



Recumbent Hitch Rack Instruction Manual

Model 45816 – 2" receiver Model 45815 – 1 1/4" receiver

- Not to be used on any trailer, fifth wheel or vehicle being towed by another vehicle
- Weight Limit 125lbs/57 kg
- The wheels can not exceed beyond vehicle's outside side view mirrors.

PARTS LIST: 2 bike "setup"

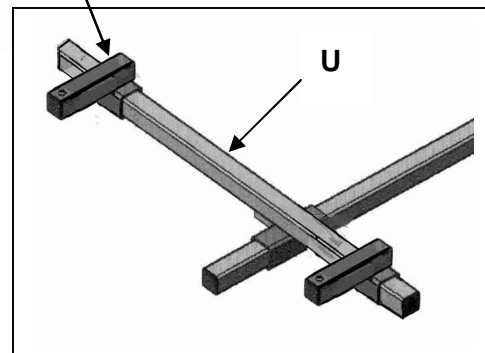
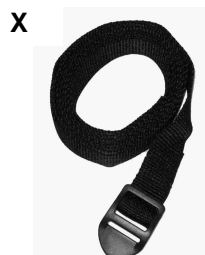
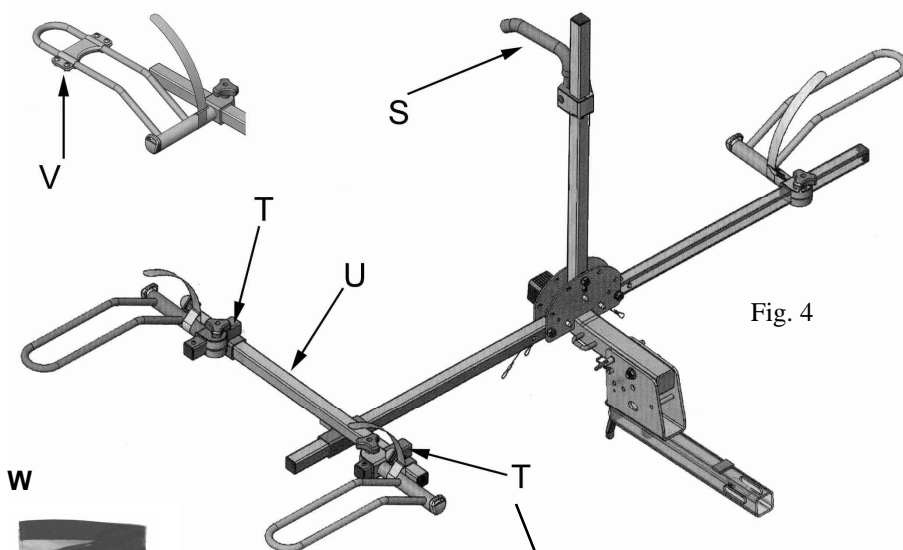
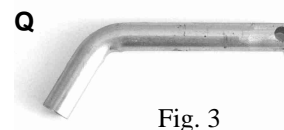
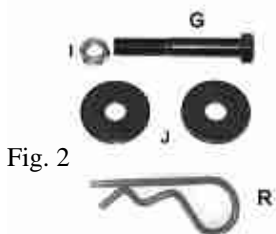
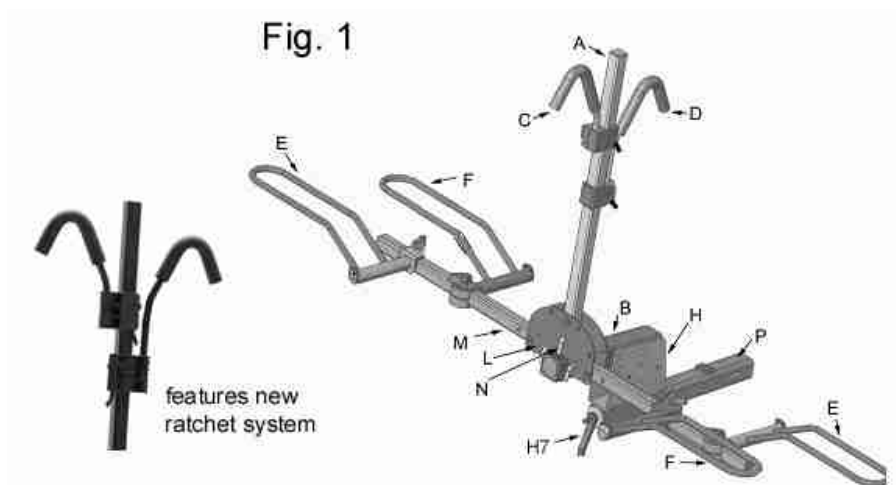
| Item | Description | Qty |
|------|--------------------|-----|
| A | vertical post | 1 |
| B | base assembly | 1 |
| C | short hook | 1 |
| D | long hook | 1 |
| E | left wheel holder | 2 |
| F | right wheel holder | 2 |
| G | pivot bolt | 1 |
| H | fold-up bracket | 1 |
| I | pivot nut | 1 |
| J | pivot washers | 2 |
| L | plates | 2 |
| M | wheel support tube | 2 |
| N | "L" pins | 3 |
| H7 | Lever | 1 |
| P | receiver tube* | 1 |
| Q | hitch pin | 1 |
| R | clip | 2 |

