WARRANTY
Every MaTRx-PB back is carefully inspected and tested to provide optimum performance. Each back is guaranteed to be free from defects for a period of 24 months from the date of purchase, provided normal use. Should a defect in materials or workmanship occur within 24 months of the original date of purchase, Motion Concepts will, at its option, repair or replace it free of charge. This warranty does not apply to punctures, tears or burns, nor to the removable cushion cover.

The original back must be returned to the dealer and will become the property of Motion Concepts as a condition of processing the warranty claim. All warranty claims must be made through the dealer where the cushion was purchased. Except for express warranties made herein, all other warranties of fitness or use for a particular purpose are excluded. There are no warranties that extend beyond the warranties provided above. Remedies for breach of this warranty are limited to repair or replacement of goods. In no event shall damages for breach of any warranty include any consequential damages or exceed the original cost of the back.

IMPORTANT!
The installation instructions contained in this manual should only be carried out by a qualified technician.
**8.0 One-Hand Cord Release Mechanism (Optional)**

**Installation Instructions:**

1. Thread the **Nylon Cord** through the holes in the latch mechanism at the top of the left and right mounting plates (see image A, below.)

2. Install the **Cord-Lock** mechanism onto the cord (see image B, below). Press the button to open the lock mechanism and slide the two open ends of the nylon cord through the opening.

3. With the back properly installed on the wheelchair, adjust the cord length so that it hangs at approximately a 35-45° angle along the back pan (this allows the release mechanism to operate more effectively). If necessary, cut/remove excess cord to eliminate any risk of entanglement. Once adjusted, combine the loose cord ends into a single knot to prevent the cord-lock from slipping.

   (Note: if the cord length was modified, carefully melt the ends of the cord to prevent fraying)

---

**IMPORTANT! TRANSPORTING THE CLIENT WITHIN A WHEELCHAIR FITTED WITH A MaTRx BACK IN A MOTOR VEHICLE**

The following guidelines should be made available to all parties who are responsible for the transportation of the client, such as schools and transport providers.

Wherever practicable the client should be transferred out of the wheelchair into a vehicle seat and use a lap and diagonal seat belt or an appropriate child safety seat.

The MaTRx back has been dynamically tested and meets the requirements of ISO 16840-4 and Section 20, ANSI/RESNA WC/Volume 4 “Wheelchair Seating Systems for Use in Motor Vehicles”. A Surrogate Wheelchair Base (SWCB) and a Hybrid III Midsize-Adult Male Anthropomorphic Test Device were used in a forward facing frontal impact test. The SWCB was secured by a four-point, strap type wheelchair tie-down and the occupant restraint was a vehicle anchored lap and diagonal occupant restraint system.

MaTRx backs should only be used in conjunction with wheelchairs that comply with the performance requirements of ANSI WC19 or ISO 7176-19.

**Before Entering the Vehicle Check the Following:**

- **MaTRx Back** - must be securely fastened into the wheelchair as described in the user manual.

- **Posture Belts & Harnesses** - should remain fitted during transportation, although they are designed to provide postural support only, they are not intended for safety during transportation.

- **Head Support** - must be securely fitted and correctly adjusted close to the rear of the client’s head during transportation, in order to reduce the risk of whiplash injuries.

**The Wheelchair Tie-down and Occupant Restraint System (WTORS)**

- **Wheelchair Tie-down** - The wheelchair must be securely tied down within the vehicle, in a forward facing position, in accordance with the wheelchair and tie-down manufacturers instructions.

- **Occupant Restraint** - A suitable occupant restraint system must also be fitted in accordance with the manufacturer’s instructions. A minimum is a lap and diagonal belt (lap belts on their own are not suitable). Restraints that loop over the shoulder and anchor to the vehicle floor should be avoided where possible, as they can cause a heavy downward load through the client during an impact, the preferred type anchor above and behind the shoulder as with a car seat belt. The lap section of the belt should fit snugly over the pelvis of the client and should not be able to ride up to the abdominal area. The upper torso section of belt should be in contact with the client’s chest and fit over the shoulder(s), while not cutting into the neck or slipping off the shoulder(s).

**Note:** If the wheelchair and MaTRx back are to be transported unoccupied, the wheelchair should be tied down with suitable equipment according to the manufacturer’s instructions. If the equipment is to be dismantled for transportation, ensure that all parts are secured safely within the vehicle.
7.0 Head/Neck Support Attachments

Instructions for installing a Headrest Clamp:

1. Open (pull down) cover and determine the appropriate set of mounting holes for the Headrest Clamp (drill new holes if necessary).

