

# LapStacker®

## Installation Guide

Congratulations and thank you for choosing the LapStacker®

Please read this Installation and User Guide carefully to ensure you install and use the LapStacker® correctly and safely.



Once you've installed your LapStacker® we'd love to see how you use it. Please feel free to send us your videos and images and let us know how the LapStacker® improves freedom and independence in your life.

You can email me anytime at [info@lapstacker.com](mailto:info@lapstacker.com) or simply tag us on social media and use #lapstacker. Of course, we'd also like to hear about how we can improve, so please feel free to let us know.

The LapStacker® is made from quality materials to our exacting standards and should last many years of hard use. I hope you'll love it as much as I do and look forward to seeing and hearing how you use it. Wishing you all the very best,

A handwritten signature in blue ink, appearing to read 'Mike Brown', is written over a light blue horizontal line.

**Mike Brown**

Inventor | Chief Adapting Officer | Paraplegic

This guide contains installation information for each of the Retractor location options and Keeper styles. By using the process below you will be able to easily follow the step by step instructions necessary to successfully fit the LapStacker® to your wheelchair regardless of what options you purchased.

How to use the Installation Guide:

### **STEP ONE: Retractor Installation**

- Use the contents page to find the assembly instructions for the Retractor location option you have purchased.
- Follow the Retractor installation instructions to assemble your Retractor to the mounting components and fix the completed assembly to your wheelchair.

### **STEP TWO: Keeper Installation**

- Use the contents to page find the Keeper install instructions for the correct Keeper style you have purchased.
- Follow the Keeper install instructions to fit the Keepers to your chair.

### **STEP THREE: Buckle Installation**

- Follow the Buckle installation guide to fit the buckles to the webbing.

### **STEP FOUR: Final Adjustment**

- Use the contents page to find the final adjustment instructions.
- Follow the final adjustment instructions to ensure all components are fitted and aligned correctly. When completed, check and tighten fasteners to fix the LapStacker® in place.
- Congratulations! The LapStacker® install process is complete. You can now enjoy using your LapStacker®.

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- Do not install or operate the LapStacker® without first reading and understanding this Installation and User Guide. The current version is available online at [lapstacker.com/install](http://lapstacker.com/install)
- Failure to do so may cause injury to you or those around you.
- By using the LapStacker® you agree to the terms of our Warranty and Product Disclaimer which can be read online at [lapstacker.com/disclaimer](http://lapstacker.com/disclaimer)

### **Warnings - General**

- The LapStacker® is not a seatbelt, safety device, or medical device.
- Please do not use the LapStacker® to secure items on your lap that may cause an injury to you or others. Some examples include sharp, hot or heavy items.
- The LapStacker® is not intended to be used during exercise as a means of keeping the wheelchair attached to you, or to secure children or animals to your lap.
- The LapStacker® is designed as an aid only. You will still need to carefully place items on your lap and monitor them while using the LapStacker®. Items can move even with the LapStacker® securing them, and we take no responsibility for any damage to goods or people should items fall while you are using the LapStacker®
- We do not recommend using the LapStacker® for extensive periods of time to hold items on your lap.

### **Warnings - Injury**

- Please be aware of the new LapStacker® components on your wheelchair and where they are relative to your limbs. Be sure to avoid contact with these while using your wheelchair or transferring in and out of your wheelchair. Failure to do so may result in injury.
- Please do not pull down too tightly on the straps otherwise it might cause a loss of circulation or a pressure injury or damage the item/s you are carrying.
- Please ensure there is adequate clearance between your legs and the LapStacker® components. If not, you may develop a pressure injury from rubbing against these components.

**Warnings - Wheelchair Balance & Vision**

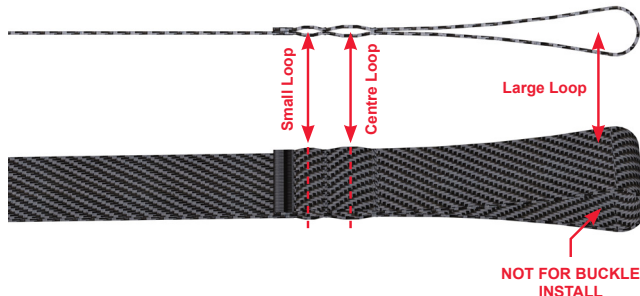
- Please note that carrying items on your lap may alter the balance of your wheelchair. We suggest supervision while trying the LapStacker® for the first time.
- Please do not exceed your wheelchair manufacturer's guidelines for loading or usage of attachments.
- Please do not stack items too high on your lap so as to reduce your ability to see where you are going. This could result in a collision that causes you or others an injury.

**Warnings - Installation**

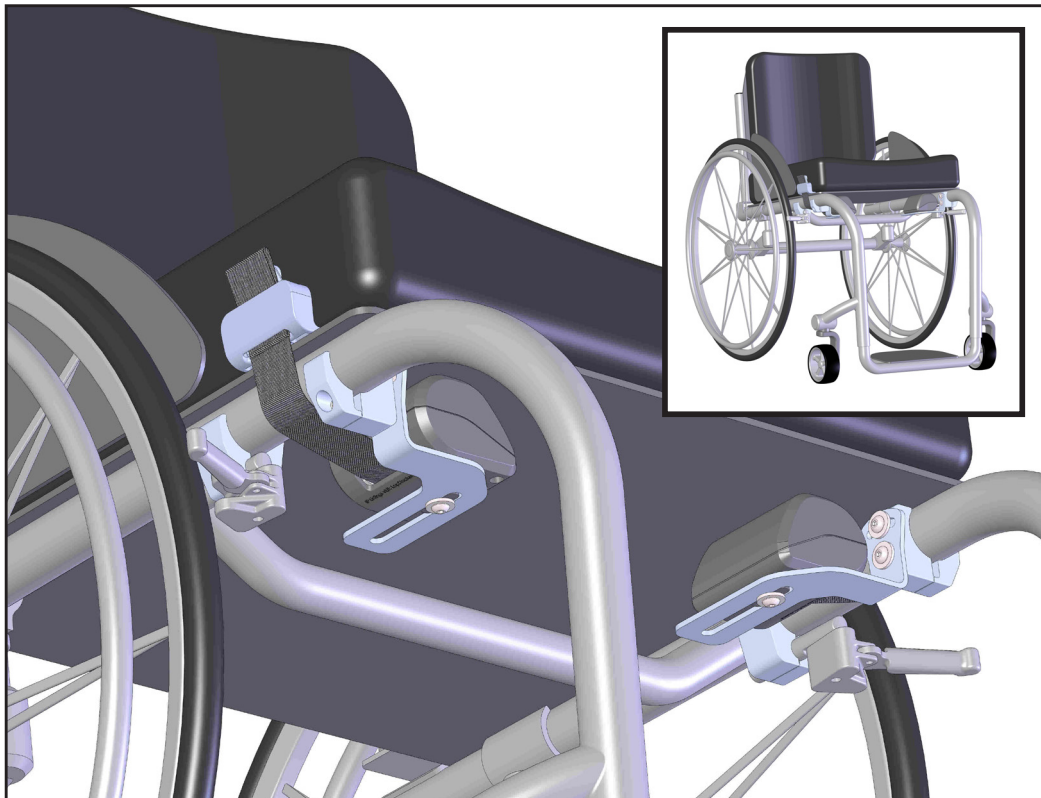
- If you are installing the LapStacker® and moving existing components around such as brakes please ensure they are reinstalled and secured correctly. Failure to do so may result in their failure and injury to you or others.
- If you are installing the LapStacker® on a carbon fibre chair please be aware that over tensioning the Clamps or Keepers may crack or damage your chair. Tighten slowly, and with caution. Do not over tighten.

**Warnings - Buckle Installation**

- To prevent your Buckles coming off of the webbing please ensure you follow the Buckle install instructions, these can be found on page 49.
- Do not attach the Buckles to the large finger loops. This will result in your Buckles easily detaching from the webbing. Always use the centre or small loops provided which are designed to keep the Buckles firmly attached.
- If you are finding the Buckles are too loose using the instructed centre loop, you can install the Buckle using the small loop available adjacent to the end of the sewn section.

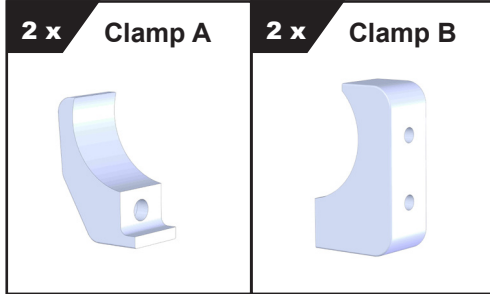


- The LapStacker® Retractor has not been designed for submersion in water. Doing so will likely result in rusting of the internal components and may void your Warranty. If you must take your wheelchair into the water it is recommended you remove the Retractor Units before doing so.
- The Brackets are made of aluminium to reduce weight and are not designed to be pulled on or adjusted without first loosening the Clamp fasteners. Please be gentle with them or they may break.
- Wipe components clean with a damp cloth and avoid the use of chemical detergents which may damage the plastic surfaces.
- The straps may be cleaned using water and a damp cloth. We suggest removing the retractors, fully extending the straps and letting them dry before retracting the straps back into their housing again.

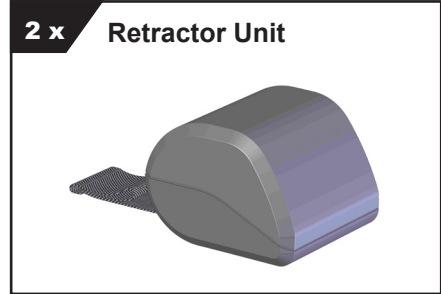


- For Keeper Installation please see page 35.
- For Buckle Installation please see page 50.
- For Final Adjustment please see page 55.
- For Trouble Shooting please see page 65.

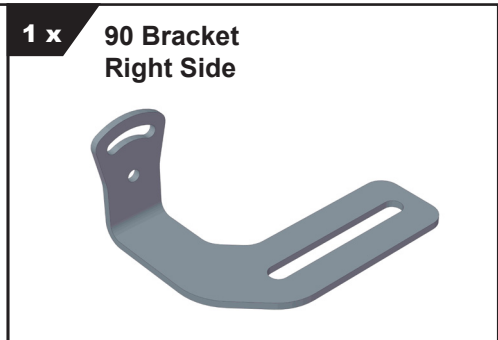
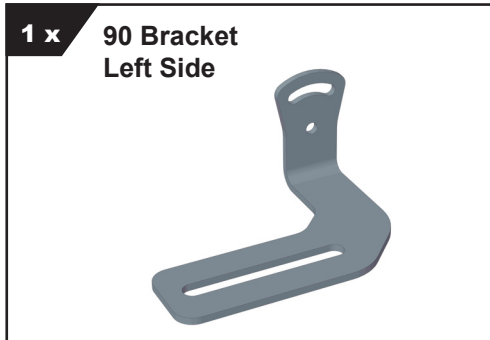
**Clamps**



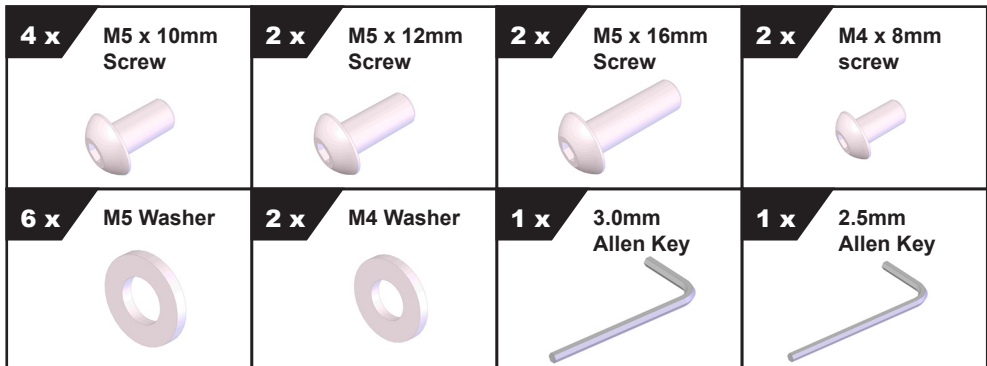
**Retractor Units**



**Brackets**



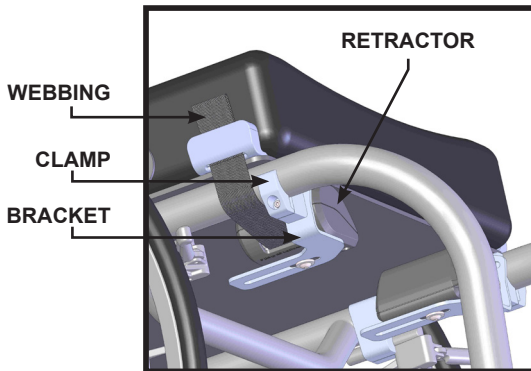
**Fastener Set**



For Keeper components please see the Keeper install section beginning page 35.

# 1. Determine Approximate Keeper Location

- Ideally, the Keepers are positioned central to where you will carry items, but the LapStacker® will still work if forward or back of this.
- While in your wheelchair look down at your side and imagine using the LapStacker® to secure an item. Find the midpoint for this object and take a note of this position on the Frame Top Tube of your wheelchair.
- The Keeper MUST align with the centre of the webbing from the retractor unit. Ensure your ideal Keeper location allows room for the Retractor Unit, Clamps and Brackets.



CENTRE OF WEBBING



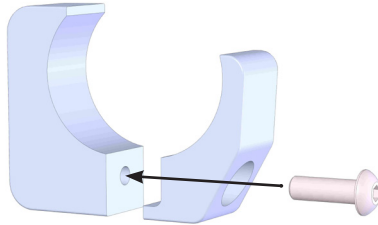
IDEAL KEEPER POSITION



## 2. Fasten Clamps together loosely.

### Items Required:

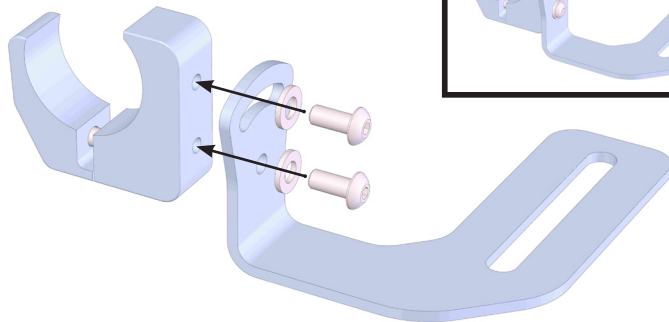
- 2 x Clamp A
- 2 x Clamp B
- 2 x M5 \* 16mm Screws
- 3.0mm Allen Key



## 3. Fasten Brackets to the Clamps.

### Items Required:

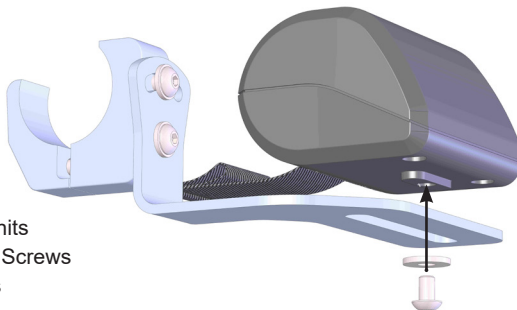
- 1 x 90 Bracket LEFT
- 1 x 90 Bracket RIGHT
- 4 x M5 \* 10mm Screws
- 4 x M5 washers
- 3.0mm Allen Key



## 4. Fasten Retractors to the Brackets loosely.

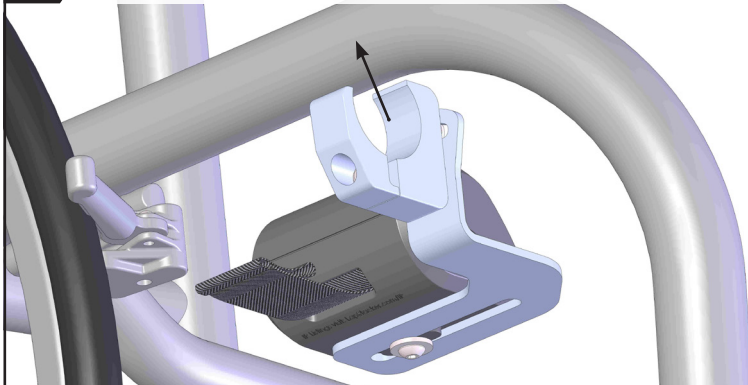
### Items Required:

- 2 x Retractor Units
- 2 x M5 \* 12mm Screws
- 2 x M5 washers
- 3.0mm Allen Key





## 5. Attach the Clamp and assembled parts to the Frame Top Tube.



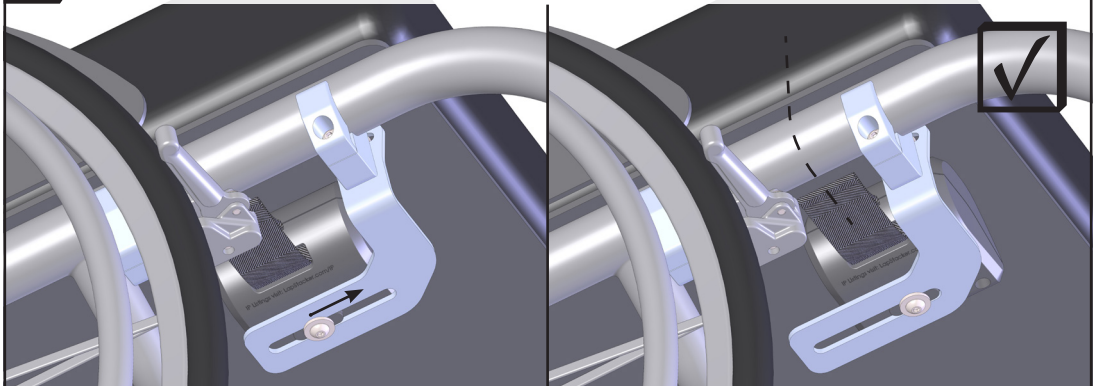
### WARNING!

Please ensure there is adequate clearance between your legs and the LapStacker® components. If not, you may develop a pressure injury from rubbing against these components.

### Items Required:

- 3.0mm Allen Key
- 2 x Clamp, Bracket and Retractor Assemblies

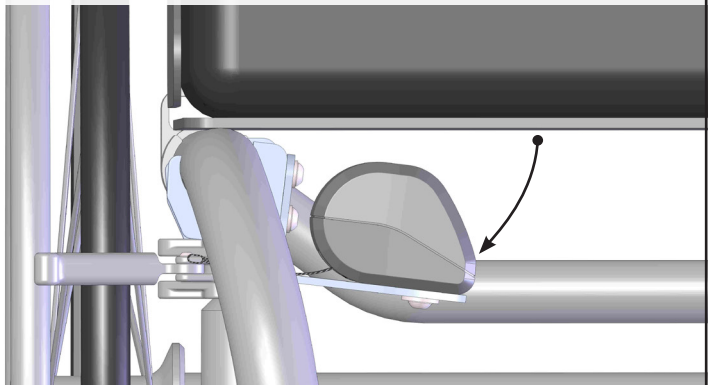
## 6. Adjust Retractor position so that webbing aligns with ideal Keeper position.



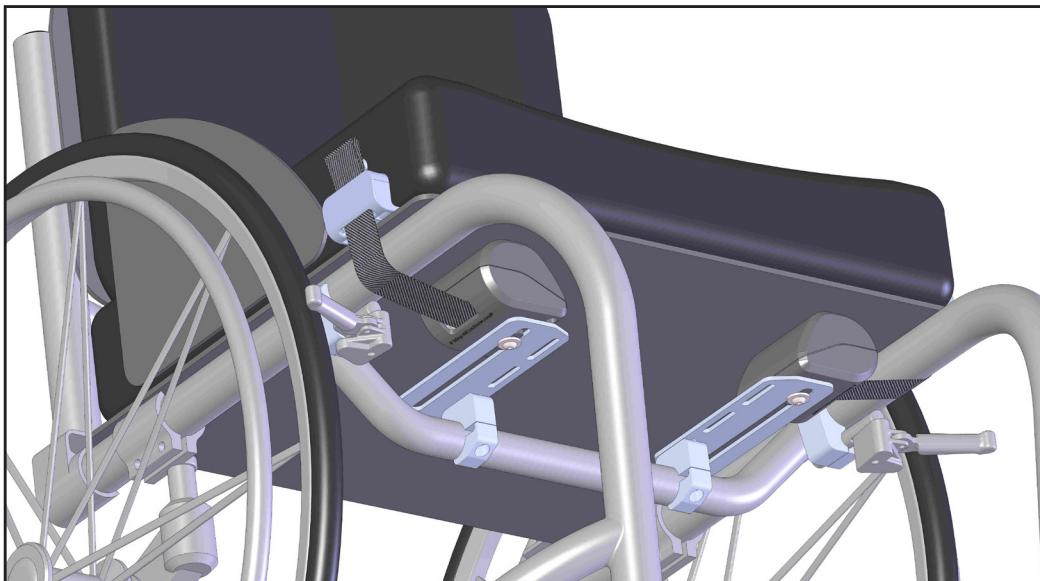
## 7. Check underseat clearance (seated). Adjust Clamp angle if necessary.

