

# JAY<sup>®</sup>

# UNION BACK

## JAY<sup>®</sup> Union Back

### IMPORTANT CONSUMER INFORMATION

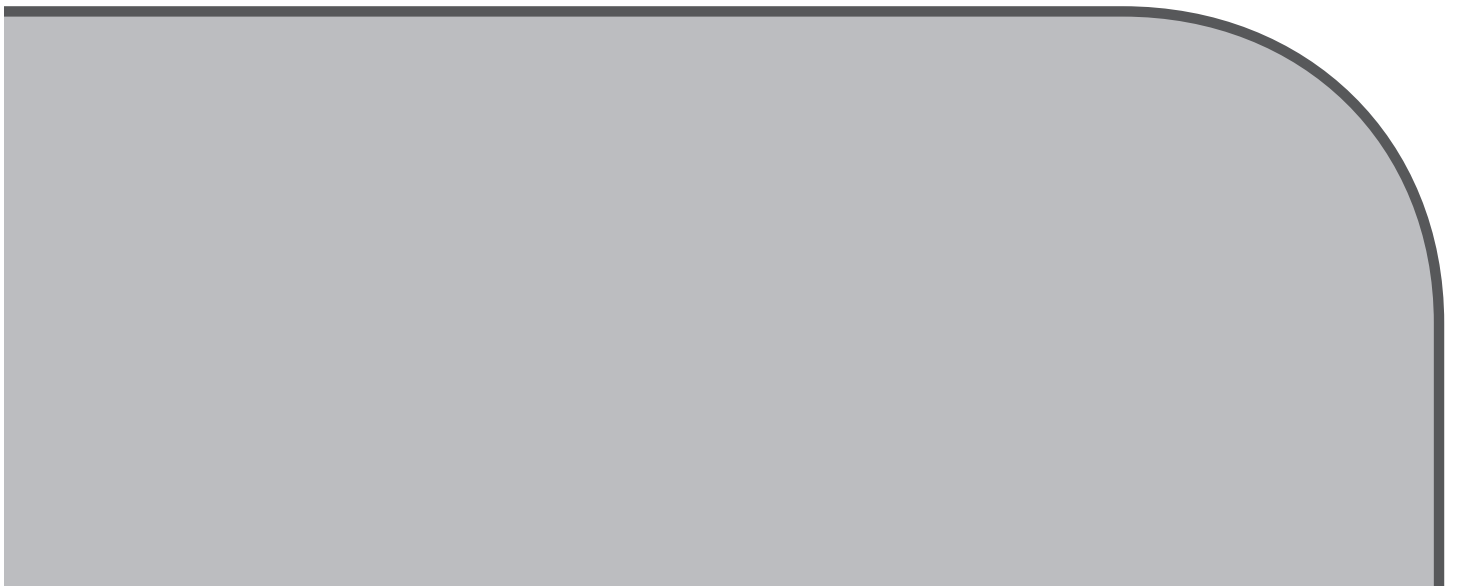
**NOTICE:** *This manual contains important instructions that must be passed on to the user of this product. Please do not remove this manual before delivery to the end user.*

**SUPPLIER:** *This manual must be given to the user of this product.*

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

**WARRANTY REGISTRATION:** *To validate the warranty on this product, please complete and return the postcard attached to the enclosed instruction and warranty booklet.*

Owner's Manual



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Sunrise Medical recommends that a clinician such as a doctor or therapist experienced in seating and positioning be consulted to determine if a Union Back is appropriate. Backs should only be installed by an authorized Sunrise Medical supplier.

### THE JAY UNION BACK

The JAY Union Back is designed to provide the important benefits of a proper back support for a wide variety of users. It is designed to provide simple, comfortable and effective support to help maximize function and increase sitting tolerance. In addition, it is lightweight, durable and easy to use.

**Maximum user weight:**

300 lbs. (136 kg)

**⚠ WARNING**

Installing a back support on a wheelchair may affect the center of gravity of the wheelchair and may cause the wheelchair to tip backwards potentially resulting in injury. Always assess for the potential need for anti-tippers or amputee axle adapter brackets to be added to the wheelchair to help increase stability.

