

ADAPTIVE BICYCLE TRAILER

INSTRUCTION AND OPERATING MANUAL



Name: Adaptive Trailer

US PATENT PENDING

Adaptive Bicycle Trailers

(309) 376-2336

Made in the USA

Manufacture of elite bicycle trailers and accessories

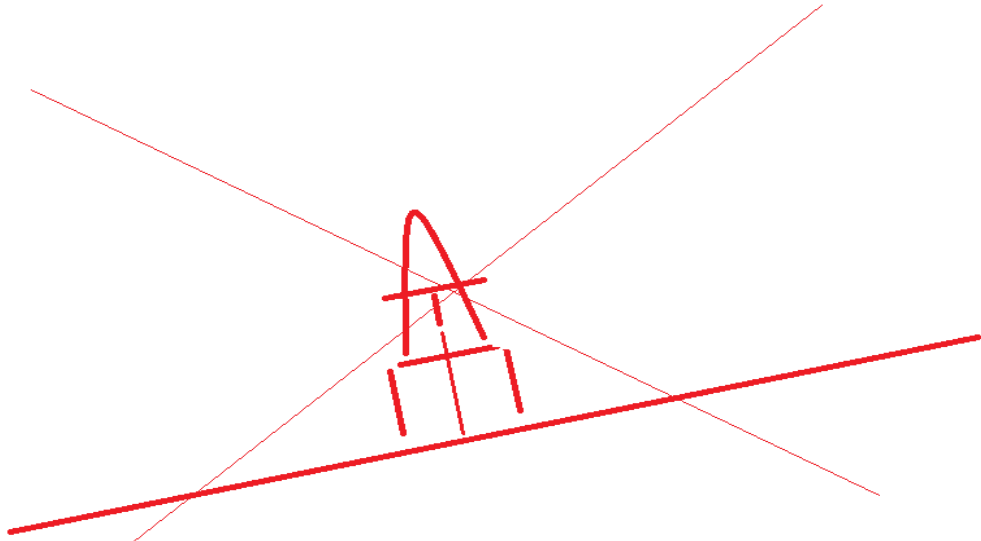
Read these instructions carefully before use and keep them for future reference. Failure to follow these instructions and use of good judgement could result in serious injury or death for the rider and passenger!

Warning and Safety Guidelines

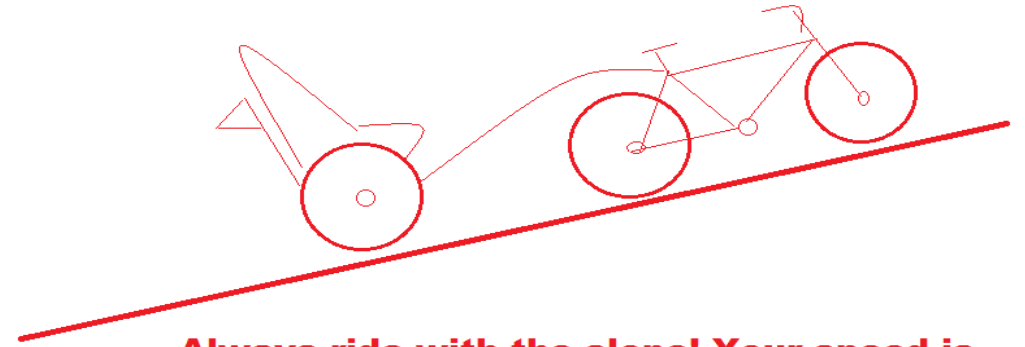
Remember the rider / puller is responsible for the passenger. Use at your own risk

