

# HEATJAC™ INSTRUCTIONS FOR USE

The Heatjac™ series of products are utility garments designed to keep medical professionals comfortable in the OR, procedure room or medical/dental office. Now, also for the outdoors, and for motor sports in the colder weather. Our products are the only portable total OR personnel heating products conforming to AORN requirements.

**Do not place the heating pads directly on the skin. The heating pads do get hot, avoid touching them directly.**

**Heatjac™ products are:**

**Not For Use By Patients**

**And**

**Not For Use By A Minor Child**

Heatjac™

heatjac.com

UNITED STATES PATENTS

# US 9,980,526 B2

# US 8,671,464 B2

## **Introduction**

The **HEATJAC™ OPERATIONHEATJAC®** products are utility garments originally conceived to keep medical professionals comfortable in the OR, procedure room, or medical/dental office.

The **HEATJAC™ OPERATIONHEATJAC®** products are made of material in conformance with AORN guidelines even though they are not to be worn exposed, which in itself conforms to AORN guidelines.

They should be worn over a scrub top and under a scrub warm-up jacket, or surgical gown or any garment used to keep heat in.

## **Five Main Products of the HEATJAC™ are available:**

### **Freeze no mORe Torso Belts w/ suspenders**

The Freeze no mORe products can be powered off of our 11.1 V, 5200 mAh 3 Level Remote Controlled Li-ion Battery, as well as our 12V, 7.5 Amp Transformer, as well as the battery of your motorcycle or snowmobile. These products offers a good deal of control over the desired temperatures.

### **Freeze no mORe Torso Belts w/ suspenders - Sizing**

Measure your torso with a tape measure at the level between the bottom of your xiphoid and umbilicus.

S:	torso	29 to 35 inches
M:	torso	35 to 41 inches
L:	torso	41 to 47 inches
XL:	torso	47 to 53 inches

### **Freeze no mORe Torso Belts w/ suspenders (Battery Powered)**

The 5" by 5" heating pads are composed of FabRoc™ mounted on 3 mm Neoprene. This is then covered in nylon.

Insert or remove a heating pad into or from a mesh pocket by folding or rolling the heating pad, keeping the nylon covered aperture side out, and passing it through the side openings in the pockets. Start with the heating pad with the cable and connector attached, and place this first into the middle pocket. Pass it through the side opening in the middle pocket facing the pocket with a small side opening on the edge side. Then pass it through the larger side opening of the adjacent pocket with the small side opening for the cable and connector. Do the same with the third heating pad intended for the third pocket without the small opening on the side edge. The nylon covered, aperture side, of the heating pads should lie right behind and up against the mesh of the pockets. The white insulating pads should be placed behind the heating pads to insulate the torso from the heat produced. These can be inserted behind the heating pads after the heating pads are in place. Excess cable can be positioned in the gaps between the pockets. To remove the heating pads, reverse the insertion steps described above.

The set of three heating pads is then plugged into our 11.1V, 5200 mAh Li-ion battery using first our P25S13 Long Adapter. This then plugs into our S25P25 Right Angle Adapter, which then plugs into the battery. The battery can be placed into the pocket of your jacket, coat, or camo.

The battery outputs are regulated by three settings: **High** (setting 3) (100%); **Medium** (setting 2) (66%); and **Low** (setting 1) (33%). The setting is chosen by pressing the **POWER ON / SET UP** button on the battery. To reduce the output or turn the battery off, press the **POWER OFF / SET DOWN** button.

**Using the remote FOB:** tones will be heard when selecting a setting; the red button turns the unit off.

The power setting display that is selected will show for at most, 5 seconds and then revert to the charge status display.

During charging and in-use, the digital display will show numbers from 1 – 9; these represent the available capacity level of the battery with 1 = very low capacity and 9 = full capacity.

Actually, as the battery discharges, you will see a flashing 2, a flashing 1, and a flashing 0.

### **Temperatures and Durations with the 11.1V 5200 mAh Li-ion Battery**

**Setting 3:** in the 160s degrees F for 5 hours

**Setting 2:** in the 140s and 130s degrees F for 7 hours

**Setting 1:** in the 100s degrees F for 13 hours

\*Our 11.1V, 5200 mAh battery also contains a USB port. You can charge your phone, tablet, or any USB charged device. Note: Heating times will decrease if used to charge other devices.

**Recharging the Battery:** plug the charger into any standard electrical outlet, unplug the battery from the heating pads and connect to the wall charger. Charging is complete when the LED on the charger is green and the digital display indicates the capacity is reading 9. **The batteries should be charged for 24 hours prior to first use.** The batteries should last a full 500 charge and discharge cycles before degradation is realized.

