



SUNLITE Model HRT220

Recumbent-Trike Hitch Rack – for 2" hitches only
 This product includes Hollywood Racks model HR1450R
 plus Hollywood Racks Trike Adapter model #2

Not to be used on any trailer, fifth wheel or vehicle being towed by another vehicle

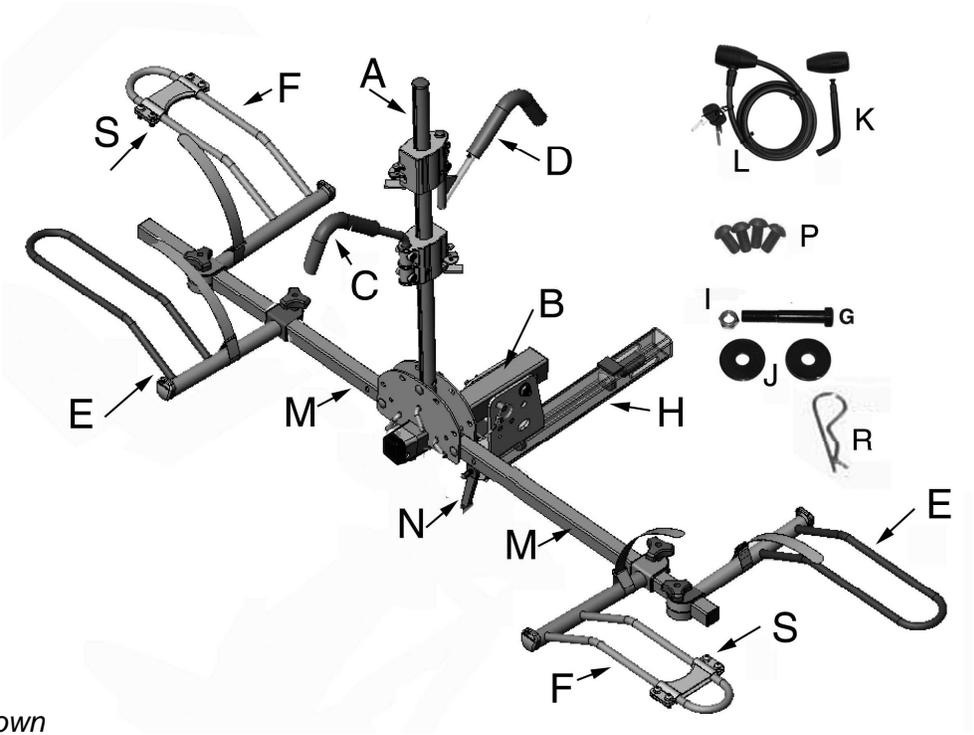
Weight Limit: 135 lbs

Maximum capacity: two 2-wheel bicycles or one 2-wheel bicycles plus one 3-wheel bicycle

Not warranted to be used for carrying electric or motorized bicycles/tricycles or motorcycles

BIKE RACK PARTS LIST

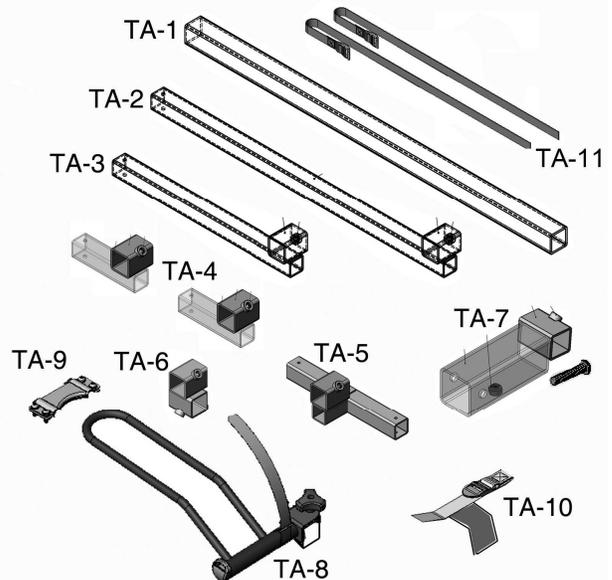
Item	Description	Qty
A	vertical post	1
B	base assembly	1
B1	Front Cap	1
C	short hook clamp	1
D	"Z" hook clamp	1
E	left wheel holder*	2
F	right wheel holder*	2
G	pivot bolt	1
H	receiver tube	1
I	pivot nut	1
J	pivot washers	2
K	locking hitch pin	1
L	security cable	1
M	wheel support tube	4
N	extension lever	1
P	"stop" screws	4
R	clip	2
S	Small Wheel Adapter	2 <i>not shown</i>
T	hex key	1 <i>not shown</i>
U	Tie down straps	2



***Extra wide for recumbents**

TRIKE ADAPTER#2 PARTS LIST

Item	Description	Qty
TA-1	straight tube	1
TA-2	long connector	1
TA-3	medium connector	1
TA-4	short connector	2
TA-5	universal connector	1
TA-6	cross connector	1
TA-7	front main bracket	1
TA-8	left side wheel holder*	1
TA-9	small wheel adapter	1
TA-10	safety flag	1
TA-11	tie downs	2



***standard width**

Assembly Instructions:

Tools Required: Two 8" adjustable wrenches or equivalent, Phillips screwdriver.

For ease of assembly, we suggest that you use your vehicle's hitch.

1: Assemble Receiver Tube to Base Assembly

1. Install your receiver tube **H** into the hitch. Unlock hitch pin **K** and insert it through hole in the hitch and the rack. Be sure that the pin passes through the welded loop on the end the bolt attached to the lever **H7**. Tighten the lever **H7** on the front of the insert tube until good and snug. Use this same procedure when using the rack.

2. Gently insert Base Assy **B** into the bracket of Receiver tube **H**, aligning holes **H3** with **B2**. The main beam can rest on pin **H5**. There are two plastic washers (**B3**) attached to main beam **B**, please take care not to accidentally scrape them off during assembly. Insert pivot bolt **G** with washer **J** through holes, then place the other washer **J** on end of bolt and hand tighten nut **I**.

3. Insert pin **H6** through holes **H4** and **B4**. Then install clip **R** through the pin. The main beam will now be in a fixed Horizontal position. Tighten bolt **G** and nut **I** securely with wrenches.

4. After tightening, remove clip **R** & Pin **H6** and rotate Main Beam **B** into a folded (vertical) position. Insert pin **H6** through holes **H2** to check alignment. Main beam should be able to rotate easily, but not be too loose.