- **Warning:** Avoid serious injury from falling out or sliding out. Always use safety harness(es)
- **Warning:** Securely attach hitch to seat post following instructions given. Failure to do so could result in serious injury or death
- **Warning:** Do not install a car seat or any seating device not approved by ABT
- **Warning:** Do not make any modifications to this trailer without consulting ABT
- **Warning: Do not allow any part of the passengers body, clothing, shoe laces, or objects to get in contact with moving parts. The passenger needs to keep hands and feet inside the envelope of the trailer. Arm straps and foot pads with straps are optional accessories and can be ordered if your passenger needs them**
- **Warning:** Never leave a person unattended in the trailer and always set the parking brake to prevent rolling after dismounting the bicycle
- **Warning:** Before each ride, Ensure the trailer or passengers feet do not interfere with the bicycle during steering, turning, braking, or slope angles
- **Warning:** Use of orange flag and LED light are required. Make sure they are visible and not blocked from view
- **Warning:** Have your bicycle safety inspected by a qualified bicycle technician. It is imperative that the braking system work properly as the braking distance increases with the weight in the trailer
- **Warning:** Only 1 passenger allowed in the trailer. Passenger must be able to sit in upright unassisted position or serious injury or death could result
- **Warning:** Rider / puller and passenger must wear CPSC or CE approved helmets when in use
- **Warning:** Before each use, check tire pressure per manufacture ratings on sidewall in all tires, make sure all pins are in place and lock wires are clipped, check for loose hardware and replace any item that show wear. Do not ride and contact ABT for replacement parts.
- **Warning: Never exceed a speed of 10 MPH and slow to under 5 MPH in any corner, sidewalk entrance, or where pedestrians or objects are near. The trailer is wider than most bicycles and sits 6 feet behind you. Make wide turns to avoid curbs and other objects. You need to clear yourself and the trailer.**
- **Warning: Never enter or exit a slope greater than 10 degrees. Always ride with the slope and never ride across the slope. All slopes and rough terrain need to be handled with extreme caution and speed to allow you to stop safely**

SLOPE / GRADE WARNING



Never ride across the slope !! Could cause a roll over and serious injury or death could result