### **Battery Storage**

Store the batteries, controller and transformer in a cool, dry area. Batteries should be stored when approximately 1/2 - 2/3 discharged. Re-charge the batteries after long periods of not being in use.

## **Freeze no mORe Torso Belts w/ suspenders (12V, 7.5A Transformer Powered, or Powered off of a Motorcycle or Snowmobile Battery)**

The 8" by 5" heating pads are composed of FabRoc™ mounted on 3 mm Neoprene. This is then covered in nylon.

Insert or remove a heating pad into or from a mesh pocket by folding or rolling the heating pad, keeping the nylon covered side out, and passing it through the side openings in the pockets. Start with the heating pad with the cable and connector attached, and place this first into the middle pocket. Pass it through the side opening in the middle pocket facing the pocket with the small side opening on the edge side. Then pass it through the larger side opening of the adjacent pocket with the small side opening for the cable and connector. Do the same with the third heating pad intended for the third pocket without the small opening on the side edge. The nylon covered side of the heating pads should lie right behind and up against the mesh of the pockets. The white insulating pads should be placed behind the heating pads to insulate the torso from the heat produced. These can be inserted behind the heating pads after the heating pads are in place. Excess cable can be positioned in the gaps between the pockets. To remove the heating pads, reverse the insertion steps described above.

Great for Dental/Oral Surgery Assistants working in cold dental operatories. The advantage of this model is that it has approximately 3Xs the heating surface. Simply plug the 12V, 7.5A Transformer into a wall outlet, (it comes with a 15' power cord) and use the 4-Level Controller to regulate temperature. When you need to get up to attend to something or switch operatories, simply unplug the connector between the controller and heating pads. When you return the setting will be unchanged.

To connect this product up to your motorcycle or snowmobile battery, we have the various required adapters, along with our 4-Level Controller.

**ALWAYS BE SURE TO USE THE INSULATING PADS IN THE POCKETS BETWEEN THE HEATING PADS AND THE LAYER OF THE GARMENT LYING AGAINST YOUR SCRUB TOP OR SHIRT.**

### **Temperatures with the 12V, 7.5A Transformer and 4-Level Controller**

**100% output:** in the 170s degrees F

**75% output:** in the 150s degrees F

**50% output:** in the 130s degrees F

**25% output:** in the 100s degrees F

### **Laundering the Freeze no mORe Torso Belts w/ suspenders**

Remove heating pads and insulating pads. Cold water wash, gentle cycle, hang dry. After dry, replace insulating pads and heating pads. The suspenders should be hand washed.

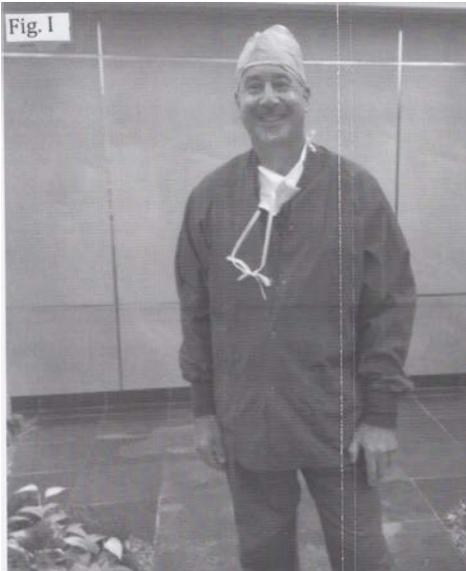
## How to Wear the Freeze no mORe Torso Belts w/ suspenders

First connect the suspenders to the **Freeze no mORe**. The clip-on suspenders are placed with one clip in back and then the two front clips on either side of the front of the **Freeze no mORe Torso Belt**.

Place the **Freeze no mORe** belt around your torso so that the **pockets face away from your body and the openings of the pockets face up**. It should be worn up higher on your body than where you would normally wear a belt, (on the torso).

Insert the hook ends of the hook and loop material, attached to the elastic straps, through the metal loops which are located on the opposite side of the **Freeze no mORe** belt at the top and bottom edge. Then bring the ends of the straps back to the edge from where they originate and pass the end of the top strap through the metal loop that is set back a bit on the top edge and attach it to the loop material of the hook and loop material on the top edge. Attach the bottom strap to the loop material of the hook and loop material on the bottom edge. Fasten the **Freeze no mORe** belt snugly but comfortably.