2. Close the cover and carefully punch holes through the cover fabric that correspond with the determined mounting holes for the Headrest Clamp.

3. Open and pull down the front half of the cover (enough to access the appropriate mounting holes on the Headrest Plate).

4. Place the Headrest Clamp on the outside of the back cover and push the mounting screws inward through the fabric and through the Headrest Plate.

5. Secure (bolt) the Headrest Clamp into place (*see note below) and close the cover.

**PLEASE NOTE**
The Headrest Plate is recessed into the Back Pan to prevent hardware from protruding into the back cushion. Please ensure that the hardware from the headrest clamp does not extend beyond this recessed area.

**WARNING!** Headrests that have been fitted onto the MaTRx-PB back are not intended for use during transport, and will not provide adequate support in the event of a crash. Users of wheelchairs should be transferred into appropriate seating in vehicles for transportation and use be made of the restraints made available by the auto industry.
1.0 Hardware Kit Contents

- Back Mounting Plates
- Cane Clamps
- Cane Inserts* (7/8" (22mm))
- Depth/Recline Adjustment Screws
- Cane Clamp Screws
- Cane Clamp Nut Plates
- Long Mounting Pins (optional)

*Note: 3/4"(19mm) cane inserts are available from Motion Concepts upon request.

6.0 Removing the Cover/Care Instructions

The MaTRx-PB cover can be removed for laundering or providing access to the inside of the back for modification.

Open the zipper at the top and carefully remove the cover by releasing the velcro hook & loop fasteners along the sides of the back shell.

General Care and Cleaning: The cover may be easily wiped down with a damp cloth when necessary. For specific laundering directions, please follow the washing instructions provided with the cover.

7.0 Head/Neck Support Attachments (Optional)

All MaTRx-PB backs contain a built-in Headrest Plate which can be used for attaching optional Head and Neck Supports.

Two sets of headrest clamp mounting holes are provided in order to install most standard types of headrests (see Figure 8 below). If required, additional holes may be drilled into the back pan and headrest plate to mount the necessary hardware.

2.0 Tools Required

Wrenches: 7/8" (22mm)  
Allen Keys: (provided)  
Utility Knife/Scissors  
Phillips Screwdriver  
Tape Measure/Ruler
5.0 Disengaging the MaTRx-PB

To Disengage the Back from the Wheelchair:

Step 1: Simultaneously lift the release levers (left & right) to unlock the latch mechanism and release the upper pins from the mounting plates. Refer to Figure 7 below.

(Note: for backs equipped with the one-hand cord release mechanism, lift cord upward to unlock/open the release levers - see Section 8.0: One-Hand Cord Release Mechanism, p.13).

Step 2: Lift entire backrest up and forward to disengage the lower pins from the lower slots in the mounting plates.

Figure 7

3.0 Before Installation - Important!

### Weight Capacities:

<table>
<thead>
<tr>
<th>MaTRx-PB</th>
<th>Back Width</th>
<th>Weight Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard</td>
<td>15&quot; - 20&quot;</td>
<td>300 lbs</td>
</tr>
<tr>
<td></td>
<td>38cm - 51cm</td>
<td>136 kg</td>
</tr>
<tr>
<td>Heavy-Duty</td>
<td>20&quot; - 24&quot;</td>
<td>500 lbs</td>
</tr>
<tr>
<td></td>
<td>51cm - 61cm</td>
<td>227 kg</td>
</tr>
</tbody>
</table>

The Mounting Plates are shipped pre-assembled on the Cane Clamps in the rearmost mounting configuration. This maximizes the seat depth on the wheelchair seat (up to a maximum 2.5" (64mm) rearward offset - see Figure 1 below).

By changing the orientation of the Mounting Plates on the Cane Clamps, the assembly can be reconfigured* to provide a more forward mounting position for the back if desired (up to a maximum 2.5" (64mm) forward offset - see Figure 2).

**Note:** Each mounting plate is also designed to provide 1.5" (38mm) of fore and aft adjustment relative to the cane clamp.

