

## ASSEMBLE A TENSION ADJUSTABLE BACKREST ON RIGID WHEELCHAIRS

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This document explains how to assemble a tension adjustable backrest on Motion Composites rigid wheelchairs. This procedure can also be used to replace backrest straps or the backrest.

## Wheelchair model(s)

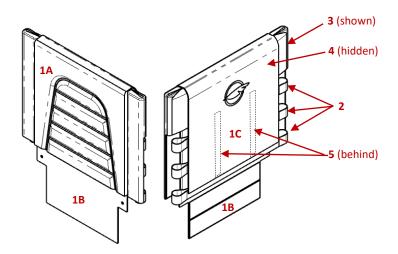
### Tool(s) and material required

APEX A, C and P

- Hexagonal key (Allen key): 3 mm
- Scissors

#### **PARTS AND DISASSEMBLY**

- Before you start assembling the tension adjustable backrest, make sure you have all the parts on hand.
  - Parts must be ordered from your representative or from Motion Composites' Customer Experience team. Have the serial number of the wheelchair on hand before ordering.
- Backrest parts:
  - 1. Backrest upholstery: back padding (1A), seat flap (1B) and back cover (1C)
  - 2. Bottom straps. Number of straps varies depending on the backrest height
  - 3. Top strap assembly ends (2x)
  - 4. Top strap (2x or 1x for pediatric/small wheelchairs) for top strap assembly
  - 5. Velcro strips (2x)



- Disassemble the installed backrest
  - NOTES:
    - Unless otherwise mentioned, everything is held in place by velcro
    - To remove a piece of upholstery, carefully pull on the fabric along the velcro
  - Raise the rear folding part of the backrest (held by a single horizontal velcro strip at the bottom)
  - Remove the two (2) vertical velcro strips at the back
  - Remove the seat cushion
  - Carefully remove the front padding, including the seat flap
  - Remove the two screws at the top of the backrest (3 mm hex key)
  - If needed, remove the push handles, this will ease the removal of the top strap assembly
  - Remove the top strap assembly
  - Remove all the individual straps

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#### **INSTALL THE BOTTOM STRAPS**

- Unfold the straps and make loops with them, velcro toward the outside as showed in the photo
  - These straps are narrower than the straps for the top strap assembly
- Install the straps on the chair around the canes, the velcro attachments toward the back as showed in the photo
  - The number of straps varies depending on the backrest height



### PREPARE AND INSTALL THE TOP STRAP ASSEMBLY

- NOTE: Usually, the top strap assembly has two (2) straps. On small pediatric wheelchairs the top strap assembly has only one strap
- Unfold the straps and install them between the strap loops of the large strap ends, the velcro attachments on the back (the side with the eyelets) as shown in the photo
  - These straps are larger than the straps at the bottom



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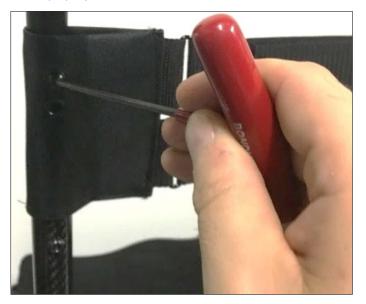


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- Install the top strap assembly on the chair:
  - Hold the top strap assembly, the eyelets toward you and upward.
  - Insert one end into the backrest cane
  - · Repeat this step on the other side
    - If the chair **does not have push handles,** insert the end of the top strap assembly into the **closed side** (opening at the bottom only) of the lining. The material lining will hide the end of the backrest cane.
    - If the chair has push handles, insert the end of the top strap assembly into the open side (opening on both sides) of the lining
- Adjust the length of top strap assembly to the width between the backrest canes



- If removed at disassembly, reinstall the push handles
- Screw the top strap assembly on each side:
  - Place the <u>bottom eyelet</u> in line with the hole in the backrest fixing screw
  - Use the two (2) screws you have disassembled
  - Screw without tightening too much (3 mm hex key)
  - CAUTION: If the chair has folding push handles, screw the top strap assembly into the topmost eyelet (photos below)
    - If the screws are screwed into the bottom eyelet, the handles will be obstructed by the fabric from folding down properly





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# ASSEMBLE A TENSION ADJUSTABLE BACKREST ON RIGID WHEELCHAIRS

### **INSTALL AND STRETCH THE BACKREST UPHOLSTERY**

- Flip back the rear folding part of the backrest upholstery
- Install the backrest upholstery on the chair by aligning the velcro strips of the canvas with those of the top strap assembly at the top and all along the sides of the backrest (photo on the right)
  - Make sure the backrest upholstery is well centered
- Flatten the seat flap and fix it to the velcro (photo below)





- Place the bottom straps as evenly as possible along the backrest height or according to the therapist instructions or the user preference
- Apply the desired tension to the straps
- Install the two (2) vertical velcro strips on the back and press them firmly to the backrest padding (photo on the right)
  - Cut the strips to the correct length
- Fold down the back of the backrest upholstery
- Stretch the canvas and press the bottom of the backrest canvas to attach it
  to the bottom velcro strip (photo below)





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