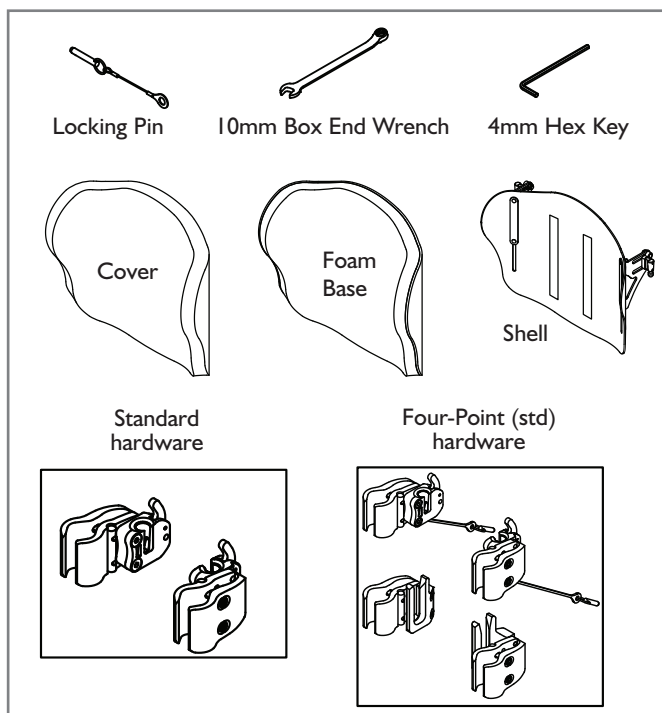
**⚠ WARNING**

Do not use the Union Back to push or lift wheelchair. Improper use may cause the back to unexpectedly detach from the wheelchair.

**⚠ WARNING**

Do not use the Union back handle to lift wheelchair. It is intended only for back removal.

### UNION BACK



### MAINTENANCE

Sunrise recommends that all fasteners be checked for wear, such as loose bolts or broken components every 6 months. Loose fasteners should be retightened according to the installation instructions. All fasteners should be tightened to torque specifications as stated in the hardware installation section. Contact your authorized Sunrise Medical supplier immediately to replace any broken components. Do not continue to use the system after identifying loose or broken components.

### EASY CLEANING

**NOTE-** When disassembling the back for cleaning, note the position of the components for correct reassembly.

**To clean back cover**

Remove cover by detaching Velcro. Detach cover from back shell. Locate zipper on bottom of the cover and unzip. Remove foam and turn cover inside out. Zip cover closed to avoid snagging. Machine wash in warm water (50°C). Drip or tumble dry on low heat.

**NOTE:** Do not dry clean covers or use industrial washers and dryers to clean cover. Do not steam autoclave. Do not bleach.

Reinsert the foam into the cover. Please note, the base has two layers of foam. When reinserting the foam, ensure that the thinner "light grey" foam is facing the shell. Once the foam is secured inside the cover, zip cover closed.

**To clean back shell**

Shell may be wiped clean with soap and water. No other maintenance should be required.

**To clean positioning components**

Positioning components can be wiped clean with soap and water. Do not immerse positioning components underwater.

If you have any additional questions regarding cleaning procedures, please contact your authorized Sunrise Medical dealer.

Laundry Care Symbols	
	Machine wash in warm water (50° C)
	Only non-chlorine bleach, when needed
	Drip dry
	Do not iron
	Do not dry clean

### DETERMINING COMPATIBILITY

#### Wheelchair Types

The Union Back is designed to be compatible with most wheelchairs with the following exceptions:

Wheelchairs that are angularly adjustable, recline or tilt and result in a back angle greater than 60 degrees from the vertical should not be used.

#### **⚠ WARNING**

**Use with these types of wheelchairs may cause the back to accidentally disconnect from the wheelchair resulting in a fall and the potential for serious injury.**

#### Wheelchair Dimensions

The Union Back is designed to replace the wheelchair's sling upholstery. Prior to installation determine if the wheelchair used has compatible back canes, by measuring the width between your back canes as seen in Figure 1. Then using that measurement, check Table 1 to determine if the back will fit your chair.

Next check that the back canes are a compatible diameter. The Union back hardware can be mounted on wheelchair back canes ranging from 3/4" to 1 1/8". Measure your back cane diameter (Fig. 2) and refer to Table 2 to ensure your back canes are compatible.

If you cannot determine that the back canes are compatible please contact your authorized Sunrise Medical provider or Sunrise Medical customer service.

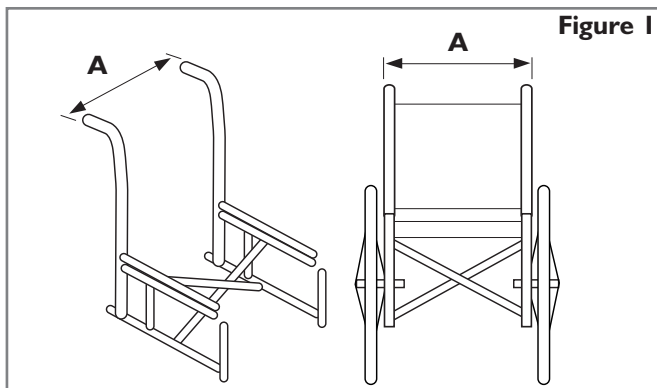


Figure 1

Table 1

Union Back Width* (all contours)	Width of back canes from outside to outside of the tubes (Fig. 1-A)			
	Minimum width		Maximum width	
	inch	cm	inch	cm
16"	15.7	40.0	18.3	46.4
18"	17.7	45.1	20.3	51.5
20"	19.7	50.1	22.3	56.5

\* Back Width is identified in your back's part number.  
Example: J3PAMTS **14**SH is a 14" back.

