

Stealth Products



OWNERS MANUAL

i-Fit Positioning Products



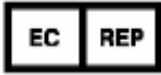
i-Fit Positioning Products

Owner's Manual for the i-Fit Line of Belts,
Thoracic Supports, and Foot Positioners

Stealth Products strives for 100% customer satisfaction. Your complete satisfaction is important to us. Please contact us with feedback or to suggest changes that will help improve the quality and usability of our positioning products. You may reach us at:



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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 due to failure of the following 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.

If this document contains information you do not understand, or if there are concerns about safety or operation, contact your supplier.

* **i-Fit™** and **Stealth Products™** are trademarks of Stealth Products, LLC.

Important Information

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;
- maintain our products according to our instructions on care and maintenance; and
- ensure devices are installed and adjusted by a trained technician.

Supplier Reference

Supplier: _____

Telephone: _____

Address: _____

Purchase Date: _____

Model: _____

Before you install or begin using Stealth Products' **i-Fit** line, it is important that you read and understand the content of these installation and operating instructions. These installation instructions will guide you through the options and possibilities for the product.

Instructions are written with the expressed intent of use with standard configurations. They also contain important safety and maintenance information. For further assistance, or more advanced options, 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 descriptions of the various parts of the product.

Ordering Documentation

You can download additional copies of this owner's manual by accessing the Stealth website (www.stealthproducts.com) and searching "**i-Fit** Owner's Manual" in the search bar at the top of the page.

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, LLC does not warrant damage due to, but not limited to:

- Misuse, abuse, or misapplication of products
- Modification of product without written approval from Stealth Products, LLC.

Any alteration or lack of serial number, where applicable, will automatically void this warranty.

Stealth Products, LLC is liable for replacement parts only. Stealth Products, LLC is not liable for any incurred labor costs.

No person is authorized to alter, extend, or waive the warranties of Stealth Products, LLC.

Stealth Products warrants against failure due to defective materials or workmanship:

Covers: 180 days

Hardware: 5 years

Electronics: 3 years

In Case of Product Failure

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

1. Call Stealth at (512) 715-9995 or toll free (800) 965-9229.
2. Request a Return Authorization form (RA) from the Returns Department and follow documentation instructions.

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Warning Labels

6.1

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/or property damage .
 WARNING	Identifies a potential situation which, if not avoided, may result in severe injury, death, and/or property damage .
 CAUTION	Identifies a potential situation which, if not avoided, may result in minor to moderate injury and/or 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

6.2

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 assembled product to end user. Stealth Products is not liable for user death or injury.

Testing

6.3

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

The **i-Fit** positioning belts, thoracic supports, straps, and foot positioners should always be tested to ensure the proper fit. Make sure every physical alteration or adjustment is complete.

Intended Use

7.1

Stealth's i-Fit line of pelvic belts, vests, chest straps and foot positioners are intended to be used as means to increase trunk stability, aid in proper pelvic alignment, and improving the clinical posture of a user in-chair through the use of breathable material and structured support.

Pelvic Positioning

IFPB (2-Point) - A pelvic positioning belt is required to maintain the pelvis in a neutral alignment for optimal posture, stability, and pressure distribution.

(4-Point) - A pelvic positioning belt is required to maintain the pelvis in a neutral alignment for optimal posture, stability, and pressure distribution. Secondary attachment points will maintain the primary pelvic positioning belt angle for optimal control of pelvic positioning and to prevent the pelvic positioning belt from moving and abrading soft tissue, causing injury.

Thoracic Positioning

IFPS -Provides anterior thoracic support to maintain an upright, seated posture, as well as to provide stability for function.

IFCS (Chest Strap) - Provides anterior thoracic support across the chest, prevents forward movement, and extends functional reach.

IFYS (Y-Strap) - Provides anterior thoracic support, primarily designed to de-rotate the trunk.

Foot Positioners

IFFP - Toe straps, ankle positioning systems, fixed ankle supports, and shoe holders with straps are recommended to maintain the feet on the footplates for pressure distribution, postural support, stability to prevent injury, and/or limit lower extremity extension.

Features

7.2

Pelvic Positioning:

- 2-Point and 4-Point styles
- Single- or dual-pull tension straps
- Padded and non-padded, push-button and side-release options
- Offset belt anchors for easy adjustment without loosening the anchor bolts
- Flat belt anchors increase surface contact and minimize twisting

Thoracic Positioning:

- Swivel buckles for self-adjustment (lower attachments only)
- Dynamic and structured options
- Vinyl face option (dynamic and structured)
- Classic and contoured styles (vinyl face)
- 2- and 4-Point styles
- Offset belt anchors for easy adjustment without loosening the anchor bolts

Foot Positioning:

- Padded option
- Easy attachment points
- Side release and curved buckles
- Structured and dynamic options

Dynamic vs. Structured

- Structured **i-Fit** products do not have stretch in the material. It is best used for clients with more aggressive tone, allowing for more effective positioning.
- Dynamic **i-Fit** products allow for stretch. It is best used for clients with less tone because of its ability to “give” with the client’s movements. The material has enough tension to still bring the client back to their original position.

Contoured vs. Classic

- Classic style offers a large padded surface for the thoracic area.
- Contoured style has a narrowed section over the sternum that allows a better fit for females, G-tube users, or those requiring a smaller support surface.

NOTICE

Wash devices according to their labels before use.

Before using the **i-Fit** products, please keep the following in mind:

 DANGER

Due to possibility of a user sliding while in-chair, unmonitored use of anterior thoracic support devices could pose a serious choking hazard. Continually ensure that the user is sitting upright and that the thoracic support device does not obstruct the user's breathing in any way.

NOTICE

A seat with angle or built-in contours may help keep the user from sliding in the seat.

 WARNING

Use the positioning belts and supports only to help support the user's posture.

 WARNING

Check that the user cannot slide down in the seating system. If this occurs, the user may suffer chest compression or suffocate due to pressure from the belts or harness.

 WARNING

The belts, posture support and straps must be snug, but must not interfere with the client's breathing.

 WARNING

Never use a chest harness without a positioning belt.

NOTICE

When traveling in a motor vehicle, it is recommended that wheelchair users transfer to a vehicle seat and use the vehicle seat belt system or a child safety seat that complies with federal safety standards. The wheelchair should then be stored and secured in the vehicle.

 **WARNING**

These devices do not conform to ANSI/RESNA WC20 or SAE J224. Do not misuse belts or harnesses.

 **WARNING**

Never use positioning belts or postural supports as motor vehicle restraints, unless they have been designed, tested, and labeled to do so.

 **WARNING**

When transporting in a motor vehicle, only use in conjunction with restraints that have been designed for restraint in a motor vehicle and that have been crash tested in accordance with SAE J2249 and/or ANSI/RESNA WC/20.

NOTICE

Pelvic positioning belts, thoracic supports, and shoulder straps may be used while in transit, but are not designed or approved to provide restraint or protection during a crash.

NOTICE

Children weighing less than 48 lbs. must always transfer to an approved child safety seat.

Pelvic Positioning



Pelvic positioning impacts all aspects of proper seating and safety. Pelvic positioning systems are placed anterior to the pelvis to maintain a neutral pelvic position (to the degree possible for each client). A correctly positioned pelvic support may:

- help stabilize the pelvis, which directly affects seated body alignment;
- aid in preventing sacral sitting, unsafe and non-functional postures, skin breakdowns, and increased pressure on bony prominences;
- increase postural stability, decreasing the effort needed to sit;
- facilitate posture, allowing an increase in upper extremity movement;
- contribute to proper head positioning and neck alignment; and
- reduce negative postural tendencies that can lead to orthopedic deformities and other secondary medical complications.

NOTICE

These solutions should be made by a clinician or wheelchair professional.

Pelvic Positioning Belts

9.1

Part Number Key: Pelvic Belts

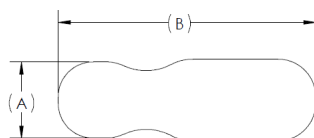
Prefix	1st Digit: Buckle Type	2nd Digit: Webbing Size	3rd Digit: Pull Type	4th Digit: Padding Size
IFPB (i-Fit Pelvic Belt)	5: Push-Button Buckle 6: Side-Release Buckle	1: 1" Webbing 2: 1.5" Webbing 3: 2" Webbing	1: Single-Pull 2: Dual-Pull 4: 4-Point	0: Non-Padded 1: 4.5" Pads 2: 5.5" Pads 3: 7.5" Pads 4: 9.5" Pads 5: 11.5" Pads 6: 4.5" Linear Pads 7: 5.5" Linear Pads 8: 7.5" Linear Pads

Pads

When ordering pads for a) *padded single-pull belts*, b) *padded dual-pull belts*, or c) *4-point linear-style belts*, reference the chart below:

Belt Options					
	IFPB5110	IFPB5210	IFPB5310	IFPB6110	IFPB6210
Pads					
IFPB101	X			X	
IFPB102	X			X	
IFPB103		X			X
IFPB104			X	X	
IFPB105			X	X	

Pad Sizes & Dimensions	
Pad Size	Pad Dimension (A x B)
XS	1 ^{3/4} " x 4 ^{1/4} "
S	1 ^{1/4} " x 5 ^{1/2} "
M	2 ^{1/2} " x 7 ^{1/2} "
L	2 ^{3/4} " x 9 ^{1/2} "
XL	2 ^{3/4} " x 11 ^{1/2} "



2-Point Belts

- 2-Point belts are adequate for most clients.
- The features and angle of attachment must be determined before mounting.
- The padding option for the belts helps increase pressure distribution.
- Provides a more comfortable option and helps prevent any ‘digging’ into the client.

