

**THIS TECHNICAL MANUAL HAS BEEN DEVELOPED FOR AND
INTENDED TO BE USED BY A QUALIFIED TECHNICIAN
WORKING FOR AN AUTHORIZED KI MOBILITY DEALER.**

ROGUE² ROGUE^{XP}

TECHNICAL MANUAL





WARNING: Repairs and adjustments not made by a qualified technician working for an authorized Ki Mobility Dealer can result in poor performance or failure of the device which may cause serious injury or death.

This technical manual is designed to aid in the different procedures that may be needed for the Rogue 2 & Rogue XP wheelchairs. This technical manual does not replace, but aids the user instruction manual, adjustment guides and instructions. The procedures shown in this technical manual should only be performed by an Assistive Technology Practitioner (ATP) or clinical professional trained to do wheelchair repairs, adjustments and retrofits.

Additional information can be found in the Rogue 2 & Rogue XP User Instruction Manual. The user instruction manual can be found on the Ki Mobility website.

If you have any questions or concerns about any aspect of this wheelchair, this manual, or the service provided by us or your retail supplier, please do not hesitate to contact us by telephone at:

715-254-0991

In writing at:

Ki Mobility
5201 Woodward Drive
Stevens Point, WI 54481
U.S.A

Via email at:

sales@kimobility.com

Table of Contents

Tools.....	3
Frame Tube Size Guide.....	3
Spoke Tension Values.....	3
Chair Measurement References - Rogue 2.....	4
Chair Measurement References - Rogue XP	5
Backrest Height Measurent Reference	6
Caster Mount	7
Caster Forks and Stems	8
Caster Angle and Squaring	14
Index Towers and Camber Tube.....	15
Quick Release Axle Adjustment	18
Backrest Assembly - Rogue 2	19
Backrest Assembly - Rogue XP	21
Height Adjustable Back Post	23
Fixed Height Back Post	24
Rigid Stroller Handle - Rogue XP	25
Ergo Stroller Handle - Rogue XP	25
Bolt-On Push Handle - Rogue XP.....	26
Height Adj. With Adj. Push Handle - Rogue XP	27
Height Adjustable T-Arm.....	28
Angle Adj. Locking Flip Up Extendable Armrest - Rogue XP.....	29
Swing Away Armrest.....	30
Cane and Crutch Holder	32
Luggage Carrier	33
Handrim Configurations	34
Handrim Construction.....	35
Handrim Tightening.....	36
Seat Pan.....	37
Seat Upholstery.....	38
Side Guards	39
Transit	43
Hybrid Angle Adjustable Footrest	45
Angle Adjustable Footrest.....	46
Angle Adjustable Flip Under Footrest	47
High Mount Angle Adjustable Footrest	48
High Mount Angle Adjustable Flip Under Footrest	49
Adjusting the Footrest.....	50
Rogue XP Frame Width.....	50
Anti-Tips.....	51
Rogue XP 5th Wheel	52
Wheel Locks.....	57
Reversing Wheel Lock	59
Center of Gravity Adjustment.....	62
Seat Height Adjustment	63
Setting Toe to Zero	64
Wheelbase Width Adjustment.....	65
One Arm Drive (OAD)	66
Growing Your Rogue XP in Width.....	68
Tipping Lever	68
Drum Brake - Rogue XP.....	69
EZ Grip Assembly	71

Tools

Please see the list below to identify the tools needed throughout this tech manual. Always check tools to ensure the ends are not stripped and that the tool can perform its function properly without damaging any parts or hardware on the chair.

Tools Needed		
• 2.5mm Allen Wrench	• Two 8mm Wrenches	• Utility Blade
• 3mm Allen Wrench	• Two 10mm Wrenches	• Calibrated Torque Wrench
• 4mm Allen Wrench	• 13mm Wrench	• Rubber Mallet
• 5mm Allen Wrench	• 17mm Wrench	• Phillips Screwdriver
• 5.5mm Allen Wrench	• 19mm Wrench	• Punch (or small screwdriver)
• 6mm Allen Wrench	• 24mm Wrench	

Frame Tube Size Guide

Tubing sizes subject to change without notice

This information is a reference for situations where the tube sizes are needed for certain attachments.

Rogue 2	Rogue XP
Frame Tube	Frame Tube
Frame Tube: 1 3/8"	Frame Tube: 1 3/8"
Camber Tube: 1 1/8"	Camber Tube: 1 1/8"
Back Canes	Back Canes
Fixed Height Back Canes: 1"	Fixed Height Back Canes: 1"
Rigidizer Bar: 7/8"	Rigidizer Bar: 7/8"
Lower Height Adjustable Back Tube: 1"	Lower Height Adjustable Back Tube: 1"
Upper Adjustable Upper Back Tube: 3/4"	Upper Adjustable Upper Back Tube: 3/4"
Half Folding Back: 7/8"	
Arms	Arms
Swing Away: 1"	Swing Away: 1"
Upper T-Arm: 7/8"	Upper T-Arm: 7/8"
Transfer Tube T-Arm: 3/4"	Transfer Tube T-Arm: 3/4"
Angle Adjustable Flip Up: 1"	
Footrests	Footrests
Footrest Tubes: 3/4"	Footrest Tubes: 3/4"

Spoke Tension Values

OAD Spoke	60-100 kgf
Drum brake Spoke	90-120 kgf radial side / 60-90 kgf crossed side
Maxx Spoke	60-100 kgf
Low Cost Spoke	60-100 kgf
Superlight Spoke	92-112 kgf

Chair Measurement References - Rogue 2

The Rogue 2 wheelchair is capable of many adjustments to configure the chair to the user's needs. See the diagram below for terms that are commonly used during the process of adjusting the chairs.

A. Seat Width See Diagram 1

Measured from outside of frame tube on one side to outside of frame tube on other side.

B. Seat Depth See Diagram 3

Measured from front of back posts to front edge of seat sling. Seat sling starts at beginning of bend at front of frame.

C. Sling Position See Diagram 2

In Performance Position (0°), sling is at front of frame to keep chair shorter and more maneuverable. The 1" or 2" seat sling position extends the frame in front of the sling by that amount. Adding more frame can improve stability and provide support to aid in transfers.

D. Front Frame Bend See Diagram 3

Angle between front seat tube and ground.

E. Footrest Taper See Diagram 1

Indicates bend of front frame creating footrest. Taper is measured from outside of seat frame to outside of front tube.

F. Front Seat Height See Diagram 1

Measured from floor to top of seat tube at front of seat sling.

G. Footrest Width See Diagram 1

Measured from inside of front tube to inside of front tube on other side. Footrest width is listed below for each seat width and taper.

Seat Width	Straight	1" Y Taper	2" Y Taper	3.5" V Taper	7" V Taper
Outside Measurement	2" Narrower than Seat Width	4" Narrower than Seat Width	6" Narrower than Seat Width	4" Narrower than Seat Width	6" Narrower than Seat Width
12"	9.5"	7.5"		7.5"	
13"	10.5"	8.5"		8.5"	
14"	11.5"	9.5"		9.5"	
15"	12.5"	10.5"		10.5"	
16"	13.5"	11.5"	9.5"	11.5"	9.5"
17"	14.5"	12.5"	10.5"	12.5"	10.5"
18"	15.5"	13.5"	11.5"	13.5"	11.5"
19"	16.5"	14.5"	12.5"	14.5"	12.5"
20"	17.5"	15.5"	13.5"	15.5"	13.5"

H. Seat to Footrest Length See Diagram 3

Measured from front edge of seat sling to top rear of footrest. Footrest length of at least 2.5" shorter than front seat height recommended.

I. Rear Seat Height See Diagram 3

Measured from floor to top of seat tube at front of back post. Rear seat height is custom to needs.

J. Center of Gravity Preset See Diagram 3

Measured from front of back post to center of rear axle. 0" indicates axle will be directly under back post.

K. Rear Wheel Spacing See Diagram 1

Measured from outside of seat back to inside of rear tire. Adjustable out .5" from setting.

L. Caster Position See Diagram 4

The Optimized Position keeps the casters tighter to the frame for enhanced maneuverability. Expanded Position pushes the casters out .75" past the Optimized Position for increased stability.

Diagram 1

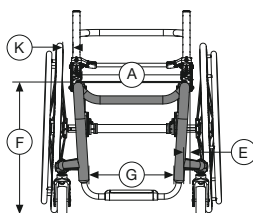


Diagram 2

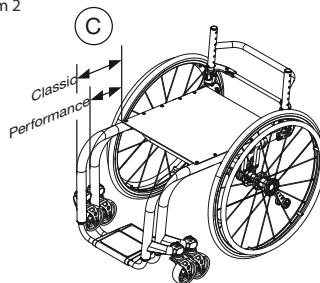


Diagram 3

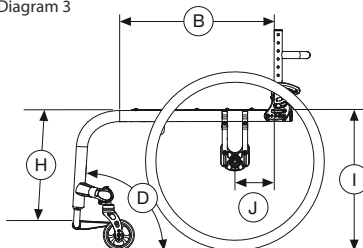
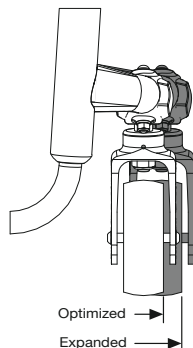


Diagram 4



Chair Measurement References - Rogue XP

The Rogue XP wheelchairs are capable of many adjustments to configure the chair to the user's needs. See the diagram below for terms that are commonly used during the process of adjusting the chairs.

A. Seat Width (see diagram 1)

Measured from outside of frame tube on one side to the outside of frame tube on the other side.

B. Seat Depth (see diagram 3)

Measured from front of back posts to front edge of seat sling. Seat sling starts at beginning of bend at front of frame.

C. Sling Position (see diagram 2)

In Performance Position (0°), sling is at front of frame to keep chair shorter and more maneuverable. The 1° or 2° seat sling position extends the frame in front of the sling by that amount. Adding more frame can improve stability and provide support to aid in transfers.

D. Front Frame Bend (see diagram 3)

Angle between front seat tube and ground.

E. Footrest Taper (see diagram 1)

Indicates bend of front frame creating footrest. Taper is measured from outside of seat frame to outside of front tube.

F. Front Seat Height (see diagram 1)

Measured from floor to top of seat tube at front of seat sling.

G. Footrest Width (see diagram 1)

Measured from inside of front tube to inside of front tube on other side. Footrest width is listed below for each seat width and taper.

Seat Width	Straight	1" Taper	2" Taper
Outside Measurement	2" Narrower than Seat Width	4" Narrower than Seat Width	6" Narrower than Seat Width
12"	9.5"	7.5"	
13"	10.5"	8.5"	
14"	11.5"	9.5"	
15"	12.5"	10.5"	
16"	13.5"	11.5"	9.5"
17"	14.5"	12.5"	10.5"
18"	15.5"	13.5"	11.5"
19"	16.5"	14.5"	12.5"
20"	17.5"	15.5"	13.5"

H. Seat to Footrest Length (see diagram 3)

Measured from front edge of seat sling to top rear of footrest. Footrest length of at least 2.5" shorter than front seat height recommended.

I. Rear Seat Height (see diagram 3)

Measured from floor to top of seat tube at front of back post. Rear seat height is custom to needs.

J. Center of Gravity Preset (see diagram 3)

Measured from front of back post to center of rear axle. 0° indicates axle will be directly under back post.

K. Rear Wheel Spacing (see diagram 1)

Measured from outside of seat back to inside of rear tire. Adjustable out .5" from setting.

Diagram 1

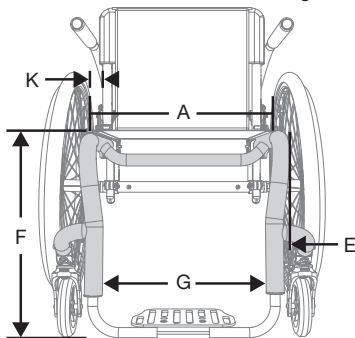


Diagram 2

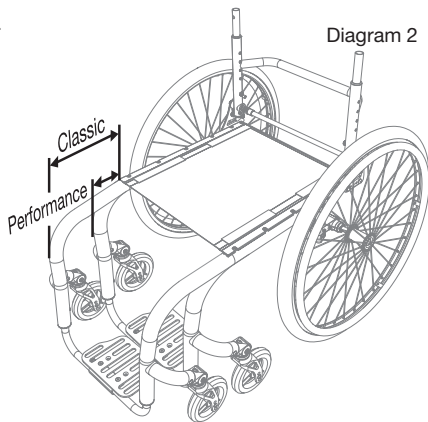
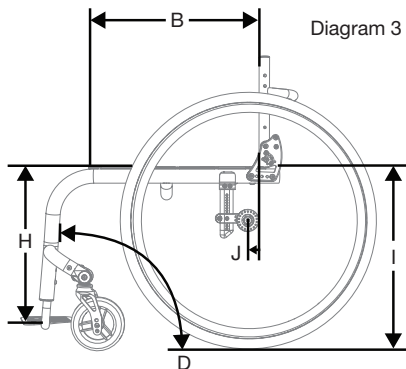
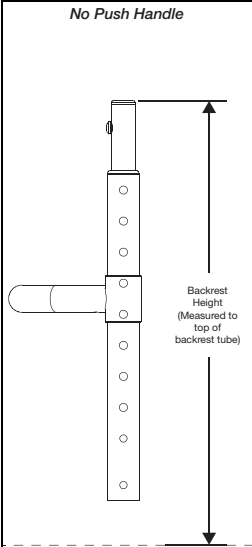
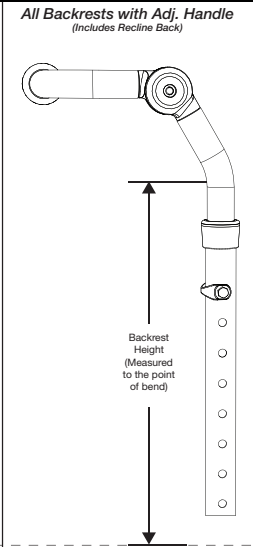
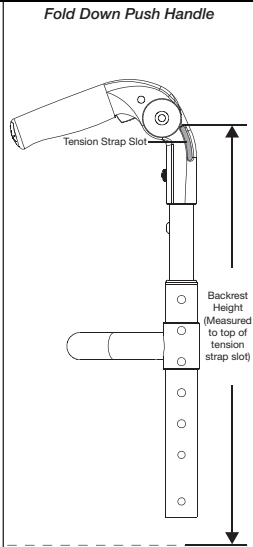
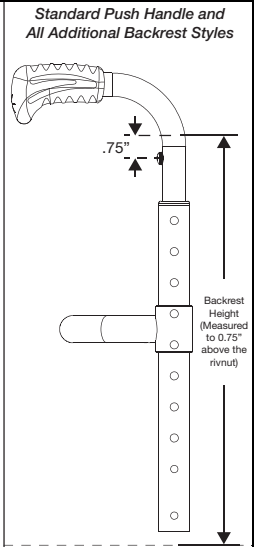


Diagram 3



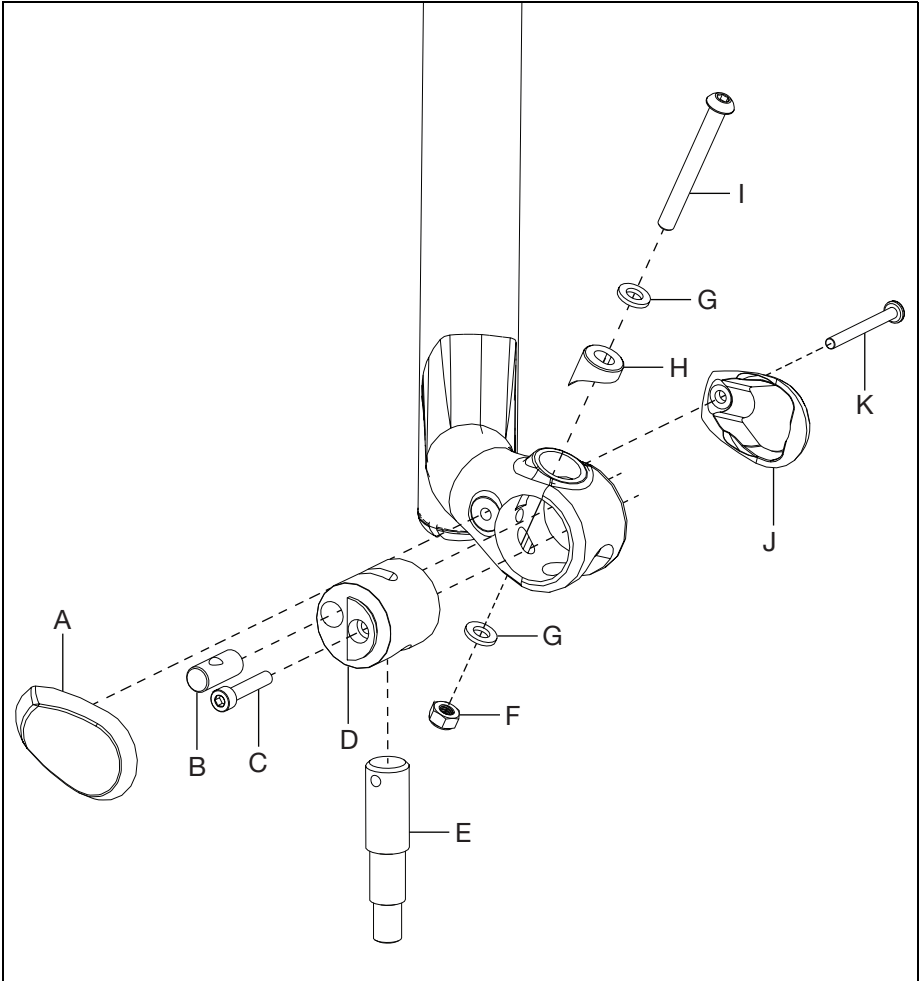
Backrest Height Measurement Reference

- *Backrest height should always be measured to the top of the upholstery when upholstery is present.
- *Tolerance for backrest height is 0.75" from customer selection for all back cane styles except the rocker back which is a tolerance of 1.5".

No Push Handle	All Backrests with Adj. Handle (Includes Recline Back)	Fold Down Push Handle	Standard Push Handle and All Additional Backrest Styles
 Backrest Height (Measured to top of backrest tube)	 Backrest Height (Measured to the point of bend)	 Tension Strap Slot Backrest Height (Measured to top of tension strap slot)	 .75" Backrest Height (Measured to .75" above the rivnut)
Seat Frame (Size Varies)	Seat Frame (Size Varies)	Seat Frame (Size Varies)	Seat Frame (Size Varies)

Caster Mount

1. Install the caster lock barrel (D) into the caster housing.
2. Install the caster stem (E) in through the bottom of the caster housing and into the caster lock barrel (D). Secure in place by installing the M5 bolt (C) through the caster lock barrel (D) and into the stem (E) using a 4mm Allen wrench.
3. Install the caster lock threaded barrel (B) into the caster lock barrel (D) with hole facing upward.
4. Install the M6 bolt (I) through the washer (G), caster lock saddle (H), caster housing opening, caster lock barrel (D), caster lock threaded barrel (B) and second washer (G). Secure with nut (F) using a 4mm Allen wrench and a 10mm wrench.
5. Close the caster housing assembly by installing the caster wing covers (A & J) with the M4 bolt (K) using a 2.5mm Allen wrench.

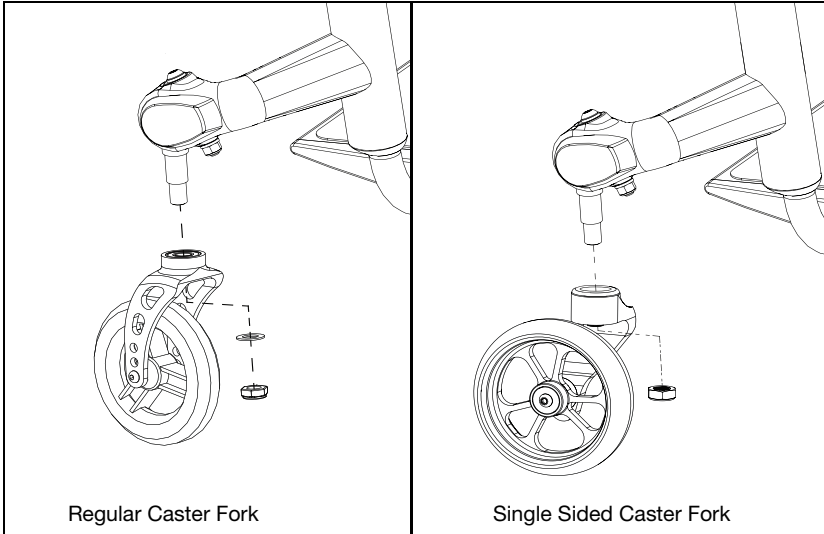


Caster Forks and Stems

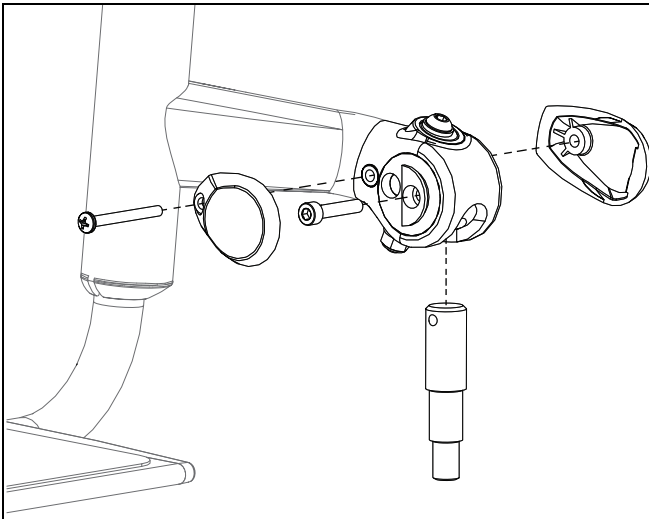
Remove Caster Fork and Stem

1. Remove bottom nut and washer using a 17mm or ¾" socket wrench. Remove fork assembly.

NOTE: Based on your configuration, the caster may need to be removed first to allow clearance for wrench (See step 3).

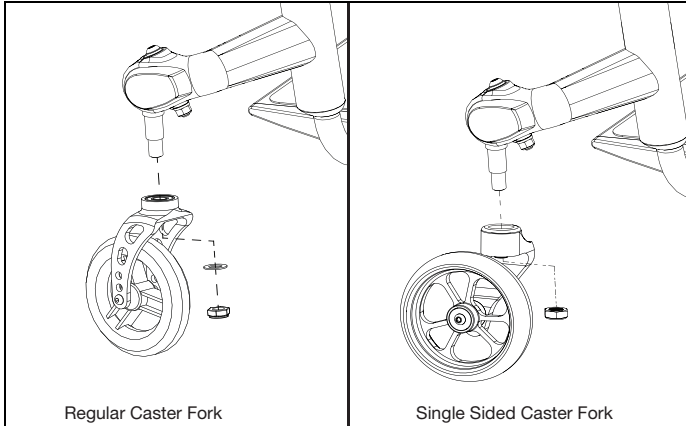


2. Remove the caster wing covers by removing the M4 bolt with a 2.5mm Allen wrench. Remove the caster stem by removing the M5 bolt with a 4mm Allen wrench.



Caster Forks and Stems

3. If you are replacing your forks continue for instructions. For a regular caster fork, remove caster wheel by removing two socket head screws and two spacers using two 4mm Allen wrenches. For a single sided fork, remove the socket head screw, axle shaft and E-Clip using a 5mm Allen wrench.

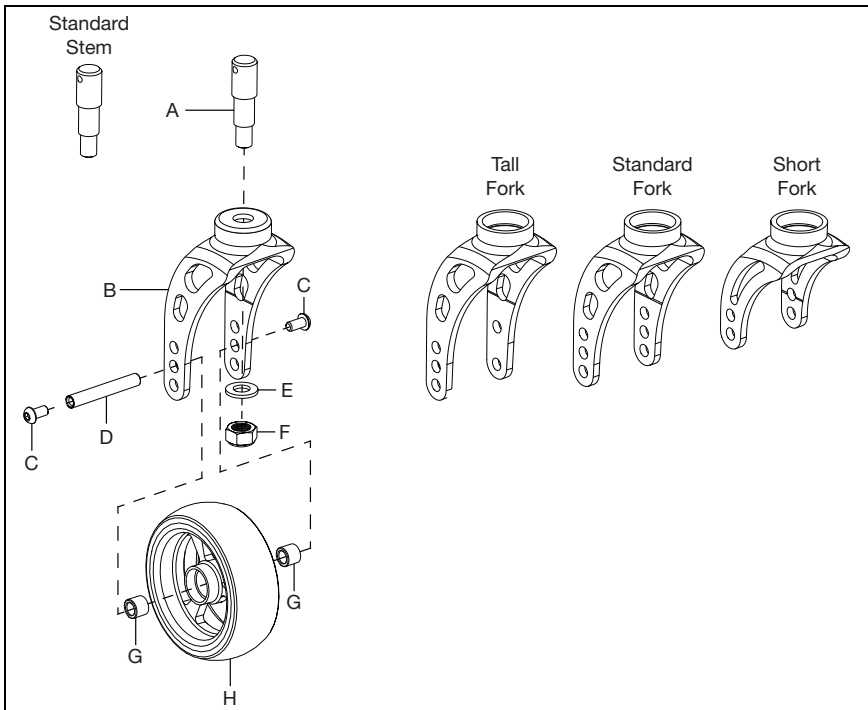


Install Caster Fork and Stem

1. Install stem (A) into fork (B) with washer (E) and nut (F) using a 16mm wrench.
2. Install caster wheel (H) into fork (B) with two screws (C), a threaded barrel (D) and two spacers (G) using two 4mm Allen wrenches.

NOTE: There is one size of caster stem (standard) and three sizes of forks (tall, standard and short) that can be used. The image below shows the stem and forks. The installation process is the same for whichever stem and fork you use.