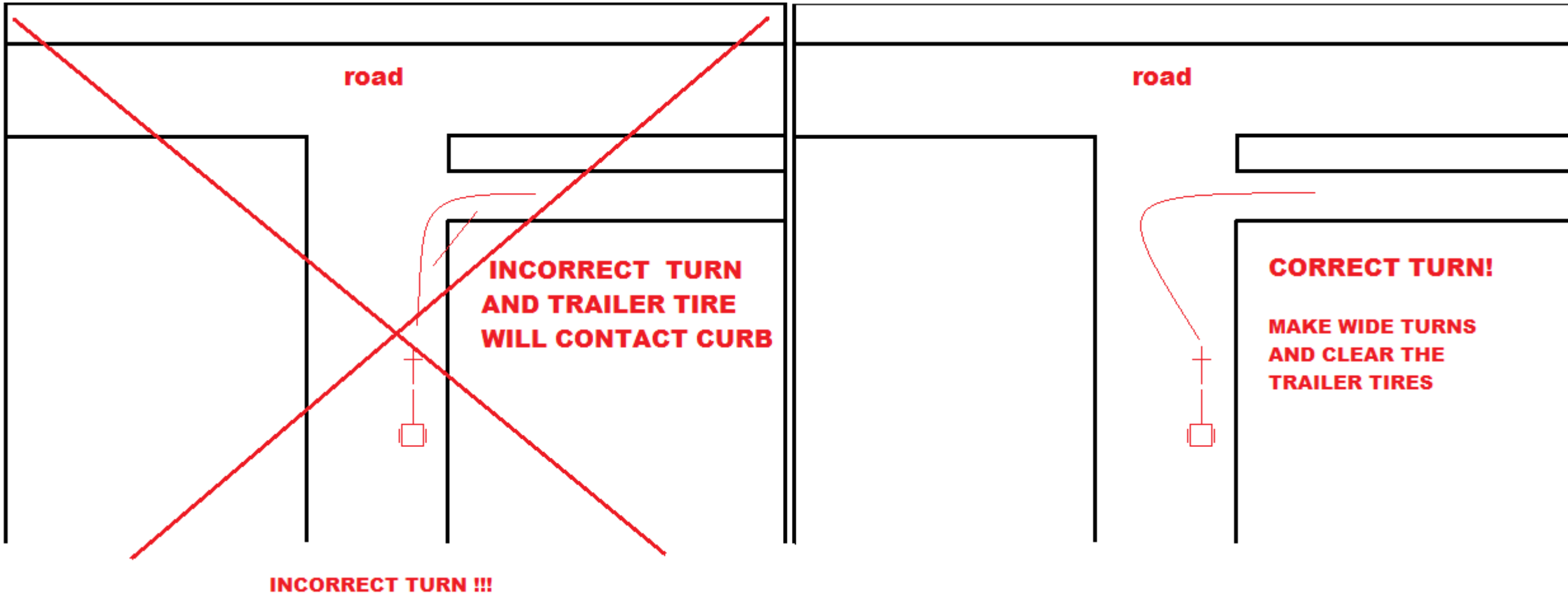


Always ride with the slope! Your speed is limited by the bicycle braking system. Use your own judgement on you and your passengers safety. Do not enter a slope or ride if you are not comfortable you can do perform the ride safely.

MAXIMUM SLOPE ANGLE OF 10 DEGREES! Do not enter slopes outside of this range and NEVER ride across the slope!

TRAILER TOWING WARNING

The bicycle rider / puller must make wide turns to clear the trailer tires of obstructions. Remember the trailer could be wider than your handle bars. Use extreme caution and slow speeds when around objects, cars, poles or other pedestrians!! Look around for traffic before starting the turn. The trailer could flip and cause serious injury or death if not performed correctly.



Weight Restrictions and Usage

The trailer is designed for one occupant and is only designed for smooth and flat terrain less than 10 degree slope such as asphalt, concrete, limestone, or brick. It is not recommended for trail riding, bumpy terrain, loose terrain and/or speeds over 10 MPH. The main function of this trailer is to allow people to get outside and enjoy a nice slow and safe ride. Our weight restrictions are recommendations only because surface conditions, brake usage, speed, brake limitations and weight play a major role in a safe ride. Please use at your own risk and always travel at a speed you can stop in case of an emergency. The higher the weight is of the occupant and baggage in the trailer, the longer the distance it will take to stop. We strongly recommend that the person on the bicycle be of 18 years of age and able to understand and follow all traffic laws where the trailer is being used.

WEIGHT RESTRICTIONS AND USAGE

The maximum occupant weight is determined by the weight of the bicycle rider / puller and the braking capacity of the bicycle. The first step is to pre-determine maximum occupant seat weight. To do this: subtract 50LBS (10 degree of slope or less) or subtract 20LBS (Strictly flat surfaces) off the bicycle / puller weight to get the maximum occupant weight with baggage for the trailer. Here are a few examples under solid and dry surface conditions:

| <u>Rider / puller</u> | <u>Maximum trailer occupant weight with baggage: 10 degree or less Slope / Flat surface</u> |
|-----------------------|---|
| 220 LBS | 170LBS / 190LBS – Maximum Manufacture Rating |
| 200LBS | 150LBS / 170LBS |
| 180 LBS | 130LBS / 150LBS |
| 160LBS | 110LBS / 130LBS |
| 140LBS | 90LBS / 110LBS |
| 120 LBS | 70LBS / 90LBS |

The person on the bicycle must weigh more than the occupant in the trailer for braking applications. The rider / puller must remain in the seat and never stand up during braking applications to keep the rear wheel on the ground! Use a smooth combination of front (30%) and rear (70%) braking to prevent skidding. Remember you are always limited by the braking power of the bicycle to stop in an emergency. Use the above weight as a guideline only and correct to your safe operating parameters.