5. Remove pin **H6** and rotate main beam back to its horizontal position to continue assembly.

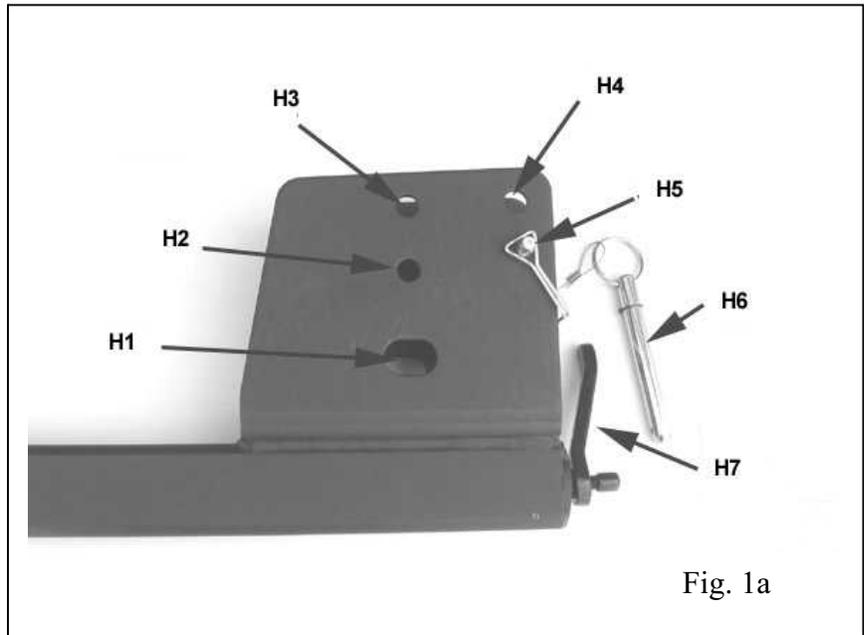


Fig. 1a

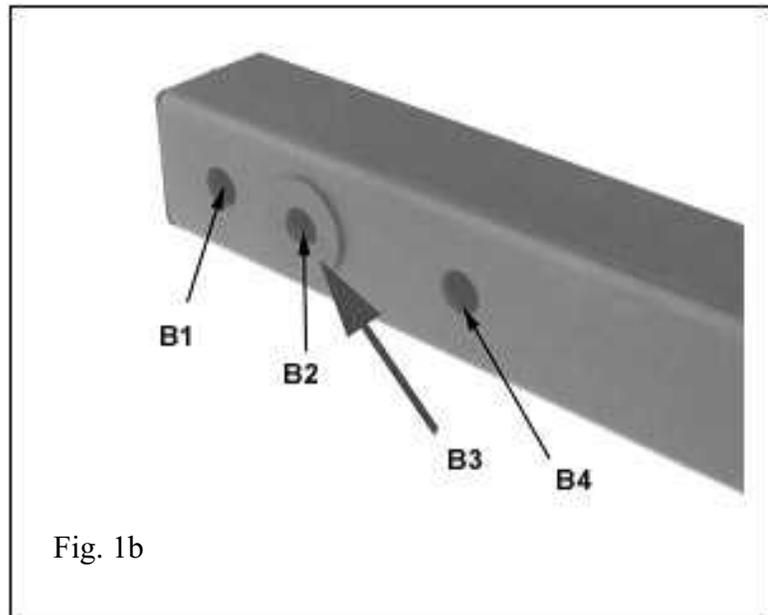


Fig. 1b

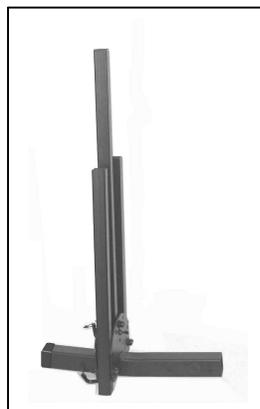


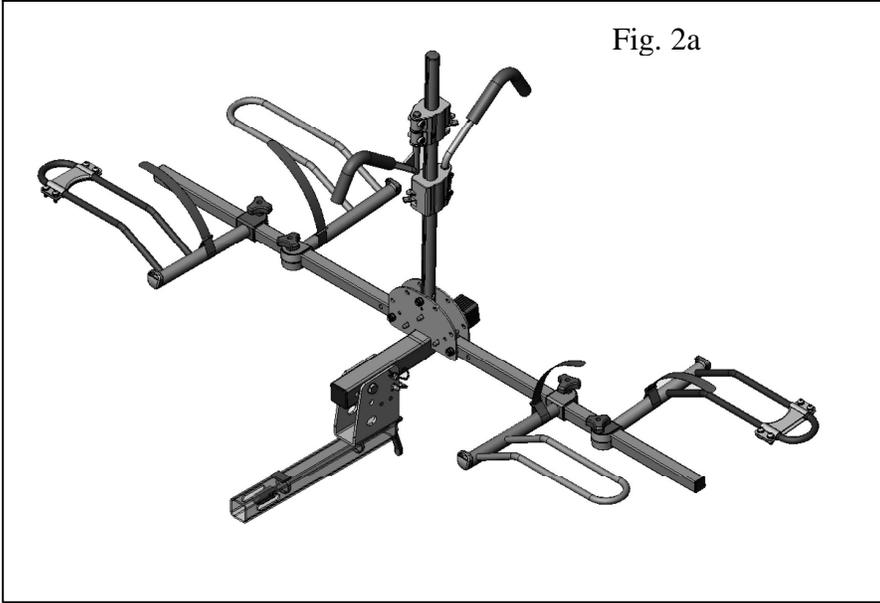
Fig. 1c
"B" base assembly



Fig. 1d

CARRYING TWO 2-WHEELERS (RECUMBENT OR STANDARD BIKE)

Fig. 2a



2: Install Wheel Holders:

Rotate and remove L pins from holes **A**. Rotate wheel tubes to a horizontal position, then replace L pins into holes **B** as indicated.

Slide wheel Holders **E** and **F** onto wheel tubes as indicated.

After installing wheel holders, install the “stop” screws (item P) into the bottom of the wheel tubes as indicated in Figure 2d & 2e. Use Phillips screwdriver.

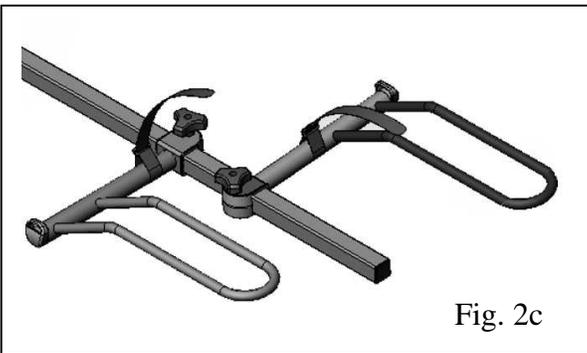
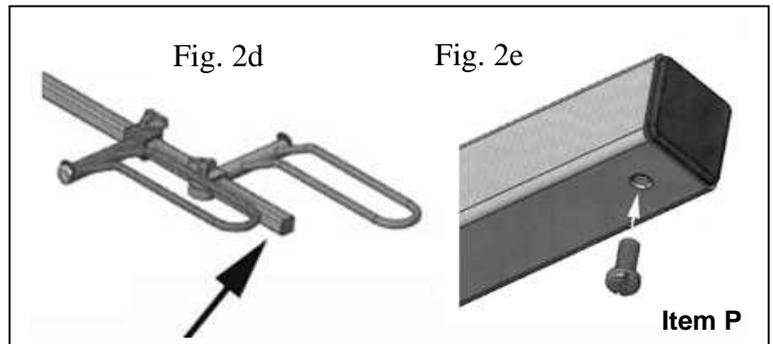


Fig. 2c



3. Small Wheel Adapter

For bikes with 16” wheels, use the “small wheel” **S** adapter to prevent the wheel from falling through the wheel holder. Place the upper section on top of the wheel holder, then position the bottom section directly below it. Insert the bolts and lightly tighten using the included 5mm hex wrench **T**. Slide the wheel adapter to the desired position then tighten all 4 bolts securely.

