



AdvenChair User Manual





Onward!

AdvenChair User Manual

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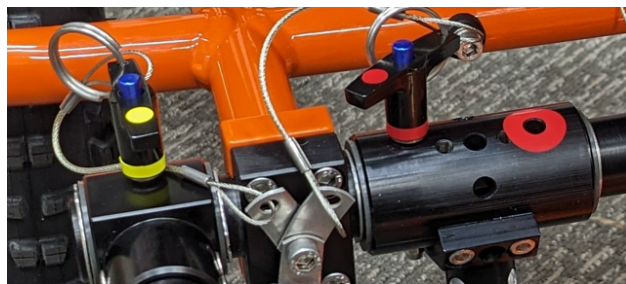
Updates to the AdvenChair V3.0 not reflected in the User Manual:

AdvenChair V3.0, produced in spring of 2024, has updates that are not reflected in this User Manual. None of the functionality has changed but some of the figures will look slightly different than the AdvenChair V3.0. Photos of the new version are shown here:

1. The front fork has been redesigned to be simpler:



2. The color coding of the detent pins has been improved:



3. The attachment points for towing straps have been replaced with webbing loops:



Updates to the Spring 2024 AdvenChair User Manual:

1. A section about maintenance has been added.

Introduction

Welcome to the growing community of adventurers who refuse to let disabilities stop them from enjoying the outdoors on the trail. Enjoy your AdvenChair wherever adventure takes you with your friends and family!

Introducing the AdvenChair and its parts



Figure 1. The AdvenChair in wheelchair mode.



Figure 2. The AdvenChair in all-terrain mode.



Figure 3. Parts of the AdvenChair

Setting up the AdvenChair

Preparation

1. Tools required (not included):
 - a. 6mm hex wrench
 - b. 17mm or 11/16" box end wrench
 - c. 5mm hex wrench (for optional headrest adjustment)
2. Cautions:
 - a. Protect the brake rotors from being bent.
 - b. The disc brakes are mechanical and although the brake levers can be engaged without the wheels in place, it is best to avoid doing this.
3. Types of Connectors: Connectors hold parts together and allow adjustments.
 - a. **Detent Pins:** Detent pins are used to hold many adjustable parts of the chair in place. To remove or insert them through their holes, press the button on the top of the pin and then push the pin through the proper hole or pull it free from the hole. All the detent pins are secured to the AdvenChair with cables to prevent loss (Figure 4).

Four detent pins and their holes on the front of the chair are color coded for clarity. The colors are referenced in the text.



Figure 4. Detent Pin.

Note the button on the top of the pin. That button must be pressed to insert or pull the pin.

- b. **Ratchet Handles:** Ratchet handles are used to tighten bolts which hold parts of the AdvenChair in position. Pulling the ratchet handle straight out releases the ratchet so the handle can be turned without tightening or loosening the bolt. When the ratchet handle is released, a spring pulls the handle back in place where it connects with the bolt. Then ratchet handles can then be turned to tighten or loosen the bolt. This allows moving the handle to a position in which it can be easily gripped to tighten or loosen parts of the AdvenChair even when there isn't much space to maneuver (Figure 5). Ratchet handles should be hand tight. Never loosen the ratchet handle more than one full turn.

NOTE: Do not loosen the ratchet handle more than one full turn. If loosened too far, the handle will come off and the internal spring and bolt will come out.

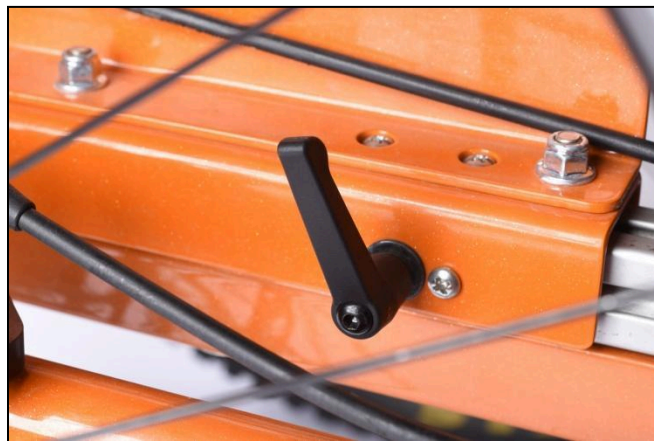


Figure 5. Ratchet handle.








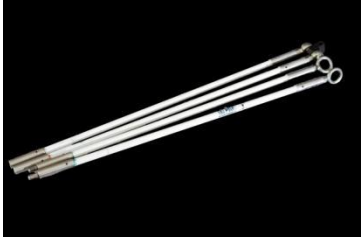

Pulling the handle straight out from the chair releases the ratchet so the handle can be positioned as needed.

- c. **Spring Plungers:** Spring plungers lock two pieces of sheet metal in position by holding a pin that goes through both pieces. A spring holds the pin tight. Pulling the spring plunger straight out retracts the pin from the holes. Turning the spring plunger 90 degrees locks the pin in the retracted position. The parts can then be adjusted. Turning the spring plunger back 90 degrees releases the pin. After releasing the pin, the parts may need to be jiggled until the pin fits through the holes to lock the parts in place (Figure 6).



Figure 6. Spring Plunger.

4. Remove the chair and other parts from the carton. Recycle the packing material or store it for later use.
 - a. The following parts are included:

 <p>Figure 7. Frame and seat with handlebars. (1 each)</p>	 <p>Figure 8. Wheels with brake rotor. (2 each)</p>	 <p>Figure 9. Wheel Axles (attached to frame). (2 each)</p>
 <p>Figure 10. Front Wheel and Forward Beam. (1 each)</p>	 <p>Figure 11. Towing straps. (3 each)</p>	<p>Optional:</p>  <p>Figure 12. Upper Footrest. (attached to the forward beam)(1each)</p>
<p>Optional:</p>  <p>Figure 13. Towing Harness. Part of the Towing Package. (1 each)</p>	<p>Optional:</p>  <p>Figure 14: Towing Poles. Part of the Towing Package. (4 pole sections and one swivel fitting.)</p>	<p>Optional:</p>  <p>Figure 15. Headrest. (1 each)</p>

- b. As it comes out of the carton, the AdvenChair is fully collapsed (Figure 16).



Figure 16. AdvenChair as it comes from the carton.

Install the handlebars

1. Lift the handlebars straight up and insert the tubes attached to the handle bars into the steering tubes (Figure 17).



Figure 17. Install the handlebars.

2. Pull the detent pins from the steering tubes, adjust the handle bars to the desired height, and reinsert the detent pins to lock the handlebars in place (Figure 18).



Figure 18. Pin handlebars in place.

Install the main wheels

1. Tip the frame forward and have someone hold it steady (Figure 19).



Figure 19. AdvenChair frame tipped forward for wheel installation.

2. Remove the axles from the axle dropouts using a 6mm hex wrench.
3. Identify the left and right wheels. The brake rotor is on the inside of the wheel. The direction-of-rotation arrow on the inside of each tire indicates the direction of rotation. The left and right wheels can be identified by this marker.
4. Install each wheel.

- a. Make sure the brake levers on the handlebars are not locked. If they are, gently squeeze the levers to release the locking button.
- b. Make sure the brake rotor slides into the slot on the brake and the center of the hub of each wheel is in the axle dropout on the frame (Figure 20 and Figure 21).