*To reconfigure a mounting plate/cane clamp to the forwardmost orientation:
- Detach the Mounting Plate from the Cane Clamp (3 screws);
- Rotate the Cane Clamp 180° and re-fasten it to Mounting Plate;
- Install Cane Clamp as illustrated in Figure 2.

**PLEASE NOTE**

When establishing the mounting position for the MaTRx-PB, ensure the stability of the wheelchair is not compromised.

Adjusting the forward and aft position of the backrest will alter the user’s center of gravity within the wheelchair. A recessed back position can significantly reduce the rearward stability of the wheelchair. Similarly, a more forward back position will reduce the wheelchair’s forward stability.
3.0 Before Installation - Important!

Acommodating Different Sized Back Post:
- 1" (25mm) back post - Cane clamps are installed without plastic inserts.
- 7/8" (22mm) back post - Requires 7/8" (22mm) plastic inserts (provided)
- 3/4" (22mm) back post - Requires 3/4" (19mm) plastic inserts*

*Note: 3/4" (19mm) inserts are available from Motion Concepts upon request.

![PLEASE NOTE]

On some wheelchairs, there may be an uneven seam along the back posts where a smaller diameter tube is inserted into a larger diameter tube. If the Cane Clamps must be mounted over this seam, the plastic inserts may be cut in half to allow the clamp to fasten securely onto the back posts (see Figure 4).

![Figure 3]

**HELPFUL HINT**

Spray a small amount of hairspray on the back canes and on the inside of the plastic inserts to create a secure 'no-slip' bond.

![Figure 4]

The Plastic Insert may be cut if the Cane Clamp is secured at the junction of 2 different diameter back posts.

![NOTE]

For wheelchairs with short back canes, it may be necessary to install Posture Back Cane Replacements (PBCR’s). The PBCR’s are designed to replace existing push handles or cane extensions on standard 1" (25mm) back posts. The Cane Clamps can be mounted directly onto the replacement back canes in order to allow proper installation of the MaTRx-PB. Cane Replacements are available from Motion Concepts (part#: TRX2810).

4.0 MaTRx-PB Installation Instructions

9 Verify that the overall fit and alignment of the back is correct (make adjustments as needed).
10 Fully secure the Cane Clamp Screws onto both back posts, and tighten the set screws to ensure the mounting plates do not slip or rotate.
11 To best determine the optimal depth & recline settings for the back, the user should be seated in the wheelchair. While seated, loosen the depth/recline screws on the mounting plates and adjust the back to the desired depth and recline angle. Re-tighten all screws to lock the back in position.

Ensure that the depth/recline adjustment for the back is made symmetrically* on the left & right mounting plates.

![PLEASE NOTE]

The vertical score lines on the mounting plates are designed as a point of reference to assist with symmetrical mounting (see image below). Since the back can be mounted in a rotated (reclined) position if desired, it will not always be mounted parallel with these vertical lines.

![HELPFUL HINT]

*Use score lines to make symmetrical adjustments on the left and right mounting plates.
4.0 MaTRx-PB Installation Instructions

8 Mounting Pin Adjustment:

i) With the back secured in place on the wheelchair, determine the amount of adjustment required for each mounting pin (see below).

ii) Remove the backrest from the wheelchair and use a wrench to loosen the flange nut on each pin that requires adjustment. (If necessary, replace the standard mounting pins with long mounting pins).

iii) Adjust the mounting pin depth (clockwise to shorten/counter-clockwise to lengthen) so that a minimum gap of 1/8” (3mm) exists between the top of the pin and the mounting plate. Re-tighten each flange nut to secure the pins in place. (Ensure pins do not rotate when tightening the flange nuts - NEVER use loctite on mounting pin hardware).


![Diagram of Mounting Pin Adjustment]

P L E A S E  N O T E

Ensure flange nuts are fully tightened; Failure to do so may cause damage/cracking in the back pan

![Diagram of Mounting Pin Adjustment]

CAUTION: Improper pin set-up may cause damage to the back pan and/or the mounting plates. Ensure sufficient spacing is provided b/w the mounting plates & the mounting pins (a min. gap of 1/8” (3mm) is recommended).

4.0 MaTRx-PB Installation Instructions

⚠️ WARNING! The installation hardware provided is high strength and tested for durability. DO NOT substitute hardware. Use only the hardware supplied.

1 Remove existing wheelchair back upholstery (if applicable).

2 Establish the desired Mounting Plate set-up/configuration for the user (per Section 3.0).

3 Loosen Cane Clamp screws (x3) and loosely install the cane clamp (with mounting bracket) onto each back post. (Install plastic inserts if required).