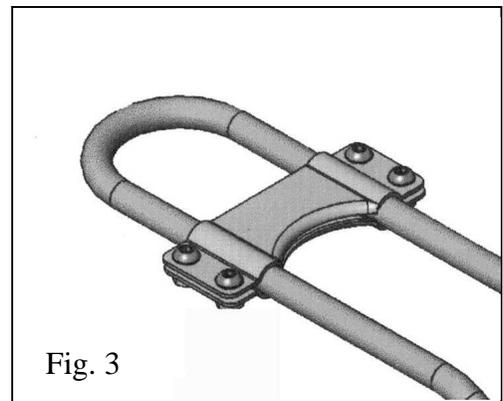


Fig. 3

4: Installation and operation of Clamp System

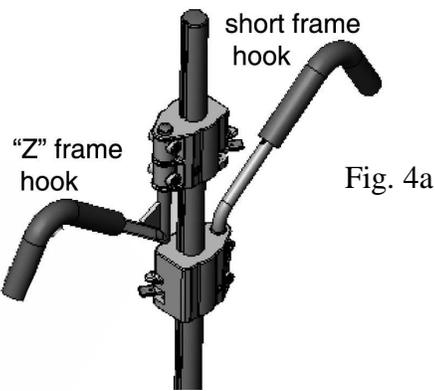


Fig. 4a



Fig. 4b

Position the first frame hook on top of the round vertical post facing the vehicle. Squeeze the lever and the tab together, so that the lever is all the way up (engaged). Now wiggle the plastic housing down onto the tube aligning the index guides with the index slots. You may have to gently tap it with your other hand. **Remember the lever must be engaged to install it onto the tube.** Repeat for the second hook facing in the opposite direction.

Using the clamps:

After the clamp is installed, it can only be raised by engaging the lever. The clamp can physically be pushed down without engaging the lever but it is **highly recommended that the lever also be engaged when lowering the clamp.**



Fig. 4c



Fig. 4d

INDEX GUIDES

5: Fold Up features

To fold up the main beam, you must first fold down the vertical post (B). Refer to Fig. 5b: Rotate and remove pin A, then rotate the post (B) and replace the pin in either holes C. Next, refer to Fig. 1a: remove clip R from pin H6, then remove pin H6. Finally, rotate main beam upward and re-install pin H6 and clip into hole H2 per Fig. 1a & 5a



Fig. 5a

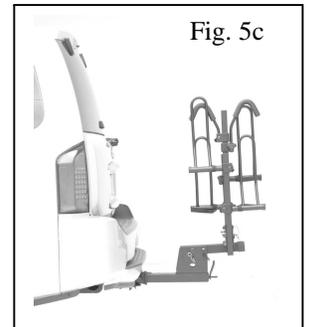


Fig. 5c

Fold Together Feature (Fig. 5c) The rack's wheel support tubes can be rotated to the side as an alternative way of folding up the rack. Referring, remove pin from hole D and rotate the wheel tube so it is pointing upwards, align holes E and re-insert the pin. Repeat for other side.

6. Tilt –Down Feature:

For easy access to the rear cargo door of your vehicle, the Sport Rider can be tilted down: First fold down vertical Post as described in "Fold-up feature". Next refer to fig. 1a: Remove pins H5 then H6 from receiver tube bracket and gently lower the main beam down so it is resting on the welded stop.

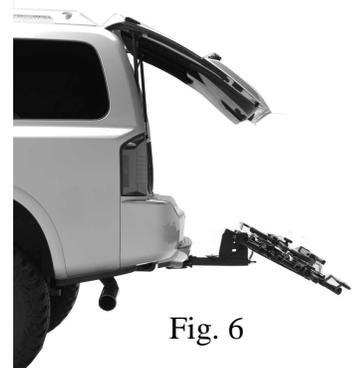


Fig. 6

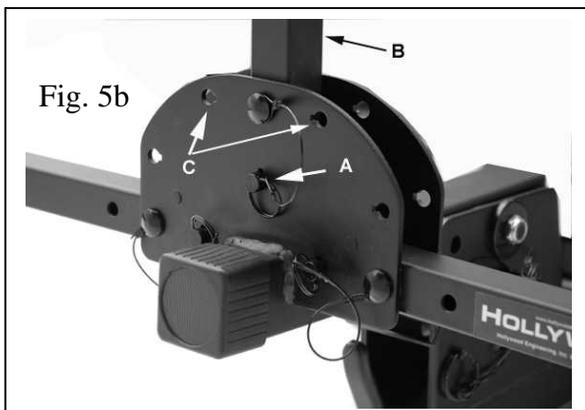


Fig. 5b

Step 7: Installing bikes on the rack

The bikes should be mounted from inside (1st bike) to the outer bike. The bikes should always be positioned so that the lowest point on the bike frame's top tube is close to the vertical post. In the case of long wheel base recumbents, wheels must not exceed width of side view mirrors. Please note in some states, wheels must not exceed width of vehicle body.

The bike handlebars should be staggered (first bike's handlebars on passenger side, second bike's handlebars on driver side, etc).

Lower the vertical post. To adjust the bike's wheel trays, loosen the knobs and slide wheel holders along the wheel support tube so that they are positioned directly beneath each wheel. Tighten knobs securely after determining correct position. Rotate the bike's pedals so that the vertical post can be raised and secured. Slide the hook down onto the frame. Use the Velcro strap on the wheel holder per Fig. 7b.

Follow same procedure for second bike. After both bikes are mounted and secured to the rack, use the additional tie down straps (item U) to secure bike to rack per Fig. 7C

Tips for carrying woman's bikes and bikes with slanted top tubes: Adjust the wheel trays so that the hook will rest in the bike frame's top tube and seat tube.

A keyed trailer hitch pin and security cable is included to help prevent theft of rack and bikes.