2-Point Padded Single-Pull Belt



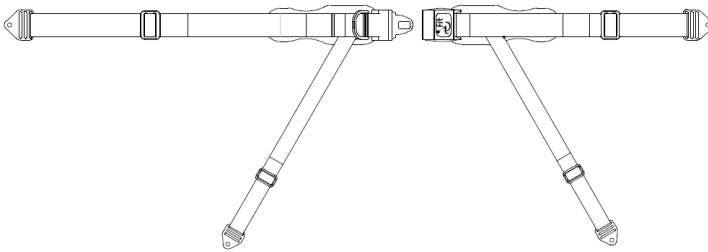
2-Point Padded Dual-Pull Belt



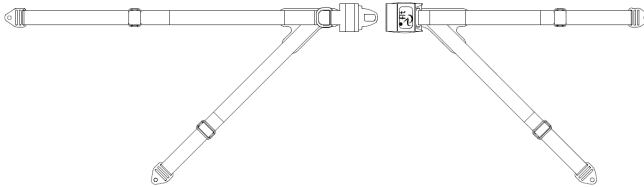
4-Point Belts

- 4-Point belts are generally used for more aggressive pelvic positioning needs.
- The primary belt is attached at the desired angle to maintain the pelvis position.
- The secondary belt is designed to maintain the angle of the primary belt or to provide more control in two different areas.
- 4-Point belts cannot be ordered without a pad.

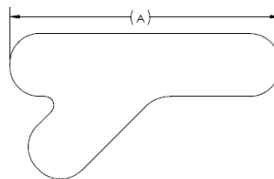
4-Point Linear-Style Buckle Release Belt



4-Point V-Style Buckle Release Belt



4-Point V-Style Belt		
Size	Webbing	Pad Size
XS	1"	4 ¹ / ₂ "
S	1"	5 ¹ / ₂ "
M	1 ¹ / ₂ "	7 ¹ / ₂ "
L	1 ¹ / ₂ "	9 ¹ / ₂ "
L	2"	9 ¹ / ₂ "
XL	2"	11 ¹ / ₂ "



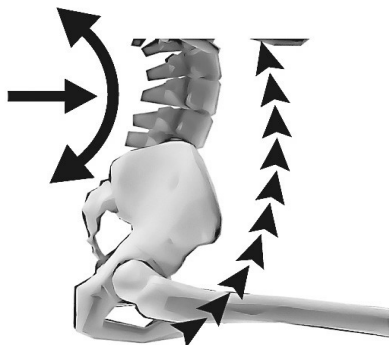
Common Presentations

9.2

The following sections detail common presentations of pelvic alignment and suggested belt usage.

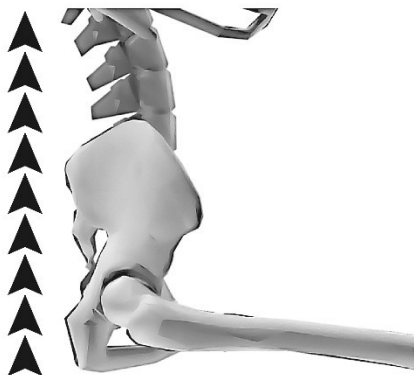
Anterior Pelvic Tilt

Suggestion: Depending on the clinical outcome desired, attach the front straps of a 4-Point padded seat belt to the seat or frame at 60° or 90° . Attach the rear straps to the seat or frame at 30° to 45° .



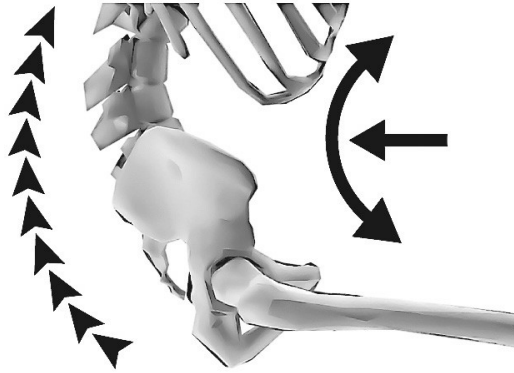
Neutral Pelvic Alignment

Suggestion: Depending on the clinical outcome desired, use either a 2-Point or 4-Point pelvic belt for stability and safety and to support neutral pelvic alignment. Attach the belt at 45° to 60° , pulling downward on the top of the thighs.



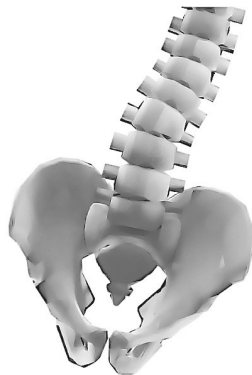
Posterior Pelvic Tilt

Suggestion: Depending on the clinical outcome desired, attach the front straps of a 4-Point positioning belt at **50°** or more. This may help with sliding forward in the seat. This is extremely important if used in conjunction with an anterior positioning vest.



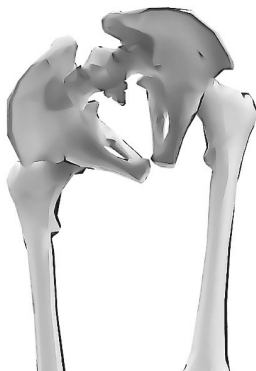
Pelvic Obliquity

Suggestion: A 2-Point or 4-Point padded positioning belt may offer the asymmetrical adjustment necessary to position the pelvis and apply forces to bring it back in contact with the seating system. Increased trunk support may be needed to achieve full benefit.



Pelvic Rotation

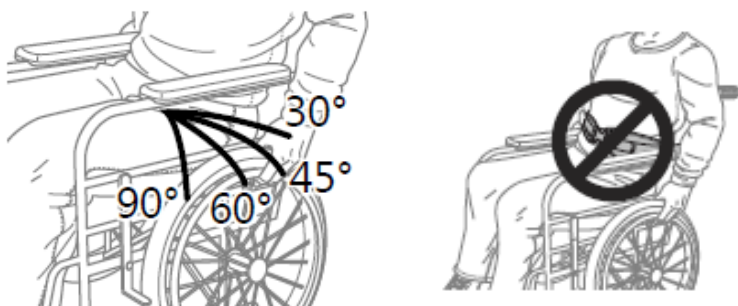
Suggestion: Depending on the clinical outcome desired, use a 2 or 4-Point belt to secure the position of the non-rotated hip securely. The rotated side is adjusted and secured into position last (based on the range of flexibility).

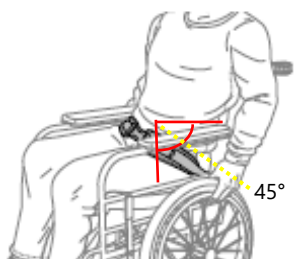


Belt Angle

9.3

Common reference angle measurements referring to positioning belts' angles of pull:





Correct placement of a 2-Point belt.
(Approximately 45°)



2-Point hip belt in position over the upper thigh, pulling downwards and backwards.



4-Point hip belt over the ASIS with main webbing running parallel to seat surface.

⚠ CAUTION

Never place a positioning belt or strap that applies force to the waist or abdomen.

Thoracic Positioning



Thoracic positioning impacts proper posture and safety. Thoracic trunk supports are placed in front of the trunk and are designed to keep the trunk aligned with the back of the seating system. A properly positioned trunk allows for:

- improved respiratory capacity;
- a good visual field;
- proper head positioning and neck alignment;
- improved overall pressure distribution;
- reduction of negative postural tendencies that can lead to orthopedic deformities and secondary medical complications; and
- a balance between support and function.

SAFETY

All adjustments should be made by a certified technician or someone who has been properly trained to work with these products.

Thoracic Positioning Items

10.1

Included in the Thoracic Positioning category:

- Postural Supports
** (Vinyl Face Support option)
- Back Pack Straps
- H-Harness
- Y-Strap
- Zipper Style
- Chest Straps

Part Number Key: Posture Supports

<u>Prefix</u>	<u>1st Digit:</u> Fit Type	<u>2nd Digit:</u> Support Type	<u>3rd Digit:</u> Pull Type	<u>4th Digit:</u> Sizing Options
IFPS: i-Fit Posture Support IFBP: i-Fit Back Pack Straps IFHH: i-Fit H-Harness IFYS: i-Fit Y-Strap	1: Classic-Style 2: Contour-Style 3: Zipper Front 4: Back Pack Straps 5: Center Release	1: Dynamic Function 2: Structured Function 3: Vinyl Face (Structured) 4: Vinyl Face (Dynamic)	0: Rear Pull	1: XS 2: Small 3: Medium 4: Large 5: XL

Part Number Key: Chest Straps				
Prefix	1st Digit: Fit Type	2nd Digit: Support Type	3rd Digit: Piece Type	4th Digit: Sizing Options
IFCS: i-Fit Chest Strap	4: Chest Strap	1: Dynamic Function	1: 1-Piece 2: 2-Piece 3: 3-Piece	1: XS 2: Small 3: Medium 4: Large 5: XL

Part Number Key: Y-Straps				
Prefix	1st Digit: Fit Type	2nd Digit: Support Type	3rd Digit: Pull Type	4th Digit: Sizing Options
IFYS: i-Fit Y-Strap	3: Y-Strap	1: Dynamic Function 2: Structured Function	0: Rear Pull	2: Small 3: Medium 4: Large

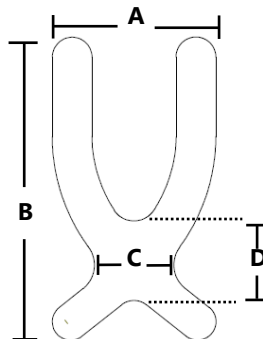
Posture Support

10.2

Classic

The Classic-style posture support offers a large, padded surface for the thoracic area. Posture supports help maintain trunk stability, proper alignment, and an improved clinical posture.

