

10. Assemble the safety flag by connecting the two halves of the flagpole and inserting it into the flag. Then insert the end of the flagpole into the flagpole holder located on the left side of the frame near the wheel's hub.

Be sure all reflectors are securely attached and fully visible.

11. Install the fender on the Lil' Shadow's frame to reduce possible water spray from the adult bike's rear wheel.
12. To attach the Lil' Shadow to an adult-sized bicycle, remove the seatpost from the adult bike. Slide the seatpost through the hitch assembly of the Lil' Shadow. Use an included shim of the appropriate size to achieve the correct fit between the adult bike's seatpost and the hitch assembly of the Lil' Shadow. Tighten the two 5mm pinch bolts so the Lil' Shadow's hitch assembly is securely attached to the adult bike's seatpost.
13. Always check entire the adult bike and the entire Nashbar Lil' Shadow for safety before each use. Carefully check all bolts, brackets, quick release connectors, reflectors, tires, etc. Check all pivots for correct function. Check the adult bike's brakes for proper function before and after attaching the Lil' Shadow.
14. Ride carefully and enjoy your Nashbar Lil' Shadow.



# Lil' Shadow Tandem Trailer

*Thank you for purchasing the Nashbar Lil' Shadow. This instruction manual contains important information about your Lil' Shadow's features and guidelines for its safe use. Please read the entire manual carefully before assembling or using your new Lil' Shadow Tandem Trailer. If you require assistance, contact Nashbar Tech Support at (800)-888-2710 – 9am-10pm M-F, 12-6pm Sat/Sun EST.*

**IT IS THE USER'S RESPONSIBILITY TO ENSURE  
THE SAFE AND PROPER USE OF THIS PRODUCT.**

Bicycling with a tandem trailer and bicycling in general can be hazardous. Failure to observe these Safety Guidelines could result in an accident, serious injury or death.

## Safety Guidelines

The maximum weight for the Nashbar Lil' Shadow Tandem Trailer is 75 pounds. The Lil' Shadow is recommended for children ages 4 to 8, but only a parent can decide if the Lil' Shadow is suitable for their child. Check with your pediatrician if you are unsure about your child's ability to use this product safely.

Bicycling with a tandem trailer is different from bicycling without one, in ways which aren't always obvious. Using a bicycle to pull anything will substantially impact the handling and stopping of the bicycle. Note that starting, braking and turning are all affected. It is essential that you read and understand the following safety guidelines prior to using the trailer.

### **The Lil' Shadow is not intended for off-road use.**

A single kickstand will not support a full-sized bike with the Lil' Shadow attached. Use care when parking your bike and Lil' Shadow as they can fall over more easily. Before loaning your tandem trailer to others, make sure they understand its proper and safe use.

## Use a Well-Maintained Bicycle and Tandem Trailer

Be sure that the adult-sized bicycle used to pull the Lil' Shadow Tandem Trailer is in good working order and is equipped with good, properly functioning brakes. Inspect and maintain your Lil' Shadow Tandem Trailer as outlined in this manual. Have a qualified bicycle mechanic maintain and inspect your bicycle and Lil' Shadow Tandem Trailer if you are not qualified to do so.

## Starting and Stopping

The additional weight of the Lil' Shadow Tandem Trailer and its rider will require more time to start and stop. The additional length of the tandem trailer requires more time when crossing intersecting streets or paths. The bicycle and tandem trailer combination is heavier and less responsive than a single bicycle. You must think further ahead to anticipate stops and turns. Remember, it is the sole responsibility of the adult rider to stop and turn. The tandem trailer extends farther behind you than a normal bicycle, allow for this difference when turning, passing pedestrians or approaching obstacles. To familiarize yourself with the altered handling characteristics of your bicycle and tandem trailer, attach the tandem trailer to your bike and practice in a safe area. Do not use your Lil' Shadow trailer with a child until you have become accustomed to how it affects your bicycle's handling.

**For technical support, call 1-800-888-2710, M-F 9am-6pm EST**

**Bike Nashbar, 6103 Rt. 446, Canfield, OH. 44406**

Made in China

[www.nashbar.com](http://www.nashbar.com)

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## Tips for Safe Riding

As with automobile and motorcycle trailers, any bicycle tandem trailer can tip over. To avoid injury, avoid potholes and do not pull your tandem trailer over curbs or other obstructions in the road. Instruct children riding on the tandem trailer not to bounce, rock or lean; such weight shifts may cause the tandem trailer to tilt or flip. Do not turn sharply or at high-speed when pulling the trailer. Always corner with caution at 5 mph or less. Do not under any circumstances exceed 20mph; high speeds adversely affect your ability to control the bicycle and to notice obstacles.

## The Fit, Alert, Adult Pilot

To safely pull a Lil' Shadow tandem trailer, you must be a fit, experienced adult cyclist not under the influence of alcohol or drugs. You must be alert and have good eyesight and hearing. You must also have adequate strength in your legs, arms and hands. Never allow a child or adolescent to pull the tandem trailer because it is likely that they lack the necessary physical ability and proper judgment.

