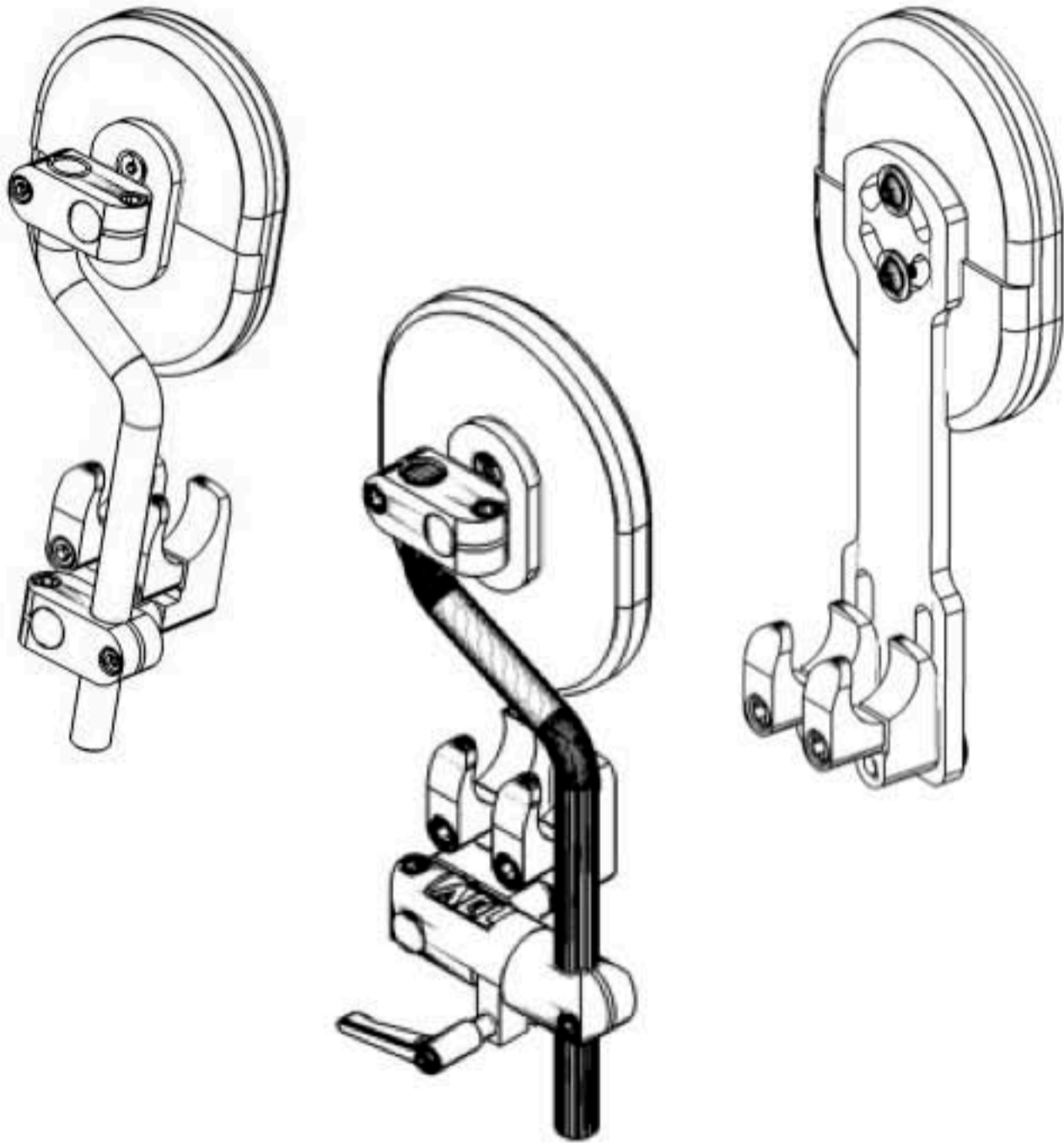

POSAInc® and Basic Knee Adductors

Installation and Adjustment Manual



**Transportation:**

This device is not intended to take the place of or considered to be a substitute for other supports required for transportation.

Limitations on use:

The product is compatible with a wide range of wheelchair systems. AEL will be glad to advise on appropriate usage.

This product is manufactured to comply with the 'Medical Device Directive'

No specific maintenance is required. However, all fasteners should be routinely checked for specified tension and basic cleaning will maintain good hygiene.

We reserve the right to continue to provide state-of-the art products. Therefore, specifications may be changed without prior notice. Adaptive Engineering Lab, Inc shall not be responsible or liable for misapplication or misuse of our products. We recommend experienced professionals be consulted in selecting and applying our products.