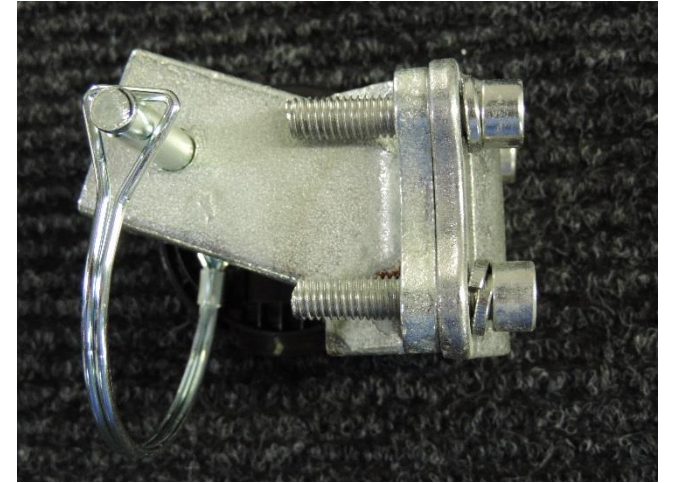
Assembly Instructions



Trailer platform



Trailer connection tube



Seat post hitch

Assembly Instructions

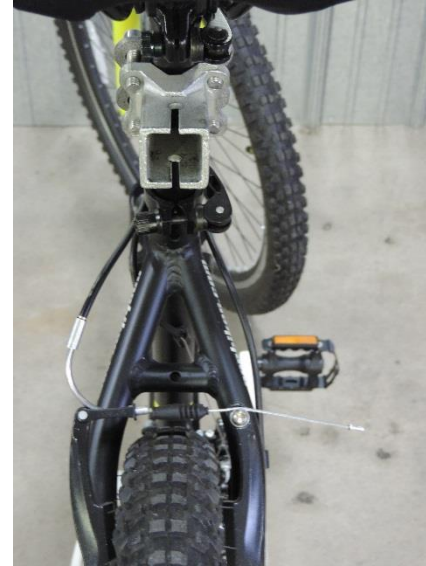
Bicycle steel seat post removal and install



1. Remove seat post from bicycle
2. Mark a line 5" from bottom of tube
3. Re-install tube into bike frame
4. Make sure the line disappears into the bicycle frame. This means you have the recommended amount of tube inside the bicycle frame. If you see the line, then the seat adjustment is too high and you will need to purchase a longer steel seat post at your local bicycle shop.

Assembly Instructions

Attaching the supplied hitch receiver to the bicycle steel seat post



1. Set and tighten your seat into the bicycle frame for a seat height that is comfortable for you to ride. Make sure you can not see the line that was drawn on the tube.
2. Using a 6 mm allen wrench remove the four bolts from the hitch in the above picture
3. Hand install the four bolts to be sure the lock washers are on the bolt head side per picture on the 1st page of the Assembly Instruction section and that the rear tube is at an upward angle per the above photo. Leave it loose enough to start all the bolts and slide on the tube.
4. Once it is together, slide the hitch to the top just under the seat connection to the tube. We want the hitch as high as possible for clearance over the rear tire. Tighten the bolts at that location so that the rear exit tube is in line with the rear tire. Use an alternating tightening method to help keep the unit square.

Assembly Instructions

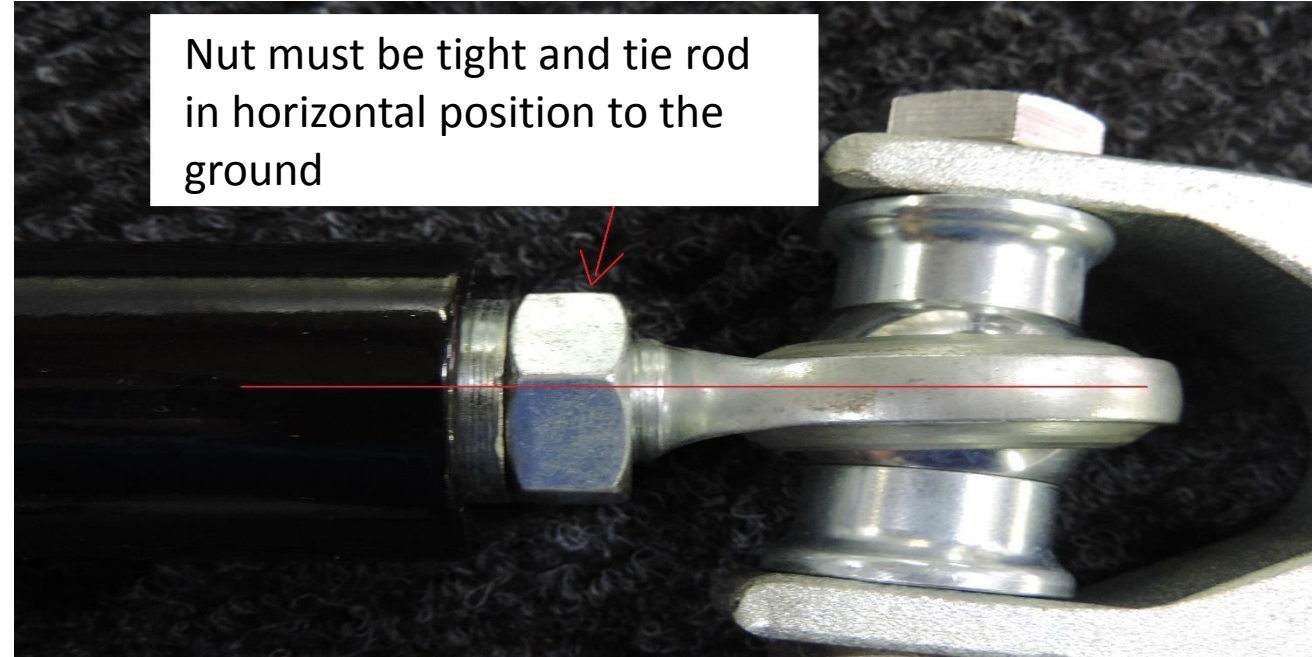
Install the trailer connection tube to the trailer platform



