



Custom Seat Cushions

INSTALLATION AND CARE INSTRUCTIONS

for

CUSTOM SEAT CUSHIONS

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Stealth Products is committed to 100% customer satisfaction. Your complete satisfaction is important to us. Please contact us with feedback or suggestions to help us improve the quality and usability of our products.

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General

Read and understand all instructions prior to the use of the product. Failure to adhere to instructions and warnings in this document may result in property damage, injury, or death. Product misuse or failure to follow instructions will void the warranty.

Immediately discontinue use if any function is compromised, if parts are missing or loose, or if any component shows signs of excessive wear. Consult with your supplier for repair, adjustment, or replacement.

All persons responsible for fitting, adjustment, and daily use of the devices discussed in these instructions must be familiar with and understand all safety aspects of the devices mentioned. In order for our products to be used successfully, you must read and understand all instructions and warnings, and maintain our products according to our instructions on care and maintenance.

The installation instructions will guide you through this product's options and possibilities.

Instructions are written with the expressed intent of use with standard configurations. They also contain important safety and maintenance information, as well as describe possible problems that can arise during use. For further assistance, or more advanced applications, please contact your supplier or **Stealth Products** at (512) 715-9995 or toll free at (800) 965-9229.

Always keep the operating instructions in a safe place so they may be referenced as necessary.

All information, pictures, illustrations, and specifications are based on the product information that was available at the time of printing. Pictures and illustrations shown in these instructions are representative examples and are not intended to be exact depictions of the various parts of the product.

Important Information



These products are designed to be fitted, applied, and installed exclusively by a healthcare professional trained for these purposes. The fitting, application, and installation by a non-qualified individual could result in serious injury.

Warranty

Our products are designed, manufactured, and produced to the highest of standards. If any defect in material or workmanship is found, **Stealth Products** will repair or replace the product at our discretion. Any implied warranty, including the implied warranties of merchantability and fitness for a particular purpose, shall not extend beyond the duration of this warranty. **Stealth Products** does not warrant damage due to, but not limited to: misuse, abuse, or misapplication of product, and/or modification of product without written approval from **Stealth Products, LLC**. Any alteration or lack of serial number, where applicable, will automatically void all warranty.

Stealth Products, LLC is liable for replacement parts only. **Stealth Products, LLC** is not liable for any incurred labor costs. **Stealth Products** warrants against failure due to defective materials or workmanship:

Covers: 2 years

Hardware: 5 years

Electronics: 3 years

In the event of a product failure covered by our warranty, please follow the procedures outlined below:

Call **Stealth Products** at (512) 715-9995 or toll free at (800) 965-9229.

Request a Return Authorization (RA) form from the Returns Department and follow the documentation instructions.

Additional warranty information may be found by visiting the website at <https://stlpro.site/returns-n-warranty>. Copies of this manual may be downloaded by accessing the Stealth website (<https://stlpro.site/stealth-docs>) and searching "Custom Cushions" in the search bar at the top of the page.

Supplier Reference	
Supplier:	
Telephone:	
Address:	
Purchase Date:	
Model:	

Warning Labels

Warnings are included for the safety of the user, client, operator, and property. Please read and understand what the signal words **DANGER**, **WARNING**, **CAUTION**, **NOTICE**, and **SAFETY** mean, and how they could affect the user, those around the user, and property.

DANGER

Identifies an **imminent** situation which, if not avoided, may result in **severe injury, death, and property damage**.

WARNING

Identifies a **potential** situation which, if not avoided, may result in **severe injury, death, and property damage**.

CAUTION

Identifies a **potential** situation which, if not avoided, may result in **minor to moderate injury and property damage**.

NOTICE

Identifies important information not related to injury, but possible **property damage**.

SAFETY

Indicates steps or instructions for safe practices, reminders of safe procedures, or important safety equipment that may be necessary.

Limited Liability

Stealth Products, LLC accepts no liability for personal injury or damage to property that may arise from the failure of the user or other persons to follow the recommendations, warnings, and instructions in this manual.

Stealth Products does not hold responsibility for final integration of final assembly of product to end user. **Stealth Products** is not liable for user death or injury.

Testing

Initial setup and driving should be done in an open area free of obstacles until the user is fully capable of driving safely.

Intended Use

Stealth Products' **Custom Seat Cushion** is designed to provide optimal fitting for individuals requiring solid seats to support minimal deformities or stability needs, and who require moderate postural support, improved trunk or pelvic positioning, or have mild pelvic asymmetries.

Features

The **Custom Seat Cushion** features numerous customizable options and accommodations to provide the best fit for each user. Customizable options include:

- Frame Width
- Cover Material
- Cushion Shape
- Cushion Base
- Growth Notches
- Hamstring Relief Depth
- Leg Length Discrepancy Cuts
- Anti-Thrust, Fixed and Adjustable
- Abduction and Adduction Options
- Cushion Foam Composition
- Ischial Gel Inserts
- Integrated Seat Pan
- Accessories (Zippered Pouch, Extra Cover, and Incontinence Liner)

Preparations

Only a qualified service technician may install the **Custom Seat Cushion** and its accessories.



WARNING

Incorrect installation of the **Custom Seat Cushion** or its accessories may cause damage to the hardware and/or injury to the user.

Required Tools

Use the proper tools to install and adjust the Custom Seat Cushion to the desired position for the user.



CAUTION

The use of improper tools may cause damage to the device.

Below are the tools needed to complete the installation of the cushion hardware systems:



Tools:
4mm Hex Key
10mm Wrench or Socket



CAUTION

Tools required to install additional assemblies are detailed in the manuals for those accessories.

Tools are not provided. Refer to the manuals provided with additional accessories for a list of the tools required to install those accessories.



CAUTION

Altering the fitted position set by your healthcare professional can lead to pinching of the skin, abrasions, or decubitus ulcers (bed sores). Maintain the cushion in the prescribed position to ensure safe, comfortable use.



CAUTION

Do not smoke while using the **Custom Seat Cushion**.

Installation Plan

Set up an installation plan before beginning the installation. This plan should take into account:

- Where the **Custom Seat Cushion** will be placed;
- how the **Custom Seat Cushion** will be operated, including the release functions for the hardware options; and,
- a sufficient amount of clearance for other hardware and accessories.



CAUTION

Any connection must always be secured with all delivered screws. Only use the screws provided in package.



CAUTION

Weight Capacity

10" - 14": 175 lbs.

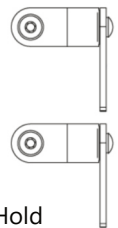
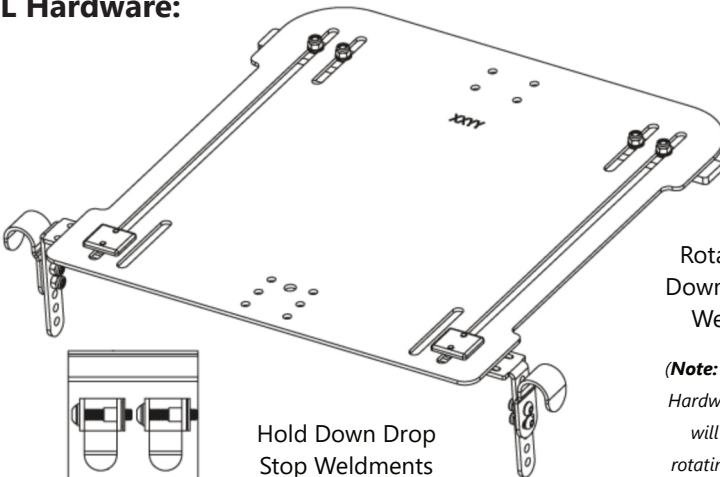
15" - 20": 300 lbs.