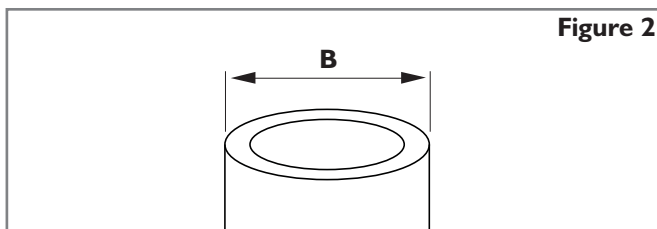


Figure 2

Table 2

Union Back Width (all contours)	Cane diameter (Fig. 2-B)			
	Minimum width		Maximum width	
	inch	cm	inch	cm
16" - 20"	3/4	1.9	1 1/8	2.85

## INSTALLING THE MOUNTING HARDWARE

Please read the following instructions before beginning installation.

To install the Union Back, it is best to begin without a user in the wheelchair. Once the back has been installed and minor adjustments are needed the user can be seated back in the wheelchair.

### Tools required (included with Union Back)

- 4mm hex key
- 10mm box end wrench



### Hardware Installation Instructions (Figs. 3, 4, 5)

1. Remove the existing wheelchair back according to the wheelchair manufacturer's instructions.
2. Visually determine the desired location of the receivers on the wheelchair's back canes. The mounting hardware should be at approximately equal heights on each back post (Fig. 3) and parallel to the seat frame (Fig. 4). Higher locations on the back canes are generally better.
3. Attach the hardware receivers. (Fig. 5)
  - a. Loosen the clamp screws (A) with the enclosed 4mm hex key. NOTE- For large tube diameters, clamp screws may have to be removed completely.
  - b. Attach and align receiver to the wheelchair back canes (B).
  - c. Hand tighten clamp screws (A). NOTE- Receivers may require additional lateral adjustment to ensure proper alignment.

### Attaching and Aligning the Union Back Shell (Fig. 6)

- a. Loosen bracket nuts (C) and mounting pin bolts (F) using 10mm box-end wrench until hardware can move easily in all directions.
- b. Attach the Union Back to the hardware receivers by inserting left and right mounting pins (D) in the left and right receivers (E).
- c. Locate back to the approximate location, relative to both chair and user.
- d. Tighten bolts on the inside of the mounting pin (F). The recommended torque specification is 100 - 110 in-lbs. (11.3 - 12.4 Nm). NOTE- Back depth and angle may require additional adjustment to ensure proper fit to the user.
- e. Tighten bracket nuts (C). The recommended torque specification is 75 - 85 in-lbs. (8.5 - 9.3 Nm). NOTE- Back height may require additional adjustment to ensure proper fit to the user.
- f. Test back release by pressing the release levers forward and removing the back off the chair. (See Removal and Replacement section for further details.) Proper alignment of the mounting hardware and back is achieved when smooth attachment and release can be easily done.
- g. If proper alignment has not been achieved, adjust the components until properly aligned.
- h. Once properly aligned, tighten the hardware receiver clamp screws. The recommended torque specification is 75 - 85 in-lbs (8.5 - 9.3 Nm).