3. Install assembly to caster housing by installing the two socket screws seen in step 2 on previous page.

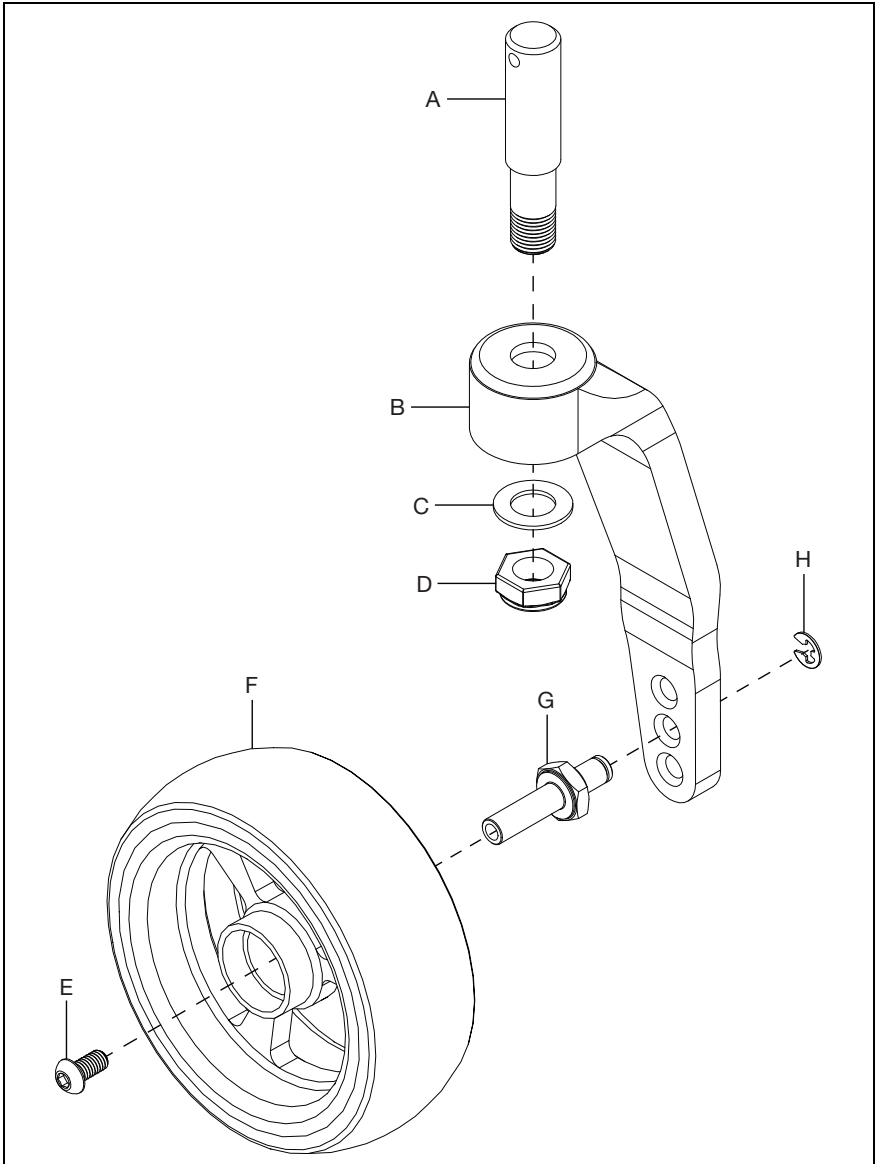


Caster Forks and Stems

Single Sided Fork

1. Install stem (A) into single sided fork (B) with washer (C) and nut (D) using a ½" wrench.
2. Install caster wheel (F) onto fork (B) with a screw (E), the axle shaft (G) and secure with E-Ring (H).

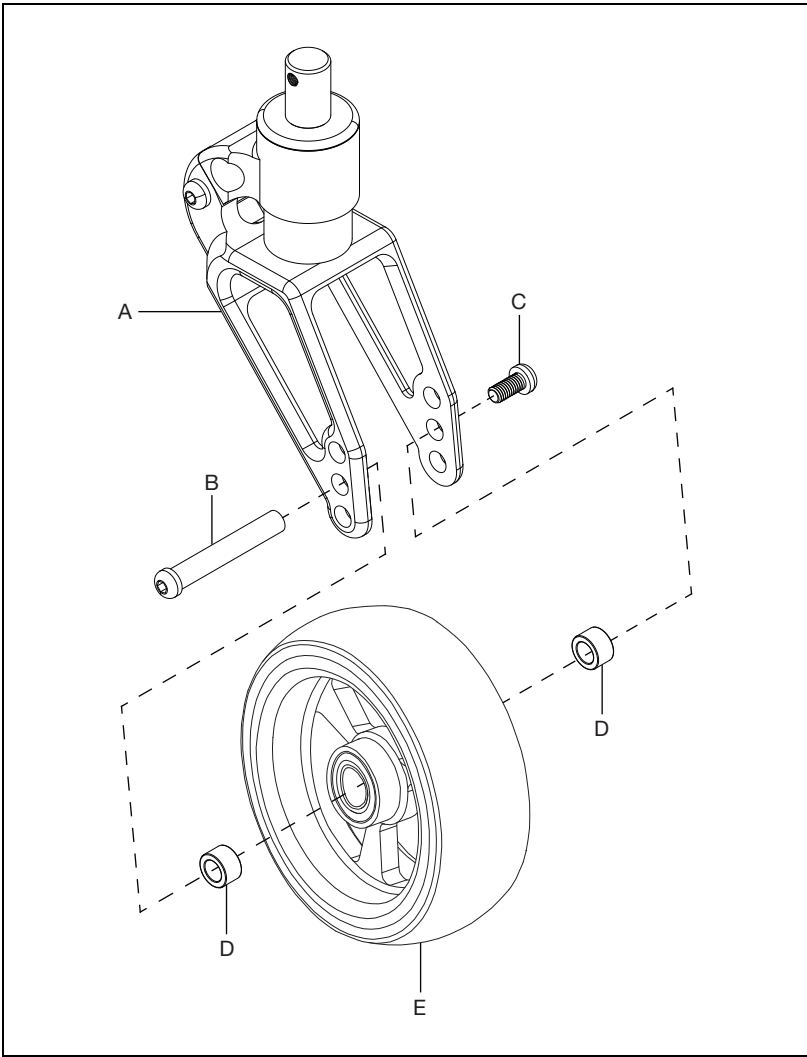
NOTE: There are two sizes of caster stems (standard and +3/4") and two sizes of forks (short and tall) that can be used. The installation process is the same for whichever stem and fork you use.



Caster Forks and Stems

Frog Legs Ultra Sport Fork Assembly

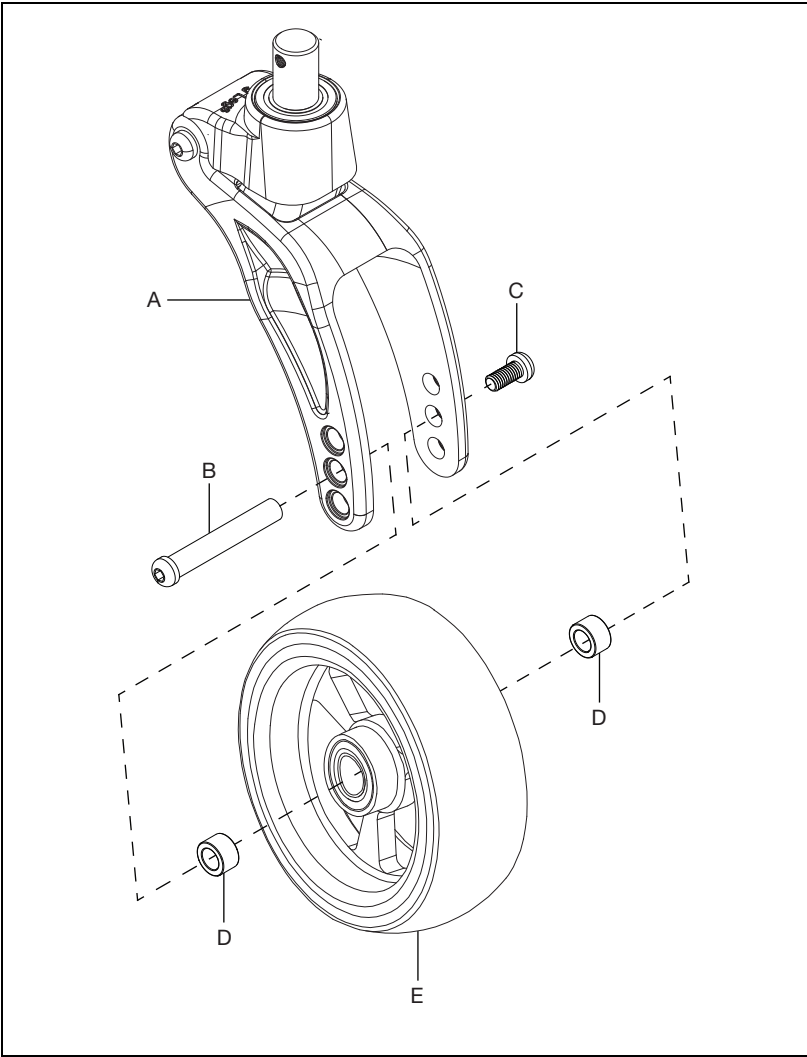
1. Install Frog Leg Ultra Sport Fork (A) onto caster wheel (E) with axle (B), screw (C) and two spacers (D) using two 4mm Allen wrenches.



Caster Forks and Stems

Frog Legs Phase 2 Carbon Fork Assembly

1. Install Frog Leg Phase 2 Carbon Fork (A) onto caster wheel (E) with axle (B), screw (C) and two spacers (D) using two 4mm Allen wrenches.

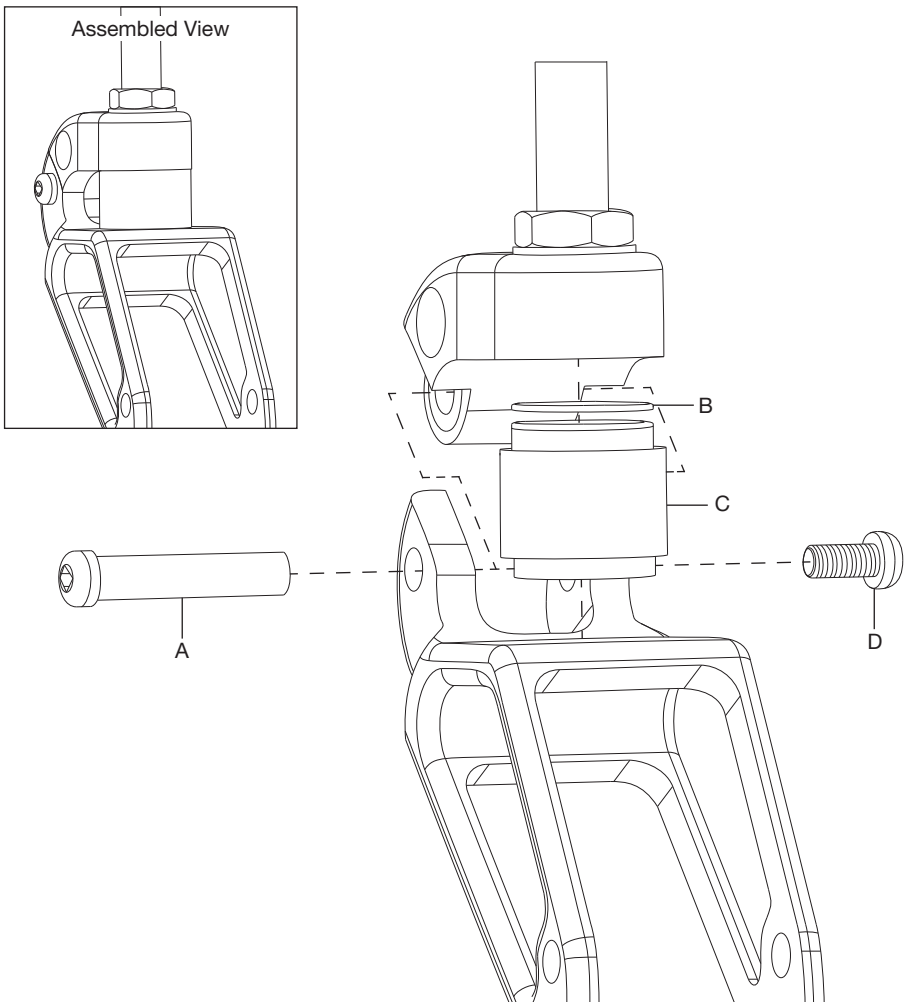


Caster Forks and Stems

Frog Legs Ultra Sport Fork Polymer Replacement

NOTE: The Ultra Sport fork has different polymers that can be used based on the chair user's weight and preferred ride. The Phase 2 fork has one polymer that works for any configuration. If ever needed, the replacement procedure is the same for a Phase 2, but no coin is needed.

1. Remove the pivot pin screw (D) using a 4mm Allen wrench.
2. Use a punch or small screwdriver and a rubber mallet to push the pivot pin (A) out.
3. Open the fork assembly and remove the polymer (C) and coin (B).
4. Install the new polymer (C) and coin (B).
5. Insert the pivot pin (A) back into the fork assembly. A punch or small screwdriver can be used to help align holes if needed.
6. Secure the assembly by reinstalling the pivot pin screw (D) using a 4mm Allen wrench.
7. Repeat steps on opposite side.



Caster Angle and Squaring

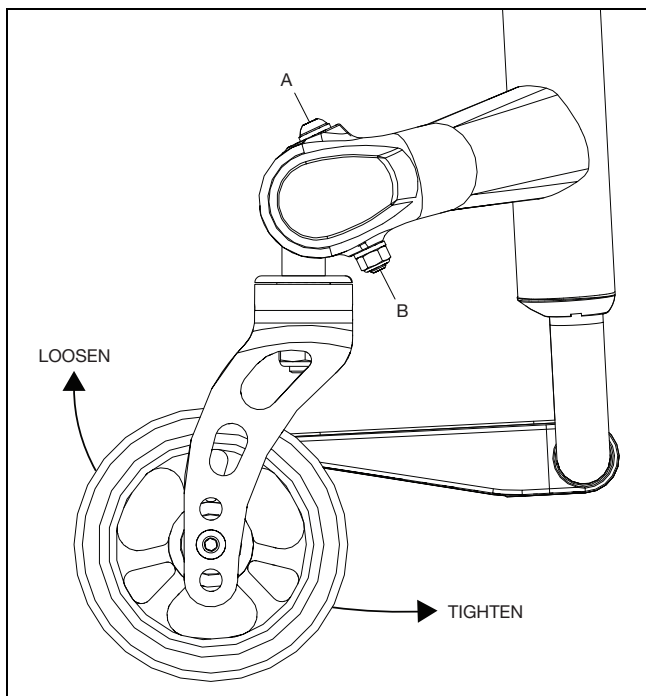
To maintain optimal performance of your Rogue 2 or Rogue XP, the front caster housing should always be aligned perpendicular to the ground. Your Rogue 2 or Rogue XP is shipped aligned. It is recommended that caster squareness is checked after making adjustments to the chair configuration related to any of the following items: caster size or type, camber, rear wheel, tire, center of gravity and seat heights. Caster squareness should always be the last check made prior to use after adjustments or changes to the chair have been made.

After all other adjustments are made you should check your caster housing alignment and realign if the housing is not perpendicular to the ground.

Caster flutter is another issue relating to caster angle and squaring. This is often caused by high speeds, misalignment of caster to ground and looseness in the caster/fork/stem assembly. To address caster flutter, first ensure all fasteners in the caster, fork and stem assembly have been appropriately tightened down and there is no excessive play between any of the parts. If the issue remains, ensure the caster is square by adjusting the caster angle as demonstrated below. Lastly, if the flutter still remains, open the caster angle. You can open the caster angle 1° at a time, up to 2° forward or 2° rearward. This is done in the same manner as squaring the caster but changing the angle 1° at a time, testing the flutter then adjusting again if needed. An angle finder is helpful when changing 1° at a time.

Adjusting the Caster Angle:

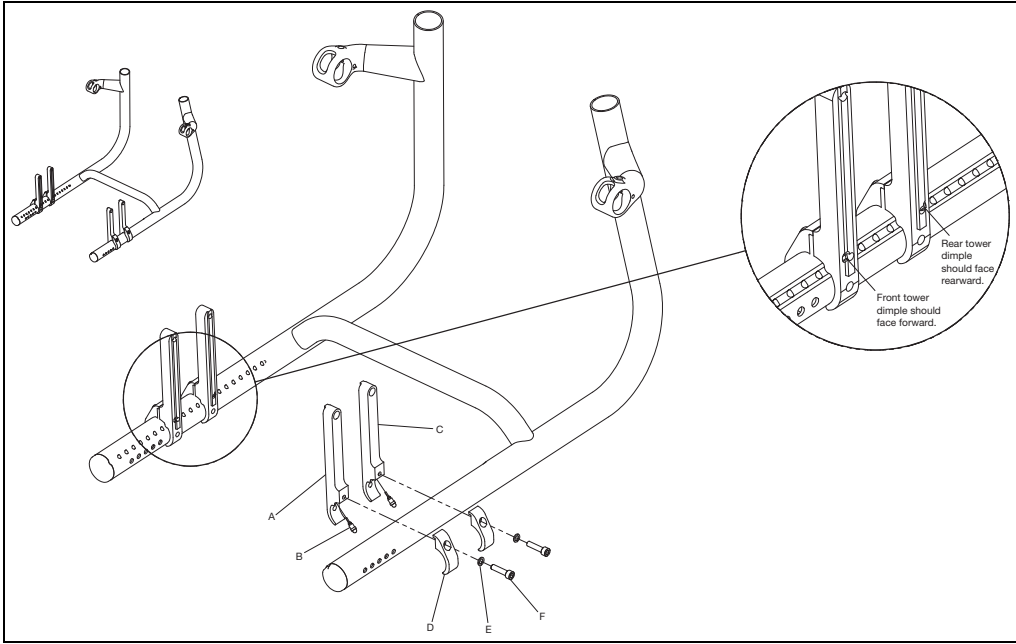
1. Loosen the lower nut (B) a quarter turn using a 10mm wrench.
2. Turn the button head cap screw (A) with a 4mm Allen wrench.
3. The caster assembly will move toward the front of the chair when adjusted clockwise and away from the chair when adjusted counter-clockwise.
4. Set the bubble level clip on the fork and set the caster perpendicular to the ground.
5. Tighten the lower nut (B) to 50 in/lbs when all adjustments are set and final.



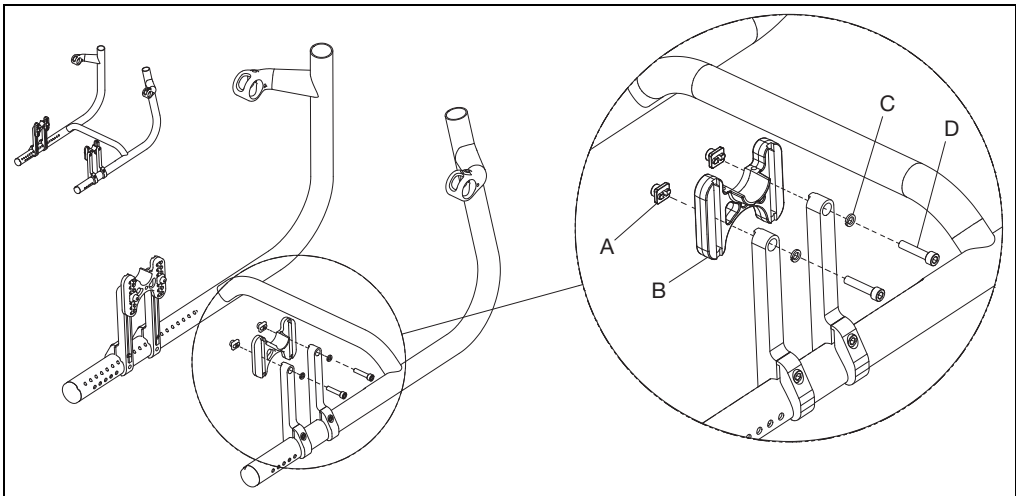
Index Towers and Camber Tube

NOTE: The install is easier if the frame is flipped upside down as shown below.

1. Install the dimple buttons (B) into the rear index clamps (A & C).
2. Install the rear index clamps (A & C) onto the frame along with the rear tower outer clamps (D) with two bolts (F) and two washers (E) per side, using a 5mm Allen wrench.
3. Repeat on the opposite side, ensuring both sets of index clamp assemblies are set in the same location on both sides of the frame.

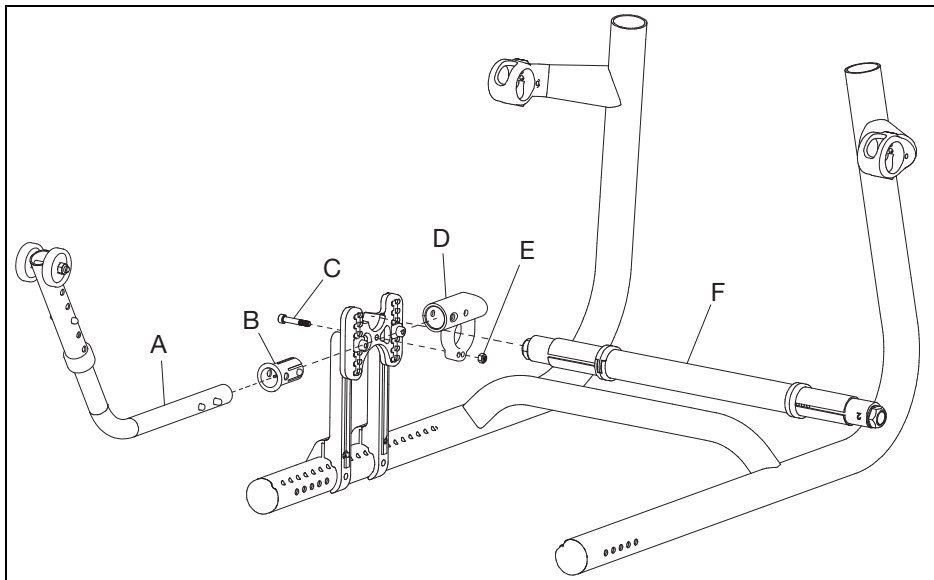


4. Install the upper base mount (B) onto the rear index clamps with two bolts (D), two washers (C) and two square nuts (A) per side using a 5mm Allen wrench. Repeat on opposite side.



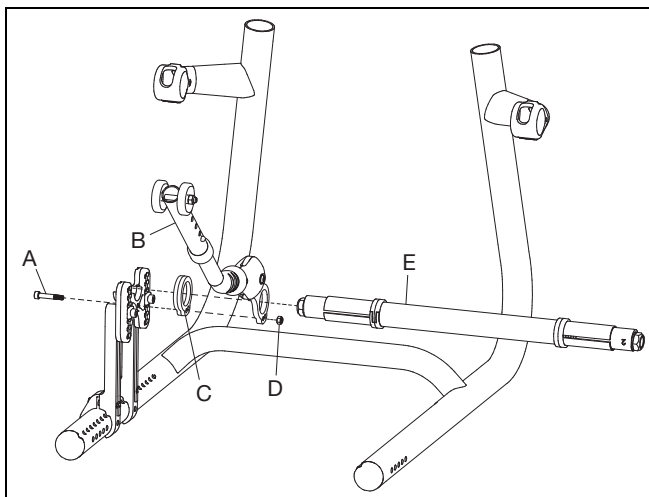
Index Towers and Camber Tube

5. When standard anti-tips are present - Install the anti-tip mount (D) onto the upper base mount with bolt (C) and nut (E) using a 4mm Allen wrench and a 2.5mm wrench. Do not fully tighten until full camber tube assembly is complete.
6. Install the anti-tip assembly (A) into the anti-tip sleeve (B). Install the anti-tip assembly and sleeve into the anti-tip mount and ensure index button "clicks" and locks into one of the holes in the anti-tip mount.
7. Install the camber tube (F) into the opening in the anti-tip mount.



8. When user activated anti-tips are present - Install the anti-tip spacer (C) and anti-tip assembly (B) onto the upper base mount with bolt (A) and nut (D) using a 4mm Allen wrench and a 2.5mm wrench. Do not fully tighten until full camber tube assembly is complete.
9. Install the camber tube (E) into the opening in the anti-tip mount.

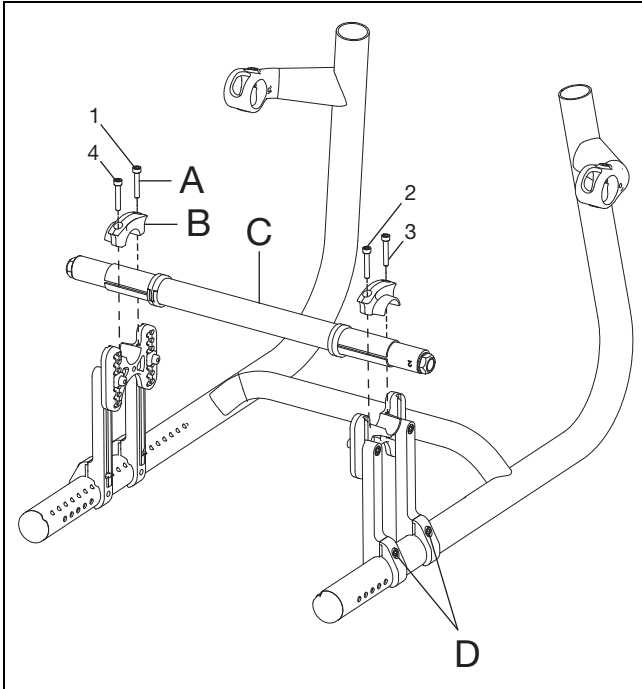
NOTE: Ensure the camber tube is perpendicular to the seat frame rails. Ensure the towers and clamps are aligned identically on both sides.



Index Towers and Camber Tube

1. For standard camber tube installation (no anti-tip present) - with the camber tube (C) in place, secure with lower base mounts (B) and two bolts (A) per side using a 4mm Allen wrench.
2. Tighten the four bolts to 50 in/lbs in the sequence shown below (1,2,3,4).
3. Slide the tower index clamp assembly along the dimple track to the the desired CG position. CG is measured from the front of the back cane to the center of the camber tube axle receiver.
4. Tighten all tower clamp bolts (D) to 70 in/lbs to secure in the desired position.

NOTE: Ensure the camber tube is perpendicular to the seat frame rails. Ensure the towers and clamps are aligned identically on both sides.