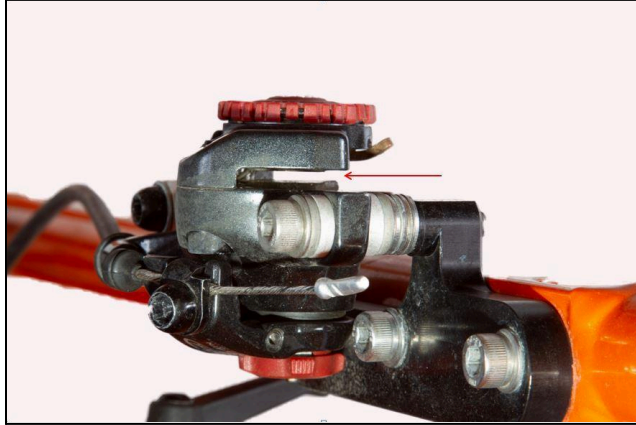


Figure 20. Slot for brake rotor in the brake mechanism.

This view looks down on the brake mechanism.

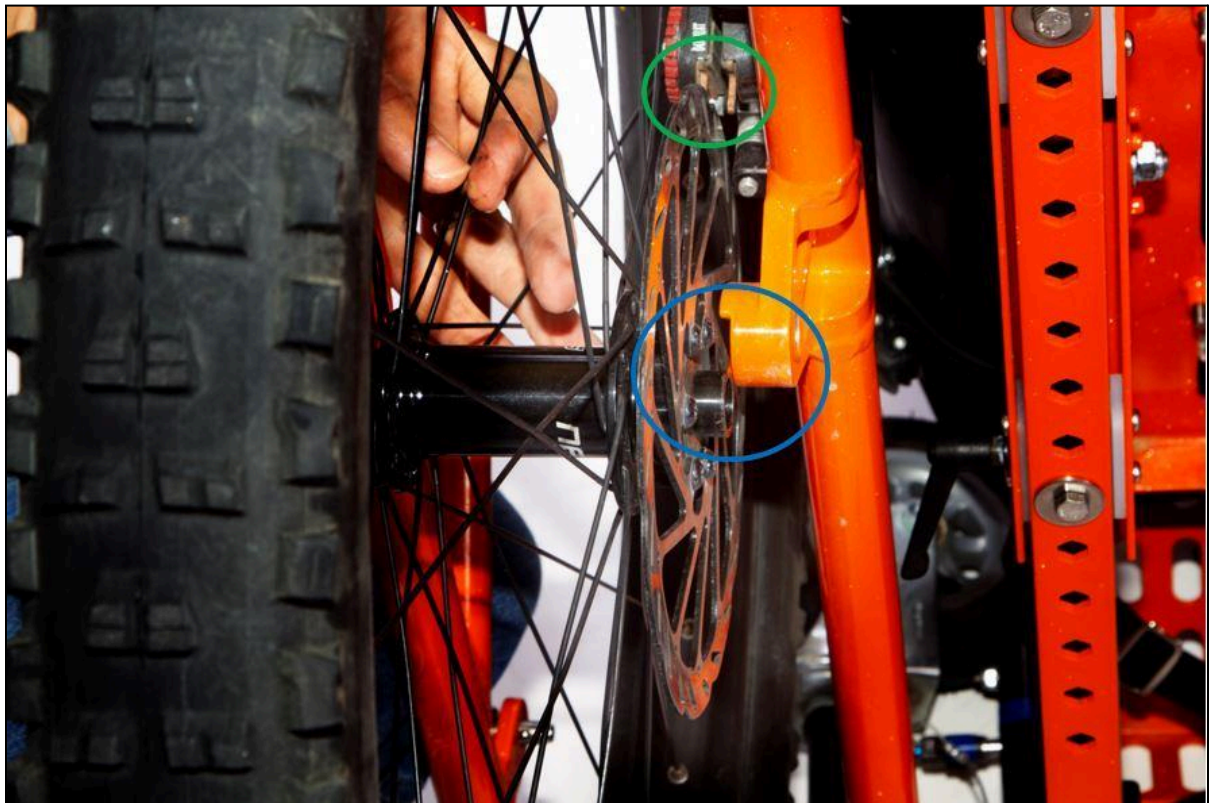


Figure 21. Wheel placed in the axle dropouts with the brake rotor in the brake rotor slot.

This is the left side of the chair looking up from below the chair. The green circle shows the brake rotor in the brake rotor slot. The blue circle shows the center of the hub just below the axle dropout.

- c. Slide the axle through the wheel hub and tighten securely with the 6mm hex wrench (Figure 22 and Figure 23).



Figure 22. Axle placed through the hub and ready to be tightened.

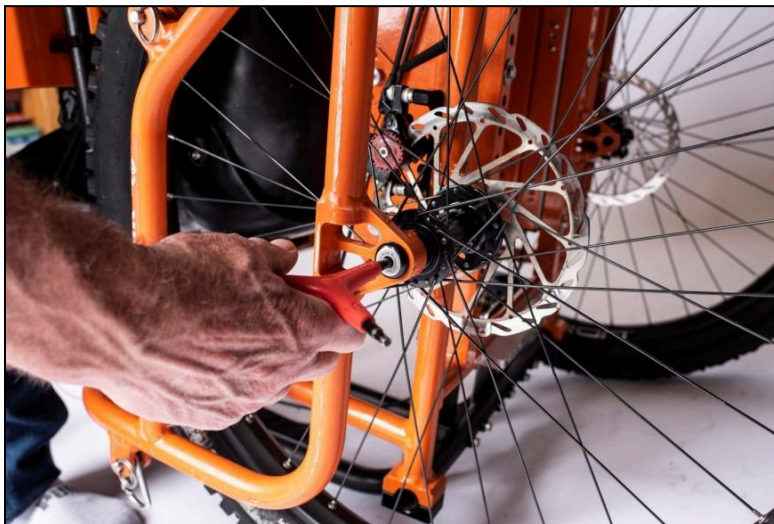


Figure 23. Tighten the axle with a 6mm hex wrench.

- d. Repeat this step for the other wheel.

Set the AdvenChair upright

1. Lower the front casters
 - a. Tip the chair back on the handlebars so the front of the chair is accessible (Figure 24).



Figure 24. AdvenChair tipped back so the casters can be lowered.

Note that the casters are rotated up for storage or transport.

- b. Pull the yellow detent pin from the front of the caster assembly, rotate the caster down, and replace the detent pin through the front of the caster assembly (Figure 25). It may be necessary to “jiggle” the caster leg to remove the detent pin.



Figure 25. Lower the casters into wheelchair mode.

The yellow detent pin holds the caster assembly in place. The casters should be up for transport, straight ahead in all-terrain mode, and down for wheelchair mode.

- c. Repeat for the other caster.
2. Lift the AdvenChair so it is upright on the main wheels and the casters.
3. Pull the seatback upright. Move the adjusting straps and seatbelt from between the seat and armrest to prevent binding (Figure 26).



Figure 26. AdvenChair with main wheels and casters in place and seatback raised.