Pad Size	Dimensions (A x B x C x D)
XS	7 ^{3/4} " x 12 ^{1/2} " x 3 ^{1/2} " x 3 ^{1/4} "
S	9 ^{1/4} " x 15 ^{3/4} " x 4" x 4"
M	9 ^{1/2} " x 19" x 5" x 5"
L	10" x 22 ^{3/4} " x 6" x 6"
XL	11 ^{1/2} " x 25 ^{3/4} " x 7" x 7"

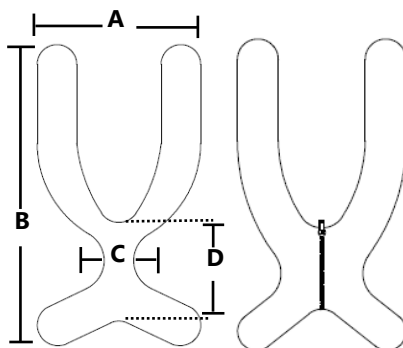


Contoured/Zipper

The Contoured-style posture support has a narrower section over the sternum, making it a popular choice for female clients.

- Dynamic or Structured material is available.
- Vinyl Face is available.

Pad Size	Dimensions (A x B x C x D)
XS	8 ^{1/4"} x 12" x 1 ^{1/2"} x 4"
S	9" x 15 ^{1/4"} x 1 ^{1/2"} x 5"
M	10 ^{1/2"} x 18 ^{3/4"} x 1 ^{1/2"} x 5 ^{1/2"}
L	10 ^{1/2"} x 22 ^{1/2"} x 1 ^{3/4"} x 6 ^{1/2"}
XL	11" x 25 ^{1/2"} x 1 ^{3/4"} x 7 ^{1/2"}



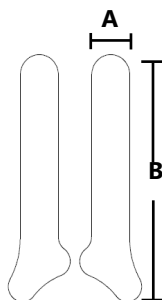
H-Harness

10.3

The H-Harness has more contact with the upper thoracic area. The straps are less likely to fall off the shoulders.

- Center release available only.
- Only structured material is offered.

Pad Size	Dimensions (A x B)
XS	1 ^{3/4"} x 8 ^{3/4"}
S	2" x 12 ^{1/4"}
M	2 ^{1/2"} x 13 ^{3/4"}
L	2 ^{3/4"} x 16 ^{1/4"}



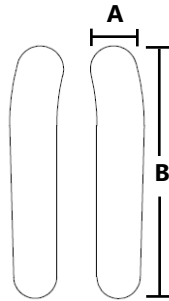
Back Pack Straps

10.4

Back Pack straps have less contact with the client and help with shoulder retraction.

- Structured material is only available. No dynamic material.
- Straps can be mounted parallel or crossed over the front of the body.

Pad Size	Dimensions (A x B)
XS	1 ^{3/8} " x 7 ^{1/2} "
S	2" x 9 ^{1/2} "
M	2 ^{1/4} " x 11 ^{1/2} "
L	2 ^{1/2} " x 13 ^{1/2} "



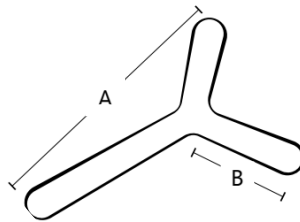
Y-Straps

10.5

i-Fit Y-Straps are typically used to address isolated shoulder rotation. The tension straps retract the rotated shoulder and bring the user in contact with the back support.

- Dynamic and structured options available.

Pad Size	Dimensions (A x B)
S	19" x 8"
M	22" x 9 ^{1/2} "
L	25" x 11 ^{1/2} "



Chest Straps

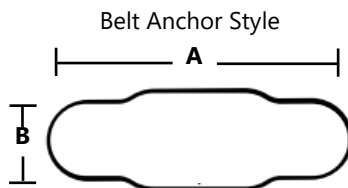
10.6

i-Fit chest straps are another form of anterior thoracic support and will help with providing additional trunk stability and proper alignment. The chest straps help prevent users with compromised trunk strength from falling forward..

Belt Anchor

- Back-mount style with side release buckles on the pad.

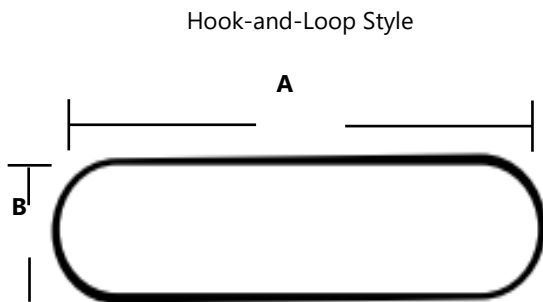
Belt Anchor Style	
Pad Sizes	Dimensions (A x B)
XS	7" x 2"
S	8 ^{1/2} " x 3"
M	10" x 4"
L	11 ^{1/2} " x 5"
XL	13" x 6"



Hook-and-Loop

- Two-piece, hook-and-loop style attachment.
- Release loop sewn onto pad for attaching and releasing.

Hook-and-Loop Style	
Pad Sizes	Dimensions (A x B)
XS	14" x 2 ^{3/4} "
S	16" x 2 ^{3/4} "
M	18 ^{1/2} " x 3 ^{1/8} "
L	21" x 3 ^{1/8} "
XL	23" x 3 ^{1/4} "



Common Presentations

10.7

Trunk Kyphosis

Suggestion: Thoracic supports such as the H-Harness or Backpack Straps extend the trunk and retract the scapulae. A positioning support places the trunk over the pelvis, improves breathing, increases safe swallowing as well as head control, maintains a good visual field, and improves overall pressure distribution.

Trunk Lordosis

Suggestion: Thoracic supports, contoured or classic, correct posture and provide pressure to the sternum, aligning the trunk over the pelvis and reducing shoulder retraction. If the client has more active trunk movement, a dynamic thoracic support will provide increased movement while still providing stability.

Trunk Scoliosis

Suggestion: A chest strap, thoracic support, or H-Harness work in combination with trunk and pelvic pads to align the trunk. This permits the head to be level over the trunk and provides a more symmetrical trunk posture.

Trunk Rotation

Suggestion: A thoracic support such as a Y-Strap or H-Harness pulls the forward shoulder back so the trunk is de-rotated and the user can face forward without neck rotation for vision, swallowing and breathing.

Foot Positioning



Foot Positioning impacts proper seating and safety. Correct foot positioning results in:

- increased stability for function;
- sustained hip and knee positioning;
- Increased foot protection;
- improved foot circulation;
- the elimination of posterior pelvic tilt; and
- easier self-repositioning.

Foot Positioning Items

11.1

The following are included in the foot positioning category:

- Foot Positioning
 - Full Foot Positioners
 - Ankle Positioners
 - Fixed Ankle Support
- Shoe Holders

Part Number Key: Foot Positioners				
<u>Prefix:</u>	<u>1st Digit:</u> Part Type	<u>2nd Digit:</u> Support Type	<u>3rd Digit:</u> Webbing Size	<u>4th Digit:</u> Sizing Options
IFFP: i-Fit Foot Positioners	0: Component Parts 1: Ankle Positioning System	1: Dynamic	1: 3/4" Webbing	0: XS 1: Small
IFSH: i-Fit Shoe Holders	2: Full Foot Positioning System 3: Ankle Support Fixed Mount 4: Shoe Holder	2: Structured	2: 1" Webbing	2: Medium 3: Large 4: XL

Foot Positioners

Foot positioners provide flex and stretch, enabling the individual to benefit from movement within a controlled range and help balance the lower body in response to upper body movements.

Shoe Holders

Shoe holders provide more lateral foot support because of the pre-built walls along the base plate, giving a rigid support to the foot and thus allowing for stable support.

Foot Positioner

11.2

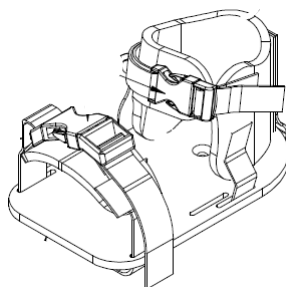
The foot positioner is a foot positioning system that secures the foot in position but still allows movement. It consists of a base plate, ankle positioner pad, and toe strap. These three components can also be ordered separately if a custom configuration is necessary.

- Pads on the foot positioning system come in dynamic material only.

Foot Positioner	
Footplate Size	Dimensions (A x B)
S (XS uses S foot plate)	7 ^{3/4} " x 4 ^{3/4} "
M	9 ^{1/4} " x 5 ^{1/4} "
L (XL uses L foot plate)	10 ^{1/4} " x 5 ^{3/4} "

(XS & S sizes use 3/4" webbing)

(M, L & XL sizes use 1" webbing)



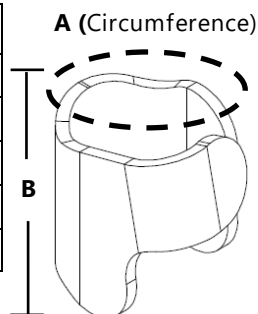
Ankle Positioner Pad

The buckle on the pad is curved slightly to follow the curve of the user's ankle, allowing for more comfort.

- Dynamic material is only available for the ankle positioner pad.

Ankle Positioner Pad	
Ankle Positioner Pad Size	Dimensions (A x B)
XS	5 ^{1/2} "-7" x 3 ^{1/2} "
S	6 ^{1/2} "-8" x 3 ^{3/4} "
M	7 ^{1/2} "-9" x 3 ^{3/4} "
L	8 ^{1/2} "-11 ^{1/2} " x 4"
XL	11"-13" x 4 ^{1/4} "

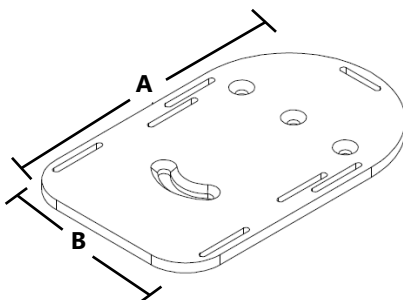
Replacement Pad
IFFP0110
IFFP0111
IFFP0122
IFFP0123
IFFP0124



Foot Plate

Slots in the plates are ideal for foot rotation and positioning, and allow space for ankle supports and toe straps to be added if necessary.