* 2" square (p/n 45816) or
1 1/4" square (p/n 45815)

Extra parts for trike adapter

| Item | Description | Qty |
|------|----------------------|-----|
| S | flat hook | 1 |
| T | short trike bar | 2 |
| U | long trike bar | 1 |
| V | small wheel adapter | 2 |
| W | Red safety flag | 1 |
| X | Extra tie-down strap | 1 |

Not shown: 5mm hex wrench, end bolts and nuts (2 each)



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 **P** into the hitch. Insert hitch pin **Q** through hole in the hitch and the slot in the rack. Put clip **R** on hitch pin **Q**. Then tighten the lever **H7** on the front of the insert tube so the insert tube will not move during assembly.

2. See Fig. 5 and 6: 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 knock them off during assembly. Insert bolt **G** with washer **J** through holes, then place the other washer **J** on end of the 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** and **B1** 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.

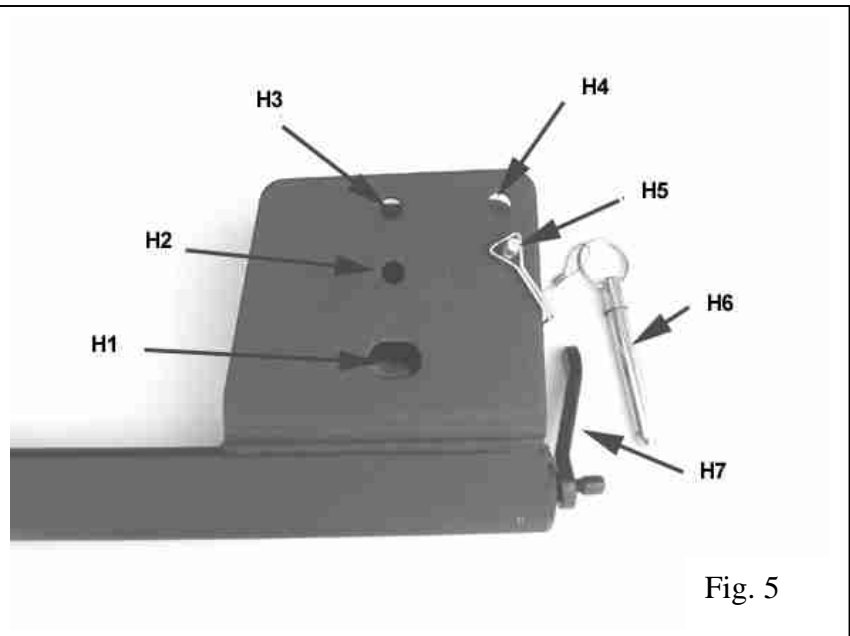


Fig. 5

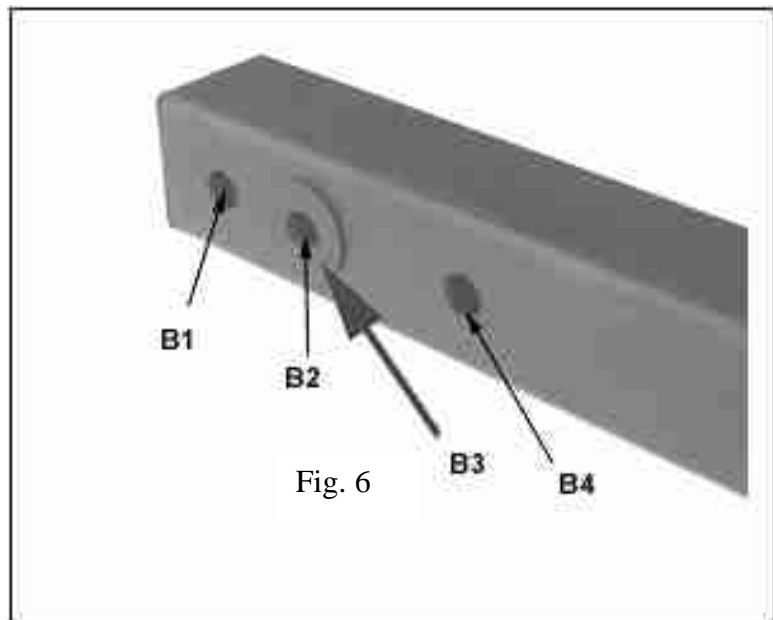


Fig. 6

2: Install frame hooks:

Slide long frame hook down vertical post facing vehicle. Then slide short frame hook onto post, facing away from vehicle. You should hear the spring loaded lever engaging the teeth on the post as shown in fig. 7

To release the frame hook, depress the Lever and pull the hook up. Tip: you may have to push the hook down a bit while holding in the lever to release it.

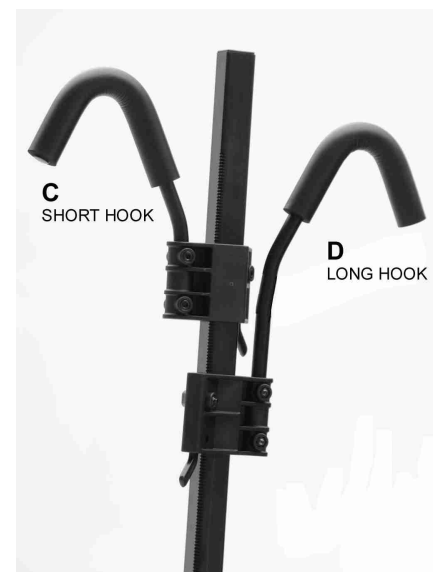


Fig. 7

3: Install Wheel Holders:

See Fig. 8: Rotate and remove L pins From holes **A**. Rotate wheel tubes to a horizontal position, then replace L pins into holes **B**.

Slide wheel Holders **E** and **F** onto wheel tubes as indicated below. See fig. 9