### WARNING!

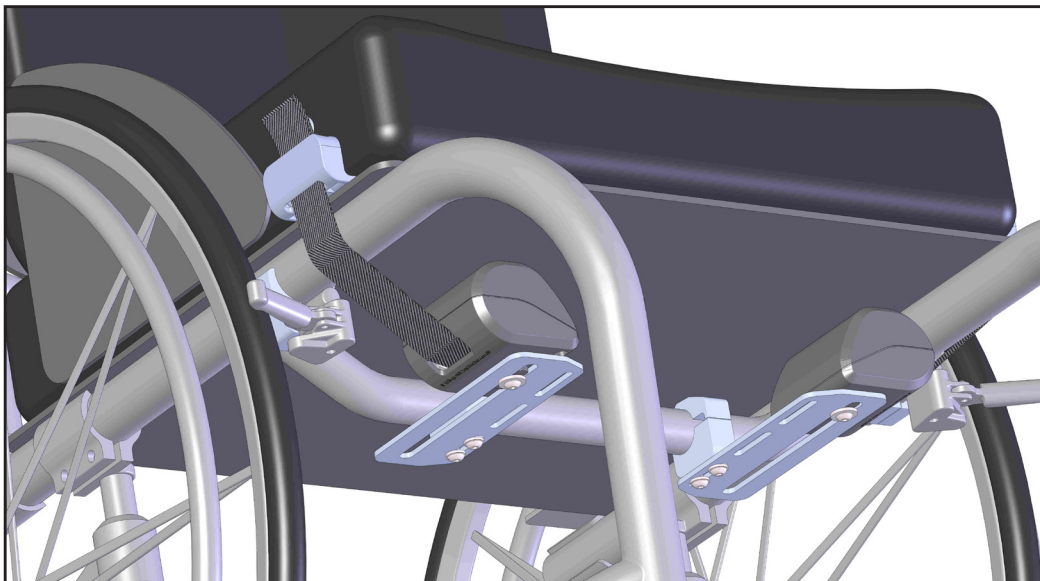
It is important that you allow enough clearance between the Retractor and the seat base so that when you are seated there is no downwards pressure on the Retractor Unit. Failure to do so will stress the Bracket and may cause it to fail over time.



**Above The Cross Frame Rigidizer Bar** - For further information please see page 16.

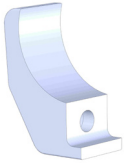


**Below The Cross Frame Rigidizer Bar** - For further information please see page 17.

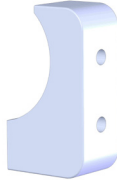


## Clamps

2 x Clamp A

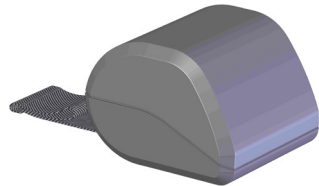


2 x Clamp B



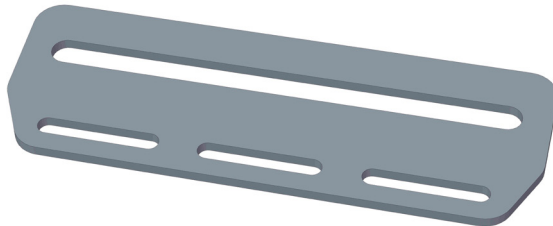
## Retractor Units

2 x Retractor Unit



## Brackets

2 x Cross Bar Bracket



## Fastener Set

4 x M5 x 10mm Screw



2 x M5 x 12mm Screw



2 x M5 x 16mm Screw



2 x M4 x 8mm screw



6 x M5 Washer



2 x M4 Washer



1 x 3.0mm Allen Key



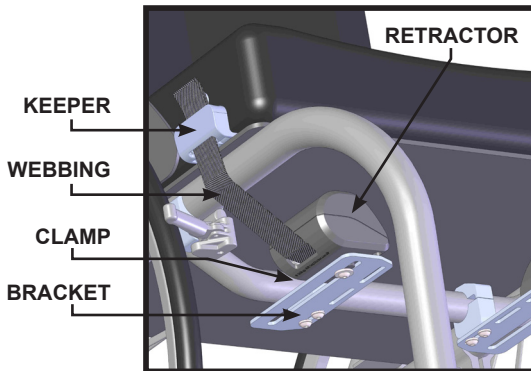
1 x 2.5mm Allen Key



For Keeper components please see the Keeper install section beginning page 35.

# 1. Determine Approximate Keeper Location

- Ideally, the Keepers are positioned central to where you will carry items, but the LapStacker® will still work if forward or back of this.
- While in your wheelchair look down at your side and imagine using the LapStacker® to secure an item. Find the midpoint for this object and take a note of this position on the Frame Top Tube of your wheelchair.
- The Keeper MUST align with the centre of the webbing from the Retractor Unit. Ensure your ideal Keeper location allows room for the Retractor Unit, Clamps and Brackets.



CENTRE OF WEBBING



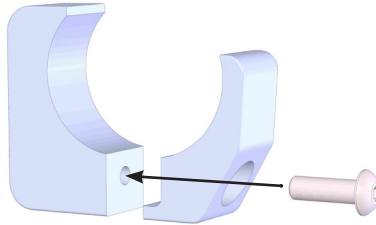
IDEAL KEEPER POSITION



## 2. Fasten Clamps together loosely.

### Items Required:

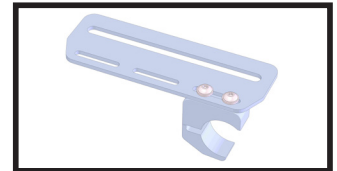
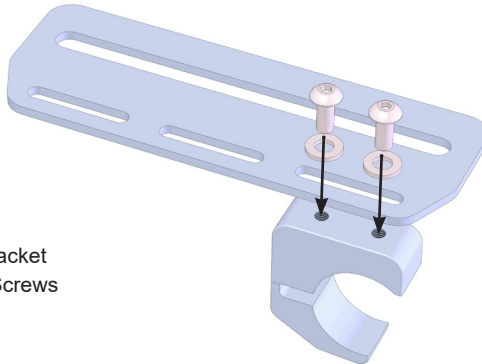
- 2 x Clamp A
- 2 x Clamp B
- 2 x M5 \* 16mm Screws
- 3.0mm Allen Key



## 3. Fasten Brackets to the Clamps.

### Items Required:

- 2 x Cross Bar Bracket
- 4 x M5 \* 10mm Screws
- 4 x M5 washers
- 3.0mm Allen Key



### IMPORTANT!

Start with the end slot first, this will give the greatest range of adjustment. If you find the Bracket is too far forward then shift the Bracket backwards to utilise the centre or forward slots.

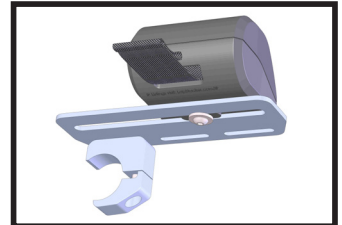
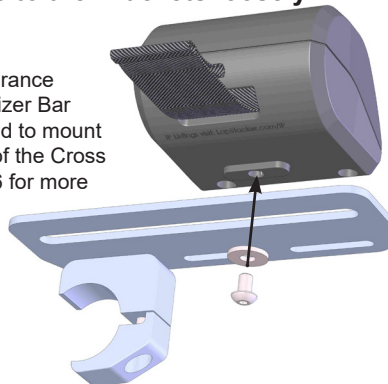
## 4. Fasten Retractors to the Brackets loosely.

### IMPORTANT!

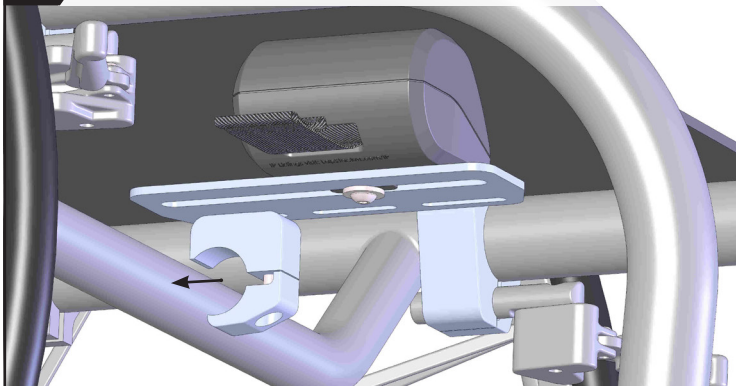
Depending on the available clearance between the Cross Frame Rigidizer Bar and the seat base, you may need to mount the Retractor on the underside of the Cross Frame Rigidizer Bar. See Step 6 for more details.

### Items Required:

- 2 x Retractor Units
- 2 x M5 \* 12mm Screws
- 2 x M5 washers
- 3.0mm Allen Key



**5. Attach the Clamp and assembled parts to the Cross Frame Rigidizer Bar.**



**WARNING!**

Please ensure there is adequate clearance between your legs and the LapStacker® components. If not, you may develop a pressure injury from rubbing against these components.

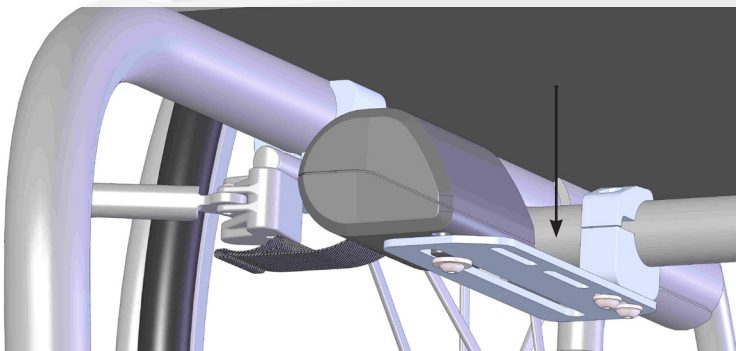
**Items Required:**

- Wheel Chair
- 3.0mm Allen Key
- 2 x Clamp, Bracket and Retractor Assemblies

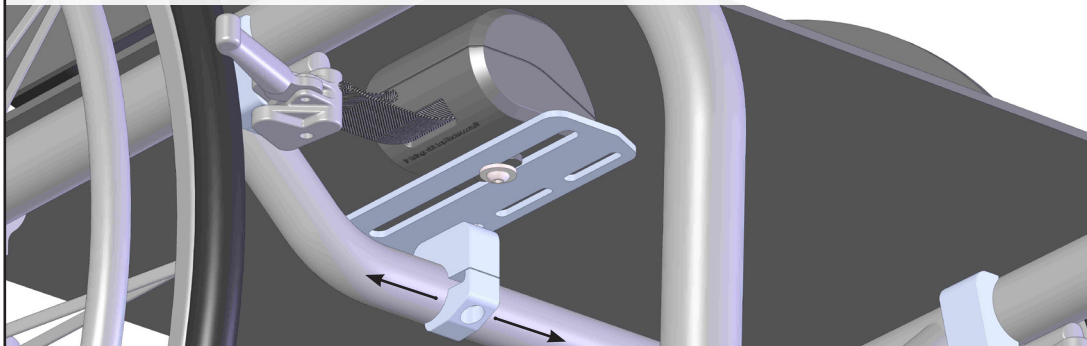
**6. If there isn't adequate room under the seat, switch the Cross Bar Bracket to the underside of the Cross Frame Rigidizer Bar.**

**WARNING!**

It is important that you allow enough clearance between the Retractor and the seat base so that when you are seated there is no downwards pressure on the Retractor Unit. Failure to do so will stress the Bracket and may cause it to fail over time.

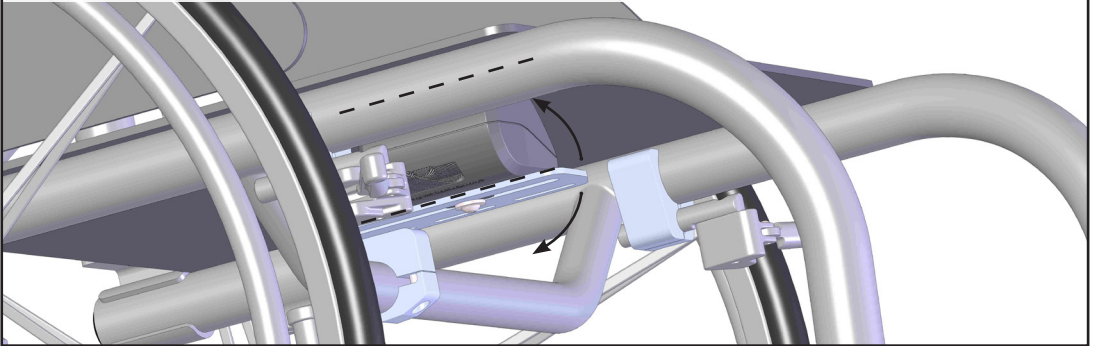


**7. Adjust Clamp position so that the Retractor is close to the Frame Top Tube but clear of any brake mechanism components.**

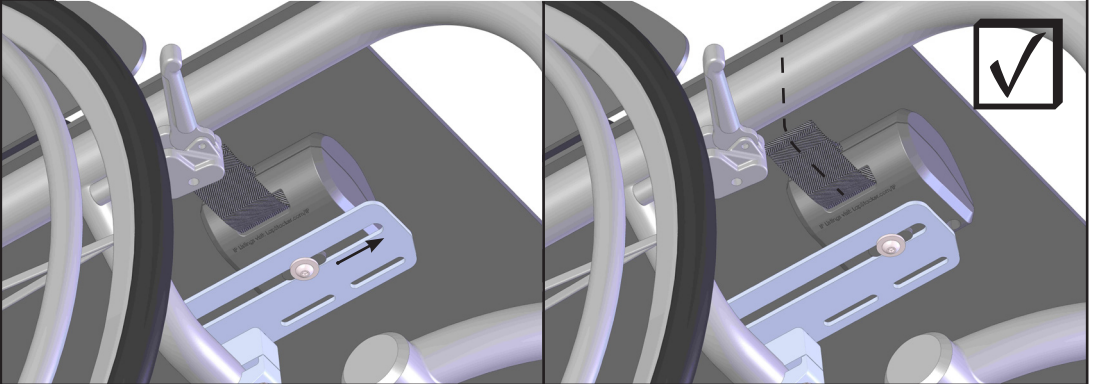




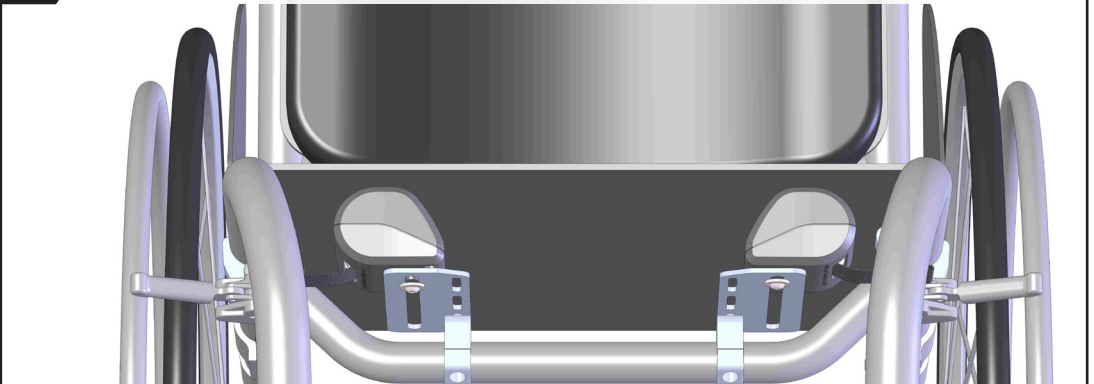
- 8.** Adjust Clamp angle so that the Cross Bar Bracket is parallel with the Frame Top Tube.



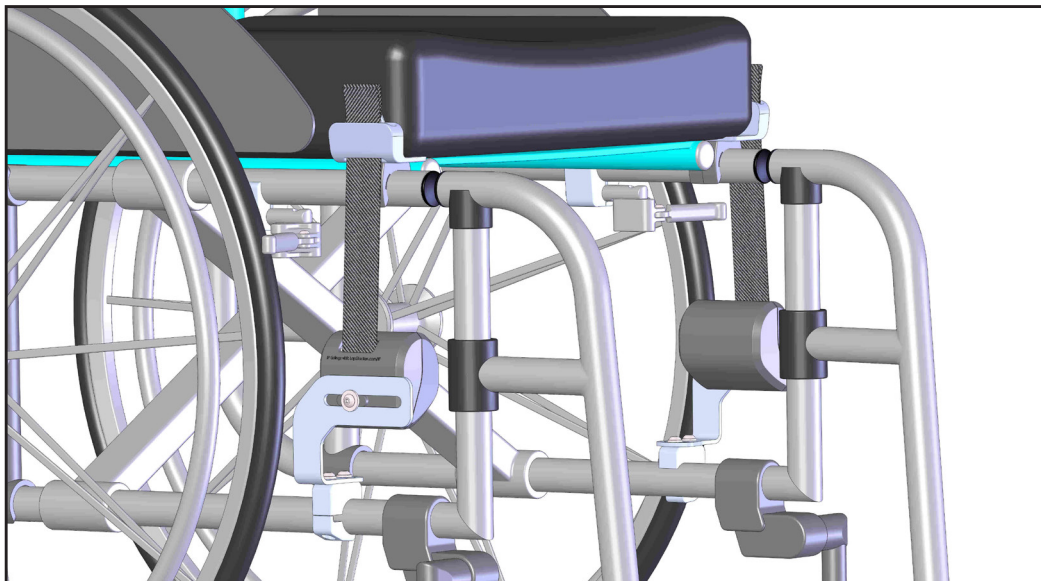
- 9.** Adjust Retractor position so that webbing aligns with ideal Keeper position.



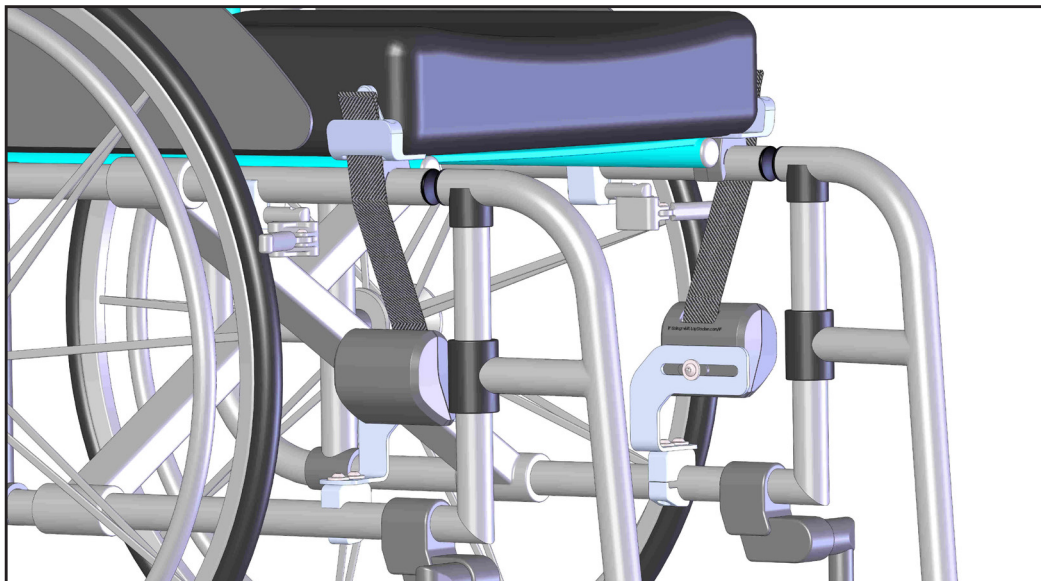
- 10.** Repeat the process with components mirrored for the opposite side.



**External Mounting Option** - See Step 6 for more information.



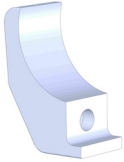
**Internal Mounting Option** - See Step 6 for more information.





## Clamps

2 x Clamp A

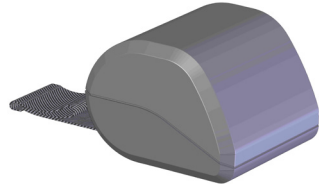


2 x Clamp B

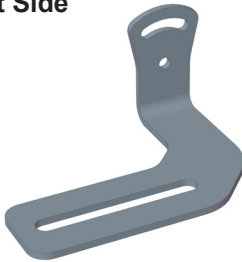
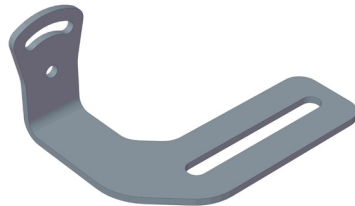


## Retractor Units

2 x Retractor Unit



## Brackets

1 x 90 Bracket  
Left Side1 x 90 Bracket  
Right Side

## Fastener Set

4 x M5 x 10mm  
Screw2 x M5 x 12mm  
Screw2 x M5 x 16mm  
Screw2 x M4 x 8mm  
screw

6 x M5 Washer



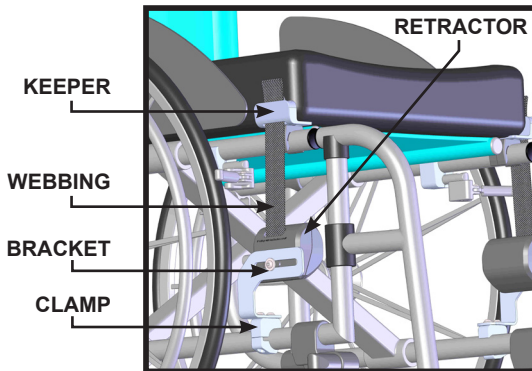
2 x M4 Washer

1 x 3.0mm  
Allen Key1 x 2.5mm  
Allen Key

For Keeper components please see the Keeper install section beginning page 35.