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Form AR-026 Rev. 5

INTRODUCTION**POSAinc® and Basic Knee Adductor**

The POSAinc® and Basic Knee Adductors are designed to position the knees out of abduction and into better alignment. AEL offers one of the widest range of knee positioning supports to accommodate a variety of users and chair configurations. We are committed to providing the very best service and will, where deemed necessary by you, provide additional training in the assembly of the knee adductors. These devices are designed for positioning and this should be undertaken by suitably qualified and competent persons, including rehabilitation engineers and occupational therapists.

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Tools Required: 1/8" (3mm) and 5/16" (4mm) Allen Keys

**All screws to be tightened to 20in-lb (2.3 N)*

1.1 PRODUCT OVERVIEW

POSAinc 360™ Swing-Away Knee Adductor

Figure 1.1 illustrates the main components of a right side POSAinc 360 Swing-Away Knee Adductor coupled with a wheelchair tube clamp. Two different size chair clamps are currently available to secure a knee adductor to a wheelchair with either 7/8" or 1" frame tubes. Mounting hardware is available to mount the POSAinc 360 Swing-Away Knee Adductor to a chair equipped with a track system. Replacement adductor pads are also available for purchase.

***Note: The POSAinc 360 Swing-Away Knee Adductor is offered specifically as a "right-" and "left-" side device, the installation technician can option to mount a right side device onto the left side of the wheelchair and a left side assembly on the right. See Figure 1.6 for an illustration displaying this mounting option. The installation technician must ensure the release knob is facing away from the chair. Throughout the rest of this instruction manual the illustrations will depict a right side device mounted on the right side of a wheelchair.

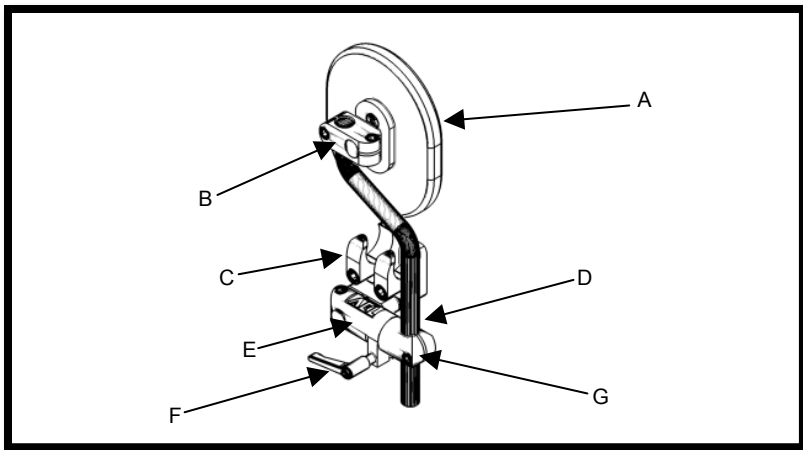


Figure 1.1

Parts List and Function

- A. **Adductor Pad:** Provides a comfortable support for the end user's knee. Pads are available in three sizes and with an upgrade option for additional pressure relief.
- B. **Pad Clamp:** Secures the pad in a fixed position; loosen to adjust pad angle.
- C. **Wheelchair Tube Clamp:** Mounts the device directly to the wheelchair's hangers or seat rails.
- D. **Offset Post:** Provides anterior and lateral adjustment. Available in Standard (7") and Extended (10") lengths.
- E. **POSAinc 360 Swing-Away Coupling, Fixed Clamp:** Keeps the coupling device firmly attached to the tube clamp while the swing away mechanism is locked and released.
- F. **Release Knob:** One turn of the knob counter clockwise releases the rotation clamp thus allowing the adductor pad to swing out of the way during client transfers.
- G. **POSAinc 360 Swing-Away Coupling, Rotation Clamp:** Secures the offset post. Loosen fastener to adjust pad height. Rotates on a pivot bar (inside the device) to allow the adductor to be released, while maintaining attachment to the chair.

1.2 MOUNTING INSTRUCTIONS

POSAlinc 360™ Swing-Away Knee Adductor

The POSAlinc 360 Swing-Away Knee Adductor can mount directly to a wheelchair's frame tube and to a chair equipped with a track system. Tube clamps can be positioned anywhere on a wheelchair's frame tube: horizontally, vertically and even on an elbow section. Figure 1.2 shows how to mount the tube clamp while Figure 1.3 shows the mounting procedure on a track system. Figure 1.4 shows how to mount the rest of the device once the clamp device is in place.

