



EVAC-U-SPLINT® Pediatric Mattress

APPLICATION GUIDELINES

MODELS PD3000, PD1500 AND PD1000

The EVAC-U-SPLINT® Pediatric Mattress operates in the same manner as the full-size EVAC-U-SPLINT Mattress, but there are a few modifications that you should be familiar with when using the pediatric vacuum mattress.

IMPORTANT: First read and understand the Application Guidelines for the adult sized EVAC-U-SPLINT Vacuum Mattress, then read the following guidelines that are specific to the pediatric version to insure your understanding of the unique features and benefits of the EVAC-U-SPLINT Pediatric Mattress.

Strap Design – The straps on the pediatric mattress come straight across the patient and do not zig-zag down the patient. This configuration enables the straps to come closer together when fastened allowing very small children to be immobilized effectively in the vacuum mattress. It also allows an individual strap to be unfastened while keeping the other straps fastened. This could be beneficial for physicians that need to examine a particular area of the child while still keeping the child securely immobilized.

Valve – There is one valve at the foot-end of the pediatric mattress. The EVAC-U-SPLINT Pediatric Mattress can be evacuated with a manual vacuum pump, a portable battery-operated suction unit or with a hospital's wall mounted suction unit.

Handles – There are four handles appropriately positioned for easy lifting of an immobilized child. The pediatric mattress can be lifted from the sides or from the ends. It is suggested to lift from the sides whenever possible as this distributes the patient's weight evenly among the two rescuers who are lifting the patient.

Positioning of the Patient – The injured child should be logrolled or lifted onto the vacuum mattress in accordance with the procedures established by your EMS organization's medical director. Because of the anatomical difference between adults and children, the child's torso usually needs to be elevated so that their cervical spine remains in neutral alignment. This can be accomplished easily with the vacuum mattress by following these steps: 1) Distribute the beads evenly throughout the length of the mattress. 2) Place the child on the mattress and check to see if the patient is in neutral alignment. 3) If the patient's head is flexed, simply make a slight depression under the occipital region of the child's head. The amount of depression can easily be changed depending on the size of the child's head in relation to their body. This helps place the child in neutral alignment and does not require the child to be repositioned once they are placed on the surface of the pediatric mattress.

Once the child is properly positioned, the straps can be secured and the mattress evacuated. Care should be taken to minimize any movement of the patient during the application and securement of the vacuum mattress. Use of a rigid cervical collar should be a decision made by your local medical director. Medical grade

adhesive tape, either 1" or 2" in width can be used to secure the forehead of the patient in the vacuum mattress. In addition, some children's hospitals have found that applying a 1" wide piece of tape just under the patient's nose is an excellent method for stabilizing a child's head. **Consult your medical director if questions arise as to the recommended immobilization procedures for your area.**

Cleaning – The EVAC-U-SPLINT Pediatric Mattress can be cleaned as stated in the EVAC-U-SPLINT Application Guidelines for the adult-sized patient.

Storage – Always inspect the product for damage prior to storing it. This will help ensure that the EVAC-U-SPLINT Pediatric Vacuum Mattress is always ready to use under emergency conditions. The mattress should be stored in an area that is above freezing (32°F/0°C). The mattress can be used in environments below freezing, down to -30°F (-34°C), but it **should not be stored in an area where the temperature is below freezing.** If there is any doubt, bring the product to a temperature that is above freezing before using it in the field.

Always follow your local medical protocols approved by your medical director. If you become aware of any serious incident related to the use of the device, you should report the incident to Hartwell Medical and to your local medical device regulatory authority. Should you have any specific questions about the design, application or maintenance of this product, please visit our website or call us at (760) 438-5500.

DOCUMENTATION OF TRAINING

Everyone who will be using or operating the EVAC-U-SPLINT® Pediatric Mattress 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 EVAC-U-SPLINT Pediatric Mattress. You should utilize the training process that has been approved by your organization and is in accordance with your medical director's guidelines. Important items to document should be the training date, names of attendees, the instructor's name and title, and the training location. Important items to document should be the training date, names of attendees, the instructor's name and title, and the training location.

