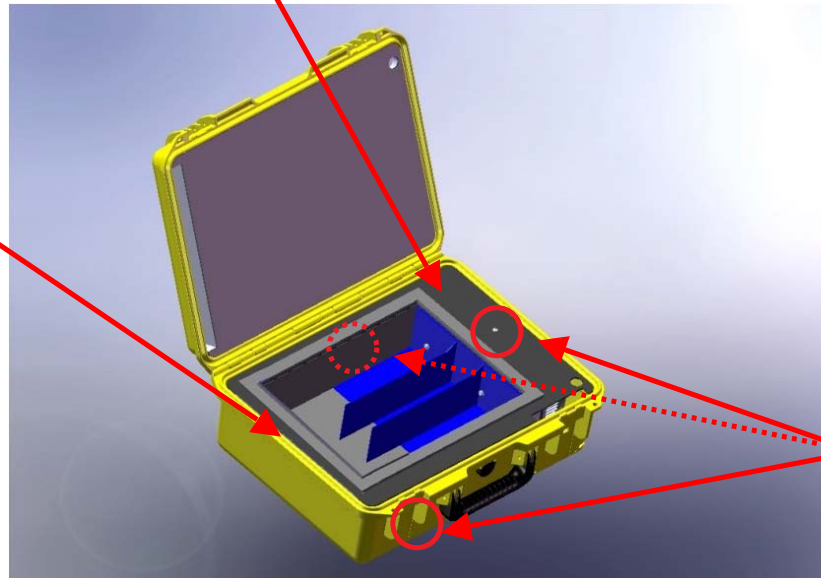
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# BATTERY ACCESS PROCEDURE 4-6

4. Main Base Cover needs to be removed to access battery.

5. Battery is beneath left side of main base cover



6. Remove 3 screws from Main Base Cover



Dashed lines indicate back of case.



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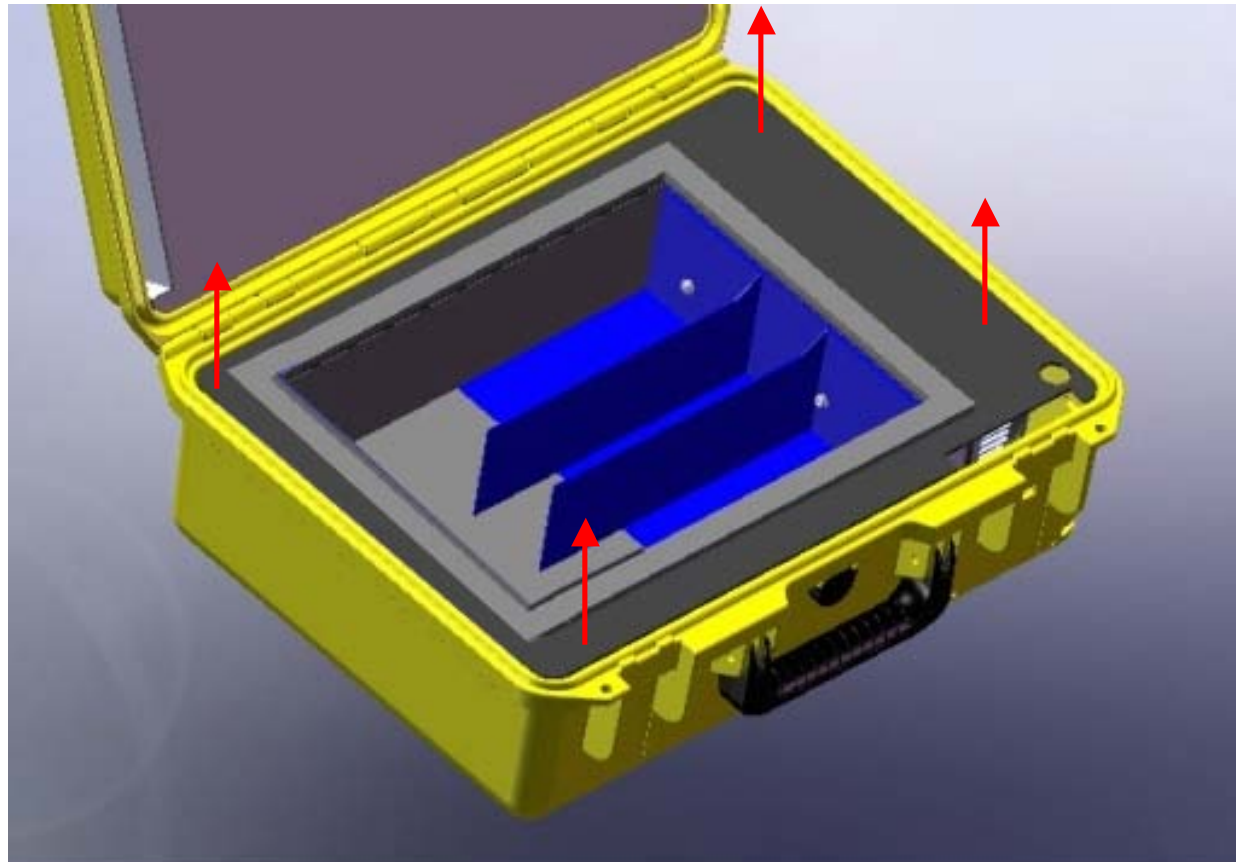
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# BATTERY ACCESS PROCEDURE 7