Hardware System Assemblies

In most cases, when coupled with a seat pan, the **Custom Seat Cushion** is able to be installed on wheelchairs via four different hardware options. Options can be mounted on 3/4", 7/8", or 1" seat tubes, depending on hardware.

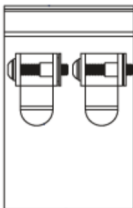
Note: *Two-Point assemblies are used here for illustration purposes.*

J&L Hardware:



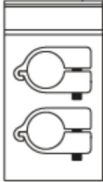
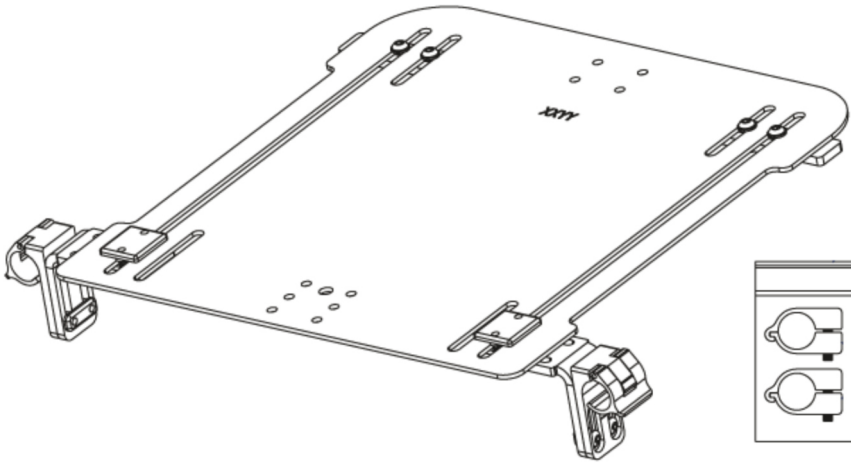
Rotating Hold
Down Drop Stop
Weldments.

(Note: *Four-point J&L Hardware assemblies will include two rotating weldments, to be outfitted at the back of the chair.*)



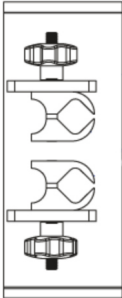
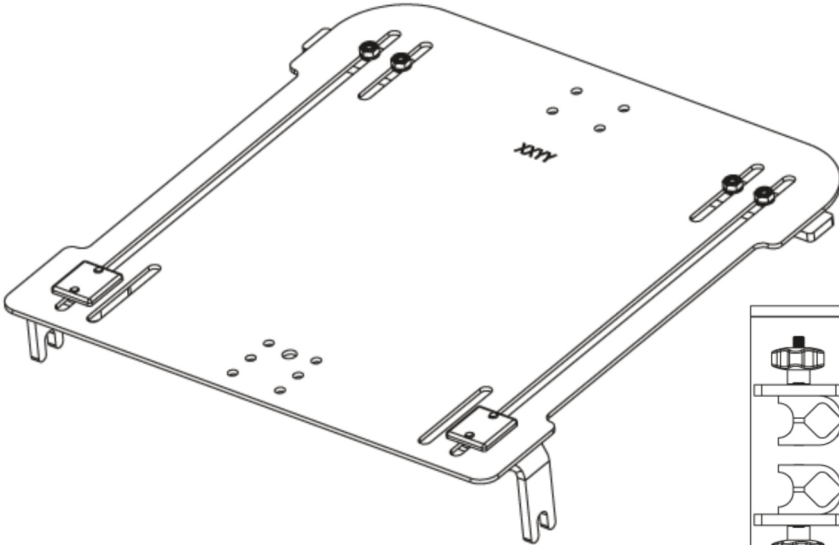
Hold Down Drop
Stop Weldments

Trouble Free Hardware:

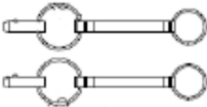


Tube Stop Clamps

All-Purpose (Knob) Hardware:



All-Purpose Knob Clamps

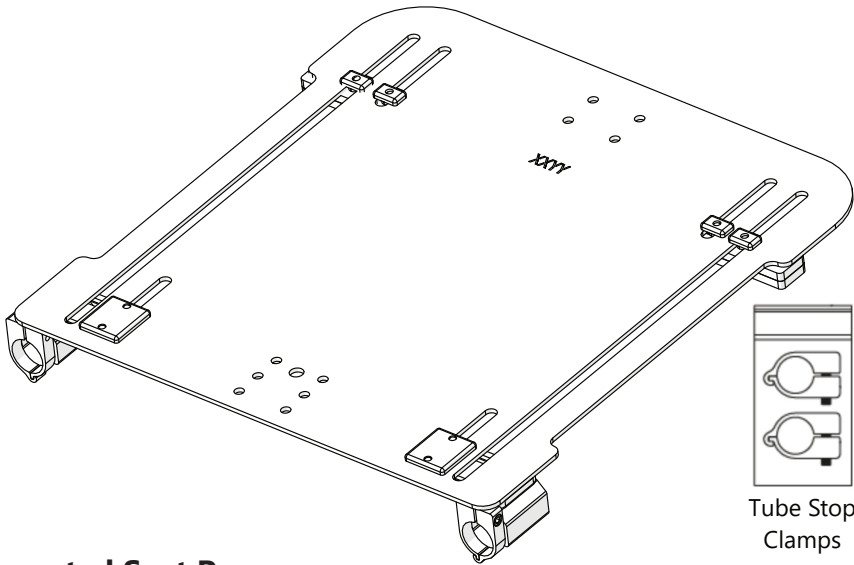


Transit Locking Pins

(Note: Four-point All-Purpose hardware assemblies will include four wc20-labeled locking pins.)

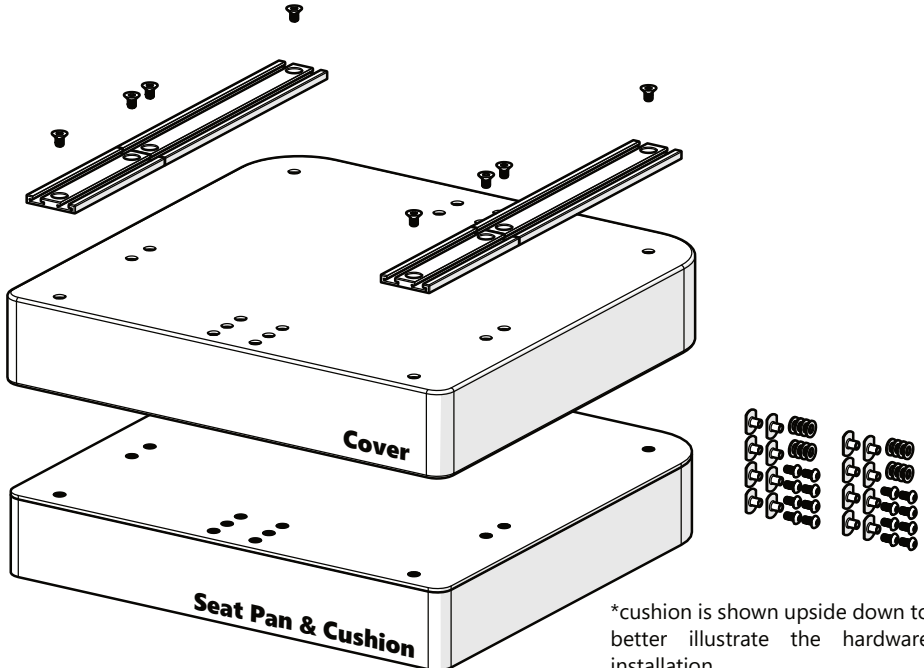
Installation Instructions

Snap-On Hardware: (only available for 1" seat tubes)



Integrated Seat Pan:

Tracks are installed to the seat pan on the underside of the cushion* after the cushion has been placed inside the cover. Hardware to mount the cushion to the chair attach to these tracks.