MAINTENANCE LOG

Routine inspection and maintenance is required to keep the EVAC-U-SPLINT® Pediatric Mattress ready for immediate use. If, at any time, the EVAC-U-SPLINT Pediatric Mattress 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. As part of your preventative maintenance program, you should maintain a written log of any maintenance performed on the EVAC-U-SPLINT Pediatric Mattress



EVAC-U-SPLINT®

APPLICATION GUIDELINES

REPAIR PROCEDURES

VINYL PATCH MATERIAL AND ADHESIVE

These instructions are intended for **minor repairs** of small holes or tears in the fabric material of the extremity splints. **Large rips or tears may require the product to be replaced.** Contact your authorized Hartwell Medical Distributor or call us directly if you have questions about the repair of your EVAC-U-SPLINT® product.

For holes or tears less than 3/4" (1.9 cm) in size:

- Locate the hole or tear in the material and mark it with a piece of masking tape for easy identification.
- Clean the surface to be repaired thoroughly using isopropyl (rubbing) alcohol. Make sure the area is dry and free of fingerprints before applying adhesive.

If the hole is less than 1/8" (0.3 cm) in size:

- Apply a small amount of vinyl glue to the damaged area, thoroughly covering the area.
- Vacuum a small amount of air out of the splint to pull some of the glue into the damaged area.
- Release the vacuum to let air back into the splint.
- Allow the glue to dry thoroughly for 24 hours at room temperature.

If the hole or tear is larger than 1/8" (0.3 cm), but less than 3/4" (1.9 cm) in size:

- Make a patch from the material supplied that is at least 3/4" larger than the tear on all sides. Example: for a 3/4" tear make a patch that measures 1.5" x 2.25". Make sure to round the corners of the patch so they do not peel.
- Using your finger (wear rubber gloves), apply the glue to the splint and to one side of the patch. Use a thin even coating. Don't apply a heavy layer because it will take longer to dry and will be squeezed out around the edges of the patch.
- Allow the glue to become tacky, then place the patch over the damaged area. Press the patch and the splint material firmly together. Make sure the entire edge of the patch is glued securely to the splint.
- Allow the glue to dry thoroughly for 24 hours at room temperature.

For holes or tears larger than 3/4" (1.9 cm) in size.

Contact your local authorized Hartwell Medical Distributor.

Temporary field repairs may be accomplished using a small piece of nonporous adhesive tape or duct tape over the damaged area. If you have any questions about these repair procedures, please contact us directly.

PEEL AND STICK PATCHES

If you have a need to patch your EVAC-U-SPLINT® mattress or splint product you may find Peel and Stick Patches for Vacuum Splints patches easy to use and quick to apply. Read ALL directions before applying a patch.

For best results wash and dry your hands before applying the patch. Apply to a clean, dry surface. Surface temperature of the materials to be repaired should be 50° F or warmer. The splint should be soft, not evacuated. Move the beads inside of the vacuum splint or mattress away from the area to be patched, creating as flat an area of fabric as possible. These patches are designed for and will provide the best results for use on small holes or cuts that are 1/4" or LESS in length.

STEP 1. CLEAN & DRY: Clean the surface to be repaired with an alcohol prep pad or a 50/50 mixture of rubbing (isopropyl) alcohol and water. Before proceeding, make sure the surface is completely dry.

STEP 2. PEEL: Carefully peel back half of the paper liner, touching just the edges or corners of the patch.

STEP 3. STICK: Position and anchor the exposed portion of the patch. Position the patch so the small hole or tear will be in the center area of the patch. Slowly peel back the rest of the liner while carefully applying the patch over the small hole – take care to avoid air bubbles. Smooth out the patch working from the center of the patch to the outside edges of the patch. Rub all edges to seal the patch and then rub the entire patch aggressively. Let the splint or mattress sit, undisturbed and not evacuated for one hour. Repair is now complete.

ALWAYS TEST THE PRODUCT BEFORE PLACING IT BACK IN SERVICE. Do not place repaired products into a washer or dryer. For best results, store patch material at room temperature.

Note: Temporary field repairs can be made using a small piece of nonporous adhesive tape or duct tape placed over the damaged area. If you have any questions about these repair procedures please contact us directly at 760-438-5500 or customerservice@hartwellmedical.com.

Additional repair kits can be ordered online at
www.HartwellMedical.com

HARTWELL MEDICAL



Tri-Tech Forensics, Inc. dba Hartwell Medical
3811 International Blvd NE, Suite 100
Leland, NC 28451 USA
PH: (760) 438-5500
www.HartwellMedical.com



MedEnvoy Switzerland
Gotthardstrasse 28, 6302 Zug,
Switzerland



MedEnvoy Global B.V
Prinses Margrietplantsoen 33
Suite 123
2595 AM The Hague
The Netherlands