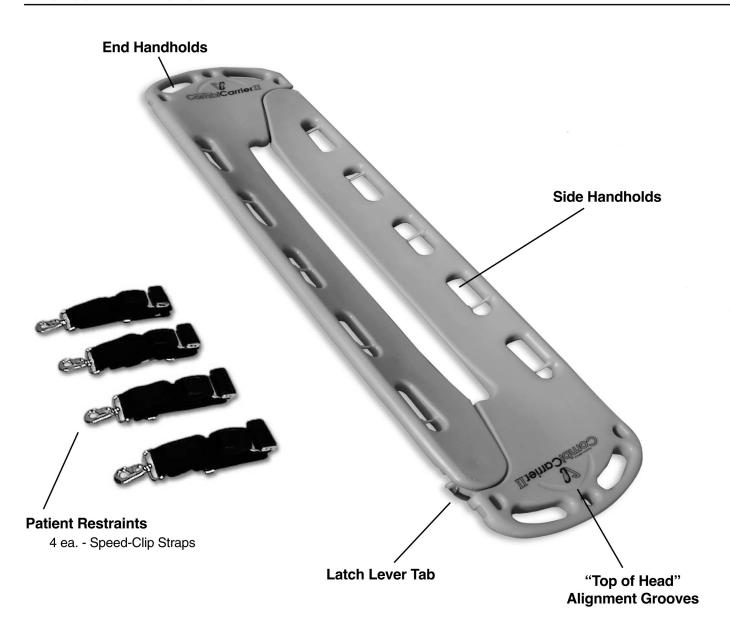






## PRODUCT TERMINOLOGY



## **SPECIFICATIONS**

#### **Dimensions:**

Our company philosophy is one of constant improvement in design and craftsmanship.

Therefore, specifications are subject to change without notice.

 $\label{lem:combicarrier} \mbox{$II^*$ is a registered trademark of Hartwell Medical Corporation.} \\ \mbox{$\mathbb{C}$2011 Hartwell Medical Corporation. All Rights Reserved.}$ 



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#### Introduction

The CombiCarrier II has been designed to aid in the movement of an injured or ill person with a minimum amount of movement to the patient. The CombiCarrier II can be used similar to a one-piece backboard device or it can be separated in half and slid underneath the patient and then secured together similar to a split litter device.

Specific application and operation techniques may vary from user to user. Hartwell Medical does not recommend that this product be used for any purpose other than what it is designed for as outlined in these application guidelines. Any other use or application of the CombiCarrier II becomes the sole and complete responsibility of the product user.

#### **Physical Abilities of Users**

All users of the CombiCarrier II should be familiar with its operation and should possess the following basic physical abilities:

- a) be able to grasp firmly with both hands
- b) sufficient strength in their back, arms and legs to lift, push and pull the weight being handled
- c) good balance
- d) good vision and reflexes
- e) muscular coordination.

CAUTION: At all times, a sufficient number of properly trained healthcare providers should be available to secure and move the patient on the CombiCarrier II. Use caution at all times when handling and maneuvering a patient secured to the CombiCarrier II.

### **A**UTHORIZATION

## A Word of Caution

These application guidelines are intended solely as a guide to the appropriate procedures to be employed when using the CombiCarrier II.

It is the responsibility of the user of this professional medical device to obtain competent emergency medical training and instruction. The application guidelines furnished here are for use by properly trained and authorized emergency medical personnel who operate under proper medical control or under the medical supervision of a licensed Physician Medical Director.

The application guidelines are not intended as a statement of the standard of care required in any particular situation, since circumstances and patient's physical condition can vary widely from one emergency to another.

Further, it is not intended that these application guidelines shall in any way advise emergency medical personnel concerning their legal authority to perform such activities or procedures outlined herein. Determinations are local, and should be made only with the authority of their local emergency medical service, and the aid of legal counsel.