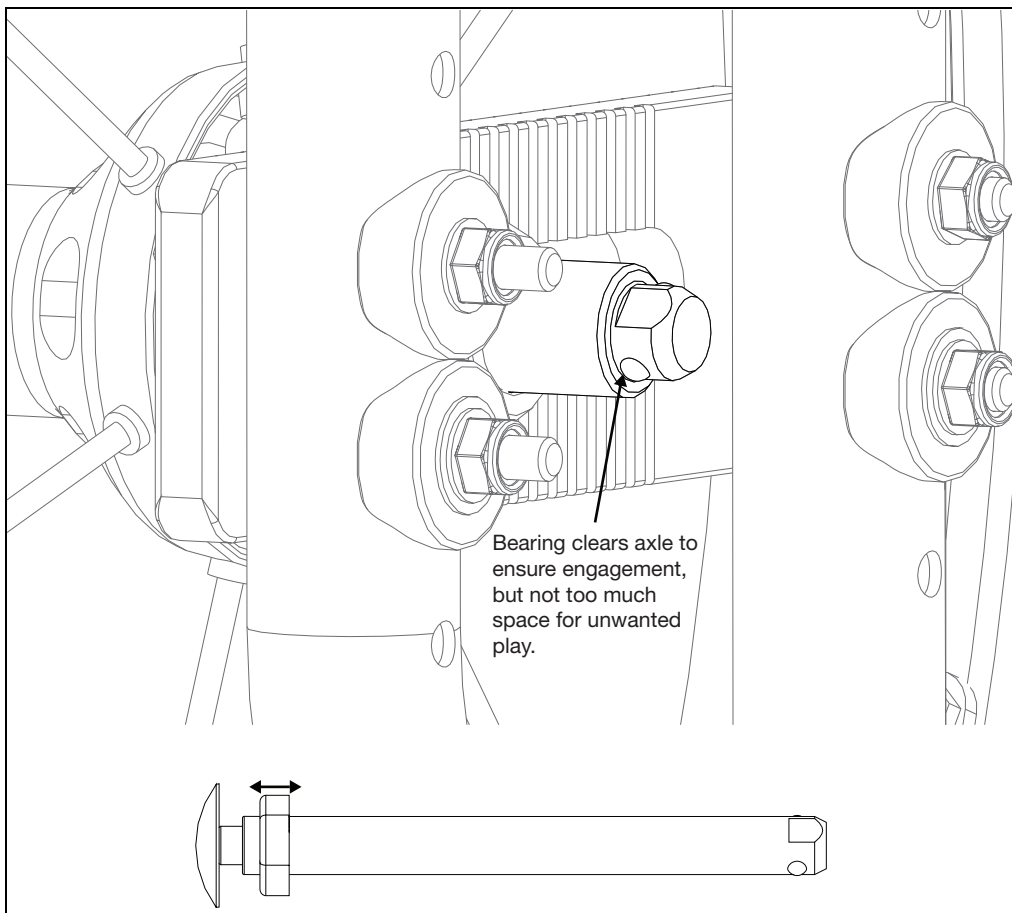


Quick Release Axle Adjustment

If the quick release axle bearing is set too long, there may be play in the wheel. If the quick release axle bearing is set too short, the bearing won't release and secure the wheel to the chair.

1. Hold the end of the quick release axle with an 11mm wrench and use a 19mm wrench to adjust the nut on the quick release axle. Rotating the nut towards the push button will increase the length and rotating the nut towards the bearing end will shorten the length.
2. Always test the quick release axle with no user in the chair first, to ensure the bearing clears and locks the axle to the frame with little play.

NOTE: The image below might show a different model of chair, but the image is to show the bearing clearing the axle.



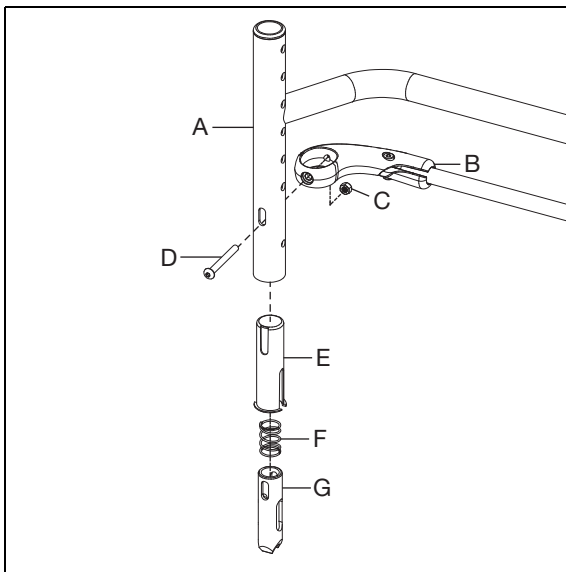
Backrest Assembly - Rogue 2

Backrest Installation

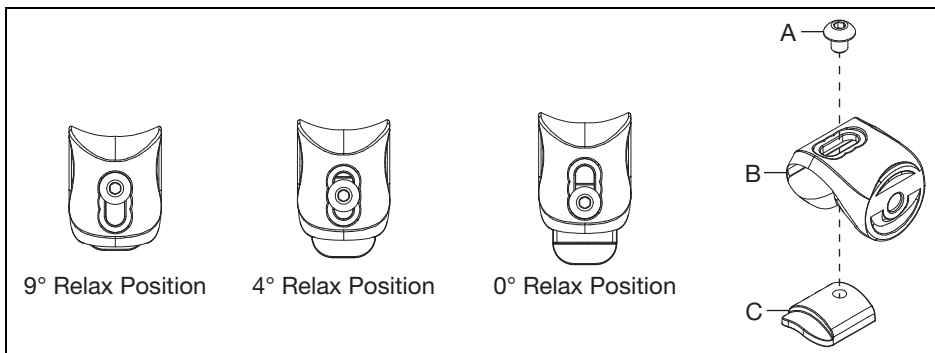
NOTE: Remove existing backrest before beginning the installation process.

NOTE: If replacing the whole backrest, the backrest will come as an assembly and the first two steps can be skipped.

1. Install the release lever assembly (B) onto the back post (A) with a screw (D) and nut (C) using a 3mm Allen wrench. The screw will pass through the tube sleeve (E) and release pin (G) which are installed up through the bottom of the back post. The compression spring (F) is installed up through the bottom of the back post also, but the bolt doesn't pass through it. Repeat steps on opposite side of back post.

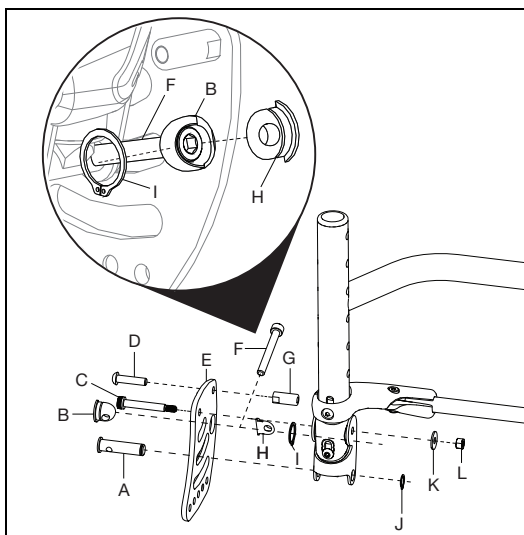


2. Secure the relax bumper (C) to the relax saddle (B) with the screw (A) using a 4mm Allen wrench. There are three index slots that the screw can be installed in - the top (9°), middle (4°) and bottom (0°). Install the screw in the desired position and repeat steps on the second set of saddles and bumpers. Ensure both sides are set in the same position.



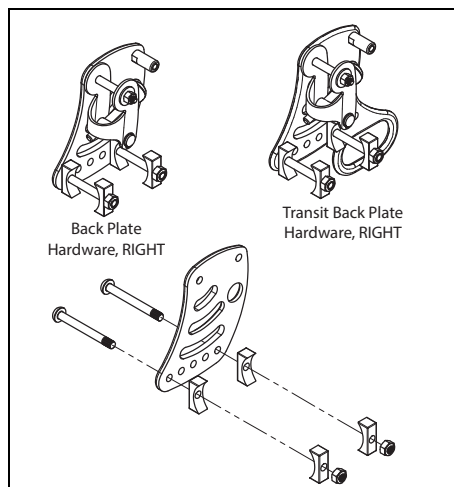
Backrest Assembly - Rogue 2

3. Secure the new backrest plate (E) to the backrest post with the barrel nut (A) and 3/8" external retaining ring (J) using a pliers.
4. Secure the top of the backrest plate (E) to the backrest post with the shoulder bolt (C), fender washer (K) and nut (L) using a 3mm Allen wrench and an 8mm wrench.
5. Install the adjustment screw plug cap (B) through the backrest plate. Install the bolt (F) in through adjustment screw plug cap (B) and secure by installing the plug cap adjustment screw (H) over the top and the 5/8" retaining ring (I) over the top of both plug cap pieces. See the zoomed in image below for details of this procedure.
6. Install the bolt (D) through the backrest plate into the strike (G).
7. Repeat steps on opposite side of the backpost.



8. Install the backrest assembly onto the chair with the hardware shown below. A 10mm wrench and a 4mm Allen wrench are needed.

NOTE: The holes that the backrest assembly is installed with on the seat frame depend on the desired seat depth desired. Set as needed for desired configuration.

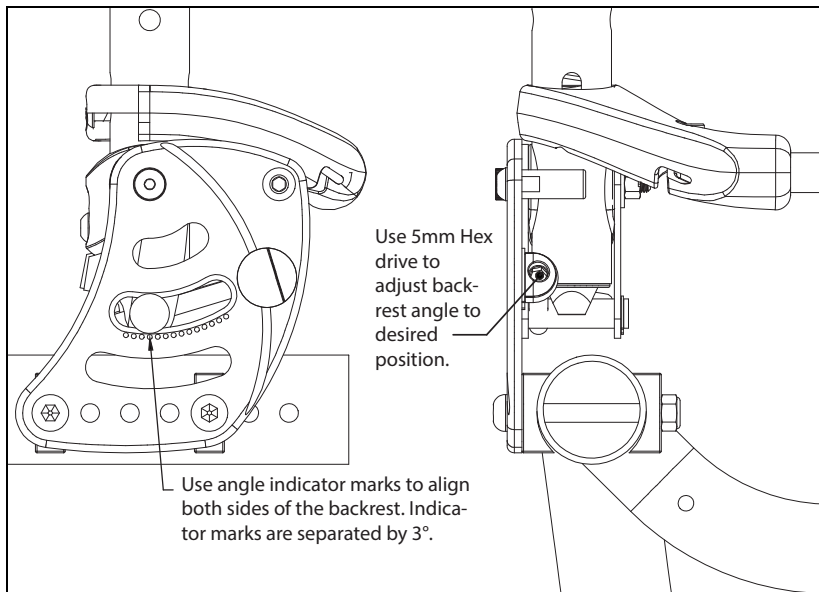


Backrest Assembly - Rogue 2

Adjusting Backrest Angle

1. The backrest angle can be adjusted by using a 5mm Hex drive, as shown below. Turning the hex drive clockwise decreases the backrest angle and turning it counterclockwise increases the angle. Each angle indicator mark on the back plate is 3° and 3° of angle change takes roughly 2.5 turns.

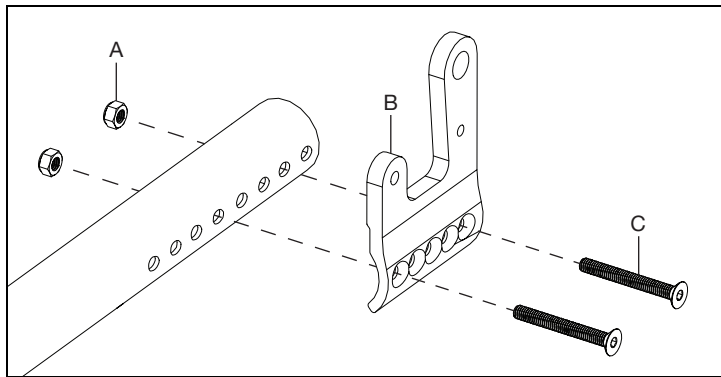
NOTE: Ensure both sides of the backrest are set in the same position. Use the angle indicator marks as a guide.



Backrest Assembly - Rogue XP

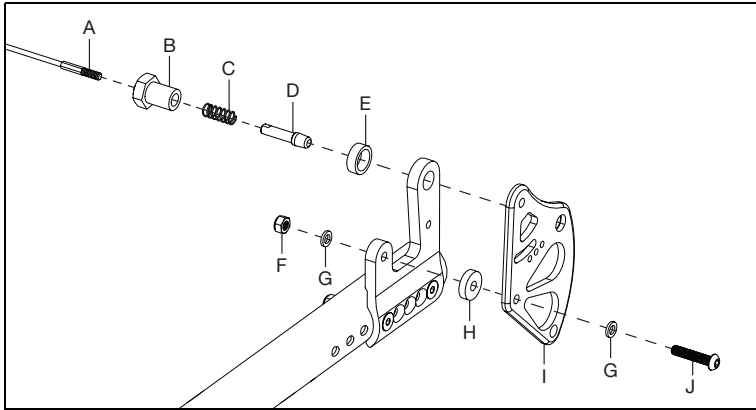
1. Remove any cushion or seating components that may be in the way of the current backrest removal.
2. Install the back mount (B) onto the chair frame with two bolts (C) and two nuts (A) using a 4mm Allen wrench and a 10mm wrench.

NOTE: The holes used for mounting are determined by the user's desired seat depth and CG.



3. Secure the backrest plate (I) to the back mount with bolt (J), nylon washer (G), large nylon washer (H), washer (G) and nut (F) using a 4mm Allen wrench and a 10mm wrench.
4. Install the release cable (A), pin receiver (B), spring (C), lockout pin (D) and spacer into the back mount and the backrest plate (I).

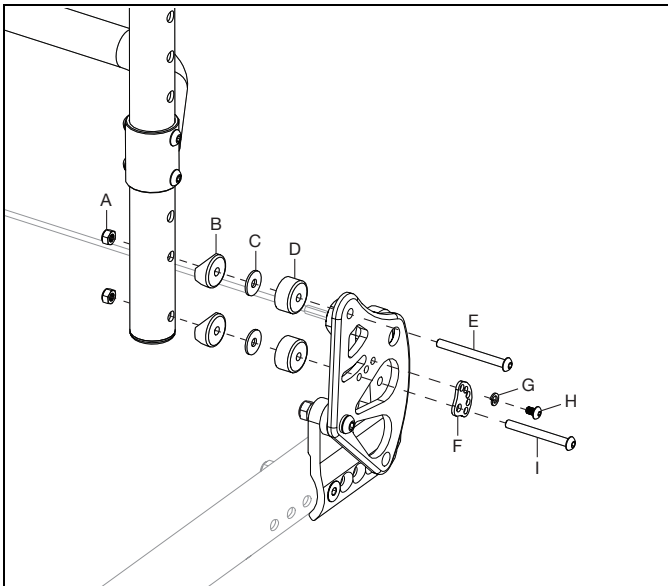
Backrest Assembly - Rogue XP



5. Secure backrest plate to back posts with bolt (E), washer (C), saddle (B) and nut (A) using a 4mm Allen wrench and a 10mm wrench.
6. Install the arc adjustment cam (C) onto the backrest plate with bolt (I), washer (C), saddle (B) and nut (A) using a 4mm Allen wrench and a 10mm wrench.

NOTE: An offset backrest spacer (D) is used in both sets of hardware that attach to the back post when installing the 1" Offset Backrest Mount.

7. Set the angle of the backrest by turning the arc adjustment cam and aligning the cam holes with the backrest plate holes. Once desired angle is achieved, secure by installing the bolt (H) and lock washer (G) using a 3mm Allen wrench.



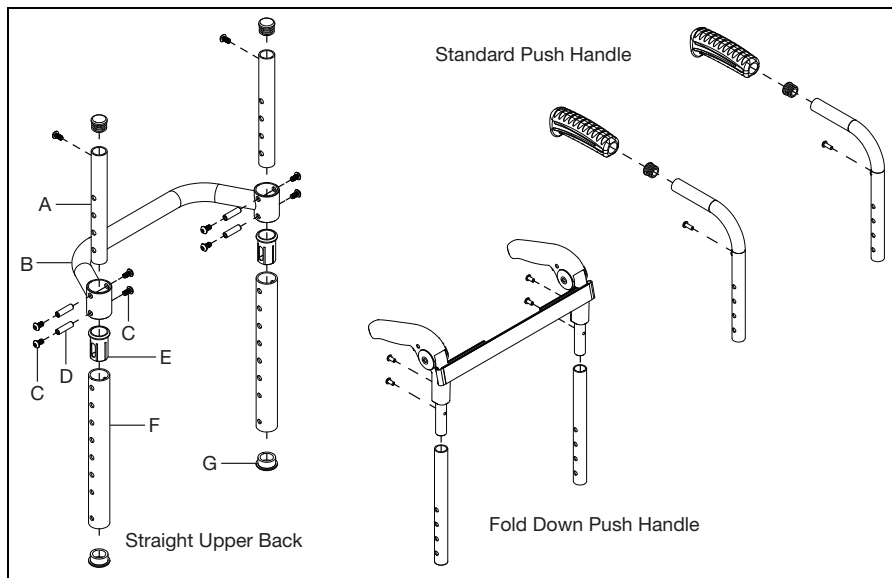
8. Repeat steps on opposite side. Ensure the same mounting and angle holes are used so both sides of the backrest match.

Height Adjustable Back Post

1. Install the height adjustable back post (F), plugs (G), sleeve (E), screws (C), threaded barrels (D) and the upper back tube assembly (A) using two 3mm Allen wrenches.

NOTE: The straight upper back, standard push handle and fold down push handle upper backs are shown in the image below.

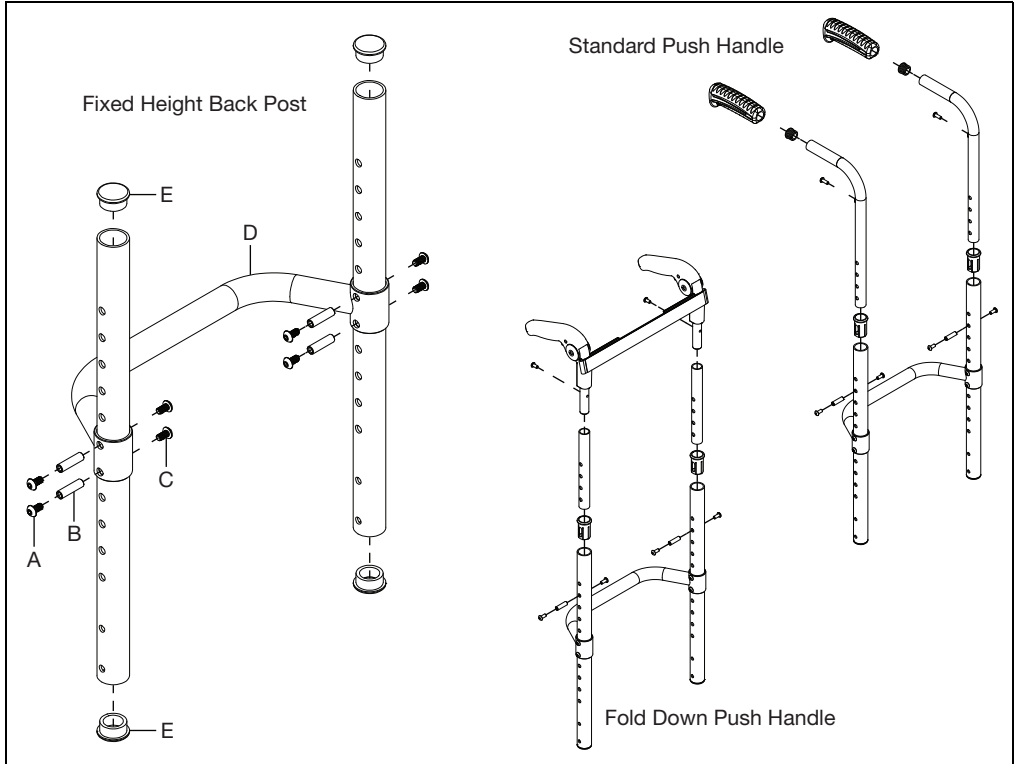
NOTE: The hole patterns on the lower section of the tubes differ between designs, but the process of installation and adjustment is the same.



Fixed Height Back Post

1. For the fixed height back post, install the rigidizer bar (D), screws (A & C), threaded barrels (B) and plugs (E) using two 3mm Allen wrenches.

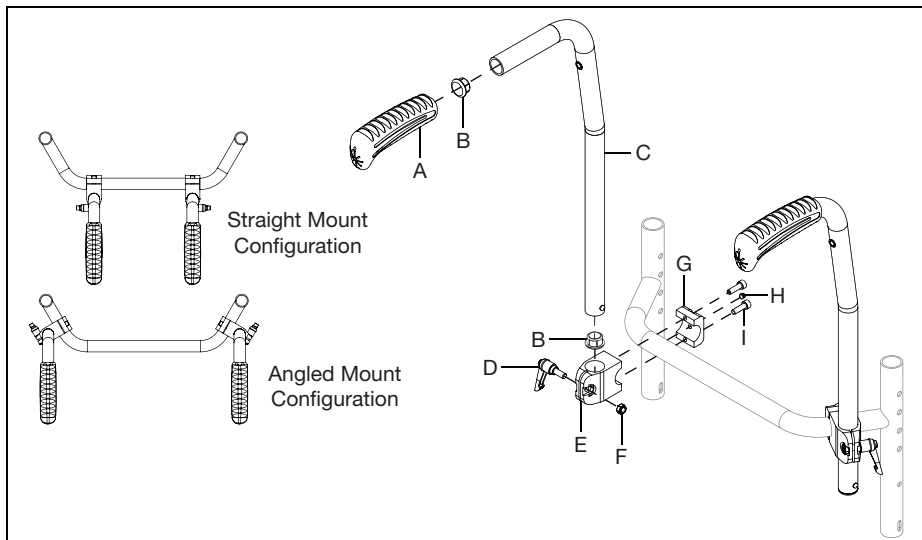
NOTE: The fixed height back post, standard push handle and fold down push handle upper backs are shown in the image below. The standard push handle and fold down push handle upper backs also require sleeves, upper post assemblies and the handle hardware. See image below for details.



Rigid Stroller Handle - Rogue XP

1. Install the stroller handle clamp (E & G) onto the rigidizer bar and secure with two screws (I) and a set screw (H) using a 5mm Allen wrench. The clamps can be installed in the straight mount configuration or the angled mount configuration. See image below.
2. Install the backpost (C), with the handles (A) and plugs (B) installed, into the clamp and secure by installing the clamp handle (D) and nut (F) using a 10mm wrench.

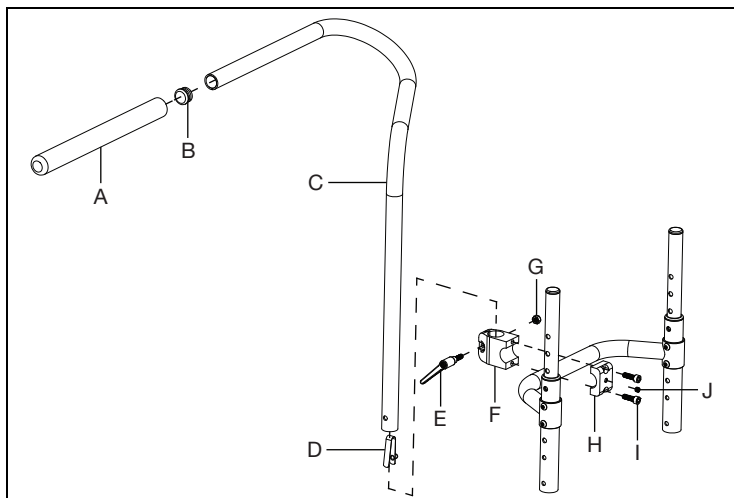
NOTE: The detent button on the bottom of the back post will click into place when properly installed.



Ergo Stroller Handle - Rogue XP

1. Install the ergo stroller handle clamp (F & H) onto the middle of the rigidizer bar and secure with two screws (I) and a set screw (J) using a 5mm Allen wrench.
2. Install the backpost (C), with the handle (A) and plug (B) installed, into the clamp and secure by installing the clamp handle (E) and nut (G) using a 10mm wrench.

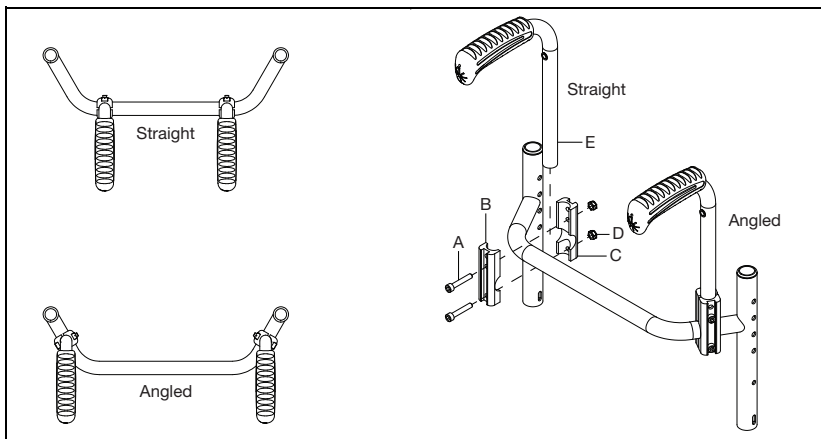
NOTE: The detent button (D) on the bottom of the back post will click into place when properly installed.



Bolt-On Push Handle - Rogue XP

1. Install the clamps (B & C) and bolt-on push handle tube (E) onto the rigidizer bar and secure with two screws (A) and two nuts (D) using a 5mm Allen wrench.

NOTE: The clamps can be installed onto the rigidizer bar in the straight or angled orientation. See image below for details.



