

# RESPIRA™

## Ventilated Back Support



User Manual



# Warnings

## NOTICE: Read Before Use

Please follow these suggestions to ensure safe and effective use of the product.

### MECHANICAL COMPONENTS

We recommend checking all system components on a regular basis. The frequency of these checks will depend on how rigorously the product is used. The following checks will ensure safe and functional product use:

1. Tightness of all fasteners and hardware attachment points.
2. Review metal parts for signs of wear, cracks, bent parts or excessive flexing.
3. Replace or repair any parts showing wear.

#### NOTICE:

This manual for the Respira Ventilated Back Support system is intended to be an informational resource to provide an understanding of the product and its adjustments to users and caregivers. This manual should always be referenced in conjunction with a licensed clinician for more advanced fitting and support techniques. Failure to consult a licensed clinician can result in muscular and skeletal issues and/or injury to the user. The Respira Ventilated Back Support and Mounting Hardware user manual should be read and fully understood, prior to the installation, set-up, and use of this product.

### A. CHOOSE THE RIGHT RESPIRA VENTILATED BACK SUPPORT

Symmetric Designs provides many Respira Ventilated Back Support options, sizes and adjustments to meet the needs of the user; however, final selection of seating equipment rests solely with you and your health care professional. Choosing the best seating depends on:

1. Your size, orientation, strength, balance and coordination.
2. Your intended use, and your level of activity.
3. The types of hazards you must overcome in areas where you are likely to use your wheelchair.
4. The need for options for your safety and comfort.

### B. ADJUST TO YOUR ABILITY

You need to work with your doctor, nurse or therapist, and your supplier, to fit this seating solution, and adjust the system for your level of function and ability.

### C. REVIEW THIS MANUAL

Before using this seating solution, the user, and persons assisting the user, should review this manual in its entirety, and note warnings and operation instructions detailed.



Manufacturer

Glossary  
of  
Symbols



Medical Device



REP

European Community Representative  
-OR- EU Representative



REP

Swiss Authorized Representative

Date of issue: 05/2024

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# Introduction

Intended use of this medical device: to provide support and control for the body in seated position within a wheelchair.

Respira Ventilated Back Support is designed for the intended purpose of providing support to compensate for loss of mobility and function due to an injury or disability. The intended users may require support resulting from, but not limited to, the following conditions: Cerebral Palsy, Spinal Cord Injury, Arthritis, Multiple Sclerosis or Motor Neurone Disease.

Contraindications for Respira Ventilated Back Support are limited to those individuals needing support and control of the body in a seated position. The device is only to be used when attached to another medical device i.e. a wheelchair. If a wheelchair is not present, the device should not be used.

Any serious incident that has occurred in relation to this device should be reported to the manufacturer and the competent authority of the Member State in which the user and/or patient is established.

We want to hear your questions, comments and feedback about the Respira Ventilated Back Support, this manual, and your experience. Please feel free to write, email or call us using the contact information on Page 9.



[www.symmetric-designs.com/respira-back](http://www.symmetric-designs.com/respira-back)

## IMPORTANT CONSUMER INFORMATION

This manual contains important instructions that must be made available to the user of this product. Please do not remove this manual before delivery to the end user.

SUPPLIER: This manual must be included with this product.