7. Lift up entire Main Cover.



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# BATTERY ACCESS PROCEDURE 8 - 9



8. Green Battery Pack is now accessible for removal. Lift Green Battery Pack out of the case.
9. CAUTION: Transfer wires from old battery to new battery one at a time. Do not transfer all 3 at one time.



START



Step 1  
Move top wire from old battery (circuit board) to new battery.



Step 2  
Move middle wire from old battery (circuit board) to new battery.



Step 3  
Move bottom wire from old battery (circuit board) to new battery.



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# BATTERY INFORMATION



## Important Battery Information

(Before ordering please read the following completely.)  
Lithium Polymer Charging, Handling, Safety Information

Automatically shut the case down if voltage drops below 9.5V.  
Will stop charging at approximately 90% capacity.  
Will charge at a current less than 1C.



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# SAFETY INFORMATION



Allow airflow around exterior fan area - blocking airflow will slow cooling or heating.



When operating from a vehicle battery, make sure you start your engine after 3 to 4 hours of operation to recharge the vehicle battery.



Do not allow moisture to enter exterior fan ports.



Never allow the ChillCore Case to be immersed in water or other liquid. This will void the warranty.



To reduce the risk of damage to the DC plug and cord, pull by DC plug rather than cord when disconnecting.



ChillCore case is intended for use with a 110 volt or 12 volt DC power source that can provide at least 10 amperes of current. Do not attempt to use with any other power source.



DO NOT operate your ChillCore case in an enclosed space. ALWAYS ensure that there is adequate ventilation and free flow of air around the unit, so that air expelled by the fan is effectively dissipated.



When operating your ChillCore case in cab of vehicle, adequate ventilation must be provided by an air conditioning system or window.



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# CHILLCORE WARRANTY

## ChillCore Case Warranty

Thomas EMS, LLC warrants that for a period of 1 (one) year from the date of purchase, this product will be free from defects in material and workmanship. 1 Year warranty on the batteries. Thomas EMS, at its option, will repair or replace this product or any component of the product found to be defective during the warranty period. Replacement will be made with a new or remanufactured product or component.

This warranty does not cover normal wear of parts or damage resulting from any of the following: negligent use or misuse of the product, use on improper voltage or current, disassembly, repair or alteration by anyone other than Thomas EMS. Further, the warranty does not cover: Acts of God, such as fire, flood, hurricanes and tornadoes.

Thomas EMS shall not be liable for any damages of any kind resulting from the purchase, use or misuse of, or inability to use the product including incidental, special, consequential or similar damages or loss of profits, or for any breach of contract, fundamental or otherwise, or for any claim brought against purchaser by any other party regardless of their kind and nature.

NON-TRANSFERABLE



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