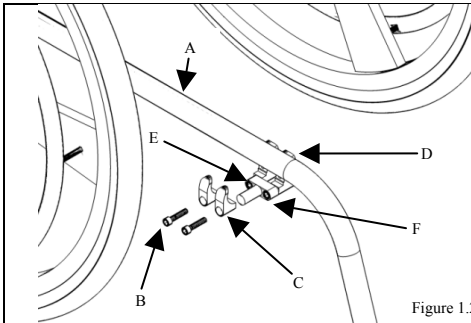


Figure 1.2

Figure 1.2 - Mounting to a Chair's Frame Tube

1. Determine the desired location for the device on the wheelchair's frame tube (A). The clamp will come assembled; to mount, loosen and remove the 1/20 fasteners (E) that attach the top clamps (C) to the lower clamps (D).
2. Loosen (don't remove) the 1/20 fasteners (E) that secure the lower clamps to the device mounting post (F). This will aid in positioning the clamp on the wheelchair's frame tube (A).
3. Position the bottom clamp assembly on the chair's tube at the desired mounting location. The mounting clamp can be positioned anywhere on the wheelchair's frame tube (A).
4. Re-assemble the small clamps (C) to the lower clamps (D), tighten all fasteners. The clamp mounting hardware is now affixed to the chair.

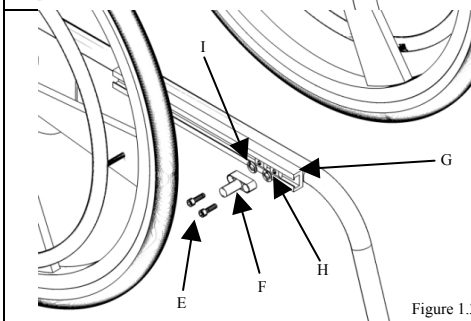


Figure 1.3

Figure 1.3 - Mounting to a Chair w/ Track System

1. Determine the desired location for the device on the wheelchair's track system (G). Track hardware will come assembled; to mount, loosen and remove the 1/20 fasteners (E) that attach the device mounting post (F) to the track nuts (H).
2. Slide the track nuts (H) into the track system (G). Position the track nuts (H).
3. Re-assemble the track system mounting device. Make sure that the washers (I) are between the track system (G) and the device mounting post (F).
4. Tighten all fasteners.

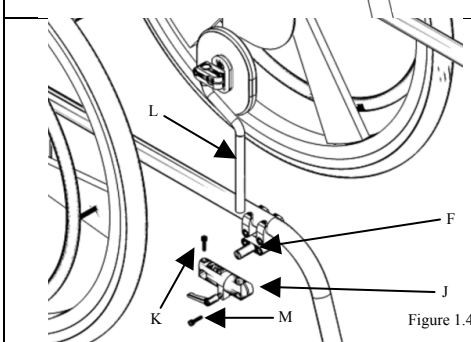


Figure 1.4

Figure 1.4 - Mounting the Remaining Device Components

1. Remaining device components secure to both mounting devices in the same fashion (illustration shows mounting to a tube clamp device).
2. The POSAlinc 360 Swing Away Coupling (J) should be mounted first. Loosen fastener (K) to free the fixed clamp. Slide the bore hole on the fixed clamp over device mounting post (F). Position the device and re-tighten fastener (K) to secure the coupling.
3. Next, the pad assembly (L) is mounted. Loosen fastener (M) to free the rotation clamp. Slide the post from the pad assembly (L) into the clamping hole on the rotation clamp. Position pad assembly and re-tighten fastener (M). The POSAlinc 360 Swing-Away Knee Adductor is now secured to the chair and ready for use.

POSAlinc 360™ Swing-Away Knee Adductor

The figures below show a POSAlinc 360 Swing-Away Knee Adductor correctly tube mounted to a wheelchair. Figure 1.5 shows a right side assembly mounted to the right side of a chair, while Figure 1.6 shows the option of mounting a right side assembly to the left side of the chair.