Hartwell Medical Corporation firmly advocates the following:

- 1. Use the application guidelines set forth, when approved by your local emergency medical service authority.
- 2. Supervised emergency medical training is required in the proper use of the CombiCarrier II prior to field use.
- Proper application of the CombiCarrier II requires a minimum of two trained emergency medical personnel.
- 4. Continuing medical education on a regular basis with "hands-on" experience is recommended.



## **OPERATING INSTRUCTIONS**

The CombiCarrier II functions as two products in one. It can be used as a split litter device or as a one-piece backboard.

# CombiCarrier II Application as a Split Litter (Two-Piece Unit)

#### **Side Latch Assembly**

Separate the sides of the CombiCarrier II by grasping both sections of the CombiCarrier II and pulling back on the latch lever tab. After the latch lever tab has been pulled back, separate the two sections of the CombiCarrier II. Repeat the same procedure for the other end. *Photo 1*.



#### Positioning of the CombiCarrier II

Place the CombiCarrier II (before separating it in half) next to the patient so that the "Top of Head" grooves are lined up with the top of the patient's head. The CombiCarrier II is 73.5" (186.7cm) long and some patients may extend beyond the length of the CombiCarrier II. Check as to whether or not additional support is needed.

While one attendant maintains support of the patient's head, separate the halves of the CombiCarrier II and place one half under the patient. Additional personnel may be required to slightly lift the shoulders and the hips of the patient in order for the CombiCarrier II section to slide properly under the patient. *Photo* 2.



The patient **does not** have to be logrolled when using the CombiCarrier II in this manner. Make sure the first half is properly positioned under the patient and then slide the other half of the CombiCarrier II into position under the patient. Secure the latch assemblies one at a time. Recheck both latch assemblies to ensure they are fully locked before placing the restraints on the patient.

#### **Securing the Patient Restraints**

The CombiCarrier II is packaged with four two-piece patient restraints. Two straps are used to form an X-pattern across the patient's chest, one strap should be positioned at the hips and one strap above the knees. The two chest straps should be secured behind the patient's shoulders and wrap around the top of each shoulder. The pins allow various strap configurations to be used. Specific strap locations will be determined by the extent of the patient's injuries and local medical protocols. Secure the patient restraints snugly, but do not impair the patient's breathing. Always follow your medical director's guidelines when securing the patient restraints. Photo 3.



#### Securing the Patient's Head

ALWAYS follow your local medical director's guidelines when securing the patient's head and neck. If a cervical collar is in place on the patient and a head immobilizer is warranted, follow the directions of the manufacturer of the head immobilizer. The patient's head should be secured to the CombiCarrier II after the patient restraints are secured. Once the patient's head is secured, recheck the CombiCarrier II latches and ALL patient restraints prior to lifting or moving the patient. Photo 4.





# CombiCarrier II Application as a Backboard (One-Piece Unit)

#### Side Latch Assembly

Make sure both side latches are fastened securely, so that the side halves are inseparable.

#### Positioning of the CombiCarrier II

Place the CombiCarrier II next to the patient so that the "Top of Head" grooves are lined up with the top of the patient's head. The CombiCarrier II is 73.50" (186.7cm) long and some patients will extend beyond the length of the CombiCarrier II. Check as to whether or not additional support is needed.

The patient can now be logrolled or lifted onto the CombiCarrier II. Always have one attendant maintain support of the patient's head during any logrolling or lifting procedures. Recheck both latch assemblies to ensure they are fully locked before placing the restraints on the patient.

In auto extrication situations, the CombiCarrier II can be placed on the edge of the car seat and the patient can be rotated and slid out onto the CombiCarrier II. Always follow your local medical director's guidelines for extricating a patient from a vehicle. Photo 5.



#### **Securing the Patient Restraints**

Position the patient restraints as stated previously. Two straps are used to form an X-pattern across the chest, one strap at the hips and one strap above the knees. The two chest straps should be secured behind the patient's shoulders and wrap around the top of each shoulder. Specific strap locations will be determined by the extent of the patient's injuries and local medical protocols. Secure the patient restraints snugly, but do not impair the patient's breathing.