Set up the footrest

1. Footrest overview:

- a. There are three detent pins on each side of the footrest assembly. Figure 27 shows those pins with the footrest raised, as it comes from the box. Figure 28 shows the pins with the footrest lowered as it is prepared for a rider.
 - i. Red Pin: Controls the angle of the tube that supports the footrest.
 - ii. Green Pin: Controls the length of that supporting tube. This adjustment is made for individual riders and is not changed during this initial setup.
 - iii. Blue Pin: Controls the angle of the footrest.
- b. All of these adjustments are made for individual riders and are described here only to get the chair set-up. Personalized adjustments are described in the [AdvenChair Field Guide](#).

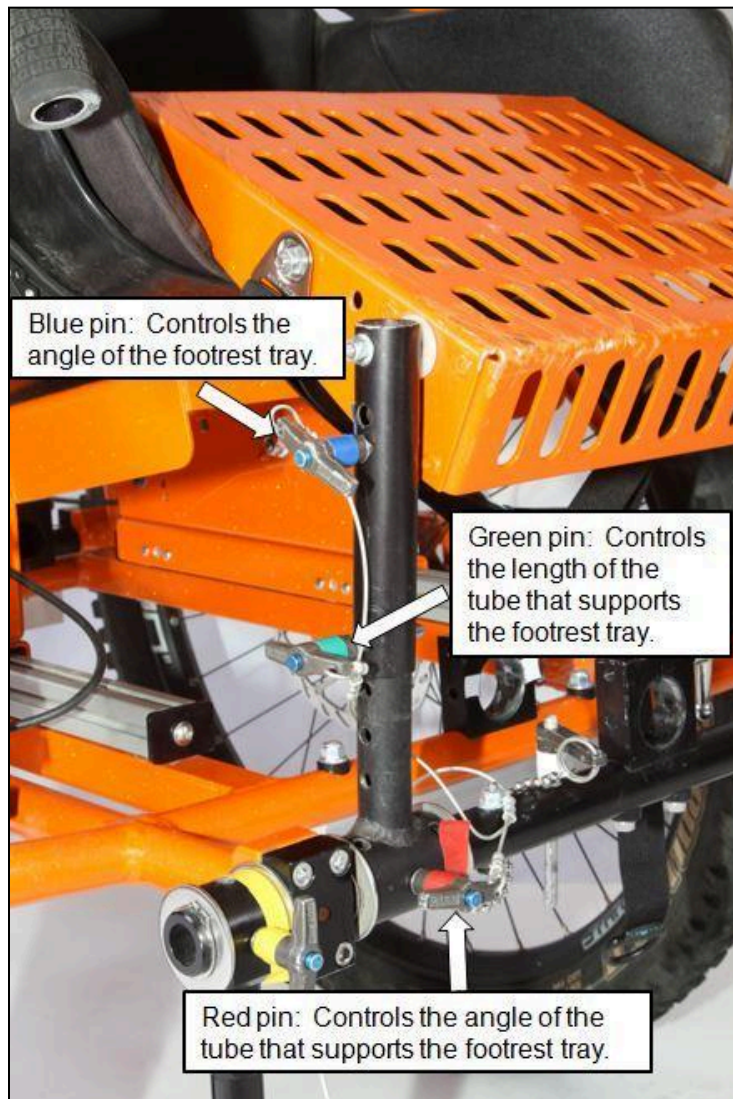


Figure 27. The three pins that position the standard footrest assembly.

This view of the footrest assembly shows how it appears as shipped or raised for transport.

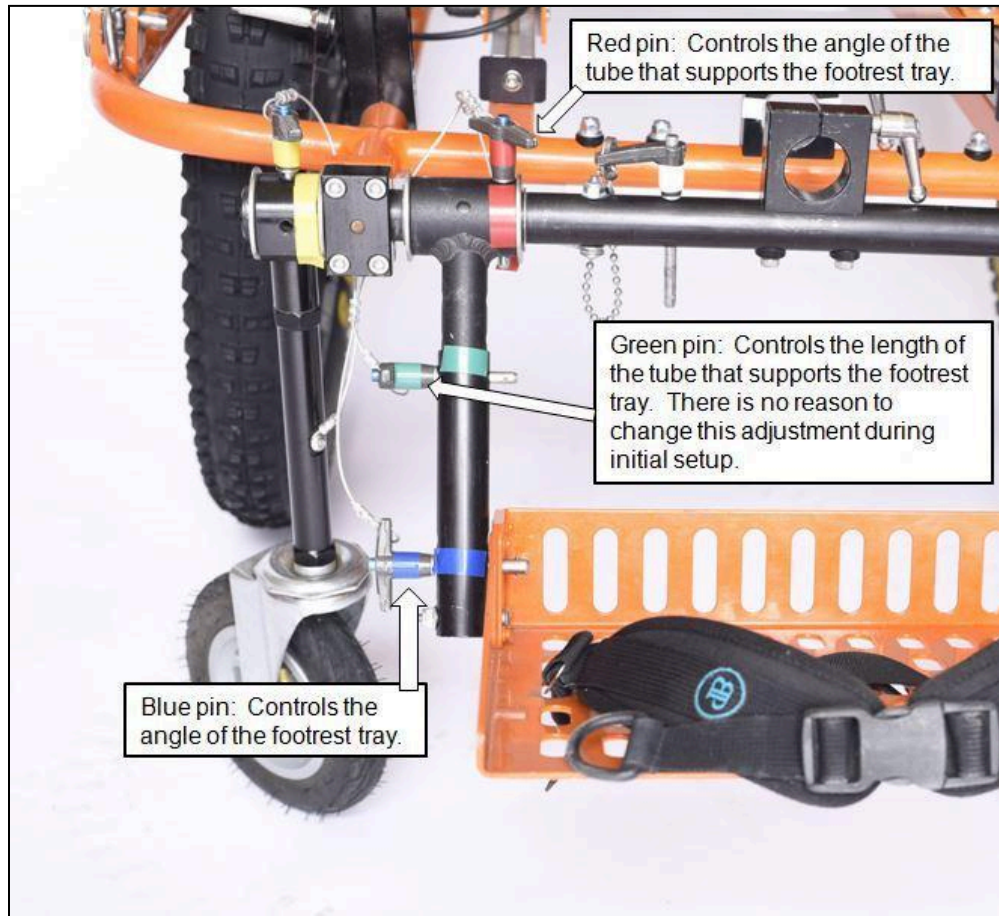


Figure 28. Footrest Assembly lowered into riding position.

2. **Rotate the full footrest assembly down:** Pull the **RED** detent pins on both sides of the footrest assembly and rotate the assembly down (Figure 29).



Figure 29. Use the red detent pins to position the footrest assembly.

The footrest assembly is rotated up for transport and down for use.

3. **Adjust the footrest tray angle:**
 - a. Pull the **BLUE** pins (Figure 30) controlling the angle of the footrest tray from both sides.



Figure 30. Unpin the blue pins from both sides of the footrest tray.

- b. Pin the footrest tray in place with the **BLUE** pin through one of the three holes on each side (Figure 31). Use the same hole on each side. Each hole holds the footrest tray at a different angle.



Figure 31. Pin or unpin the footrest tray.

4. **Pin the footrest assembly in place.** Rotate the footrest assembly slightly forward of vertical and pin it in place on both sides with the red pins through one of the three red holes (Figure 32). Use the same hole on each side.