Foot Plate	
Footplate Size	Dimensions (A x B)
S (XS uses S foot plate)	7 ³ / ₄ " x 4 ³ / ₄ "
M	9 ¹ / ₄ " x 5 ¹ / ₄ "
L (XL uses L foot plate)	10 ¹ / ₄ " x 5 ³ / ₄ "

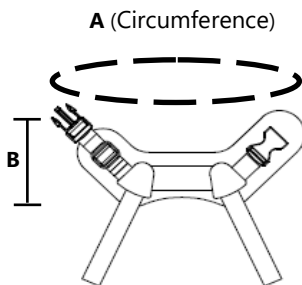


Fixed Ankle Support

Fixed ankle supports mount to the footplate on a client's chair, and are a comfortable alternative to foot positioners.

- Supports are made of structured material only.

Fixed Ankle Support	
Pad Size	Dimensions A x B
XS	5 ¹ / ₂ "-7" x 3 ¹ / ₂ "
S	6 ¹ / ₂ "-8" x 4"
M	7 ¹ / ₂ "-9" x 4"
L	8 ¹ / ₂ " - 11 ¹ / ₂ " x 4"
XL	11"-13" x 4 ¹ / ₄ "



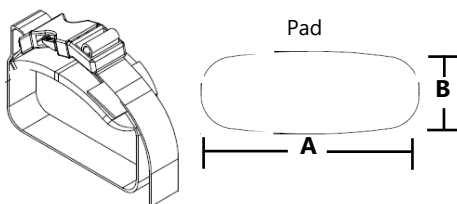
(XS & S sizes use 3/4" webbing)

(M, L & XL sizes use 1" webbing)

Toe Straps

Toe straps limit aggressive foot rotation and are designed for durability. The strap and buckle has a curved design to comfortably rest on the client's foot.

Toe Strap Pad Size		Replacement Pad
Size	Dimensions (A x B)	
S	5 ¹ / ₄ " x 2"	IFTS2111
M	5 ³ / ₄ " x 2"	IFTS2122
L	6 ¹ / ₄ " x 2"	IFTS2123



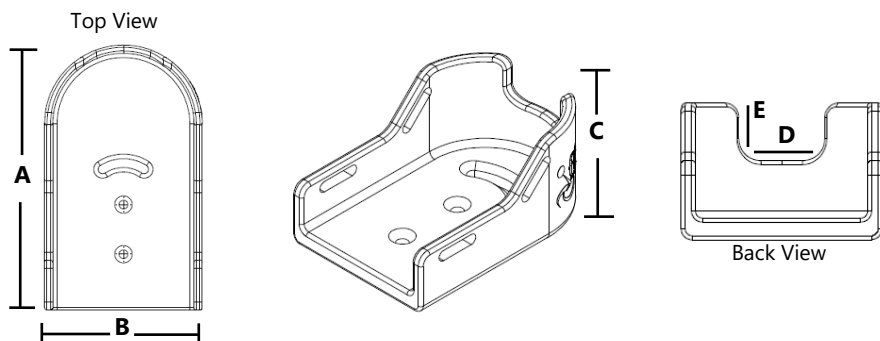
Shoe Holders

11.3

Shoe holders are a formed footplate that allows for more rigid and lateral support across the foot and is designed for strength and durability. The rear walls offer relief for high tone clients, and all versions are available with the straps pre-attached.

Shoe Holders	
Size	Dimensions (A x B x C)
S	5" x 3" x 2"
M	6 ¹ / ₄ " x 3 ¹ / ₂ " x 2 ¹ / ₂ "
L	7 ³ / ₄ " x 4 ¹ / ₄ " x 3"

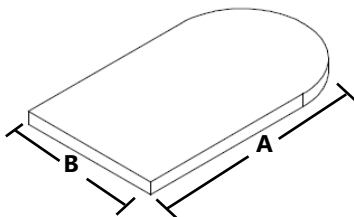
Tendon Relief	
Size	Dimensions (D x E)
S	5 ¹ / ₄ " x 2"
M	5 ³ / ₄ " x 2"
L	6 ¹ / ₄ " x 2"



Shoe Holder Pads

The shoe holder pad is made of structured material and is 1/4" thick with a hook-and-loop attachment underneath for easy application.

Shoe Holder Pads	
Size	Dimensions (A x B)
S	5 ^{1/4} " x 2"
M	5 ^{3/4} " x 2"
L	6 ^{1/4} " x 2"



Common Presentations

11.4

The following details common presentations of adverse foot positioning and suggested usage:

Knee Extension

Suggestion: Foot positioners provide depth adjustability while keeping the foot in place and still allowing movement.

Unequal Lower Leg Length

Suggestion: Foot positioners and fixed ankle supports provide greater height adjustability. Adjust the feet and height so the femurs are parallel with the seat and the feet are fully supported. The foot positioners will reduce pressure under the thighs and increase stability.

Ankle Contractures

Suggestion: Foot plates and fixed ankle supports accommodate fixed posture and support the foot. The footplate stabilizes the foot, adjusting inversion or eversion, height, and depth without causing joint stress.

Knee Flexion

Suggestion: A shoe holder or foot positioner can be used to position the feet in such a way as to regain stability and relieve stress from the hamstrings and knees, all while maintaining a neutral pelvic tilt.

Installation Instructions

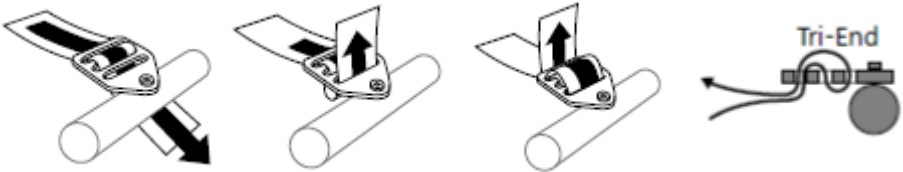
Pelvic Belt Installation

12.1

Pelvic belts may be installed in various manners depending on hardware, seating system, or wheelchair type. Many choices of aftermarket attachment hardware are available. Be sure to read and understand all instructions supplied with any aftermarket hardware.

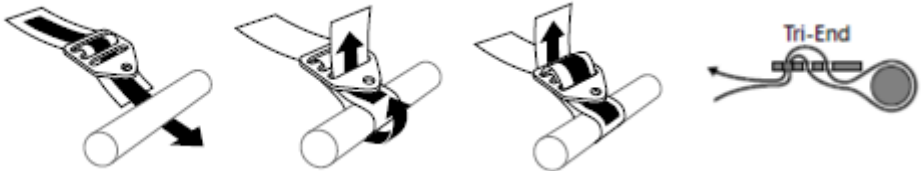
Fastened Tri-End

Tri-ends are attached using a fastener and a hole in the seat rail.

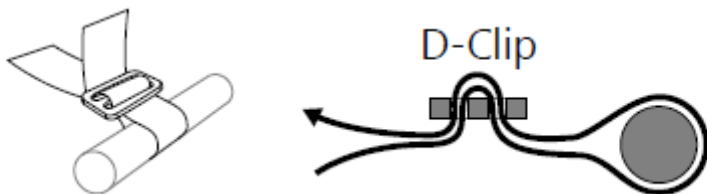


Tri-End Around Seat Rail

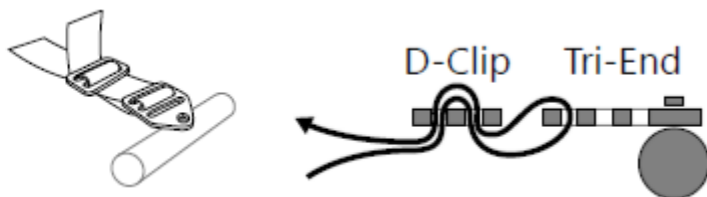
Thread the belt around the wheelchair tube in the correct location following the threading instructions below.



Sliding Double-D Clip



Sliding Double-D Clip with Tri-End



CAUTION

Ensure that the webbing is routed properly through the belt anchor and does not slip when pulled. Improper routing could cause the strap to become loose and slip from belt anchor.

The angles at which the thoracic supports attach to the seating system or wheelchair frame determine the effectiveness of the product for the user.

Posture Support/H-Harness/Back Pack Strap Installation 12.2

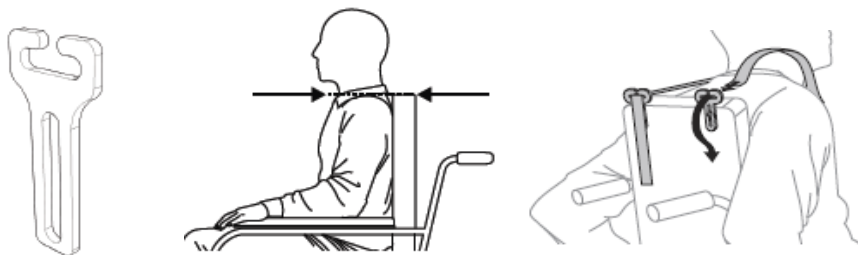
Solid back should be roughly at shoulder height for anterior support to fit properly. If the strap is attached lower than the shoulders, it will pull the shoulders downward. If the shoulder harness is mounted too high, it will be less effective in pulling the shoulders back.

- Shoulder straps/H-Harness should be positioned so that the vertical straps cross mid-clavicle and the horizontal straps sit mid-trunk.
- Back pack straps should be positioned so the vertical straps cross mid-clavicle.

If the back height is lower than shoulder, consider strap risers for correct positioning.

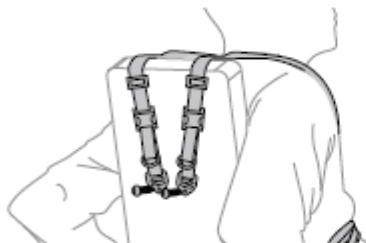
To prevent improper alignment, it is recommended that the bottom straps be adjusted first, then the top straps.