## No Headphones or Other Distraction

Do not bicycle with headphones, radios or other distractions. You must be able to hear surrounding traffic and concentrate on safe bicycling at all times.

## No Motorized Vehicles

Your Nashbar Lil' Shadow is intended to be pulled behind pedal-powered bicycles only. Never pull a tandem trailer with any motorized vehicle, as the increased acceleration and speed may damage the tandem trailer or cause the tandem trailer to crash, possibly causing injury.

## Avoid Riding in Traffic

It is recommended that you do not use the Lil' Shadow tandem trailer while riding in traffic. If you must ride in traffic, do not pull your tandem trailer on highways, busy streets or on streets unsafe for bicycling with children. Never assume that you will be given the right-of-way, even if it is legally yours. The personal safety of you and your child should not be entrusted to a car driver whose attention or regard for bicyclists is unknown. Use care when pulling your tandem trailer on bike routes or along bike lanes, especially at intersections.

## Ride on Clean, Paved Surfaces

Your Lil' Shadow tandem trailer is not intended for off-road use. Off-road cycling with a child can be especially dangerous. The irregular surface of off-road trails could cause you and your cycling partner to crash, possibly resulting in serious injury. Always cross railroad tracks, grates, curb cutouts and road grooves at a 90 degree angle. Riding parallel to these road obstacles or crossing them at an angle of less than 90 degrees could result in a crash.

## Riding On Slippery Surfaces

Be especially careful in wet, rainy, icy or adverse conditions. Your ability to control and stop your bicycle when towing anything is greatly impaired. In wet conditions, gently apply your brakes periodically to be sure the brake pads and braking surfaces are clear of water. Avoid forceful braking which can result in skidding. Ride slowly and allow a greater margin of safety for starting, stopping and turning. Do not ride on surfaces where sand, gravel, ice, oil or other slippery substances are present. If you must cross a slippery surface, walk your bike and tandem trailer.

## Navigating Curbs, Stairs and Escalators

Never ride your Lil' Shadow tandem trailer over curbs or stairs. Both riders should always dismount and walk over any curbs. If you must traverse stairs, disconnect the tandem trailer from the adult bike and carefully roll your tandem trailer and bike, separately, up or down the stairs. Never take your bike or tandem trailer on escalators.

## Avoid Riding at Night

It is not recommended that you use the Nashbar Lil' Shadow Tandem Trailer at night. Since your vehicle is longer and heavier you will be less able to react to unseen hazards. Automobile drivers may not be accustomed to your longer vehicle and may not react to it appropriately. If you must ride at night, wear bright, reflective clothing. Use a bright headlight and a red taillight on your bicycle and on the tandem trailer. Do not use your tandem trailer without properly attached reflectors, safety flags and adequate lighting. Check your local laws regarding bicycle lighting and the use of bicycles at night.

## Considerations for Cool Weather Use

In temperatures below 70 degrees, your pedaling effort may keep you warm, but your child's smaller size coupled with a potential wind chill factor may result in them requiring additional clothing. In cool weather, check at regular intervals to ensure your cycling partner is sufficiently warm.

## Wear Your Helmets

Numerous studies have demonstrated that head injuries sustained in a crash are the leading cause of bicycling fatalities, and that helmets can prevent or reduce head injuries in the event of a crash. For safety, it is essential that all cyclists wear approved bicycling helmets at all times. Many states and communities have laws requiring the use of bicycle helmets, particularly for children under the age of 16. Check your local bicycle helmet laws.

## Protect Your Child

Make sure the child riding the Nashbar Lil' Shadow uses a correctly fitted, Consumer Product Safety Commission-approved, child's cycling helmet at all times. Consider providing other protective gear to your child, such as cycling glasses and gloves. You and your child should always wear fully enclosed sneakers or cycling shoes when using the Lil' Shadow Tandem Trailer. Be aware that children will get thirsty and hungry when riding on tandem trailers. Bring plenty of food and water, especially on longer rides.

## Use Your Flag

The safety flag is an essential safety device which makes you more visible to motorists and other cyclists. Always use the safety flag.

## Follow the Rules of the Road

Bicycles are vehicles and are required to observe all rules of the road. Always signal turns and stops; ride with both hands on the handlebars except when signaling. Scan ahead for dangerous situations and anticipate turning traffic. Watch for parked cars and opening car doors. Obey all signals and never ride against oncoming traffic. On bike paths, give audible warning when passing pedestrians from behind. If you are not aware of your local and state bicycle regulations, contact your local police or motor-vehicle office for more information.

## Know Your Trailer Hitch

Familiarize yourself with the Nashbar Lil' Shadow hitch operation. After you attach the hitch assembly securely to the bicycle, check for correct attachment and function each time you use the tandem trailer. See the "Assembly" section of this manual for details on proper installation and use of the hitch.

## Keeping it Fun – Getting the most from your Lil' Shadow

An outing with your child and the Lil' Shadow can be a rewarding experience for both adult and child, here are some tips to make sure everyone has a fun, safe and positive experience:

**Tip 1:** Keep the first trips short. As you are becoming accustomed to the added weight of pulling a tandem trailer, your young riding partner is also experiencing fatigue. Keep in mind the length of your ride and try to stick to shorter routes. Then build to longer trips as muscle strength and endurance increase.