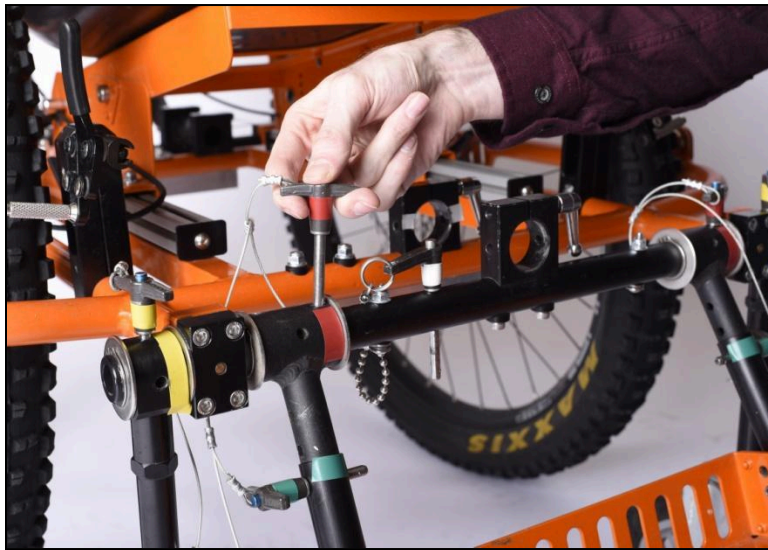


Figure 32. Pin or unpin the footrest assembly.

Position the handgrips

1. Unclamp the handgrips with the ratchet handle just under the armrests on each side (Figure 33). Loosen the ratchet handles just enough to allow the handgrips to move.



Figure 33. Use the ratchet handle under the armrest to loosen/tighten the handgrips.

2. Rotate the handgrips to the down position to facilitate rider entry.
3. Clamp the handgrips in place with the ratchet handles (Figure 33).

Install and Remove the Front Wheel /Forward Beam

Generally the front wheel/forward beam is installed just as a hike is starting. If the rider cannot get into the chair unassisted, it is best to get the rider into the chair while it is in wheelchair mode and then install the front wheel/forward beam.

Install the Front Wheel onto the Forward Beam

1. The forward beam is shipped without the front wheel attached (Figure 34).



Figure 34. Forward beam without front wheel.

2. To install the front wheel, loosen the nuts from the axle on each side of the front wheel with a 17mm (11/16") box end wrench.
3. Slip the axles onto the forward beam fork with the nut and washer on the outside of the forward beam fork (Figure 35).



Figure 35. Installing the front wheel on the forward beam.

4. Tighten the nuts on both sides to complete installation of the front wheel (Figure 36).



Figure 36. Forward beam with front wheel installed.

Install the Forward Beam onto the AdvenChair

1. Turn the front wheel on the forward beam so that most of the wheel is out in front of the forward beam. In this position the front wheel will be slightly off the ground during installation, making installation much easier (Figure 37).

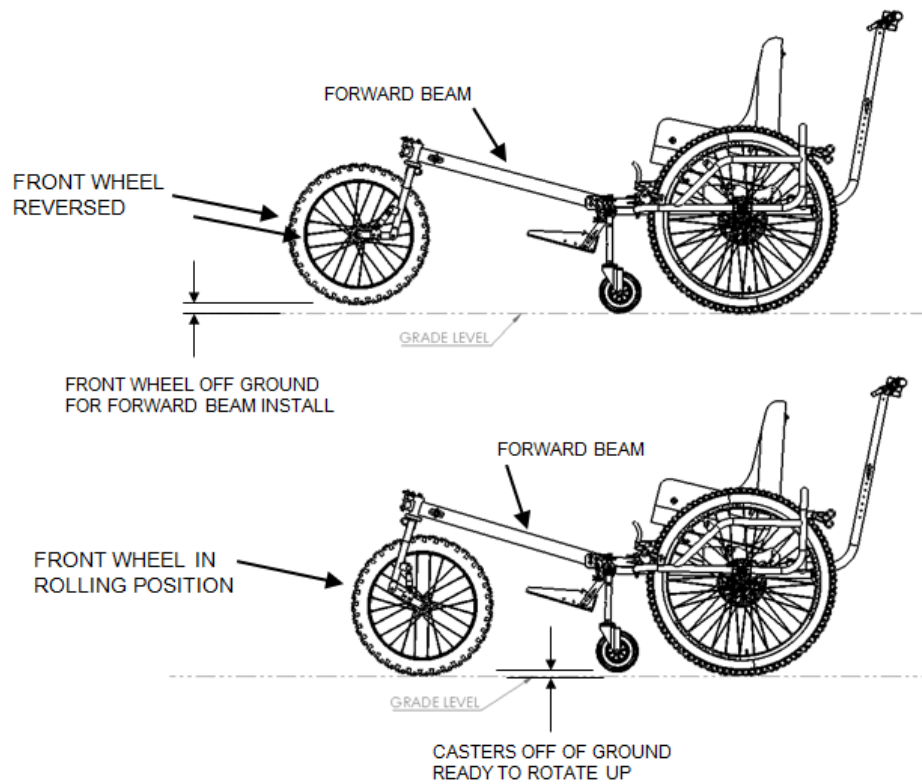


Figure 37. Positioning the front wheel to install or remove the forward beam.

When the front wheel is reversed, the casters take the weight and the front wheel is off the ground. When the front wheel is in rolling position the casters are lifted off the ground, putting the weight on the front wheel.

2. Slide the rear, tubular end of the forward beam into the two round clamp blocks on the front of the frame just above the standard footrest. Make sure the ratchet handles on both the clamp blocks are loose and the white detent pin is removed (Figure 38).



Figure 38. Sliding the rear, round end of the forward beam into the clamp blocks.

The round clamp blocks are shown by the red arrows. The white arrow indicates the direction of insertion of the back (tubular) end of the forward beam. Make sure the ratchet handles on both the round clamp blocks are loose and white detent pin is removed.

3. Install the white detent pin into the rear clamp block holding the forward beam. The forward beam must be slid all the way into the forward clamp block. **The clamp blocks should remain loose at this step.** Since the pin goes through the end of the forward beam, you may need to rotate the beam slightly to align the hole through the beam with the pin (Figure 39).