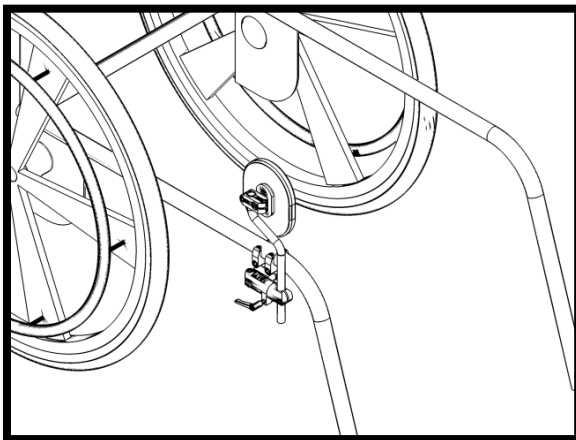


Figure 1.5

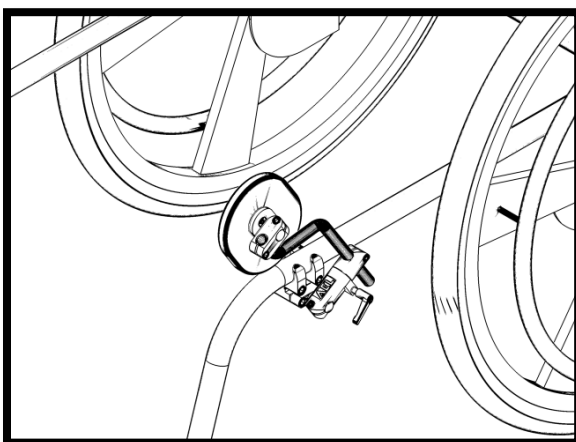


Figure 1.6

1.3 ADJUSTMENT INSTRUCTIONS

POSAlinc 360™ Swing-Away Knee Adductor

The POSAlinc 360 Swing-Away Knee Adductor can be easily adjusted to achieve desired pad placement. Figure 1.7 shows how to adjust the adductor pad's height. Figure 1.8 shows how the pad can be adjusted and moved forward and back (distal / proximal). Figure 1.9 shows how the pad can be moved in and out (medial / lateral) and pad angle adjustment. Remember to retighten all fasteners after adjustments are made.

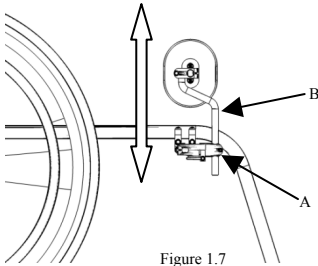


Figure 1.7

Figure 1.7 – Pad Height Adjustment

1. Loosen fastener (A) to free the offset post (B).
2. Move the post up and down to achieve desired pad placement. Retighten fastener (A) to secure.

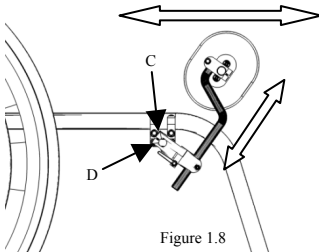


Figure 1.8

Figure 1.8 – Distal / Proximal Adjustment

1. Loosen fastener (C), located on the fixed clamp, to free the POSAlinc 360 Swing-Away Coupling from the tube clamp's mounting post (D).
2. Distal / proximal adjustment is achieved by rotating the coupling clockwise and counter-clockwise to achieve desired pad placement.
3. During this adjustment, pad height may also need to be adjusted. Follow the instructions in Figure 1.7 to adjust. Retighten all fasteners to secure.

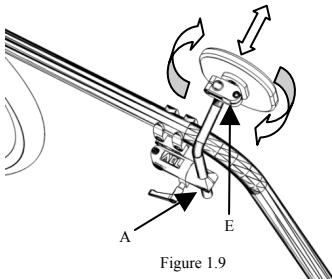


Figure 1.9

Figure 1.9 – Medial / Lateral and Pad Angle Adjustment

1. Loosen fastener (A), located on the rotation clamp, to free the offset post.
2. Rotate the offset post to move the pad in and out (medial / lateral) to achieve the pad placement.
3. Retighten fastener (A) to secure.
4. To adjust the pad angle, loosen fastener (E) to free the adductor pad.
5. Rotate the pad to achieve desired pad placement. Retighten all fasteners to secure.

1.4 SWING-AWAY FUNCTION

POSAlinc 360™ Swing-Away Knee Adductor

See Figure 1.10, to release and swing/rotate adductor pad out of the way; turn the release knob (A) counter-clockwise one revolution to free the rotation clamp (B) on the swing-away device. Pull the clamp out and move pad aside. Figure 1.11 shows a release clamp with the pad moved aside. The pad and post assembly will still be connected to the main body of the coupling by the pivot bar (see Figure 1.11, note C). The pivot bar allows the user to move the pad assembly completely off to the side during transfers and navigate around any other devices attached to the chair in the adjacent area. To re-secure the pad-post assembly, insert the rotation clamp back into the fixed clamp's housing. A locating pin is pressed into the fixed clamp housing to ensure the adductor pad-post assembly is re-positioned back into its original placement. Turn the release knob (A) clockwise to secure (after resistance is felt, one-half turn is all that's required to firmly secure the rotation clamp).