In auto extrication situations, the patient restraints should be positioned and secured around the patient prior to moving the patient away from the vehicle unless there is an immediate life-threatening hazard present. Always follow your medical director's guidelines when securing the patient restraints.

#### **Securing the Patient's Head**

ALWAYS follow your local medical director's guidelines when securing the patient's head and neck. If a cervical collar is in place on the patient and a head immobilizer is warranted, follow the directions of the manufacturer of the head immobilizer. The patient's head should be secured to the CombiCarrier II after the patient restraints are secured. Once the patient's head is secured, recheck the CombiCarrier II latches and ALL patient restraints prior to lifting or moving the patient. *Photo* 6.



## **USE WITH A VACUUM MATTRESS**

The CombiCarrier II can be used to transfer a patient from the ground onto a vacuum mattress with a minimum of movement, eliminating the need to logroll the patient. After the patient is on the vacuum mattress the CombiCarrier II can be removed and the patient can be immobilized in the vacuum mattress. The CombiCarrier II can then be used underneath the EVAC-U-SPLINT® mattress to facilitate end-to-end lifting of the patient. *Photo* 7.



## **USE WITH A BASKET STRETCHER**

The CombiCarrier II can be placed into most basket stretchers except those with leg dividers. The patient should be secured to the CombiCarrier II first, then placed into the basket stretcher and secured to the basket stretcher with the appropriate restraints provided with the basket stretcher.

CAUTION: ALL vertical and horizontal lifts should be performed in accordance with the guidelines established by your medical director.





## **S**TORAGE

The CombiCarrier II can be placed into most standard sized backboard compartments. It is recommended that the CombiCarrier II be stored as a one-piece unit with both halves latched together. If a smaller space is required, the CombiCarrier II can be stored separated with one section on top of the other to reduce the length of the device. The patient restraints should be kept in close proximity to the CombiCarrier II for easy access. *Photos 8a and 8b*.





## **MAINTENANCE**

To properly maintain your CombiCarrier II, establish a preventative maintenance program that meets the needs of your particular service area. Daily inspection should include looking for anything that would affect the strength or performance of the CombiCarrier II, i.e. broken parts, loose screws, inoperable latches, etc. If damage is found or if maintenance is required take the CombiCarrier II out of service until such time that it can be properly repaired or replaced.

The plastic surfaces of the CombiCarrier II do not need any special maintenance. If metal burrs develop on any of the metal parts they should be removed with emery cloth. It is not advisable to wax the metal parts. Medical grade adhesive tape will not stick well to waxed parts.

## **CLEANING**

Clean and disinfect the CombiCarrier II according to your medical director's guidelines. A 1% bleach solution can be used on the CombiCarrier II, but it should be thoroughly rinsed off with lukewarm water. DO NOT remove the latch assembly unless authorized by Hartwell Medical. The latch assembly can be flushed out with soap and water, or any commercial disinfectant. After cleaning, towel dry the CombiCarrier II and place it back in service. An air hose may be helpful in drying the latch area.

The latch should not require any lubrication after cleaning. If the CombiCarrier II is used under extreme or adverse environmental conditions, minor lubrication of the latch assembly with a Teflon based spray lubricant or WD-40® may be necessary. DO NOT use oil or grease lubricants.

### **CUSTOMER SERVICE**

The lot number and serial number are located on the underside of both sections of the CombiCarrier II. Record this number with other important information like date of purchase and dealer name in the space provided. Retain this manual for reference and include it with any change in ownership of this product.

Should you need to order replacement parts in the future, please provide both the model number and the lot number to our customer service department. This information will help us provide you with accurate information and the proper parts for your CombiCarrier II.

Should you have any questions about your CombiCarrier II, our customer service personnel will be happy to help you. Our customer service department can be reached by calling (760) 438-5500, Monday through Friday, 8:00 am - 4:30 pm PST.