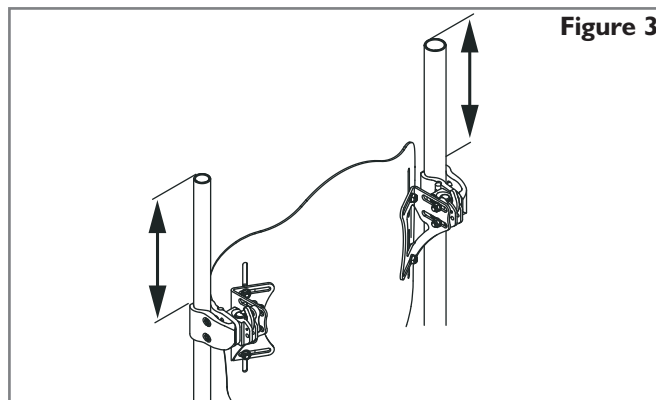


Figure 3

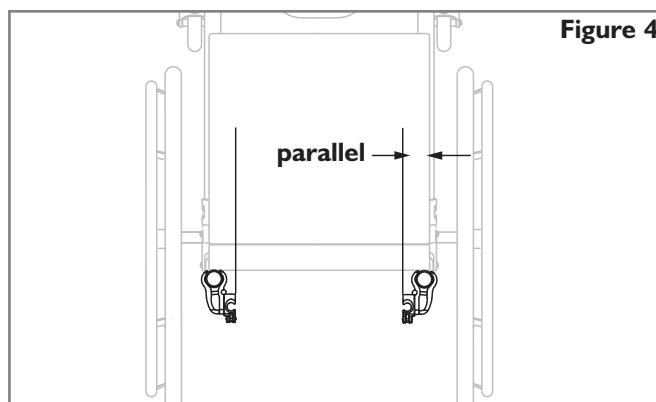


Figure 4

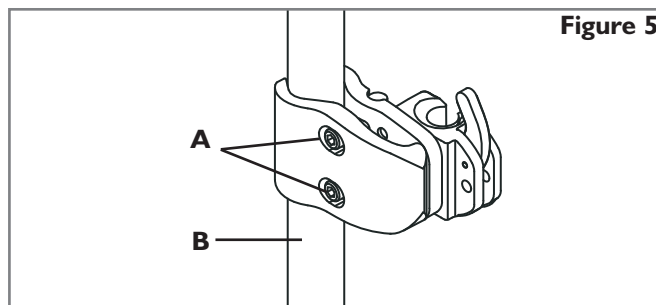


Figure 5

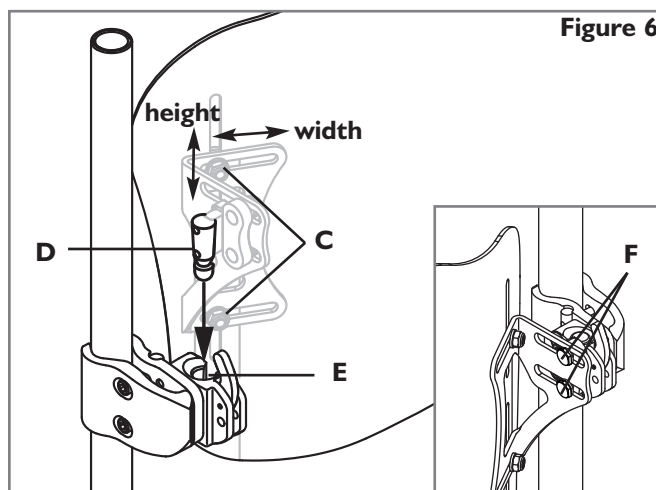


Figure 6

## ATTACHING FOUR POINT HARDWARE (OPTIONAL) (FIG. 7, 8, 9)

Tools required (included with Union Back with 4-Point Hardware)

- 4mm hex key



- 10mm box end wrench



- 5/8" box end wrench



### Installing the 4-Point Hardware

1. Loosen the clamp screws (A) with the supplied 4mm hex key and slip the clamps around the Back Canes (B).
2. The mounting hardware should be at equal heights on each back post (Fig. 8) and parallel to the seat frame (Fig. 7).
3. Hand tighten clamp screws (A). Loosen bracket nuts (C) and Mounting Pin bolts (F) using the supplied 10mm box-end wrench until hardware can move easily in all directions

**NOTE-** For large tube diameters, clamp screws may have to be removed completely.

4. Attach the Union Back by inserting left and right Mounting Pins (D) in the left and right Latch Receivers (E).
5. Install back to the approximate location, relative to both chair and user.
6. Tighten bolts on the inside of the Mounting Pin (F). Torque to 100 - 110 in-lbs.(11.3 - 12.4 Nm).

**NOTE-** Receivers may require additional lateral adjustment to ensure proper alignment.

7. Tighten bracket nuts (C). Torque to 75 - 85 in-lbs. (8.5 - 9.3 Nm).

**NOTE-** Back height may require additional adjustment to ensure proper fit to the user.

8. Test back release by pressing the release levers (L) forward and removing the back off the chair. Proper alignment of the mounting hardware and back is achieved when smooth attachment and release can be easily done.
9. If proper alignment has not been achieved, adjust the components until properly aligned.
10. Once properly aligned, tighten the hardware receiver clamp screws (A). Torque to 75 - 85 in-lbs (8.5 - 9.3 Nm)
11. Loosen bolts (G) to install Lower Receivers on Back Canes (H).
12. Use a 5/8" end wrench to loose the nut (K) that secures the Lower Mounting Pin (I) so that it slides fore and aft.
13. Slide lower receiver up (J) until it surrounds the Lower Mounting Pin (I).

**NOTE-** Leave 1/8" to 1/4" of space between the bottom of the Lower Mounting Pin (I) and the bottom of the Lower Receiver Channel (J).

**NOTE-** Make sure the Upper Mounting Bracket and Lower Receiver Bracket are in alignment on the Back Canes. Misalignment of the brackets may result in impaired function of quick-release.