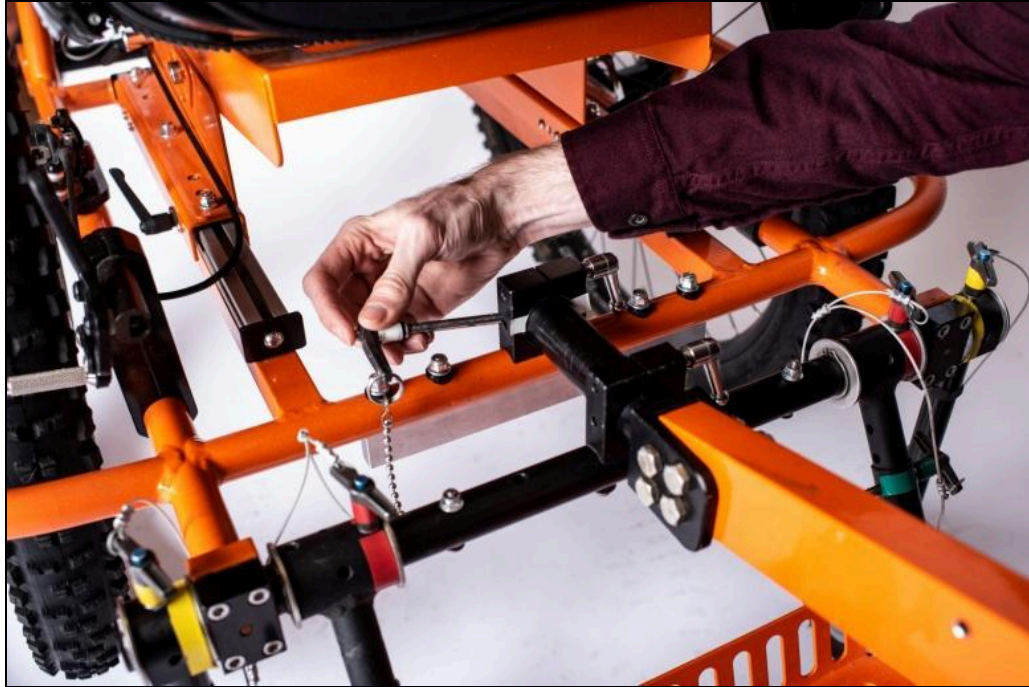


Figure 39. Pinning the forward beam in place with the white detent pin.

Note that the forward beam is inserted as far as possible into its clamp blocks. Since this pin goes through the end of the forward beam, you may need to rotate the beam slightly to align the hole through the beam with the pin.

4. With the detent pin in place, tighten both clamp blocks with the ratchet handles to hold the forward beam securely in place (Figure 40).



Figure 40. Clamping the forward beam in place.

5. Turn the front wheel into rolling position—most of the wheel will be behind the front end of the forward beam. This lifts the casters slightly off the ground (Figure 37).
6. Raise the casters into all-terrain mode. Pull the yellow pin from both casters, rotate the casters up so their legs are parallel to the ground, and pin them in place (Figure 41).



Figure 41. Casters up and the AdvenChair in all-terrain mode.

Remove the Front Wheel and Forward Beam

Removing the front wheel is exactly the reverse of installation. Refer to the illustrations in the Installation of the forward beam section, if necessary.

1. Lower the casters into wheelchair mode. The yellow detent pins are removed and then re-pinned.
2. Rotate the front wheel forward to take pressure off the front beam, putting weight on the casters (Figure 37).
3. Loosen both of the forward beam clamp blocks with the ratchet handles. These clamp blocks are just above the standard foot rest (Figure 38).
4. Remove the forward beam white detent pin from the forward beam rear clamp block.
5. Pull the forward beam straight forward, out of the clamp blocks.
6. Re-pin the white detent pin through the rear clamp block to keep it from swinging around on its chain.

Adjust the AdvenChair for the Rider

Adjusting the AdvenChair for a rider is best done with the rider in the chair, the front wheel in place, and two people to make the adjustments. Some of the adjustments are related to each other so some adjustments will have to be re-visited until the best adjustments are found. For example the seat position, seat angle, and the seatback angle all contribute to how the rider sits in the chair.

On a long hike, the rider may want adjustments changed through the day for different conditions or to change position.

Height of the footrest:

The tube supporting the standard footrest telescopes and can be lengthened or shortened. Pull the green detent pins from the tubes on both sides, raise or lower the footrest tray to a comfortable height, and re-pin both sides (Figure 42).

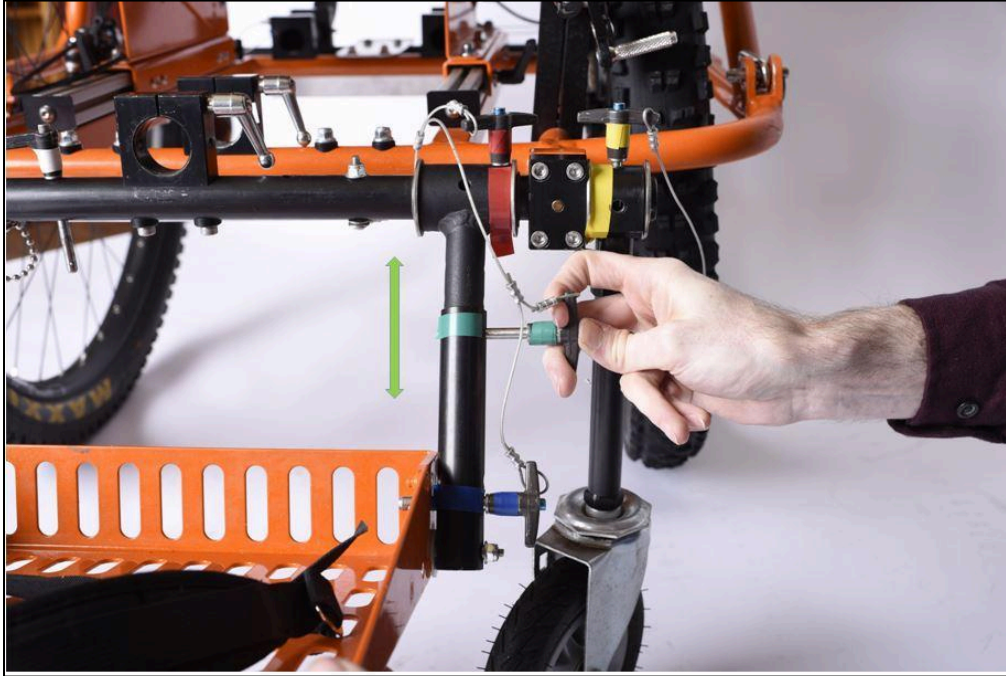


Figure 42. Adjusting the length of the footrest support tube.

Position of the seat forward and back:

To position the seat forward or back, loosen the ratchet handles under both sides of the seat, move the seat forward or back to a comfortable position, and tighten the ratchet handles (Figure 43).



Figure 43. Ratchet handle for adjusting seat position.

Angle (dump) of the seat base:

1. The seat angle or dump is adjustable from zero degrees (level) to sixteen degrees (tilted back) in four degree increments. The seat shown is currently level and pinned to the bottom hole (Figure 44).
2. Loosen the seat angle ratchet handles under the back of the seat on both sides. The handles should only be loosened one half to one full turn.
3. On each side of the chair, pull the round spring plunger out and turn it 90 degrees to disengage. If the rider is in the seat, the spring plunger may be tight. In this case lift the blue webbing strap at the top of the seatback to unbind the spring plungers, after which the spring plungers can be pulled out and disengaged.
4. Adjust the seat to a comfortable angle using the blue web strap on the top of the seatback.
5. When reclining the seat, make sure the ratchet handle is pointed towards the back of the chair.
6. Re-engage the spring plungers by turning them back 90 degrees. Then make minor adjustments to the seat angle by using the blue webbing strap at the top of the seatback to rock the seat up and down gently until the pins click into the desired adjustment holes. This may require fitting one side and then matching the other side.