Product	CombiCarrier II	
Model Number	CC 2200P	
Lot # / Serial #	1	
Date Purchased		
Purchased From		
<b>Date Product Inspected</b>		
and Approved for Use		
In-Service Training		
<b>Completion Date</b>		

### LIMITED WARRANTY

The CombiCarrier II is warranted for five years from the date of purchase, or the date of receipt if proof of delivery is provided. This warranty covers all defects in material and workmanship under normal use.

All disposable and soft goods are warranted for 90 days from the date of purchase, or the date of receipt if proof of delivery is provided.

Any product claimed to be defective due to materials or workmanship within the specified time period will be inspected by an authorized representative of Hartwell Medical. Obligation shall be limited to replacement or repair of components found to be defective.

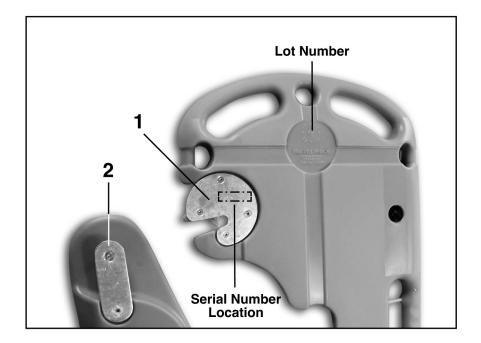
Should a possible defect be found after the product is placed in-service, contact your Hartwell Medical dealer directly. **DO NOT return the product without prior authorization.** 

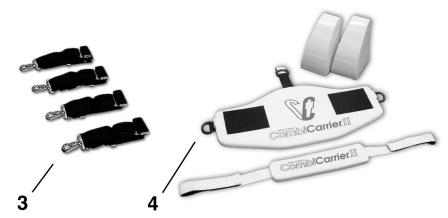
#### **RETURN POLICY**

No product claimed to be deficient will be accepted without prior approval of Hartwell Medical. Product accepted for investigation will be cleaned (if necessary), inspected, tested and then evaluated for repair or replacement. Returned products will be evaluated by age of product, condition of product and expected length of time to repair the product. If deemed repairable, the customer will be provided with an estimate prior to beginning any repairs. All repaired items carry a 90-day warranty.

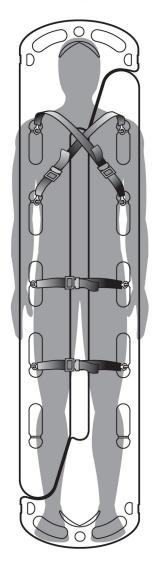


## Parts Diagram





# STRAP APPLICATION DIAGRAM



Ref#.	Replacement Part Number	Description	Quantity
1	CC 2100-9-100	Latch Lever Assembly (Circular base plate, screws, spring, bushing, nut, washer and latch lever)	1
2	CC 2100-9-200	Retainer Plate Assembly (Retainer plate, spacer, screws)	1
3	CC 2100-9-400	CombiCarrier Patient Restraints - Speed Clip (set of 4)	1
4	СС 3200Н	CombiCarrierII Head Immobilizer	1



## **DOCUMENTATION OF TRAINING**

Everyone who will be using or operating the CombiCarrier II should be required to actively participate in the initial training and all subsequent refresher training sessions. This will ensure a clear understanding of the function and capabilities of the CombiCarrier II. These are suggested documentation formats. Additional copies may be necessary to meet your organization's needs. Photocopy or create additional forms according to your medical director's guidelines.

Date	Attendees	Instructor's Name	Training Site

## **MAINTENANCE LOG**

Routine inspection and maintenance is required to keep the CombiCarrier II ready for immediate use. If, at any time, the CombiCarrier II is suspected of not functioning properly it should be taken out of service until such time that it can be thoroughly inspected and properly repaired or replaced.

Date	Maintenance Performed	Technician's Name	Signature