

# Matrix<sup>®</sup> SHAPE INSERT

FOR USE WITH THE  
Matrix MAC-HUG Back



## USER MANUAL

**DEALER:** This manual **MUST** be given to the user of the product.

**USER:** Before using this product, read this manual and save for future reference.


*This manual may not be reproduced or reprinted either partly or completely without previous written consent from Motion Concepts or its statutory representatives.*


*This user manual is compiled from the latest specifications and product information available at the time of publication. We reserve the right to make any necessary as they become necessary. Any changes made to our products may cause slight variations between the illustrations and explanations in this manual and the product you have purchased. If you have any questions or concerns regarding the information provided in this manual, please contact our Customer Service Department for assistance.*


# 1.0 GENERAL WARNINGS/INFORMATION

## 1.1 SAFETY SYMBOLS:


Proper set-up and safe use of your Matrix® Shape Insert depends on your own good judgement and common sense, as well as that of your provider, caregiver and/or health professional. The following symbols are used throughout this user manual to identify warnings, cautions and important notes. It is very important that you read and understand them completely.

 **CAUTION!** Failure to heed the cautions in this manual may result in minor injury or damage to your Matrix Seating product, or both.


 **WARNING!** Failure to heed the warnings in this manual may result in death, serious injury or damage.

 **IMPORTANT!** Important information to remember during installation, set-up and/or adjustment of your Matrix Seating product.

## 1.2 IMPORTANT INFORMATION FOR USERS


 **WARNING!** Risk of serious injury or damage

Improper use of this product may cause serious injury or damage. DO NOT use this product or any available optional equipment without first completely reading and understanding these instructions and any additional instructional material such as user manual, service manuals or instruction sheets supplied with this product or optional equipment. If you are unable to understand the warnings, cautions or instructions, contact a health care professional or dealer before attempting to use this equipment.

 **IMPORTANT INFORMATION:** The best way to avoid problems related to pressure injuries is to understand their causes and your role in a skin management program. Your therapist and physician should be consulted if you have questions regarding individual limitations and needs.

All back supports should be selected carefully. Working with your therapist and physician is the best way to assure that a back/cushion choice matches your individual needs. As the needs of the individual become more complex, the evaluation becomes more important. Regular evaluations should be performed to address any ongoing physical changes.

For additional product information or if you have questions regarding this or any other Matrix® product, please contact Motion Concepts® for assistance (see contact information on the back page of this manual).

 **IMPORTANT!** Please refer to the Wheelchair Owners/Operators Manual for additional safety information, warnings and cautions related to the operation of your wheelchair.

## 1.3 INTENDED USE

The Matrix® SHAPE is designed to be used primarily with the Matrix® MAC HUG Back, to accommodate moderate postural asymmetries. Normal use is defined by Motion Concepts as when the product is placed between the padding and rigid back shell.

## 2.0 SAFETY INFORMATION & WARNINGS

### **⚠ WARNING! Risk of Serious Injury or Damage**

- The instructions in this manual should be performed by a qualified technician
- For instructions on the installation/set-up of the Matrix® MAC Back, please refer to the Matrix® MAC Back User Manual (provided separately)

### **⚠ WARNING! Risk of Death, Serious Injury, or Damage**

Lighted cigarettes dropped onto an upholstered seating system can cause a fire resulting in death, serious injury or damage. Wheelchair occupants are at particular risk of death or serious injury from these fires and resulting fumes because they may not have the ability to move away from the wheelchair.

- DO NOT smoke while using your wheelchair

### **⚠ WARNING! Risk of Serious Injury**

When establishing the final mounting position for your Matrix® MAC Back, ensure the stability of the wheelchair is not compromised. Adjusting the forward and aft position and/or angle of the backrest will alter the user's center of gravity within the wheelchair. It may be necessary to reposition the front casters, rear wheels, back angle, tilt-in-space, recline position and/or seat depth before use.

### **⚠ WARNING Risk of Serious Injury**

Skin condition should be checked very frequently after the installation of any new seating system. Working with your therapist, physician and service provider is the best way to assure that a seating choice meets your individual needs.

### **⚠ WARNING! Risk of Injury or Damage**

Matrix® products are specifically designed and manufactured for use in conjunction with Matrix® accessories. Accessories designed by other manufacturers have not been tested by Motion Concepts and are not recommended.

---

## 3.0 MATRX SHAPE INSERT

### 3.1 PRODUCT DESCRIPTION

The Matrix® SHAPE INSERT is a kit consisting of a fabric interface pad (C), a set of polyurethane foam blocks (A), and a corresponding set of stretchable fabric loops (B). The foam blocks are designed to fit inside the individual fabric loops. The foam blocks can be attached to the fabric interface pad (via hook & loop fasteners) in any desired configuration (see Fig. 1), in order to meet the needs of the end user.