(Fig. 1) Shows a scrub warm-up jacket over the **Freeze no mORe**



(Fig. J) Shows the 11.1V, 5200 mAh Battery Placed into a Scrub Warm-up Jacket Pocket



## The HOT LINER

**The Only Heated “Vest” Designed With Anesthesia Personnel and Perioperative Nurses in Mind!!!**

### **The HOT LINER Powered By AIR-ACTIVATED WARMERS**

- Constructed of Heat Reflective Material (Reflects back 90% - 95% of your own body heat)
- Contains 6 inner mesh pockets. Four for the placement of 2 - 4 Air-Activated Warmers (Extra-Large Hand Warmers). Two additional larger inside pockets.
- Heating at temperatures of 120 -150 degrees F. for 6 - 12 hours. **Usually 12.**
- **More heat and more effective than anything on the market.**
- Able to be laundered – Cold Water, Gentle Cycle, Hang Dry (No need to launder frequently as it does not absorb sweat)
- Designed to be worn under a scrub warm-up jacket or surgical gown.
- Oversized in order to keep the heating sources away from the body.
- Color is the old fashioned “Hospital Color” as it is fabricated from of a unique “housing insulation”.

- Please note that there is a subtle pattern on one side of the warmers that resembles a tire tread. This is the side of the air-activated warmers that throws off the most heat.

**Temperatures and Durations:** Each warmer can provide temperatures in the 150s to the 120s degrees F for 6 – 12 hours. The oxidative reaction producing the heat can be stopped by placing the warmer into a zip lock plastic bag. By doing this, the warmer can be saved for use later on.

### **The HOT LINER Powered By A SINGLE BATTERY POWERED HEATING PAD**

- As above but instead of Air-Activated Warmers, one Battery Powered Heating Pad.
- The FabRoc™ Heating pad is placed into the smaller pocket of the double pocket.
- The 11.1 V, 2600 mAh, 3 – Level Remote Control Li-ion Battery is placed into the larger pocket of the double pocket.
- Charger Included
- 500 cycles of charging and usage
- 130 degrees F. for 8 hours, 110 degrees F. for 11 hours, 90 -100 degrees F. for 16 hours.

The battery outputs are regulated by three settings: **High** (setting 3) (100%); **Medium** (setting 2) (66%); and **Low** (setting 1) (33%). The setting is chosen by pressing the **POWER ON / SET UP** button on the battery. To reduce the output or turn the battery off, press the **POWER OFF / SET DOWN** button.

**Using the remote FOB:** tones will be heard when selecting a setting; the red button turns the unit off.

The power setting display that is selected will show for at most, 5 seconds and then revert to the charge status display.

During charging and in-use, the digital display will show numbers from 1 – 9; these represent the available capacity level of the battery with 1 = very low capacity and 9 = full capacity. Actually, as the battery discharges, you will see a flashing 2, a flashing 1, and a flashing 0.

### **Sizing:**

Find the largest part of your upper body and measure your size in inches.

Small – If you measure 36” – 39”

Medium – If you measure 40” – 44”

Large – If you measure 45” – 49”

Extra Large – If you measure 50” – 55”



## **Laundering the HOT LINER**

Be sure to remove any old air-activated warmers, or heating pad and battery. Cold water wash, gentle cycle, hang dry.

## **“CoolHeating” from HEATJAC™ LLC’s OPERATIONHEATJAC® Division Instructions For Use**



Our new “CoolHeating” Disposable Cooling or Heating product; for surgeons, it is to be worn over a scrub top and under a sterile gown. For nurses who need cooling, it can be worn under a scrub top against the skin or T-shirt. For those who need heating, i.e. anesthesia providers, perfusionists, and perioperative nurses, it can be worn over a T-shirt and under a scrub top and scrub warm-up jacket or surgical gown or over a scrub top and under a scrub warm-up jacket or surgical gown.

- 1) Position the garment around your torso by adjusting the suspenders for vertical and tie the ties for securing it around your torso. This disposable product should be worn around your torso, between your xiphoid and umbilicus. The round openings in the pockets should face outward.
- 2) If upon tying the ties, the garment sits too low, adjust the suspenders and re-tie.
- 3) Have an assistant place the warming or cooling pack into the back pocket, or all the pockets if needed. They should be placed up against the round openings.
- 4) The warming packs are Air-Activated Warmers which are activated by exposure to air. These last up to 12 hours and throw off temperatures from 150 – 120 degrees F. The reaction can be stopped if need be, by placing each warmer into a zip lock bag to be used at a future time. The side of the warmers that appears to have a tire-track pattern (look carefully), is best up against the panel with the circular openings. When finished with the warmers, they can be disposed of in the trash as they are environmentally safe. The Air-Activated Warmers come in a case of 60.
- 5) The cooling packs should be placed flat down or stacked in the freezer. Each individual belt comes with 6 cooling packs, or simply order a case of 50 belts and a case of 36 cooling packs (the only re-usable component). While using three, the other three are kept in the freezer to be exchanged once the first three melt and no longer provide cooling, (about three hours). The first three are then placed in the freezer and the second set of three are used in the belt.