4 Starting on one side, position the Cane Clamp at the desired height on the back post and tighten the clamp screws enough to hold it in place. (Clamps and set screws will be fully tightened after the back is installed and all final adjustments have been made."

5 From a fixed point on the wheelchair (e.g. seat frame) measure the exact height of the installed Cane Clamp assembly, and install the second Cane Clamp at the same height on the opposite back post - see Figure 5 below. Ensure the Cane Clamps/Mounting Plates are mounted parallel with each other.

![Figure 5]

Install Cane Clamps at equal heights and parallel to each other

![Figure 5]

Front view of wheelchair with Back removed

CAUTION! Improper pin set-up may cause damage to the back pan and/or the mounting plates. Ensure sufficient spacing is provided b/w the mounting plates & the mounting pins (a min. gap of 1/8” (3mm) is recommended).
4.0 MaTRx-PB Installation Instructions

7 Mounting Pin Configurations/ Set-Up:

PLEASE NOTE

Our standard MaTRx-PB backs are available in 3 different widths (16” (41cm); 18” (46cm); and 20” (51cm)). Two sets of Mounting Pins are supplied with every MaTRx-PB (standard pins and long pins). Each backrest is factory assembled with standard mounting pins. Standard pins provide sufficient adjustability to install the Matrx-PB onto most typical wheelchair back canes, and are able to compensate for back cane widths up to 1” (25mm) narrower than the actual back width. However, long pins may be required in situations where the wheelchair seat frame (including back canes) is wider than the actual MaTRx-PB back width. The long pins will accommodate a wider base seat size up to 1” (25mm) wider than the actual back width.

Example: for a 16” (41cm) MaTRx-PB:
- 15” (38cm) wheelchair seat frame (back cane) width = standard pins
- 16” (41cm) wheelchair seat frame (back cane) width = standard pins
- 17” (43cm) wheelchair seat frame (back cane) width = long pins

Note: when the narrowest setting is used for the back, the depth/recline range will be less than in wider positions.

PLEASE NOTE

Extended Mounting Pins* (EMP) are available (sold separately) to allow interfacing of our PB-elite backs onto wheelchair seat frames up to 2” (5cm) wider than the actual back width.

* Note: EMP’s are only for use with our standard back sizes (for up to 300lb (136kg) weight capacity); EMP’s are not recommended for use in Tilt applications.

6 To install the MaTRx-PB onto the mounting plates:

Step 1: Slide the lower mounting pins into the hooked slots at the bottom of each mounting plate (see Figure 6).

Step 2: With the lower pins in place, lock/snap the upper mounting pins into the latch mechanism at the top of the mounting plates.
4.0 MaTRx-PB Installation Instructions

**PLEASE NOTE**

Additional upper and lower adjustment slots are provided on the Mounting Plate to allow alternate mounting heights if obstacles are encountered. Using these Alternate Mounting Slots will increase or decrease the back height by 7/8" (22mm). (note: these alternate slots will limit the range of available depth and/or recline angle adjustment).

6 To install the MaTRx-PB onto the mounting plates:

Step 1: Slide the lower mounting pins into the hooked slots at the bottom of each mounting plate (see Figure 6).

Step 2: With the lower pins in place, lock/snap the upper mounting pins into the latch mechanism at the top of the mounting plates.

![Figure 6](image)

4.0 MaTRx-PB Installation Instructions

7 Mounting Pin Configurations/ Set-Up:

**PLEASE NOTE**

Our standard MaTRx-PB backs are available in 3 different widths (16" (41cm); 18" (46cm); and 20" (51cm)). Two sets of Mounting Pins are supplied with every MaTRx-PB (standard pins and long pins). Each backrest is factory assembled with standard mounting pins. Standard pins provide sufficient adjustability to install the Matrx-PB onto most typical wheelchair back canes, and are able to compensate for back cane widths up to 1" (25mm) narrower than the actual back width. However, long pins may be required in situations where the wheelchair seat frame (including back canes) is wider than the actual MaTRx-PB back width. The long pins will accommodate a wider base seat size up to 1" (25mm) wider than the actual back width.