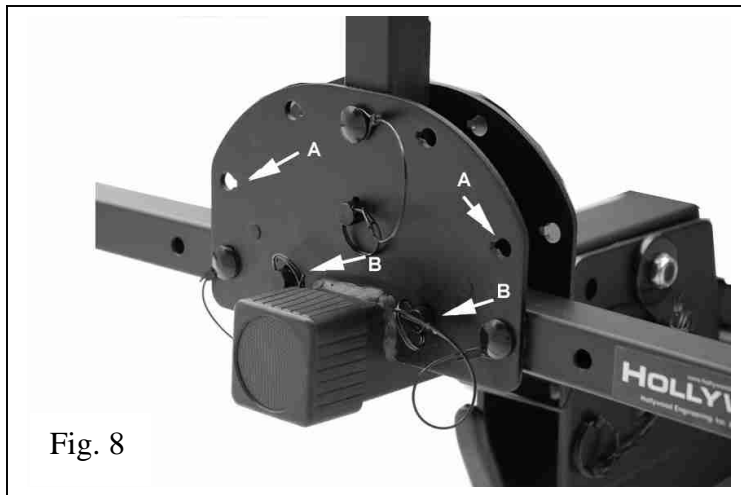
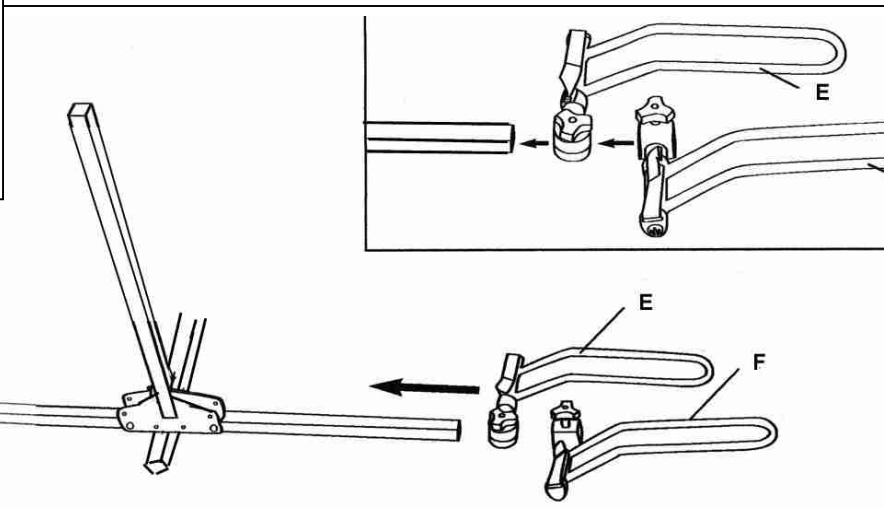


Fig. 8



Fig. 9



4: Fold up feature:

To fold up the main beam, You must first fold down the vertical post. Refer to Fig. 10: Rotate and remove pin A, then rotate the post (B) and replace the pin in either holes C.

Now refer to Fig. 10a: remove clip R from pin H6, then remove pin H6. Rotate main beam upward and re-install pin and clip.

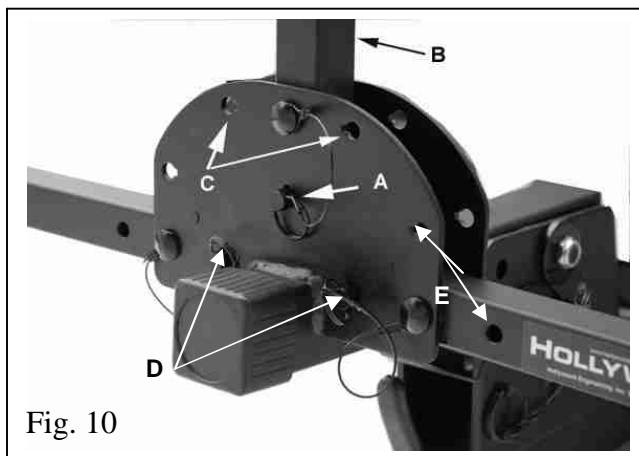


Fig. 10

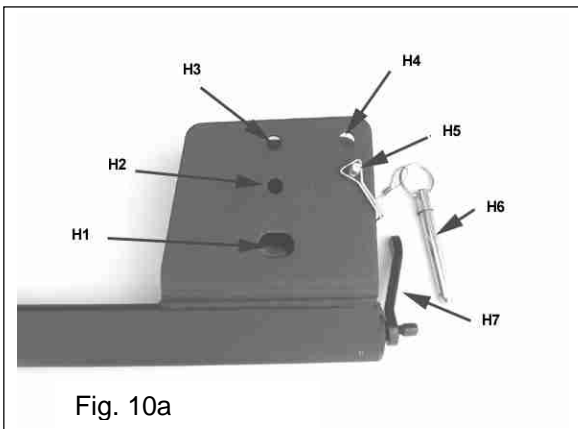


Fig. 10a

5: Fold Together Feature (shown on right)

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 rack can be tilted down: First fold down vertical post as described earlier. Next refer to Fig. 10a: Remove pin **H5** from receiver tube bracket and gently lower the main beam down so it is resting on the welded stop.