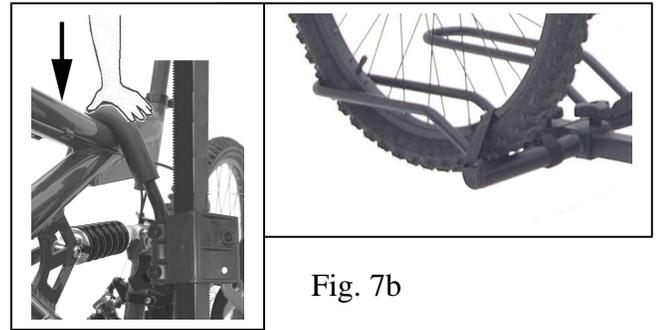


Fig. 7a

Fig. 7b

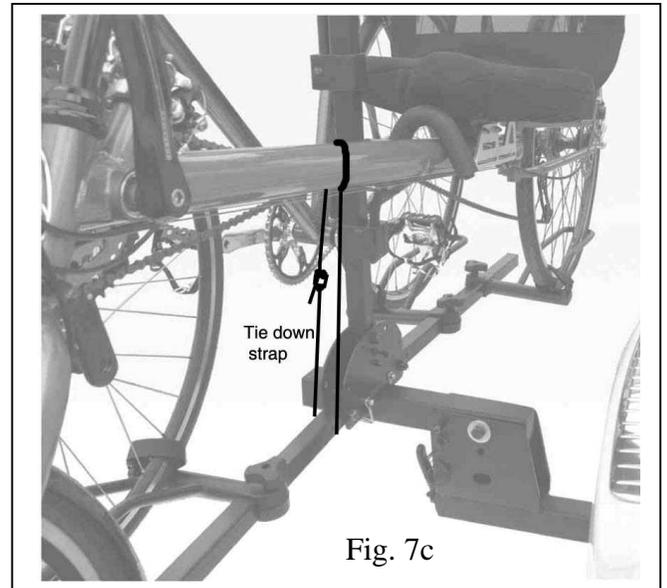


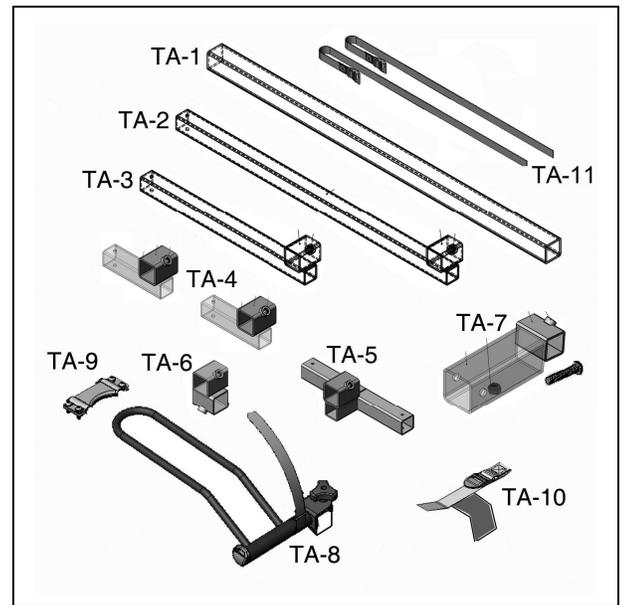
Fig. 7c



Trike Adapter: Assembly for carrying one trike

TRIKE ADAPTER#2 PARTS LIST

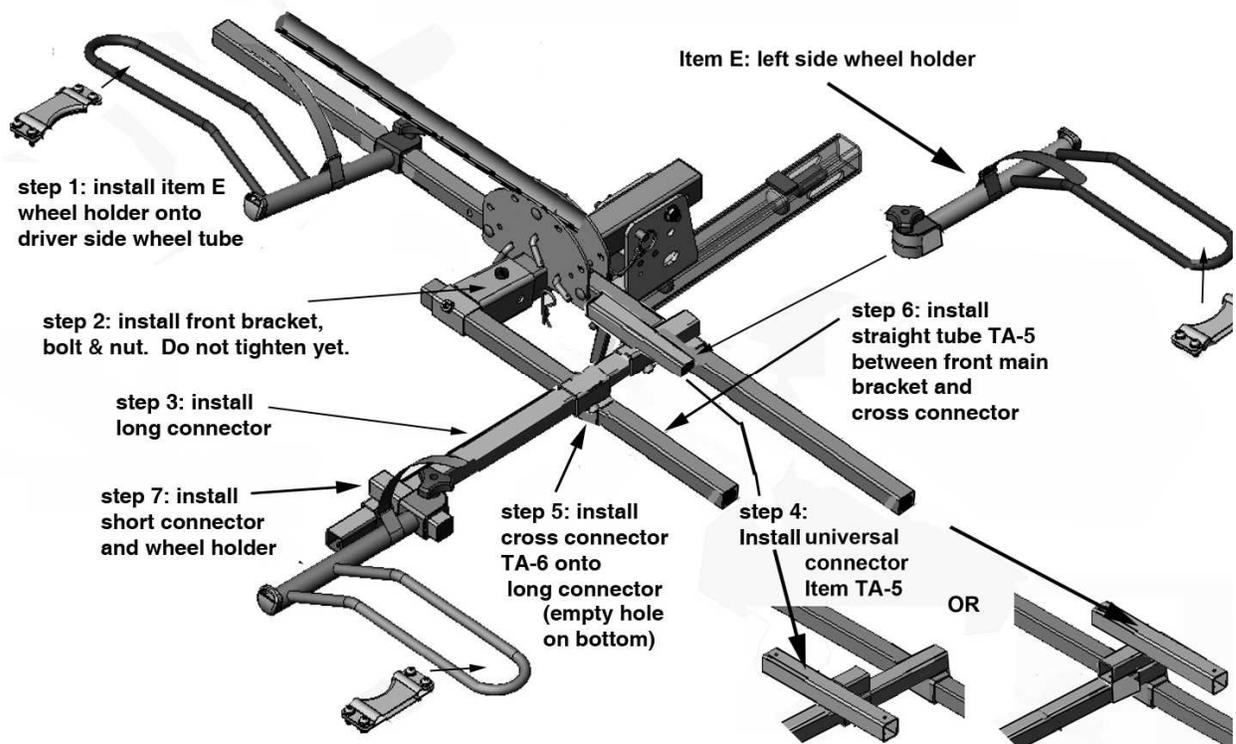
Item	Description	Qty
TA-1	straight tube	1
TA-2	long connector	1
TA-3	medium connector	1
TA-4	short connector	2
TA-5	universal connector	1
TA-6	cross connector	1
TA-7	front main bracket	1
TA-8	left side wheel holder	1
TA-9	small wheel adapter	1
TA-10	safety flag	1
TA-11	tie downs	2



A) Assembly: Install rack on vehicle without wheel holders, center mast must be folded down.

1. Install item E left side wheel holder onto driver's side wheel tube.
2. Remove front reflector cap and install front main bracket **TA-7**. Do not tighten set screw on bottom yet.
3. Slide long connector **TA-2** onto passenger side wheel tube.
4. Install universal connector onto long connector **TA-2**. (Please note it may have to be reverse later depending on the width between the trikes wheels.)
5. Install cross connector **TA-6** (empty hole on bottom) onto long connector **TA-2**
6. Install straight tube **TA-1** between front main bracket and cross connector.
7. Install short connector **TA-4** onto long connector.

Note: when carrying one three wheeler only, the medium connector TA-2 and one of the short connectors TA-4) will not be required.