# 1. Determine Approximate Keeper Location

- Ideally, the Keepers are positioned central to where you will carry items, but the LapStacker® will still work if forward or back of this.
- While in your wheelchair look down at your side and imagine using the LapStacker® to secure an item. Find the midpoint for this object and take a note of this position on the Frame Top Tube of your wheelchair.
- The Keeper MUST align with the centre of the webbing from the Retractor Unit. Ensure your ideal Keeper location allows room for the Retractor Unit, Clamps and Brackets.



CENTRE OF WEBBING



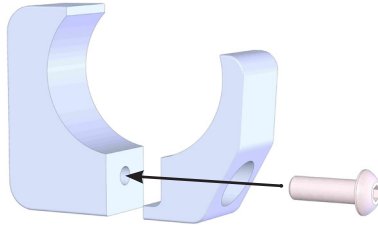
IDEAL KEEPER POSITION



## 2. Fasten Clamps together loosely.

### Items Required:

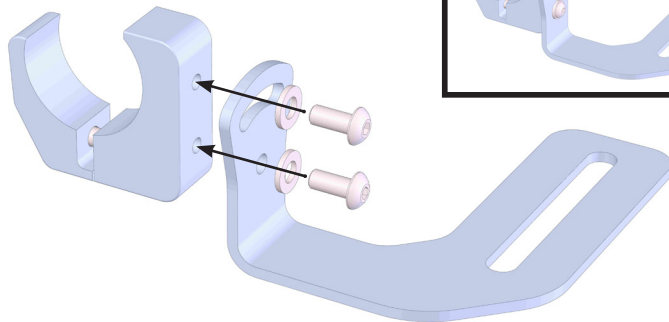
- 2 x Clamp A
- 2 x Clamp B
- 2 x M5 \* 16mm Screws
- 3.0mm Allen Key



## 3. Fasten Brackets to the Clamps.

### Items Required:

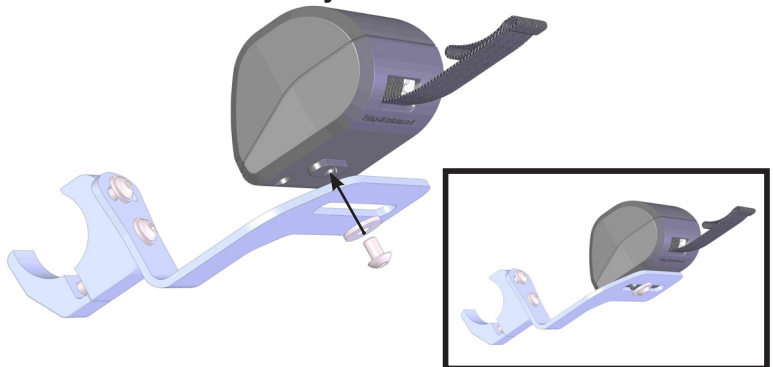
- 1 x 90 Bracket LEFT
- 1 x 90 Bracket RIGHT
- 4 x M5 \* 10mm Screws
- 4 x M5 washers
- 3.0mm Allen Key



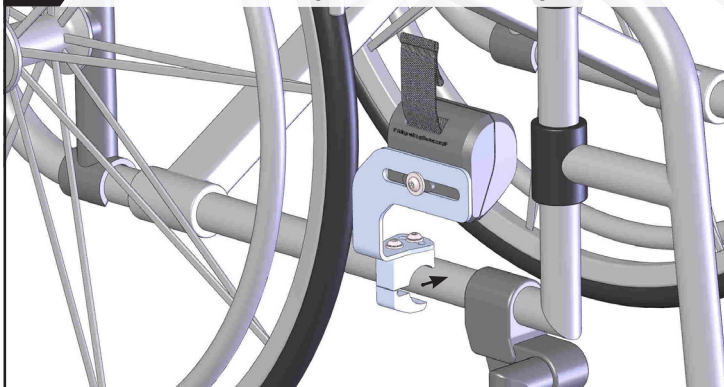
## 4. Fasten Retractors to the Brackets loosely.

### Items Required:

- 2 x Retractor Units
- 2 x M5 \* 12mm Screws
- 2 x M5 washers
- 3.0mm Allen Key



**5. Attach the Clamp and assembled parts to the Lower Horizontal Frame Tube.**



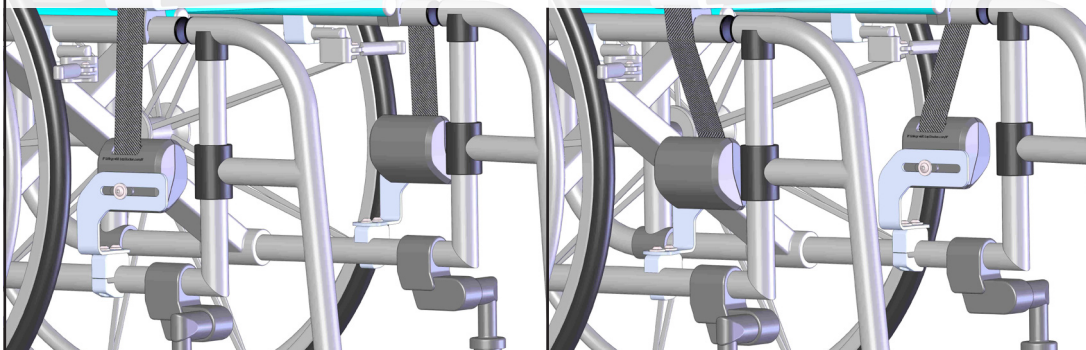
**WARNING!**

Please ensure there is adequate clearance between your legs and the LapStacker® components. If not, you may develop a pressure injury from rubbing against these components.

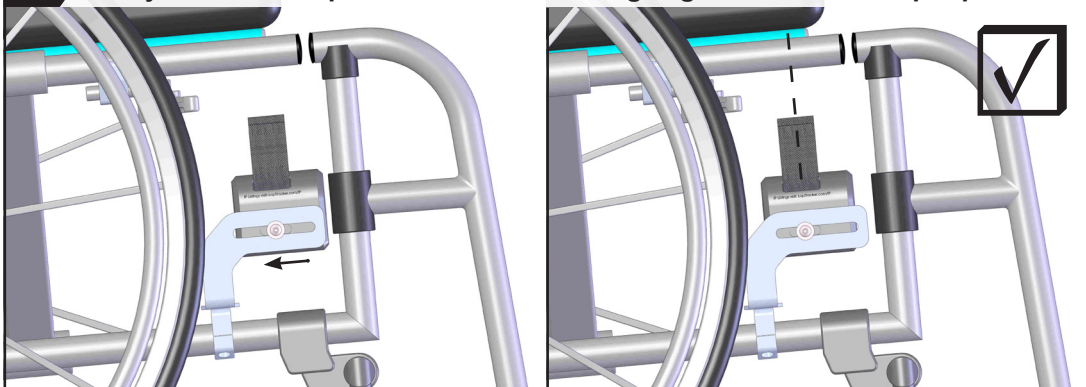
**Items Required:**

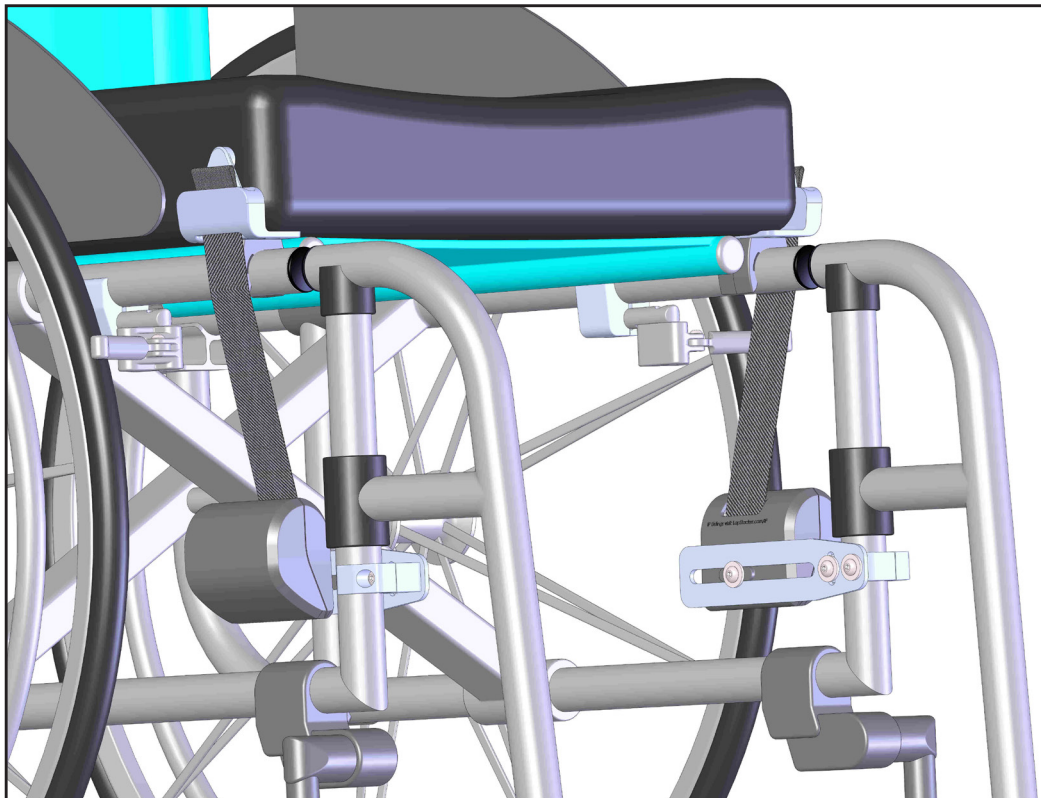
- Wheel Chair
- 3.0mm Allen Key
- 2 x Clamp, Bracket and Retractor Assemblies

**6. You can shift the position of the Retractor inwards towards your legs by swapping the Clamp and assembled parts to the opposite side.**



**7. Adjust Retractor position so that webbing aligns with ideal Keeper position.**

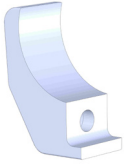




- For Keeper Installation please see page 35.
- For Buckle Installation please see page 50.
- For Final Adjustment please see page 55.
- For Trouble Shooting please see page 65.

## Clamps

2 x Clamp A

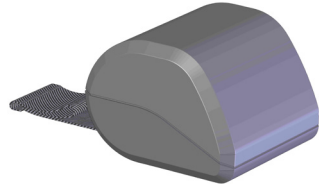


2 x Clamp B



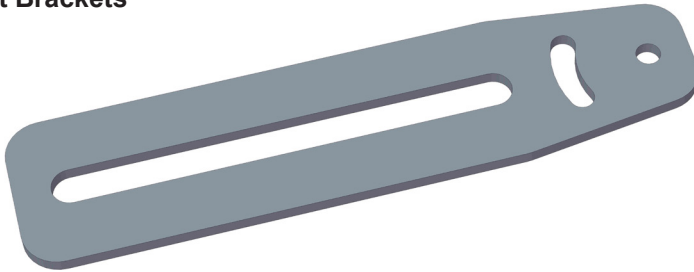
## Retractor Units

2 x Retractor Unit



## Brackets

2 x Flat Brackets



## Fastener Set

4 x M5 x 10mm Screw



2 x M5 x 12mm Screw



2 x M5 x 16mm Screw



2 x M4 x 8mm screw



6 x M5 Washer



2 x M4 Washer



1 x 3.0mm Allen Key



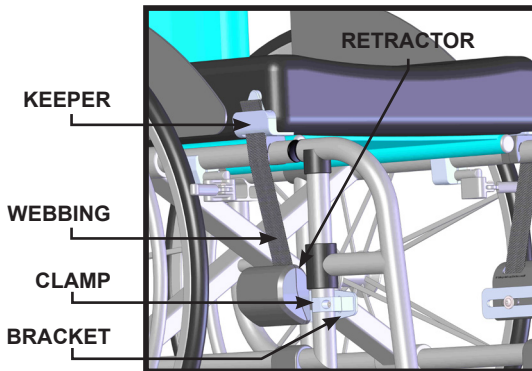
1 x 2.5mm Allen Key



For Keeper components please see the Keeper install section beginning page 35.

# 1. Determine Approximate Keeper Location

- Ideally, the Keepers are positioned central to where you will carry items, but the LapStacker® will still work if forward or back of this.
- While in your wheelchair look down at your side and imagine using the LapStacker® to secure an item. Find the midpoint for this object and take a note of this position on the Frame Top Tube of your wheelchair.
- The Keeper MUST align with the centre of the webbing from the Retractor Unit. Ensure your ideal Keeper location allows room for the Retractor Unit, Clamps and Brackets.



CENTRE OF WEBBING



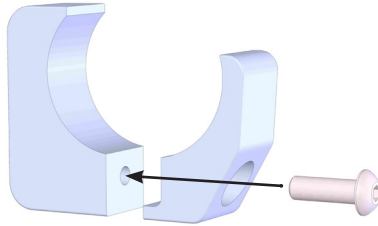
IDEAL KEEPER POSITION





## 2.

**Fasten Clamps together loosely.**

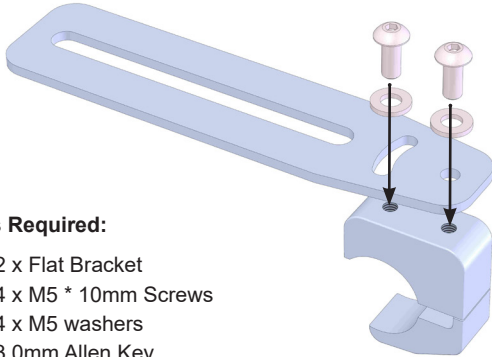
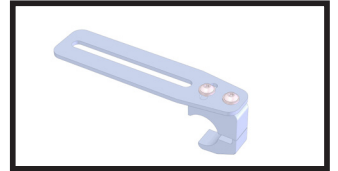


### Items Required:

- 2 x Clamp A
- 2 x Clamp B
- 2 x M5 \* 16mm Screws
- 3.0mm Allen Key

## 3a.

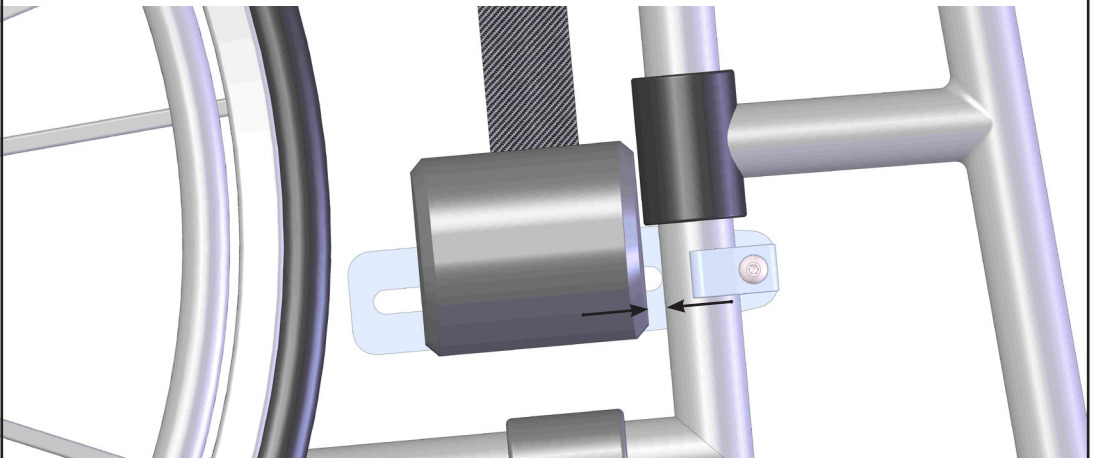
**Fasten Brackets to the Clamps. OPTION A**



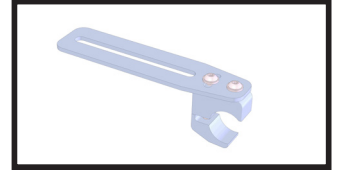
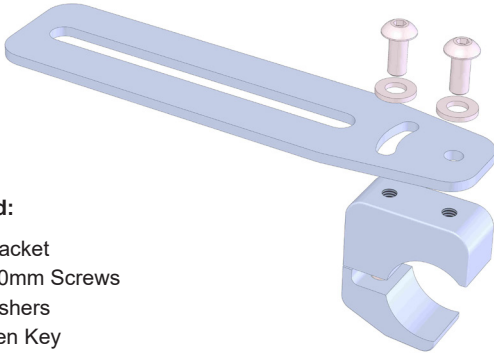
### Items Required:

- 2 x Flat Bracket
- 4 x M5 \* 10mm Screws
- 4 x M5 washers
- 3.0mm Allen Key

**OPTION A** allows the Retractor to be placed close up to the Front Vertical Tube.

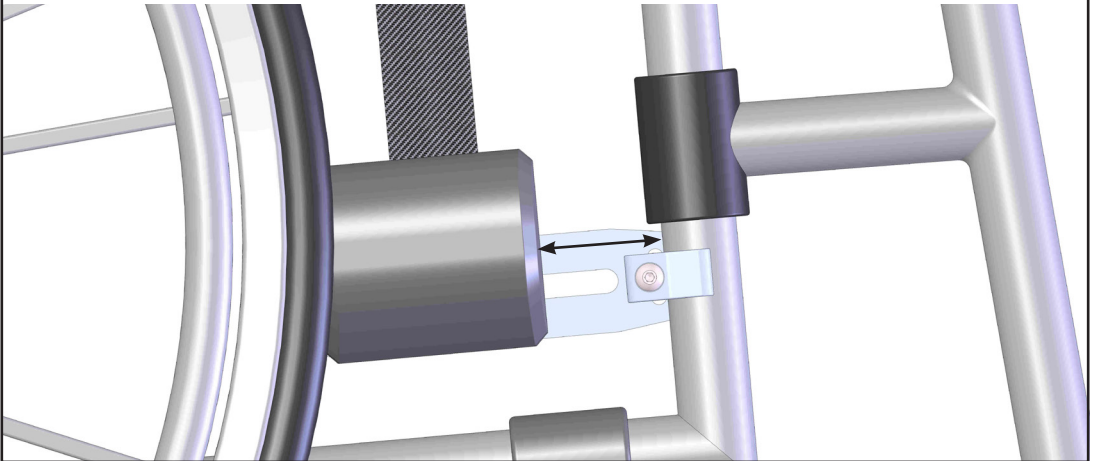
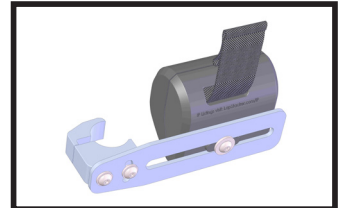
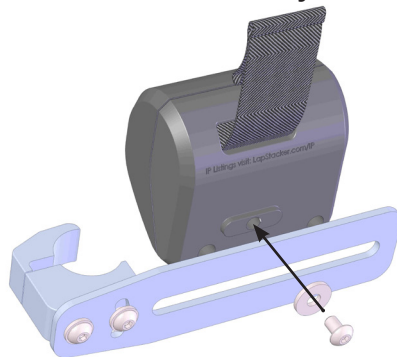




**3b.****Fasten Clamps together loosely. OPTION B****Items Required:**

- 2 x Flat Bracket
- 4 x M5 \* 10mm Screws
- 4 x M5 washers
- 3.0mm Allen Key

**OPTION B increases adjustment distance from Front Vertical Frame Tube.**

**4.****Fasten Retractors to the Brackets loosely.****Items Required:**

- 2 x Retractor Units
- 2 x M5 \* 12mm Screws
- 2 x M5 washers
- 3.0mm Allen Key

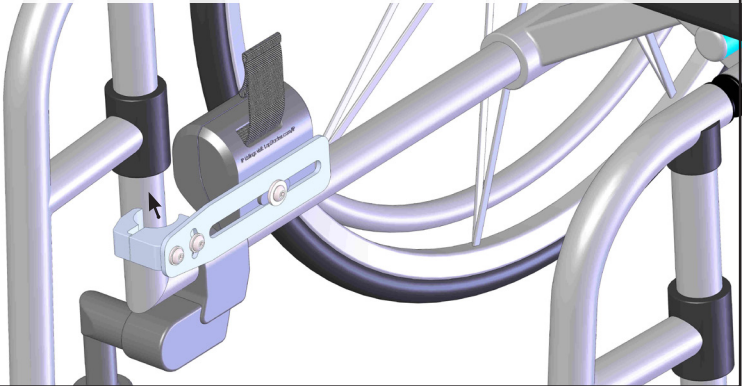
## 5. Attach the Clamp and assembled parts to the Front Vertical Frame Tube.

### WARNING!

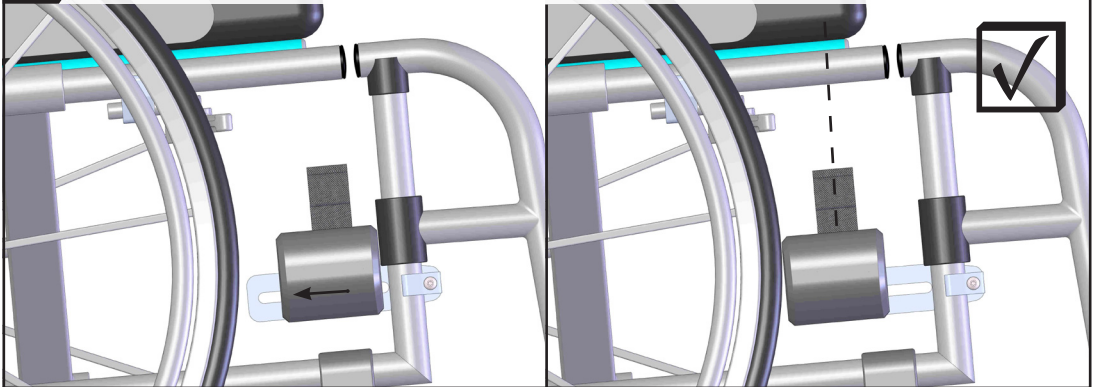
Please ensure there is adequate clearance between your legs and the LapStacker® components. If not, you may develop a pressure injury from rubbing against these components.