Hardware System Installation

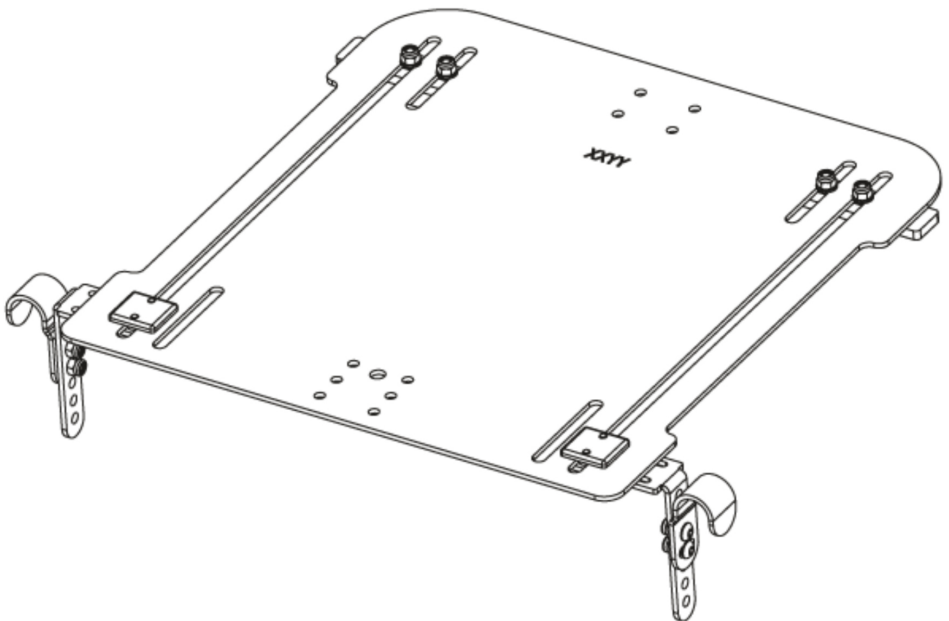
This section details how to install the cushion to the wheelchair with the three available hardware configurations.

Please note that the hardware is functional whether it faces outward (as pictured) or inward. The amount of space, clearance, and the type of chair are the determining factors in installation compatibility.

J&L Hardware Installation:

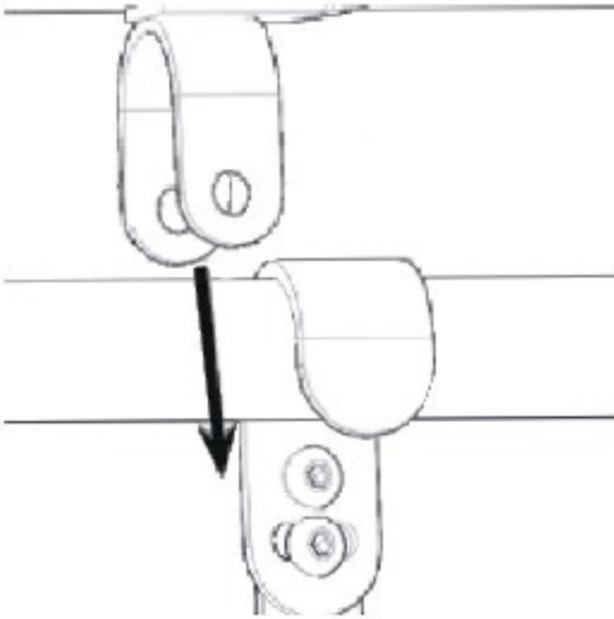
The J&L hardware attaches to a wheelchair in two-point or four-point options. The following instructions are for the two-point option. In order to install the four-point option, simply repeat the following steps for the two remaining hardware sub-assemblies.

Step One: Place the seat pan assembly onto the wheelchair canes so that the hardware is at the front of the chair.

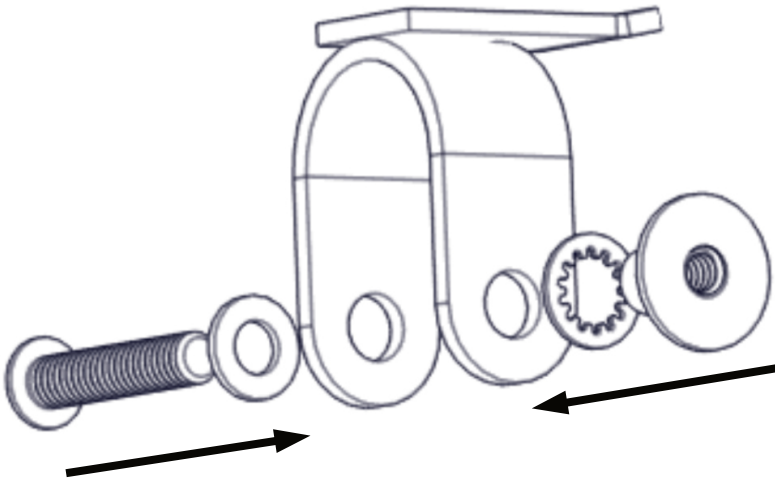


Installation Instructions

Step Two: Using a 4mm hex key, remove the screws, washers, and nuts from the Hold Down Drop Stop Weldments. Position the weldments just outside the J-clips on the wheelchair cane.

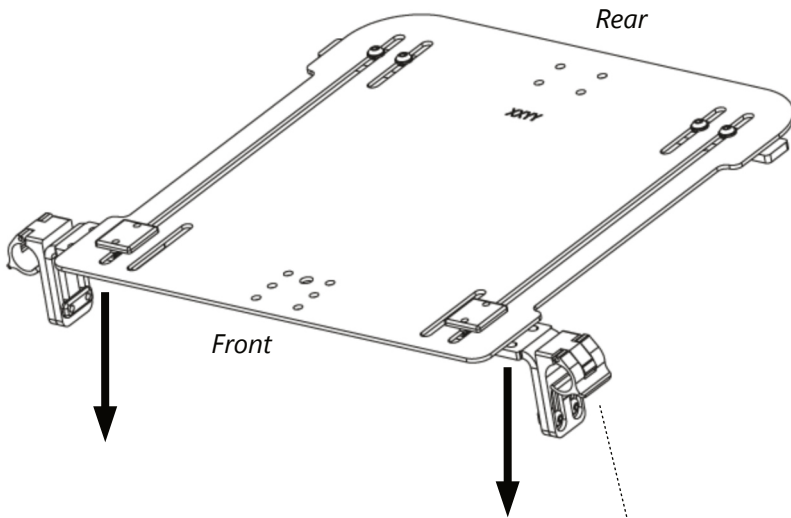


Step Three: Use the 4mm hex key to replace the screws, washers, and nuts from the weldments and tighten firmly.

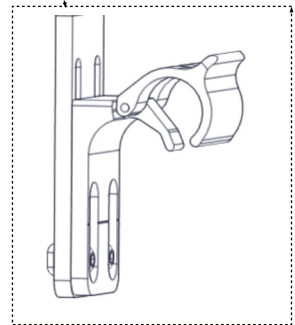


Trouble-Free Hardware Installation:

The Trouble-Free hardware attaches to a wheelchair in two-point or four-point options. The following instructions are for the two-point option. In order to install the four-point option, simply repeat the following steps for the two remaining hardware sub-assemblies.