2. Repeat installation step with the second bolt-on push handle.

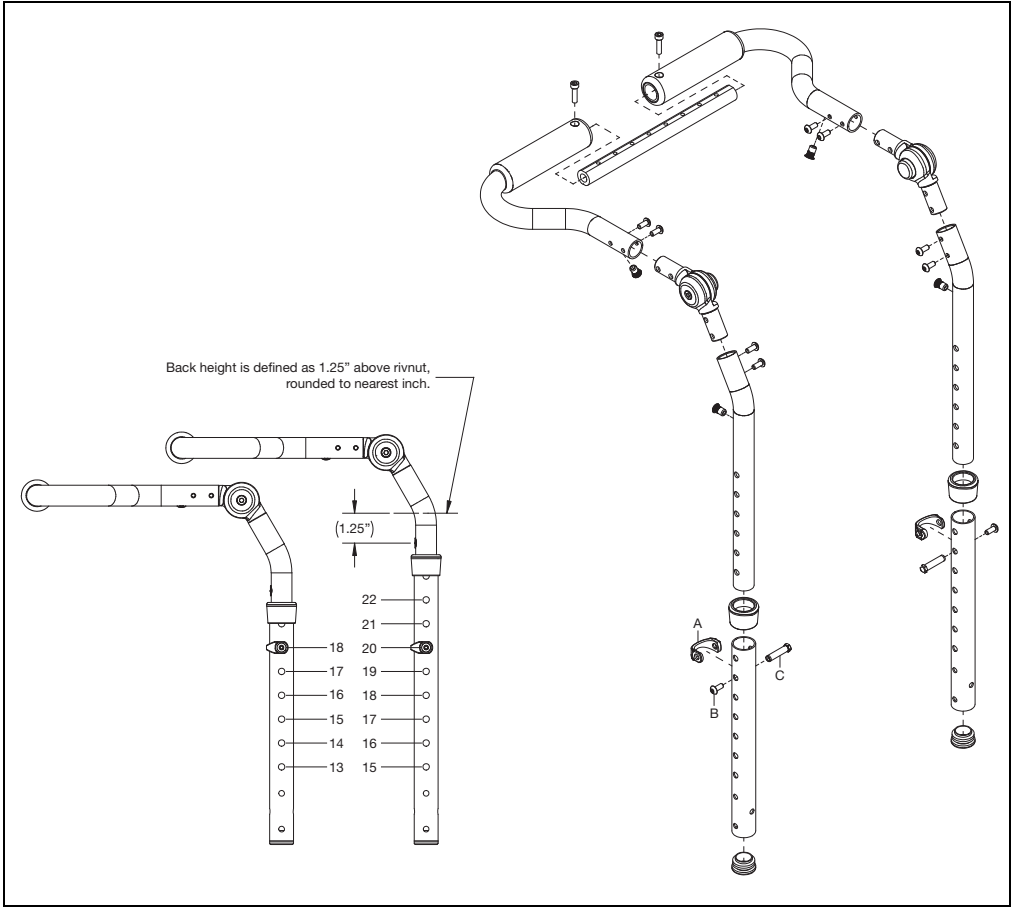
Height Adj. With Adj. Push Handle - Rogue XP

Assembly

1. See image below for assembly of the Height Adjustable with Adjustable Push Handle back.

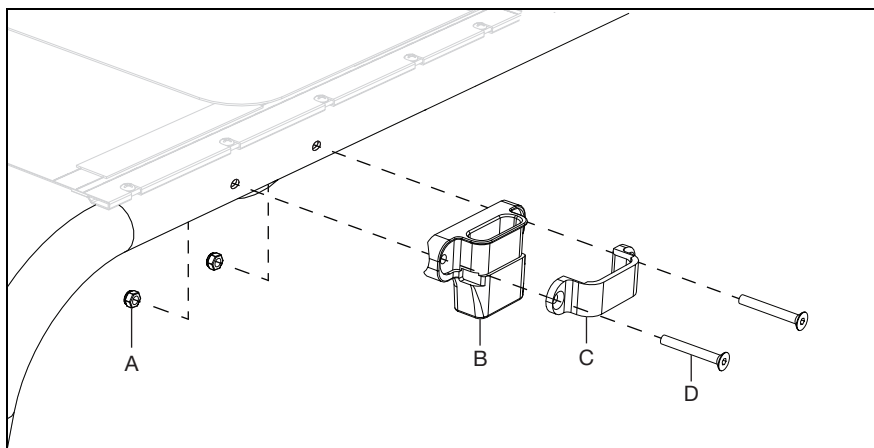
Height Adjustment

1. See the image below for callouts on which holes are used for the desired height configuration.
2. Remove the button head cap screw and hex bolt with a 3mm Allen wrench.
3. Slide the fastener restrainer collar to the desired hole and place the hex bolt into place.
4. Reinstall the the button head cap screw and tighten using 3mm Allen wrench. Repeat on opposite side, ensure both sides are set in the same height configuration.

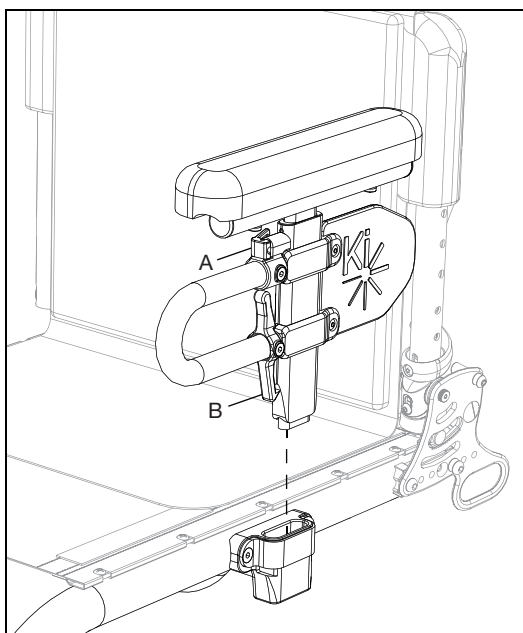


Height Adjustable T-Arm

1. Install the T-Arm receiver (B) and the T-Arm bracket (C) onto frame with two bolts (D) and two nuts (A) using a 5mm Allen wrench and a 10mm wrench.



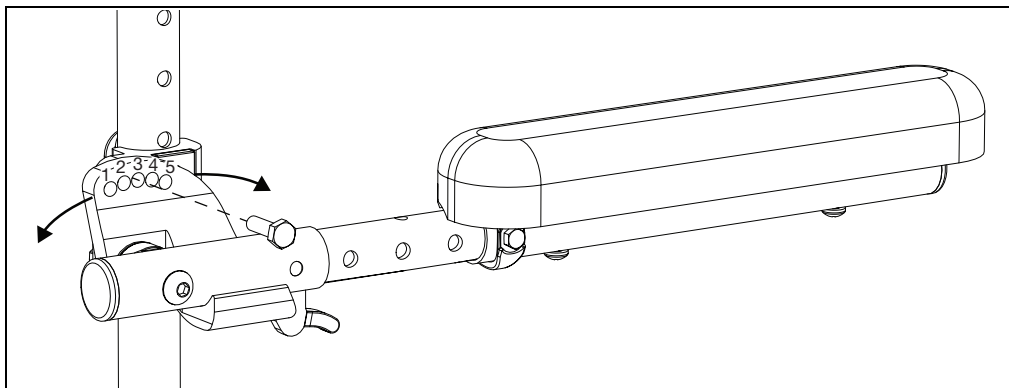
2. Install the T-Arm assembly into the receiver. Ensure the latch (B) "clicks" into place. Adjust the height by loosening the height lever (A) and sliding the T-Arm post up or down. Repeat steps on opposite side.



Angle Adj. Locking Flip Up Extendable Armrest - Rogue XP

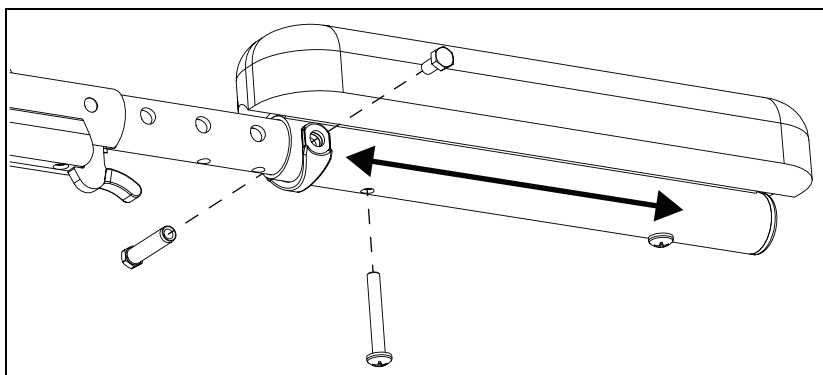
1. Set the angle of the armrest. Tighten the bolt once angle is set.

NOTE: There are 7 angle adjustments in 5° increments from -5° to 25°.

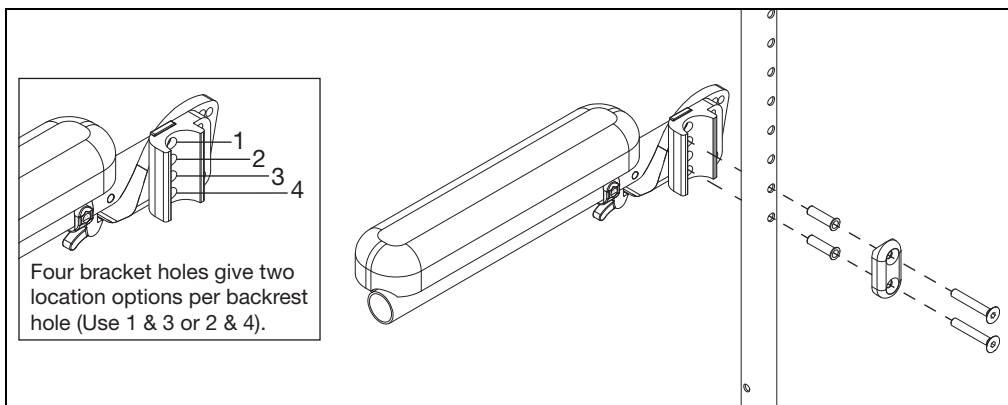


2. Set the length of the armrest. To adjust the length, remove the bolts and spacer on the tube and the screw closest to the back of the chair. Slide the armrest to desired length available by the predrilled holes and reinstall the screw and bolts.

NOTE: The armrest can extend up to 4" in 1" increments.



3. Set the height of the armrest. There are four holes on the armrest that allow for two different height settings for each set of holes on the back tube. Use the holes that provide the correct height setting for the user. The two bolts pass through the spacer, sleeves, back posts and into the armrest.



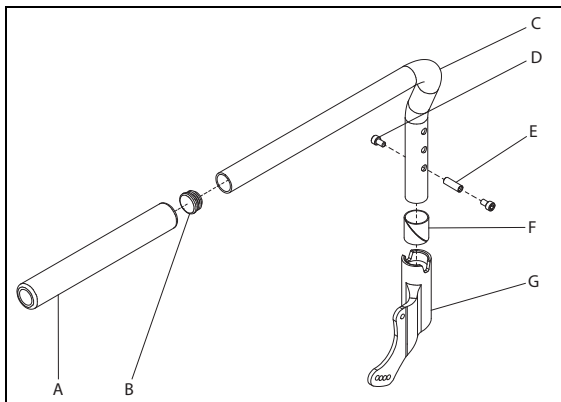
Swing Away Armrest

Rogue 2

1. Install the tube plug (B) into the swing away arm (C) (if not already assembled).
2. Install the armrest foam (A) over the swing away arm (C) (if not already assembled).
3. Set the height of the swing away arm by using one of the three possible holes and install the two bolts (D) using two 5mm Allen wrenches.

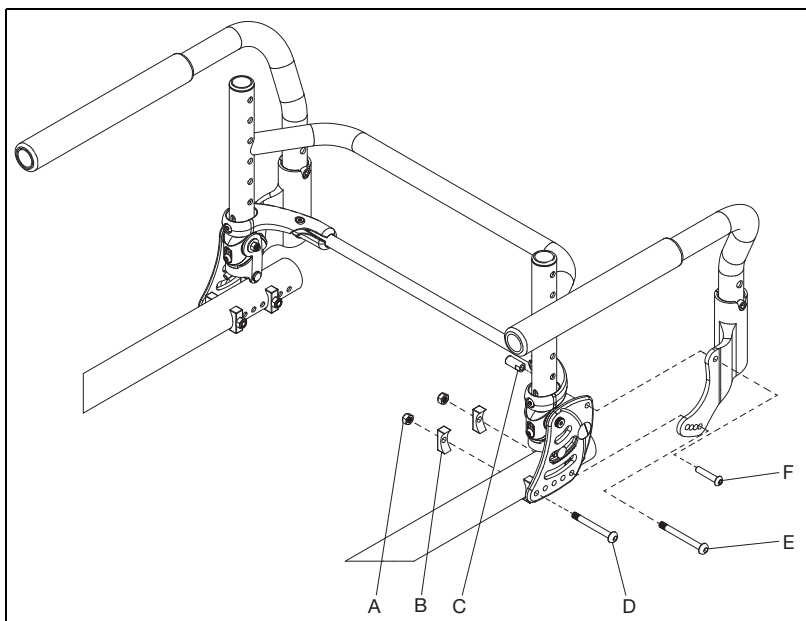
NOTE: The highest hole on the swing away arm will provide the lowest setting. The lowest hole will provide the highest setting.

4. Install the swing away arm assembly into the receiver (G) with the sleeve (F).



5. Install the swing away arm assembly onto the outside of the backplates with three bolts (D,E & F), four saddles (B - 2 inside of frame, 2 outside of frame), two nuts (A) and a strike (C). A 4mm Allen wrench and a 10mm wrench are needed for the install. If existing hardware is present on the backplate, remove and install what is shown below.

NOTE: Install the bolt (E) into the angle hole on the swing away receiver that makes the swing away armrest parallel with the ground.

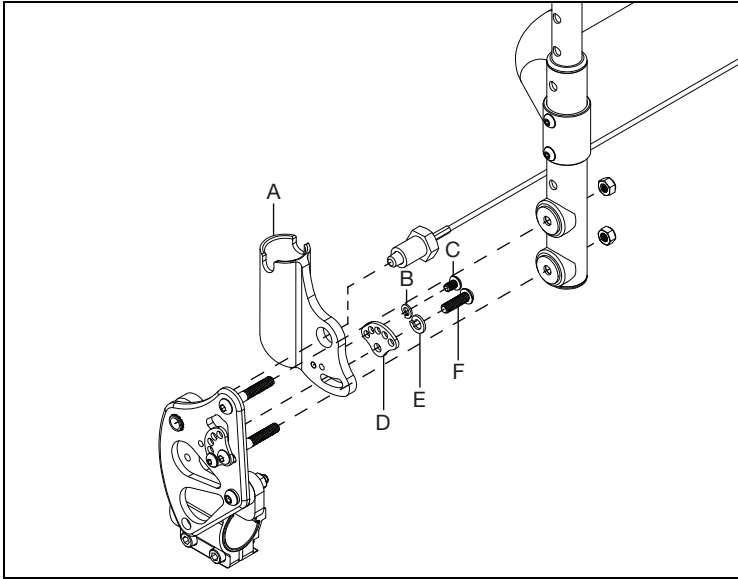


Swing Away Armrest

Rogue XP

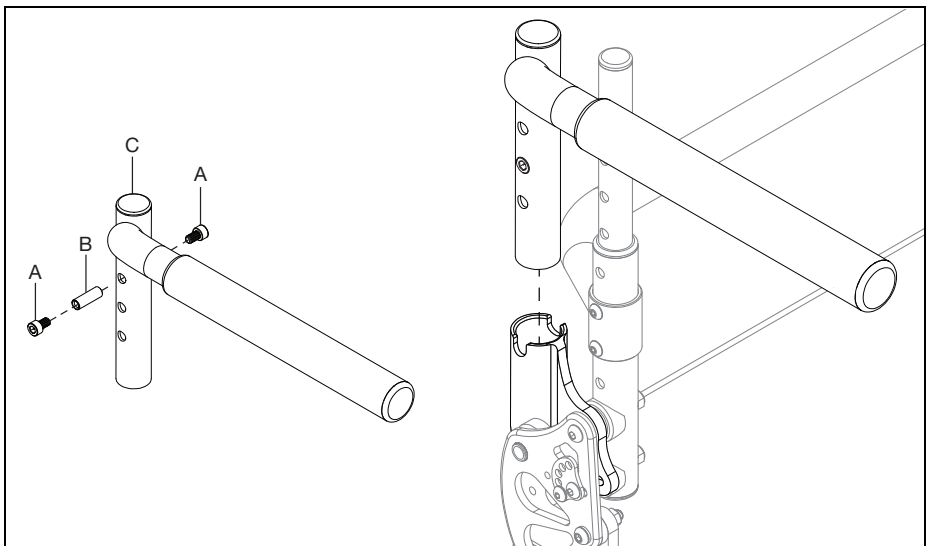
1. Detach the backrest from the backrest plate and install the swing away receiver (A) between the backrest and backrest plate along with arc adjustment cam (D) with two screws (C & F) and two lock washers (B & E) using a 3mm Allen wrench and a 4mm Allen wrench. See image below.

NOTE: The backrest cable will also need to be detached, put through the swing away receiver hole and back into backrest plate.



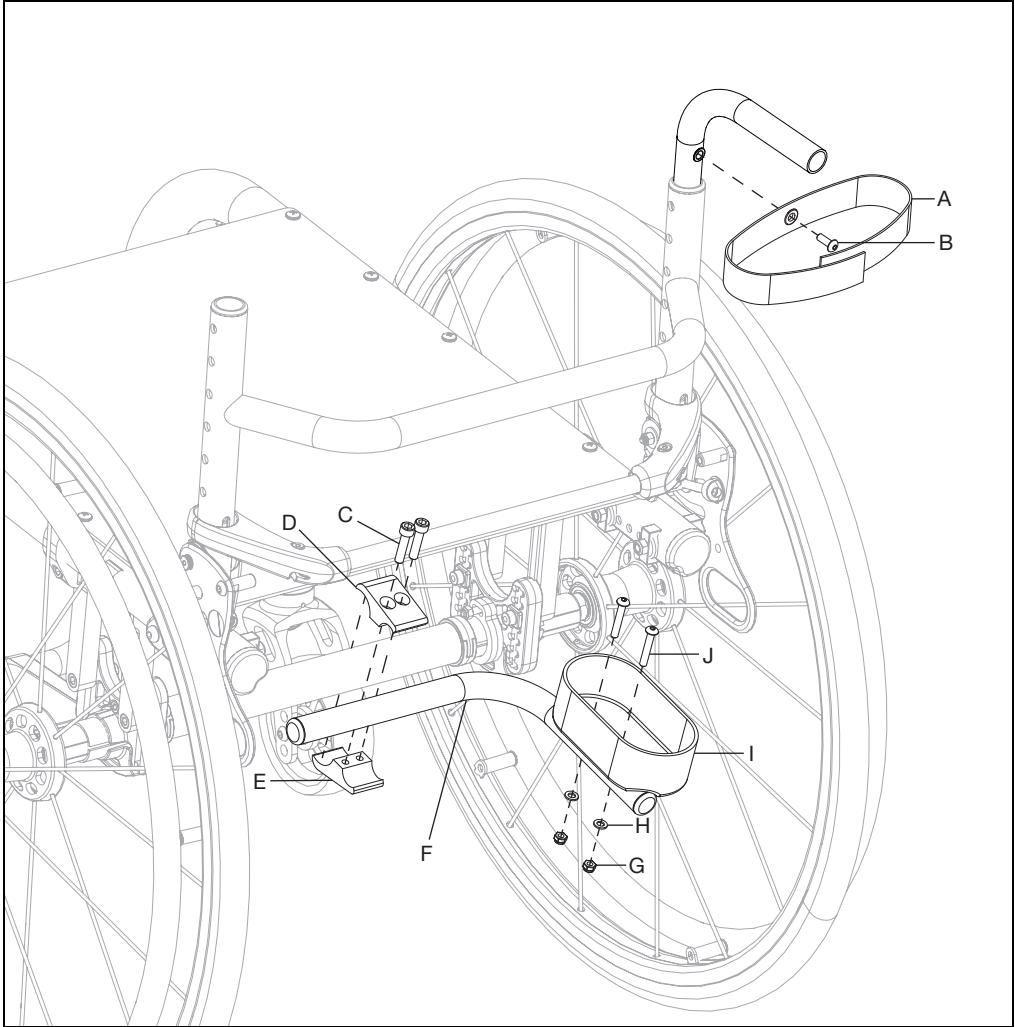
2. Install two bolts (A) and the threaded barrel (B) into the swing away armrest (C). The bolts act as stops when the armrest is dropped into the receiver, controlling the armrest height. Change height setting as needed and repeat steps on opposite side.

NOTE: There is a short and tall swing away arm available. The short has a height range of 7" - 9" and the tall has a height range of 9.25" - 11.25".



Cane and Crutch Holder

1. Install crutch holder cup (I) onto the crutch holder tube (F) with two screws (J), two washers (H) and two nuts (G) using a 3mm Allen wrench and an 8mm wrench.
2. Install the crutch holder tube assembly onto the camber tube with the clamps (D & E) and two bolts (C) using a 5mm Allen wrench.
3. Install the crutch holder velcro strap (A) onto the back post (ensure the crutch holder cup and velcro strap are on the same side of chair) with a screw (B) using a 3mm Allen wrench.



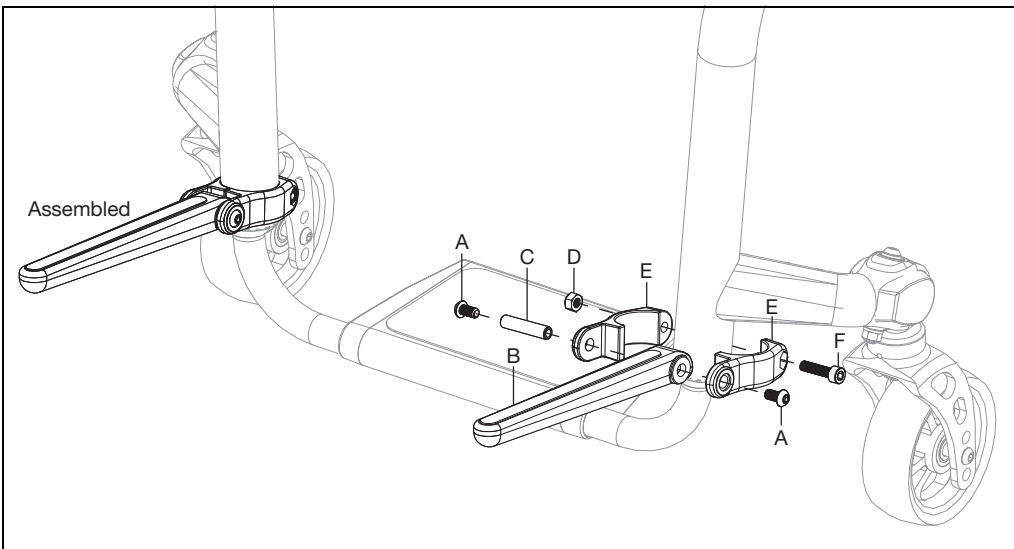
Luggage Carrier

NOTE: There are different sizes of clamps to fit all types of chairs and configurations. The carrier can be mounted to the frame or footrest tube on Rigid chairs. The installation is the same whether it is being installed on the frame or footrest tubes.

1. Install luggage carrier fork (B) and clamp (E) by installing two screws (A) and barrel nut (C) through the clamp and fork using two 4mm Allen wrenches.
2. Secure the clamp in the desired location by installing and tightening the screw (F) and nut (D) on the backside of the clamp using a 5mm Allen wrench.

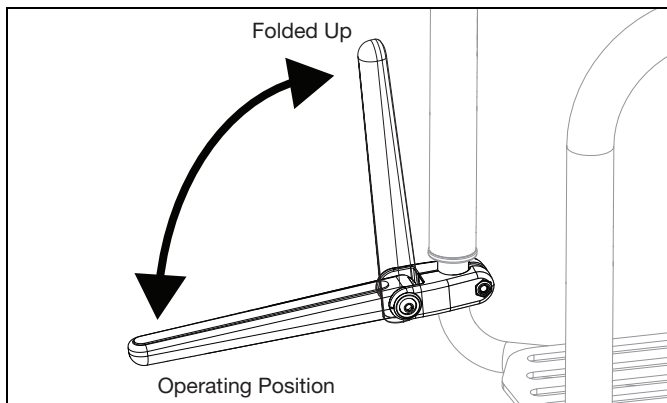
NOTE: The nut for the backside screw goes into a recess in the clamp. Ensure that nut stays in place.

3. Repeat on opposite side.



Using the Luggage Carrier

1. Operating position for the luggage carrier is when the forks are folded down (See image below). The max weight capacity is 55lbs.
2. When not in use, fold the luggage carrier up.

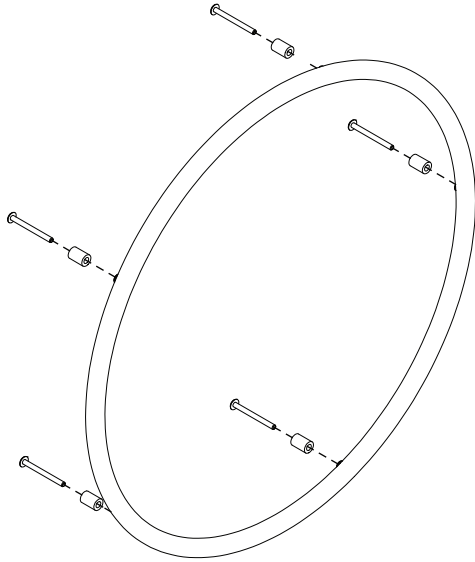


Handrim Configurations

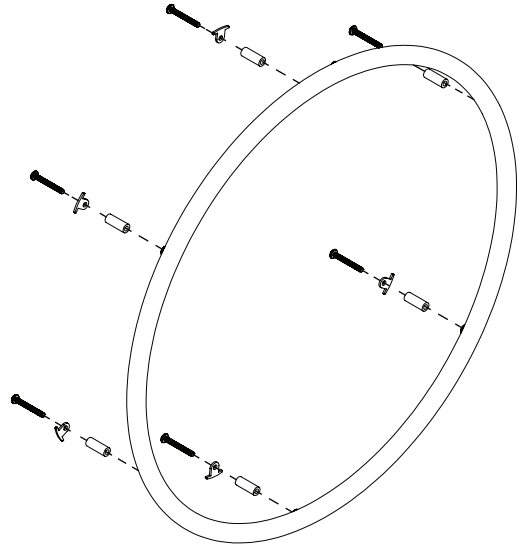
For handrim sizing, hardware and more information please visit our parts manual or click the link [HERE](#) to jump to the Handrim Chart.

Handrim Construction

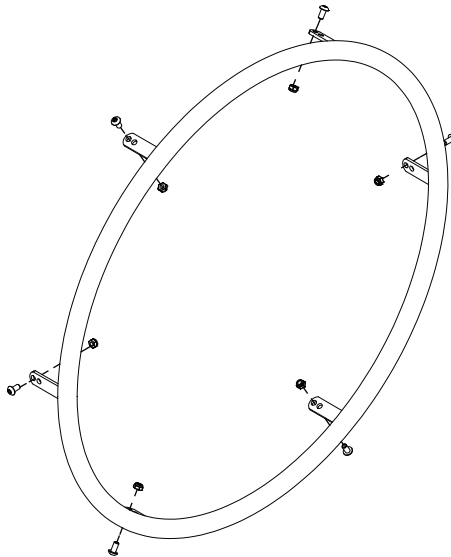
The sequencing of hardware for the three styles of handrims is shown below. The specific hardware used is determined in the chart on the previous page, based on the tire and handrim being used.



Spacer Style



Detached Tab Style



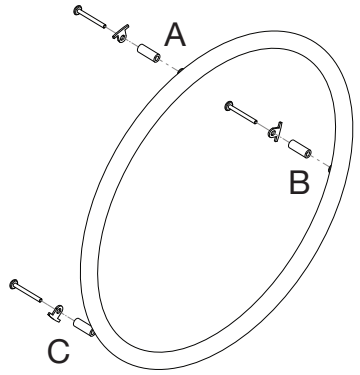
Tab Style

Handrim Tightening

The correct tightening patterns are shown below.