### Items Required:

- Wheel Chair
- 3.0mm Allen Key
- 2 x Clamp, Bracket and Retractor Assemblies



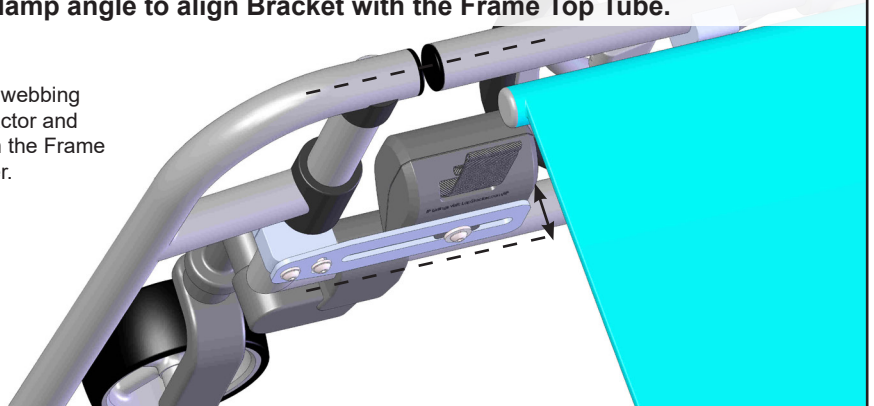
## 6. Adjust Retractor position so that webbing aligns with ideal Keeper position.

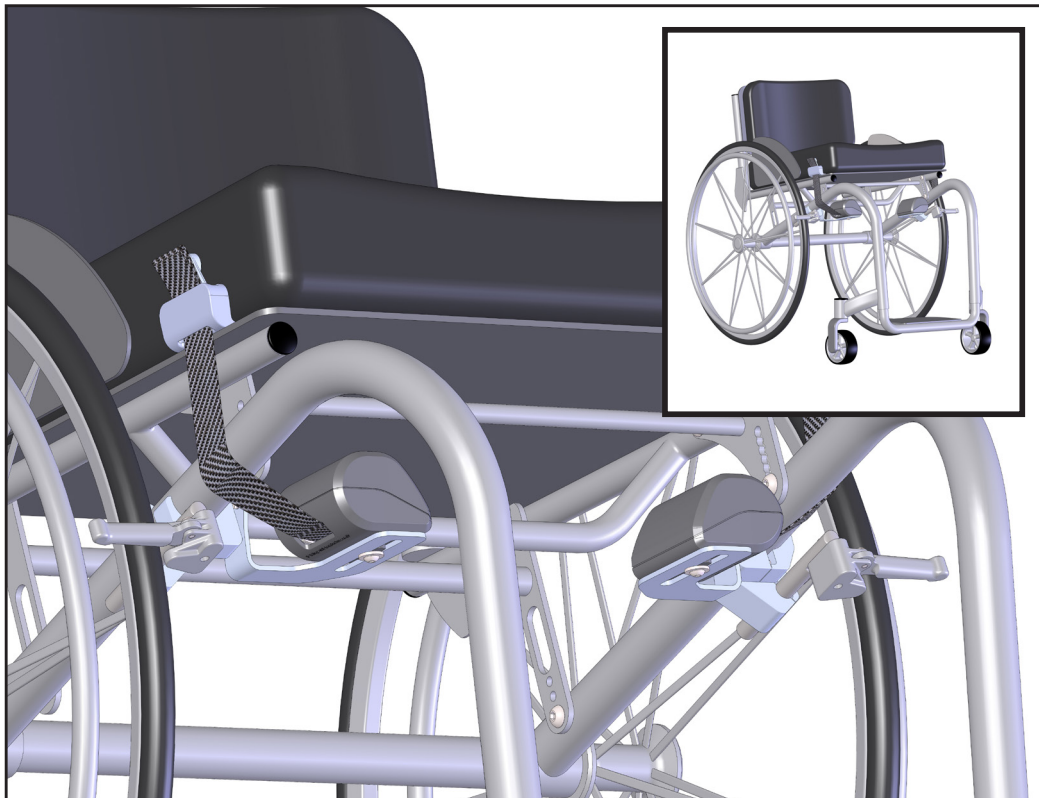


## 7. Adjust Clamp angle to align Bracket with the Frame Top Tube.

### IMPORTANT:

Prevent wear on the webbing by keeping the Retractor and webbing aligned with the Frame Top Tube and Keeper.





- For Keeper Installation please see page 35.
- For Buckle Installation please see page 50.
- For Final Adjustment please see page 55.
- For Trouble Shooting please see page 65.

## Clamps

2 x Clamp A

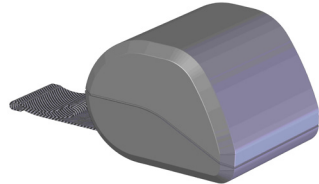


2 x Clamp B

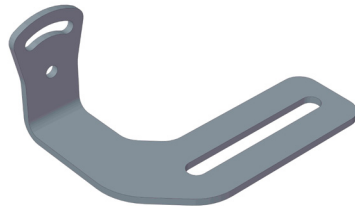


## Retractor Units

2 x Retractor Unit



## Brackets

1 x 90 Bracket  
Left Side1 x 90 Bracket  
Right Side

## Fastener Set

4 x M5 x 10mm  
Screw2 x M5 x 12mm  
Screw2 x M5 x 16mm  
Screw2 x M4 x 8mm  
screw

6 x M5 Washer



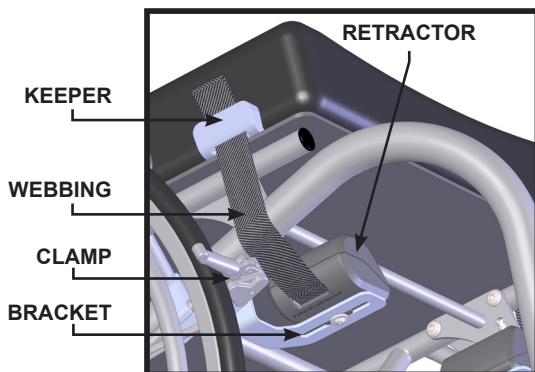
2 x M4 Washer

1 x 3.0mm  
Allen Key1 x 2.5mm  
Allen Key

For Keeper components please see the Keeper install section beginning page 35.

# 1. Determine Approximate Keeper Location

- Ideally, the Keepers are positioned central to where you will carry items, but the LapStacker® will still work if forward or back of this.
- While in your wheelchair look down at your side and imagine using the LapStacker® to secure an item. Find the midpoint for this object and take a note of this position on the Frame Top Tube of your wheelchair.
- The Keeper MUST align with the centre of the webbing from the Retractor Unit. Ensure your ideal Keeper location allows room for the Retractor Unit, Clamps and Brackets.



CENTRE OF WEBBING



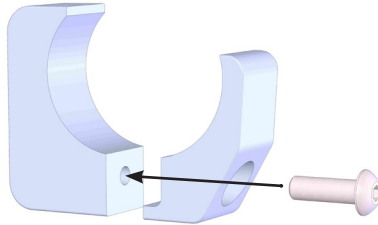
IDEAL KEEPER POSITION



## 2. Fasten Clamps together loosely.

### Items Required:

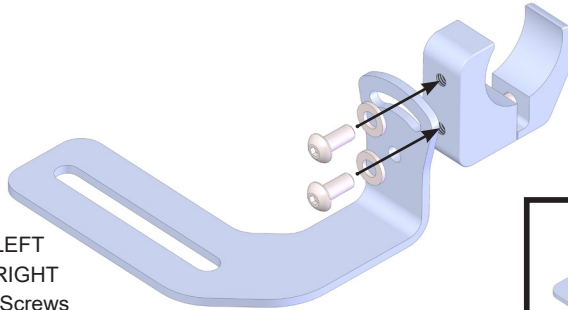
- 2 x Clamp A
- 2 x Clamp B
- 2 x M5 \* 16mm Screws
- 3.0mm Allen Key



## 3. Fasten Brackets to the Clamps.

### Items Required:

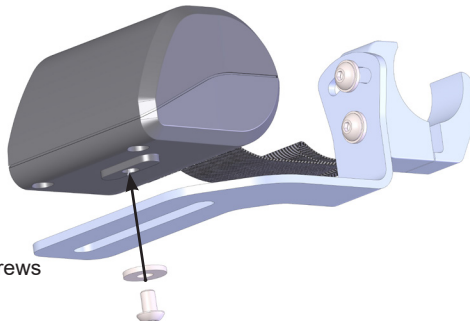
- 1 x 90 Bracket LEFT
- 1 x 90 Bracket RIGHT
- 4 x M5 \* 10mm Screws
- 4 x M5 washers
- 3.0mm Allen Key



## 4. Fasten Retractors to the Brackets loosely.

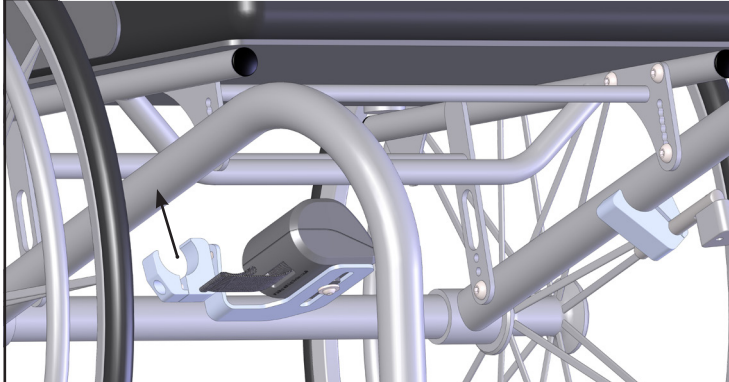
### Items Required:

- 2 x Retractor Units
- 2 x M5 \* 12mm Screws
- 2 x M5 washers
- 3.0mm Allen Key





**5. Attach the Clamp and assembled parts to the angled Frame Top Tube.**



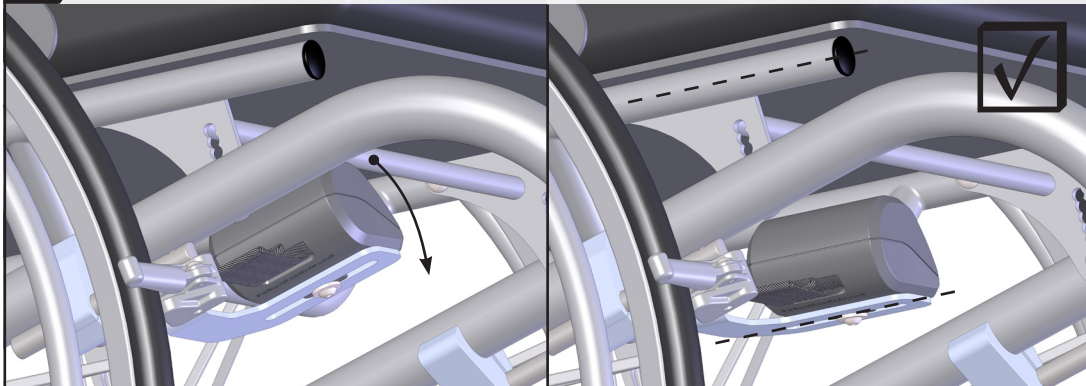
**WARNING!**

Please ensure there is adequate clearance between your legs and the LapStacker® components. If not, you may develop a pressure injury from rubbing against these components.

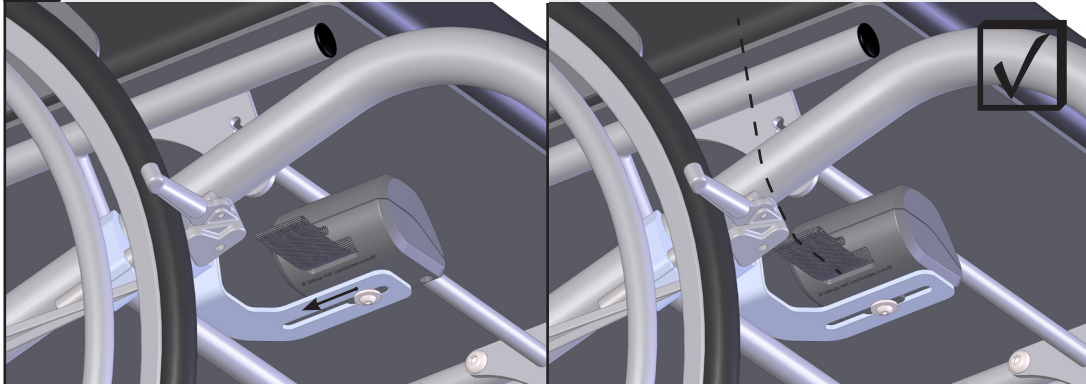
**Items Required:**

- 3.0mm Allen Key
- 2 x Clamp, Bracket and Retractor Assemblies

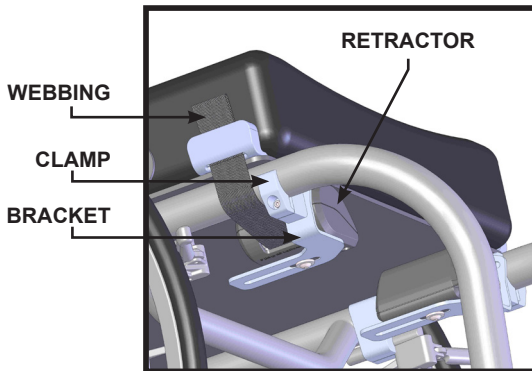
**6. Rotate the 90 Bracket so that the Retractor is parallel with the seat base.**



**7. Adjust Retractor position so that webbing aligns with ideal Keeper position.**



- Ideally, the Keepers are positioned central to where you will carry items, but the LapStacker® will still work if forward or back of this.
- While in your wheelchair look down at your side and imagine using the LapStacker® to secure an item. Find the midpoint for this object and take a note of this position on the Frame Top Tube of your wheelchair.
- The Keeper MUST align with the centre of the webbing from the Retractor Unit. Ensure your ideal Keeper location allows room for the Retractor Unit, Clamps and Brackets.

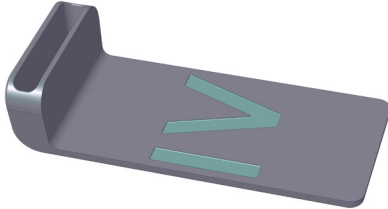




Components:

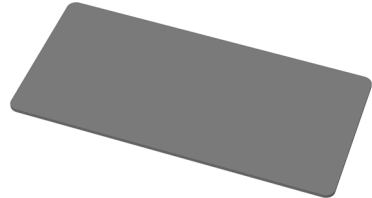
### Keepers

2 x Long Keeper

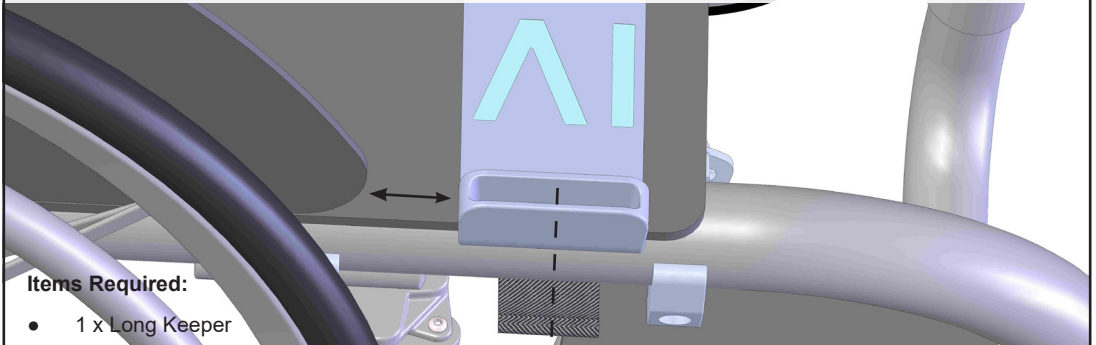


### Velcro®

2 x Hook + Loop Velcro



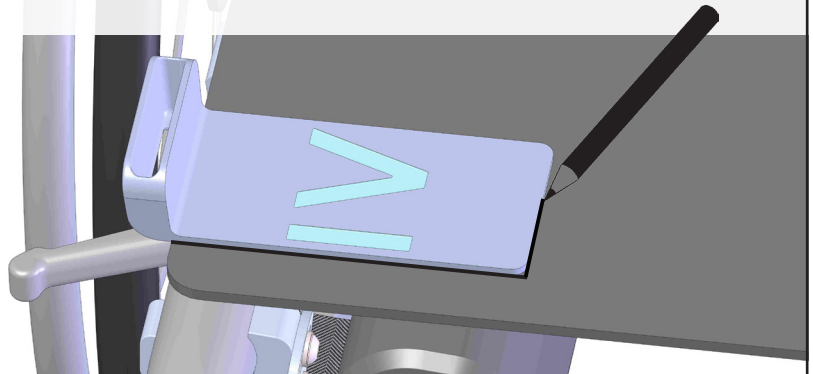
1. Position the Long Keeper so that it aligns with the Retractor strap and is clear of any wheel guards.



Items Required:

- 1 x Long Keeper

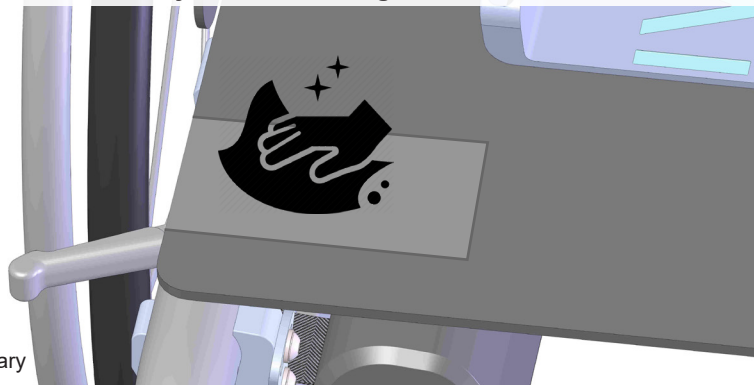
2. Mark out the position of the Long Keeper on your seat base using a pencil.



Items Required:

- 1 x Pencil

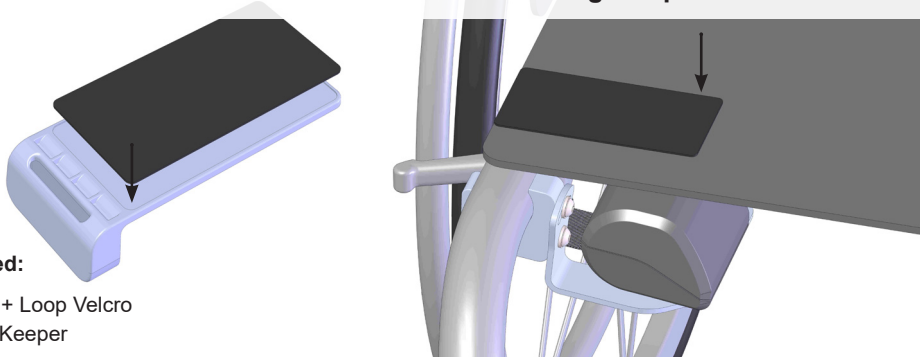
### 3. Ensure the area is clean and dry and free from grease



#### Items Required:

- Cleaning product if necessary

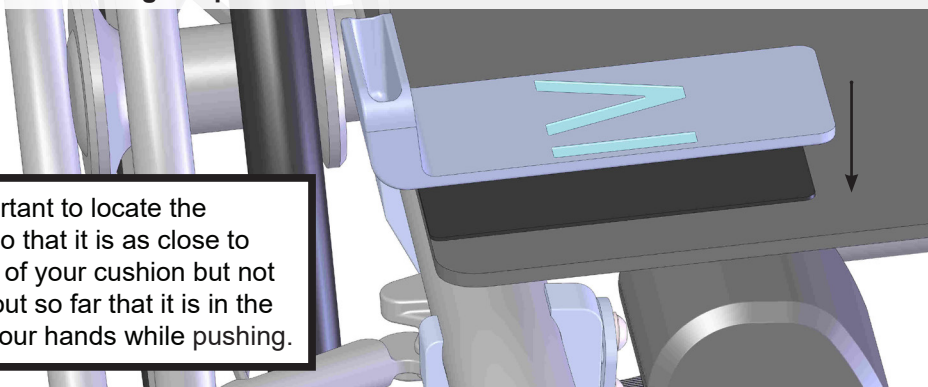
### 4. Adhere Velcro to both the seat base and the underside of the Long Keeper so that both locations have as much velcro coverage as possible.