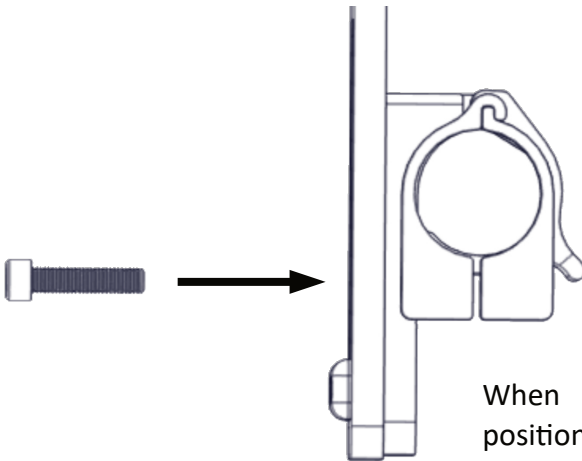
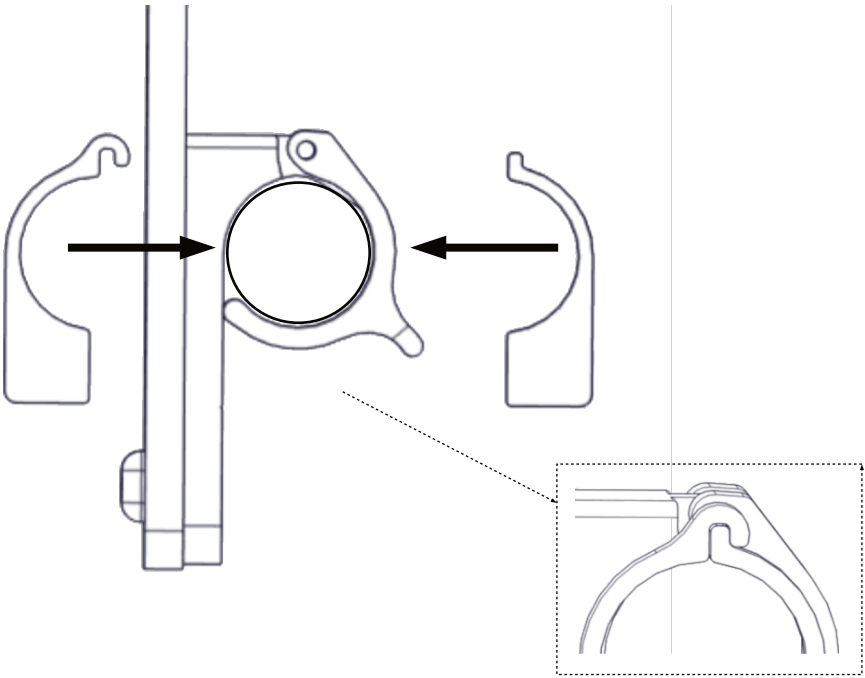


Step One: Unlatch the clasps of the hardware attached to the seat pan, then place the seat pan assembly onto the wheelchair canes so that the hardware is at the front of the chair. When the seat pan is in position, latch the clasps.



Installation Instructions

Step Two: Join the female/male Tube Stop Clamps around the wheelchair canes.

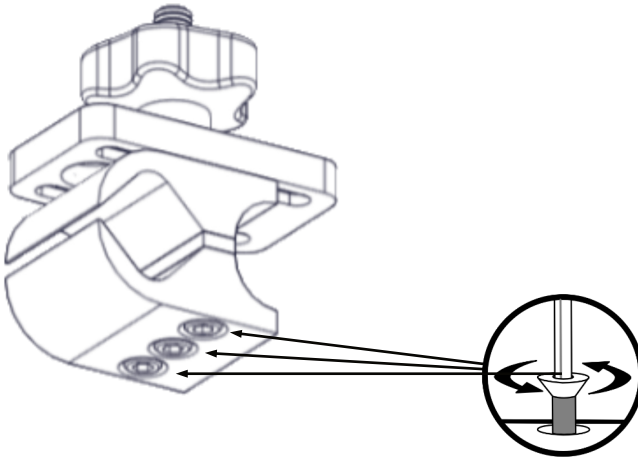


When the clamps are positioned correctly, use a 4mm hex key to tighten the screws through the tube stop clamps.

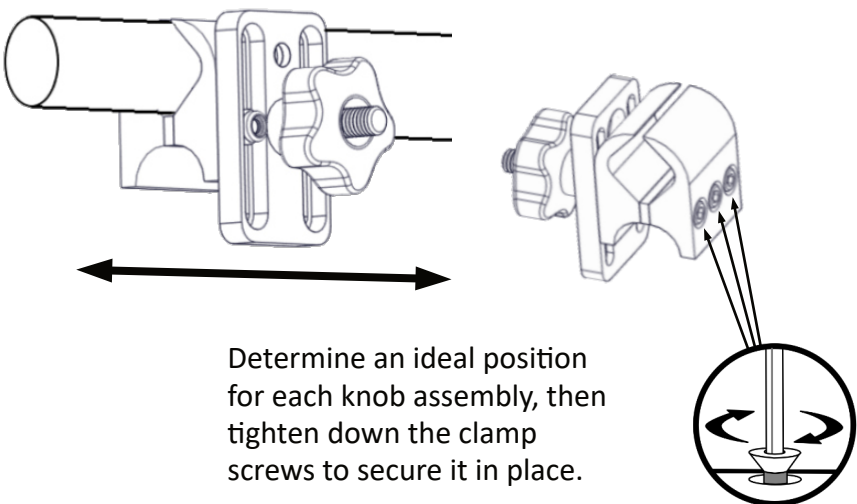
All-Purpose (Knob) Hardware Installation:

The All-Purpose hardware attaches to a wheelchair in a two-point or a WC20-approved four-point option. The following instructions are for the four-point option.

Step One: Using a 4mm hex key, slightly loosen the three screws in the base of each knob's clamp, pictured below.



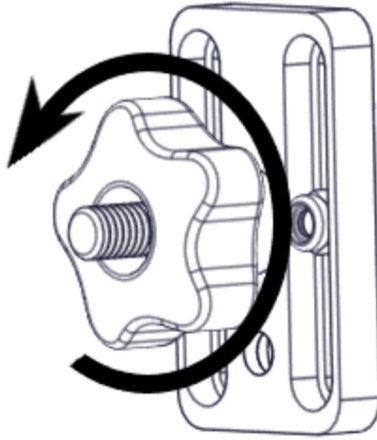
Step Two: With the clamp screws now loosened, slide the clamps onto the wheelchair canes.



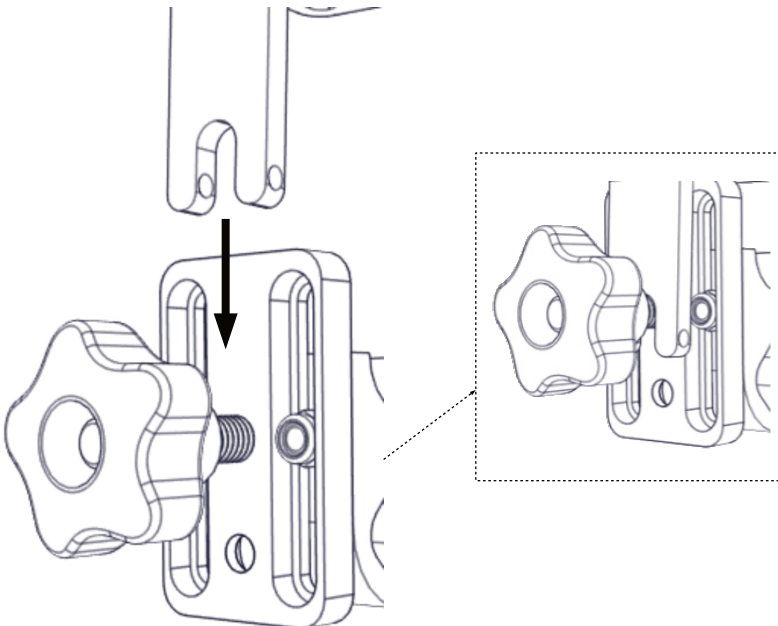
Determine an ideal position for each knob assembly, then tighten down the clamp screws to secure it in place.