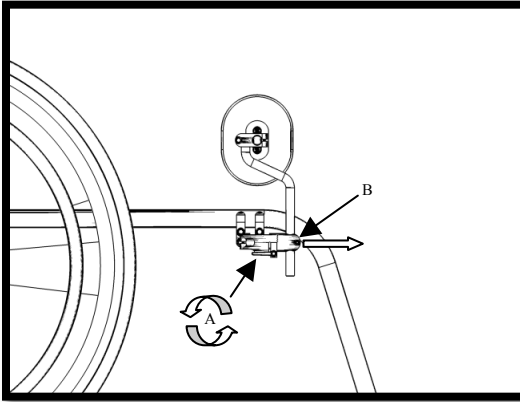


Figure 1.10

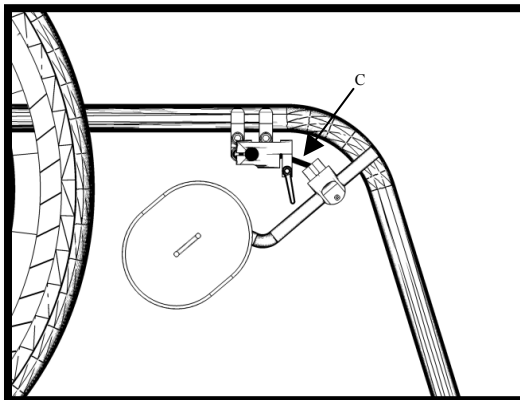


Figure 1.11

2.1 PRODUCT OVERVIEW

POSAlinc® Original Knee Adductor

Figure 2.1 illustrates the main components of a right side POSAlinc Original Knee Adductor coupled with a wheelchair tube clamp. Two different size chair clamps are currently available to secure a knee adductor to a wheelchair with either 7/8" or 1" tube diameters. Mounting hardware is available to mount the POSAlinc Original Knee Adductor to a chair equipped with a track system. Replacement adductor pads are also available for purchase.

***Note: The POSAlinc Original Knee Adductor is offered specifically as a "right-" and "left-" side device, but the user can option to mount a right side device onto the left side of the wheelchair and a left side assembly on the right. See Figure 2.6 for an illustration displaying this mounting option. Throughout the rest of this instruction manual, the illustrations will depict a right side device mounted on the right side of a wheelchair.

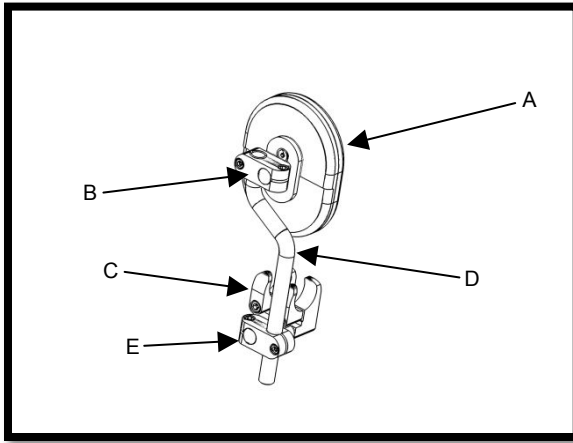


Figure 2.1

Parts List and Function

- A. **Adductor Pad:** Provides a comfortable support for the end user's knee. Pads are available in three sizes and with an upgrade option for additional pressure relief.
- B. **Pad Clamp:** Secures the pad in a fixed position; loosen to adjust pad angle.
- C. **Wheelchair Tube Clamp:** Mounts the device directly to the wheelchair's hangers or seat rails.
- D. **Offset Post:** Provides anterior and lateral adjustment. Available in Standard (7") and Extended (10") lengths.
- E. **Tube Clamp / Offset Post Coupling:** Connects the offset post to the mounted wheelchair clamp (tube or track style)

2.2 MOUNTING INSTRUCTIONS

POSAlinc® Original Knee Adductor

The POSAlinc Original Knee Adductor can mount directly to a wheelchair's frame tube and to a chair equipped with a track system. Tube clamps can be positioned anywhere on a wheelchair's frame tube: horizontally, vertically and even on an elbow section. Figure 2.2 shows how to mount the tube clamp, while Figure 2.3 shows the mounting procedure on a track system. Figure 2.4 shows how to mount the rest of the device once the clamp device is in place.

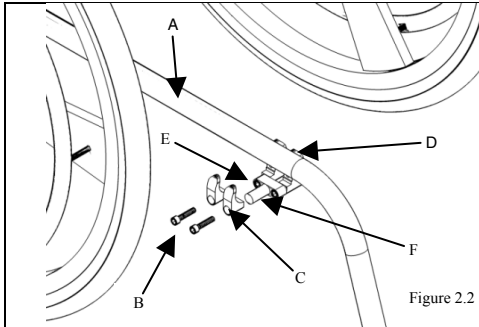


Figure 2.2

Figure 2.2 - Mounting to Chair's Frame Tube

1. Determine the desired location for the device on the wheelchair's frame (A). The clamp will come assembled; to mount, loosen and remove the 1/4-20 fasteners (B) that attach the top clamps (C) to the lower clamps (D).
2. Loosen (don't remove) the 1/4-20 fasteners (E) that secure the lower clamps to the device mounting post (F). This will aid in positioning the clamp on the wheelchair's frame tube (A).
3. Position the bottom clamp assembly on the chair's tube at the desired mounting location. The mounting clamp can be positioned anywhere on the wheelchair's frame tube (A).
4. Re-assemble the small clamps (C) to the lower clamps (D), tighten all fasteners. The clamp mounting hardware is now affixed to the chair.