The fabric interface pad may be cut to any desired shape/size without fraying. The Velcro™ compatible surface on the interface pad secures the Matrix® Shape Insert to the inside of the rigid back shell\*.

*\*Note: The Matrix® Shape Insert **must** be secured directly onto the back shell, and installed behind the back support (MAC-HUG) cushion*

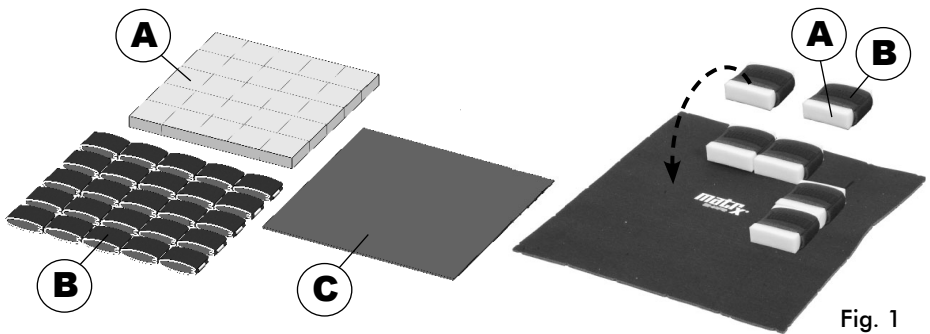


Fig. 1

### 3.2 INSTALLING THE SHAPE INSERT (onto the Matrix® MAC-HUG Back)

1. Remove the individual fabric loops from the fabric interface pad, and separate the individual foam blocks; Install the foam blocks inside the individual loops.
2. If necessary, carefully cut the fabric interface pad to the desired shape/size, to fit onto the back shell and/or to meet the specific needs of the user (Fig. 2)
3. **Assembling the Shape Insert:** Install/arrange the individual foam block assemblies onto the front of the fabric interface pad, in the desired configuration (Fig 3). (note: foam blocks are secured via hook & loop strips on the fabric loops).
4. Remove/Disengage the Matrix® MAC-HUG Back cushion/cover from the backshell.

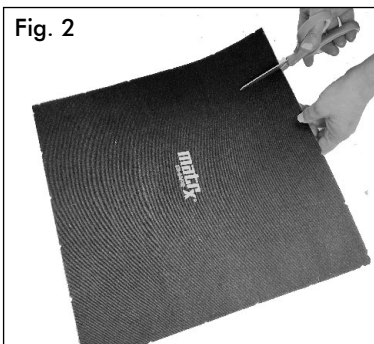


Fig. 2

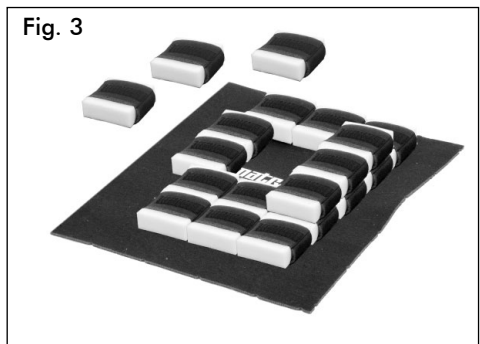
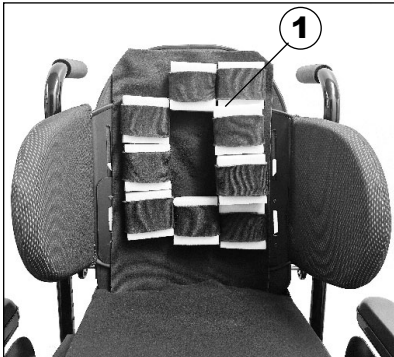


Fig. 3

5. Align and secure the pre-configured Shape Insert onto the existing hook & loop strips on the backshell (1).
6. Align the Matrix® MAC-HUG Cushion (A) in FRONT of the Shape Insert (2), then re-attach the outer cover onto the backshell (by wrapping the outer cover 'flap' over the top of the back shell (3)).
7. Following installation, test fit the Matrix® Shape Insert with the end user seated in the wheelchair. If necessary, repeat steps 3-7 to modify/reconfigure the layout of the foam blocks.

## SHAPE INSERT INSTALLATION:



### **⚠ WARNING! Risk of Injury or Damage**

- The Matrix® Shape Insert is **NOT** a suitable replacement for a back support cushion. **NEVER** use the Shape Insert on its own without a Back Support Cushion in place.
- The Matrix® Shape Insert **MUST** be positioned BEHIND the existing back support cushion (e.g. Matrix® MAC-HUG Cushion), NEVER in front.



## 4.0 CARE AND MAINTENANCE

### 4.1 INSPECTION AND MAINTENANCE

Frequent visual inspection of the Matrix Shape Insert, as well as all associated Matrix Back components, should be performed to identify deformation, wear and tear or compression. Replace damaged/worn components if necessary.