Installation Instructions

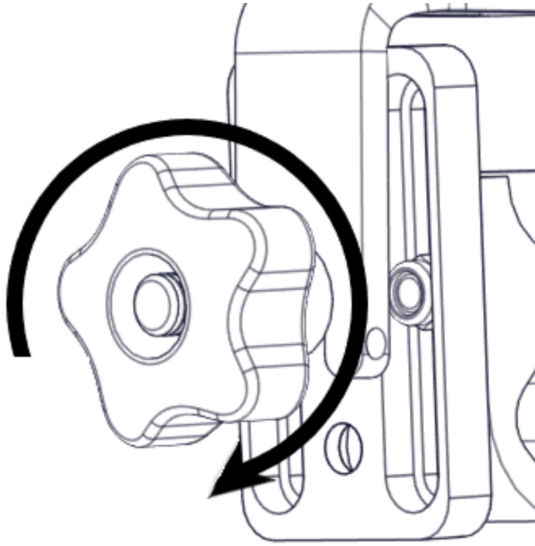
Step Three: Turn the knobs counterclockwise to loosen them and expose the knob's center screw.



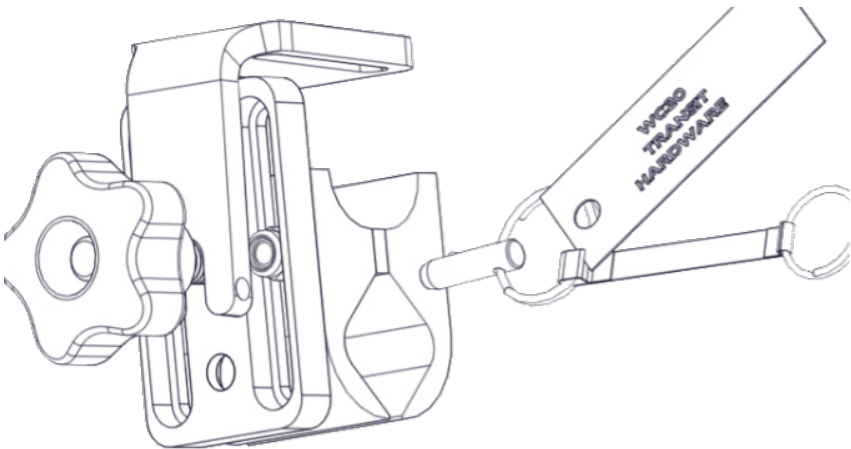
Step Four: Place the seat pan assembly onto the knob assembly. Ensure the seat's L-brackets are flush with the knob's exposed center screws.



Step Five: Turn the knobs clockwise to firmly tighten them against the L-brackets.



Step Six: In order to comply with the provisions and requirements of WC20, the provided locking pins must be inserted in the through-holes of each L-bracket, as illustrated below.

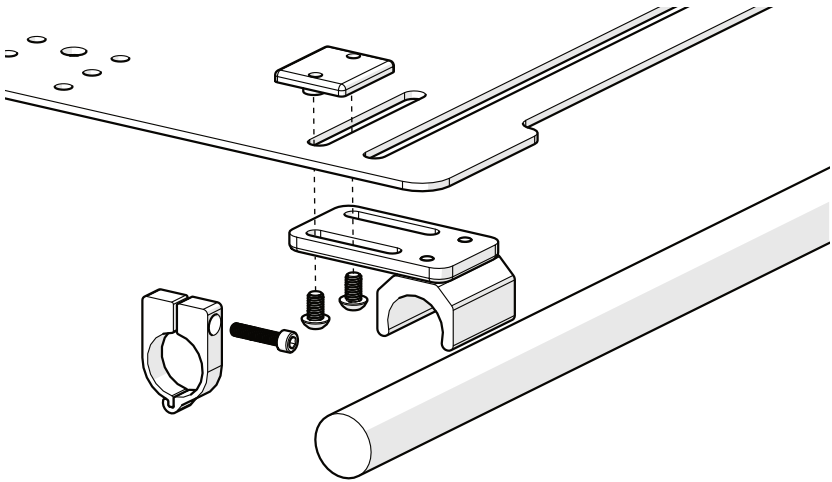


Snap-On Hardware Installation:

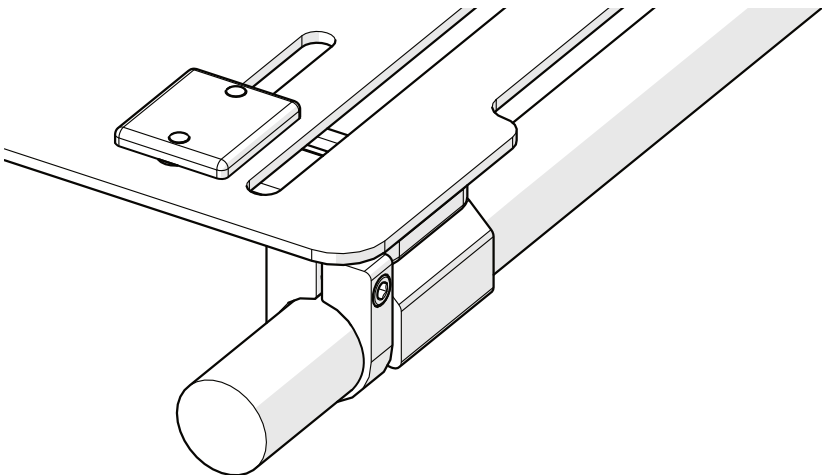
The Snap-On hardware attaches to a wheelchair in a two-point or four-point configuration. The following instructions apply to both the two-point and four-point options.

Mounting Hooks:

Step One: The Snap-On Mounting Hooks install to the front slots (and the rear slots in the 4-Point version) of the seat pan. Loosely secure the mounting hooks using the M6 x 1.0 x 10MM Button Head Screws and T-Slot Nuts.

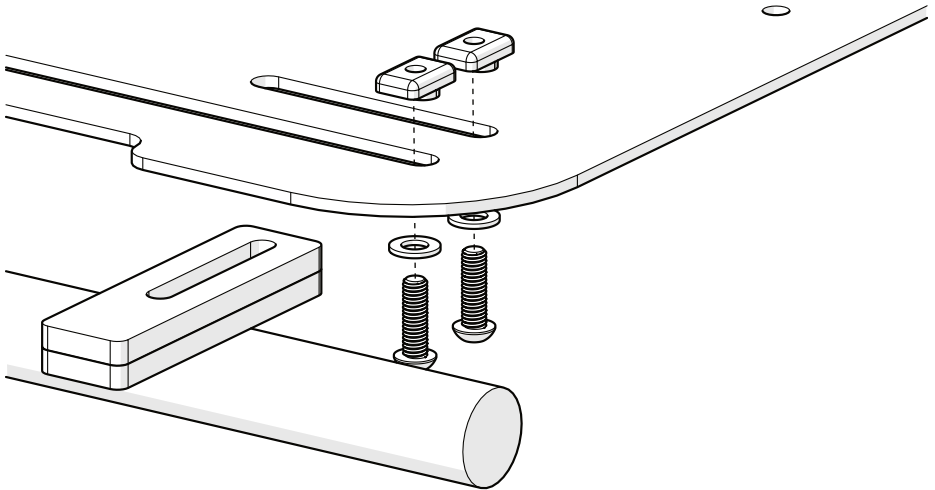


Step Two: Align the mounting hooks to center the seat pan evenly between the tubes. Torque the screws to the torque specification called out in the hardware manual provided. Install the tube stop clamps.