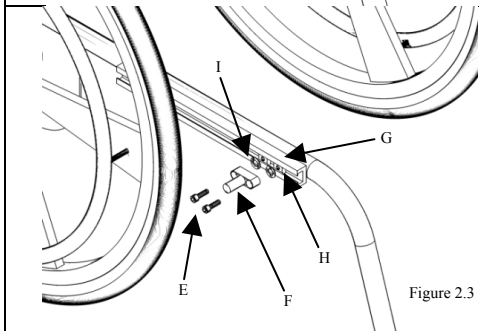


Figure 2.3

Figure 2.3 - Mounting to a Chair w/ a Track System

1. Determine the desired location for the device on the wheelchair's track system (G). Track hardware will come assembled; to mount, loosen and remove the 1/4-20 fasteners (E) that attach the device mounting post (F) to the track nuts (H).
2. Slide the track nuts (H) into the track system (G). Position the track nuts (H).
3. Re-assemble the track system mounting device. Make sure that the washers (I) are between the track system (G) and the device mounting post (F).
4. Tighten all fasteners.

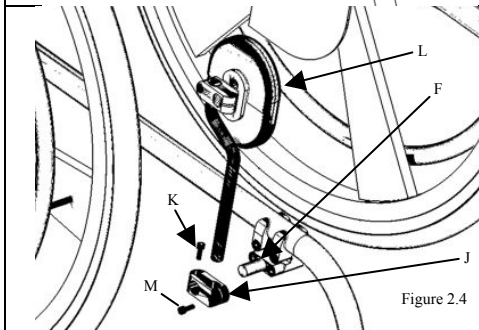


Figure 2.4

Figure 2.4 - Mounting the Remaining Device Components

1. The remaining device components secure to both mounting devices in the same fashion (illustration shows mounting to a tube clamp device).
2. The coupling (J) should be mounted first. Loosen fastener (K) to free the back clamp. Slide the bore hole on the back clamp over device mounting post (F). Position the device and re-tighten fastener (K) to secure the coupling.
3. Next, the pad assembly (L) is mounted. Loosen fastener (M) to free the front clamp. Slide the post from the pad assembly (L) into the bore hole on the front clamp. Position pad assembly and re-tighten fastener (M). The POSAlinc Original Knee Adductor is now secured to the chair and ready for use.

POSAlinc® Original Knee Adductor

The figures below show a POSAlinc Original Knee Adductor correctly tube-mounted to a chair. Figure 2.5 shows a right side assembly mounted to the right side of a chair, while Figure 2.6 shows the option of mounting a right side assembly to the left side of the chair.

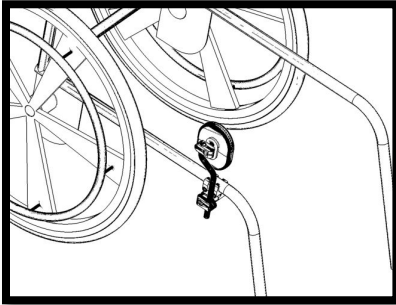


Figure 2.5

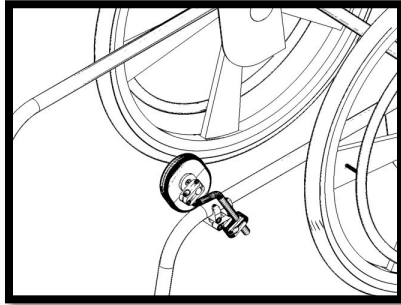


Figure 2.6

POSAlinc® Original Knee Adductor w/ Knob Release Kit

With the addition of a Knob Release Kit, the POSAlinc Original Knee Adductor is converted from a fixed positioning device to a removable option. The Knob Release Kit is compatible with the POSAlinc Original Knee Adductor (tube and track mounted styles). See figure 2.7 to see how to add the Knob Release Kit.

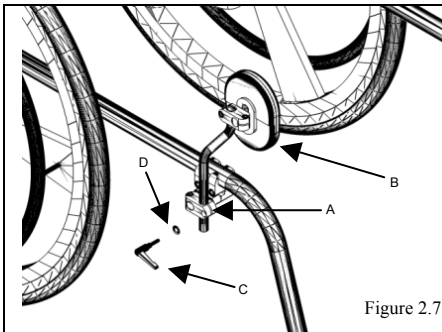


Figure 2.7

Figure 2.7 Remove Standard Screw and Add the Release Knob

1. Once the POSAlinc Original Knee Adductor is mounted, remove the fastener on the front clamp of the coupling (A) that secures the pad and post assembly (B).
2. Replace this screw with the Release Knob (C). Ensure that washer (D) is positioned on the stud of the Release Knob before inserting into the clamp.
3. Turn the Release Knob clockwise to tighten.
4. To remove the knee adductor for transfers, turn the Release Knob counter-clockwise and remove pad/post assembly (B).