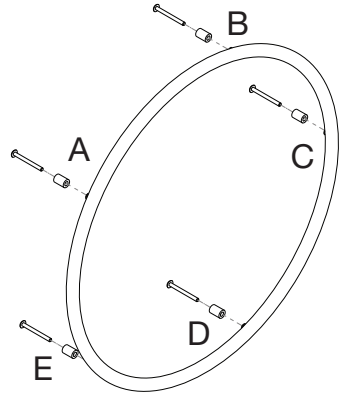
3-Hole Pattern

Use A, B, C pattern leaving A loose until C is tightened completely.



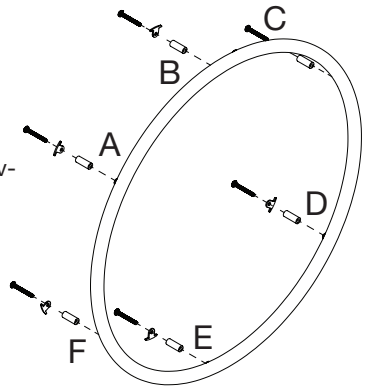
5-Hole Pattern

Use A, C, E, B, D (STAR) pattern leaving A loose until D is tightened completely.



6-Hole Pattern

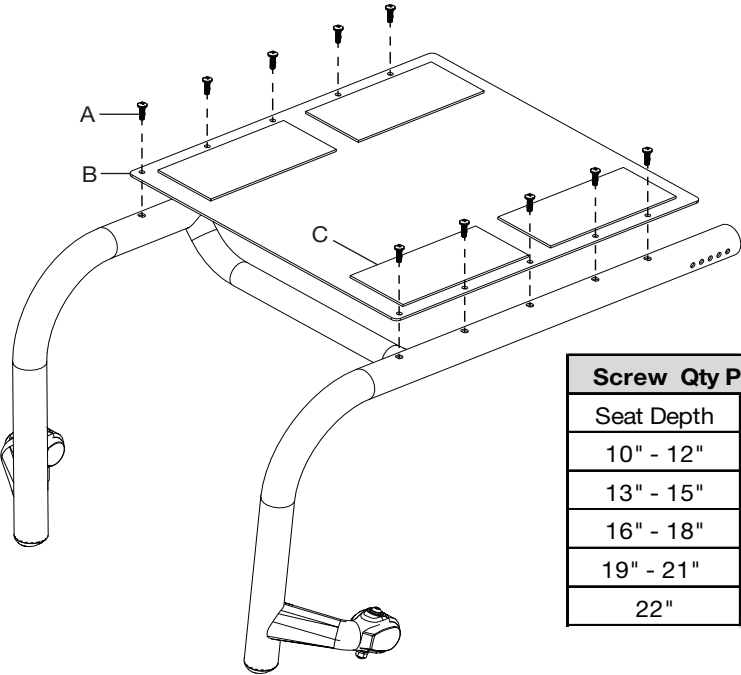
Use A, D, B, E, C, F pattern leaving A loose until F is tightened completely.



Seat Pan

NOTE: Remove any current seating or cushions before installing the seat pan.

1. Install the seat pan (B) onto the chair frame and secure with screws (A) using a Phillips screwdriver.
2. If not already done, install the tape onto the seat as shown in the image below. The tape should cover as much area as possible without hanging over the edge or covering one of the screw holes.

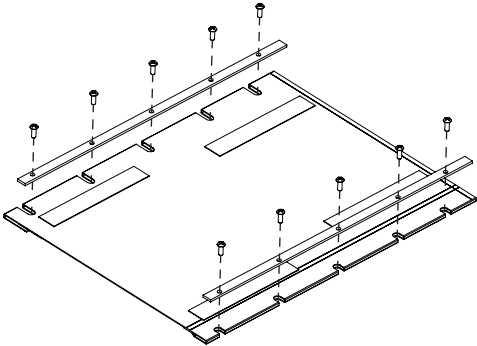


Screw Qty Per Chair	
Seat Depth	Screw Qty
10" - 12"	6
13" - 15"	8
16" - 18"	10
19" - 21"	12
22"	14

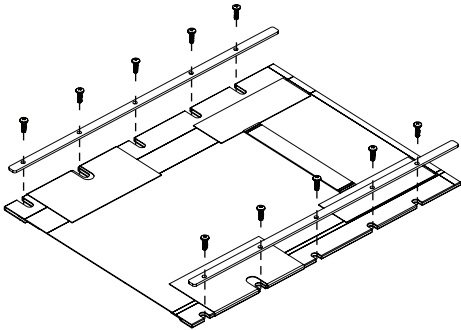
Tape Size	Seat Pan Depth
3" X 4"	10" - 11"
3" X 4" & 3" X 5"	12"
3" X 5"	13"
3" X 6"	14" - 22" (19" - 22")

Seat Upholstery

1. Install the seat rail (B) into the sleeve on the edge of the seat upholstery (C). Repeat on opposite side. The seat rail is shown outside of the sleeve to show the hole alignment in the image below.
2. Secure the seat rail and seat upholstery onto the chair frame with screws (A) using a Phillips screwdriver.



Seat sling used on 10” - 13” wide



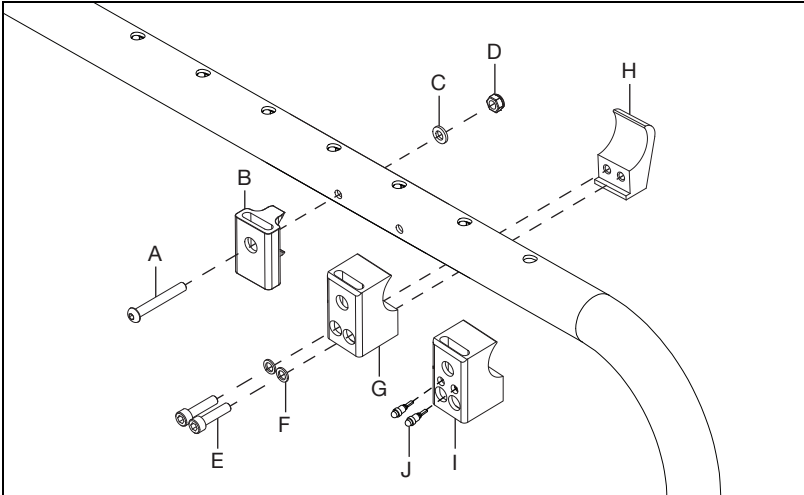
Seat sling used on 14” - 22” wide

SCREW (ITEM 3) QTY PER CHAIR	
SEAT DEPTH	SCREW QTY
10" - 12"	6
13" - 15"	8
16" - 18"	10
19" - 21"	12
22"	14

Side Guards

Side Guard Receiver

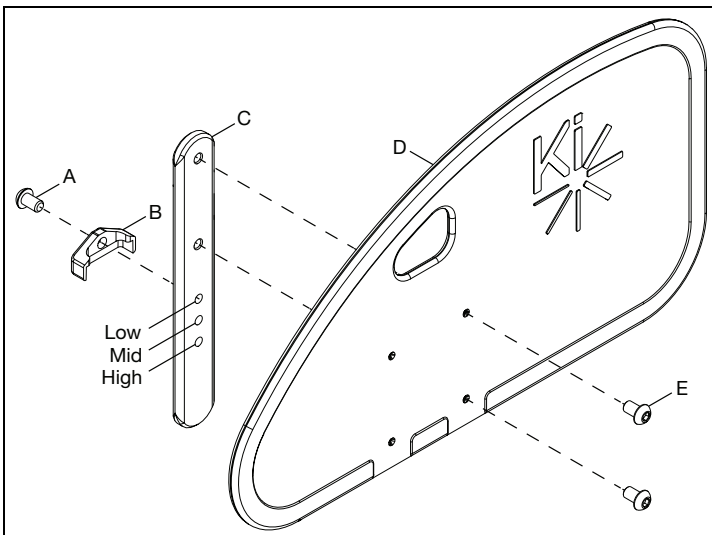
1. There are three types of side guard receivers that may be used. The mounted side guard receiver (B) is installed onto the frame with screw (A), washer (C) and nut (D) using a 4mm Allen wrench and a 10mm wrench. The clamp side guard receivers (G & H) are installed onto the frame with two screws (E) and two washers (F) using a 5mm Allen wrench. The anti-rattle side guard receiver (I) is installed the same way as the clamp side guard receiver, it just has two additional rubber buttons (J) installed into the receiver. Repeat on opposite side.



Removable Adult Side Guard

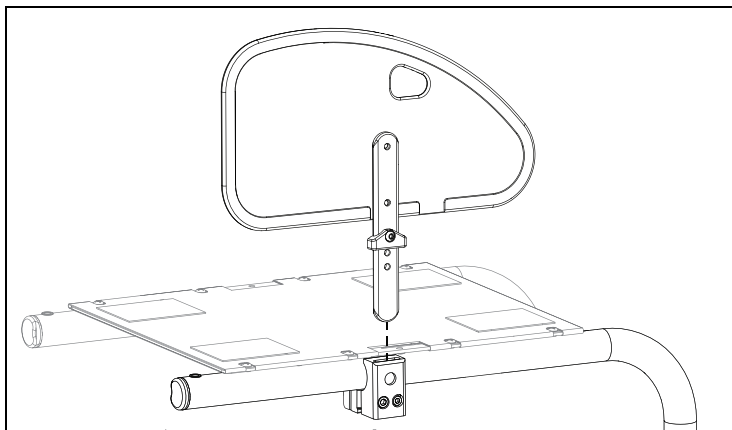
1. Install the adult side guard (D) onto the side guard post (C) with two screws (A) using a 4mm Allen wrench. On the opposite side, install the side guard post stop (B) with a screw (A) using a 4mm Allen wrench.

NOTE: There are two sets of holes that the side guard post (C) can be installed onto the side guard with. Choose the holes that place the side guard in the desired position. The height is also adjusted with the hole that the side guard post stop (B) is installed in.



Side Guards

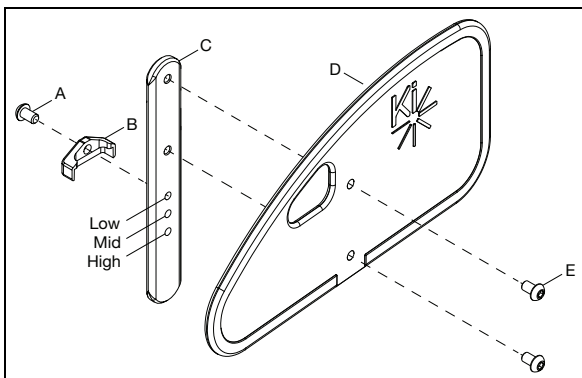
2. Install the side guard assembly into the receiver so the side guard post stop faces the outside of the chair.



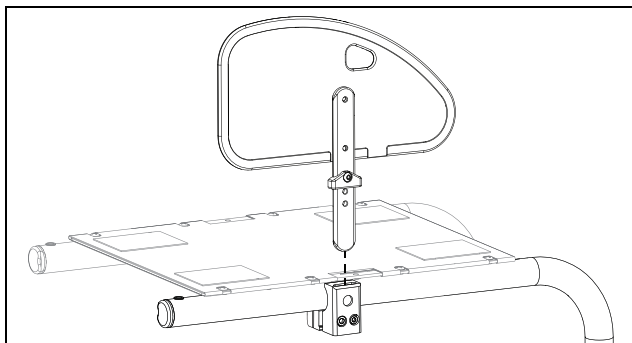
Removable Pediatric Side Guard

1. Install the pediatric side guard (D) onto the side guard post (C) with two screws (A) using a 4mm Allen wrench. On the opposite side, install the side guard post stop (B) with a screw (A) using a 4mm Allen wrench.

NOTE: The height of the pediatric side guard can be adjusted with the three holes on the side guard post (C).



2. Install the side guard assembly into the receiver so the side guard post stop faces the outside of the chair.

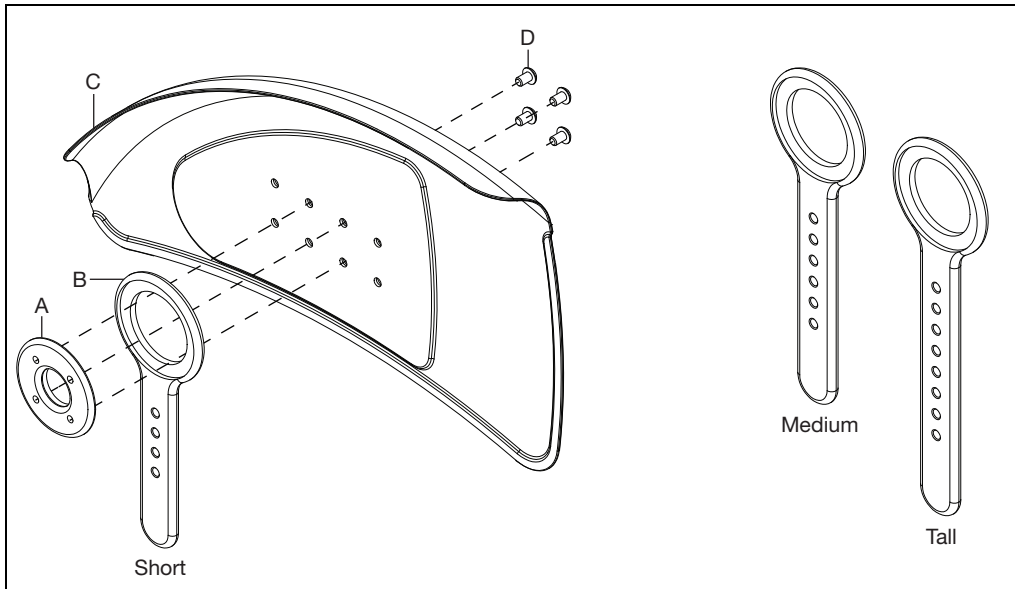


Side Guards

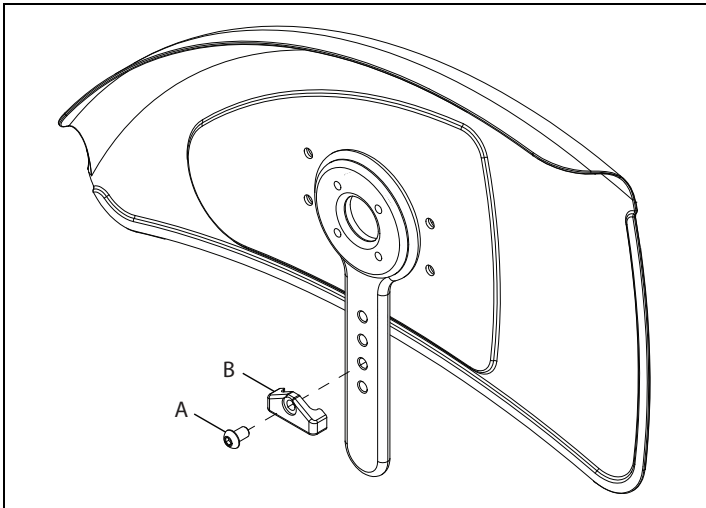
Adjustable Fender Side Guard

1. Install post (B), post mount plate (A) and bolts (D) onto the fender (C) using a 3mm Allen wrench.

NOTE: There are three mounting positions that can be used. Pick the holes that put the fender in the desired position for the occupant. This can be adjusted again later.



2. Set the height of the back post by installing the post stop (B) with a screw (A) using a 4mm Allen wrench. The height of the post can also be adjusted later if needed.



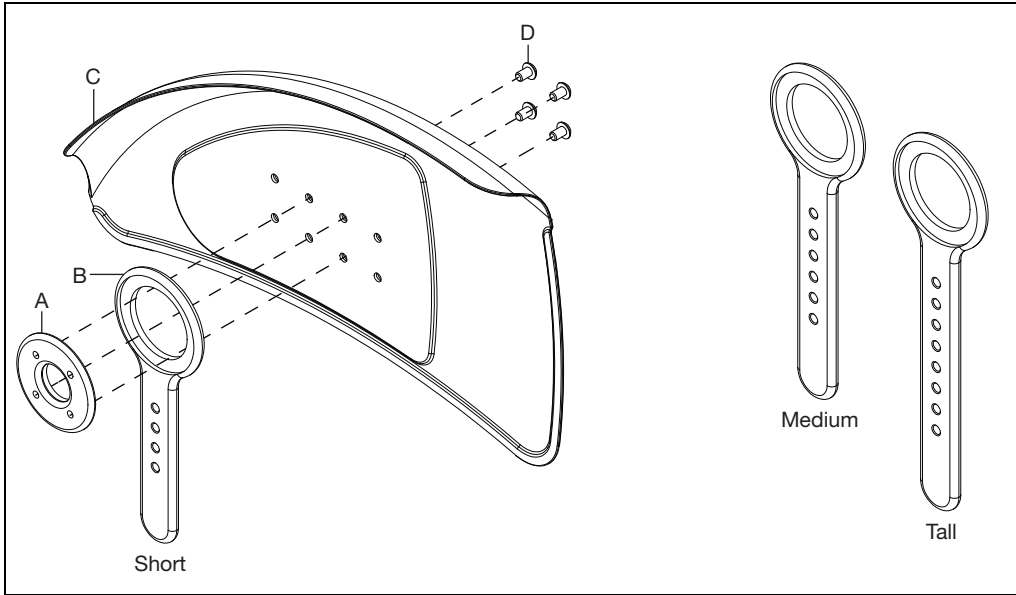
3. Install the fender assembly into the receiver by dropping the post into the receiver slot. Adjust the fender if needed.
4. Repeat steps on opposite side.

Side Guards

Angle Adjustments

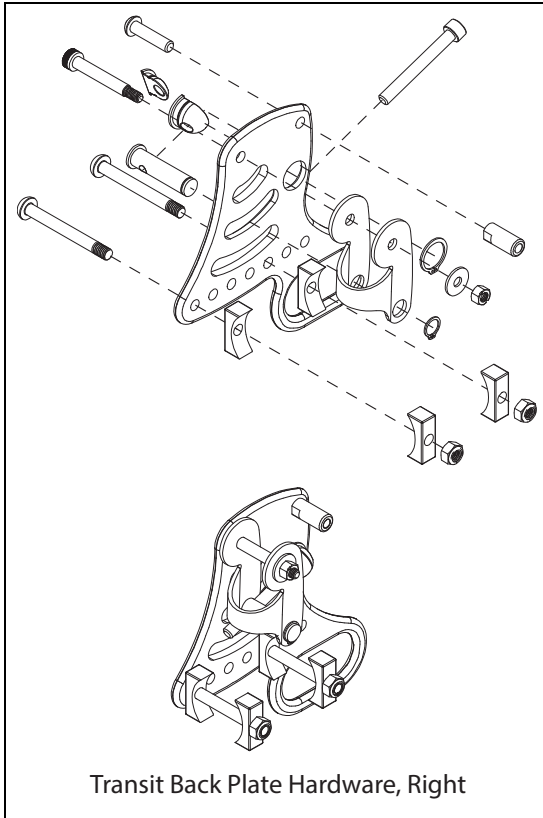
The angle of the fender can also be changed to align the fender if the profile of the tire if needed.

1. Remove the four bolts from the post mount with a 3mm Allen wrench.
2. Rotate the fender, either way, to align the fender with the profile of the tire.
3. Rotate the post mount plate so the four holes align with the desired holes on the fender.
4. Reinstall the the four bolts securing the fender to the post and post mount plate using a 3mm Allen wrench.



Rogue 2

NOTE: See the Backrest section of this technical manual for full instructions on how to install the transit back plate. An exploded image is shown below as reference, but the full instructions are found in the Backrest section.



Rogue XP

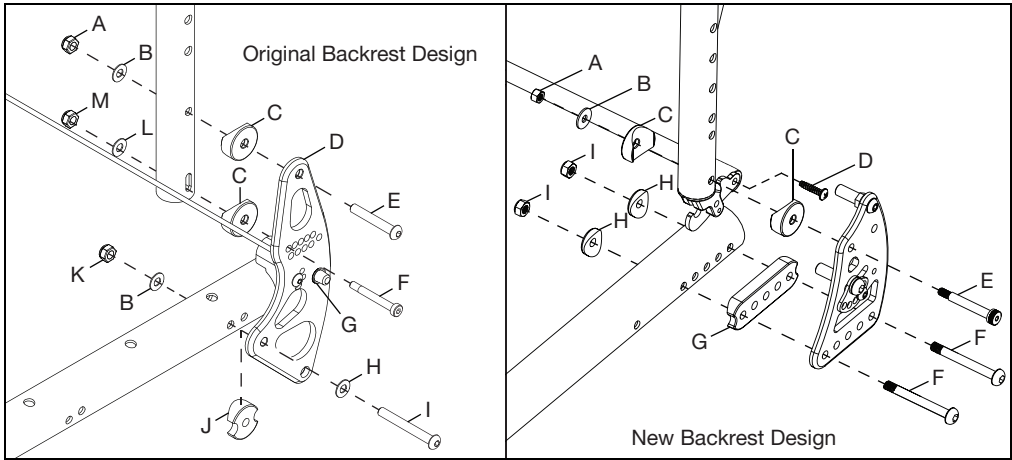
NOTE: The new backrest assembly, standard and transit, uses new backrest tubes. If the chair does not already have the new backrest design, new backrest tubes are needed as the old tubes are not compatible.

1. Remove any cushion or seating components that may be in the way of the current backrest removal. Also, remove any backrest tubes and/or handles that may be used after the backrest installation process.

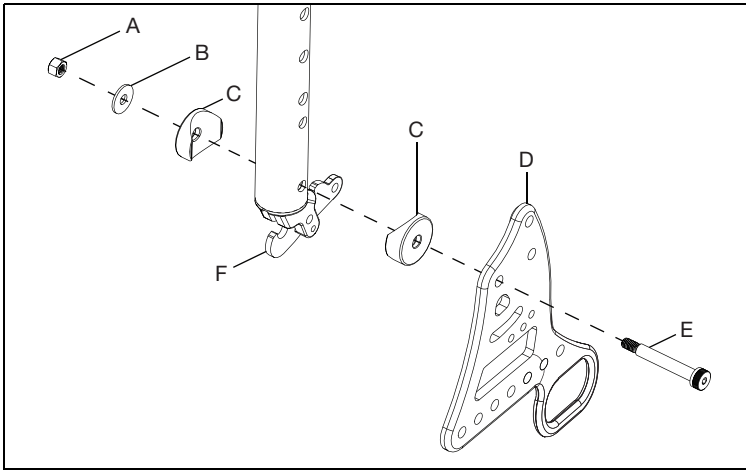
NOTE: Refer to parts manual for additional information on compatibility restrictions for the new backrest design.

2. There are two types of backrests. Use the image below to determine the version you have. For an original backrest, remove three bolts (E, F & I), three saddles (C & J), four washers (B, H & L) and three nuts (A, K & M) from back plate (D) to remove the back post using a 4mm Allen wrench, an 8mm wrench and a 10mm wrench. Twist off the cable housing to detach cable from back plate. Repeat on opposite side. For a new backrest, remove three bolts (E & F), one washer (B), four saddles (C & H), one saddle back (G) and three nuts (A & I) using a 4mm Allen wrench, a 5mm Allen wrench, an 8mm wrench and a 10mm wrench. Remove the screw (D) from the backrest release bar using a Phillips screwdriver and repeat on opposite side.

Transit



3. Install new backrest by installing pivot (F) into new backrest tubes and securing with bolt (E), back plate (D), two saddles (C), washer (B) and nut (A) using a 5mm Allen wrench and an 8mm wrench. Repeat on opposite side.



4. Install bolt (G), lock washer (F) and strike hex (D) using a 4mm Allen wrench and a 10mm wrench.
5. Install backrest release bar (N) and secure with screw (C) using a Phillips screwdriver. Repeat on opposite side.

Transit

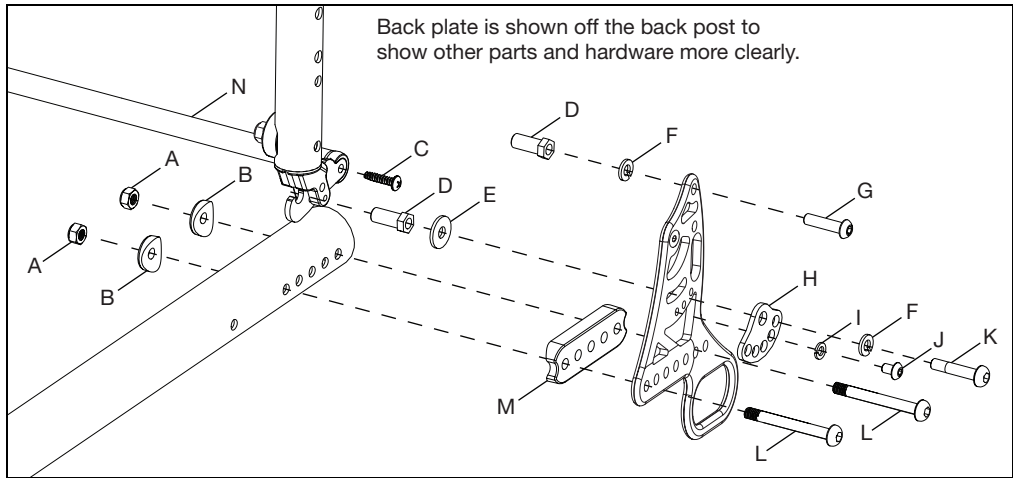
6. Install two bolts (J & K), two lock washers (F & I), arc adjustment cam (H), washer (E) and strike hex (D) using a 3mm and 4mm Allen wrench along with a 10mm wrench.

NOTE: The angle of the backrest can be adjusted using the different arc adjustment cam holes. Choose the configuration that works best for the chair user.

7. Secure backrest assembly to the frame by installing two bolts (L), saddleback (M), two saddles (B) and two nuts (A) using a 4mm Allen wrench and a 10mm wrench.

NOTE: The two bolts (L) determine the seat depth based on the frame holes that are used. Choose the configuration that works best for the chair user.

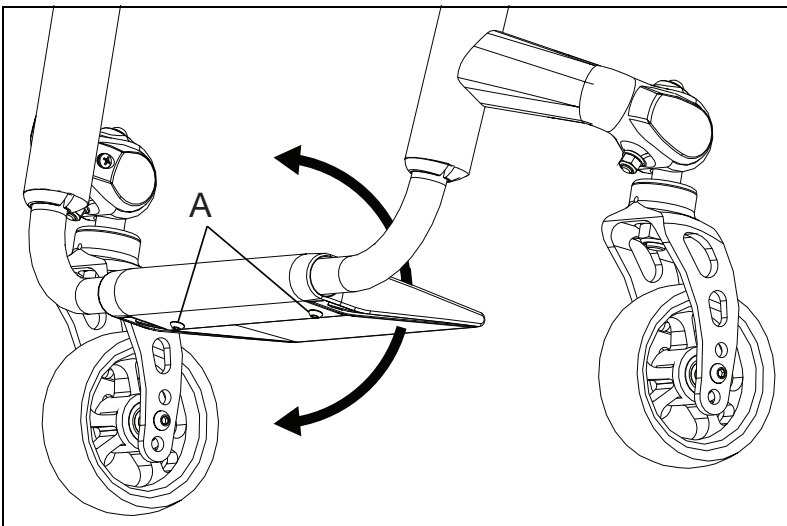
NOTE: Longer fasteners have been provided to accommodate a setup where the backrest and CG are set in the same spot.