#### Items Required:

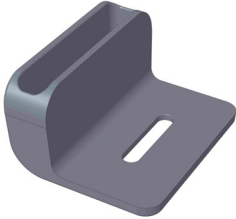
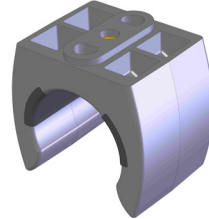
- 2 x Hook + Loop Velcro
- 2 x Long Keeper

### 5. Attach the Long Keepers to the seat base.



It is important to locate the Keeper so that it is as close to the edge of your cushion but not sticking out so far that it is in the way off your hands while pushing.

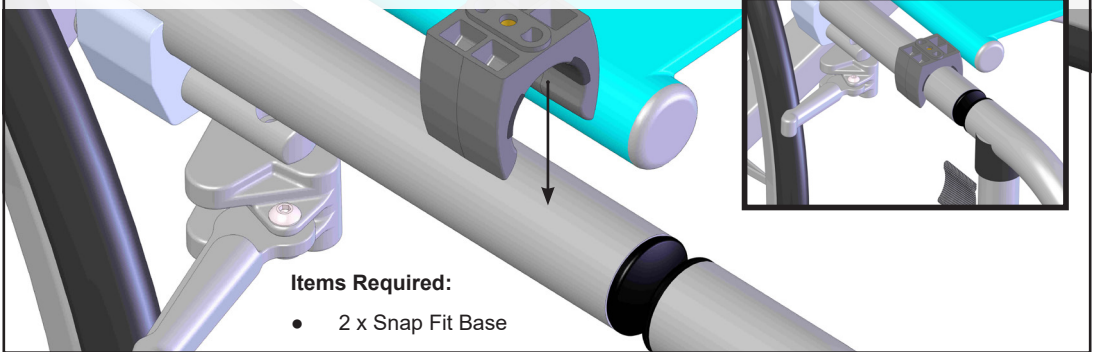
Components:

**Keepers****2 x** Short Keeper**Snap Fit****2 x** Snap Fit Base

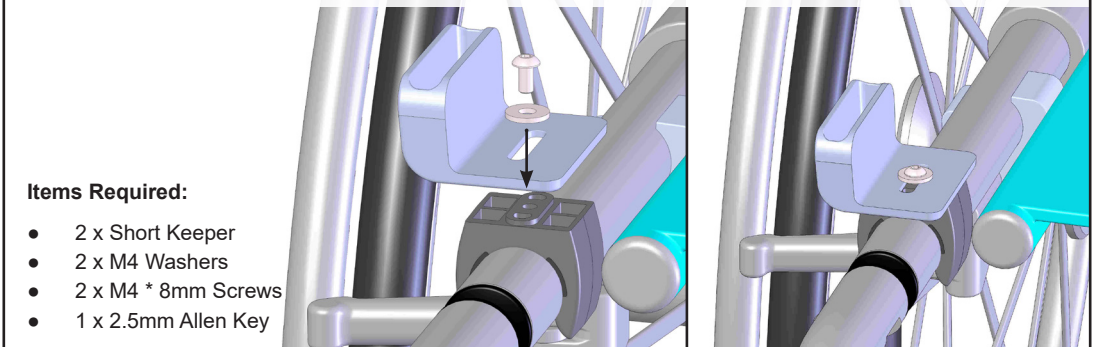
The items highlighted below are required from the main fastener set.

**Fastener Set****4 x** M5 x 10mm Screw**2 x** M5 x 12mm Screw**2 x** M5 x 16mm Screw**2 x** M4 x 8mm screw**6 x** M5 Washer**2 x** M4 Washer**1 x** 3.0mm Allen Key**1 x** 2.5mm Allen Key

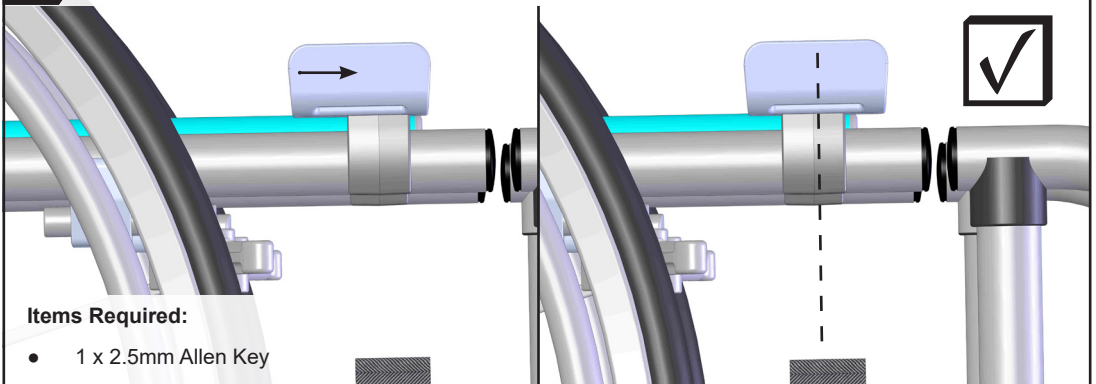
- 1.** Press the Snap Fit Base onto the Frame Top Tube so that it aligns with the Retractor webbing.



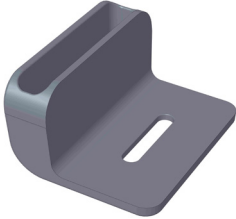
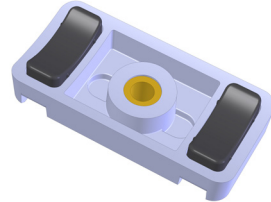
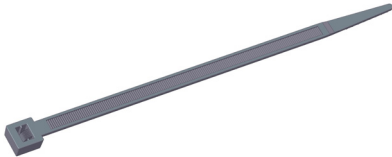
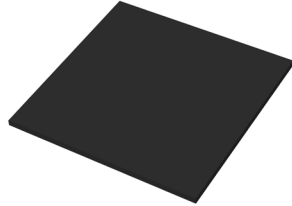
- 2.** Attach the Short Keeper to the Snap Fit Base using the M4 washers and fasteners.



- 3.** Adjust the Short Keeper so that it aligns with the webbing. Tighten in place.



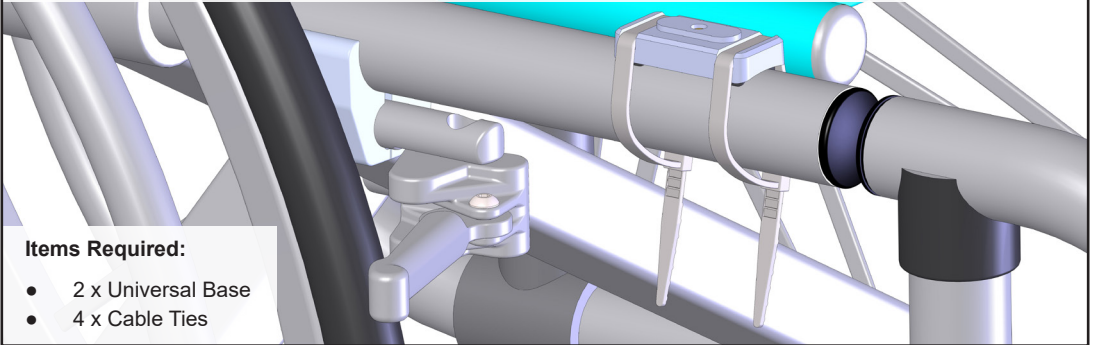
Components:

**Keepers****2 x** Short Keeper**Universal Base****2 x** Universal Base**Cable Ties****4 x** Cable Ties**Rubber Pad****2 x** Rubber Pad

The items highlighted below are required from the main fastener set.

**Fastener Set****4 x** M5 x 10mm  
Screw**2 x** M5 x 12mm  
Screw**2 x** M5 x 16mm  
Screw**2 x** M4 x 8mm  
screw**6 x** M5 Washer**2 x** M4 Washer**1 x** 3.0mm  
Allen Key**1 x** 2.5mm  
Allen Key

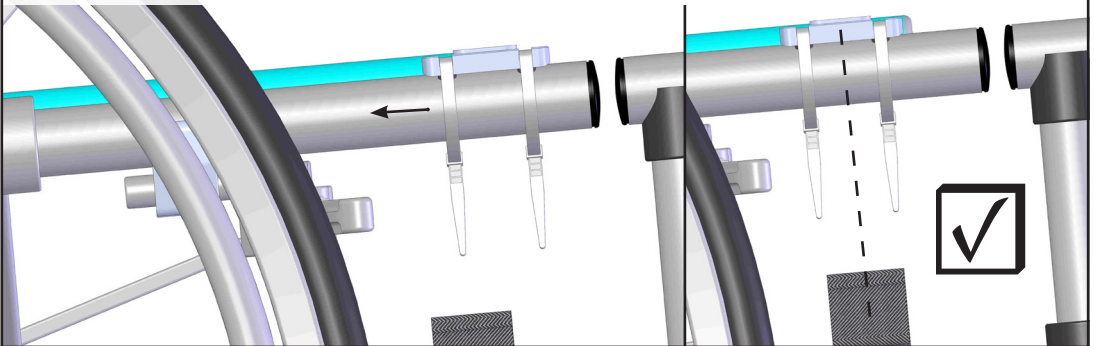
- 1.** Attach the Universal Base to the Frame Top Tube using two cable ties. Do not fully tighten the cable ties yet.



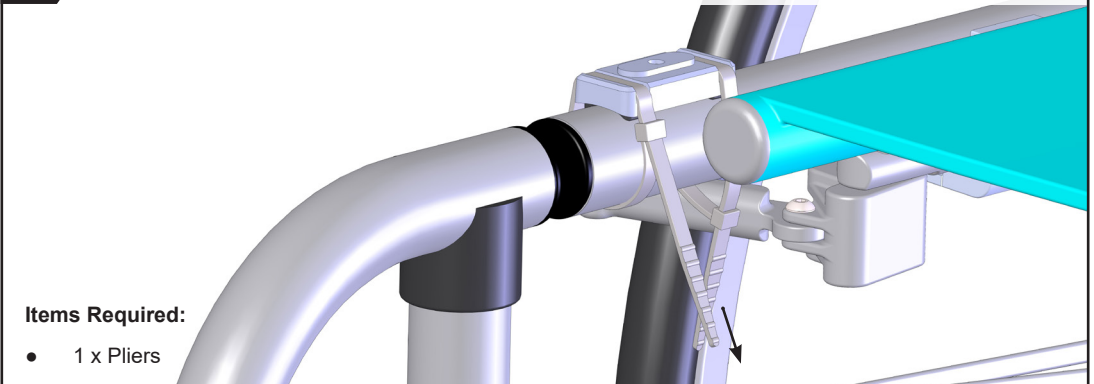
**Items Required:**

- 2 x Universal Base
- 4 x Cable Ties

- 2.** Adjust the position of the Universal Base to ensure it aligns with the Retractor webbing.



- 3.** Tighten cable ties firmly in place. Using a set of pliers can make this easier.



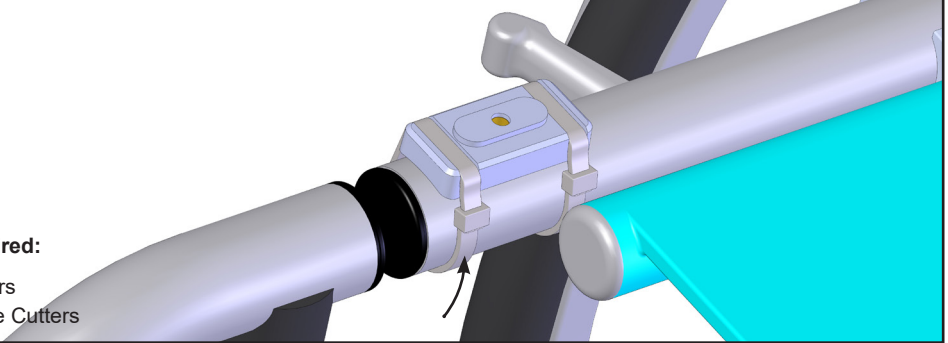
**Items Required:**

- 1 x Pliers

- 4.** Adjust cable tie ends so that they are kept clear of your seat, legs and the webbing. Trim the ends flush and **AVOID LEAVING SHARP EDGES.**

**Items Required:**

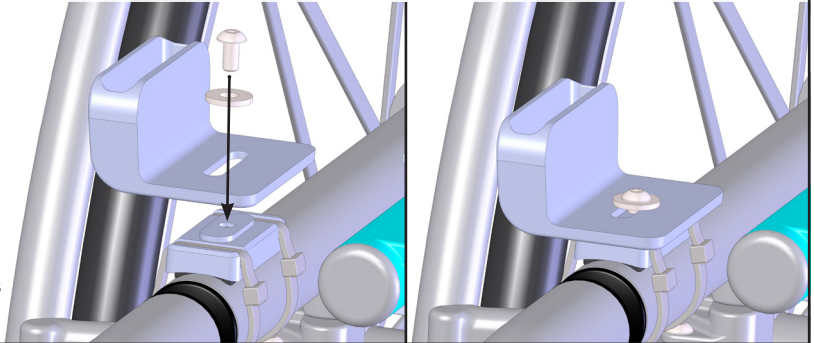
- 1 x Pliers
- 1 x Side Cutters



- 5.** Attach the Short Keeper to the Universal Base using the M4 washers and fasteners.

**Items Required:**

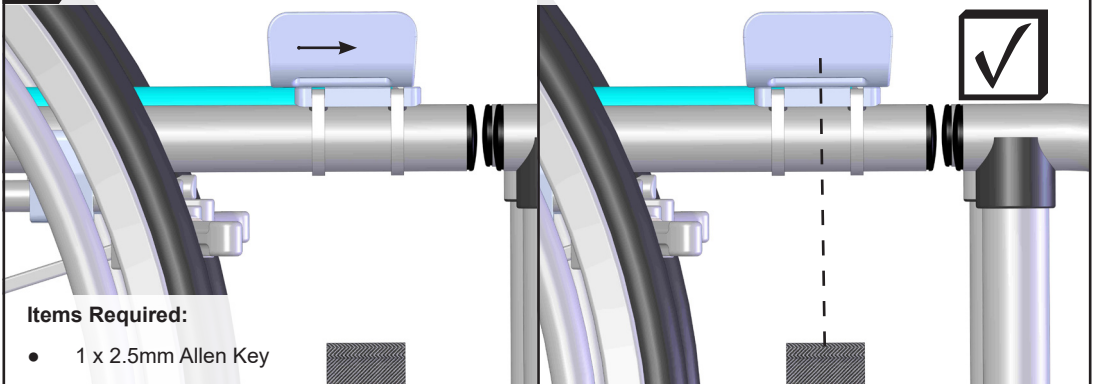
- 2 x Short Keeper
- 2 x M4 Washers
- 2 x M4 \* 8mm Screws
- 1 x 2.5mm Allen Key



- 6.** Adjust the Short Keeper so that it aligns with the webbing. Tighten in place.

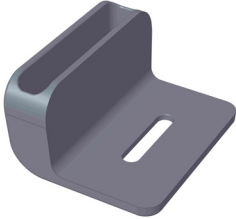
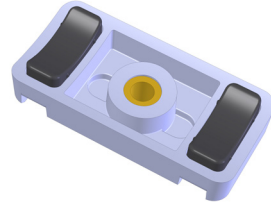
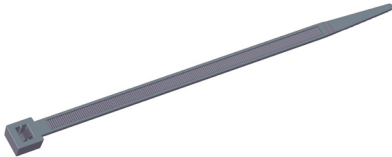
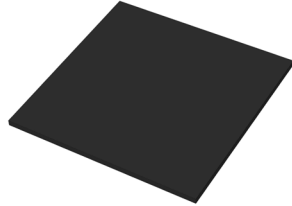
**Items Required:**

- 1 x 2.5mm Allen Key





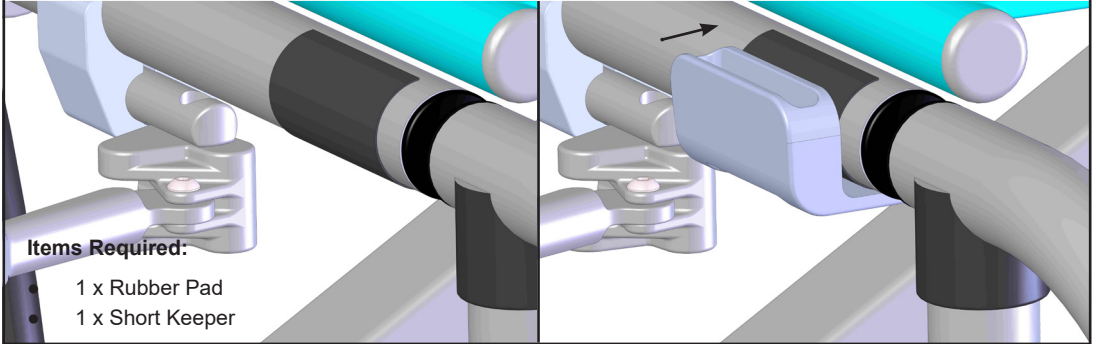
Components:

**Keepers****2 x** Short Keeper**Universal Base****2 x** Universal Base**Cable Ties****4 x** Cable Ties**Rubber Pad****2 x** Rubber Pad

The items highlighted below are required from the main fastener set.

**Fastener Set****4 x** M5 x 10mm  
Screw**2 x** M5 x 12mm  
Screw**2 x** M5 x 16mm  
Screw**2 x** M4 x 8mm  
screw**6 x** M5 Washer**2 x** M4 Washer**1 x** 3.0mm  
Allen Key**1 x** 2.5mm  
Allen Key

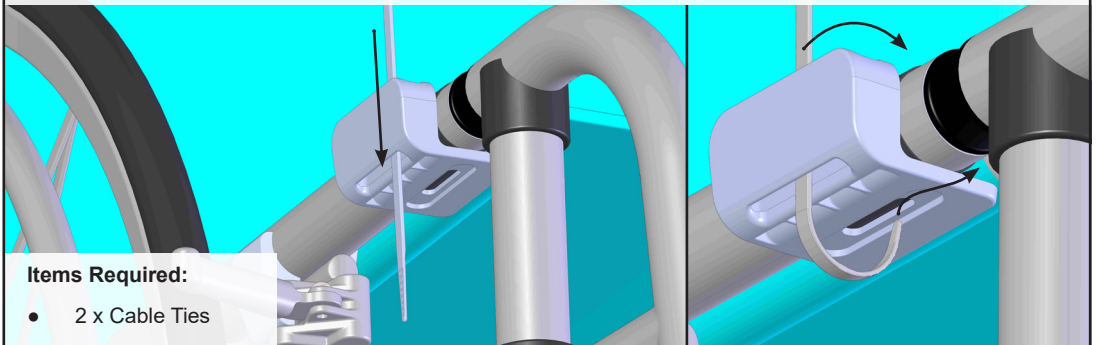
**1.** Wrap Rubber Pad around the Frame Top Tube. Hold the Short Keeper against the Rubber Pad and Frame Top Tube.



**Items Required:**

- 1 x Rubber Pad
- 1 x Short Keeper

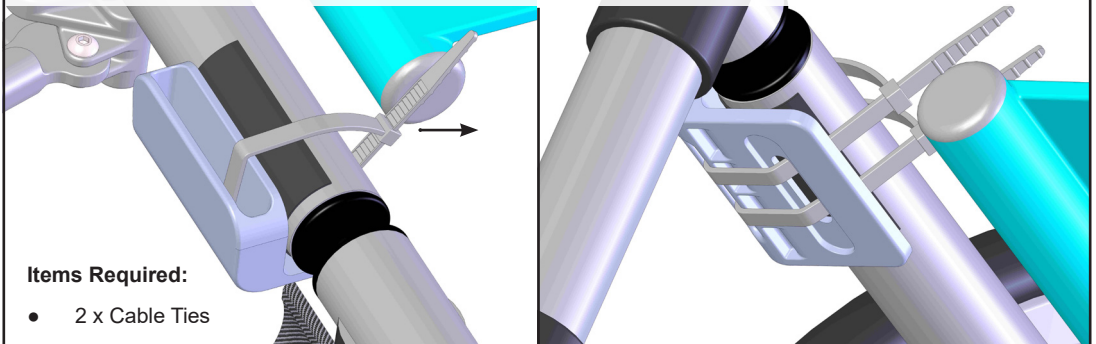
**2.** Feed the cable tie through the Buckle recess of the Short Keeper and back up through the small slot.



**Items Required:**

- 2 x Cable Ties

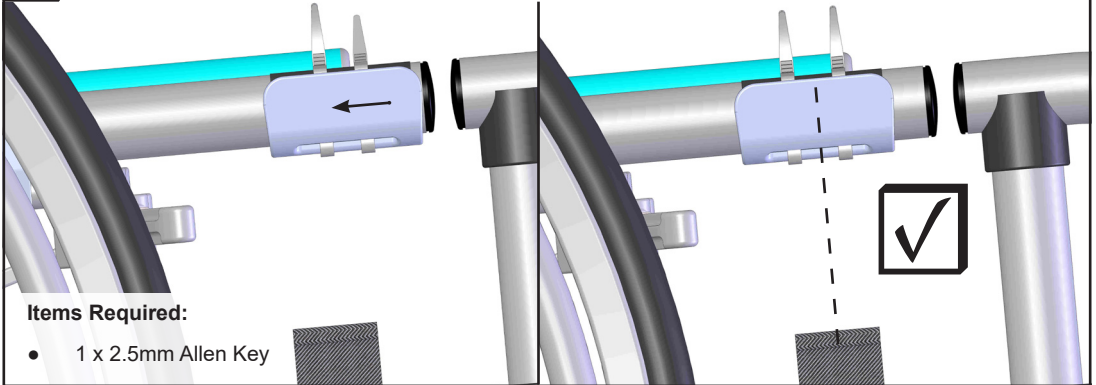
**3.** Connect the cable ties around the Frame Top Tube. Do not tighten the cable ties fully yet.