2.3 ADJUSTMENT INSTRUCTIONS

POSAlinc® Original Knee Adductor

The POSAlinc Original Knee Adductor can be easily adjusted to achieve desired pad placement. Figure 2.7 shows how to adjust the adductor pad's height. Figure 2.8 shows how the pad can be adjusted and moved forward and back (distal / proximal). Figure 2.9 shows how and pad can be moved in and out (medial / lateral) and also how to adjust the pad angle. Remember to retighten all fasteners after adjustments are made.

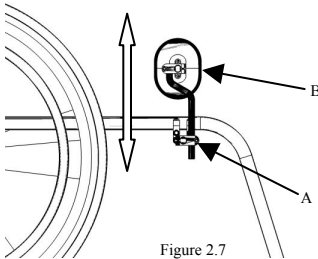


Figure 2.7

Figure 2.7 – Pad Height Adjustment

1. Loosen fastener (A) to free the offset post (B).
2. Move the post up and down to achieve desired pad placement. Retighten fastener (A) to secure.

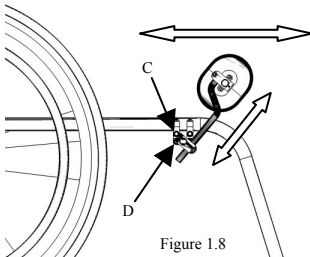


Figure 1.8

Figure 2.8 – Distal / Proximal Adjustment

1. Loosen fastener (C), located on the back clamp, to free the coupling from the tube clamp's mounting post (D).
2. Distal / proximal adjustment is achieved by rotating the coupling clockwise and counter-clockwise to achieve desired pad placement.
3. During this adjustment, pad height may also need to be adjusted. Follow the instructions in Figure 2.7 to adjust. Retighten all fasteners to secure.

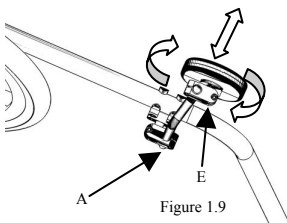


Figure 1.9

Figure 2.9 – Medial / Lateral and Pad Angle Adjustment

1. Loosen fastener (A), located on the front clamp of the coupling, to free the offset post.
2. Rotate the offset post to move the pad in and out (medial / lateral) to achieve desired pad placement.
3. Retighten fastener (A) to secure.
4. To adjust the pad angle, loosen fastener (E) on the pad clamp to free the adductor pad.
5. Rotate the pad to achieve desired pad placement. Retighten all fasteners to secure.

3.1 PRODUCT OVERVIEW

Basic Knee Adductor

Figure 3.1 illustrates the main components of a right side Basic Knee Adductor with a wheelchair tube clamp. Two different size chair clamps are currently available to secure a knee adductor to a wheelchair with either 7/8" or 1" tube diameters.

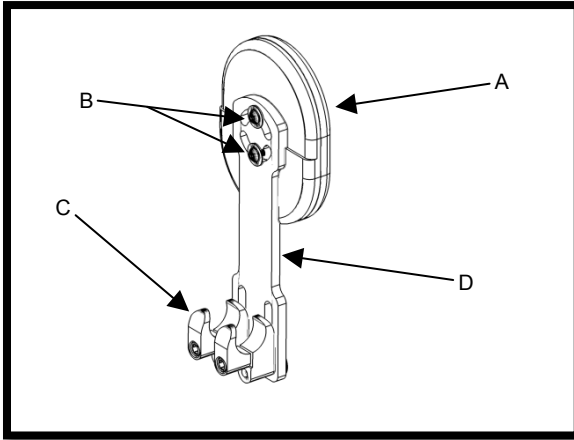


Figure 3.1

Parts List and Function

- A. **Adductor Pad:** Provides a comfortable support for the end user's knee. An upgrade option is available for additional pressure relief.
- B. **Pad Angle Adjustment Fasteners:** Loosen to adjust pad angle.
- C. **Wheelchair Tube Clamp:** Mounts the device directly to the wheelchair's hangers or seat rails.
- D. **Post:** Used to adjust pad height.

3.2 MOUNTING INSTRUCTIONS

Basic Knee Adductor

The Basic Knee Adductor mounts directly to a wheelchair's frame tube. Tube clamps can be positioned anywhere on a wheelchair's frame tube: horizontally, vertically and even on an elbow section. Figure 3.2 shows how to mount the device onto a chair. Figure 3.3 shows a device mounted with the pad in the vertical position while figure 3.4 shows the device mounted horizontally.