7: Using the ‘Flat Hook’

For some types of bikes, recumbents and 3 wheelers, the standard curved hook may not fit as conveniently as the “flat hook”. To replace the curved hook for the flat hook: Remove the two side bolts as indicated by the arrows in fig 11 using a 4mm Allen key (not provided). Slide out the curved hook, and then install the flat hook. Reinstall and tighten both bolts. See Fig. 11



Fig. 11

8: Small Wheel Adapter

For bikes with 16” wheels, use the “small wheel” 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. Slide the wheel adapter to the desired position then tighten all 4 bolts securely. See Fig. 12

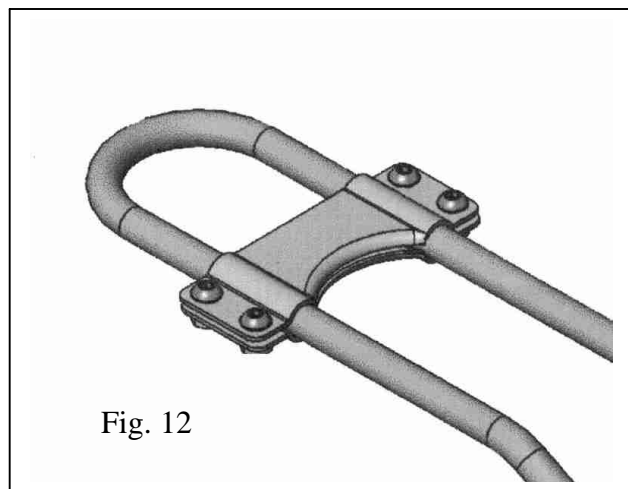
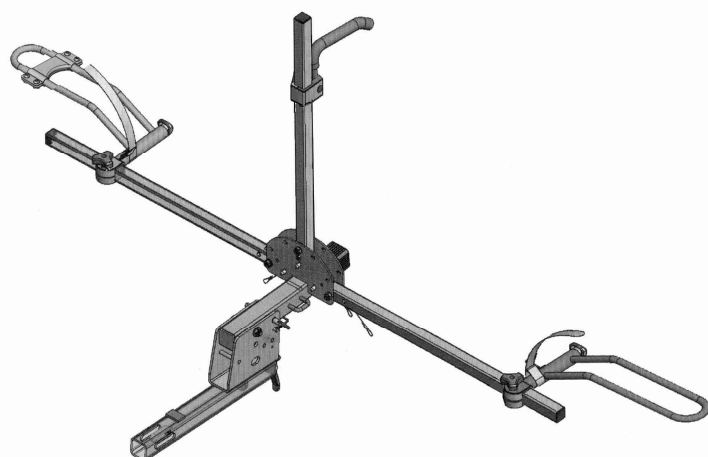