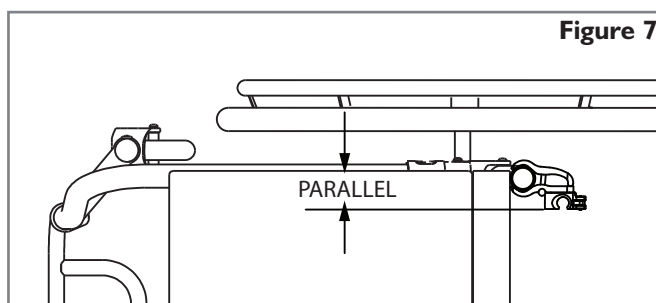


Figure 7

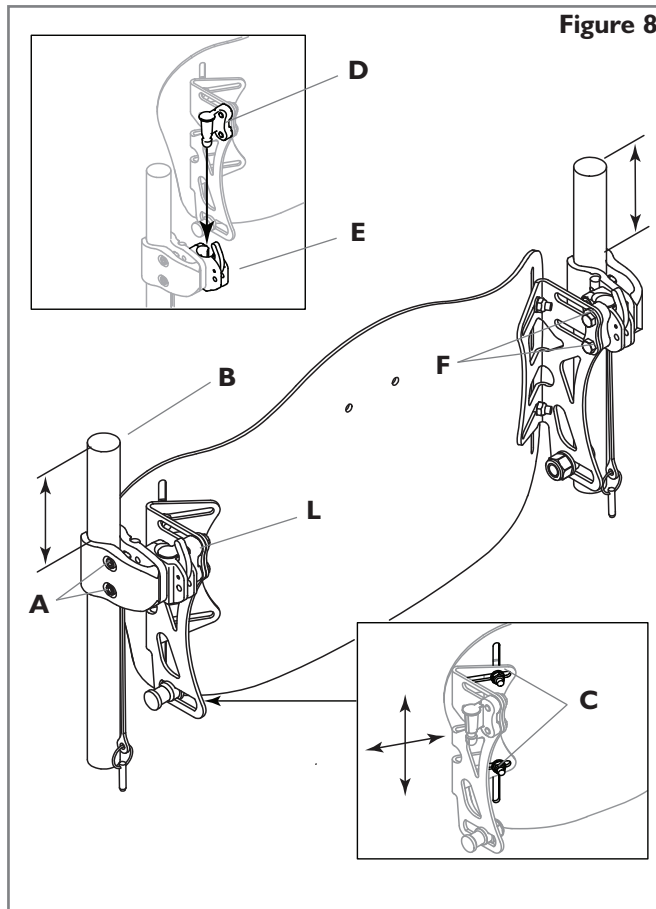


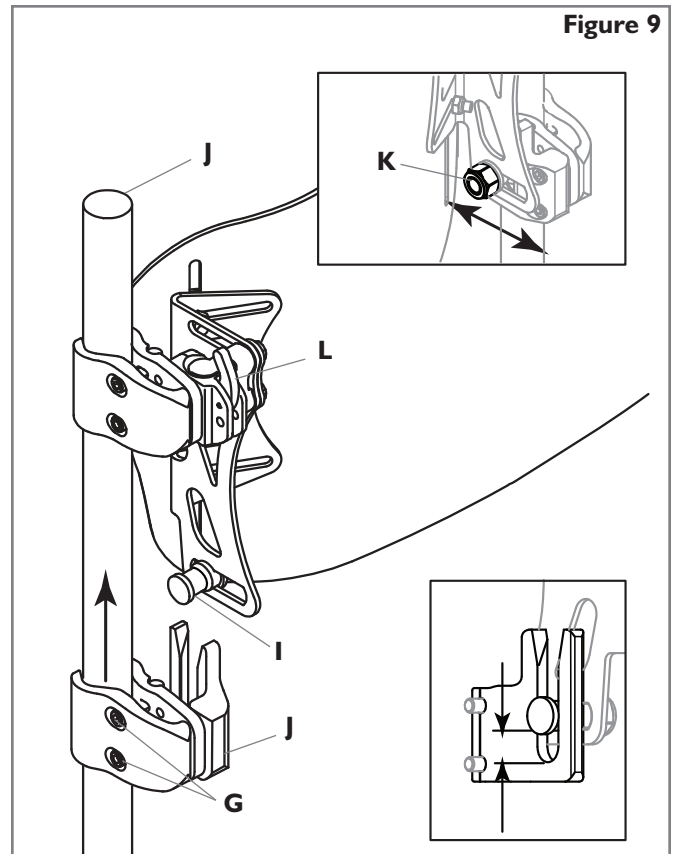
Figure 8

14. Once properly aligned, tighten the hardware receiver clamp screws (G). The recommended torque specification is 75 - 85 in-lbs (8.5 - 9.3 Nm). Then tighten the Lower Mounting Pin nut (K). Torque to 100 - 110 in-lbs.(11.3 - 12.4 Nm).
15. Test back release by pressing the release levers (L) forward and removing the back off the chair. (See Removal and Replacement section for further details.) Proper alignment of the mounting hardware and back is achieved when smooth attachment and release can be easily done.
16. If proper alignment has not been achieved, adjust the components until properly aligned.
17. To make micro adjustments, loosen bolts C and F. This will allow for minor changes in height, depth and angle. Retighten all bolts to required specs and test back function and quick-release.
18. Or, to make macro adjustments, loosen, but do not remove, bolts G, C and F (Figs. 8, 9). Position backrest to desired height, depth and angle.
19. Retighten all bolts to required specs and test back function and quick-release.

#### Adjusting the Four-Point Hardware

To make micro adjustments, loosen bolts C and F. This will allow for minor changes in height, depth and angle. Retighten all bolts to required specs and test back function and quick-release.