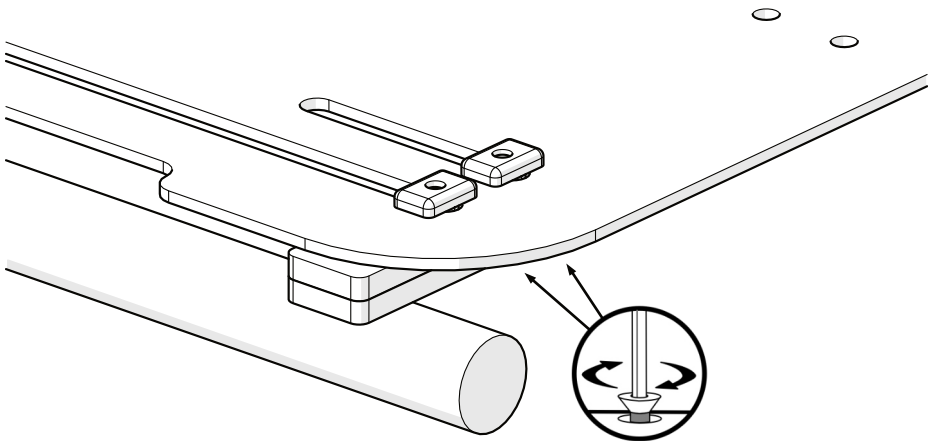


Long Seat Tabs:

Step One: The Long Seat Tabs provide support for the seat pan without gripping the tubes in 2-point installations. Stack the tabs and loosely secure them to the seat pan using the M6 x 1.0 x 20mm Button Head Screws, washers, and T-Nuts included in the package.



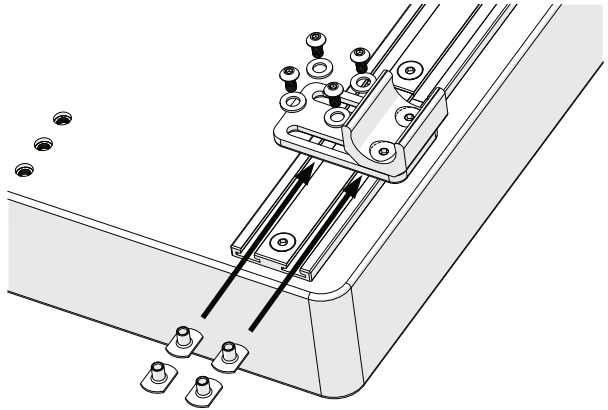
Step Two: Align the outer edges of the seat tabs to line up with the outer edges of the mounting hooks installed in the previous section. Check to ensure the seat tabs overlap the seat tubes sufficiently without causing clearance issues for other items installed on the chair, such as arm rails or laterals. Torque the fasteners to the specifications shown in the hardware manual provided.



Integrated Seat Pan Hardware Installation

The bracket used to mount Trouble-Free, All-Purpose, and Snap-On hardware will need to be inverted for use with the tracks and slab nuts on the Integrated Seat Pan.

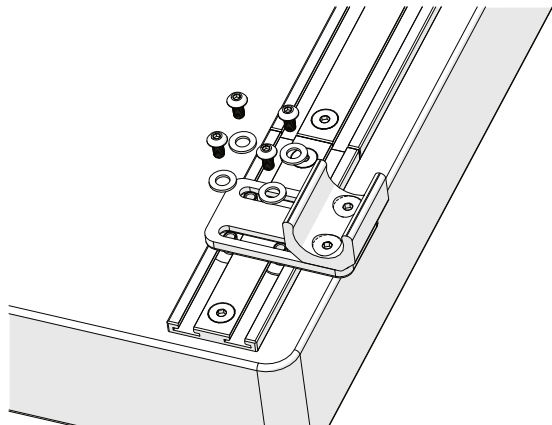
Step One: Slide the slab nuts into the grooves in the track, as shown.

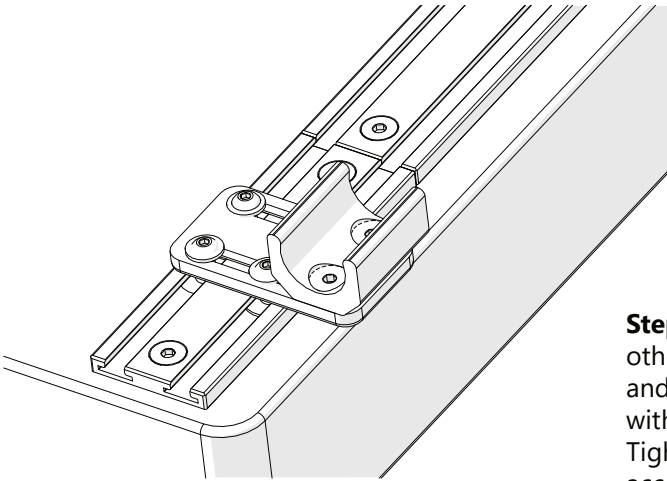


Step Two: Align the slots in the bracket hardware* with the slab nuts in the track.

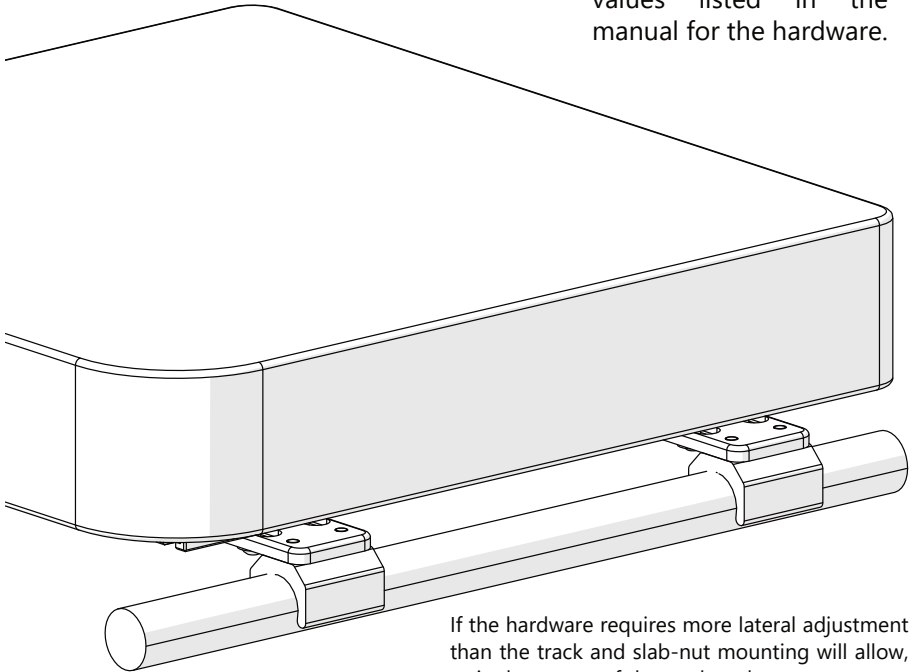
* Snap-On hardware shown for illustration purposes. Installation of other hardware is similar.

Step Three: Place the slots on the slab nuts and loosely secure the bracket to the track.





Step Four: Install the other mounting brackets and align the hardware with the seat pan. Tighten the hardware according to the torque values listed in the manual for the hardware.