7. Tighten the ratchet handles on both sides.

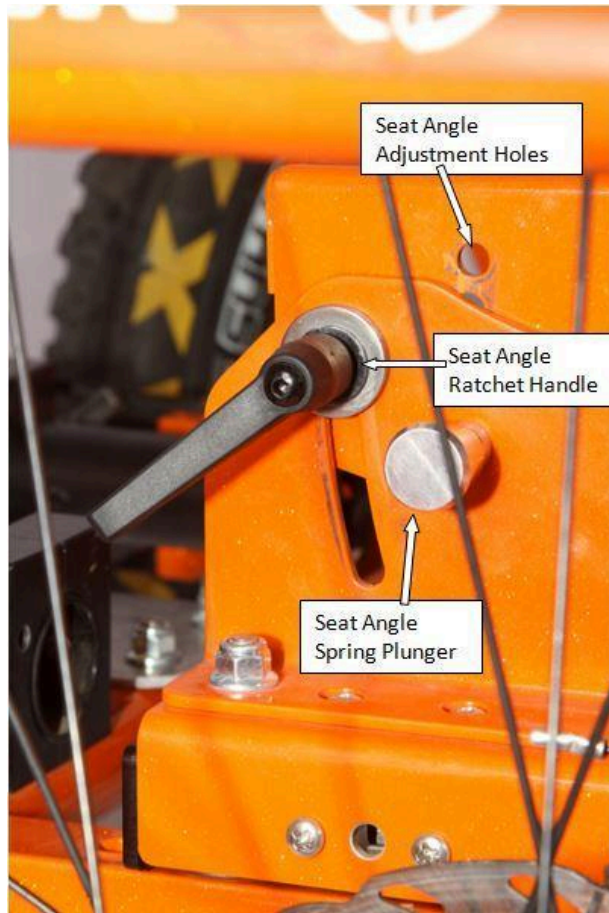


Figure 44. Ratchet handle and spring plunger for adjusting the seat angle.

Note the seat angle adjustment holes the spring plunger engages to lock the seat angle. There are five seat angle adjustment holes, two visible and three behind the side of the chair.

Note: If the end of the handgrip tubes rubs against the tire, correct this with the following adjustments:

- Move the handgrips forward.
- Move the seat forward.
- Reduce the angle (or dump) of the seat so it is more upright.

Angle of the seatback:

The angle between the seat bucket and the seatback is adjusted by lengthening or shortening the plastic strap running diagonally from the seatback to the seat bucket. The buckle on this strap has two adjustments:

- The gray center part of the buckle loosens the strap to recline the seatback.
- The black outer part of the buckle, ratchet mechanism, tightens the strap and raises the seatback to a more upright position (Figure 45).



Figure 45. Buckle for adjusting the angle of the seatback.

The strap controlling the angle between the seat bucket and the seatback has a buckle with a ratchet mechanism to adjust its length. The gray part in the center of the buckle releases the strap, allowing the seatback to recline. The black lever on the outside of the buckle is used to shorten the strap, raising the seatback to a more upright position.

1. To tilt the seatback further back, lengthen the strap by pulling out on the gray portion of the buckle and sliding the strap through the buckle (Figure 46).



Figure 46. Adjusting the seatback position: Recline the seatback.

2. To raise the seatback to a more upright position, ratchet the black lever portion of the lever as many times as necessary to pull the strap through the buckle to the desired position (Figure 47).



Figure 47. Adjusting the seatback position: Raising the seatback.

To raise the seatback to a more upright position, tighten the strap by ratcheting the black lever part of the buckle out as many times as is necessary to get the desired angle.

3. To get the seatback adjusted evenly, adjust one side and then adjust the other strap to the same length.

Height of the armrests:

To raise or lower the armrests on each side (Figure 48):

1. Pull and hold the spring plunger to disengage it.
2. Raise or lower the armrest.
3. Release the spring plunger to re-engage it into one of the adjustment holes. (These holes are not visible in the picture.) There are 5 holes, each ½ inch apart.



Figure 48. Spring plunger used to adjust the height of the armrests.

Position the handgrips:

1. For each handgrip, loosen the ratchet handle just enough so the handgrip can be moved. The ratchet handle is just below the armrest. Position the handgrip to a comfortable position. There are two adjustments for the handgrip:
 - i. The distance between the front end of the armrest and the handgrip.
 - ii. The angle of the handgrip.
2. Tighten the ratchet handle to clamp the handgrip in place. This is best done with the rider in the chair to ensure the position is comfortable (Figure 49).
3. When loading and unloading the rider, the handgrips should be rotated down and out of the way.

Note: If the end of the handgrip tubes rubs against the tire, correct this with the following adjustments:

- Move the handgrips forward.
- Move the seat forward.
- Reduce the angle (or dump) of the seat so it is more upright.



Figure 49. Adjusting the position of the handgrip.

Adjust the chest strap, seat belt, and foot strap:

1. **Adjust the chest strap:** Bring both sides of the chest strap around the rider, buckle them together and tighten them by pulling the rings to a comfortable position. Additional length adjustment can be made where the chest straps attach to the seatback (Figure 50).
2. **Adjust the seat belt:** Bring both sides of the seat belt across the rider's lap, buckle them, and pull them tight. The tighter the seat belt, the less the rider will slide forward, but don't make the rider uncomfortable. Additional length adjustment can be made where the seat belt attaches to the seat bucket under the seat cushion (Figure 50).



Figure 50. Seat belt and chest strap.

3. **Strap the rider's feet:** When the rider is comfortably seated, buckle the straps over his/her feet and pull the strap snug (Figure 51). Most riders prefer to wear shoes or boots.



Figure 51. Foot strap on the standard footrest.

Adjustments for Optional Components

Adjust the upper footrest:

The optional upper footrest sits on the forward beam, just behind the front wheel (Figure 52). There are two adjustments:

- Forward/ back
- Angle



Figure 52. The optional upper footrest is on the forward beam.

1. **Upper footrest position:** Loosen the ratchet handles on both sides of the front of the upper footrest assembly, slide the upper footrest forward or back to the desired position and clamp it in place with the two ratchet handles (Figure 53).

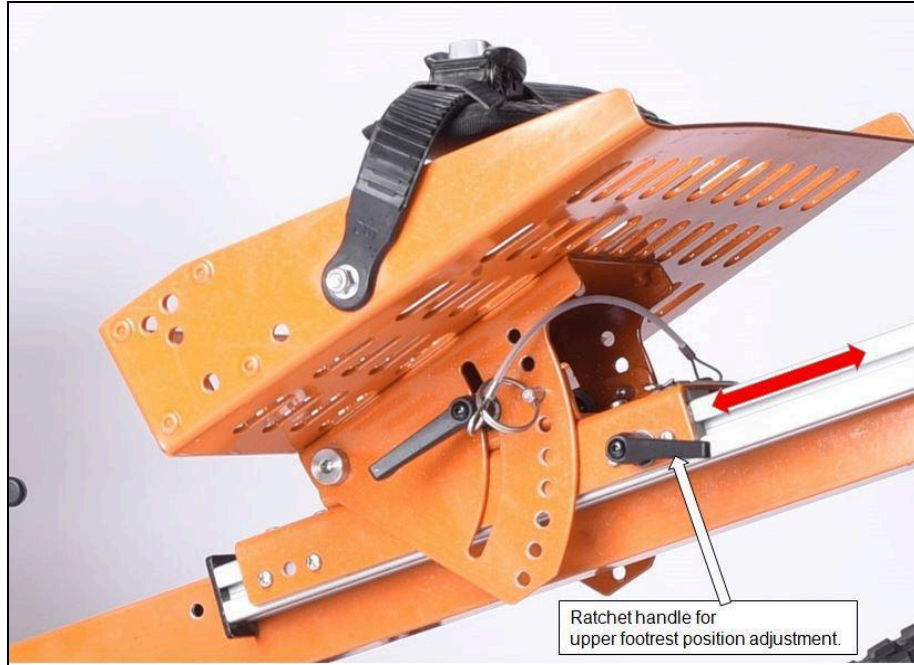


Figure 53. Ratchet handle for adjusting forward and back position of the upper footrest.