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

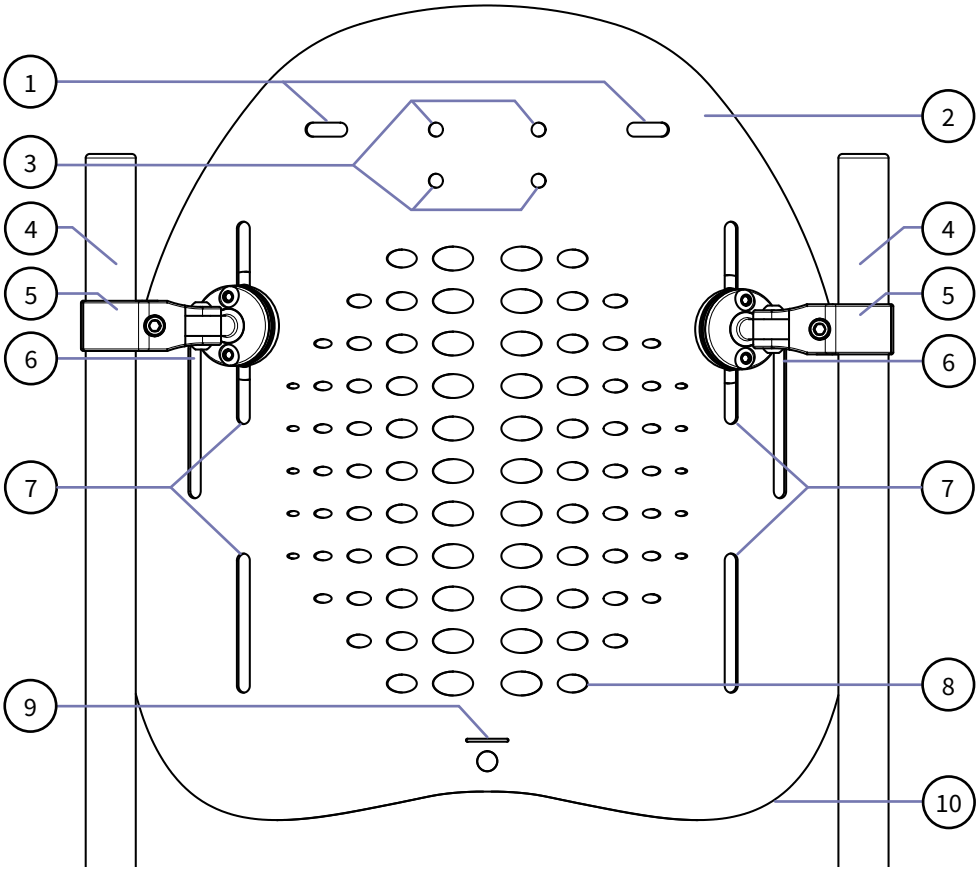
Inspect your Respira Ventilated Back Support for defects upon receiving the product.

## MOTOR VEHICLE TRANSPORTATION SAFETY WARNING

It is safest to transfer out of your wheelchair and into a manufacturer-installed vehicle seat, and use the vehicle's crash-tested occupant restraint system. Failure to use the appropriate equipment for restraint in a vehicle can result in serious injury or death.

- Crash test was conducted using 48-kph (30-mph) and 20-g average impact conditions to determine the response of the Symmetric Designs Respira Ventilated Back Support with FA mounts during frontal-impact loading, and compliance of the seating system to performance criteria in 5.1 of WC20 and 5.1 of ISO 16840-4. Results are available at [www.symmetric-designs.com/respira](http://www.symmetric-designs.com/respira).
- The ANSI RESNA WC-20 and ISO 16840-4 standards are not considered applicable to individual seating system components. These standards address complete seating systems consisting of a seating surface and a back support used together in a specific configuration.
- A risk assessment should be performed by competent seating professionals in the case that a provider wishes to configure Symmetric Designs products for use during transportation in a motor vehicle.

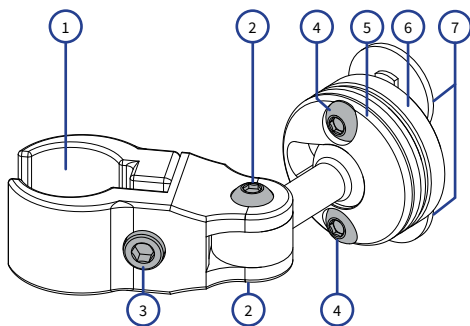
# Respira Ventilated Back Support Part Legend



Legend #	Description	QTY
1	Buckle mounting slots	2
2	Respira shell	2
3	Head support receiver mounting holes	4
4	Back support canes	2
5	FA Mounting Hardware (BA Hardware shown on Page 4)	2
6	Lateral trunk support hardware mounting slots	2
7	FA/BA Mounting Slots	2
8	Ventilation holes	~
9	Reflective tag slot	1
10	Respira shell trim	1