Hybrid Angle Adjustable Footrest

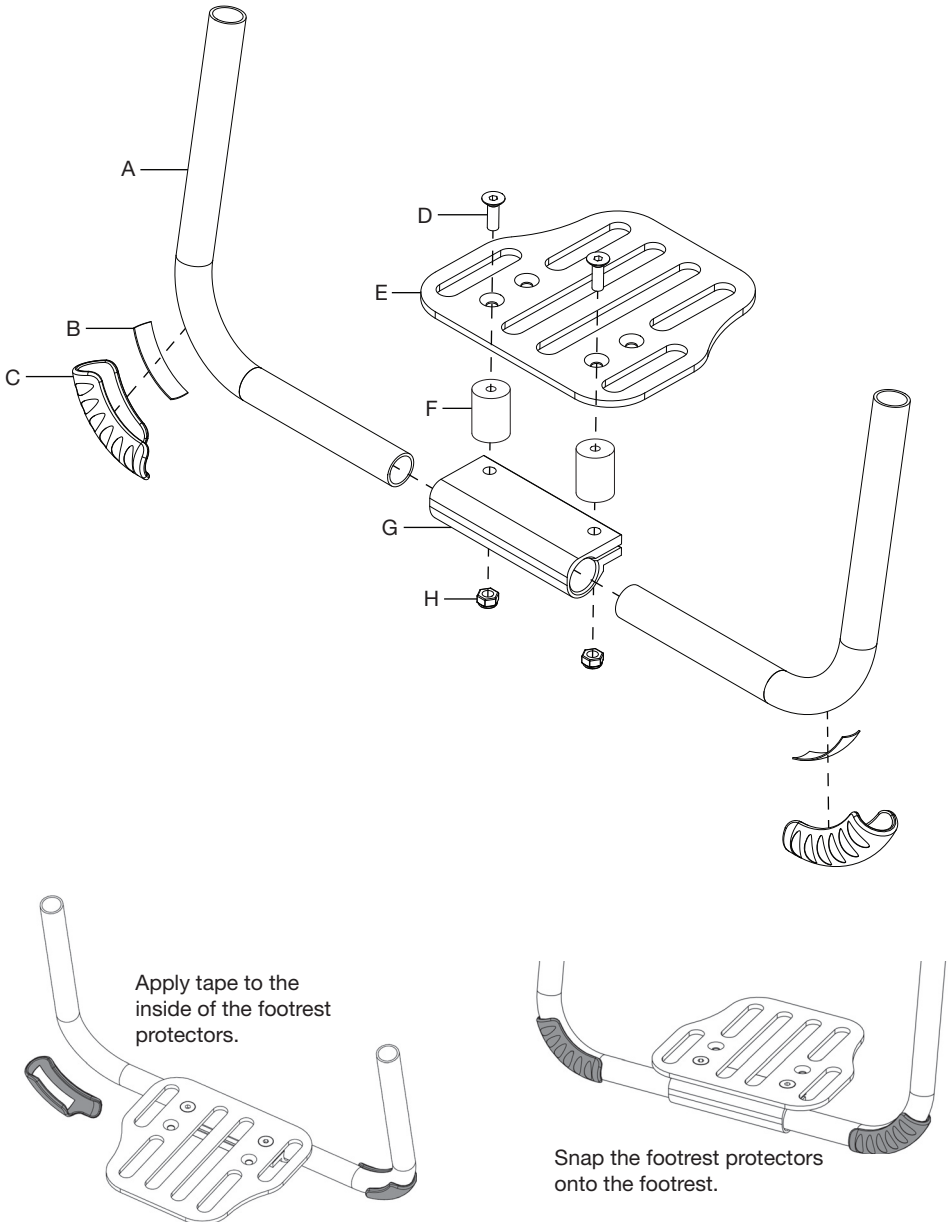
Angle Adjustment of Your Footrest

1. Loosen the two set screws (A) on the bottom of the footrest using a 4mm Allen wrench.
2. Rotate footrest to desired angle and secure in place by retightening the two screws.



Angle Adjustable Footrest

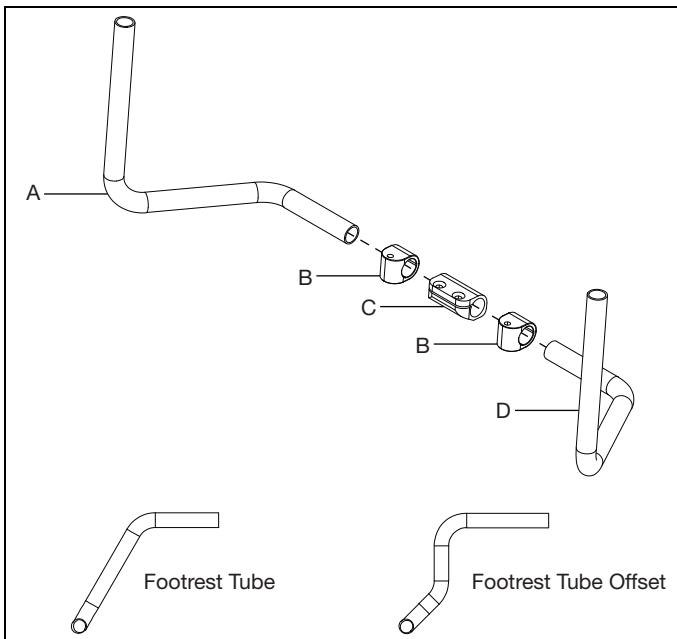
1. Install the footrest extension tubes (A) into the footrest adjustable clamp (G).
2. Install the footplate (E) onto the clamp and secure with two screws (D) and two nuts (H) using a 5mm Allen wrench and a 10mm wrench. If a riser (F) is being used to elevate the footrest platform, install between the footrest platform and the footrest adjustable clamp.
3. Install the footrest protectors (C) by peeling the backing off of the tape (B) and sticking the tape inside the footrest protector. Peel the remaining backing off of the tape and snap footrest protectors onto the footrest as seen below.



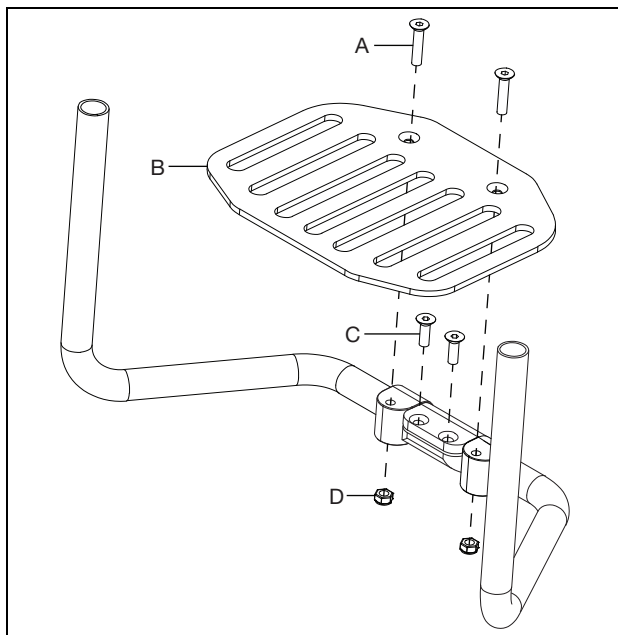
Angle Adjustable Flip Under Footrest

1. Install the footrest tubes (A & D) through the pivots (B) into the footrest flip stop clamp (C).

NOTE: The footrest tube and the footrest tube offset are shown below. The installation process is the same for both footrest tubes.

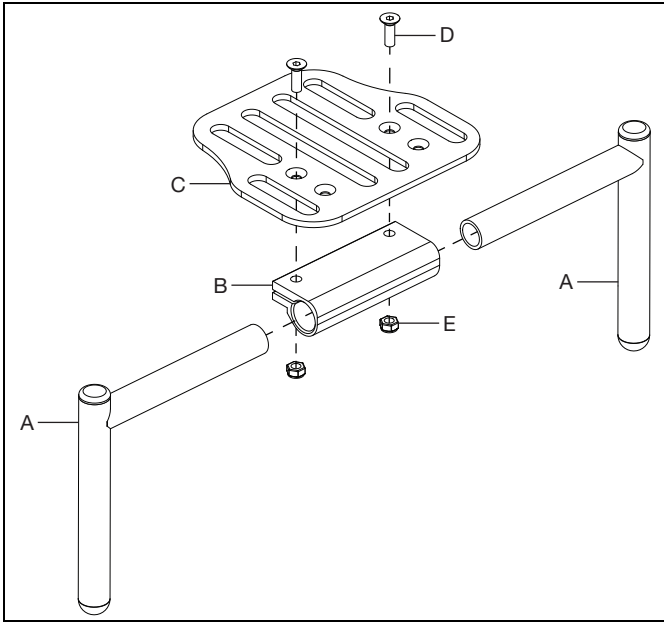


2. Install two screws (C) into the footrest flip stop clamp to secure the footrest tubes using a 5mm Allen wrench. Install the footrest platform (B) onto the footrest flip stop clamp with two screws (A) and two nuts (D) using a 5mm Allen wrench.

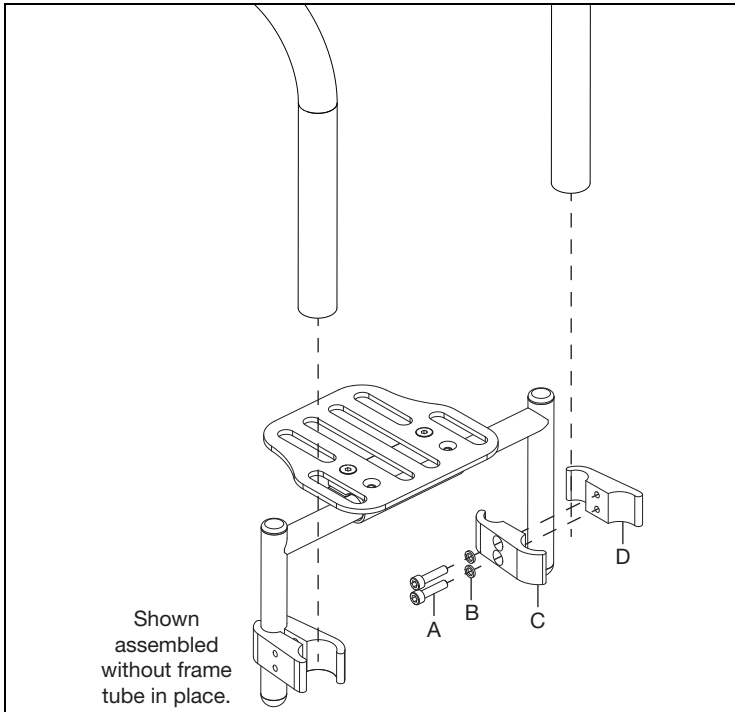


High Mount Angle Adjustable Footrest

1. Install the footrest tubes (A) into the footrest adjustable clamp (B) and secure by installing the footrest platform (C) onto the clamp with two screws (D) and two nuts (E) using a 5mm Allen wrench.

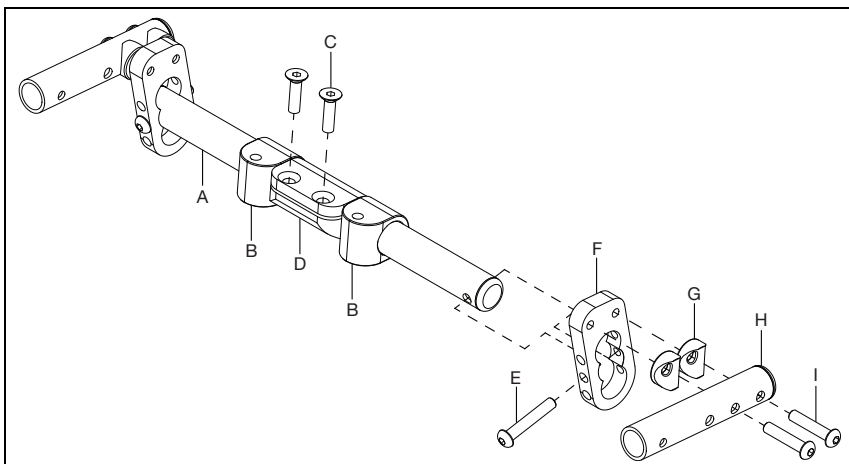


2. Install the two clamps (C & D), one end on the footrest tube and the other end around the frame tube, with two screws (A) and two lock washers (B) using a 5mm Allen wrench.

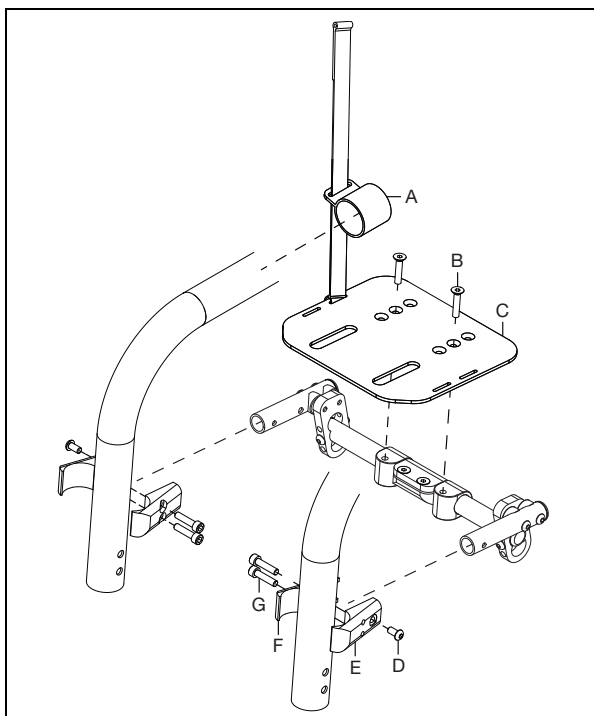


High Mount Angle Adjustable Flip Under Footrest

1. Install the pivots (B) and clamp (D) onto the footrest tube (A) and secure with two screws (C) using a 5mm Allen wrench.
2. Install the bracket (F) onto the end of the footrest tube and secure with screw (E) using a 4mm Allen wrench.
3. Install the footrest flip mount tube (H) onto the bracket with two screws (I) and two saddles (G) using a 4mm Allen wrench.



4. Install foot platform (C) onto pivots with two screws (B) using a 5mm Allen wrench. While installing the foot platform, slide the flip foot strap (A) onto frame tube.
5. Install the top and bottom footplate clamps (E & F) onto the footrest tubes and the frame tubes with three screws (D & G) using a 4mm Allen wrench and a 5mm Allen wrench.

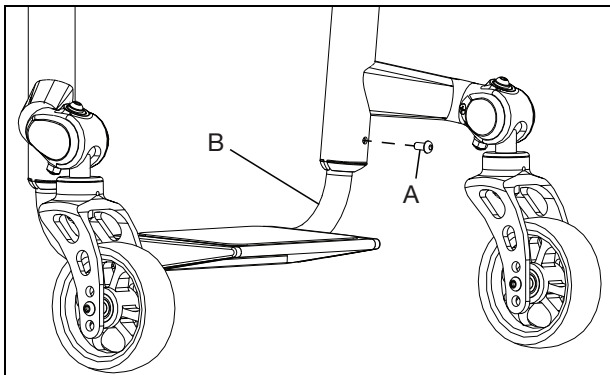


Adjusting the Footrest

NOTE: Some footrests are adjusted by moving the clamps they are attached with up or down. The standard footrest adjustment is shown below.

Height Adjustment of Footrest

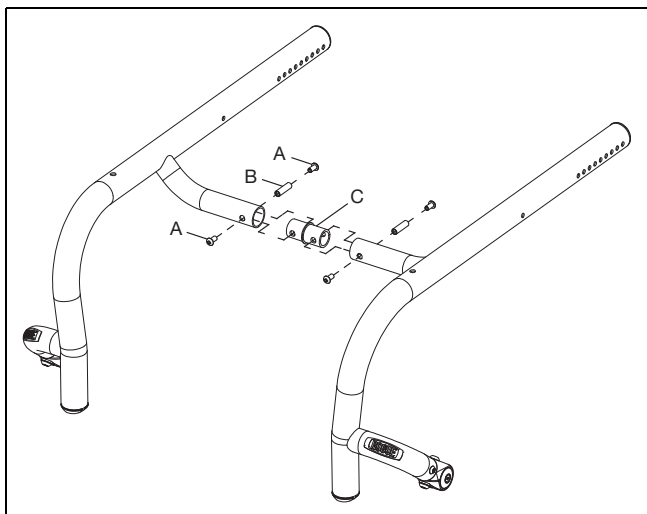
1. Locate the set screw on each side of the frame.
2. Loosen the set screw on each side of the frame using a 3mm Allen wrench. Do not remove set screws all the way.
3. Adjust footrest tube up or down to achieve the desired height (B).
4. Ensure both sides are adjusted equally.
5. Retighten each set screw to 40 in./lbs.
6. To ensure safe use, verify that the distance between the footplate and the ground is greater than or equal to 2.5" and always look ahead for potential obstructions or surface transitions.



Rogue XP Frame Width

1. The Rogue XP frame width is changed with the frame connector (C), which is available in 0", 1", 2" and 3" lengths. Remove the four screws (A) and two threaded barrels (B) using two 4mm Allen wrenches to remove the frame connector. Swap in the new frame connector and reinstall hardware to secure.

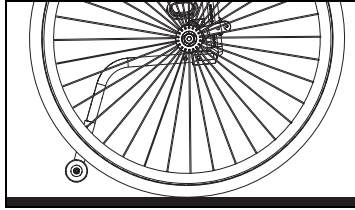
NOTE: Other parts and assemblies on the chair need to be checked and/or adjusted when the width of the chair is changed. See the corresponding sections on the different parts and assemblies for information regarding installation and adjustments.



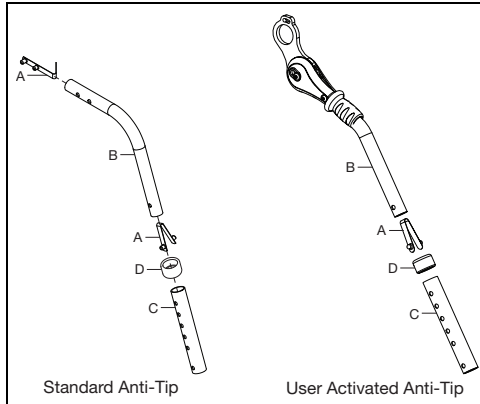
Anti-Tips

NOTE: To ensure safe use, verify that the distance between the footplate and the ground is greater than or equal to 2.5" and always look ahead for potential obstructions or surface transitions.

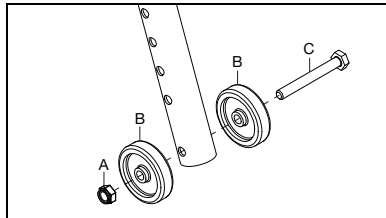
NOTE: After any adjustment, ensure anti-tips clear the wheels as shown below.



1. Assemble the anti-tip by sliding the anti-rattle bushing on (D) and connecting the two anti-tip tubes (B & C), ensuring they "click" together when the detent buttons (A) engage.

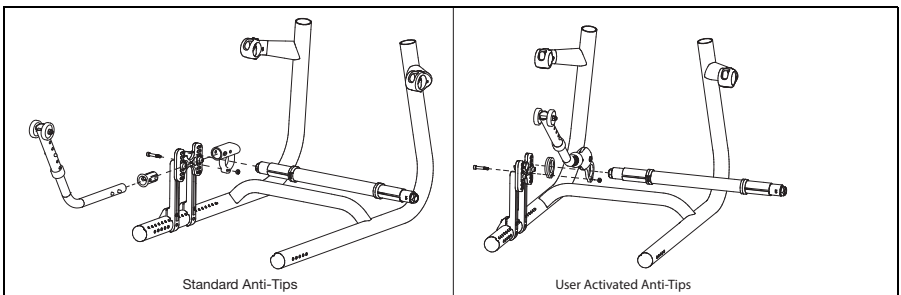


2. Install the wheels (B) onto the anti-tip tube with a bolt (C) and nut (A) using two 10mm wrenches.



3. The anti-tip receivers are installed on the base mounts and the camber tube runs through the receivers. The standard and user activated configurations are shown below. For more specific information, refer to the Index Towers and Camber Tube section in this technical manual.

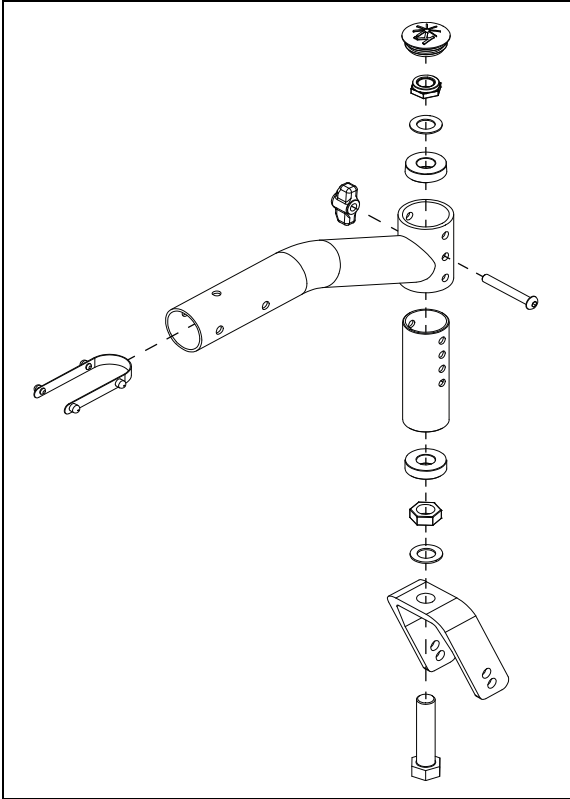
NOTE: The anti-tip receiver would never be mounted upside down, even when OAD is present.



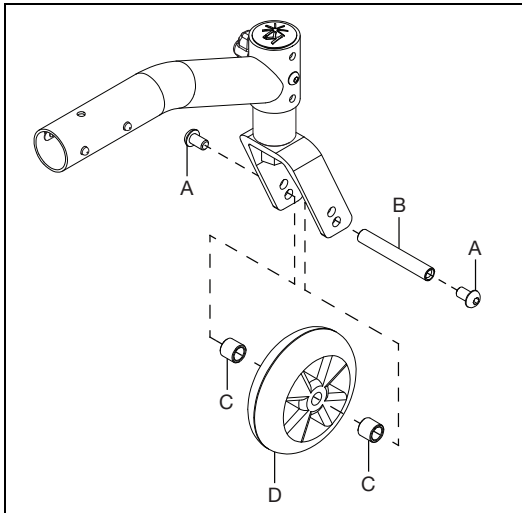
Rogue XP 5th Wheel

Standard 5th Wheel

1. Assemble the 5th wheel arm mount as shown below using two ½" wrenches.

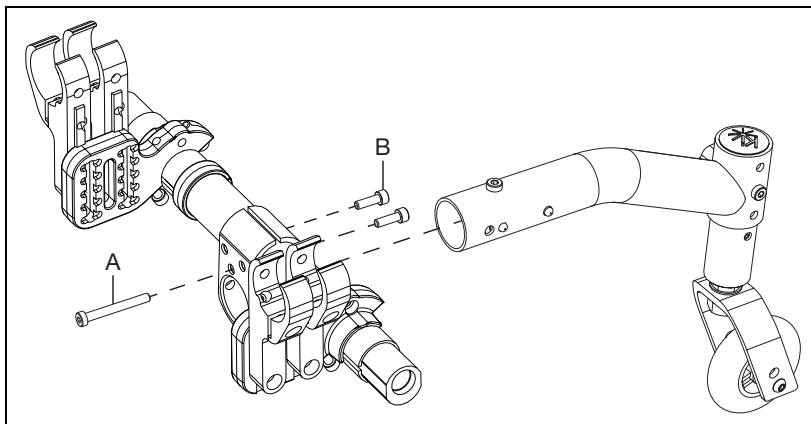


2. Install the caster (D) into the 5th wheel mount forks with two screws (A), threaded barrel (B) and two caster spacers (C) using two 4mm Allen wrenches.



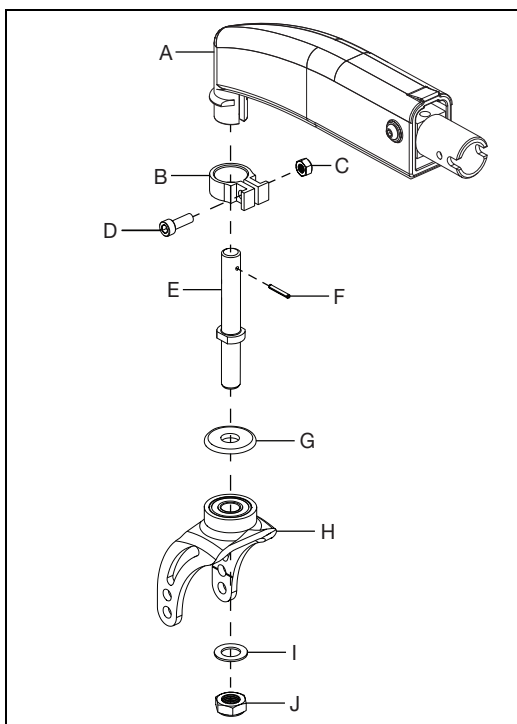
Rogue XP 5th Wheel

- Center the 5th wheel mounting clamp and secure in place by installing three screws (A & B) using a 4mm Allen wrench. Install the 5th wheel into the clamp and ensure the detent buttons "click" or lock into place.



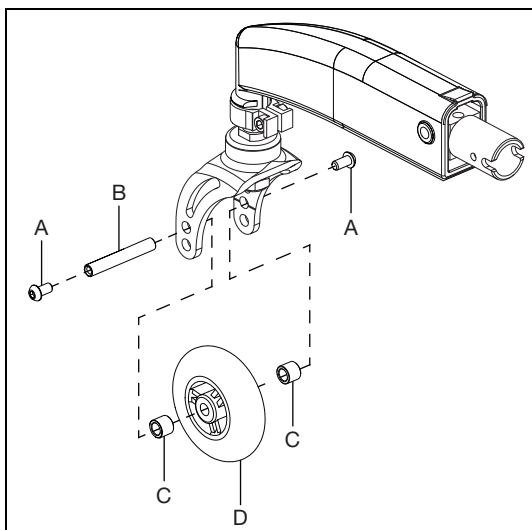
Dynamic 5th Wheel

- Assemble the 5th wheel arm mount as shown below using a 1/2" wrench, 10mm wrench and a 5mm Allen wrench.