Fig. 12



Set-up for one bike using flat hook and small wheel adapter

9: Installing bikes on the rack

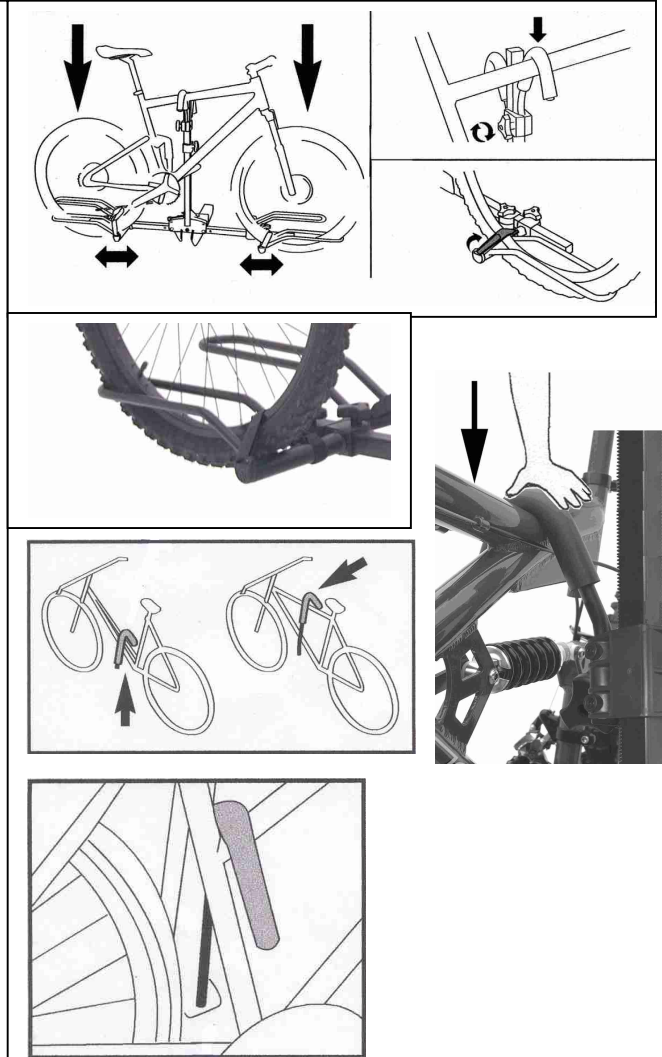
When carrying two bikes, the first bike mounted should be on the inside (between the post and vehicle).

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 most instances, the bike handlebars should be staggered (first bike's handlebars on passenger side, second bike's handlebars on driver side, etc. If one or both bikes are recumbents, try to balance the weight distribution. This may require that both handlebars are on the same side.

1. Lower the vertical post as described earlier.
2. To adjust the first bike's wheels 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. Rotate the bike's pedals so that the vertical post can be raised and secured. Slide the ratcheting hook down onto the frame. Tighten knob securely. Use the Velcro straps on the wheel holder to secure the wheels to the wheel holders.
3. Adjust the wheel holders of the second bike and mount to the rack in the same procedure as described above.
4. Be sure that the hooks are well supported on the bike's frame and the knobs securely pushing down on the bike's frame.

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.



Rack will hold 2 regular or 2 recumbent two wheeled bikes (or one of each).



10: Trike Adapter

Note: Rack will hold 1 adult trike or 1 recumbent trike. When carrying a trike, **DO NOT** attempt to carry additional bike(s).

Installation Procedure:

- A.** Remove all wheel holders except the driver's side outer wheel holder (Fig. 13a).
- B.** Slide the long trike bar onto the passenger side of the rack as shown in fig.14. Snug up set screws (Fig. 14a) but do not tighten.
- C.** Slide short trike bars onto ends of the long trike bar tube as shown in fig. 14. Install wheel holders onto short trike bar as shown in Fig.15.
- D.** Slide wheel holders onto short trike bars as indicated in Fig. 14 and Fig. 15. Tighten knob securely.
- E.** Install bolt and nut onto end of short trike bar.

Measuring and set-up:

- F.** Measure the distance between the wheels (Dimension A, Fig. 16, 17) and adjust the distance between the short trike bars accordingly. Tighten set screws (Fig. 15a).
- G.** Measure the wheelbase (distance between the 2 axles) on your trike. This will correspond to Dimension C on Fig. 16,17.
- H.** Most of the weight on recumbents are in the rear wheels, so it is very important that you attempt to position the rear wheels as close to the center of the rack as possible. This will correspond to dimension B in Fig. 16, 17). **However, be careful to not allow the front wheel to extend beyond the side view mirror.**