#### **WARNING! Risk of injury or damage**

- Do not continue to use this product if problems or damage are discovered;
- Corrective maintenance can be performed by or arranged thru your local service provider

**Weekly:** Inspect **ALL** Matrix Back Support fasteners weekly to ensure that mechanical connections and attaching hardware are tightened securely.

**Monthly:** Perform a visual inspection of all components including hardware, brackets, upholstery materials, foam, and plastics for deformation, corrosion, breakage, wear or compression. Replace damaged/worn components if necessary.

### 4.2 CLEANING OF THE MATRIX® SHAPE INSERT

 **PLEASE NOTE:** Foam blocks develop a yellow tinge over time if exposed to air. The color of the foam is NOT an indicator of the cleanliness of the product.

#### **WARNING! Risk of injury or damage**

- Inspect the Matrix® Shape Insert regularly and launder any fabric components which have become contaminated or soiled.
- DO NOT continue to use foam blocks if they are soiled. Discard any soiled foam blocks in accordance with local government regulation regarding medical waste.

#### **CAUTION! Risk of damage**

- If the Shape Insert becomes exposed to liquids, remove it from the backrest, separate the foam blocks & fabric interface pad, and air dry all components.
- Adequate drying is a crucial factor in the care and maintenance of the Matrix® Shape Insert and the back support. All components should be dried completely prior to reinstallation.

#### **CAUTION! Risk of damage**

- DO NOT use cleaning and disinfecting agents with abrasive, staining, or polymer-damaging properties such as phenols, alcohols, or bleaches. Chlorine solutions used even in low concentrations on a regular basis can diminish the life of the cover/fabric
- DO NOT use fabric softeners when laundering fabric components.
- NEVER use disinfectant agents or wipes to clean the Foam blocks.
- Keep components clear of open heat sources during cleaning.

### 4.2.1 General Cleaning:

The Matrix® Shape Insert can be wiped with a damp absorbent towel, cloth, or paper towel. Remove all gross contamination from surface (i.e. food particles, urine, feces, blood). Spot-clean with mild soap and water. Ensure ALL components are completely dried prior to reinstallation.

### 4.2.2 Laundering Instructions

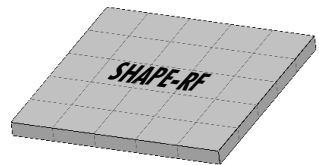
The fabric interface pad and fabric loops may be laundered, if necessary. **PRIOR** to laundering, please read all **Warning Information** provided in section 4.2

#### **LAUNDERING THE INTERFACE PAD AND FABRIC LOOPS:**

1. Prior to laundering, remove all gross contamination using an absorbent material (cloth or paper towel).
2. Remove the Matrix® Shape Insert from the back support and inspect thoroughly.
3. Remove ALL foam blocks **PRIOR** to laundering the fabric interface pad and/or fabric loops (*Discard any soiled foam blocks in accordance with local government regulations regarding medical waste*) **Note:** Replacement Foam Blocks are available for purchase, if required- see 4.2.3 below
4. It is recommended to place the fabric loops and interface pad in a Laundry Bag for laundering.
5. Wash fabric components using a mild/neutral detergent on a gentle cycle (*Fabric softener may damage the properties of the foam core layer and is NOT recommended*)
6. Due to foam core layer in the fabric it is recommended to double rinse components after laundering.
7. Hang fabric components to dry. (Air Drying is the preferred drying method, **DO NOT** tumble dry). Ensure ALL components are **COMPLETELY** dried prior to reinstallation.

### 4.2.3 Replacement Foam Blocks for the Matrix Shape Insert

Replacement Foam Block sheets may be purchased separately, if required. (1 sheet = 25 pre-cut blocks (p.n. **SHAPE-RF**)). Please contact your local service provider for assistance.



## 5.0 AFTER USE

### 5.1 STORAGE

#### **⚠ CAUTION! Risk of Damage**

- Store product inside a protective cover whenever possible, in a clean, dry environment away from any sharp edges.
- **DO NOT** store other items on top of this product,
- **DO NOT** store this product next to radiators or other heating devices.
- Protect the product from direct sunlight.



## 5.2 REUSE/RECYCLING

This product is suitable for re-use. The Matrix® Shape Insert (fabric and foam), must be inspected by a qualified dealer or healthcare professional before re-use.

### **WARNING! Risk of Serious Injury**

- Always have an authorized dealer inspect the product for damage or wear PRIOR to transferring the product to a different user.
- If any damage is found, DO NOT RE-USE this product. Failure to heed these warnings may result in serious injury.
- PRIOR to reuse, clean and disinfect the product thoroughly in accordance with local government regulations.

## 5.3 DISPOSAL

The disposal and recycling of used devices and packaging must comply with the applicable local legal regulations.