Example: for a 16" (41cm) MaTRx-PB:
- 15" (38cm) wheelchair seat frame (back cane) width = standard pins
- 16" (41cm) wheelchair seat frame (back cane) width = standard pins
- 17" (43cm) wheelchair seat frame (back cane) width = long pins

Note: when the narrowest setting is used for the back, the depth/recline range will be less than in wider positions.

![MaTRx-PB (Rear View)](image)

**PLEASE NOTE**

Extended Mounting Pins* (EMP) are available (sold separately) to allow interfacing of our PB-elite backs onto wheelchair seat frames up to 2" (5 cm) wider than the actual back width.

* Note: EMP’s are only for use with our standard back sizes (for up to 300lb (136kg) weight capacity). EMP’s are not recommended for use in Tilt applications.
8 Mounting Pin Adjustment:

i) With the back secured in place on the wheelchair, determine the amount of adjustment required for each mounting pin (see below).

ii) Remove the backrest from the wheelchair and use a wrench to loosen the flange nut on each pin that requires adjustment. (If necessary, replace the standard mounting pins with long mounting pins).

iii) Adjust the mounting pin depth (clockwise to shorten/counter-clockwise to lengthen) so that a minimum gap of 1/8" (3mm) exists between the top of the pin and the mounting plate. Re-tighten each flange nut to secure the pins in place. (Ensure pins do not rotate when tightening the flange nuts. NEVER use loctite on mounting pin hardware).

### PLEASE NOTE

Ensure flange nuts are fully tightened; Failure to do so may cause damage/cracking in the back pan

![Diagram of Mounting Pin Adjustment](image)

### CAUTION!
Improper pin set-up may cause damage to the back pan and/or the mounting plates. Ensure sufficient spacing is provided b/w the mounting plates & the mounting pins (a min. gap of 1/8" (3mm) is recommended).
3.0 Before Installation - Important!

Acommodating Different Sized Back Post:
- **1” (25mm) back post** - Cane clamps are installed without plastic inserts.
- **7/8” (22mm) back post** - Requires 7/8” (22mm) plastic inserts (provided)
- **3/4” (22mm) back post** - Requires 3/4” (19mm) plastic inserts
*Note: 3/4” (19mm) inserts are available from Motion Concepts upon request.

**PLEASE NOTE**
On some wheelchairs, there may be an uneven seam along the back posts where a smaller diameter tube is inserted into a larger diameter tube. If the Cane Clamps must be mounted over this seam, the plastic inserts may be cut in half to allow the clamp to fasten securely onto the back posts (see Figure 4).

Figure 4
The Plastic Insert may be cut if the Cane Clamp is secured at the junction of 2 different diameter back posts.

**HELPFUL HINT**
Spray a small amount of hairspray on the back canes and on the inside of the plastic inserts to create a secure ‘no-slip’ bond.

NOTE: For wheelchairs with short back canes, it may be necessary to install Posture Back Cane Replacements (PBCR’s). The PBCR’s are designed to replace existing push handles or cane extensions on standard 1” (25mm) back posts. The Cane Clamps can be mounted directly onto the replacement back canes in order to allow proper installation of the MaTRx-PB. Cane Replacements are available from Motion Concepts (part#-TRX2810).

4.0 MaTRx-PB Installation Instructions

9 Verify that the overall fit and alignment of the back is correct (make adjustments as needed).
10 Fully secure the Cane Clamp Screws onto both back posts, and tighten the set screws to ensure the mounting plates do not slip or rotate.
11 To best determine the optimal depth & recline settings for the back, the user should be seated in the wheelchair. While seated, loosen the depth/recline screws on the mounting plates and adjust the back to the desired depth and recline angle. Re-tighten all screws to lock the back in position.

Ensure that the depth/recline adjustment for the back is made symmetrically* on the left & right mounting plates.

**PLEASE NOTE**
The vertical score lines on the mounting plates are designed as a point of reference to assist with symmetrical mounting (see image below). Since the back can be mounted in a rotated (reclined) position if desired, it will not always be mounted parallel with these vertical lines.

*Use score lines to make symmetrical adjustments on the left and right mounting plates.
5.0 Disengaging the MaTRx-PB

To Disengage the Back from the Wheelchair:

Step 1: Simultaneously lift the release levers (left & right) to unlock the latch mechanism and release the upper pins from the mounting plates. Refer to Figure 7 below.

(note: for backs equipped with the one-hand cord release mechanism, lift cord upward to unlock/open the release levers - see Section 8.0: One-Hand Cord Release Mechanism, p.13).

