Our company philosophy is one of constant improvement in design and craftsmanship. Therefore, specifications are subject to change without notice.

CombiCarrier® is a registered trademark of Hartwell Medical.

©2016 Hartwell Medical LLC. All rights reserved.
**TABLE OF CONTENTS**

Product Terminology .................................................. 2

Important Information
   Specifications .................................................. 2
   Introduction .................................................. 3
   Authorization ................................................ 3
   Customer Service ............................................... 6
   Limited Warranty ............................................... 6
   Return Policy .................................................. 6

Operating Instructions
   Application as a Split Litter ............................. 4
   Application as a Backboard .............................. 5
   Use with a Vacuum Mattress .......................... 5
   Use with a Basket Stretcher .......................... 5

Storage ................................................................. 6

Maintenance and Cleaning ................................. 6

Parts List ............................................................ 7

Training and Maintenance Log .......................... 8

**INTRODUCTION**

The CombiCarrierII® has been designed to aid in the movement of an injured or ill person with a minimum amount of movement to the patient. The CombiCarrierII 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 CombiCarrierII becomes the sole and complete responsibility of the product user.

**Physical Abilities of Users**

All users of the CombiCarrierII 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 CombiCarrierII. Use caution at all times when handling and maneuvering a patient secured to the CombiCarrierII.

**AUTHORIZATION**

**A Word of Caution**

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

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 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 CombiCarrierII prior to field use.

3. Proper application of the CombiCarrierII requires a minimum of two trained emergency medical personnel.

4. Continuing medical education on a regular basis with “hands-on” experience is recommended.
The CombiCarrierII® functions as two products in one. It can be used as a split litter device or as a one-piece backboard.

**CombiCarrierII Application as a Split Litter (Two-Piece Unit)**

**Side Latch Assembly**

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

**Positioning of the CombiCarrierII**

Place the CombiCarrierII (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 CombiCarrierII is 73.5” (186.7cm) long and some patients may extend beyond the length of the CombiCarrierII. 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 CombiCarrierII 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 CombiCarrierII section to slide properly under the patient. *Photo 2.*

The patient does not have to be logrolled when using the CombiCarrierII in this manner. Make sure the first half is properly positioned under the patient and then slide the other half of the CombiCarrierII 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 CombiCarrierII 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 protocols established by your local medical director. When using a FASPLINT FULLBODY® or FASPLINT HALFBACK®, the patient’s head should be stabilized in unison with the patient’s neck and torso.

Recheck the CombiCarrierII latches and **ALL** patient restraints prior to lifting or moving the patient. *Photo 4.*
CombiCarrierII® 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 CombiCarrierII
Place the CombiCarrierII next to the patient so that the “Top of Head” grooves are lined up with the top of the patient’s head. The CombiCarrierII is 73.50” (186.7cm) long and some patients will extend beyond the length of the CombiCarrierII. Check as to whether or not additional support is needed.

The patient can now be logrolled or lifted onto the CombiCarrierII. 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 CombiCarrierII can be placed on the edge of the car seat and the patient can be rotated and slid out onto the CombiCarrierII. 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 protocols established by your local medical director. When using the CombiCarrierII Head Immobilizer, the patient’s head should be stabilized after the patient restraints are secured. Recheck the CombiCarrierII latches and ALL patient restraints prior to lifting or moving the patient. Photo 6.

USE WITH A VACUUM MATTRESS
The CombiCarrierII 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 CombiCarrierII can be removed and the patient can be immobilized in the vacuum mattress. The CombiCarrierII 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 CombiCarrierII can be placed into most basket stretchers except those with leg dividers. The patient should be secured to the CombiCarrierII 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.
Storage

The CombiCarrierII can be placed into most standard sized backboard compartments. It is recommended that the CombiCarrierII be stored as a one-piece unit with both halves latched together. If a smaller space is required, the CombiCarrierII 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 CombiCarrierII for easy access. Photos 8a and 8b.

Maintenance

To properly maintain your CombiCarrierII, 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 CombiCarrierII, i.e. broken parts, loose screws, inoperable latches, etc. If damage is found or if maintenance is required take the CombiCarrierII out of service until such time that it can be properly repaired or replaced.

The plastic surfaces of the CombiCarrierII 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 CombiCarrierII according to your medical director’s guidelines. A 1% bleach solution can be used on the CombiCarrierII, but it should be thoroughly rinsed off with cool or 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 CombiCarrierII 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 CombiCarrierII 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 CombiCarrierII. 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 CombiCarrierII.

Should you have any questions about your CombiCarrierII, 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.

Limited Warranty

The CombiCarrierII 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 List

<table>
<thead>
<tr>
<th>Ref#</th>
<th>Replacement Part Number</th>
<th>Description</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>CC 2100-9-400</td>
<td>CombiCarrierII® Patient Restraints - Speed Clip (set of 4)</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>CC 3400H</td>
<td>CombiCarrierII Head Immobilizer (complete set)</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>CC 3400-9-100</td>
<td>CombiCarrierII Head Immobilizer Base Plate (each)</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>CC 3400-9-200</td>
<td>CombiCarrierII Head Immobilizer Support Block (pair)</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>CC 3400-9-300</td>
<td>CombiCarrierII Head Immobilizer Head Strap (each)</td>
<td>1</td>
</tr>
</tbody>
</table>

For more information on additional parts, please contact our Customer Service Department at 760-438-5500.
**DOCUMENTATION OF TRAINING**

Everyone who will be using or operating the CombiCarrierII® 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 CombiCarrierII. 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.

<table>
<thead>
<tr>
<th>Date</th>
<th>Attendees</th>
<th>Instructor’s Name</th>
<th>Training Site</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**MAINTENANCE LOG**

Routine inspection and maintenance is required to keep the CombiCarrierII ready for immediate use. If, at any time, the CombiCarrierII 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.

<table>
<thead>
<tr>
<th>Date</th>
<th>Maintenance Performed</th>
<th>Technician’s Name</th>
<th>Signature</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

HARTWELL MEDICAL
6354 Corte del Abeto, Suite F • Carlsbad, CA 92011
1-800-633-5900 • (760) 438-5500 • Fax (760) 438-2783
www.HartwellMedical.com
©2016 Hartwell Medical LLC - All rights reserved
AGCCII 09/16