**Tip 2:** Keep the child's feet on the pedals. Your riding partner can't support the weight of you and your bike, so they won't need to put a foot down except to get on and off. Adults should instruct them to keep their feet on the pedals at all times, including stop signs and lights. This will allow you to get moving quicker, and prevent injury and pedal strikes to the rear rider.

**Tip 3:** Adjust the child's seat height. Since they don't need to put a foot down, adjust the rear saddle high enough that they get good leg extension at the bottom of the pedal stroke. Have someone watch as you practice and make handlebar and pedal adjustments to make the young rider comfortable.

**Tip 4:** Keep them well hydrated and fed. Frequent "snack breaks" and lots of fluid may be required to keep your riding partner in good spirits, especially if it is hot.

**Tip 5:** Be positive, enthusiastic and patient. Set goals, but don't push too hard to reach them. And above all – **SAFETY FIRST!**

## Safety Checklist

*Before every ride, check the following:*

- Wheel securely attached
- Hitch securely attached
- Maximum load 75 lbs.
- Adult bicycle brakes and tires in good condition and operating properly
- Helmets for both riders
- Safety flag and reflectors in place
- Quick releases at folding hinge, hitch attachment and seatpost clamp fastened securely.
- Check tire inflation pressure on Adult bike and Lil' Shadow
- Tires should be inflated to the range indicated by the manufacturer on the sidewall of the tires

## Monthly Checklist

*On a monthly basis, check the following:*

- Inspect hitch assembly and all pivot points for damage, scratches or loose fasteners
- Inspect frame tubing and hardware for cracks, damage or loose parts
- Inspect tires for wear or cracks; worn tires should be replaced
- Inspect wheels for trueness and rims for cracks or other damage
- Inspect chain for wear and apply bicycle chain lubricant

## ASSEMBLY

### Tools needed:

6mm allen wrench  
5mm allen wrench  
15mm pedal wrench  
Bicycle grease

1. Remove the seatpost and saddle assembly from the box. Carefully cut the plastic zip ties securing the handlebar assembly to the frame. Remove the Lil' Shadow's frame assembly from the box. Remove any other accessories and smaller boxes from the main box and set them aside. There may be packing materials or accessories in the bottom of the main box, be sure to check for parts and accessories before discarding any packing materials.
2. Tear the protective material off the frame. Do not use a sharp instrument to remove the packing material as this may damage the paint surface. Remove the plastic axle protectors from the rear wheel's axle.
3. Locate the main folding hinge on the Lil' Shadow's connector arm. Unthread the nut from the quick release assembly and remove the entire quick release assembly from

the hinge. Fully unfold the Lil' Shadow's connector arm and push it into the extended position. Insert the quick release assembly through the hole in the hinge and install the nut onto the end. Tighten the nut almost securely, then flip the quick release lever to the fully closed position to achieve proper tension. Be sure that the tip of the quick-release lever is fully closed and positioned in a downward angle. There should be no play or looseness at the Lil' Shadow's folding hinge.

4. Locate the seatpost and saddle assembly. Lightly apply bicycle-specific grease the seatpost to prevent it from seizing inside the frame. Insert the seatpost into the Lil' Shadow's seat tube and tighten the quick release seatpost binder. Adjust the seatpost height and seat angle to the position that will best fit the child.
5. Locate the handlebar and handlebar bracket assembly. Remove the two 6mm allen bolts on the bottom of the handlebar bracket. Install the handlebar and handlebar bracket onto the area of the Lil' Shadow's connector arm where the scuff-resistant material has been positioned. The scuff-resistant material helps to ensure a secure interface between the handlebar bracket and the Lil' Shadow frame. Be sure that the handlebar is straight and parallel to the ground. Tighten the two 6mm allen bolts to securely affix the handlebar bracket onto the frame of the Lil' Shadow.
6. Adjust the tilt angle of the handlebar by loosening the 5mm pinch bolt on top of the handlebar bracket. Be sure to tighten the 5mm bolt securely after the handlebar position that will best fit the child has been achieved. Check to be sure that the handlebar grips are installed securely on the handlebars.
7. Install the Velcro handlebar pad onto the top tube of the handlebar.
8. Lightly apply bicycle-specific grease to the threads of the pedals to prevent them from seizing. Install the pedals into the crankarms using a 15mm pedal wrench. Note that left bicycle pedal is reverse threaded. Be sure you install the left pedal into the left crankarm and the right pedal into the right crankarm.
9. To install the hitch attachment assembly onto the end of the Lil' Shadow's connector arm, unthread the nut from the quick release skewer and remove the entire quick release assembly. Insert the quick release assembly through the hole in the hitch assembly and then through the hole on the end of the connector arm. Re-install the nut onto the end of the quick release assembly. Tighten the nut almost securely, then flip the quick release lever to the fully closed position to achieve proper tension. The hitch assembly's hinge tension must be set securely enough to be safe, but not so tight that the hinge cannot pivot sideways. Be sure that the quick-release lever is positioned in a downward position.