If the hardware requires more lateral adjustment than the track and slab-nut mounting will allow, a single groove of the track and two screws may be used instead of the recommended 4 screws to secure the hardware to the seat pan.

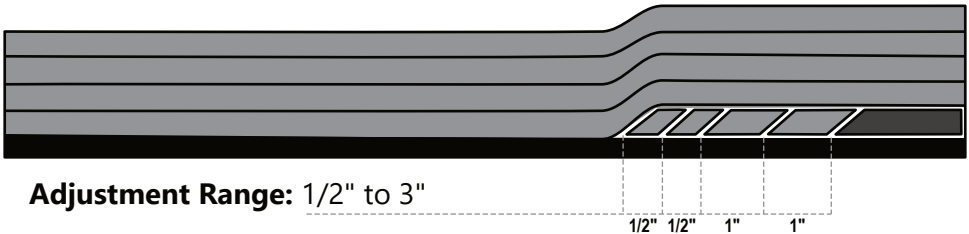
 **CAUTION**

Following installation, ensure nothing scrapes, or comes into unintentional contact with the cushion.

Adjustable Anti-Thrust Adjustments

The Adjustable Anti-Thrust option gives you the ability to adjust the depth of the anti-thrust support for your **Custom Cushion**. The removable adjustment strips come in two sizes to make the adjustment from 1/2 in. to 3 in. in 1/2 in. increments.

1. Remove the adjustable anti-thrust cushion from the chair and remove its cover.
2. Lift the top layers of foam (held in place by hook and loop fabric) from the base layer of foam to expose the depth adjustment wedges.
3. There are two (2) one-inch, and two (2) half-inch 45° trapezoidal spacers located near the front of the cushion. These can be removed and replaced in any combination of half-inch increments up to 3 inches.
4. Press the hook and loop fabric together to hold the spacers in place and lower the top foam layers over the spacers and base foam. Press in place.
5. Replace the cover on the foam pad, and install on the chair.



WC20 All-Purpose Hardware

The **All-Purpose** hardware, when utilized as part of a four-point configuration, has met RESNA WC20 and ISO16840-4 requirements and provisions. The All-Purpose hardware *must* have locking pins inserted and *must* be applied in a four-point configuration to be WC20 approved.



CAUTION

The WC20-approved **All-Purpose** hardware and **Custom Cushion** should only be used as detailed in these instructions, and only meet WC20 requirements when used in conjunction with a WC20-approved back and wheelchair.

RESNA WC20 establishes design/performance requirements and test methods for complete seating systems (i.e., consisting of a seat, back support, and attachment hardware) as they relate to their use as seats in motor vehicles.

Before Transit

- Clients who use wheelchairs should transfer to the vehicle seat and use the vehicle-installed occupant restraint system.
- Prior to transporting, always double check the tie-downs and hardware.
- On tie-downs and restraints, look for tears or worn webbing straps. Replace as necessary. *Never* use torn straps.
- Look for damaged hooks or loose tie-down hardware.
- On the seating system, check for loose screws attaching the hardware to the seat. These should be snug and not over-tightened.
- The All-Purpose hardware should be securely attached to the chair, and the transit pins should be properly inserted into the hardware.



DANGER

The WC20-approved **All-Purpose** hardware is designed specifically for occupancy when used on wheelchairs that are facing forward in motor vehicles.

! DANGER

The WC20-approved **All-Purpose** hardware has been designed to accommodate the proper use of vehicle-anchored belt restraints and the ratings of the seating systems, with regard to a) ease of properly positioning vehicle-anchored belt restraints on the wheelchair passenger, and b) the degree to which proper positioning of belt restraints can be achieved.

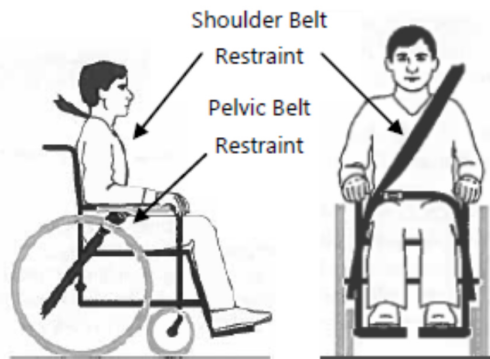
! DANGER

Alterations or substitutions should not be made to the product or to its parts and components without consulting the manufacturer.

Belt Placement

- The pelvic belt restraint should be worn low, across the front of the pelvis near the junction of the pelvis and thighs.
- The belt restraint buckle of three-point belt restraints should be placed in contact with the occupant's body and away from wheelchair components.
- The junction of the shoulder belt and pelvic belt of three-point belt restraints should be located near the hip opposite the shoulder over which the diagonal belt crosses and not near the mid-line of the occupant.

Proper Positioning of Belts on Occupant



- Upper torso belt restraints should fit directly over, and in contact with, the middle of the shoulder.

CAUTION

Belt restraints should be adjusted to fit as snugly as possible, consistent with user comfort.

Improper Positioning of Belts on Occupant



- Belt restraints should not be routed outside of the wheelchair wheels or over the wheelchair arm supports and should not be held away from the body by wheelchair components or parts.

SAFETY

Belt restraints should not be worn twisted or in a manner that reduces the area of contact of the belt webbing with the occupant.

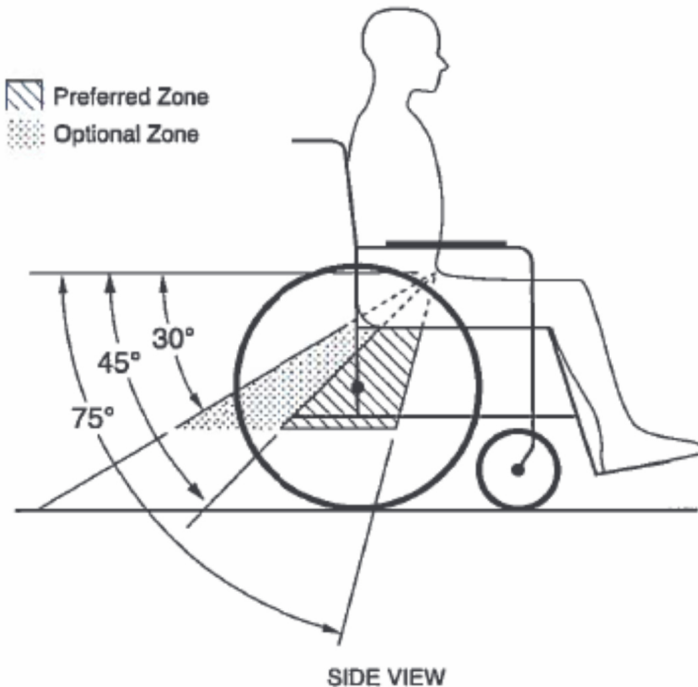
CAUTION

Ensure that safety belts, if used, are properly installed.

WC20 Information

Both pelvic belt and shoulder belt restraints that comply with RESNA WC-4:2012, Section 18 and/or 4.6, 5.2, 5.3 or RESNA WC-4:2012, Section 19 should be used to limit occupant movement in a crash and reduce the likelihood of occupant ejection from the vehicle and/or injurious contact of the occupant with the vehicle interior.

The pelvic belt should be angled between 30° and 75° horizontally when viewed from the side, and ideally between 45° and 75° horizontally, as shown in the figure below.



WARNING

Back supports with adjustable recline angles should not be tilted back more than 30° to the vertical during travel in vehicles unless necessary for the medical and postural needs of the occupant.

WARNING

If the back support must be adjusted to an angle greater than 30° to the vertical during travel, the upper shoulder belt anchor point should be adjusted rearward to maintain belt contact with the wheelchair occupant's shoulder and chest.