Step 2: Lift entire backrest up and forward to disengage the lower pins from the lower slots in the mounting plates.

Figure 7

3.0 Before Installation - Important!

Weight Capacities:

<table>
<thead>
<tr>
<th>Back Width</th>
<th>Weight Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard</td>
<td>38 cm - 51 cm</td>
</tr>
<tr>
<td>Heavy-Duty</td>
<td>20&quot; - 24&quot;</td>
</tr>
<tr>
<td>51 cm - 61 cm</td>
<td>227 kg</td>
</tr>
</tbody>
</table>

The Mounting Plates are shipped pre-assembled on the Cane Clamps in the rearmost mounting configuration. This maximizes the seat depth on the wheelchair seat (up to a maximum 2.5" (64mm) rearward offset - see Figure 1 below).

By changing the orientation of the Mounting Plates on the Cane Clamps, the assembly can be reconfigured* to provide a more forward mounting position for the back if desired (up to a maximum 2.5" (64mm) forward offset - see Figure 2).

Note: Each mounting plate is also designed to provide 1.5" (38mm) of fore and aft adjustment relative to the cane clamp.

*To reconfigure a mounting plate/cane clamp to the forwardmost orientation:
- detach the Mounting Plate from the Cane Clamp (3 screws);
- Rotate the Cane Clamp 180° and re-fasten it to Mounting Plate;
- Install Cane Clamp as illustrated in Figure 2.

PLEASE NOTE

When establishing the mounting position for the MaTRx-PB, ensure the stability of the wheelchair is not compromised.

Adjusting the forward and aft position of the backrest will alter the user’s center of gravity within the wheelchair. A recessed back position can significantly reduce the rearward stability of the wheelchair. Similarly, a more forward back position will reduce the wheelchair’s forward stability.
1.0 Hardware Kit Contents

2 - Back Mounting Plates
2 - Cane Clamps
2 - Cane Inserts* (7/8” (22mm))
6 - Depth/Recline Adjustment Screws
6 - Cane Clamp Screws
2 - Cane Clamp Nut Plates
4 - Long Mounting Pins (optional)

*Note: 3/4”(19mm) cane inserts are available from Motion Concepts upon request.

6.0 Removing the Cover/Care Instructions

The MaTRx-PB cover can be removed for laundering or providing access to the inside of the back for modification.

Open the zipper at the top and carefully remove the cover by releasing the velcro hook & loop fasteners along the sides of the back shell.

General Care and Cleaning: The cover may be easily wiped down with a damp cloth when necessary. For specific laundering directions, please follow the washing instructions provided with the cover.

7.0 Head/Neck Support Attachments (Optional)

All MaTRx-PB backs contain a built-in Headrest Plate which can be used for attaching optional Head and Neck Supports.

Two sets of headrest clamp mounting holes are provided in order to install most standard types of headrests (see Figure 8 below). If required, additional holes may be drilled into the back pan and headrest plate to mount the necessary hardware.

2.0 Tools Required

- Wrenches: 7/8” (22mm)
- Allen Keys: (provided)
- Utility Knife/Scissors
- Phillips Screwdriver
- Tape Measure/Ruler

Please Note:

If any of the above hardware is missing or misplaced, please contact our Customer Service Department and arrangements will be made to send you the necessary replacements.

Canada: 866-748-7943
USA: 888-433-6818
7.0 Head/Neck Support Attachments

Instructions for installing a Headrest Clamp:

1. Open (pull down) cover and determine the appropriate set of mounting holes for the Headrest Clamp (drill new holes if necessary).
2. Close the cover and carefully punch holes through the cover fabric that correspond with the determined mounting holes for the Headrest Clamp.
3. Open and pull down the front half of the cover (enough to access the appropriate mounting holes on the Headrest Plate).
4. Place the Headrest Clamp on the outside of the back cover and push the mounting screws inward through the fabric and through the Headrest Plate.
5. Secure (bolt) the Headrest Clamp into place (*see note below) and close the cover.

**PLEASE NOTE**
The Headrest Plate is recessed into the Back Pan to prevent hardware from protruding into the back cushion. Please ensure that the hardware from the headrest clamp does not extend beyond this recessed area.