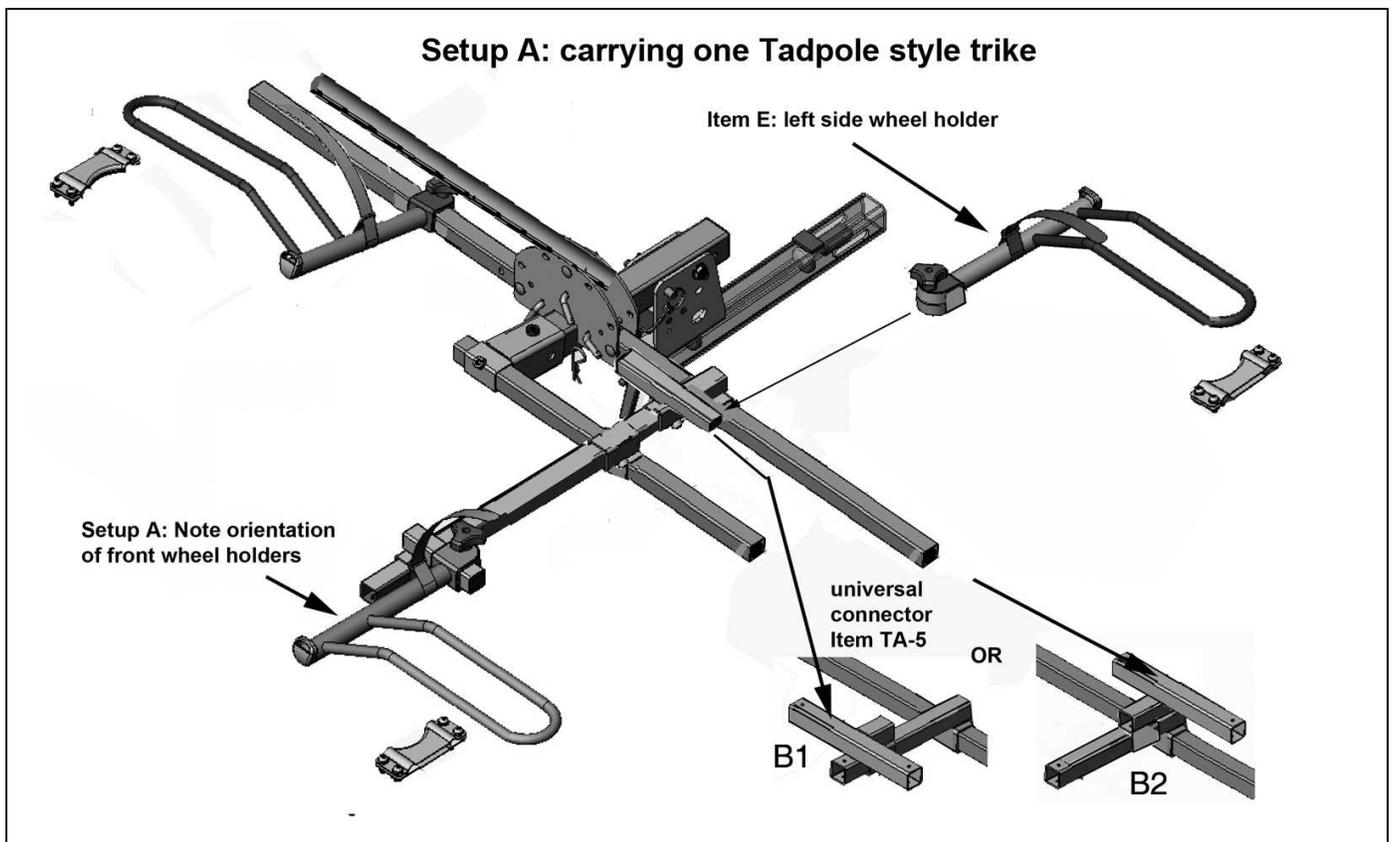
B: Carrying one "Tadpole" style trike

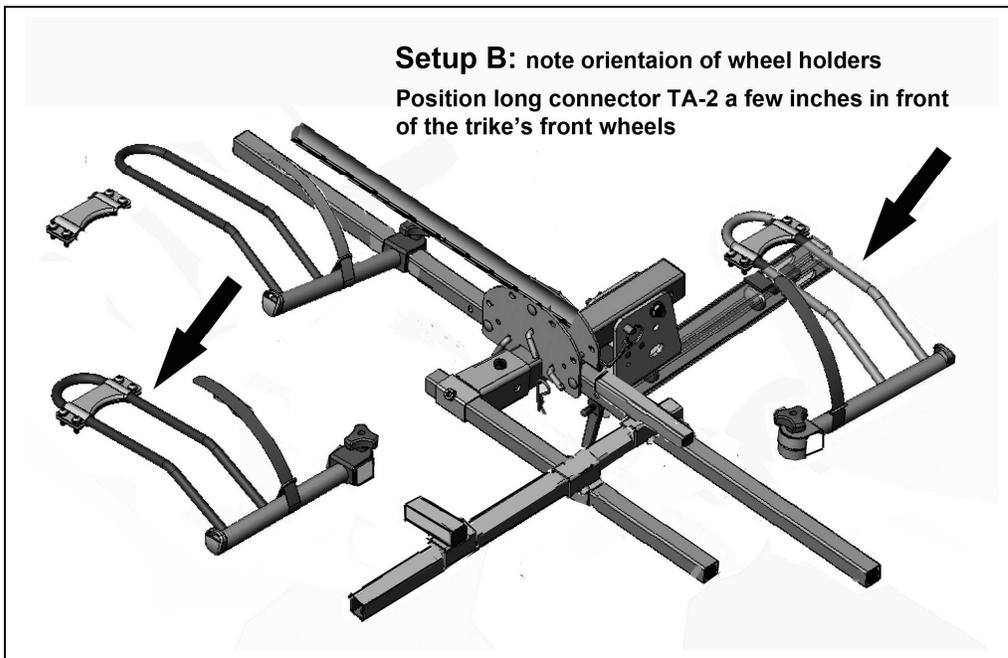
Tip: the small wheel adapters must be used on 16" wheels, but we also suggest using them on 20" wheels as well for better clearance between the trike's frame and the rack.



Installation procedure:

1. Measure width between center of tires (track) and distance between center of hubs (wheelbase).
 2. Place bike directly behind rack (rear wheel on driver's side), then "center" the trike between vehicle's side view mirrors.
 3. Slide the long connector along passenger side wheel tube so it is a few inches behind front wheels.
 4. If the center plate is preventing the long connector from positioning behind the front wheels, try rolling the trike a little to the right.
 5. **Check to make sure your chain rings are not protruding beyond your side view mirror.**
- If you are sticking out too far on the right, please see SETUP "B".**
6. Universal connector: *If the track is less than 29", use position B1 shown below. If the track is 29" or more, use position B2 shown below.*
 7. Install item E left side wheel holder. For very narrow tracks, you can use item TA-9 wheel holder.
 8. Using the measurements taken in step 1, adjust for the track and wheelbase.
 9. Place the trike onto the wheel holders to make sure it is sitting correctly in the wheel holders.
 10. When the final positions are determined, remove the trike from the rack and **tighten all set screws and knobs securely.**
 11. When carrying the trike, be sure to use the Velcro straps for the wheels AND both tie down straps (U) to secure the trike to the rack. Install the safety flag to the outside front wheel.