Ensure that the product is cleaned prior to disposal to avoid any risk of contamination.

---

## 6.0 WARRANTY INFORMATION

### WARRANTY

PLEASE NOTE: THE WARRANTY BELOW HAS BEEN DRAFTED TO COMPLY WITH FEDERAL LAW APPLICABLE TO PRODUCTS MANUFACTURED AFTER JULY 4, 1975.

This warranty is extended only to the original purchaser/user of our products. This warranty gives you specific legal rights and you may also have other legal rights which vary from state to state. Invacare/ Motion Concepts warrants this product to be free from defects in materials and workmanship for two years of use by original purchaser. This warranty does not apply to punctures, tears or burns, nor to the removable cushion cover. If within such warranty period any such product shall be proven to be defective, such product shall be repaired or replaced, at Invacare's/Motion Concepts' option, with refurbished or new parts. This warranty does not include any labor or shipping charges incurred in replacement part installation or repair of any such product. Product repairs shall not extend this warranty- coverage for repaired product shall end when this limited warranty terminates. Invacare's/Motion Concepts' sole obligation and your exclusive remedy under this warranty shall be limited to such repair and/or replacement. For warranty service, please contact the dealer from whom you purchased your Invacare/ Motion Concepts product. In the event you do not receive satisfactory warranty service, please write directly to Invacare/Motion Concepts at the address on the back cover. Provide dealer's name, address, model number, the date of purchase, indicate nature of the defect and, if the product is serialized, indicate the serial number.

Invacare Corporation/Motion Concepts will issue a return authorization. The defective unit or parts must be returned for warranty inspection using the serial number, when applicable, as identification within thirty (30) days of return authorization date.

DO NOT return products to our factory without our prior consent. C.O.D. shipments will be refused; please prepay shipping charges.

**LIMITATIONS AND EXCLUSIONS:** THE WARRANTY SHALL NOT APPLY TO PROBLEMS ARISING FROM NORMAL WEAR OR FAILURE TO ADHERE TO THE ENCLOSED INSTRUCTIONS. IN ADDITION, THE FOREGOING WARRANTY SHALL NOT APPLY TO SERIAL NUMBERED PRODUCTS IF THE SERIAL NUMBER HAS BEEN REMOVED OR DEFACED; PRODUCTS SUBJECTED TO NEGLIGENCE, ACCIDENT, IMPROPER OPERATION, MAINTENANCE OR STORAGE; OR PRODUCTS MODIFIED WITHOUT INVACARE'S/MOTION CONCEPTS' EXPRESS WRITTEN CONSENT INCLUDING, BUT NOT LIMITED TO: MODIFICATION THROUGH THE USE OF UNAUTHORIZED PARTS OR ATTACHMENTS: PRODUCTS DAMAGED BY REASON OF REPAIRS MADE TO ANY COMPONENT WITHOUT THE SPECIFIC CONSENT OF INVACARE/MOTION CONCEPTS; PRODUCTS DAMAGED BY CIRCUMSTANCES BEYOND INVACARE'S/MOTION CONCEPTS' CONTROL; PRODUCTS REPAIRED BY ANYONE OTHER THAN AN INVACARE/MOTION CONCEPTS DEALER, SUCH EVALUATION SHALL BE SOLELY DETERMINED BY INVACARE/MOTION CONCEPTS.

THE FOREGOING WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER EXPRESS WARRANTIES, IF ANY, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. IT SHALL NOT EXTEND BEYOND THE DURATION OF THE EXPRESSED WARRANTY PROVIDED HEREIN AND THE REMEDY FOR VIOLATIONS OF ANY IMPLIED WARRANTY SHALL BE LIMITED TO REPAIR OR REPLACEMENT OF THE DEFECTIVE PRODUCT PURSUANT TO THE TERMS CONTAINED HEREIN. INVACARE/MOTION CONCEPTS SHALL NOT BE LIABLE FOR ANY CONSEQUENTIAL OR INCIDENTAL DAMAGES WHATSOEVER. THIS WARRANTY SHALL BE EXTENDED TO COMPLY WITH STATE/PROVINCIAL LAWS AND REQUIREMENTS.





---

**Motion Concepts**

[www.motionconcepts.com](http://www.motionconcepts.com)

**USA**

700 Ensminger Rd. Suite 112  
Tonawanda, NY 14150  
888-433-6818

**Canada**

84 Citation Dr., Unit 1-10  
Concord, Ontario L4K 3C1  
905-695-0134  
866-748-7943



Copyright © 2024 Motion Concepts LP. All rights reserved. Republication, duplication or modification in whole or in part is prohibited without prior written permission from Motion Concepts. Trademarks are identified by ™ and ®. All trademarks are owned by or licensed to Invacare Corporation or its subsidiaries unless otherwise noted.