Strap Risers: Strap risers attach to the solid back's t-nuts. Ensure that proper height is provided for comfortable fit on the shoulders. Slide the harness strap through the front of the strap riser and fasten to back.



Installing T-Nuts and Bolts

Fasten tri-ends to the back with the t-nuts and bolts and attach the belt to tri-end. This will allow proper adjustment of the tension straps.



CAUTION

Check that the belt anchor is properly oriented and mounted flush to the chair.

CAUTION

Ensure that the bolts and t-nuts have been securely tightened.

WARNING

The ends of the belt anchor must be securely attached to a mechanically solid mounting point. Severe injury may result if the belt ends become unattached.

DANGER

Due to the possibility of a user sliding while in-chair, unmonitored use of anterior thoracic support devices could pose a serious choking hazard. Continually ensure that the user is sitting upright and that the thoracic support device does not obstruct the user's breathing in any way.

DANGER

Do *not* cross Back Pack straps. Doing so presents a serious choking hazard.

Y-Strap Installation

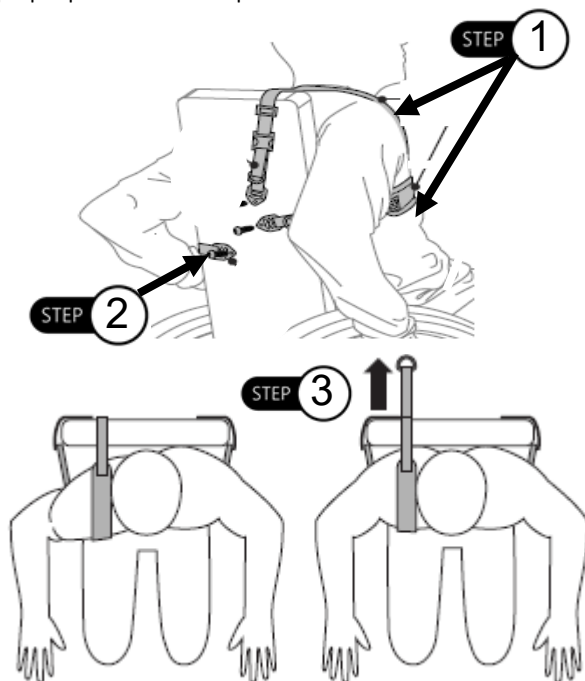
12.3

- One end of the Y-Strap should cross over the shoulder at mid-clavicle and the other cross underneath the axilla on the same side of the body.
- The other end of the Y-Strap, with a single attachment point, should cross in front of the client's body at an angle and attach on the opposite side, lower than the other two attachment points.

Step 1: Position the upper portion of the Y-Strap above and below the rotated shoulder and attach belt anchors to rear face of solid back.

Step 2: Stretching the lower strap diagonally across the trunk, attach the lower portion of the Y-Strap to the rear face of the solid back.

Step 3: Using the tension straps on the top portion of the Y-Strap, draw the rotated shoulder back until proper position is accomplished.



⚠ DANGER

Due to the possibility of a user sliding while in-chair, unmonitored use of anterior thoracic support devices could pose a serious choking hazard. Continually ensure that the user is sitting upright and that the thoracic support device does not

Foot Positioner Installation

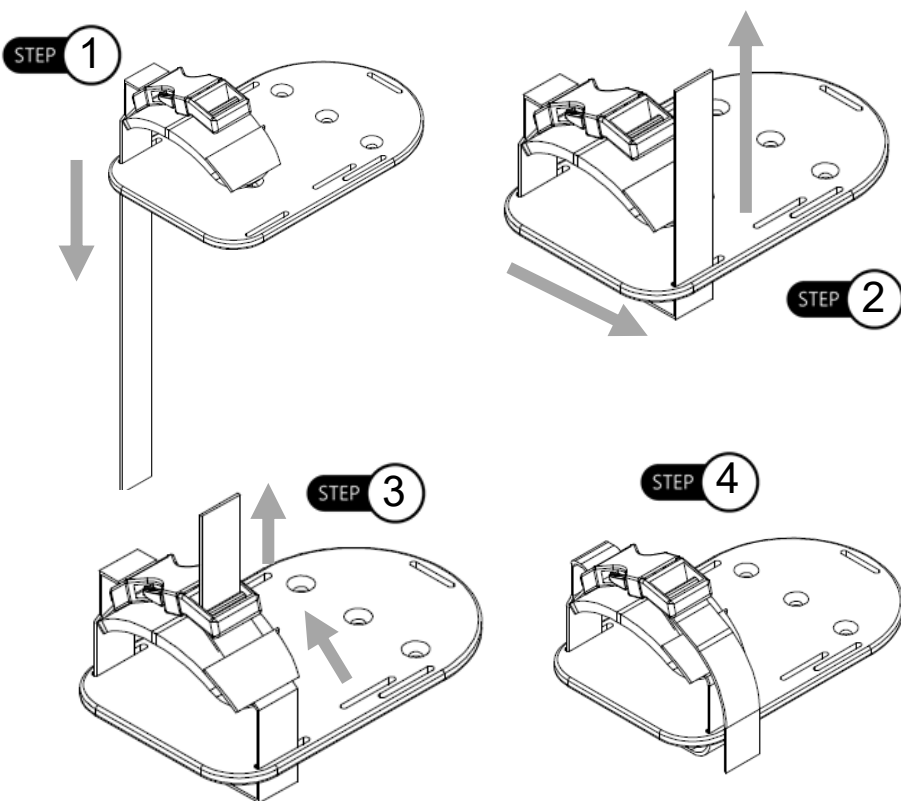
12.4

Toe Strap

- Step 1:** Thread the toe strap webbing through the front slot of the foot plate.
- Step 2:** Guide the webbing under the foot plate and back up through the slot on the opposite side of the plate.
- Step 3:** Thread the webbing under and through the elastic strap sewn onto the pad, and up through the tri-slide, guiding it through the space closest to the buckle first.
- Step 4:** Slide the webbing over the post, under and through the second gap of the buckle. Pull the strap completely through, ensuring the strap is tight and secure.

⚠ CAUTION

Check that the smooth side of the footplate is facing down prior to installation.

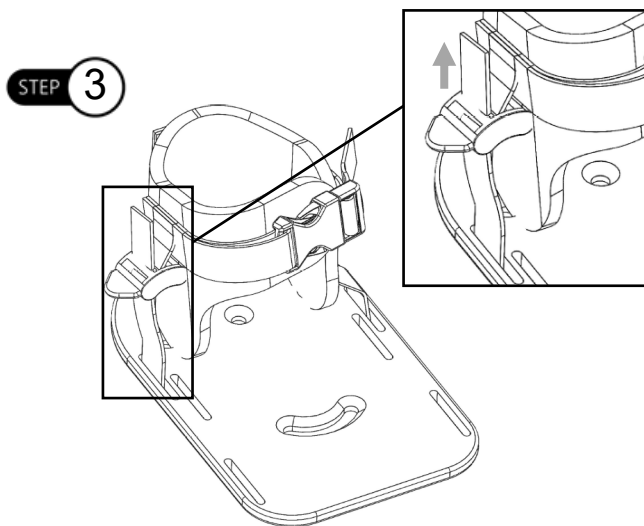
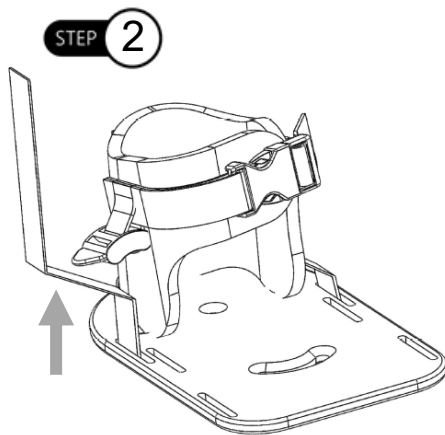
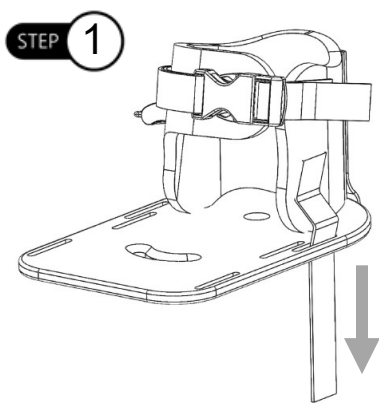


Ankle Strap

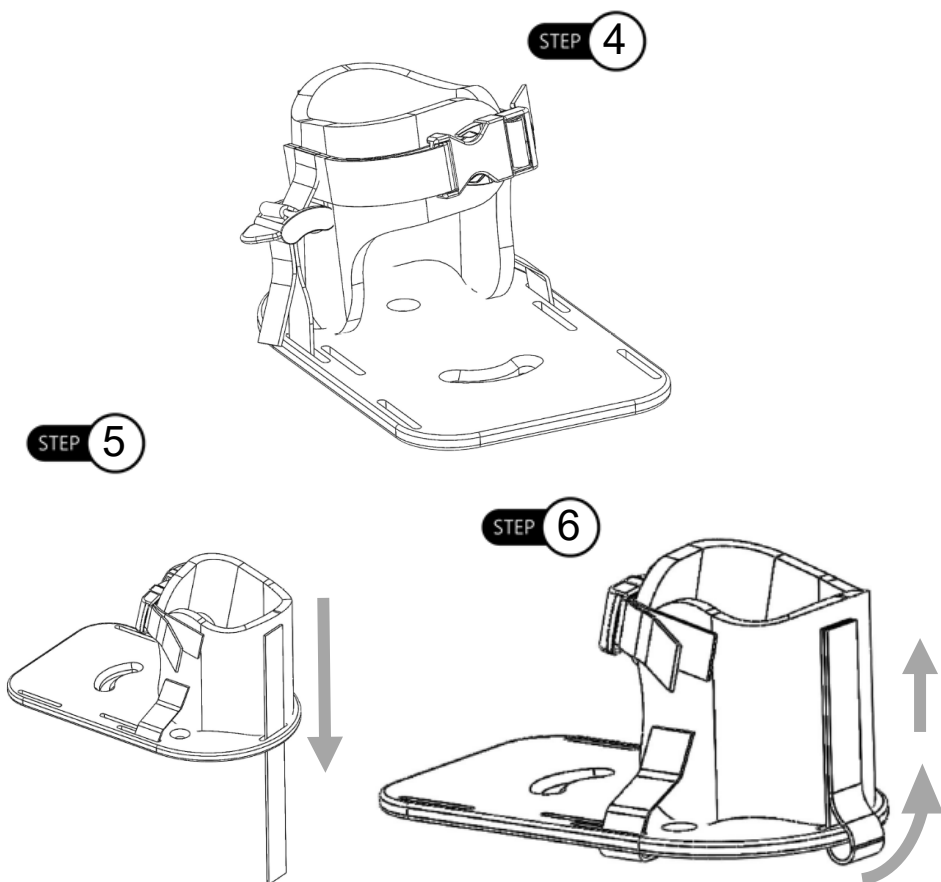
Step 1: Thread the strap of the ankle support through the back slot of the foot plate.