**Items Required:**

- 2 x Cable Ties

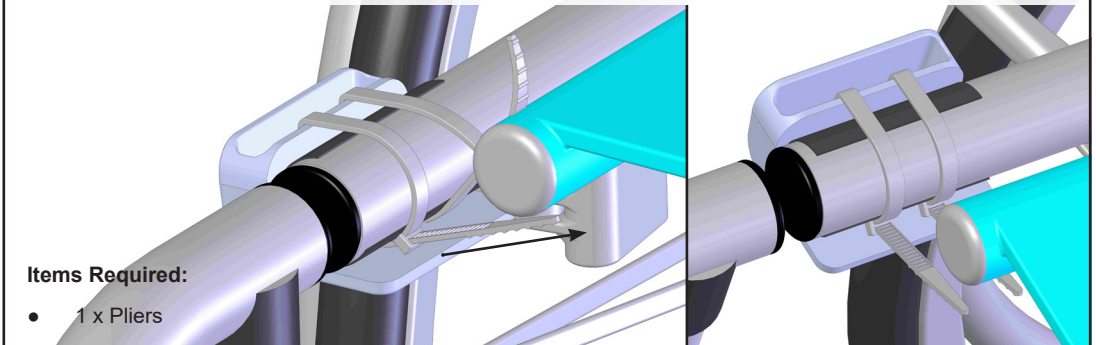
**4.** Adjust the Short Keeper so that it aligns with the webbing.



**Items Required:**

- 1 x 2.5mm Allen Key

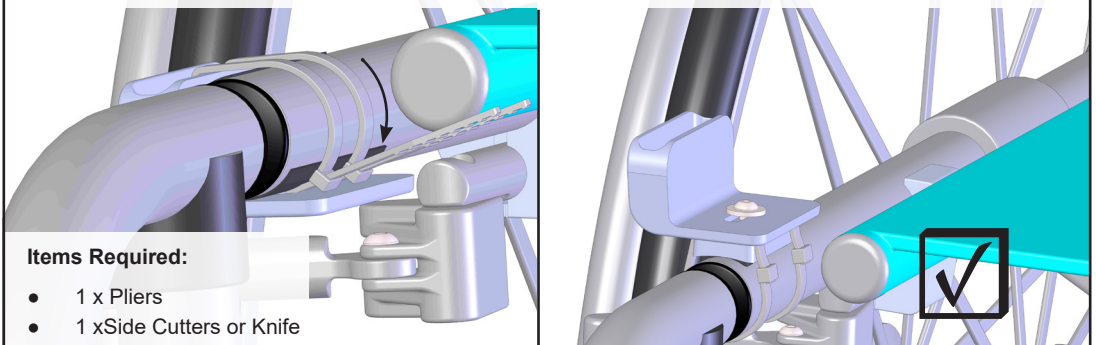
**5.** Tighten the cable ties so that the Short Keeper is held firmly in position. Using a pair of pliers to grip the cable ties will make this job easier.



**Items Required:**

- 1 x Pliers

**6.** Adjust cable tie position so that the end is not exposed when in use. Finally trim each cable tie flush. **AVOID LEAVING SHARP EDGES.**



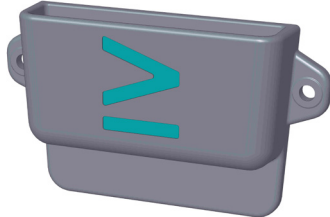
**Items Required:**

- 1 x Pliers
- 1 x Side Cutters or Knife

Components:

## Keepers

2 x Side Guard Keeper



## Webbing Loop Extension

2 x Webbing Loop Extension



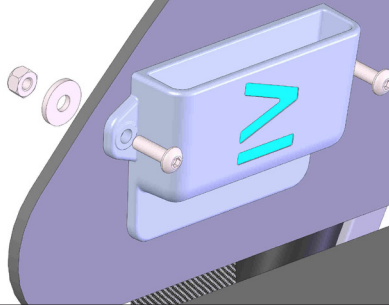
**Before you begin** - In the case that you cannot attach the Side Guard Keeper using the adhesive tape provided, we have included two fastening points. These through holes will allow you to bolt the Keeper directly to your side guard.

HOWEVER, your warranty may be voided if you choose to use this method of fixing. Please consult with your wheelchair provider for advice prior to making any alterations to your chair. Adaptdefy® will not be held liable for any voided warranties or damage should you choose to use this method. Fasteners are not included.

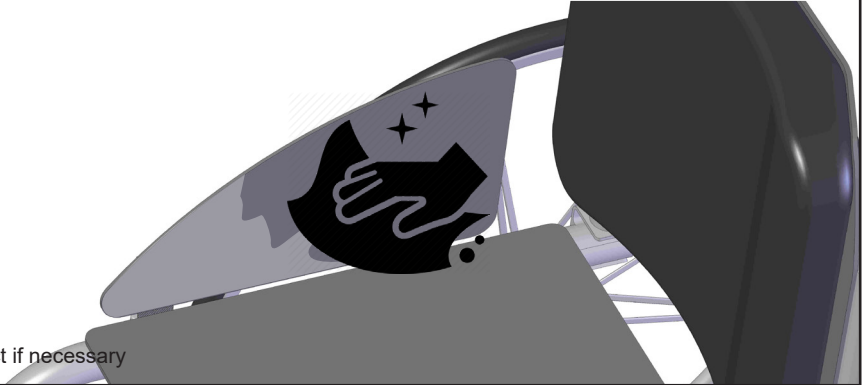
### OPTION: Attaching Side Guard Keeper using fasteners.

(Fasteners are not provided)

PLEASE CONSULT WITH YOUR WHEELCHAIR PROVIDER FIRST TO AVOID WARRANTY ISSUES.



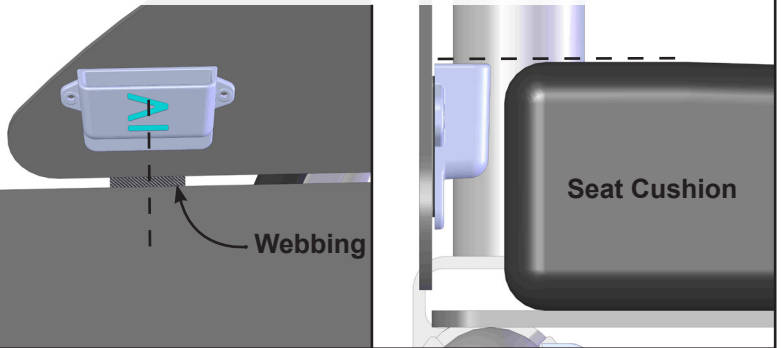
- 1.** Start by cleaning each side guard, removing any oil, dirt or dust build up.



**Items Required:**

- Cleaning product if necessary

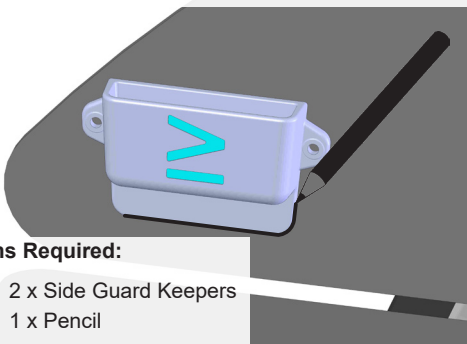
- 2.** Hold the Side Guard Keeper against the inside face of your side guard aligned with the Retractor webbing and level with the top of your cushion.



**Items Required:**

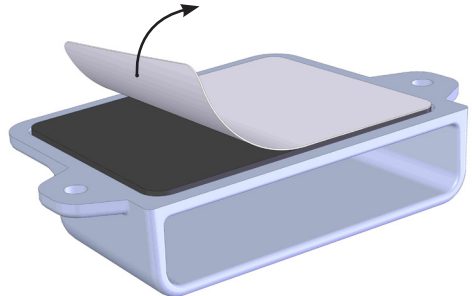
- 2 x Side Guard Keepers

- 3.** Trace around Side Guard Keeper then remove the plastic backing from the foam adhesive on the back of the Side Guard Keeper.

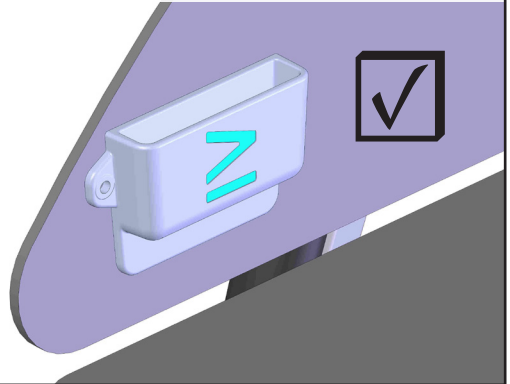
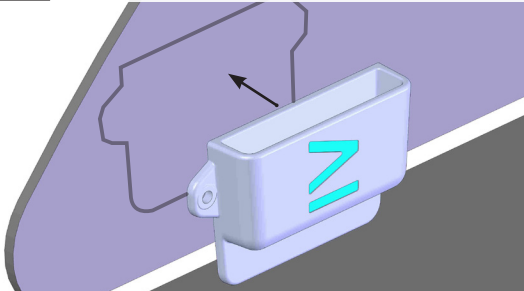


**Items Required:**

- 2 x Side Guard Keepers
- 1 x Pencil



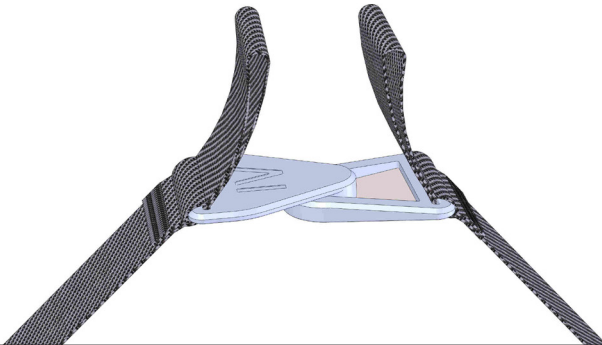
**4. Press the Side Guard Keeper and adhesive firmly against the side guard.**



**Items Required:**

- 2 x Side Guard Keepers

**5. Install Magnetic Buckles A and B. See page 50 for detailed instructions.**

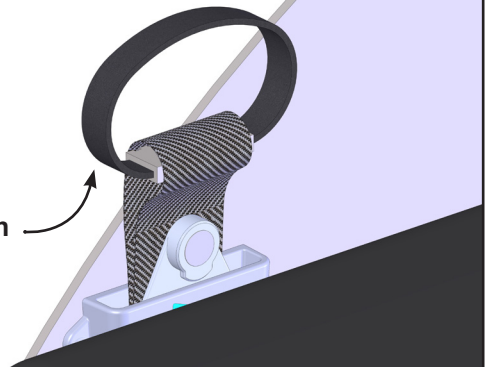


**Webbing Loop Extensions: OPTIONAL**

**When should I use Webbing Loop Extensions?**

- If the existing webbing loop is hidden between the wheelchair side guard and your thigh when seated.
- If you are having difficulty accessing and using the existing webbing loop.

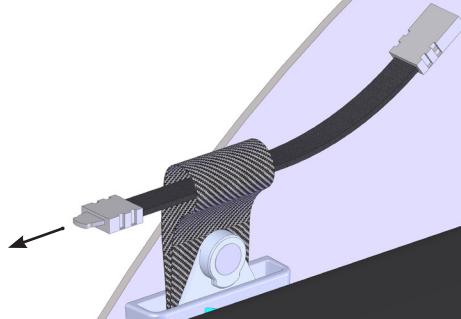
**Webbing Loop Extension**



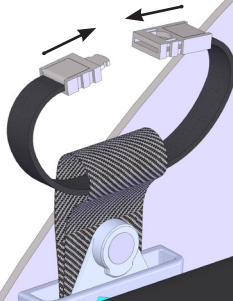
**Items Required:**

- 2 x Webbing Loop Extensions

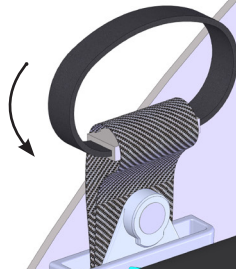
**6.** Thread the Webbing Loop Extension through the existing webbing loop.



**7.** Fasten the plastic clips together by pushing the locking tab into the receiver.



**8.** Rotate the Webbing Extension Loop so that the plastic clips are concealed.

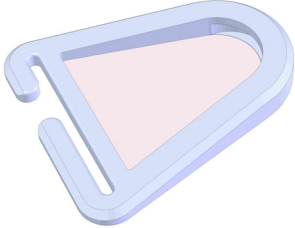




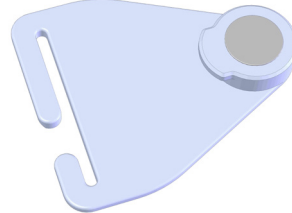
Components:

## Buckles

1 x Buckle A

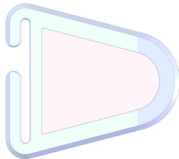


1 x Buckle B



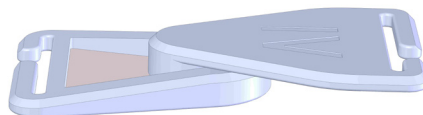
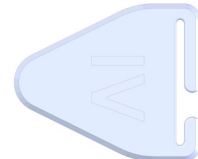
**Before you begin** - The Buckles work best with Buckle B being matched with your dominant hand. Take note of which side of the chair this will be when seated.

(Buckle A)



Dominant Hand Side

(Buckle B)



## Buckle Loop Options:

The webbing has three sewn loops. Not all loops are suitable for Buckle installation.

### 1. Large Loop

The large loop is NOT for installing the Buckle. This loop is designed so that you can thread your fingers through the loop and reduce your dependence on grip strength. This is particularly useful for those with limited hand function.

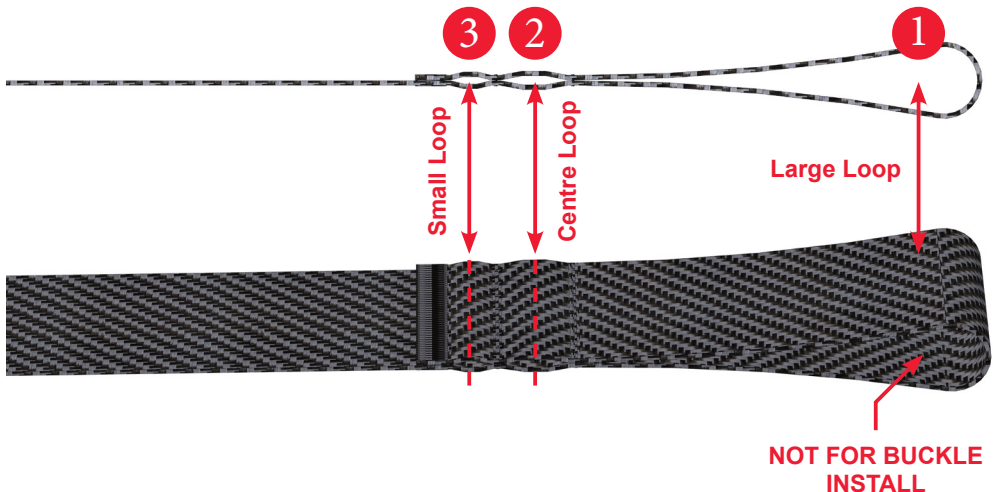
**WARNING: If you thread the Buckles onto this large loop they will eventually fall off.**

### 2. Centre Loop (Default)

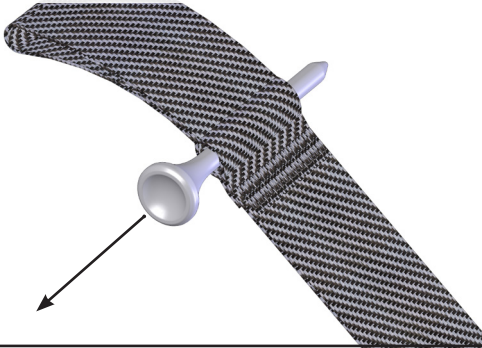
The centre loop is the default Buckle install location. This location is easy to install and will hold the Buckles comfortably in place whilst allowing the Buckles to rotate freely.

### 3. Small Loop

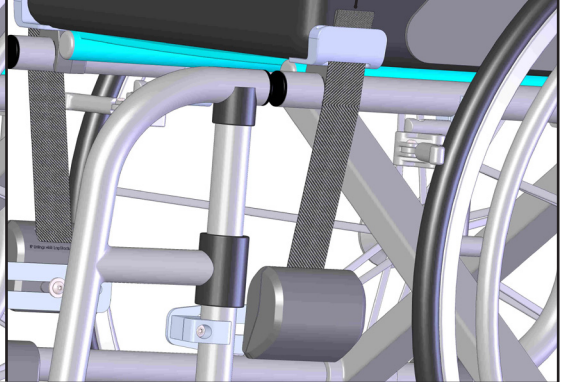
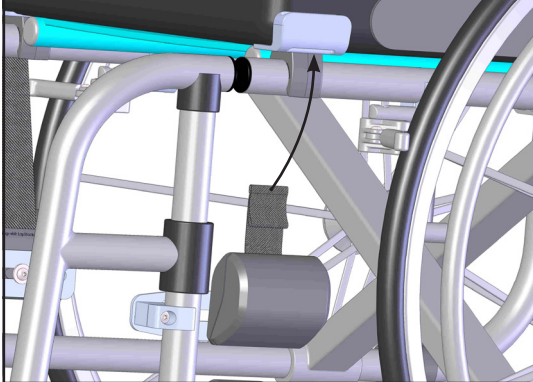
The small loop will hold the Buckles in place firmly. If you are needing the Buckles to be held more secure this is the best option. This location also raises the height of the fabric loop giving more length to hold onto.



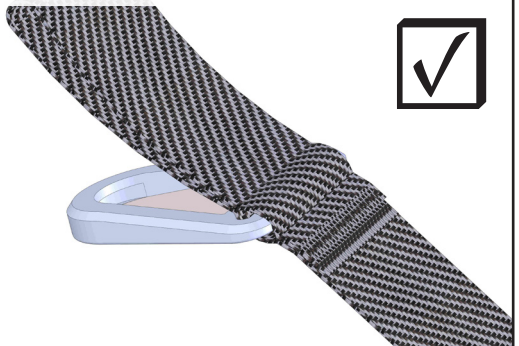
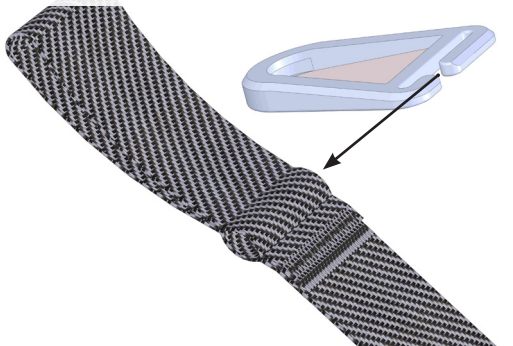
- 1.** Buckle A: Carefully remove the golf tee from the webbing. Do not let the webbing go as it can retract inside the housing.



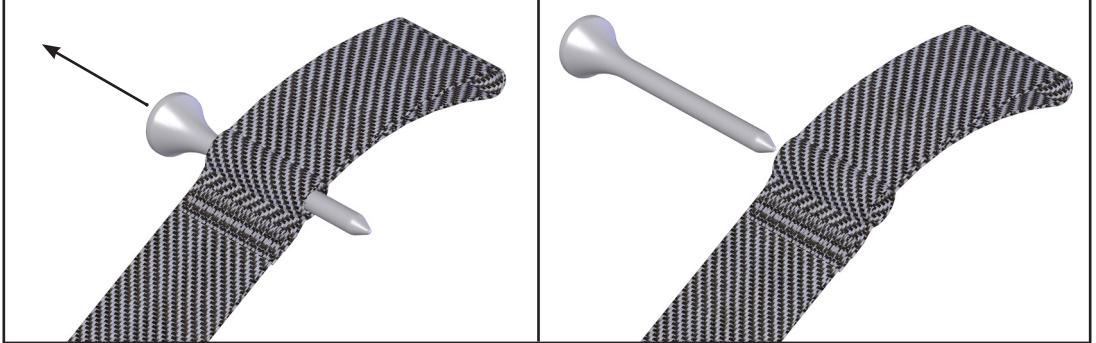
- 2.** Thread the sewn webbing loop through the Keeper.



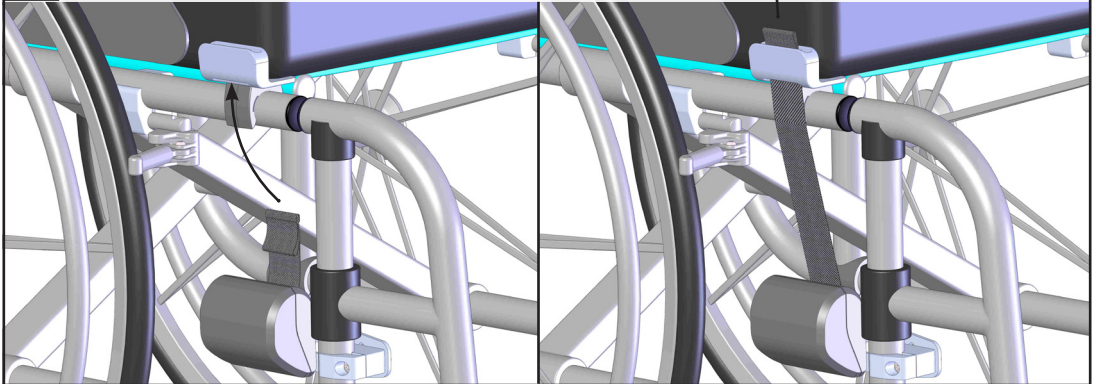
- 3.** Thread Buckle A through the centre loop. The Buckle should be fitted with the steel plate facing upwards and the fabric loop above the Buckle.