C: Carrying one "delta" style or adult trike

Follow the same installation procedure on page 7 for tadpole style trikes, except have the center mast on the bike rack in a vertical position. Use either the standard or "Z" style hook to clamp down on the frame depending on frame height. Please follow frame clamping procedure as described in section 4, page 4.

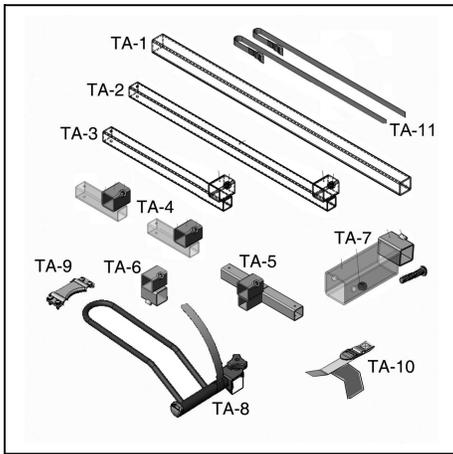


Special notes for carrying adult bikes

Due to awkward weight distribution and short wheel base for adult trikes, the distance between the long connector and center of rack should be very small (as small as possible). This will allow the heaviest part of the rack to be as close to the base assembly as possible. The trike will probably not be centered behind the car, so check to make sure the front wheel is not protruding beyond the side view mirror.



(D) INSTALLING TRIKE ADAPTER: CARRYING ONE TRIKE AND ONE "TWO WHEELER"



Trike Assembly & setup (Different than section B)

Slide medium connector tube **TA-3** onto driver's side wheel holder. Then slide the universal connector **TA-5** onto the medium connector. Install the wheel holder **TA-8** onto universal connector. Refer to Fig. D-1

Remove front reflector cap and install front main bracket **TA-7**. Do not tighten set screw.

Slide the long connector **TA-2** onto the passenger side wheel tube. Slide short connector **TA-4** onto long connector so it is close to the passenger side wheel tube. Next, slide the cross connector **TA-6** onto the long connector, "empty hole" on bottom.

Install the straight tube between the cross connector and front bracket. Slide the other short connector onto the long connector, then install the wheel holders onto the short connectors.

Measure width between center of tires (track) & distance between center of hubs (wheelbase). Place bike directly behind rack (rear wheel on driver's side), then "center" the trike between vehicle's side view mirrors. Check to make sure your chain rings are not protruding beyond your side view mirror. If you are protruding too far on the right, please see SETUP "B" (Fig. D-3). Note wheel holder orientation.

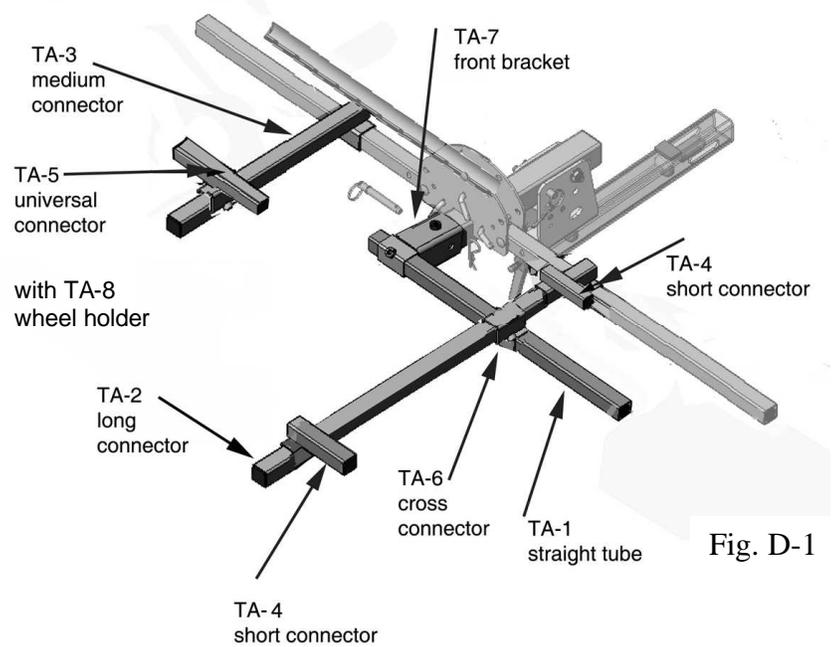


Fig. D-1

SETUP "A" for carrying tadpole and two wheeler

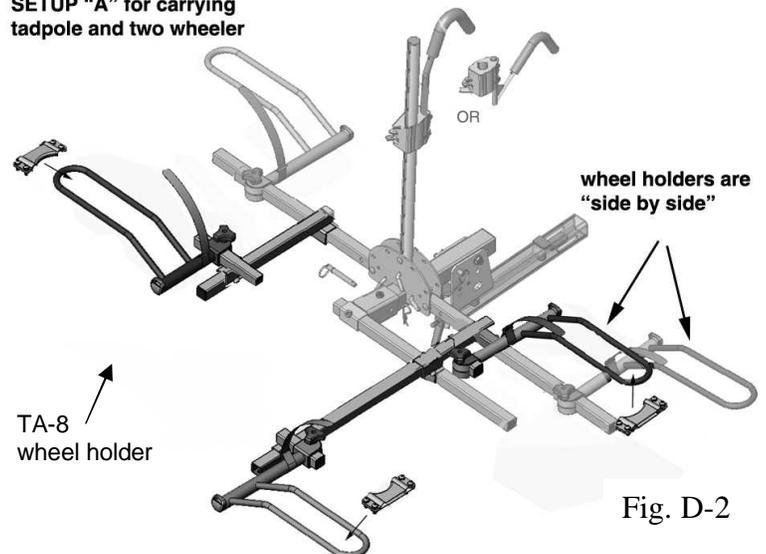


Fig. D-2

Using the measurements taken in step 1, adjust for the track and wheelbase. Place the trike onto the wheel holders to make sure it is sitting correctly in the wheel holders. When the final positions are determined, remove the trike from the rack and tighten all set screws and knobs securely.

When carrying the trike, be sure to use the Velcro straps for the wheels AND both tie down straps (**U**) to secure the trike to the rack. Install the safety flag to the outside front wheel. Install stop screws into wheel holders (Fig. 2D) and install the connector tube hardware.