Step 2: Guide the strap under the foot plate and back up through the slot on the opposite side of the plate.

Step 3: Guide the end of the strap up through the tri-slide buckle. Slide the strap through the space closest to the buckle first.



- Step 4:** Thread the strap over the post and back under and through the buckle. Pull the strap completely through, ensuring the strap is tight and secure.
- Step 5:** To attach the back strap to the base of the foot plate, guide the webbing through the back slot and pull through.
- Step 6:** Pull the strap up and press the strap against the hook-and-loop strip on the pad. Secure the hook-and-loop section and check that it is securely fastened.



Buckle Installation

12.5

Swivel Buckle

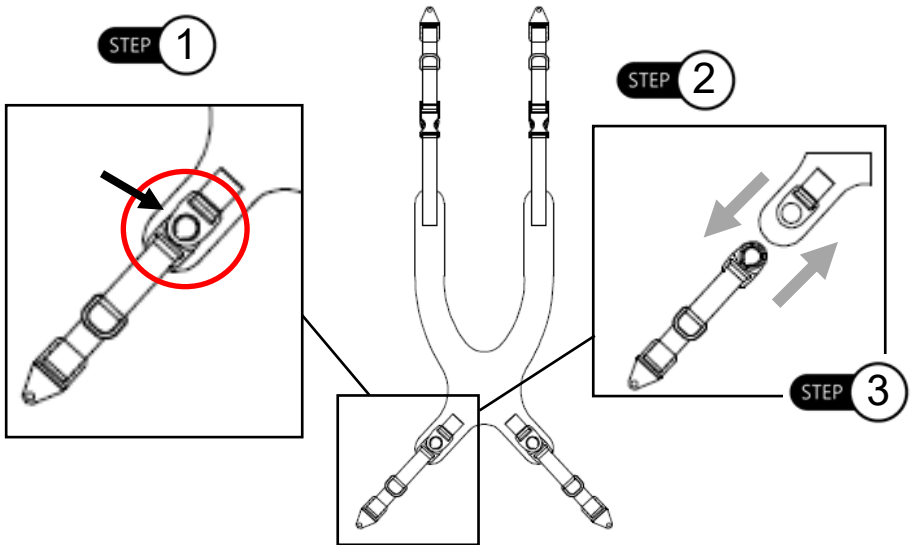
The swivel buckle is used on the following **i-Fit** products:

- Positioning Systems
- Y-Straps

Step 1: To release the swivel buckle from the belt, push down on the button in the center of the male swivel buckle.

Step 2: Remove the male swivel buckle and attached belt from the female swivel buckle. Make any adjustments necessary.

Step 3: To reattach swivel buckle, slide the buckle into the housing. An audible click should occur when the male buckle has been fastened into place, indicating that the belt is secure. If the button does not latch and hold secure, immediately refrain from using the product.



CAUTION

Before engaging the chair, check that all buckles and straps are clear from any mechanical components to prevent damage.

Side-Release

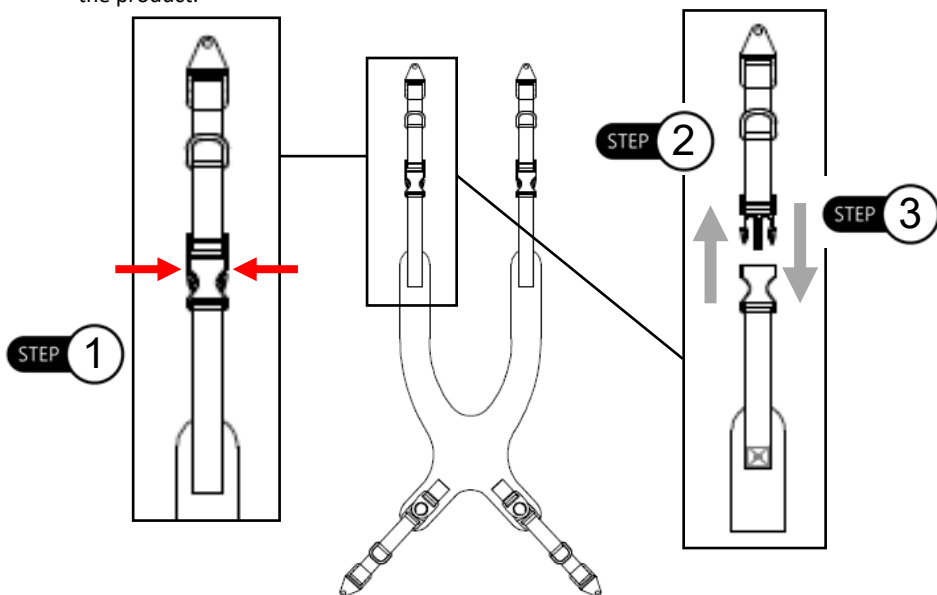
The Side-Release Buckle is used on the following **i-Fit** products:

- Pelvic Belts
- Positioning Systems
- Chest Straps
- Y-Straps
- Back Pack Straps
- Shoe Holders
- Foot Positioners

Step 1: To remove the side release buckle from the belt, push the prongs of the male buckle in, releasing the buckle from the female housing.

Step 2: Remove the male side-release buckle and attached belt from the female buckle. Make any adjustments necessary.

Step 3: To reattach the side-release buckle, slide the buckle into the housing. An audible 'click' should occur when the male buckle has been fastened into place, indicating that the belt is secure. If the buckle does not latch and hold secure, immediately refrain from using the product.



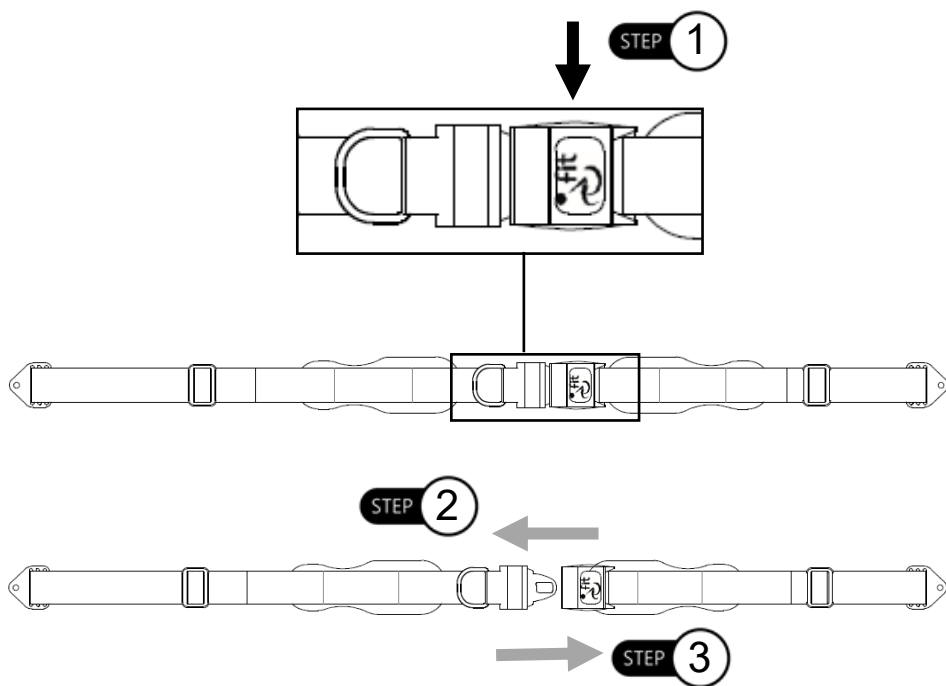
⚠ CAUTION

Before engaging the chair, check that all buckles and straps are clear from any mechanical components to prevent damage.

Push Button

The Push Button is used on **i-Fit** pelvic belts.

- Step 1:** To remove the push button from the belt, push down on the female buckle with the i-Fit logo, releasing the buckle from the female housing.
- Step 2:** Remove the male push button and attached buckle from the female buckle. Make any adjustments necessary.
- Step 3:** To reattach the push button, slide the buckle into the housing. An audible 'click' should occur when the male button has been fastened into place, indicating that the belt is secure. If the button does not latch and hold, immediately refrain from using the product.



CAUTION

Before engaging the chair, check that all buckles and straps are clear from any mechanical components to prevent damage.