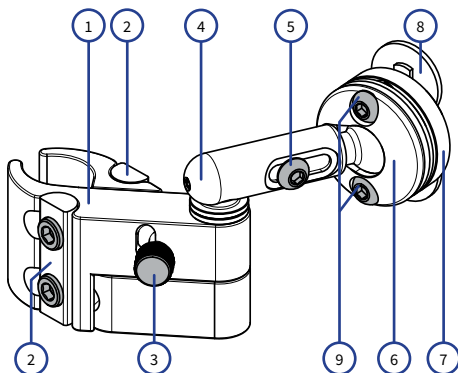
# Mounting Hardware Legend

## FA Clamp



Legend #	Part Name	Description	QTY
1	FA Clamp A/B	Arms which clamp to back support canes	1
2	M5x10 Button Head Screw	Fasteners to control rotation of clamp and arm	2
3	M5x20 Low Head Screw	Fastener that controls the pressure of clamps to back support canes	1
4	M5x14 Button Head Screw	Fasteners that clamp the Clamp Ring to the Mounting Disc	2
5	Clamp Ring	Clamps the Stem Ball to Mounting Disc	1
6	Mounting Disc	Mounting Disc that allows a Clamp Ring to attach to Respira shell	1
7	Anti Rotation Nut	Mounting nut for securing clamps to the Respira shell	2

## BA Clamp



Legend #	Part Name	Description	QTY
1	BA Clamp Top (R/L)	BA Clamp top section	1
2	BA Rocker Washers A & B	Clamp rocker washers for tightening clamps	2
3	BA Latch Lever	Bolt action quick-release handle	1
4	BA Slider Tube (R/L)	Connects the BA Slider Ball, Lock Pin and Fasteners	1
5	M6x8 Button Head Screw	Slider ball fastening screw	1
6	Clamp Ring (R/L)	Clamp to hold Slider Ball in place	1
7	Mounting Disc	Mounting Disc that allows a Clamp Ring to attach to Respira shell	1
8	Anti-Rotation Nut	Mounting nut for securing clamps to the Respira shell	2
9	Access holes	Access holes for height adjustment	2

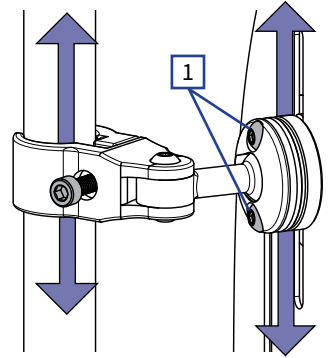
# Fixed Adjustable (FA) Mount

## Height Adjustment

1. Use the supplied 4mm hex key to loosen the two height adjustment screws (marked **1**).
2. Once the screws on both Clamp Rings are loose, the backrest will slide up or down on the mounting slots.
3. Tighten screws when back support is at the desired height.

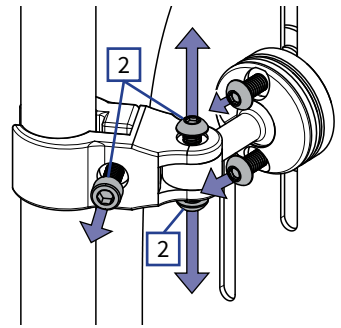


**Note:** \*Height can also be adjusted by adjusting clamp height on the wheelchair posts.



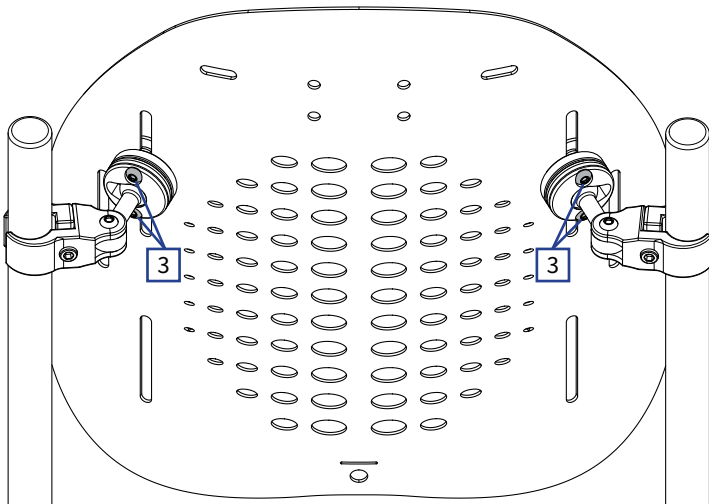
## Depth Adjustment

1. Loosen the three screws (marked **2**) on the side, top and bottom of the FA clamp.
2. Push or pull the Respira shell until it is at the desired seat depth.
3. Tighten the screws to secure the back support.