Installing the bike:

The two wheel bike, (whether it is a recumbent or standard bike) will sit between the tadpole and vehicle. When setting up the trike adapter, be sure to slide the inside short connector "outwards". See fig. D-2 and D-3 so that the wheel holders can be set up "side by side" if necessary (Fig. D-10)

The universal connector mounted may be rotated to provide more "outward" distance if necessary. See Fig. D-6

Note Fig. D-4: The wheel holders are pointing inwards. **This allows for installation of standard bikes** or shorter wheel base recumbents so you don't have to tear down the trike setup. Fig. E-3 shows setup for tadpole plus long wheel base recumbent.

SETUP "B" FOR
TADPOLE AND
TWO WHEELER

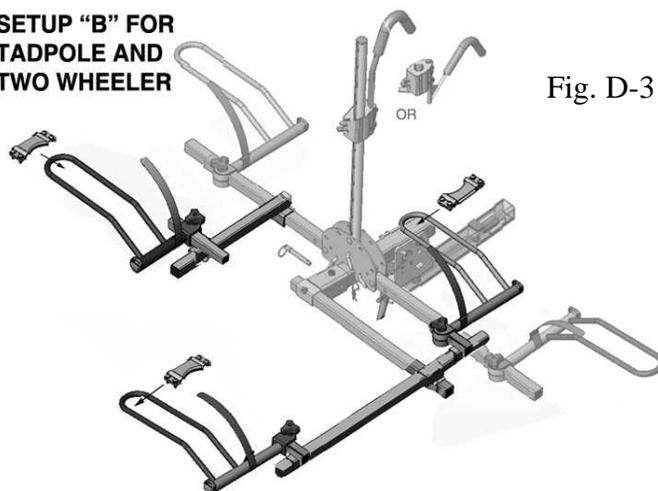


Fig. D-3

Fig. D-4

Tadpole plus standard bike:

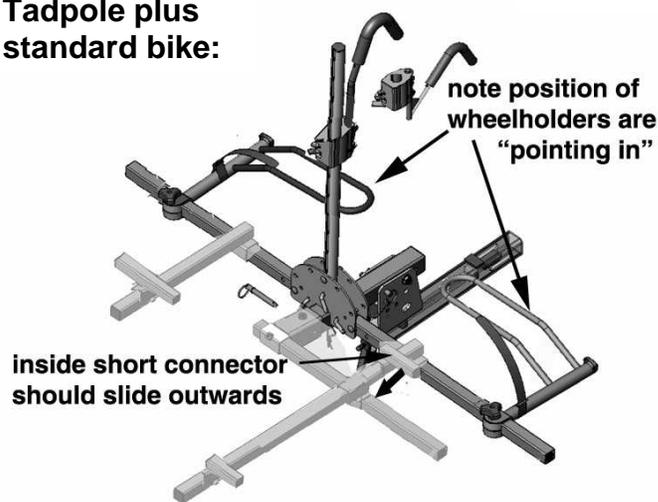


Fig. D-5

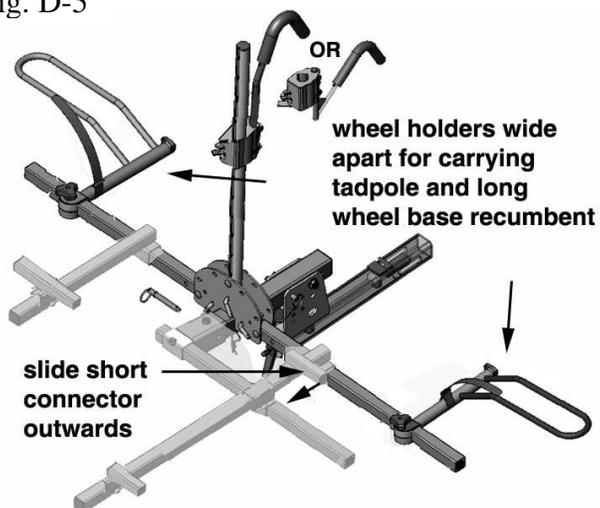
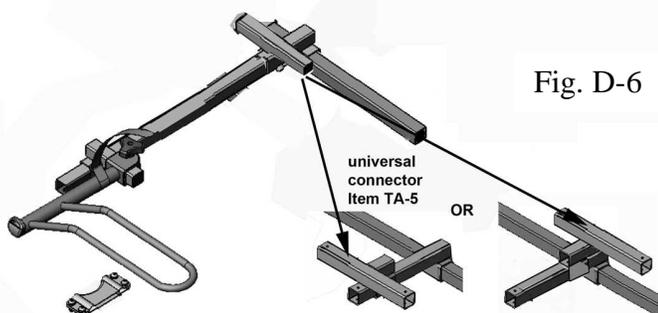


Fig. D-6



CARRYING A DELTA TRIKE AND BIKE

If carrying a delta trike and a bike, it will probably not be possible to use the center mast/frame hook on the trike due to the track width and interference with the inside bike. In this case, follow the procedures given in the previous section on tadpoles and use the center mast/frame hook for the inside bike.

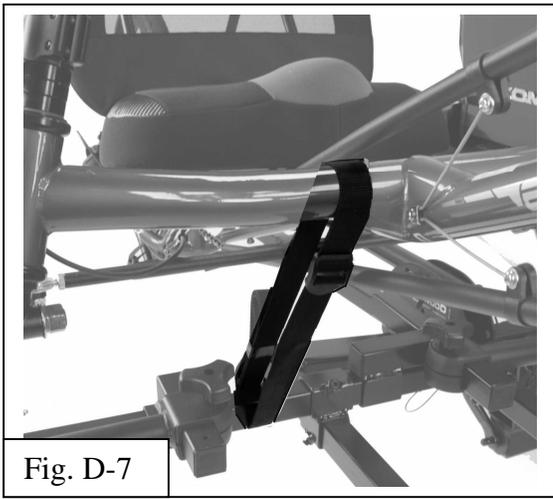


Fig. D-7

It is very important to use the tie downs (item U or TA-11) to secure the trike to the rack due to its high center of gravity. Use additional tie downs as required.



Fig. D-8B



Fig. D-8A

Fig. D-8A shows the setup for carrying just one 3-wheeler, Fig.D-8B shows same setup with tadpole installed. Fig. D-9A shoes setup for carrying one trike and one bike, Fig. D-9B shows with one bike installed and Fig. D-9C (next page) shows with both bike and trike installed.