Or, to make macro adjustments, loosen, but do not remove, bolts G, C and F (Figs. 8, 9). Position backrest to desired height, depth and angle. Retighten all bolts to required specs and test back function and quick-release.



## ADJUSTING UNION HEIGHT, DEPTH AND ANGLE

The first phase of the Union Back hardware installation is complete. It is now the appropriate time to have the user seated back in the chair for personalizing the Union Back. Do not have the user apply full pressure on the back as it is not fully tightened to the full torque requirements.

### 1. Height Adjustment (Fig. 10)

- a. With the user in the chair, identify the desired height of the back. Once identified, have the user remove pressure from the Union Back by leaning or sliding partially forward if possible to allow the adjustment to take place.
- b. Loosen the bracket nuts (A) and adjust the height of the back shell to required position.
- c. Securely tighten the bracket nuts (A). The recommended torque specification is 75-85 in-lbs. (8.5 - 9.3 Nm).

**NOTE-** After height adjustment is complete, check that the width was not inadvertently changed.

### 2. Depth/Angle Adjustment (Figs. 11, 12, 13)

The standard hardware allows for 2 inches of depth adjustment (Fig. 11).

- a. To adjust Union Back depth and angle loosen left and right bolts (Fig. 13-B) on bracket slots.
- b. Adjust depth and/or angle and securely tighten. The recommended torque specification is 100-110 in-lbs. (11.3 - 12.4 Nm). Ensure that none of the depth adjustment nuts (Fig 13-B) will slip or rotate.
- c. If additional depth is needed, remove back from receivers. Remove screws (Fig. 11-D) from receiver using the enclosed 4mm hex key, and reposition to desired depth. Tighten screws to 25-35 in-lbs. (2.8 - 4 Nm).

### **⚠ WARNING**

Ensure that all hardware has been properly tightened once all adjustments have been completed and the Union Back is ready for use.

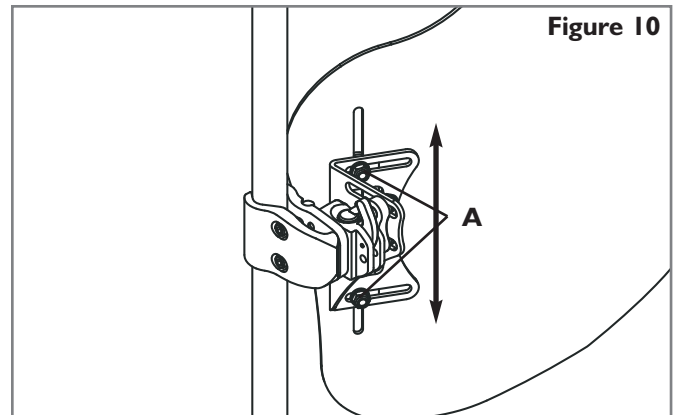
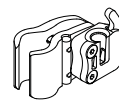


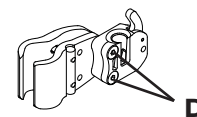
Figure 10

### Standard hardware- 2 depth settings

Figure 11



Depth 1



Depth 2

### Four-Point Hardware Lower Receivers

Figure 12

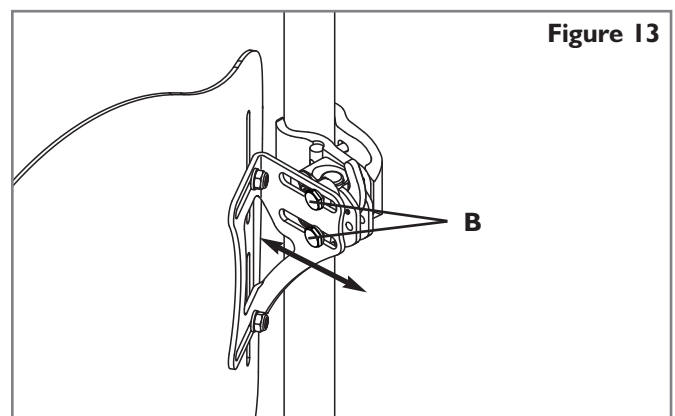
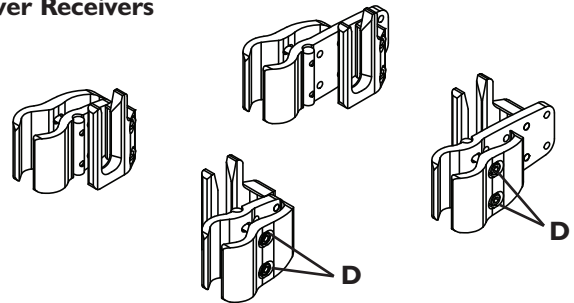


Figure 13



## INSTALLING THE LATERAL SUPPORTS

(Figs 14, 15, 16)

### Tools required (included with JAY Union Back)

- 4mm Hex Key

1. Remove Velcro® attachment at top of cover and fold the cover down.
2. Attach the Lateral Support Assembly to the Velcro® strips that run down the center of the back.
3. Adjust the height and angle of the Lateral Support Assembly as preferred.
4. Adjust position of Lateral Support Plates
  - a. Pass the hex key through the slots (A) in the positioning plates.
  - b. Loosen the two screws that hold the positioning plates in place.
  - c. Position the positioning plates as preferred (Fig. 16).
  - d. Retighten screws.