2. **Upper footrest angle:** Loosen the ratchet handles just below the center of the upper footrest on both sides; pull the pins just in front of those ratchet handles; rotate the upper footrest to an angle comfortable for the rider; insert the pins; and tighten the ratchet handles. There is no button to push to release these pins (Figure 54).

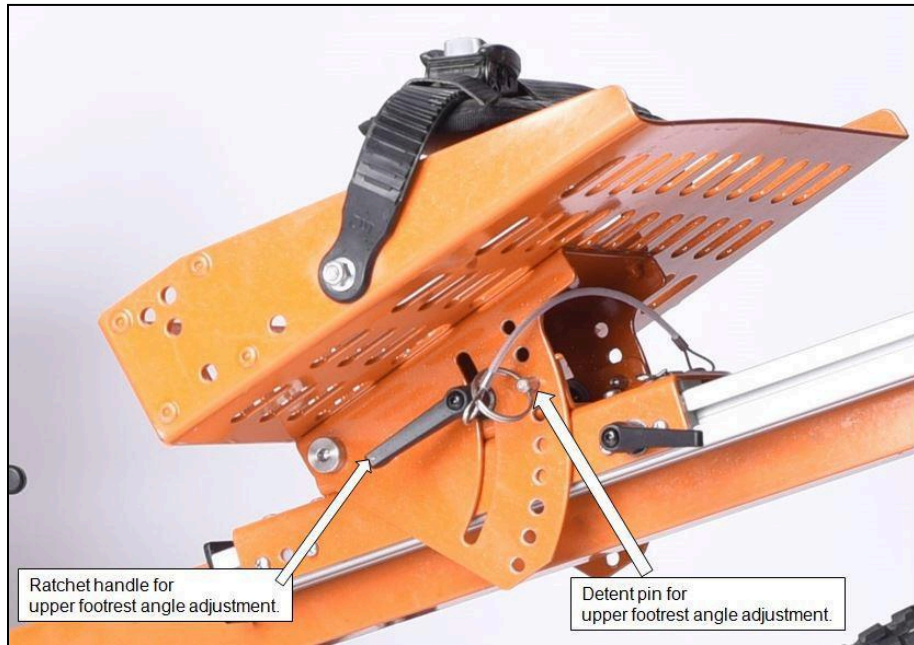


Figure 54: Ratchet handle and pin for adjustment of the upper footrest angle.

Installation and Adjustment of the optional Headrest

The headrest is an optional accessory that is installed in a bracket on the back of the seatback (Figure 55).



Figure 55. Headrest bracket and clamp on the upper back of the seatback.

1. The bracket can be lowered 3" by removing the four screws with a 5mm hex key and reattaching the bracket to the four holes shown below the current bracket position. This will position the headrest for a short person.
2. **Install the optional headrest:** Slide the stem of the headrest support into the headrest bracket and tighten the clamp. The height is adjusted by how far the stem is inserted into the bracket. The bottom of the stem must be in far enough for the clamp to engage with the stem (Figure 55).
3. Adjust the angle of the headrest: There are two swivel joints on the headrest support. Loosen both of them with a 5mm hex wrench just enough so they can be moved. Adjust the height and angle of the headrest, and tighten the swivel joints (Figure 56).



Figure 56. Tighten or loosen the headrest swivel joints with a 5mm hex wrench.

And you're ready to hit the trail...

See the [AdvenChair Field Guide and Trail Notes](#) for information about AdvenChair hiking!

Transporting—Getting the AdvenChair into and out of a vehicle

Depending on the size of your vehicle, you will need to do less or more to collapse the AdvenChair for transporting. Figure 57, Figure 58, and Figure 59 show the dimensions of the folded AdvenChair, the forward beam and front wheel, and the main wheel. Don't forget room for your crew, food, water, and all the things to make your trip enjoyable. It is very important to practice these procedures at home before you go.

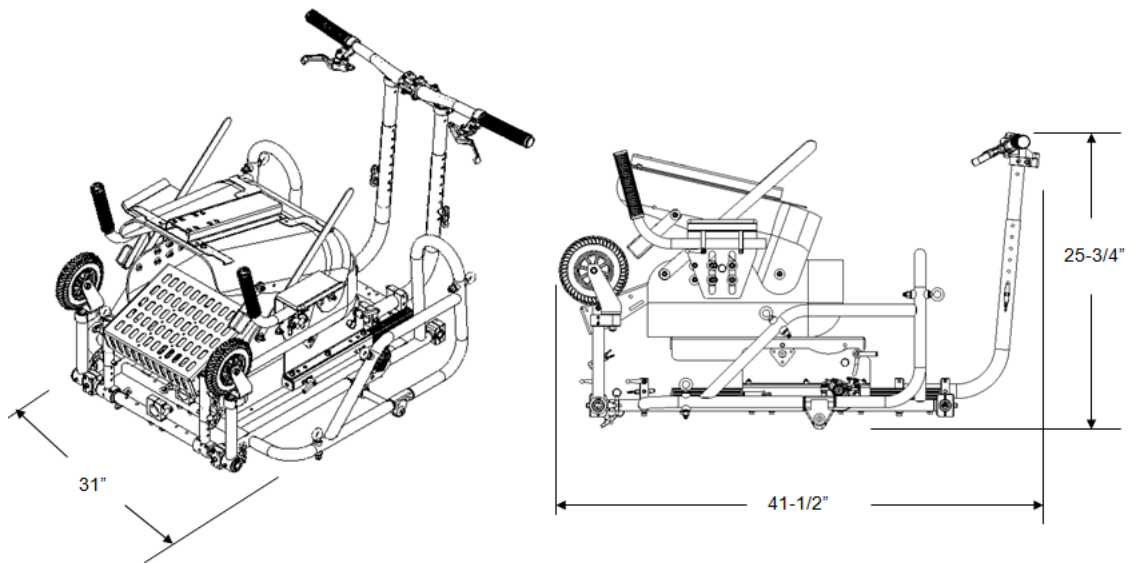


Figure 57. Dimensions of the folded AdvenChair.

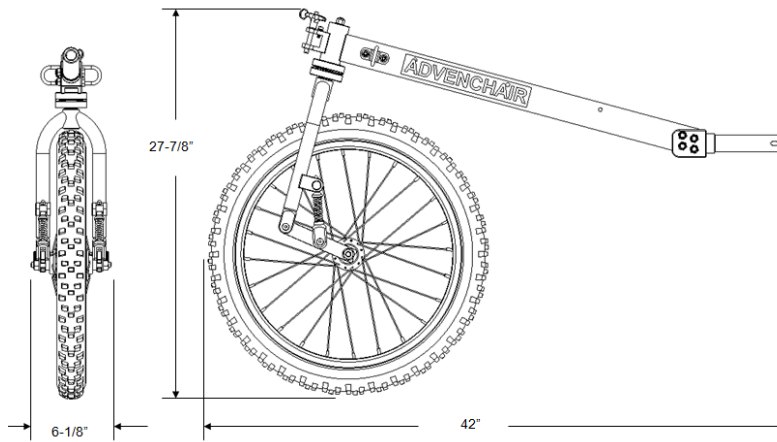


Figure 58. Dimensions of the Forward Beam and Front Wheel.