1. Remove the wire lock pin in the trailer platform
2. Grab the trailer connection tube
3. Slide the tube onto the center pin on the front of the trailer first. **Do not try to connect to the bicycle seat post hitch first.**
4. Install the wire lock pin back through the hole in the trailer connection tube and trailer pin. Ensure it is a snug fit and re-latch the safety wire over the end of the pin as shown in the photo

Assembly Instructions

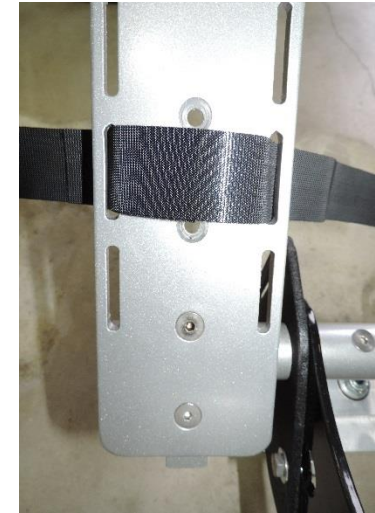
Connecting the trailer to the bicycle seat post hitch



1. Release the parking brake on the trailer - if applicable
2. Remove the wire lock pin from the rear of the hitch
3. Roll the trailer up to the hitch and insert the connection tube yoke adapter into the hitch
4. Re-insert the lock pin and re-attach the safety wire over the end of the pin
5. Make sure the rod end is horizontal to the ground and the jam nut is tight. This will need to be checked prior to each ride in case it loosens. If you see more than $\frac{1}{4}$ " of threads showing, remove the yoke from the hitch and hand screw the yoke into the trailer connection tube. Align the yoke as seen in the above photo and retighten the jam nut.

Adjustments or Optional Accessories

Adjustable foot rest mounting location and angle adjustment



Adjustable foot rests and straps can be installed at either the top round bar location or the lower round bar location depending on passenger leg length. There are two allen bolts in the bottom of the rounded mounting bracket (2nd photo). If you remove the two bolts on one side and tap the mounting pad it will break free from the tube. Then, remove the two allen bolts in the center of the tubes (3rd photo) and slide it out of the main frame. Remove the two bolts out of the other round tube and switch the positions. Reinstall the hardware and foot rest on the one side. If you are just adjusting the angle, loosen the two bolts under the round mounting plate (photo 2), tap to break loose and reset to correct angle then retighten.

The plates can also be extended or set back using the two allen bolts going through the top foot pad plate (4th photo).

****Remember to verify foot clearance with the rear tire on the bicycle during turning or slopes prior to riding****

Adjustable arm rests and straps



If your trailer has adjustable arm rests. You can adjust the height by squeezing the button on the front of the arm rest and moving up and down as needed.