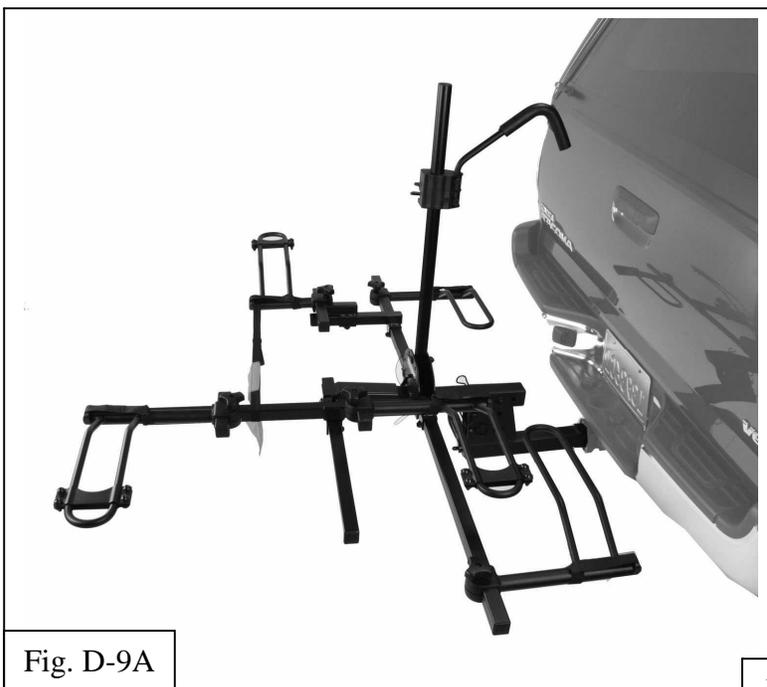


Fig. D-9A

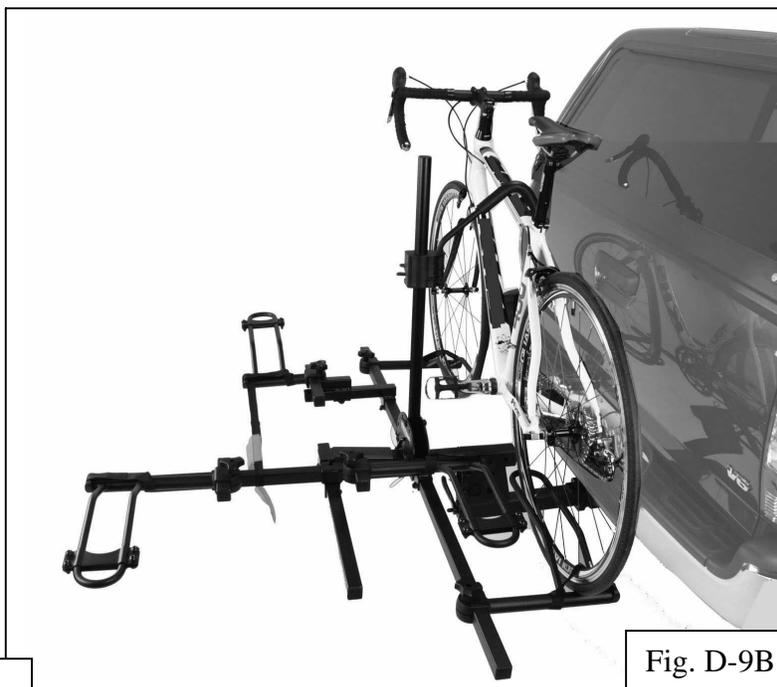


Fig. D-9B

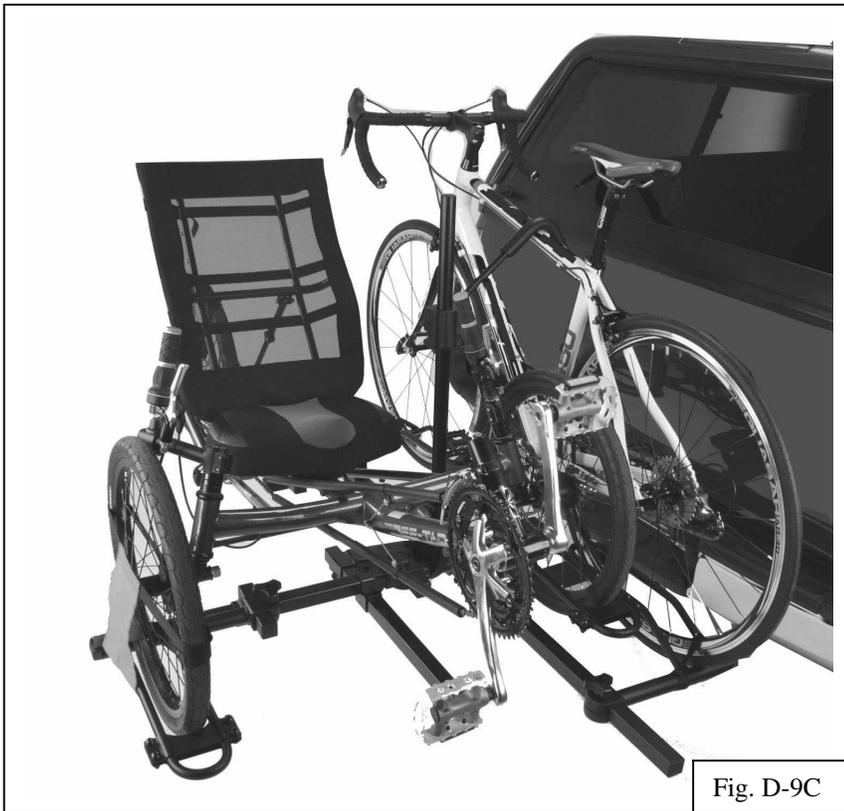


Fig. D-9C



Fig. D-10

Note “side-by – side” position of wheel holders when carrying one bike and one trike (Fig. D-10).

The SUNLITE Recumbent-Trike hitch rack is distributed by J&B Importers, Miami FL

Limited Lifetime Warranty (effective January 1, 2008):

Hollywood Racks will warranty its car racks and accessories during the time that an original retail purchaser owns the product subject to the exclusions and limitations of this warranty. Hollywood Racks will remedy defects in materials and workmanship by repairing or replacing (at its option) the complete rack or a defective part without charge for labor or parts. Hollywood Racks may elect (at its option) to issue a refund equal to the purchase price paid for the product.

This warranty does not cover problems caused by normal wear and tear including (but not limited to) weather, scratches, dents, rust, accidents, unlawful vehicle operation, misuse, abuse, neglect, theft, unauthorized modifications, or unauthorized repair. No warranty is given for defects resulting in incorrect assembly, incorrect installation onto the vehicle, installation on a “no fit” vehicle, incorrect attachment of bicycles onto the rack, or overloading of the rack’s weight restrictions. This warranty terminates if the original retail purchaser transfers the product to any other person.

If a product is believed to be defective, the original retail purchaser should contact either the original retailer or Hollywood Racks directly at 800-747-4085 or at info@hollywoodracks.com

Disclaimer of Liability: Repair or replacement of a defective product or the issuance of a refund or credit (as determined by Hollywood Racks) is a purchaser’s exclusive remedy under this warranty. Damage to a purchaser’s vehicle, cargo, bicycles and or to any other person is excluded. This warranty is expressly made in lieu of any and all other express warranties, whether oral or written.

Hollywood Racks shall not be liable for any direct, indirect, consequential, incidental, special, punitive or any other damages in connection with the purchase, use or handling of this product. Some states do not allow the exclusion or limitation of consequential or incidental damages and the above limitation may not apply to you. This warranty gives you specific legal rights and you have other rights, which vary from state to state.

Made For SUNLITE by Hollywood Racks
For all customer service and warranty questions,
please contact Hollywood Racks directly

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