Shoe Holder Strap Installation

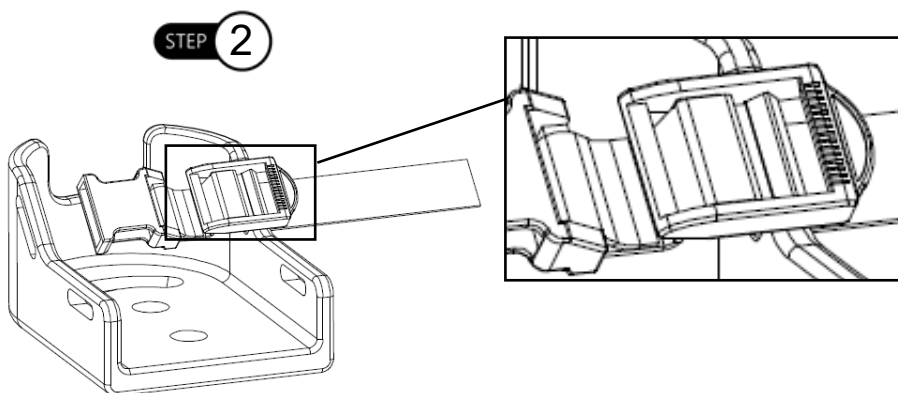
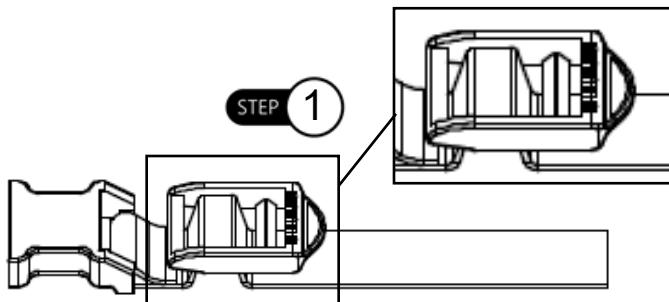
12.6

Female Buckle Installation

To install the first strap on the foot positioner:

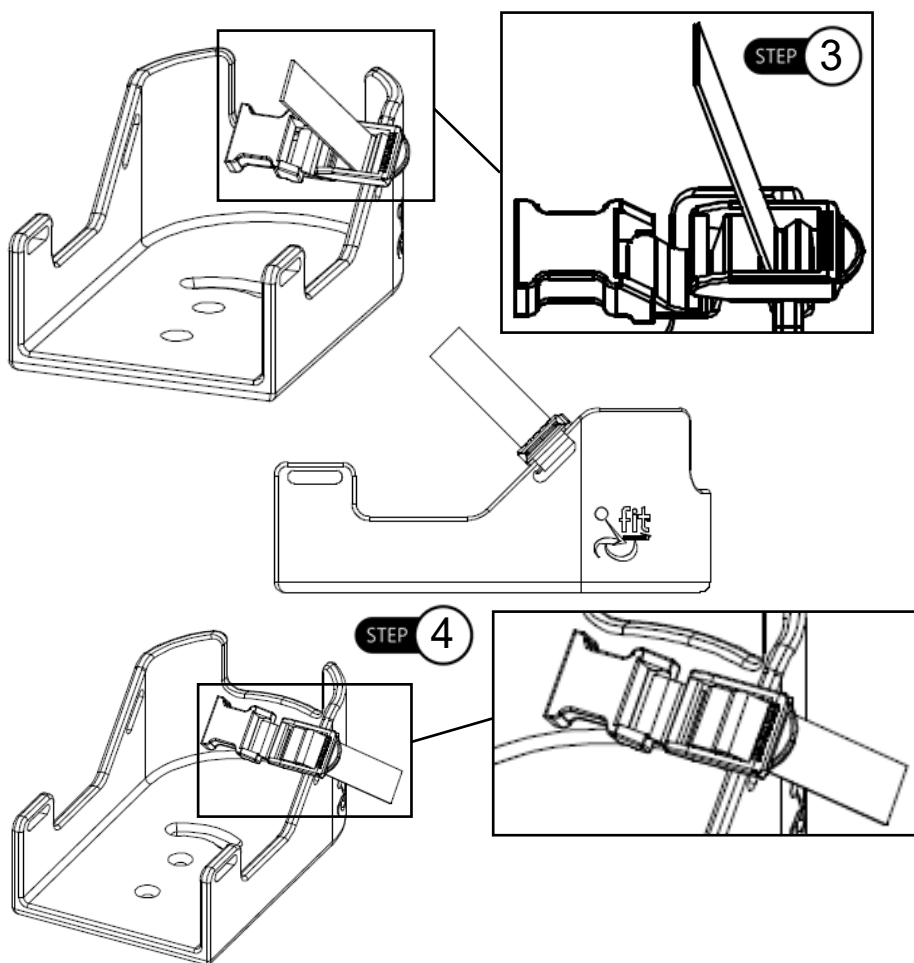
Step 1: Start by sliding the strap up through the first slide of the buckle from the bottom. Thread the strap over the first slide and back down through the buckle.

Step 2: Place the end of the strap through the precut slot at the top of the foot positioner from the inside going out and pull all the way through.



Step 3: With the remaining length of the strap, loop back up and lead under the buckle and up in between the two slides.

Step 4: Thread the strap over the second slide and down through the buckle. Pull the strap through until it is tight. Adjust the strap to the desired length.



⚠ CAUTION

Ensure that the webbing is routed properly through the slider and does not slip when pulled. Improper routing could cause the strap to become loose and slip.

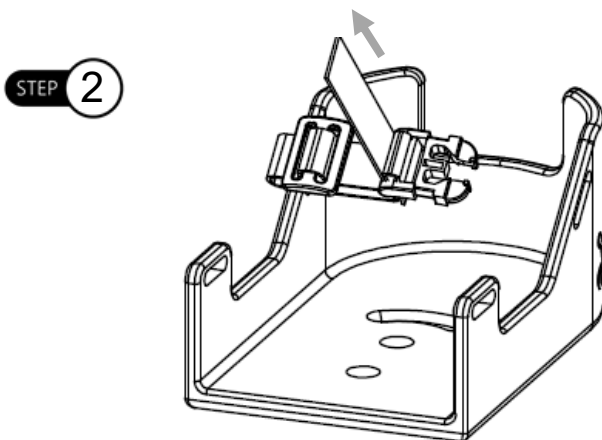
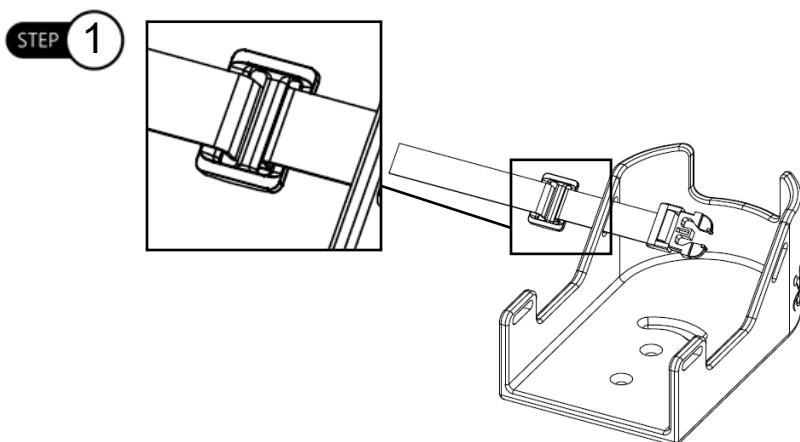
Male Buckle Installation

To install the male buckle and strap onto the foot positioner:

Step 1: Turn the buckle down, with the bottom of the buckle facing up. Slide the strap through the first slide, moving right to left. Thread the strap under the post and back up through the second slide. Pull the strap all the way through.

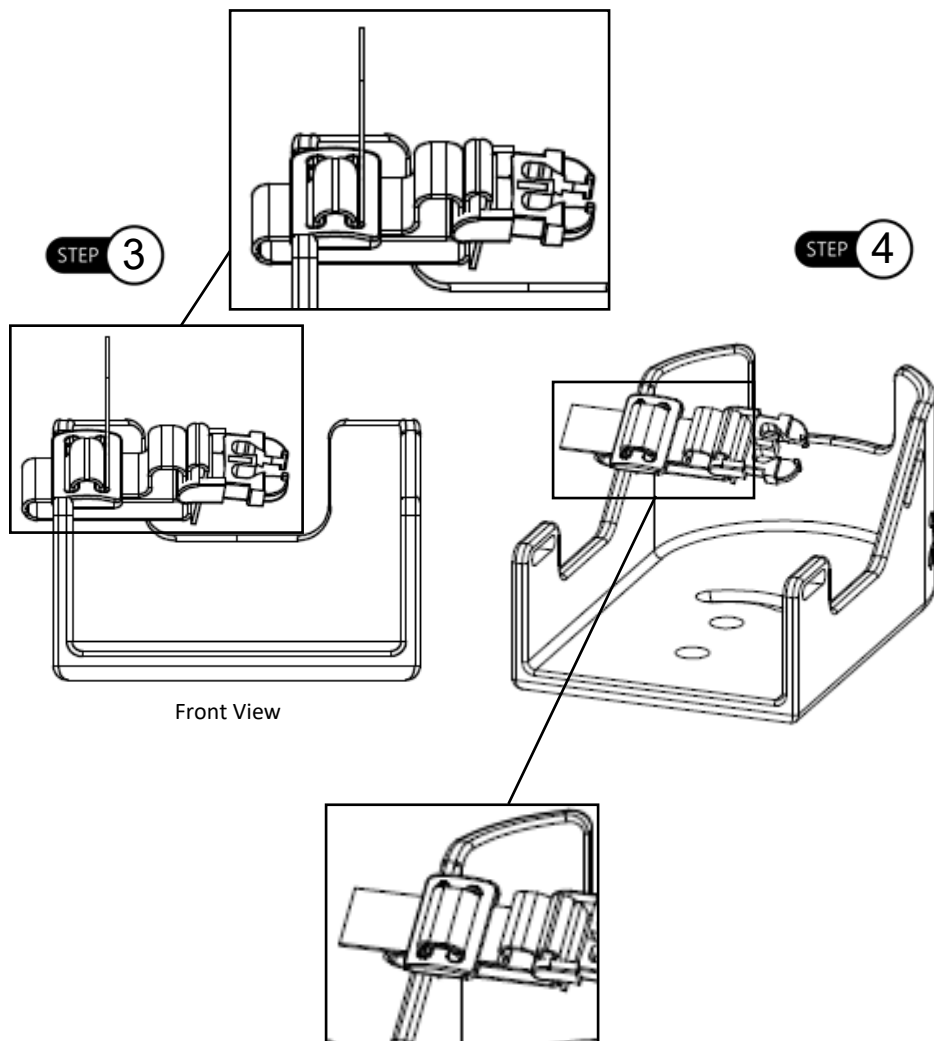
Step 2: Pull the strap over the edge with the precut slot and pull over in the direction of the male buckle end.