## Angle Adjustment

1. Use the supplied 4mm hex key to access the two exposed screws on the left and right Clamp Ring (marked **3**).
2. Once all four screws are loose, adjust to the desired angle.
3. Tighten the screws to secure the back support (marked **3**).



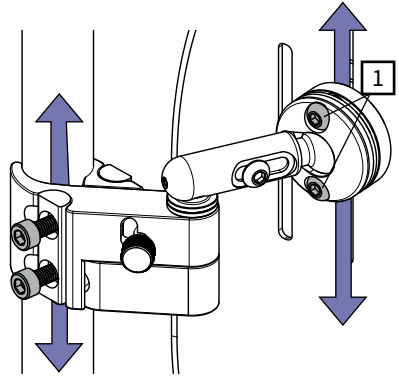
# Bolt Action (BA) Mount

## Height Adjustment

1. Use the supplied 4mm hex key to loosen the two height adjustment screws in the Clamp Ring (marked **1**).
2. Once the screws on both Clamp Rings are loose, the backrest will slide up or down on the mounting slots.
3. Tighten when back support is at the desired height.



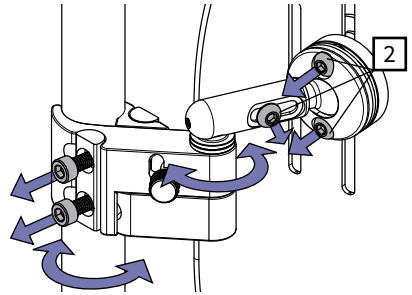
**Note:** \*Height can also be adjusted by adjusting the clamp position on the wheelchair posts.



## Depth Adjustment

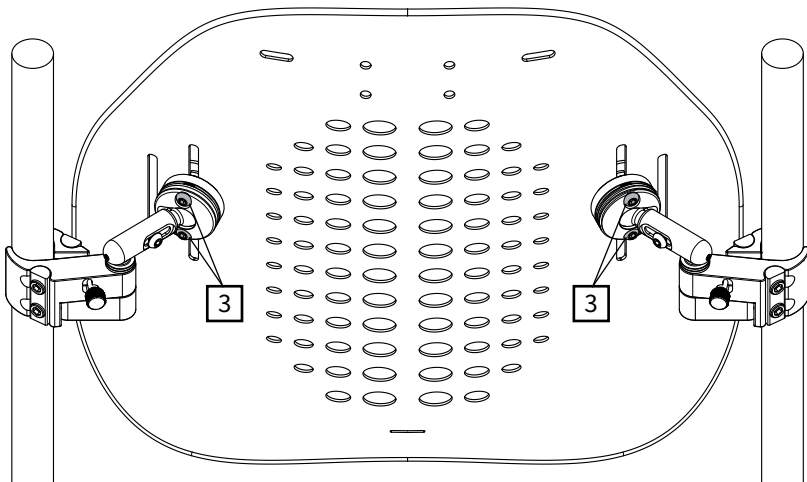
1. Loosen the screws (marked **2**) on the Clamp Ring and Slider Tube.
2. Push or pull the Respira shell until it's positioned at the desired seat depth.
3. Re-tighten the screws to secure the back support.

**Note:** The BA clamps can also be rotated on the wheelchair posts to adjust depth. To rotate the BA Clamps, loosen all screws except the concealed height adjustment screws, and push or pull the Respira shell until it is in the desired position.



## Angle Adjustment

1. Use the supplied 4mm hex key to loosen the screws on the left and right Clamp Ring (marked **3**).
2. Once all four screws are loose (two on each side), adjust to the desired angle.
3. Tighten the screws to secure the back support (marked **3**).