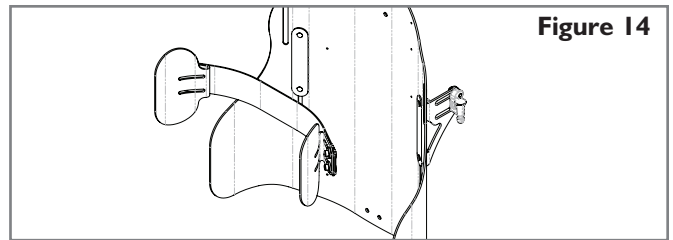


Figure 14

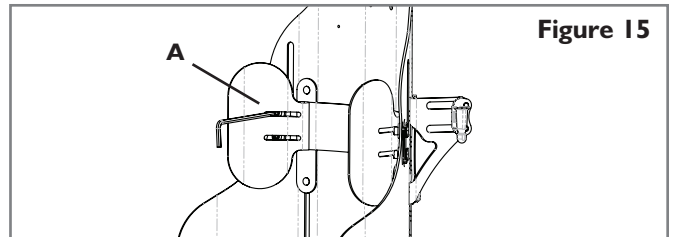


Figure 15

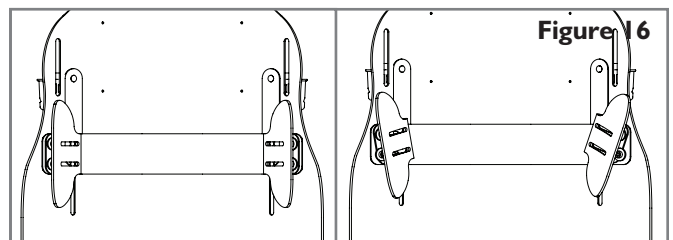


Figure 16

## INSTALLING THE SACRAL SUPPORT

(Figs. 17, 18, 19, 20)

### Tools required (included with JAY Union Back)

- 4mm Hex Key

1. **Determine Angle of Sacral Support (Fig. 18)**
  - a. Determine if you prefer an anterior or posterior angle on the sacral support.
  - b. Reverse the pad on the sacral support plate as appropriate.

**NOTE-** The easiest way to do this is to pull the metal plate out of the cover, reverse it and slip it back in, leaving the foam inside the cover.

2. **Attach Sacral Support to Shell (Figs. 19, 20)**

- a. Unfasten the top Velcro on the cover and flip the cover down, leaving the bottom attached.
- b. Place the “Nut Plate” (A) through the shell from the inside.
- c. Slide the Sacral Support up through the opening on the bottom flap of the cover and over the “Nut Plate” using one of the three sets of holes to adjust for the preferred height.
- d. Attach with the two M4 screws (B) and tighten to secure.
- e. Re-attach top of cover.

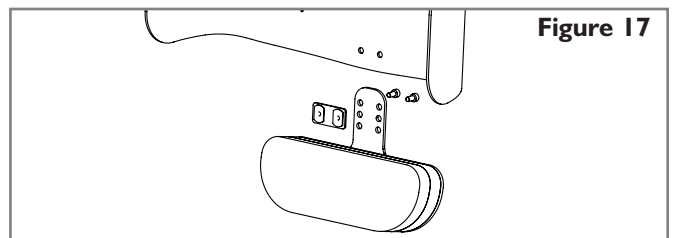


Figure 17

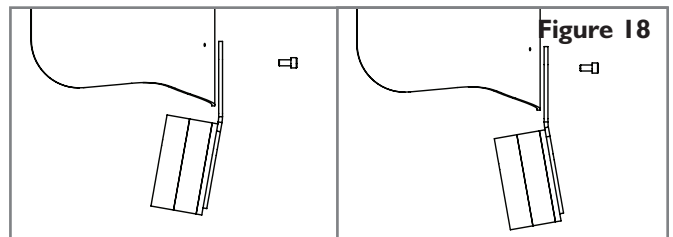


Figure 18

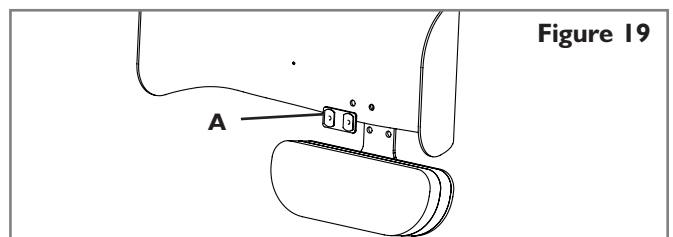


Figure 19

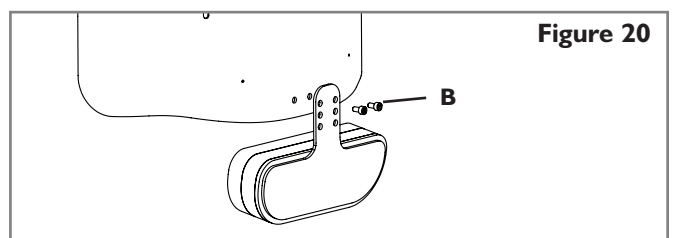


Figure 20

## BACK TRANSIT SAFETY

The Union back has been dynamically tested for use in a motor vehicle. Please follow all installation, use and maintenance instructions within this manual as well as the transit instructions listed below.