Trays

Wheelchair mounted rigid trays that are not specifically designed for use during travel in motor vehicles should be:

- removed and secured separately in the vehicle, or secured to the wheelchair so they will not break free in a crash;
- positioned with a gap of at least 3 in. (76mm) between the back edge of the tray and the wheelchair occupant's abdomen and/or chest so as not to interfere with proper belt restraint use; and
- equipped with energy-absorbent padding between the back edge of the tray and the wheelchair occupant.

User Safety

The use of a postural pelvic belt attached to the wheelchair base or seat frame is encouraged during travel, but these belts should be positioned so that they do not interfere with the proper positioning of crash-worthy belt restraints, and they should not be relied upon for occupant protection in crash situations unless the postural belt has been designed to comply with, and perform to, the requirements in 4.6, 5.2, and 5.3 of RESNA WC-4:2012, Section 19.

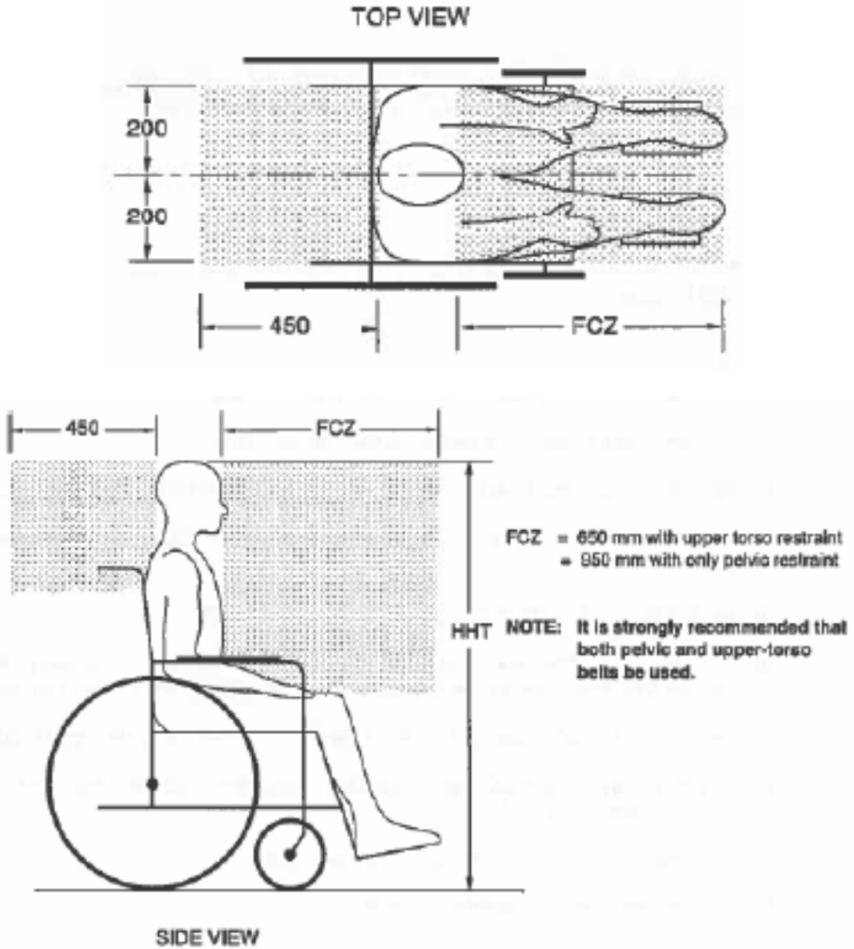
Sufficient forward and rearward clear space should be provided around the wheelchair occupant.

The forward clear-space zone (FCZ) needs to be larger when a shoulder belt restraint is not used.



WARNING

The WC20-approved **All-Purpose** hardware is designed only for use with wheelchair frames that have been successfully crash-tested to the frontal impact requirements of RESNA WC-4:2012, Section 19.



When mounting the WC20-approved **All-Purpose** hardware to your wheelchair, refer to the installation instructions starting on page 3 of this manual.

 **WARNING**

The WC20-approved **All-Purpose** hardware *must* be used on a wheelchair frame that provides four securement points and pelvic belt anchor points that conform to the requirements of RESNA WC-4:2012, Section 19.

Dealer Assistance

During first-time use by the client, it is advised that the dealer or service technician explain and assist in the configuration of user positioning to the customer (the user and/or the attendant). If needed, the dealer can make final adjustments.

CAUTION

Check all mounting hardware before using the cushion.
Ensure all fasteners are properly tightened.

User Testing

It is important that the customer be fully aware of the installation of the **Custom Seat Cushion**, including how to use it and how it can be adjusted to fit the client comfortably. As a dealer, proceed as follows:

- Explain and show the customer how you have executed the installation and explain the function.

Have the user test the position of the seating system.

- Is the hardware in the proper position for the client?
- Can the user safely operate all controls with minimal effort?

If needed, make any adjustments to the positioning. Explain to the customer possible problems and how to address them.

Conditions of Use

The **Custom Seat Cushion** is intended for use as installed by the dealer, in accordance to the installation instructions in this manual.

- The foreseen conditions of use are communicated by the dealer or service technician to the user and/or attendant during first-time use.
- If the usage conditions change significantly, please contact your dealer or a qualified service technician to avoid unintended damage.

SAFETY

Repair or replace parts as needed.

General Cleaning

- Use a soft cloth to clean the hardware and seat pan.
- Ensure all cleaners are approved for finished steel, aluminum, plastic, and upholstered surfaces.
- Use water and a mild detergent to remove debris from the zipper teeth.

To clean the covers of the cushion:

- Remove the covers from the foam; *do not* get the foam wet.
- Machine wash the covers in cold water on delicate cycle and drip dry.

Fabric care instructions can be found on the covers of the cushion.



WARNING

Do not bleach. Do not iron. Do not machine dry.
Do not hand wash in water temperatures
above 160°F (70°C).

Integrated Seat Pan Cover Cleaning

The cover of the Integrated Seat Pan is attached to the seat pan by the track guides on the bottom of the cushion.

To remove the cover, first remove the track guides by loosening and removing the flat head screws attaching them to the seat pan. Remove them from the bottom of the cushion and set them aside.

Unzip the cover and remove it from the foam cushion and attached seat pan. Be careful not to damage the foam while removing the cover. Wash the cover according to the directions listed above. Be sure not to immerse the foam in liquid and avoid getting the surface wet.

Allow the cover to dry fully before reassembly. Gently replace the cushion in the cover. Ensure the holes in the cover line up with the threaded holes in the seat pan. Reinstall the track guides, securing them with the flat head screws removed in the first step.

Torque the flat head screws to 8 N·m.

Disinfection

- Wipe surface gently with a cloth dampened with a household disinfectant.



WARNING

Do not immerse foam in water.

NOTICE

Any alteration or improper installation of a cushion will void your warranty.

Maintenance

The following care and guideline instructions will keep the hardware and covers in good condition for a longer period of time, and will prevent damage:

- check and tighten all fasteners on a regular basis;
- check pads for any signs of breakdown;
- repair or replace parts as necessary; and,
- routinely remove dust and dirt from any hardware with a soft, damp cloth.



CAUTION

Extreme temperatures can affect the temperature of your cushion components and may lead to skin irritation. Use caution when your mobility device has been used or stored in an extremely hot or cold environment.



CAUTION

The cushion cover is not intended for direct contact with bare skin. Failure to comply may result in skin irritation.



CAUTION

Take care when zipping and unzipping the cover to avoid catching hair, wires, or anything else that could be caught in the zipper teeth.



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Warranty Information



Home Page



Online User Manual



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