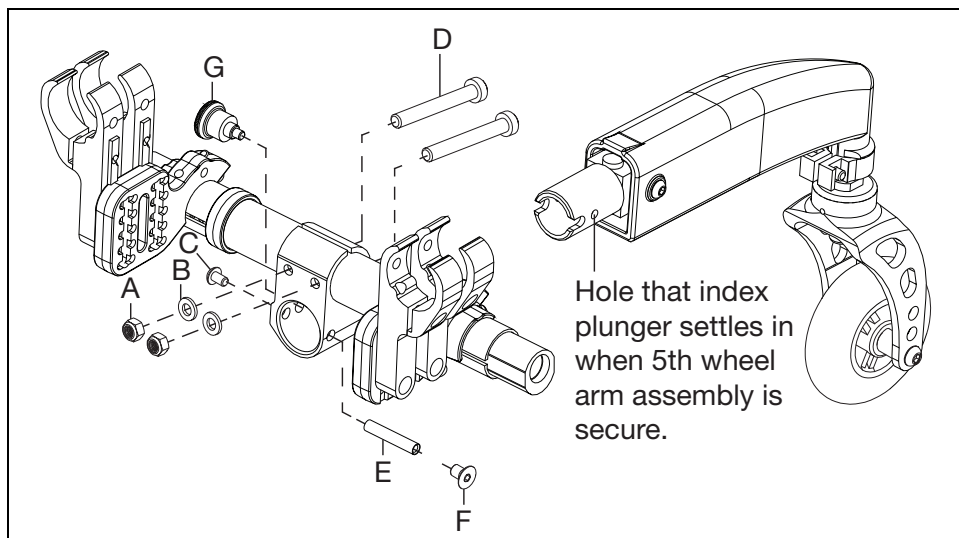


Rogue XP 5th Wheel

2. Install the caster (D) into the 5th wheel mount forks with two screws (A), threaded barrel (B) and two caster spacers (C) using two 4mm Allen wrenches.



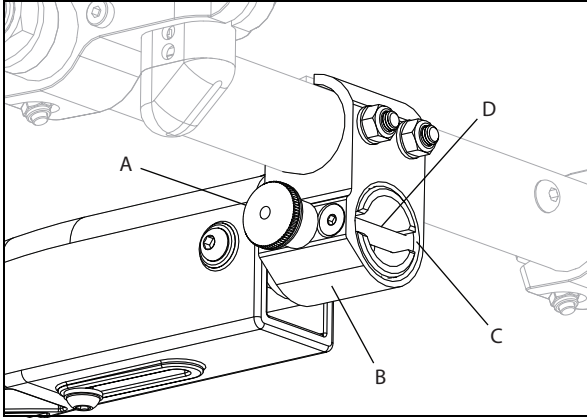
3. Center the dynamic 5th wheel mounting clamp and secure in place by installing two screws (D), two washers (B) and two nuts (A) using a 5mm Allen wrench and a 10mm wrench. Install the two screws (F), a threaded barrel (E) and indexing plunger (G) using two 3mm Allen wrenches. Install the 5th wheel into the clamp and secure in place by pulling the index plunger out, inserting the 5th wheel and then releasing the index plunger. The index plunger secures the 5th wheel in place when reinserted into the 5th wheel tube hole.



Rogue XP 5th Wheel

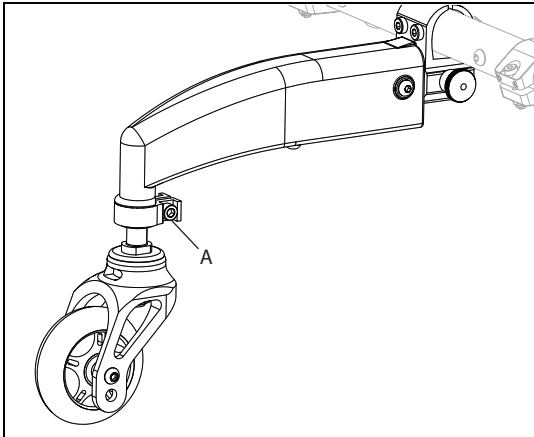
Inserting and Removing the Dynamic 5th Wheel

1. To remove, pull the release knob (A) to disengage the locking pin and slide assembly out of the tubular receiver (B).
2. To insert assembly, pull release knob (A) and insert assembly into tubular receiver (B).
3. Rotate the assembly in receiver to align slot (C) and cross pin (D).
4. Release knob (A).



Adjusting the Position from the Floor

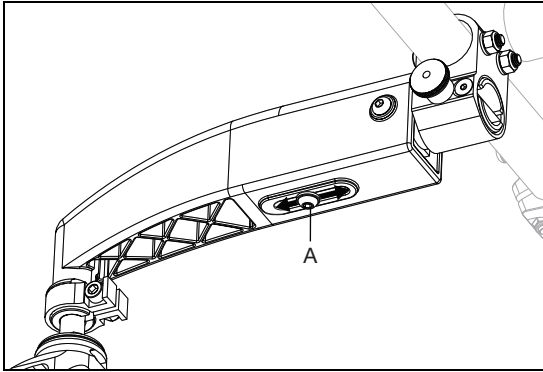
1. The caster stem is adjustable within the Dynamic 5th wheel arm.
2. Loosen 6mm bolt in clamping ring (A).
3. Grasp caster fork assembly and move up or down to desired position. Take care to not rotate caster stem within housing while repositioning.
4. Retighten 6mm bolt in clamping ring (A).



Rogue XP 5th Wheel

Adjusting Spring Force

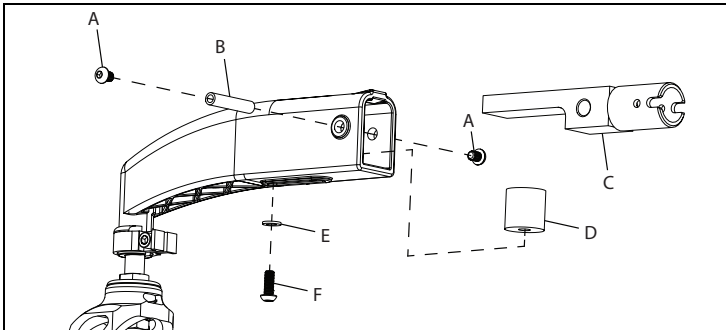
1. Remove Dynamic 5th wheel assembly from chair.
2. Loosen 6mm screw located on the underside of assembly (A).
3. To decrease spring rate, slide screw and elastomer away from caster fork assembly. To increase spring rate, slide screw and elastomer towards caster fork assembly.
4. Retighten 6mm screw (A). Take care to not overtighten.



Changing or Replacing Elastomer

NOTE: There are two elastomers to choose from - a soft (yellow) and a firm (black). The softer elastomer (yellow) offers less resistance to the rider so it will move up and down easier when weight is applied to the system. The firmer elastomer (black) offers more resistance to the rider so it will not move as much when weight is applied to the system.

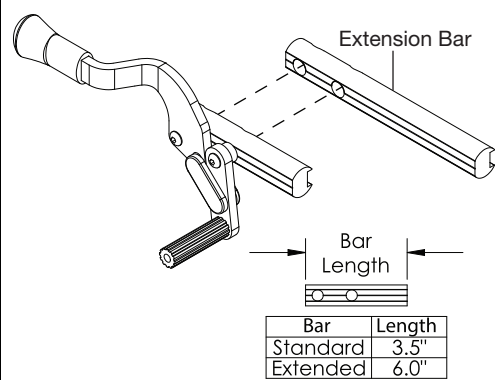
1. Remove dynamic 5th wheel assembly from chair.
2. Remove screw (A) using two 4mm Allen wrenches.
3. Using Allen wrench, push threaded barrel (B) out of arm assembly.
4. Slide tubular receiver (C) out of assembly.
5. Remove screw (F) and washer (E) located on the underside of assembly. This will release the elastomer (D). Remove elastomer and set aside.
6. Insert new elastomer (D) into opening on arm assembly with threaded insert facing down towards slot, aligned with slot in arm.
7. Thread screw (F) and washer (E) through slot and into threaded insert in elastomer. Retighten screw, but do not overtighten.
8. Reinsert tubular receiver (C) into arm. Take care to place flat arm of tubular receiver over the top of elastomer.
9. Align holes on arm and tubular receiver to insert threaded barrel (B) and screw (A).
10. Tighten the two screws (A) with two 4mm Allen wrenches.



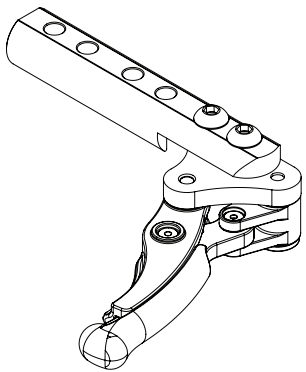
Wheel Locks

See image below for information on the types of wheel locks available. Installation of the wheel lock clamps is on the next page. The Under Seat Scissor Lock always comes assembled so it is not shown below.

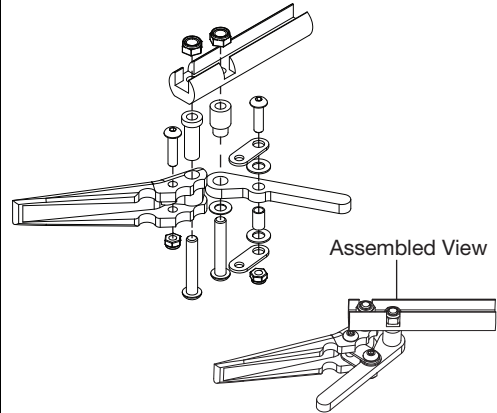
Push to Lock Flush Mount



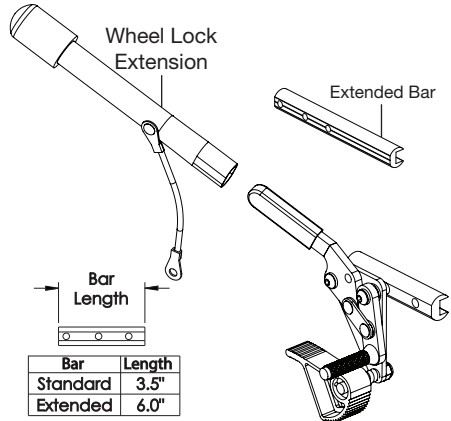
Low Profile Scissor Lock



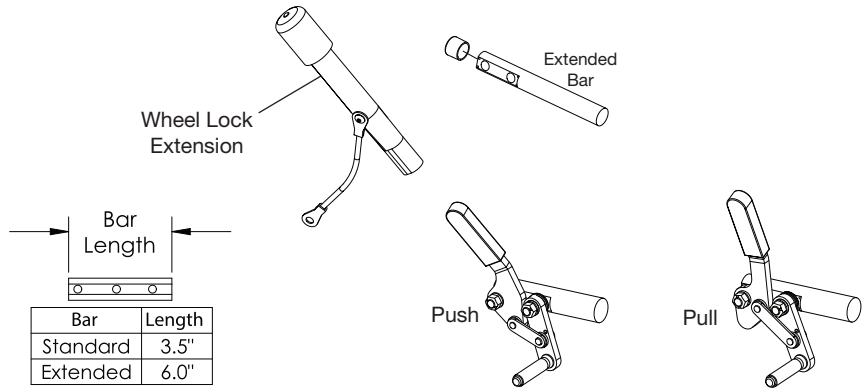
Short Thro Scissor Locks



Grade Aids



Push and Pull to Lock Wheel Locks

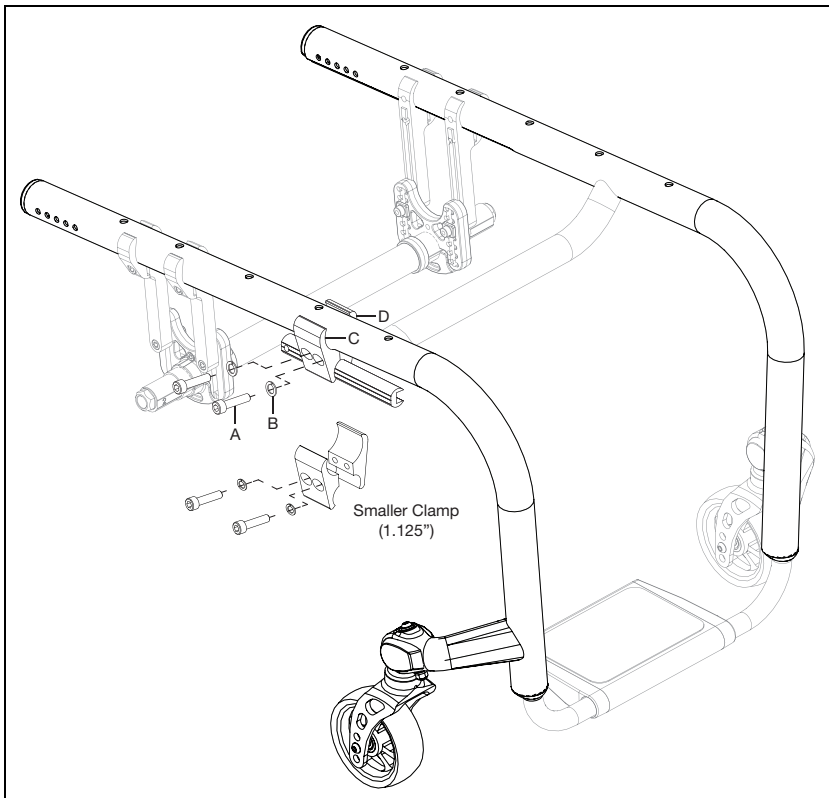
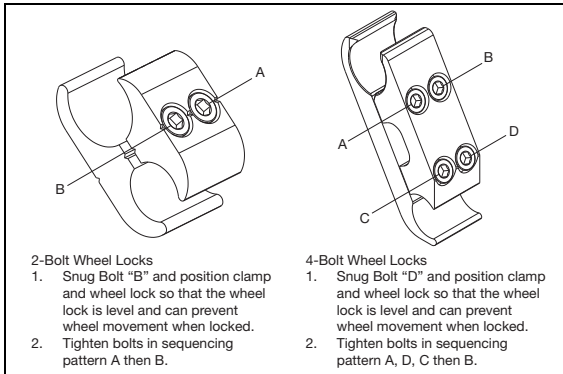


Wheel Locks

Installing Wheel Lock Clamps

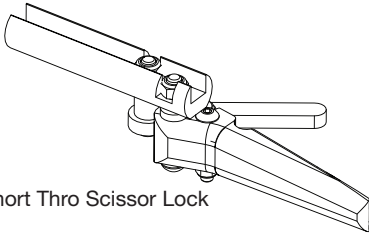
1. The wheel lock assemblies with the wheel lock bars are mounted onto the chair using the wheel lock clamps (C & D). There are two types of wheel lock clamps that are shown below. Install hardware with the wheel lock bar and chair frame in position using a 5mm Allen wrench and a 6mm Allen wrench. Once installed, ensure wheel lock engages at least 1/8" into tire and locks properly prevent the chair from moving when engaged.

NOTE: Always tighten wheel lock hardware as shown in the image below. This prevents overclamping on one set of hardware which can lead to binding of the fasteners and increased difficulty in removal.

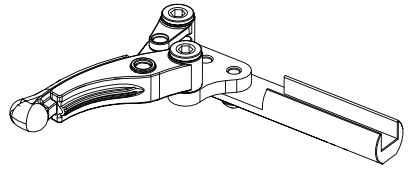


Reversing Wheel Lock

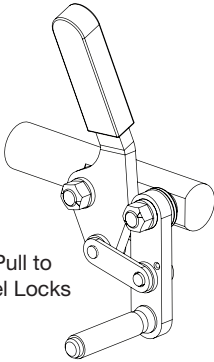
1. Identify the type of wheel lock on the chair.



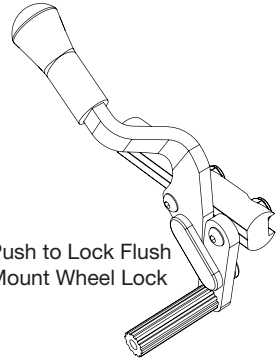
Short Thro Scissor Lock



Low Profile Scissor Lock



Push and Pull to
Lock Wheel Locks

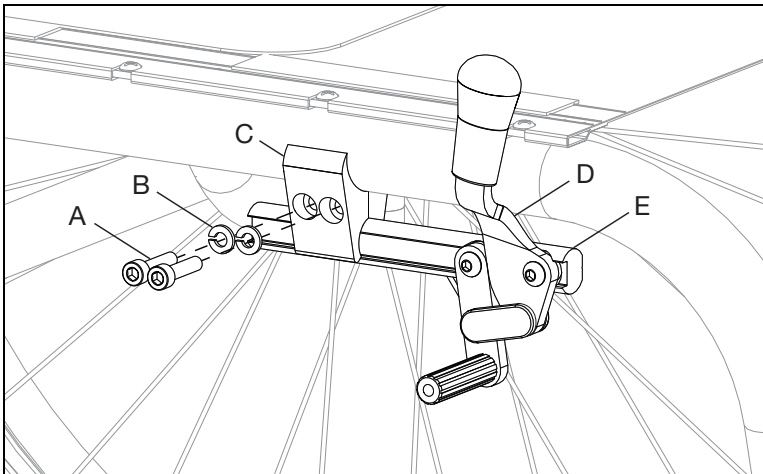


Push to Lock Flush
Mount Wheel Lock

2. Remove wheel lock (D) and wheel lock bar (E) from clamp (C) by removing the two bolts (A) and two lock washers (B) with a 5mm Allen wrench.

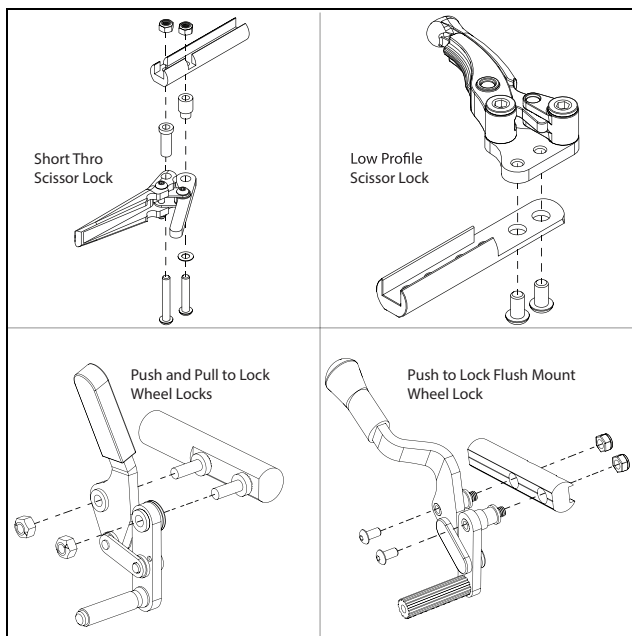
NOTE: The push to lock flush mount is shown below. The process of removing the clamp is the same for all of the wheel locks.

NOTE: Always loosen wheel lock hardware by alternating between the two bolts while loosening a little at a time. This prevents overclamping on one set of hardware which can lead to binding of the fasteners and increased difficulty in removal.

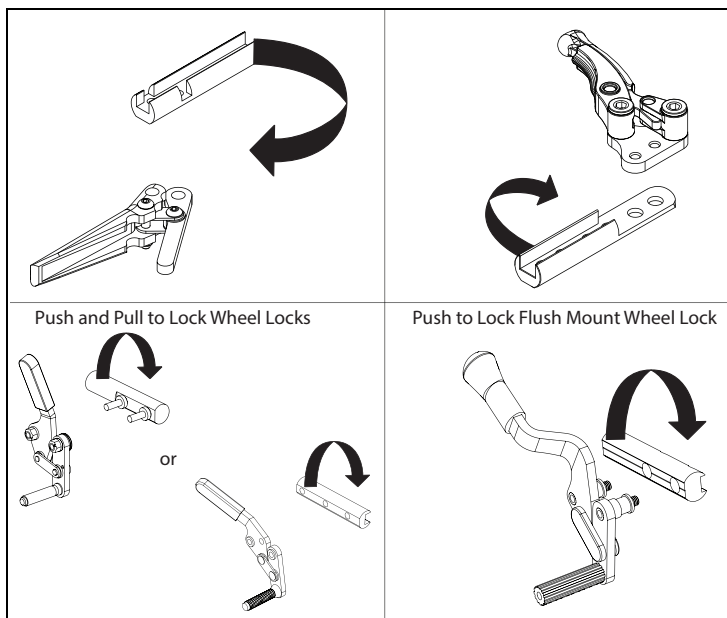


Reversing Wheel Lock

3. Remove the wheel lock assembly from the wheel lock bar. For a low profile scissor lock, use a 5mm Allen wrench to remove the two bolts. For the short throw and push to lock flush mount, remove hardware using a 4mm Allen wrench and a 10mm wrench. For the push and pull to lock, loosen and remove the top lock nuts and then grasp the assembly so the spring does not come out of the linkage hole when sliding off the arbors.



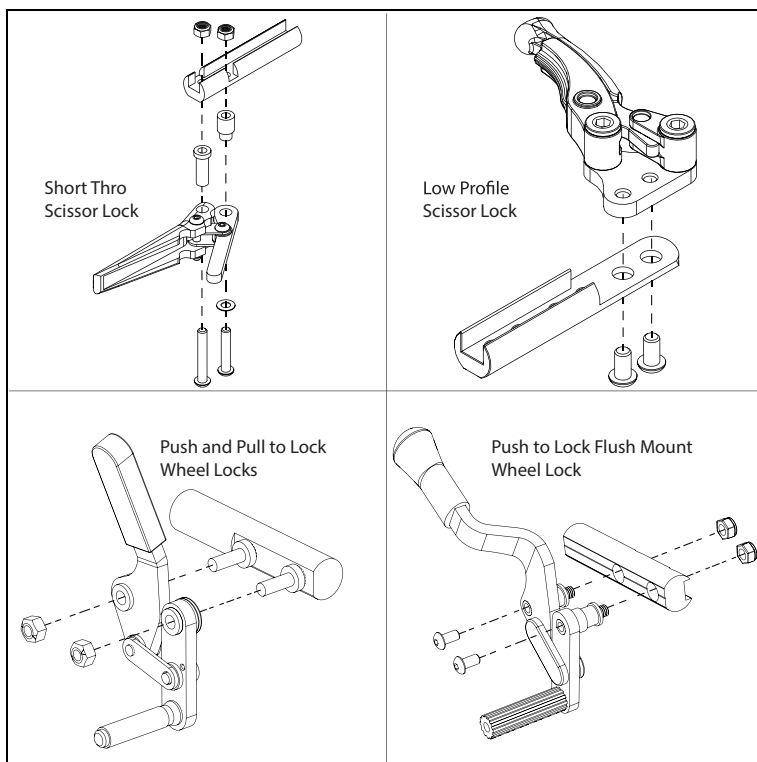
4. Rotate the wheel lock bar 180°.



Reversing Wheel Lock

- Reinstall the wheel lock assembly onto the wheel lock bar. For a low profile scissor lock, use a 5mm Allen wrench to install the two bolts. For the short throw and push to lock flush mount wheel locks, install hardware using a 4mm Allen wrench and a 10mm wrench. For the push and pull to lock, slide the assembly back onto the arbors. To install the spring on a push to lock, pull the curved spring arm over the arbor shoulder. To install the spring on a pull to lock, pull the spring arm end into the wheel lock bar hole (thin screwdriver will help with this). Place and tighten the top lock nuts to secure. See image below.

NOTE: Always tighten wheel lock hardware by alternating between the two bolts while tightening a little at a time. This prevents overclamping on one set of hardware which can lead to binding of the fasteners and increased difficulty in removal.



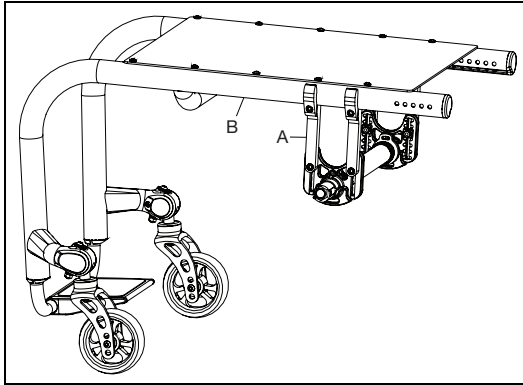
- Test the wheel locks. Ensure wheel lock arms embed in tires at least 1/8 inch when locked. If they do not embed at least 1/8 inch, readjust wheel lock and test again.

Center of Gravity Adjustment

You can adjust your center of gravity by moving the two rear tower index clamps (A) forward or rearward on the seat tube (B). Moving the rear tower index clamps forward shortens the wheelbase and lightens the front end, making your chair more maneuverable. Moving the rear tower index clamps rearward makes the chair more stable and less likely to tip over rearward.

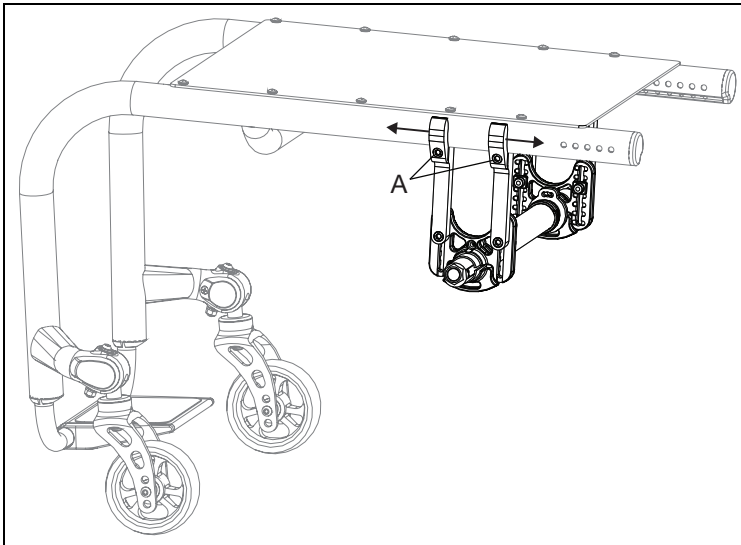
NOTE: Changes to the center of gravity may affect the rear seat height, toe-in/toe-out of the rear wheels and the squareness of the casters. If you change your center of gravity position, readjust all of these settings as necessary.