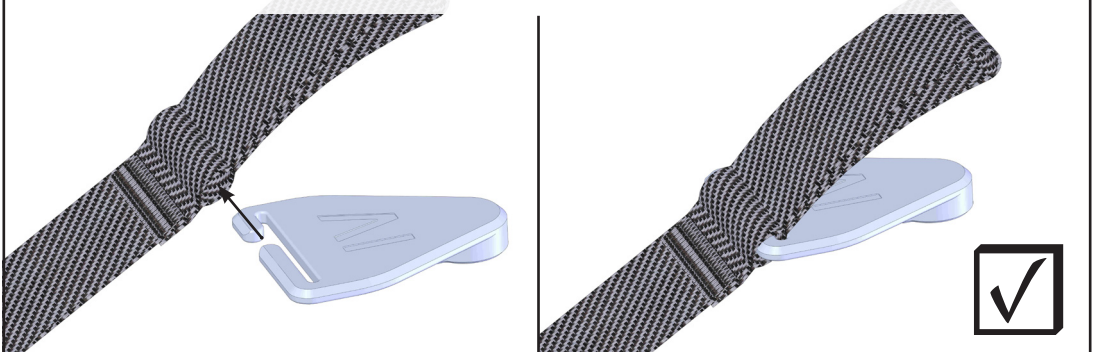
- 4.** Buckle B: Carefully remove the golf tee from the webbing. Do not let the webbing go as it can retract inside the housing.



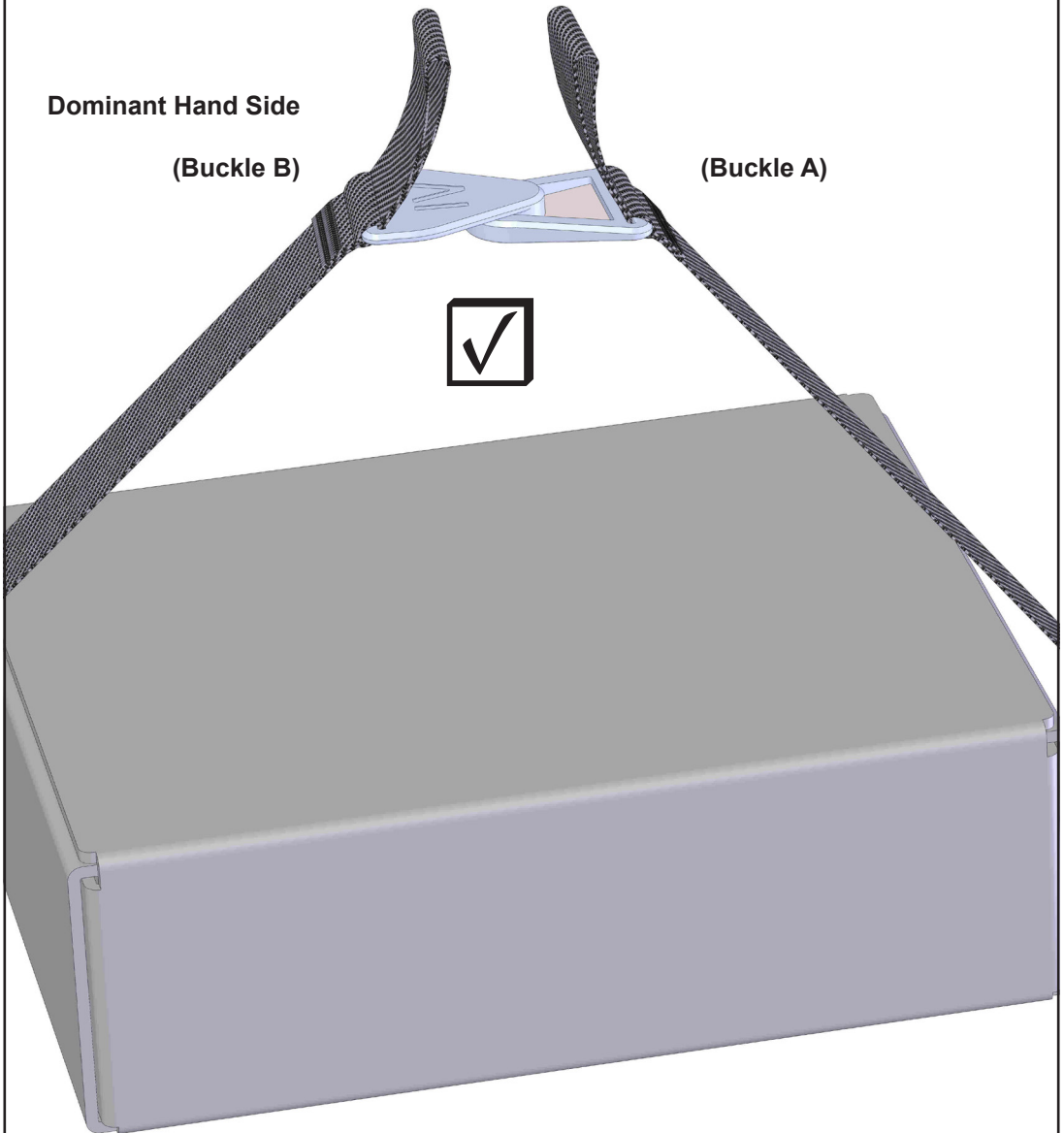
- 5.** Thread the sewn webbing loop through the Keeper. ↑



- 6.** Thread Buckle B through the centre loop. The Buckle should be fitted with the logo facing upwards and the fabric loop above the Buckle.

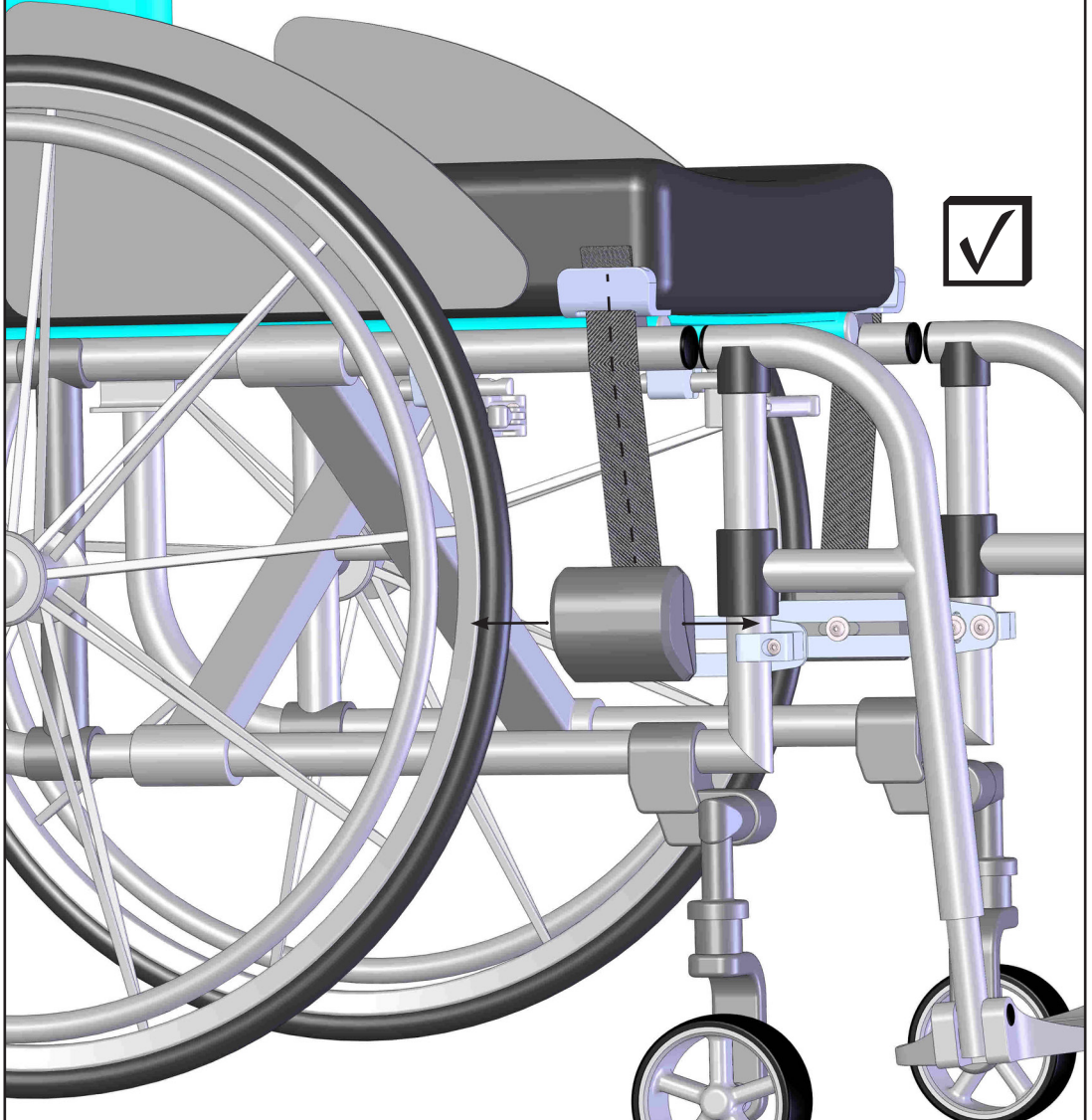


- 7.** When assembled the Buckles should lock together with the webbing loops sitting above the Buckles. The Buckles should sit directly against the object you are carrying.



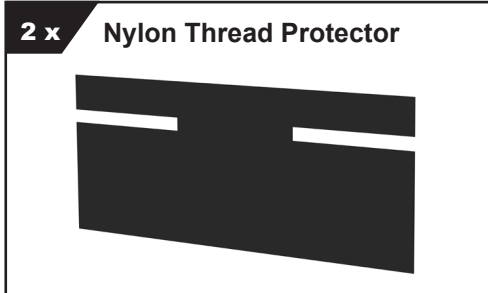


Adjust the alignment of the Retractor so that the webbing runs smoothly through the Keeper. Finally check all fasteners are done up tight. Your LapStacker® is now ready to use!

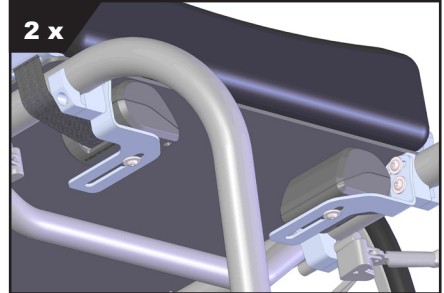


Components:

### Thread Protector



### LapStacker® Installed

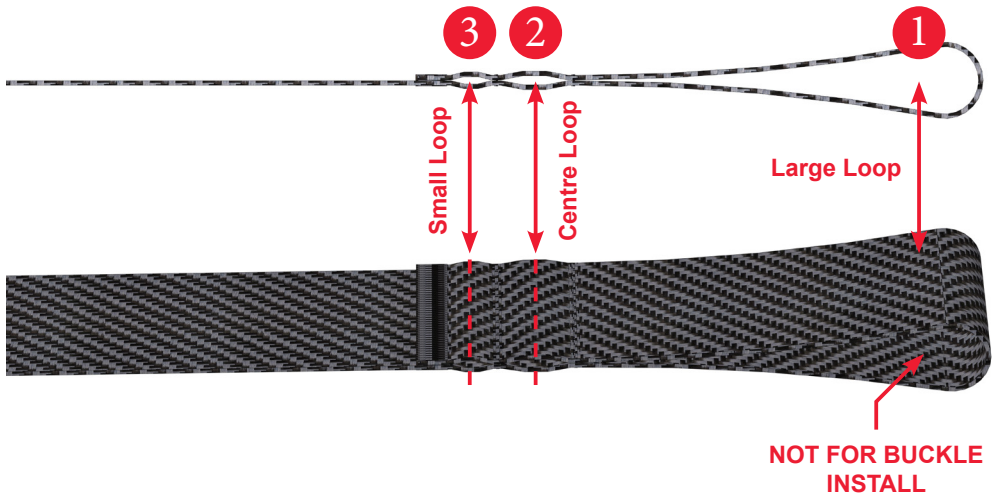


**Before you begin** - It is recommended that you install the Thread Protectors once the Magnetic Buckles have been fitted. Please see page 50 for the Magnetic Buckle installation guide. To make install easier, secure the webbing so that it cannot retract back towards the housing.

### Thread Protector Install Video

#### IMPORTANT

The Thread Protector is designed to cover the stitching when the Magnetic Buckles are fitted into the centre loop (2). If using the small loop (3) the top row of stitching will remain exposed.



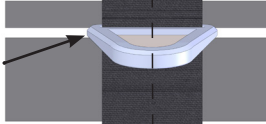


## 1. Remove backing and position Thread Protector onto the top side of webbing

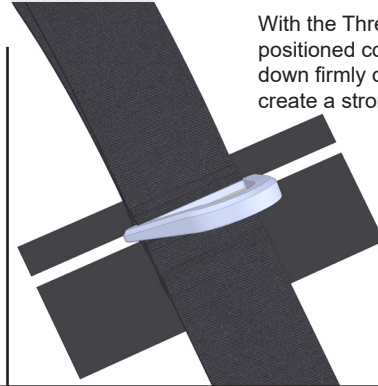
### IMPORTANT!

Centre Thread Protector with the webbing.

Ensure the partition in the Thread Protector fits either side of the Magnetic Buckle.



With the Thread Protector positioned correctly, press down firmly on the webbing to create a strong bond.



### Items Required:

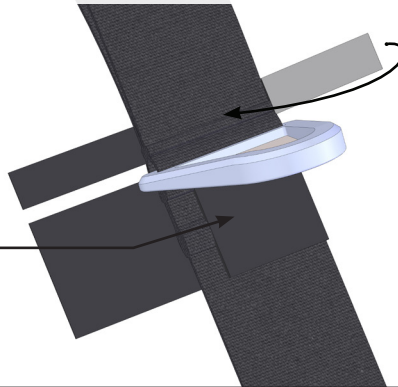
- 2 x Thread Protector
- 2 x LapStacker Installed

## 2. Fold both tabs from the right side around the the webbing.

### IMPORTANT!

Keep the Nylon Thread Protector taut to ensure the adhesive is tight around the webbing with no ripples.

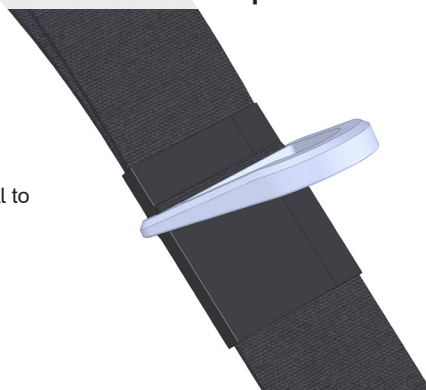
Press firmly on the Thread Protector so that it bonds well with the webbing.

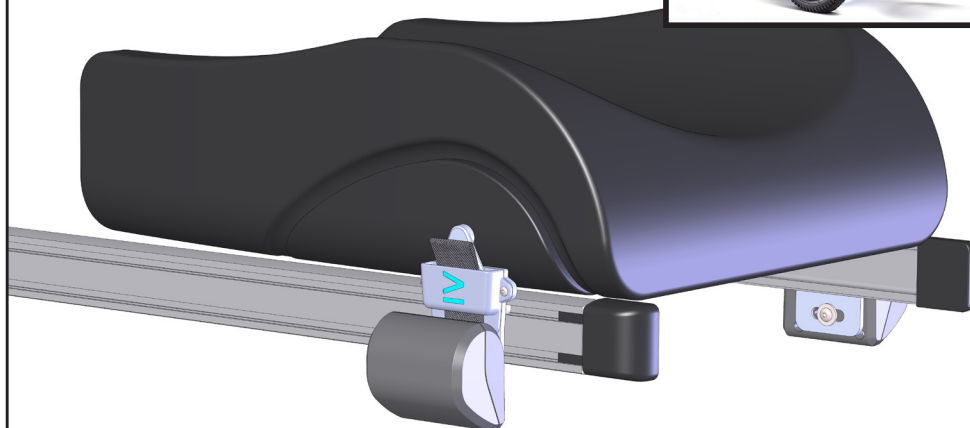


## 3. Fold remaining two tabs over to complete the installation.

### IMPORTANT!

Press firmly on the Thread Protector so that it bonds well to the webbing.

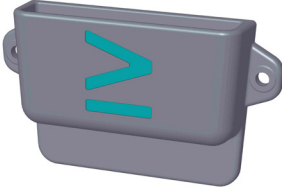


**IMPORTANT!**

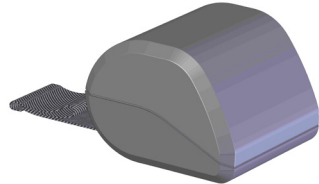
The Compact 1 LapStacker set is suitable for all Permobil power chairs. If you own a different brand of power chair you will need to contact Adaptdefy to work out if this will fit your chair prior to purchasing.

- For Buckle Installation please see page 50.
- For Trouble Shooting please see page 65.

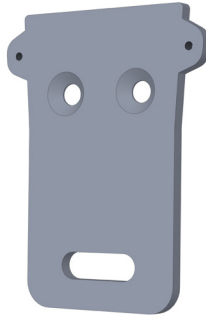
## Keepers

**2 x** Side Guard Keeper

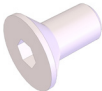
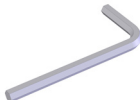
## Retractor Units

**2 x** Retractor Unit

## Brackets

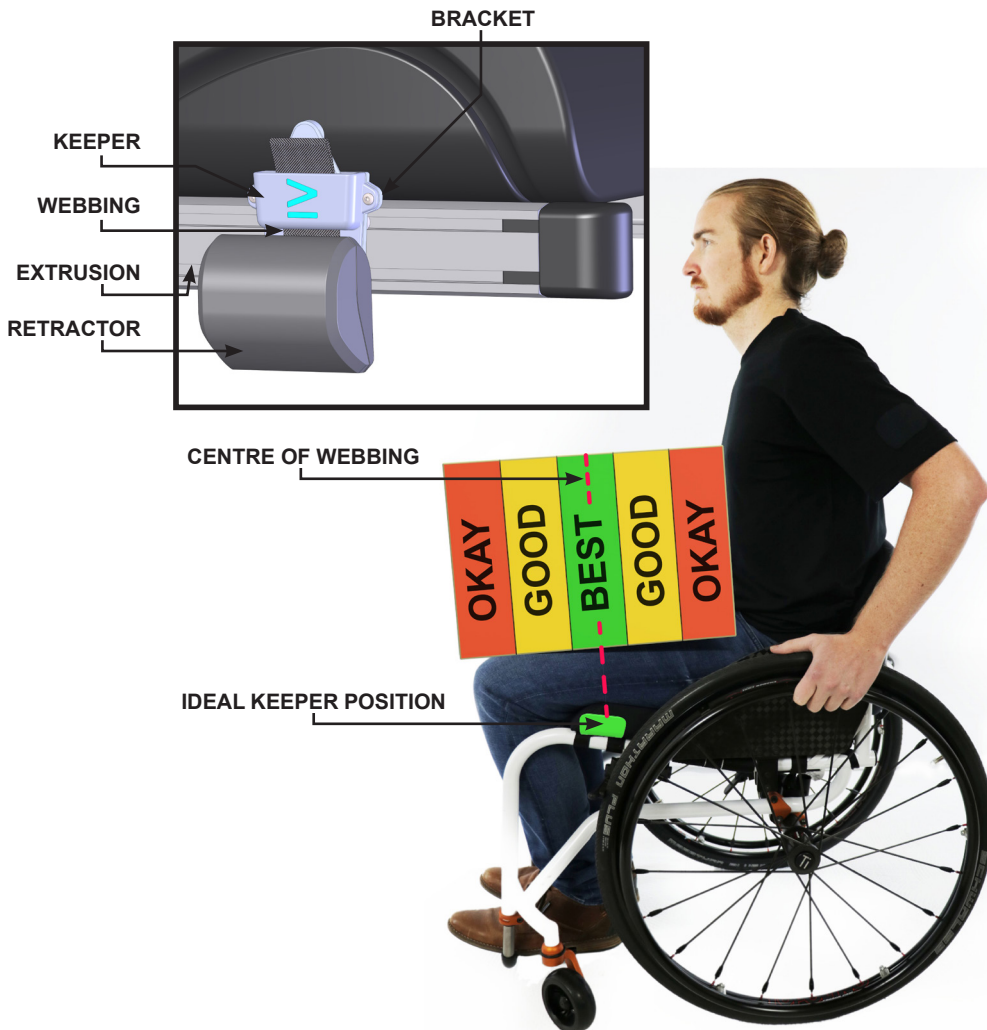
**2 x** Compact 1 Bracket

## Fastener Set

**2 x** M6 x 12mm Screw**2 x** M6 Slot Nut**2 x** M5 x 12mm Screw**2 x** M3 x 6mm screw**6 x** M5 Washer**1 x** 4.0mm Allen Key**1 x** 3.0mm Allen Key**1 x** 2.0mm Allen Key

# 1. Determine Approximate Keeper Location

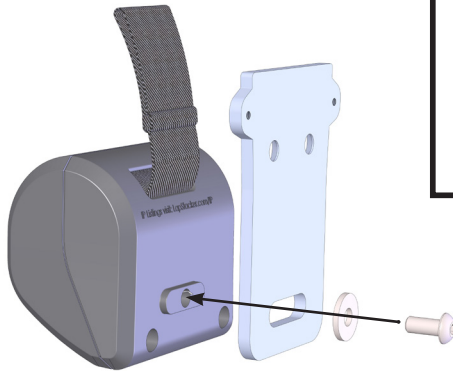
- Ideally, the Keepers are positioned central to where you will carry items, but the LapStacker® will still work if forward or back of this.
- While in your power wheelchair look down at your side and imagine using the LapStacker® to secure an item. Find the midpoint for this object and take a note of this position on the extrusion at the side of your seat.