- 1) Place ThermoSafe® Utek Phase Change Materials Cooling Packs against the holes facing outward, away from one's torso.
- 2) Place Air-Activated Warmers against the holes facing outward, away from one's torso.
- 3) Adjustable suspenders help position the belt around one's torso, between the xiphoid and umbilicus.
- 4) The four ties (two on each side) tie securely in front.

Sizes: As with our **Freeze no mORe** products...

S: torso 29 to 35 inches

M: torso 35 to 41 inches

L: torso 41 to 47 inches

XL: torso 47 to 53 inches

Measure your torso with a tape measure at the level between the bottom of your xiphoid and umbilicus.

# THE HEATED FACE MASK

## Heat Provided by Air-Activated Warmers or a Battery Powered FabRoc™ Small Heating Pad

### 8 HOURS of WARMTH

CE Certified

1. Simply open package and expose the warmer to air.
2. Place a warmer into the pocket of the mask.
3. Contents are environmentally safe, nontoxic, and disposable in the trash when cooled.
4. If after a while a decrease in temperature is noted, gently shake the warmer. Make sure the contents are fairly evenly distributed throughout the warmer and place back in the pocket of the mask.
5. The reaction can be stopped by placing the warmer into a small zip-lock bag. Upon removal from the bag, and exposure to air, the reaction will re-start.

**Caution:**

For external use only! Do not place the warmer directly on skin as heat may cause burns. Remove the air-activated warmer from the mask if it becomes uncomfortably hot. Keep out of reach of children. Provide careful supervision if product is used by children, the elderly, or the handicapped. Do not open the air-activated warmer. If the contents come into contact with the skin, mouth or eyes, flush immediately with cold water and consult a physician. The air-activated warmer will not be effective if wet.

**Ingredients:** Iron powder, water, activated carbon, vermiculite, wood powder, salt.  
Store in a cool and dry environment.

### Battery Powered

1. Small FabRoc™ Heating Pad is able to be washed and disinfected.
2. Inserting Heating Pad into pocket of mask: First pull the right-angle connector through the opening in the pocket. The mask surface of the heating pad that is to face the wearer will be marked.
3. Attach a fully charged 7.4V, 3400 mAh Li-ion Battery to the right-angle connector.
4. Regulate the temperature by pressing the "Power" button on the battery.
5. Power increments are 100%, 75%, 50%, 25%. (Temperatures on 100% should be in the 140s deg. F.)
6. If temperatures feel too warm, decrease the temperature setting to comfort.
7. Cable to battery is 36" and can be placed into a jacket or coat pocket.
8. Charge battery with the 8.4V, 1.2 Amp Charger.

## **Precautions**

Please read and follow all instructions prior to using this product:

Discontinue using the **HEATJAC™** product if it or any component becomes damaged or defective. Do not attempt to disassemble the battery unit, charger, controller, transformer, or heating pads.

**Do not place the heating pads directly on the skin. The heating pads do get hot, avoid touching them directly.**

The **Freeze no mORe Torso Belts w/ suspenders** should always be worn over at least one layer of clothing. Our disposable heating/cooling product, for cooling can be worn directly over skin. With the disposable product a light T-Shirt may be more comfortable under the heated use of this product as one may get sweaty directly under the belt. Do not use this product on children or on potentially desensitized skin as in areas of frostbite or in diabetics with neuropathy. Do not wear this product to bed. Discontinue immediately if the heating pads become uncomfortably hot. Do not use this product if there is a chance that the **Freeze no mORe Torso Belts w/ suspenders**, heating pads, or any of the electrical components will be exposed to water or wet conditions.

If the battery, controller, or heating pads are broken or cracked, avoid contact with skin and discard immediately.

Do not use the various heating modalities together.

Do not place air-activated warmers in a microwave oven.

Do not use air-activated warmers in oxygen-enriched environments.

Careful supervision is required when used by the elderly, the handicapped, and those with sensitive skin.

People with paralysis, nerve damage, circulatory problems, and people who cannot put on or remove the **Freeze no mORe Torso Belts w/ suspenders** by themselves, should not use this product.

Do not open packaging for the air-activated warmers until ready to use. Do not open or put a hole into the air-activated warmers. Do not allow contents to get in eyes or in mouth. If in eyes, flush thoroughly with clean water. If swallowed, contact poison control, as they contain iron powder, which can be harmful if swallowed. Keep out of reach of children and pets.

## **Contact Us**

Please contact us if you have any questions on the use of our products at:

[support@heatjac.com](mailto:support@heatjac.com)