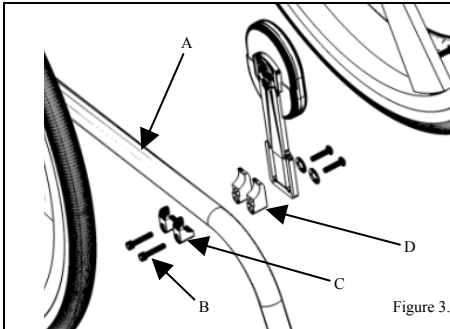


Figure 3.2

Figure 3.2 - Mounting to a Wheelchair's Frame Tube

1. Determine the desired location for the device on the wheelchair's frame (A). The device will come assembled; to mount, loosen and remove the 1/4-20 fasteners (B) that attach the small clamps (C) to the larger clamps (D).
**The figure to the left shows an exploded view of the device to better illustrate the inner components of the device. The device the user received will have the post-pad assembly secured to the clamp to aid in device mounting.*
2. Position the device, re-align the clamps and re-tighten fasteners (B) to clamp the device to the wheelchair's frame.

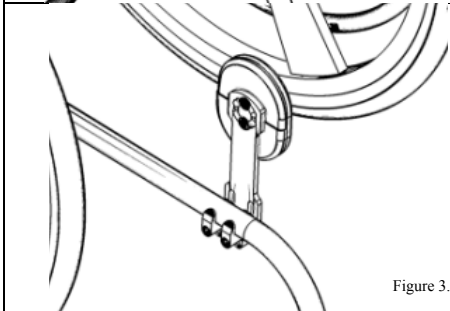


Figure 3.3

Figure 3.3 – Device Mounted in the Vertical Position

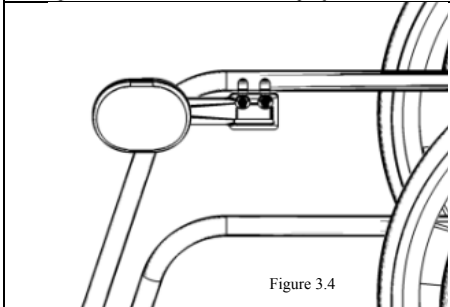


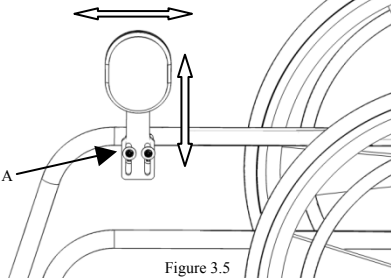
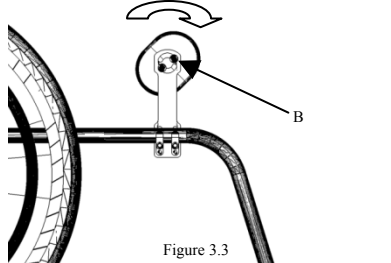
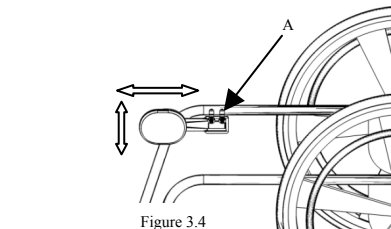
Figure 3.4

Figure 3.4 – Device Mounted in the Horizontal Position

3.3 ADJUSTMENT INSTRUCTIONS

Basic Knee Adductor

The Basic Knee Adductor can be easily adjusted to achieve desired pad placement. Figure 3.5 shows how to move the pad up/down and forward/back when mounted vertically. Figure 3.6 shows how to adjust the pad angle and Figure 3.7 shows the same adjustment in Figure 3.5 but with the device mounted horizontally.

 <p>Figure 3.5</p>	<p>Figure 3.5 – Up/Down (Height) and Forward/Back (Distal/Proximal) Adjustment</p> <ol style="list-style-type: none"> 1. Loosen fasteners (A). 2. Adjust pad to desired placement. 3. Re-tighten fasteners (A).
 <p>Figure 3.3</p>	<p>Figure 3.6 – Pad Angle Adjustment</p> <ol style="list-style-type: none"> 1. Loosen fasteners (B) 2. Rotate pad to achieve desired pad angle. 3. Re-tighten fasteners (B).
 <p>Figure 3.4</p>	<p>Figure 3.7 – Forward/Back (Distal/Proximal) Adjustment</p> <ol style="list-style-type: none"> 1. Loosen fasteners (A). 2. Adjust pad to desired placement. 3. Re-tighten fasteners (A).