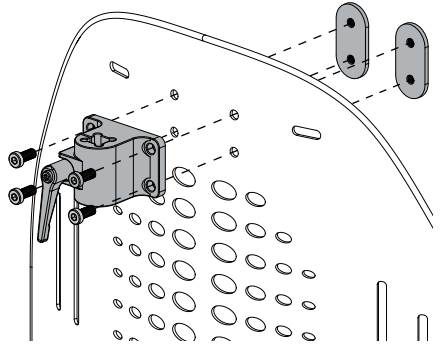




# Optional Component Installation

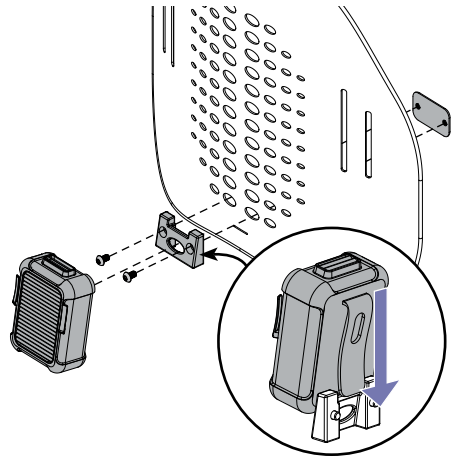
## Head Support Hardware Receiver

1. Remove the top of the Respira cover to gain access to the inside of the shell.
2. Using the provided M6x14mm Screws and 4mm hex key insert the 4 screws through the holes in the bottom plate of the Receiver Block and the corresponding holes in the Respira shell.
3. Place washers onto the threaded ends of the screws from the inner side of the Respira shell.
4. Use the 4mm hex key to tighten screws.



## Active Ventilation Fan with Mount

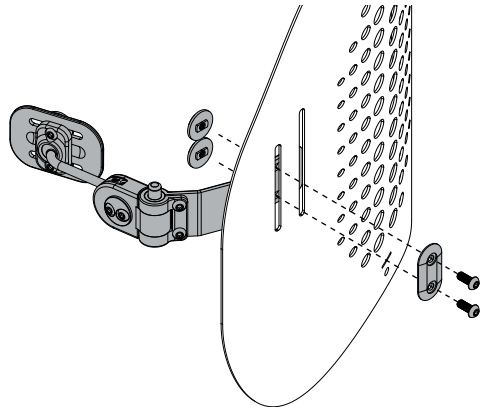
1. Peel the bottom section of the padding from the backrest shell.
2. Position the bracket at the desired height.
3. Insert two included screws into the mounting bracket.
4. Hold the inner mounting plate at the desired position on the inside of the backrest shell.
5. Align the mounting bracket on the outside of the backrest shell with the mounting plate on the inside, then tighten both screws.
6. Slide the clip of the Ventilation Fan onto the mounting bracket to complete mounting.



Refer to the Fan Operation Manual for details on use.

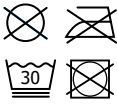
## Lateral Upper Body Support (L.U.B.S.) / Free Form L.U.B.S.

1. Remove, or peel back padding from the backrest shell to gain access to the front of shell.
2. Use the M6x14 Button Head screws, Mounting Screw Washer Plate and Anti-Rotation Nuts to attach the L.U.B.S. Bracket to the inside of the backrest shell.
3. Set L.U.B.S. bracket at desired vertical and horizontal position. Tighten all screws.
4. See separate user manual included with the L.U.B.S. Swing Away Lateral for adjustment instructions.



# Respira Cover - Care Instructions

## Washing the Respira cover



Remove foam before washing cover.  
Turn inside out. Wash cold on gentle cycle.  
Hang to dry. Do not dry-clean. Do not iron.

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Respira Covers contain new materials only.

### Cover

Polyester  
Other fibres  
exclusive of trimmings

### Filling

Polyurethane Foam  
EPDM Rubber



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This article meets all flammability requirements of:

*Canada Consumer Product Safety Act*  
*California Bureau of Home Furnishings Technical Bulletin 117*

Care should be exercised near open flame or with burning cigarettes

Registration No. C5T-02594717



# Warranty Coverage

Each Symmetric Designs product is carefully inspected to provide peak performance and is guaranteed to be free from defects in materials and workmanship for a period of 12 months from the date of purchase, provided normal use. Should a defect in materials or workmanship occur within 12 months from the original date of purchase, Symmetric Designs will, at its option, repair or replace it without charge. This warranty does not apply to general wear and use, including the application of excessive loads. Claims and repairs should be processed through the nearest authorized Symmetric Designs supplier. Except for express warranties made herein, all other warranties, including implied warranties of merchantability and warranties of fitness for a particular purpose are excluded. There are no warranties which extend beyond the description of the face hereof. Remedies for breach of express warranties herein are limited to repair or replacement of the goods. In no event shall damages for breach of any warranty include any consequential damages or exceed the cost of non-conforming goods sold.



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**MD** The Respira Ventilated Back Support is a medical device.

 Manufactured in Canada by Symmetric Designs,  
125 Knott Place, Salt Spring Island, BC V8K 2M4

 Designed and manufactured in Canada

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