**WARNING!** Headrests that have been fitted onto the MaTRx-PB back are not intended for use during transport, and will not provide adequate support in the event of a crash. Users of wheelchairs should be transferred into appropriate seating in vehicles for transportation and use be made of the restraints made available by the auto industry.

![Image of Headrest Clamp Mounting Holes]

![Image of Headrest Plate and Back Pan]
8.0 One-Hand Cord Release Mechanism (Optional)

Installation Instructions:

1. Thread the Nylon Cord through the holes in the latch mechanism at the top of the left and right mounting plates (see image A, below.)

2. Install the Cord-Lock mechanism onto the cord (see image B, below). Press the button to open the lock mechanism and slide the two open ends of the nylon cord through the opening.

3. With the back properly installed on the wheelchair, adjust the cord length so that it hangs at approximately a 35° angle along the back pan (this allows the release mechanism to operate more effectively). If necessary, cut/remove excess cord to eliminate any risk of entanglement. Once adjusted, combine the loose cord ends into a single knot to prevent the cord-lock from slipping. (Note: if the cord length was modified, carefully melt the ends of the cord to prevent fraying)

The following guidelines should be made available to all parties who are responsible for the transportation of the client, such as schools and transport providers.

Wherever practicable the client should be transferred out of the wheelchair into a vehicle seat and use a lap and diagonal seat belt or an appropriate child safety seat.

The MaTRx back has been dynamically tested and meets the requirements of ISO 16840-4 and Section 20, ANSI/RESNA WC/Volume 4 “Wheelchair Seating Systems for Use in Motor Vehicles”. A Surrogate Wheelchair Base (SWCB) and a Hybrid III Midsize-Adult Male Anthropomorphic Test Device were used in a forward facing frontal impact test. The SWCB was secured by a four-point, strap type wheelchair tie-down and the occupant restraint was a vehicle anchored lap and diagonal occupant restraint system.

MaTRx backs should only be used in conjunction with wheelchairs that comply with the performance requirements of ANSI WC19 or ISO 7176-19.

Before Entering the Vehicle Check the Following:

MaTRx Back - must be securely fastened into the wheelchair as described in the user manual.

Posture Belts & Harnesses - should remain fitted during transportation, although they are designed to provide postural support only, they are not intended for safety during transportation.

Head Support - must be securely fitted and correctly adjusted close to the rear of the client’s head during transportation, in order to reduce the risk of whiplash injuries.

The Wheelchair Tie-down and Occupant Restraint System (WTORS)

* Wheelchair Tie-down - The wheelchair must be securely tied down within the vehicle, in a forward facing position, in accordance with the wheelchair and tie-down manufacturers instructions.

* Occupant Restraint - A suitable occupant restraint system must also be fitted in accordance with the manufacturer’s instructions. A minimum is a lap and diagonal belt (lap belts on their own are not suitable). Restraints that loop over the shoulder and anchor to the vehicle floor should be avoided where possible, as they can cause a heavy downward load through the client during an impact, the preferred type anchor above and behind the shoulder as with a car seat belt. The lap section of the belt should fit snugly over the pelvis of the client and should not be able to ride up to the abdominal area. The upper torso section of belt should be in contact with the client’s chest and fit over the shoulder(s), while not cutting into the neck or slipping off the shoulder(s).

Note: If the wheelchair and MaTRx back are to be transported unoccupied, the wheelchair should be tied down with suitable equipment according to the manufacturer’s instructions. If the equipment is to be dismantled for transportation, ensure that all parts are secured safely within the vehicle.
WARRANTY
Every MaTRx-PB back is carefully inspected and tested to provide optimum performance. Each back is guaranteed to be free from defects for a period of 24 months from the date of purchase, provided normal use. Should a defect in materials or workmanship occur within 24 months of the original date of purchase, Motion Concepts will, at its option, repair or replace it free of charge. This warranty does not apply to punctures, tears or burns, nor to the removable cushion cover.

The original back must be returned to the dealer and will become the property of Motion Concepts as a condition of processing the warranty claim. All warranty claims must be made through the dealer where the cushion was purchased. Except for express warranties made herein, all other warranties of fitness or use for a particular purpose are excluded. There are no warranties that extend beyond the warranties provided above. Remedies for breach of this warranty are limited to repair or replacement of goods. In no event shall damages for breach of any warranty include any consequential damages or exceed the original cost of the back.

IMPORTANT!
The installation instructions contained in this manual should only be carried out by a qualified technician.