## 2. Fasten Retractor to the Bracket.

### Items Required:

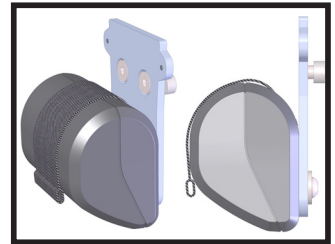
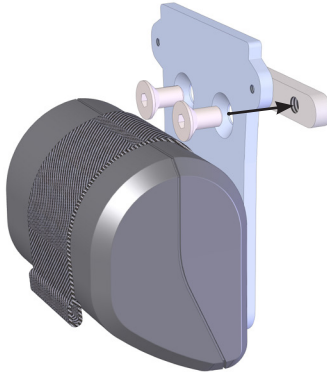
- 2 x Retractor
- 2 x Compact 1 Bracket
- 2 x M5 washers
- 2 x M5 \* 12mm Screws
- 3.0mm Allen Key



## 3. Fasten M6 Slot Nut to the Bracket loosely.

### Items Required:

- 2 x Bracket Assembly
- 2 x M6 \* 12mm Screws
- 2 x M6 Slot Nut
- 4.0mm Allen Key



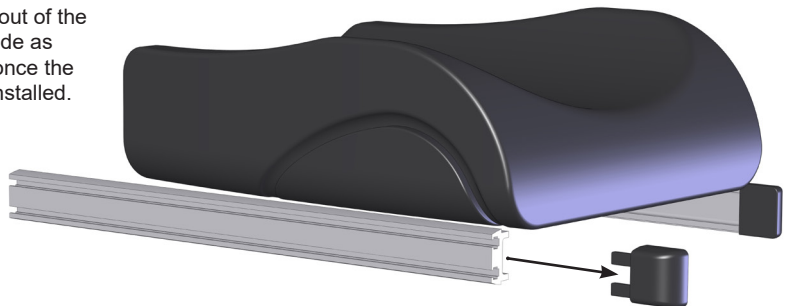
### IMPORTANT!

Do not fully tighten the screws as this will prevent being able to slide the Slot Nut into the extrusion.

## 4. Remove seat extrusion end cap.

### TIP:

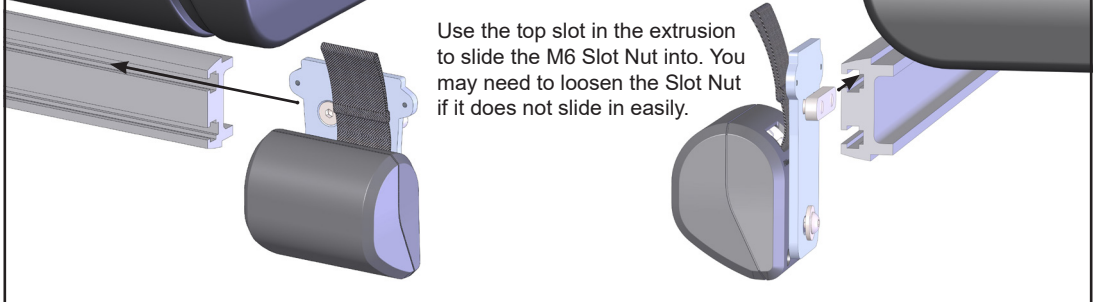
Caps should simply pull out of the extrusion. Place to the side as these will be reinserted once the LapStacker® has been installed.



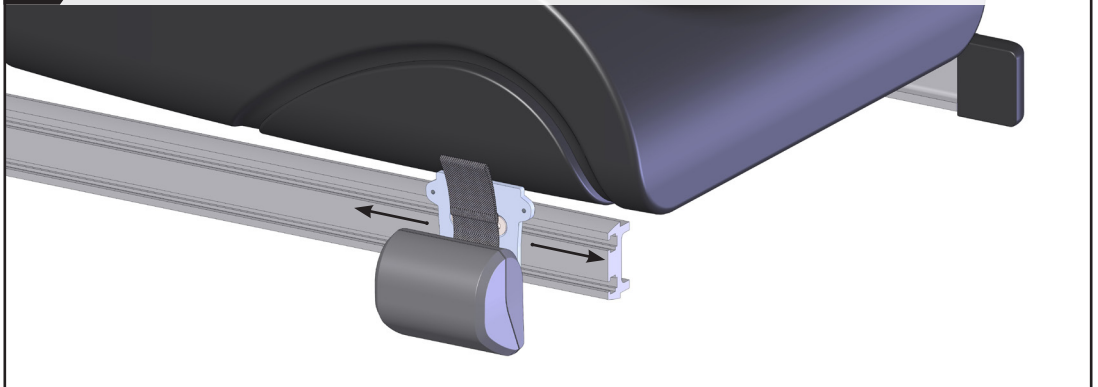
## 5. Slide Bracket Assembly onto the seat extrusion.

### IMPORTANT!

Use the top slot in the extrusion to slide the M6 Slot Nut into. You may need to loosen the Slot Nut if it does not slide in easily.



## 6. Align centre of the webbing with the ideal Keeper position.



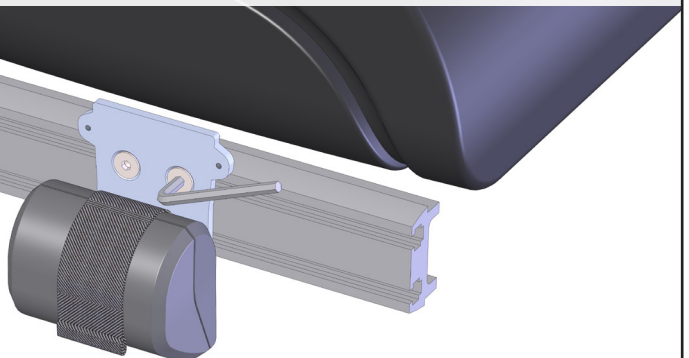
## 7. Tighten the assembly to the extrusion.

### WARNING!

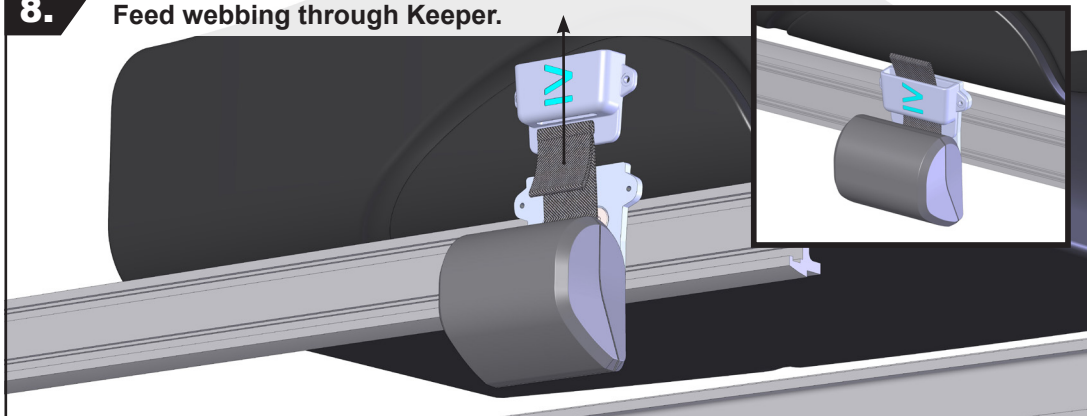
Avoid over tightening the fasteners as this will strip the thread.

### Items Required:

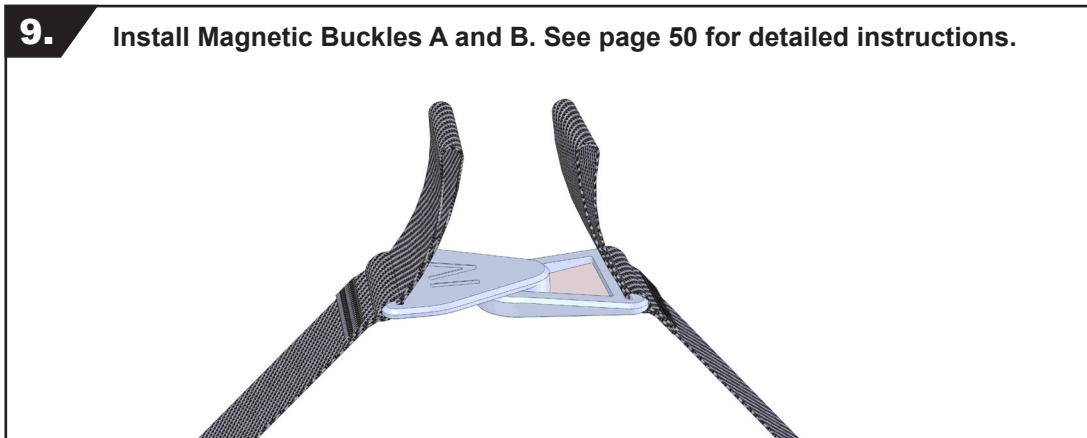
- 2 x Bracket Assembly
- 4.0mm Allen Key



**8.** Feed webbing through Keeper.



**9.** Install Magnetic Buckles A and B. See page 50 for detailed instructions.



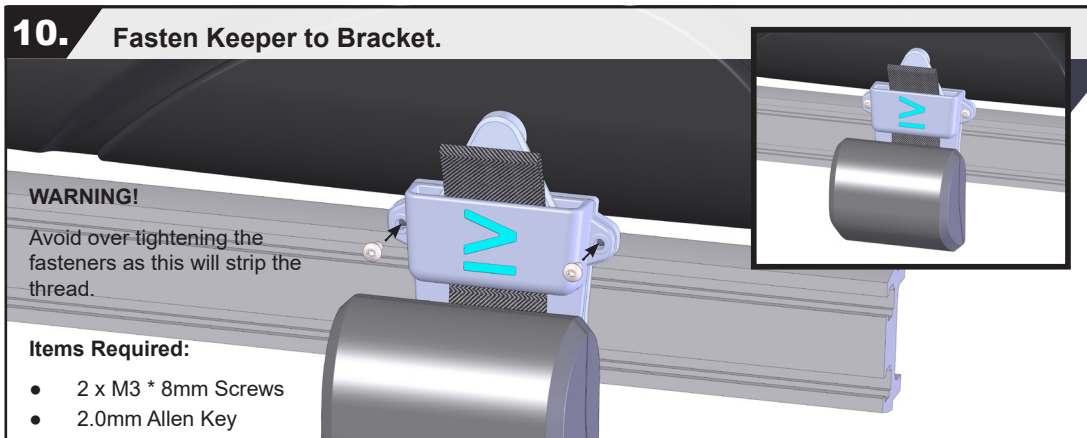
**10.** Fasten Keeper to Bracket.

**WARNING!**

Avoid over-tightening the fasteners as this will strip the thread.

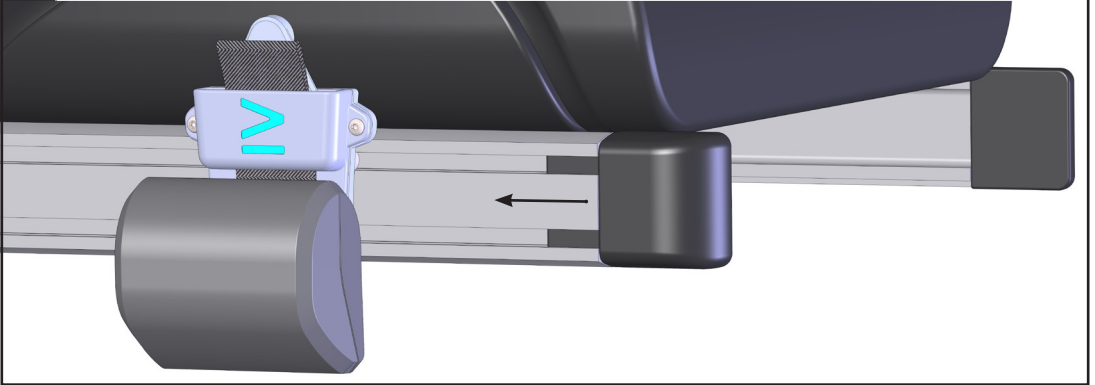
**Items Required:**

- 2 x M3 \* 8mm Screws
- 2.0mm Allen Key

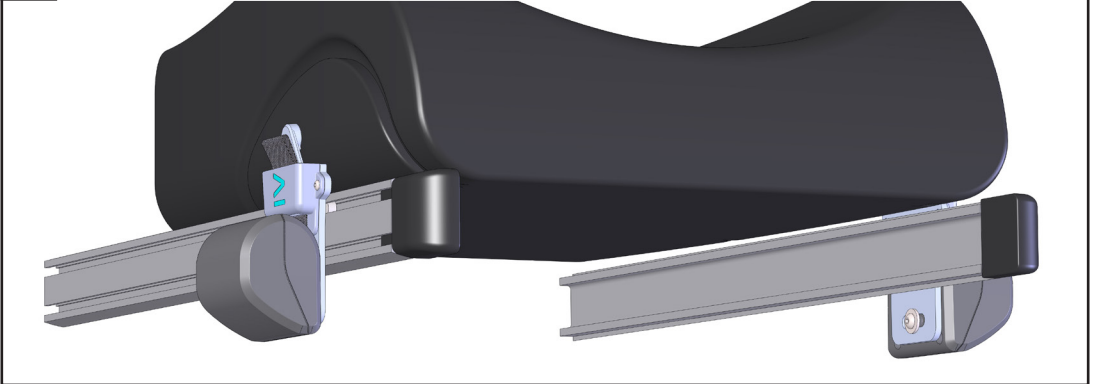




**11.** Reinsert extrusion end cap.



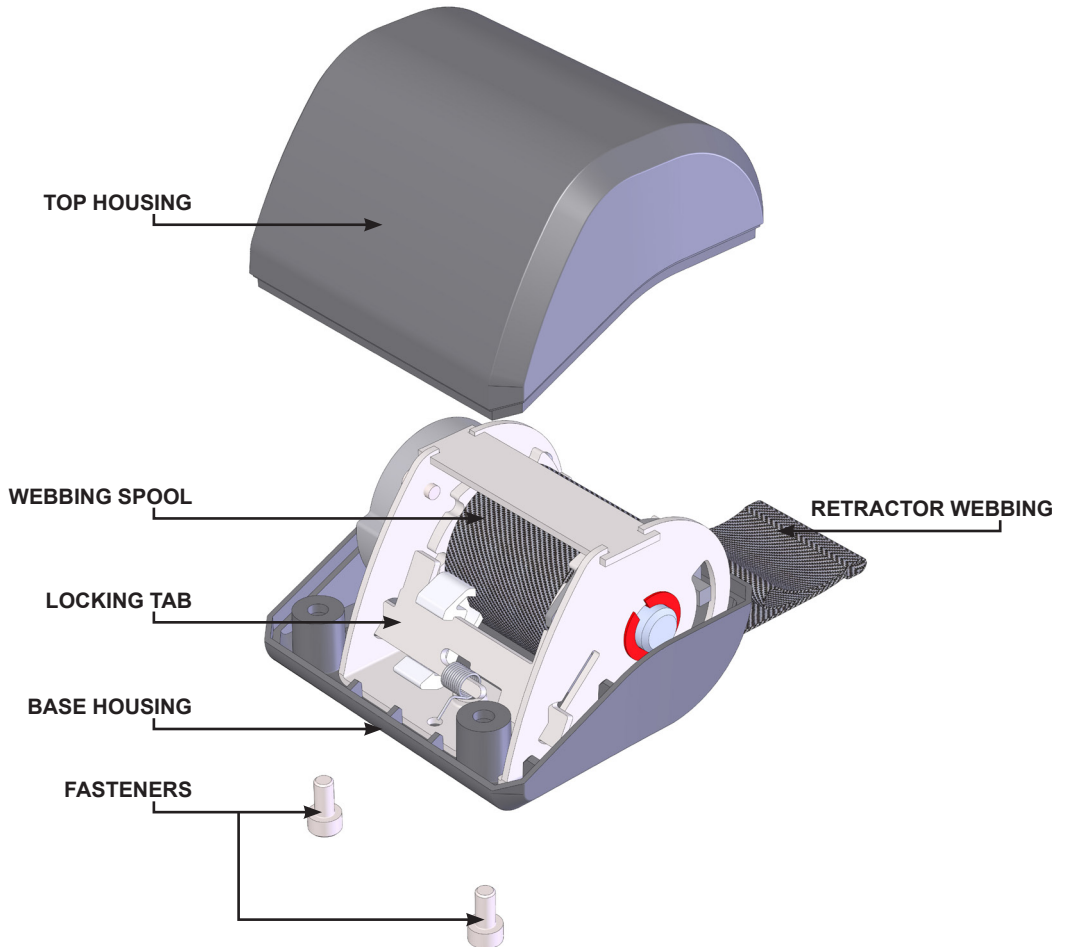
**12.** Repeat install process for the opposite side.



**Assembly is now completed! Enjoy using your LapStacker®!**

**Retractor Unit Assembly and Main Components.**

- Please reference this illustration when using the trouble shooting guide on the following page.



**NEED HELP?**

If your LapStacker® problem is not listed below OR you are having trouble fixing the issue and need help, please contact Adaptdefy® directly and our staff will work with you to get your LapStacker® working correctly.

**1. Webbing folds over itself and jams the Retractor Unit**

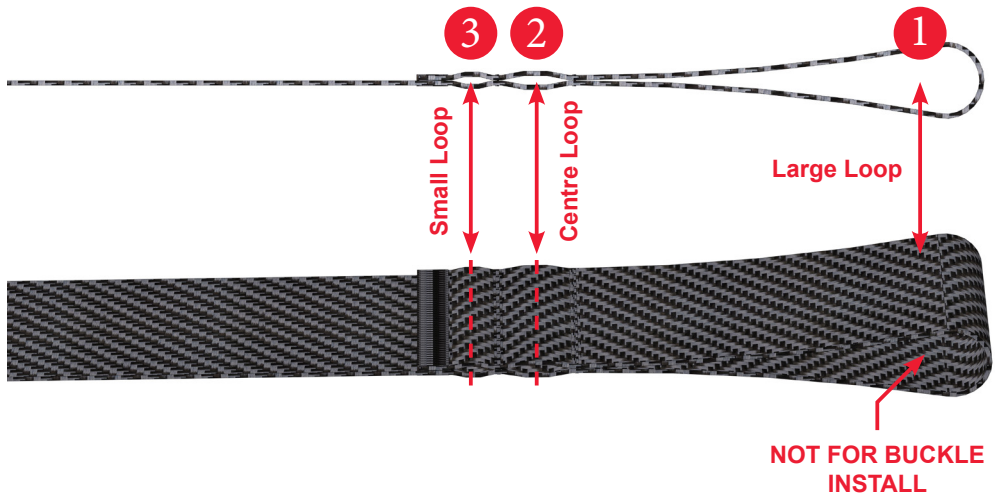
- I. Remove the Retractor Unit from the wheelchair by unscrewing it from the Bracket using the 3mm Allen Key supplied.
- II. Carefully undo the two fasteners holding the Retractor housings together.
- III. Remove the Top Housing to reveal the webbing spool.
- IV. Locate the Locking Tab and pull this back to release the lock and allow the spool to turn freely.
- V. Pull on the end of the webbing until the folded section is revealed and the fold is removed.
- VI. Release the Locking Tab.
- VII. Carefully let the webbing retract back onto the spool. Make sure the webbing remains flat and level with the Retractor Unit to avoid it folding back onto itself.
- VIII. Fasten the Top Housing back in place and reinstall on your chair.

**2. Webbing retracts completely inside the Retractor Housing**

- I. Remove the Retractor Unit from the wheelchair by unscrewing it from the Bracket.
- II. Using the 3mm Allen Key supplied, carefully undo the two fasteners holding the Retractor enclosure together.
- III. Remove the Top Housing to reveal the webbing spool.
- IV. Locate the end of the webbing and pull it through the slot in the Base Housing.
- V. Attach the Buckle or insert the Golf Tee to prevent the webbing retracting.
- VI. Fasten the Top Housing back in place and reinstall on your chair.

### 3. Buckles come off of the webbing

- I. If the webbing has retracted into the housing as a result of the Buckles coming off, please view section 2 of the trouble shooting guide (page 66).
- II. With the webbing outside of the housing, feed the webbing loop back through the Keeper slot.
- III. Attach the Buckle using the central loop (2) OR the smallest loop (3) adjacent to the end of the sewn section (see figure below). **DO NOT** use the large finger loop.



- IV. For full instructions on Buckle installation please see page 50.