Thread the strap from the bottom onto the buckle and pull through the first slider.



Step 3: Guide the end of the strap under the first slider.

Step 4: Thread the strap over the post and down through the buckle. Pull the strap through until it is tight. Adjust the strap to the desired length.



Retractable Seat Belt Installation

12.7

Seat Belt Receiver Installation

To install the Retractable Seat Belt Receiver to the chair:

Step 1: Take the Seat Belt and one of the included hardware packages. Remove the M8 screw.

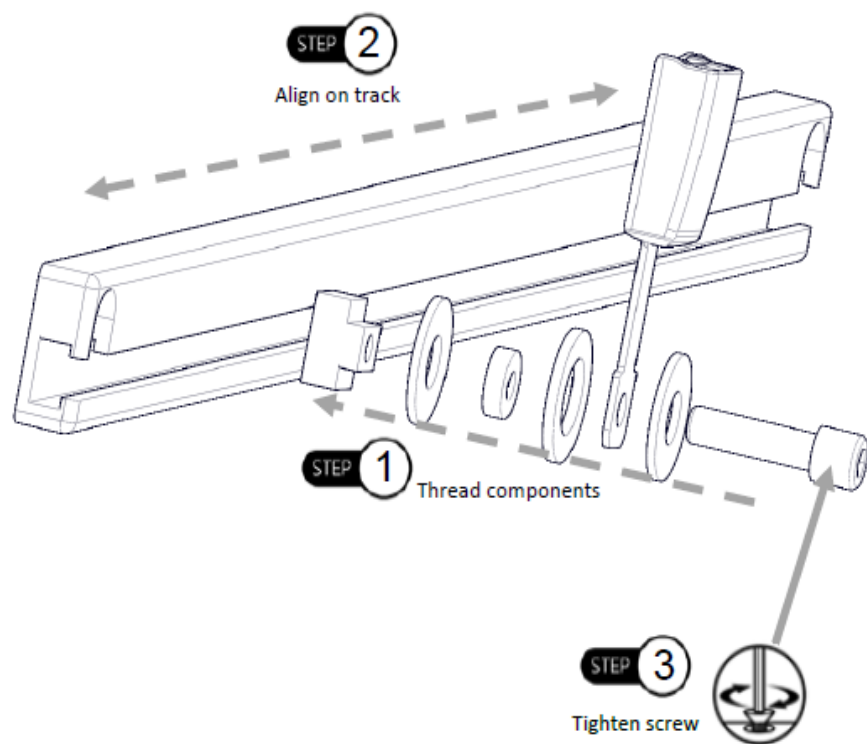
Thread the M8 screw through the other components in the following order:

The 5/16" washer, seat belt receiver, M12 washer, spacer, 5/16" washer, and the M8 T-nut.

Note: The M12 washer has a larger hole to allow the spacer to slide inside of it.

Step 3: Mount the seat belt receiver into the arm chair track to the desired position.

Step 4: Tighten the M8 screw to 24 Nm after angling the seat belt receiver to the desired position.



Seat Belt Receptacle Installation

To install the Retractable Seat Belt to the chair:

Step 1: Take the Seat Belt and one of the included hardware packages. Remove the M8 screw.

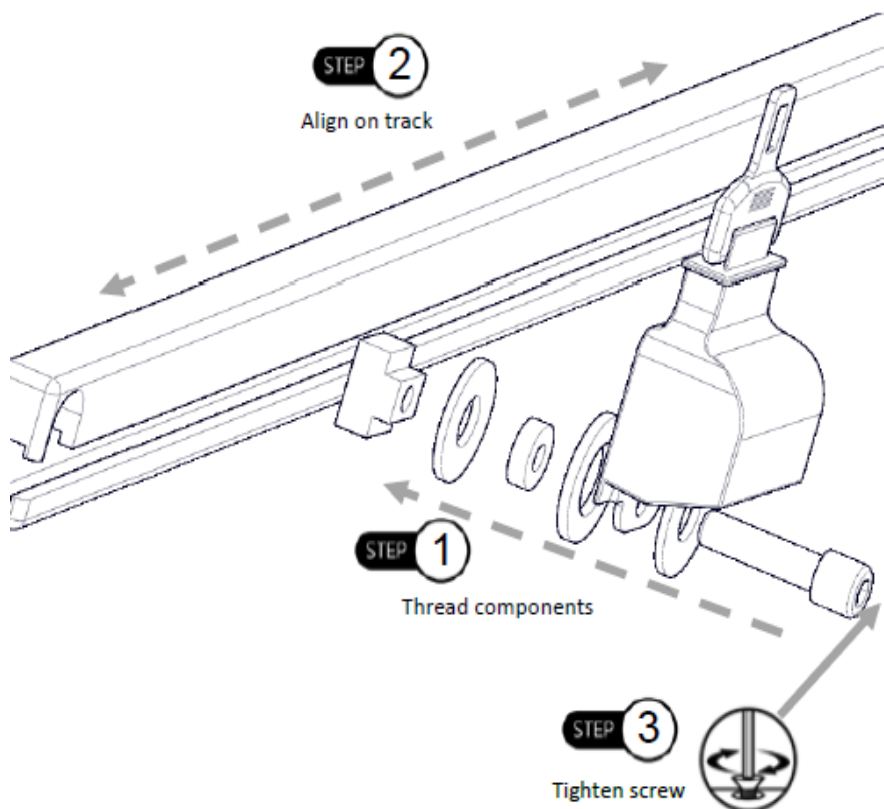
Thread the M8 screw through the other components in the following order:

The 5/16" washer, seat belt receptacle, M12 washer, spacer, 5/16" washer, and the M8 T-nut.

Note: The M12 washer has a larger hole to allow the spacer to slide inside of it.

Step 3: Mount the seat belt into the arm chair track to the desired position. Ensure that the belt receptacle is mounted in a safe and secure area to avoid impact or damage.

Step 4: Tighten the M8 screw to 24 Nm after angling the seat belt to the desired position.



Before Each Use

13.1

Positioning belts, straps and posture supports are NEVER to be used:

- as client restraints;
- on a user who is comatose or agitated; or
- as a motor vehicle restraint without the correct use of approved transit restraint.

Safety Checklist

13.2

- Check all components for tears, rips, fraying, or physical damage.
- Check that the receivers for the straps are kept free of debris, dirt, liquids, or foreign objects.
- Ensure buckles are engaged properly.
- Engage the ends of the buckles and pull to check for correct engagement.
- Ensure the belt is snug to the chair and all loose material is away from moving objects.
- Never use positioning belts or postural supports as motor vehicle restraints, unless they have been designed, tested, and labeled to do so.

If any physical damage exists, it is recommended that you replace the complete assembly. If your chair is involved in a vehicular crash, these devices should be replaced. Consult your supplier for these procedures.

SAFETY

The belts, posture support, and straps must be snug, but must not interfere with the chair.

NOTICE

Excessive force may cause damage to the product.

Simulation

13.3

As with any sort of positioning intervention, the best way to judge necessary intervention forces and the angles in which they should be applied, is to simulate the forces with your hands. Use your hands to:

- Mimic the forces and angles applied by a positioning belt.
- Judge the amount and degree of force needed.
- Determine how, and at what points, the forces should be applied.

Having a partner during the simulation will allow you to use a piece of webbing to help with the simulated angles of pull.

NOTICE

A seat with angle or built-in contours may help keep the user from sliding in the seat.

SAFETY

Use positioning belts and harnesses only to help support the user's posture.

⚠ WARNING

Never use an anterior thoracic support without a hip belt and a solid back support.

⚠ CAUTION

Use caution around feeding tubes, wounds, or sensitive areas.

First-Time Use

14.1

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

User Testing

14.2

It is important that the customer is fully aware of the installation and what can be adjusted in order to gain the best positioning possible:

- Explain and show the customer how you have executed the installation.
- Can the user safely operate the wheelchair?
- Is the placement of the pelvic/thoracic/foot positioner in the optimal position for the user?

If needed, adjust the **i-Fit** to the proper position.

Explain to the customer possible problems and how to address them.

Conditions of Use

14.3

The **i-Fit** positioning belts, posture supports and foot positioners are 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 the first-time use.
- If the usage conditions change significantly, please contact your dealer or a qualified service technician to avoid excessive wear and tear or unintended damage.

Care and Maintenance

15.1

We recommended that all products be checked for wear and function on a periodic basis and replaced, if necessary, by a wheelchair professional.


- Repairs should be done with Stealth Products parts, fasteners, or items appropriate for the service needed.
- Discontinue use after identifying loose or broken components.
- Check and retighten all fasteners according to the installation instructions.
- On a regular basis, check the sticking on the webbing.

Cleaning

15.2

- Surfaces may be wiped clean with a damp cloth and mild, nonabrasive cleaner.
- Ensure all cleaners are approved for finished steel, aluminum, plastic and upholstered surfaces.
- Vests and straps that are removable and DO NOT contain metal components may be machine washed warm (40° C), permanent press, mild process.

 **WARNING** Do not bleach.

 **WARNING** Do not tumble dry. Dry flat.

 **WARNING** Do not iron.



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