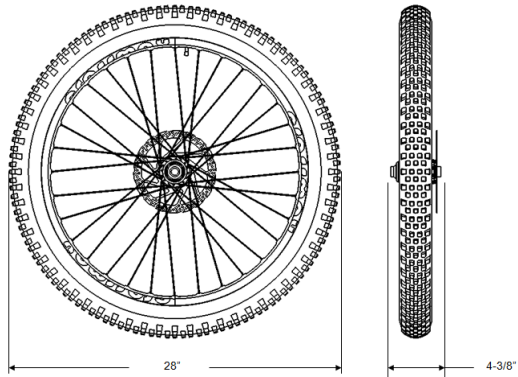


Figure 59. Dimensions of the Main Wheel.

A small SUV like a Subaru Outback requires that the two main wheels and the handlebars be removed. A larger vehicle like a Suburban, a mini-van, or a pick-up can accommodate the AdvenChair in normal wheelchair mode without the forward beam attached. Figure 60 shows the AdvenChair in the back of a small SUV.



Figure 60. AdvenChair packed up in the back of a small SUV.

1. Tools Required—Only if removing the main wheels.
 - 6mm hex wrench
2. Disassembling the AdvenChair—Only do what's required for the size of your vehicle. For large vehicles you may be able to remove the front wheel/forward beam and roll the chair in.
 - a. Remove the Front wheel/Forward beam (Figure 37 to Figure 41).
 - i. Lower the casters into wheelchair mode.
 - ii. Rotate the front wheel forward to take pressure off the front beam, with weight on the casters.
 - iii. Loosen both of the forward beam clamps with the ratchet handles.
 - iv. Unpin the white forward beam detent pin from the forward beam rear clamp.
 - v. Pull the forward beam straight forward, out of the clamps.
 - vi. Replace the detent pin in the rear clamp to secure it.
 - b. Footrest: Rotate the entire footrest assembly up towards the seat so it is out of the way.
 - i. Pull the red detent pins from the top of the footrest assembly on both sides (Figure 32).
 - ii. Pull the blue detent pins from both sides of the footrest (Figure 31).
 - iii. Rotate the footrest assembly up so the tubes are straight up and pin the tubes in place with the red detent pins (Figure 29).
 - iv. Pin the footrest tray to the tubes using the blue pins (Figure 29).
 - c. Casters: Rotate the casters up so they take up less room.
 - i. Tip the AdvenChair on its back, resting on the handlebars.
 - ii. Unpin the yellow detent pins from the top of both casters (Figure 25).

- iii. Rotate the casters up and re-pin them using the holes in the front of the caster assembly and yellow detent pins (Figure 25).
 - d. Taking off the main wheels
 - i. Tip the chair onto its front and have someone hold it in place.
 - ii. Unscrew the axles from each wheel using a 6mm hex wrench and pull the wheels “down” and away from the chair.
 - iii. While the main wheels are off, make sure the brake rotors are protected from being bent.
 - iv. Replace the axles in the axle dropouts to protect from loss and damage to the axle threads.
 - e. Handlebars:
 - i. Remove detent pins in each handlebar steering tube.
 - ii. Lift the handlebars until the upper steering tubes come out of the lower steering tubes.
 - iii. Move the handlebars and upper steering tubes forward a few inches and set them down between the seatback and the lower steering tubes. The handlebars should remain upright.
 - iv. Replace the detent pins through the holes in the lower steering tubes.
 - f. Folding the seat
 - i. Place the chair upright and push the seatback forward and down.

The chair is now fully disassembled and ready for transport.

3. Getting chair into vehicle
 - a. Lift the whole thing; use your legs, not your back! Two people are better than one.
 - b. Roll it in if the main wheels are attached.
 - c. If the wheels are on, set the brakes and tie it down. Don’t get run over before you get to the trail!
4. If the rider will be riding in the chair follow these additional steps:
 - a. Set the parking brakes by pulling the brake levers and pushing the locking button.
 - b. Attach the vehicle-mounted tie-down straps (e.g., QStraints) to the AdvenChair frame, not the wheels.
 - c. Attach the seat belt firmly and securely across the waist and the chest strap firmly and securely across the chest.
5. Getting the chair out of vehicle
 - a. If the main wheels are off, lift it out with two people.
 - b. If the main wheels are on, roll it out carefully so it doesn’t damage the vehicle.
6. Setting up a fully disassembled AdvenChair
 - a. Unfold the seatback by pulling the top of the seatback up and back until it is upright.
 - b. Installing the main wheels
 - i. Tip the chair onto its front (Figure 19).
 - ii. Place each wheel in position with the brake rotor in the brake mechanism slot and the axle in its receiver (Figure 20 and Figure 21).
 - iii. Slide the axle through the axle receiver and the hub and screw tight with the 6mm hex wrench (Figure 22 and Figure 23).

- c. Casters
 - i. Tip the chair on its back so it is resting on the handle bars. (Figure 24).
 - ii. Remove the yellow pin for each caster, rotate the caster down and pin it in place (Figure 25).
- d. Footrest
 - i. Tip the chair upright, on its wheels and casters (Figure 26).
 - ii. Unpin the footrest assembly (red pins) and the footrest (blue pins) (Figure 29 and Figure 30).
 - iii. Rotate the footrest assembly down and pin it in the desired position with the red pins. There are three holes, for different angles (Figure 32).
 - iv. Position the footrest tray in the desired position and pin it in place with the blue pins. (Figure 31).

Maintenance

The AdvenChair is relatively maintenance free but some maintenance is needed.

1. Keep your AdvenChair clean and looking sharp. You can wash it just like you'd wash your car.
2. Keep the tires inflated. We recommend the main wheels be kept at about 15-20 pounds per square inch (psi) and the front wheel at about 30 psi. Lower pressures provide a more "cushy" ride, but may be harder to push on some surfaces. Higher pressures (and harder tires) may be desirable on smooth surfaces. They are tubeless and have internal suspension which protects the rims from damage even with very low tire pressure. The main wheels use a presta valve fitting while the front wheels and caster wheels use a Schraeder valve fitting.
3. Add tire sealant every four to six months, or so, to the main wheels. The main wheels are "tubeless" and the sealant will plug almost all tire leaks. For more information, see this [article about tire sealant](#) in *Bicycling Magazine*.
4. Keep the brakes maintained. The AdvenChair's brakes are mechanical disc brakes. The cable will stretch over time. This increases the distance the brake levers have to be pressed to engage the brakes. To tighten them, loosen the hex nut holding the brake cable, pull the cable tight with pliers, and retighten the hex nut. To find the hex nut, follow the brake cable from the brake levers to the brake mechanism. For more information, see this article about [adjusting mechanical disc brakes](#) from Park Tools.

The AdvenChair is now ready for your Adventures!



Imagine where your AdvenChair will take you!