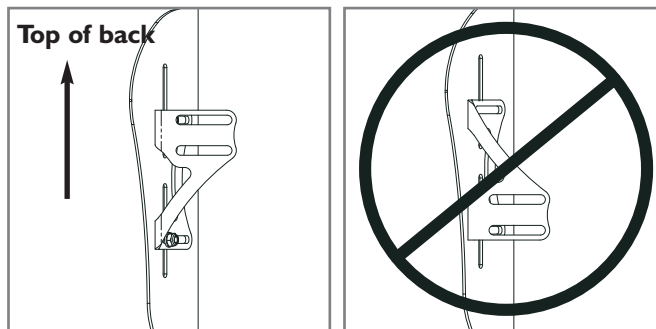
### WARNINGS

1. If possible and feasible, the rider should transfer to the Original Equipment Manufacturer vehicle seat and use the vehicle restraints.
2. The distance between the top of the user's shoulder and the top of the back should not exceed 6.5" (16.5 cm).
3. The wheelchair must be labeled as appropriate for use as a seat in a motor vehicle, dynamically tested to the performance requirements of ISO Standard 7176-19 and installed, used and maintained according to the manufacturer's instructions.
4. If the original wheelchair seat was replaced, the new seat must be approved for wheelchair transit, installed and used as indicated in the manufacturer's instructions.
5. The Wheelchair Tiedown and Occupant Restraint System (WTORS) should be compatible with the specific wheelchair, used as indicated in the manufacturer's instructions and should comply with the performance requirements of ISO Standard 10542.
6. The wheelchair must be forward facing during transport.
7. In order to reduce the potential of injury to vehicle occupants wheelchair-mounted accessories such as trays and respiratory equipment should be removed and secured separately.
8. This product is intended for use by adults ranging in weight from 79 to 300lbs or up to 500 lbs. (227 kg) for widths over 22".
9. Postural support devices such as pelvic positioning belts, anterior trunk supports or postural supports such as lateral trunk supports should not be relied on for occupant restraint in a moving vehicle unless they

are labeled as conforming to ISO Standard 16840-4.

10. Alterations or substitutions should not be made to the structure, parts or components, without consulting the manufacturer.

11. Backshell mounting bracket must be attached in the "leg up" position for transit use. (See below.) Refer to the appropriate section for correct back hardware



Correct bracket orientation for transit

Incorrect bracket orientation for transit

mounting instructions.

### **⚠** WARNING

**FAILURE TO HEED THESE WARNINGS  
COULD CAUSE SEVERE INJURY TO THE  
WHEELCHAIR RIDER OR OTHERS.**

Refer to next page for a list of transit approved part numbers.

## REMOVAL AND REPLACEMENT

### Removal

Following installation and adjustment, the back can be easily removed from the wheelchair if necessary. To remove, push each release lever forward to unlock (Fig. 27). Once both levers are in the forward position, simply lift the back straight up (Fig. 28) using the handle located on the top of the back.

### Proper reattachment after removal

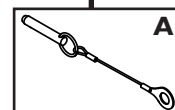
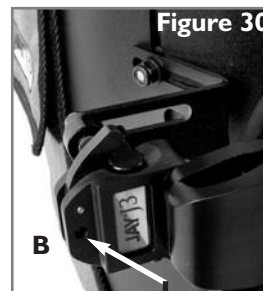
To reattach the back to the hardware receivers, simply line up the pins to the receivers and push into place (Fig. 28). If properly inserted the pins will “click” to a locked position.

### **⚠ WARNING**

**If you are uncertain if you have heard the locking “click”, pull up on the back using the handle to ensure that it has been securely locked.**

### Locking Pins (Fig. 30)

The Union Back comes with two locking pins which, when secured, prevent the back from being released from the chair. To lock, insert the pins (A) into the mounting receivers (B). Simply remove the pins if the quick-release capability is desired.



## WARRANTY

### 24 MONTH LIMITED WARRANTY

Each JAY Union Back is carefully inspected and tested to provide peak performance. Every JAY Union Back is guaranteed to be free from defects in materials and workmanship 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 from the original date of purchase, Sunrise Medical will, at its option, repair or replace it without charge. This warranty does not apply to punctures, tears or burns, nor to the back’s removable cover.

Claims and repairs should be processed through the nearest authorized 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 not warranties which extend beyond the description on 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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