The wrist straps (styles may vary) are an optional accessory that hold the persons wrists to the armrest while riding. Please make sure the person can keep their hands free of moving parts and inside the dimensions of the trailer or we recommend you have this option added to help prevent injuries.

STROLLER CONVERSION OPTION

Bike trailer to stroller procedure

Here are the steps to convert the bike trailer into a stroller. This option allows you to ride to a location, stroll through the attraction or event and ride back home.

1. Make sure you are on flat and stable ground
2. Loosen the one black knob screw on the side plate of the front wheel 1-2 turns. With one hand supporting the wheel block use your other hand to loosen the 2nd black knob screw 1-2 turns. This will allow the swivel block to slide down. Push the block all the way to the rear slot on the bottom side. Re-tighten the knob screws on each side. These knob screw bolts need to be firmly tightened. Do not try to over tighten them. If for some reason they begin to come loose while in stroller configuration, You will feel a light vibration while rolling in the front. If this happens, just re-tighten the bolts again.
3. Remove the pin at the seat hitch
4. Disconnect the trailer from the bicycle and slide the unit back
5. Set the parking brakes on the trailer
6. Remove the pin at the front of the trailer next to the foot bars
7. Remove the trailer connection tube from the trailer. Re-install the connection tube in the seat post hitch with secure pin for storage until you return.

STROLLER CONVERSION OPTION

Stroller to bike trailer procedure

Here are the steps to convert the stroller into a bike trailer. This is in reverse of the previous steps. Make sure you are on flat and stable ground

1. Set parking brakes on stroller
2. Remove the trailer connection tube from the bicycle.
3. Re-install the connection tube to the front trailer pin above foot pegs and install locking pin with safety wire
4. Release parking brakes on stroller and roll unit up and into the seat post hitch. Secure with locking pin and safety wire.
5. Set parking brakes on stroller
6. The trailer unit should be attached to the bicycle with the wheel still in the down position
7. Loosen the one black knob screw on the side plate of the front wheel 1-2 turns. With one hand supporting the wheel block use your other hand to loosen the 2nd black knob screw 1-2 turns. This will allow the swivel block to become loose. Slide the block all the way up to the top slot so the wheel points toward the bicycle. Re-tighten the knob screws on each side. These knob screw bolts need to be firmly tightened.
8. Verify you have tire clearance for turning and slopes
9. Verify all safety pins are installed and latched
10. Verify passenger and trailer are ready to ride again and no objects can get in the way of moving parts
11. Release the parking brakes and begin to ride

Passenger Loading Options

- Set the parking brake if applicable. If not, we recommend someone to hold the bicycle steady while loading.
- You can load the passenger into the seat. Install and tighten the seat belts as required.
- If it is difficult to load the person with the trailer connected to the bicycle. You can remove the trailer from the hitch. Set the parking brake or block the wheel. Remove the trailer connection tube at the pin in the front of the trailer. Then, load the person and reconnect the tube. Unlock the parking brake or move the block and reconnect the bicycle. You may also find it easier to use a solid 8" – 9" platform, street curb, or parking block to set the front of the trailer on to keep the seat in a level position during loading.

Safety Check

1. Check that the flag is clear and visible
2. Tires pressures are good (Set tire pressure to the weight of the passenger. Too much air can cause the trailer to bounce around if it doesn't have enough weight in it. Adjust accordingly)
3. Reach under the **rear flashing light** on the back side, there is a hole in the aluminum to access the button to turn the light on. Switch to the light setting you desire. If, the factory installed batteries need replaced the lens cover detaches from the front. It requires 2 AA batteries.
4. All pins are installed and safety wires attached
5. Passenger is restrained in the seat by use of strap or seat belts and that nothing can come in contact with any moving parts.
6. Rear bicycle tire clearance is good from foot pegs or stroller option - if applicable
7. Approved helmets are on and secure
8. Release the parking brake - if applicable
9. Take your time and go slow. Remember, its for fun not a race!
10. Make WIDE TURNS
11. Go Enjoy the Ride!