NOTE: Adjusting your chair's center of gravity will require readjusting the location of the wheel locks (if provided). See the Wheel Lock section for instructions on adjusting the wheel locks.



To adjust the center of gravity location:

- Remove both rear wheels.
- Loosen the two bolts at the top of the rear index clamps on both sides of the chair using a 4mm Allen wrench.
- Slide the rear index clamps and assemblies along the frame to the desired position.
- Ensure the rear index clamps on both sides of the frame are adjusted equally on both sides of the frame before retightening the clamps.
- Once the rear index clamps are secured, attach the rear wheels, occupy the chair and maneuver it with a spotter to get a feel for the new adjustment.



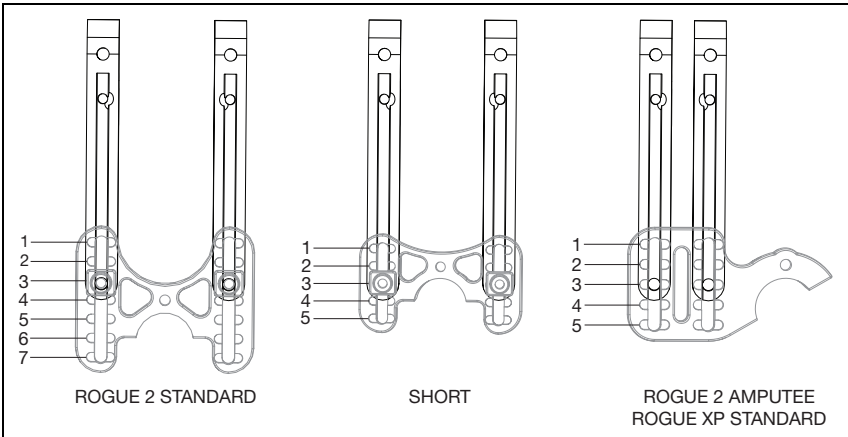
Seat Height Adjustment



WARNING



WARNING: Repairs and adjustments not made by a qualified technician working for an authorized Ki Mobility Dealer can result in poor performance or failure of the device which may cause serious injury or death.

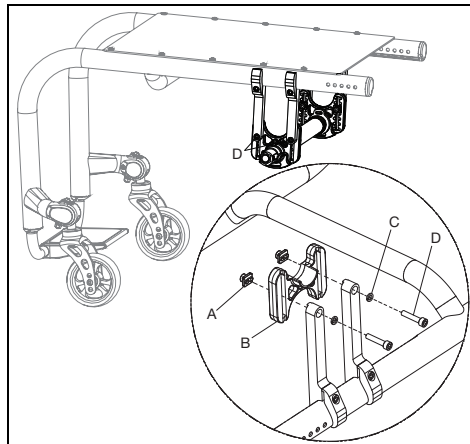


NOTE: Do not adjust the tower into index 1 or 2 when changing seat heights. You **MUST** order a longer tower and mount it in an approved index position. Approved index positions are 3 - 7.

Rear Seat Height

Rear seat height can be adjusted by repositioning upper base mounts.

1. Remove your wheels by depressing the buttons on the quick release axle. For easier access, flip the chair upside down.
2. Use a 4mm Allen wrench to loosen the two bolts (D), two washers and two square nuts (A) per upper base mount.
3. Retighten the hardware in the new desired seat height hole on the upper base mount.
4. Repeat on both sides of the wheelchair.
5. When the desired height is reached, tighten the bolts (D) to 70 in/lbs.



NOTE: Height adjustments are in $\frac{1}{4}$ " increments.

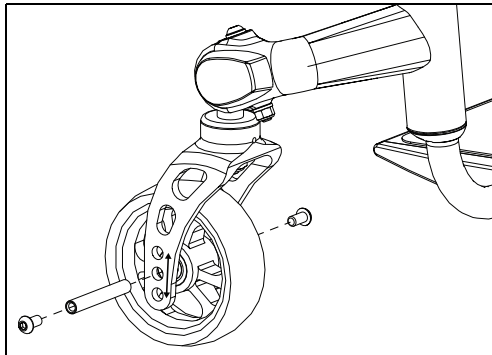
NOTE: A front caster adjustment should be made to correspond with any change in seat angle.

Seat Height Adjustment

Front Seat Height

The front seat height can be adjusted in ½" increments by repositioning the caster wheel within the fork.

1. Use two 4mm Allen wrenches to remove the cap screws and push the internally threaded axle from one hole location and move up or down to the desired location.
2. Reposition the two 6mm screws and tighten to 80 in./lbs.
3. Resquare caster wheels.



Setting Toe to Zero

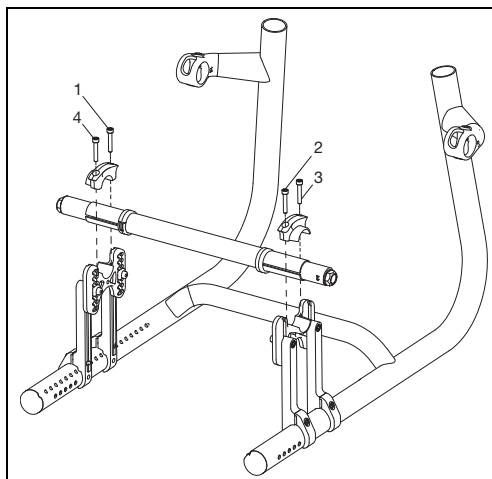
NOTE: A wheelchair equipped with 0° camber plugs cannot have a toe-in toe-out condition. This adjustment is only required when using 2°, 4°, 6° and 8° camber adapters.

Toe refers to how well the rear wheels of the chair are aligned relative to the ground. It affects how well the chair will roll. Drag or rolling resistance is optimally minimized when the wheel toe is set to zero.

To Set Toe to Zero:

1. Remove the lower base mounts by removing two bolts per side using a 3mm Allen wrench. If anti-tips are present, the image will look different, but the process is the same.
2. Adjust the camber tube so it is centered in the mounts and rotate the tube until the camber is facing upward, relative to the ground if the chair is upright.
3. Reinstall the lower basemounts with the hardware loose.
4. Tighten the bolts in the sequence shown below (1,2,3,4) to 70 in./lbs.

NOTE: Ensure the camber tube is perpendicular to the seat frame rails. Ensure the towers and clamps are aligned identically on both sides.

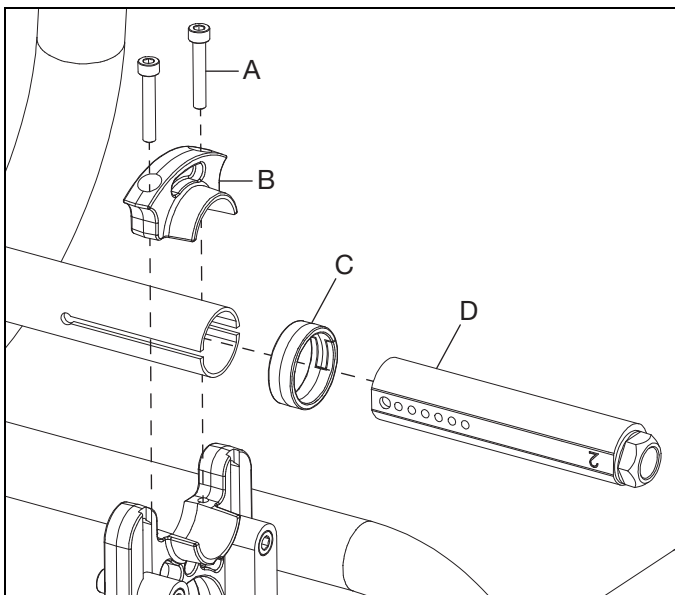


Wheelbase Width Adjustment

Adjusting the wheelbase width allows the rider the option to move the wheels closer or further away from the hips. It also compensates for camber adjustment and gives the proper wheel spacing to maximize pushing efficiency.

To Adjust the Wheelbase Width

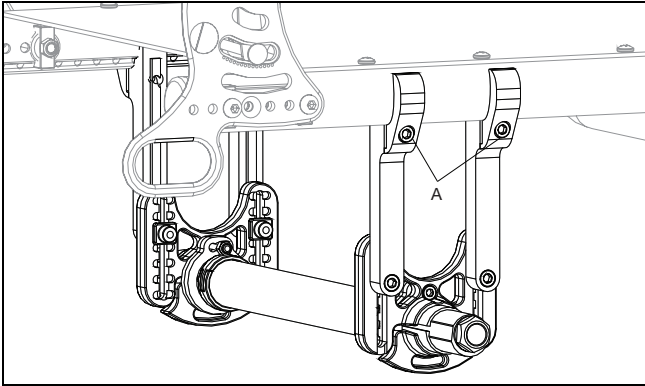
1. Remove the lower base mounts (B) by removing two bolts (A) per side using a 3mm Allen wrench. If anti-tips are present, the image will look different, but the process is the same.
2. Move the dimple clip (C) to the dimple on the camber plug (D) that provides the desired spacing.
3. Repeat on opposite side.
4. When both sides are spaced equally, tighten the bolts (A) to 70 in/lbs.



One Arm Drive (OAD)

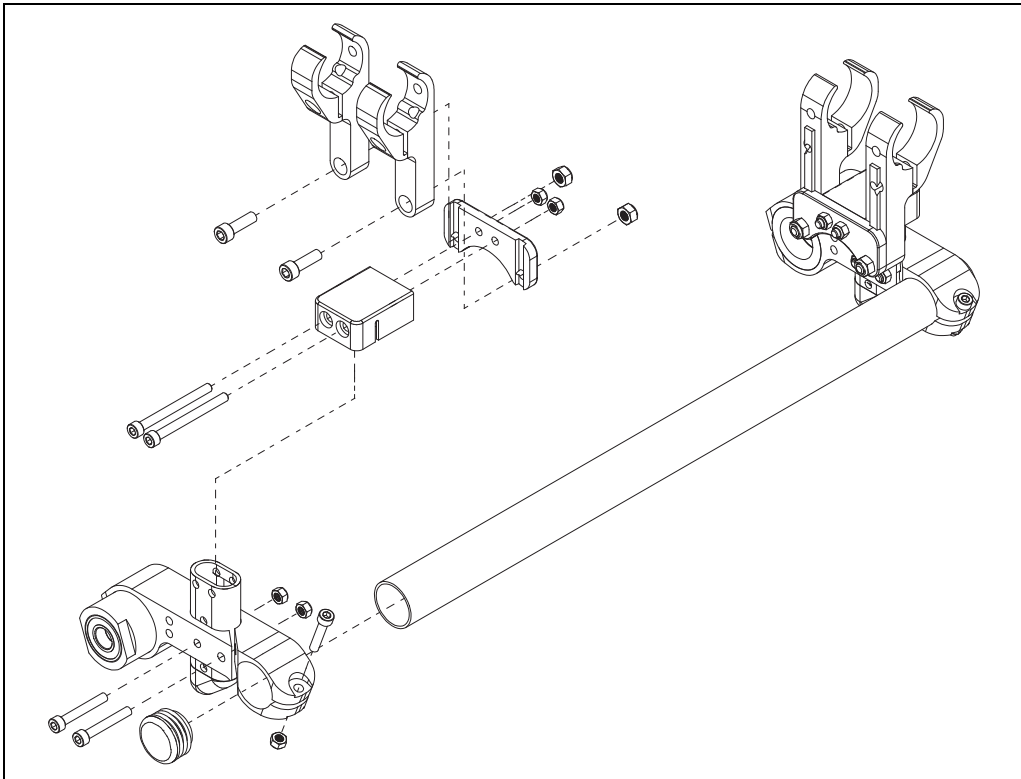
Installation

1. Remove wheels, camber tube and index tower assembly by removing two bolts (A) at the top of the index towers on each side using a 4mm Allen wrench.



2. Assemble the camber mount tubes to the towers with the brackets and hardware shown below. Ensure both sides are installed in the same positions. Do not fully tighten.

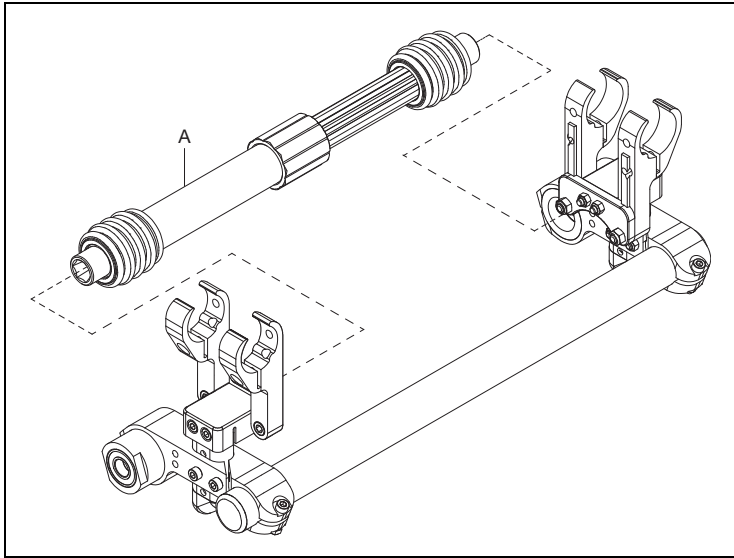
NOTE: When used with anti-tips, the anti-tip receiver would never be mounted upside down.



3. Reinstall the towers to the frame with the hardware from step 1 of the installation section.

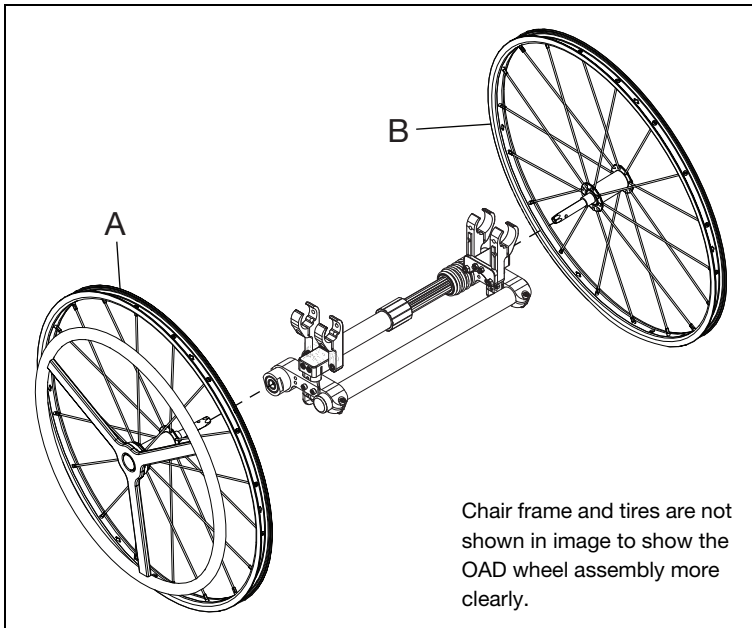
One Arm Drive (OAD)

- Before fully tightening, install the OAD drive shaft (A) into the two axle mounts.



NOTE: Visit the parts manual for full sizing and hardware guides.

- Install the OAD wheels on both sides of chair. Install the OAD wheel with the handrim (A) on the desired drive side. The OAD wheel with no handrim (B) is the following side and is installed opposite the drive wheel.



Growing Your Rogue XP in Width

NOTE: Visit the tutorial page at kimobility.com for the growth adjustment video.

It is recommended that you follow the below sequence of adjustments when growing your Rogue XP in width.

Remove the following assemblies from chair in order listed:

1. Upholstery - See seat upholstery section on page 38.
2. Backrest Release Cable - See backrest assembly section on page 19. Use the section that corresponds with the backrest assembly style found on the chair.
3. Rigidizer Bar - See back post section which begins on page 23. Use the section that corresponds with the back post style found on the chair.
4. Footrest Assembly - See footrest section which begins on page 45. Use the section that corresponds with the footrest assembly style found on the chair.
5. Camber Tube - See camber mount assembly and camber tube and adapters section which begins on page 15.

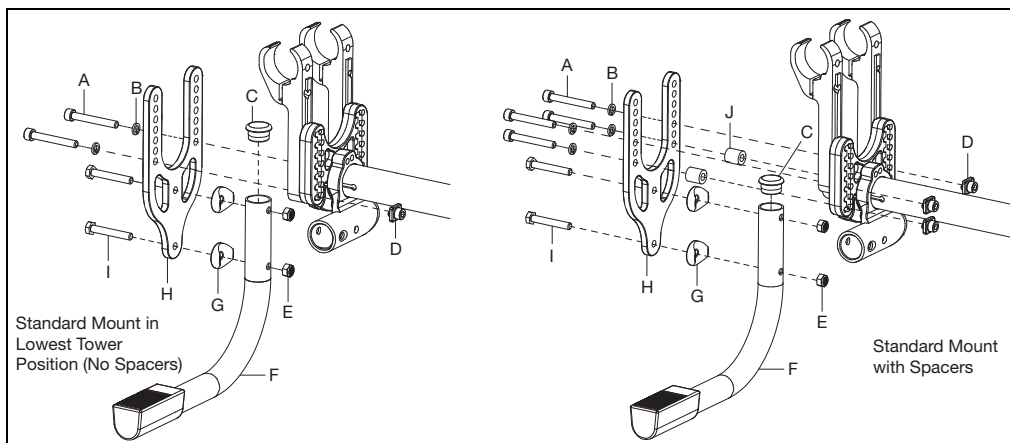
Replace new assemblies for width adjustment in reverse of order listed above. Reference removal and replacement instructions.

Tipping Lever

Installation

NOTE: For wheel sizes 20 and 22 the short tipping lever is used. For wheel sizes 24, 25 and 26 the standard tipping lever size is used.

1. Install the tipping lever (F) to the adapter plate (H) with two bolts (I), two saddles (G) and two nuts (E) using two 10mm wrenches.
2. Install the adapter plate assembly to the chair with two or four bolts (A), two or four lock washers (B), two spacers (J - not used in lowest tower position) and two or four square nuts (D) using a 5mm Allen wrench.
3. Install the end plug (C) into the tipping lever.
4. Repeat on opposite side.

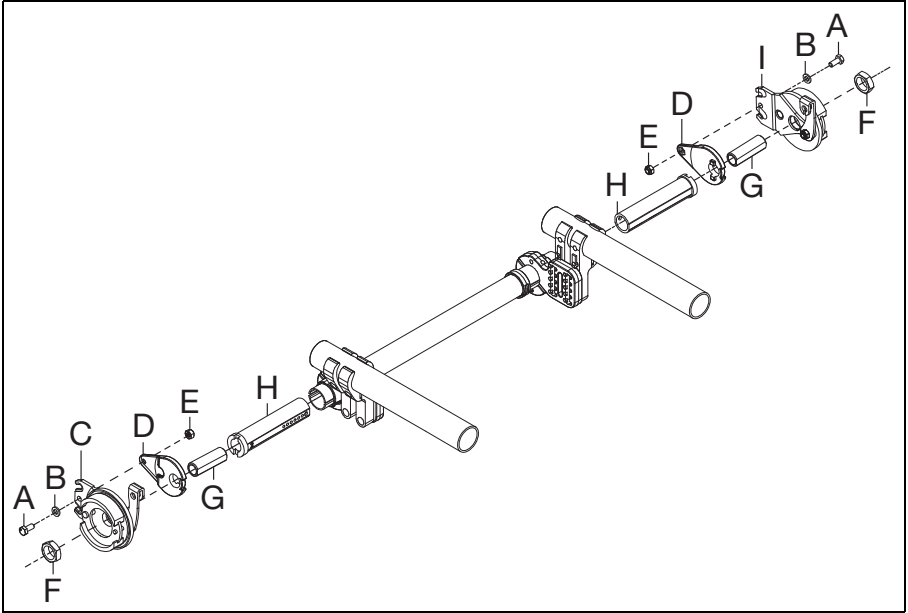


Drum Brake - Rogue XP

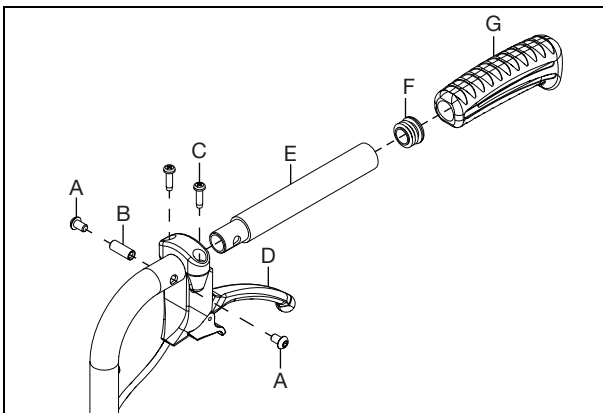
NOTE: Remove wheels and axle sleeves before beginning the drum brake instructions.

1. Install the drum brake adapter (D) to the drum brake rotor (C or I) with bolt (A), washer (B) and nut (E) using two 10mm wrenches.
2. Install the drum brake rotor assembly to the chair using the camber tube adapter (H) and axle sleeve (G) which are secured with the nut (F) on the outside of the drum brake rotor.

NOTE: If camber is desired, the camber comes from the camber tube adapter (H) which is available with 0°, 2°, 4°, 6° and 8° of camber.

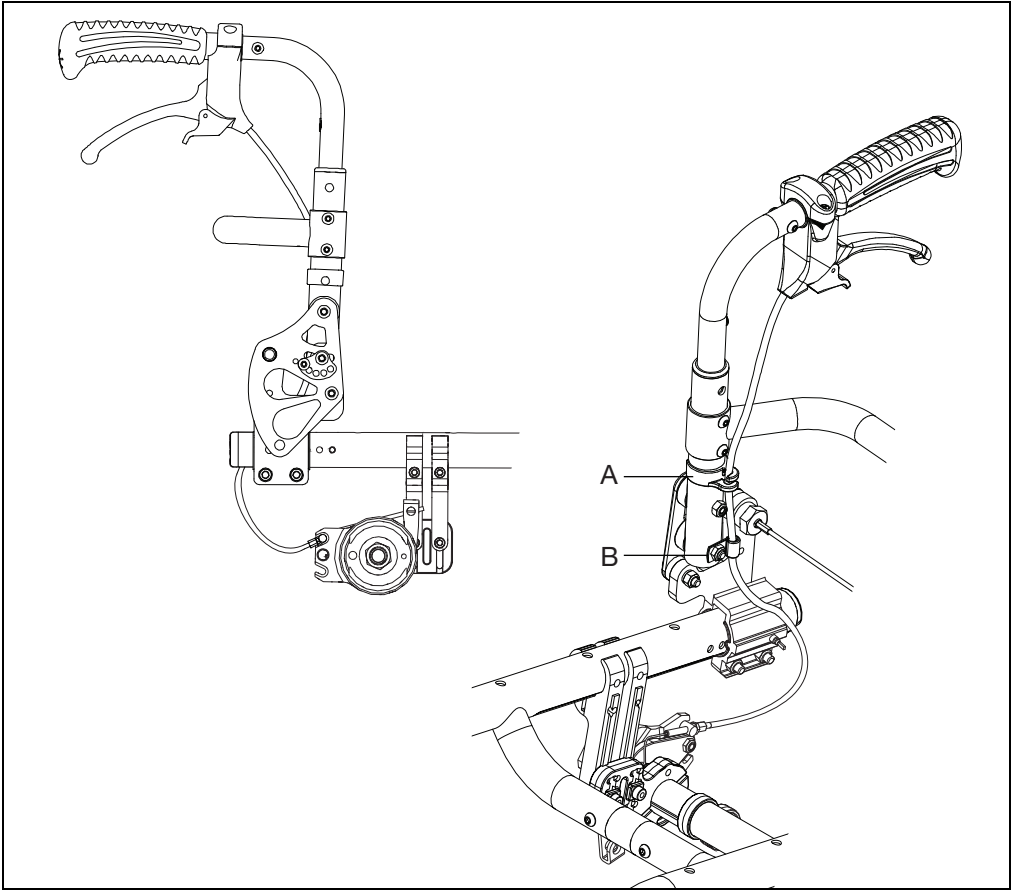


3. Install the cable to the trigger lever (D) by removing the lever from the mount and removing the cable core from the cable jacket and routing it through the rearmost hole in the lever. Replace the lever and thread the core back through the cable jacket.
4. Install trigger lever (D) and extension adapter (E) to the back post handle with four screws (A & C) and threaded barrel (B).
5. Install the tube end plug (F) on the back of the extension adapter.
6. Install the push handle grip (G) onto the extension adapter. Some chairs may have the EZ Grip, see the EZ Grip section for installation instructions for those handle grips.



Drum Brake - Rogue XP

7. Route the cable down the backrest cane to the drum brake.
8. Thread the end of the the cable through the hole in the pinch bolt and tighten after removing all play from the cable.
9. Adjust cable until no wheel drag is present and positive lock is achieved with levers.
10. Secure cable to back cane and frame with cable clip (A) and P-Clip (B) as shown.

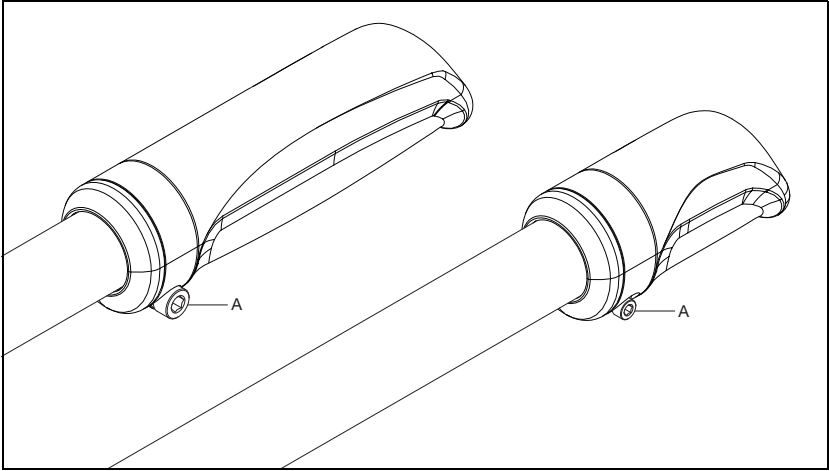


EZ Grip Assembly

1. Ensure any previous hand grips are removed and the handle is smooth and clean for install.
2. Install the EZ grip on to the handle by pushing onto the hand grip as far as grip will go.
3. Tighten bolt (A) on the grip collar with a 4mm Allen wrench to a minimum torque setting of 50 in-lbs, until grip is secure and does not rotate or remove when twisted and pulled.

NOTE: There are two sizes of EZ grips available, installation is the same for both sizes.

4. Repeat on opposite side.





Ki Mobility
5201 Woodward Drive
Stevens Point, Wisconsin 54481
715-254-0991
www.kimobility.com