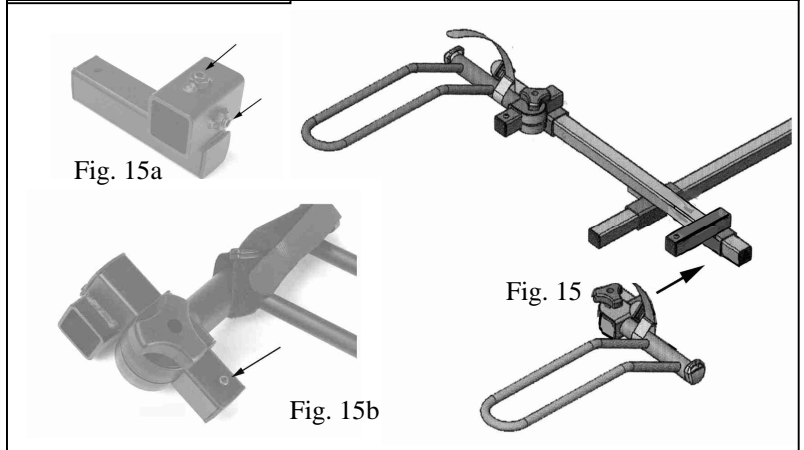
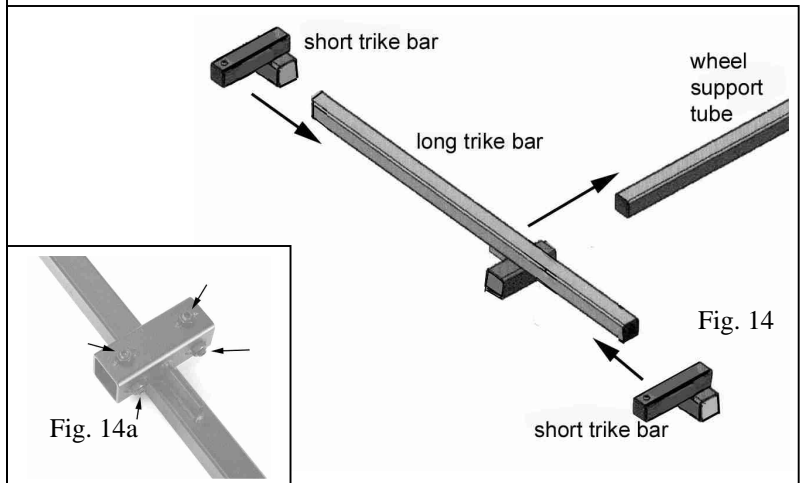
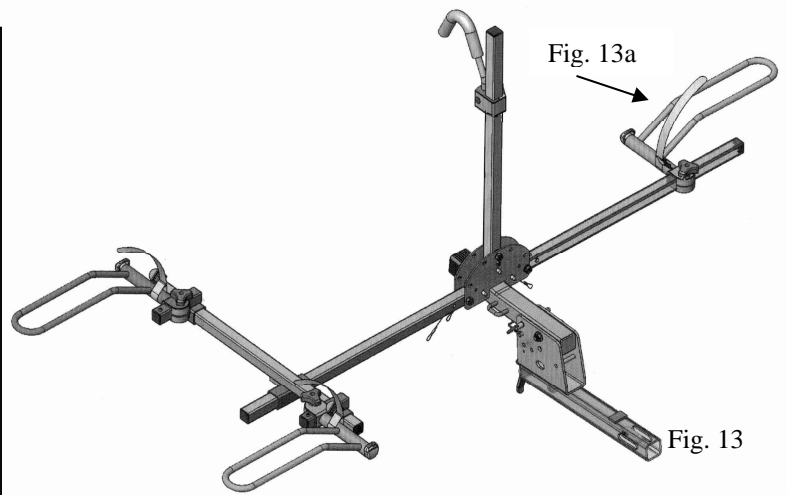


Fig. 17

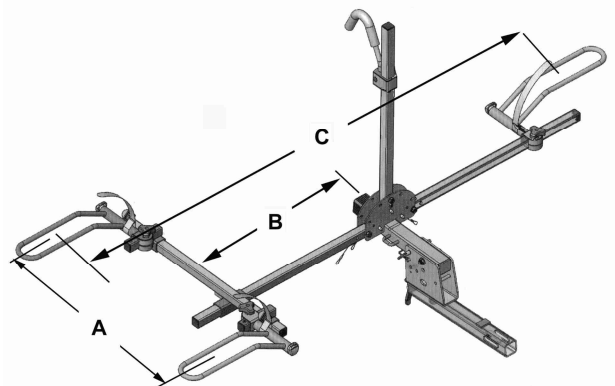
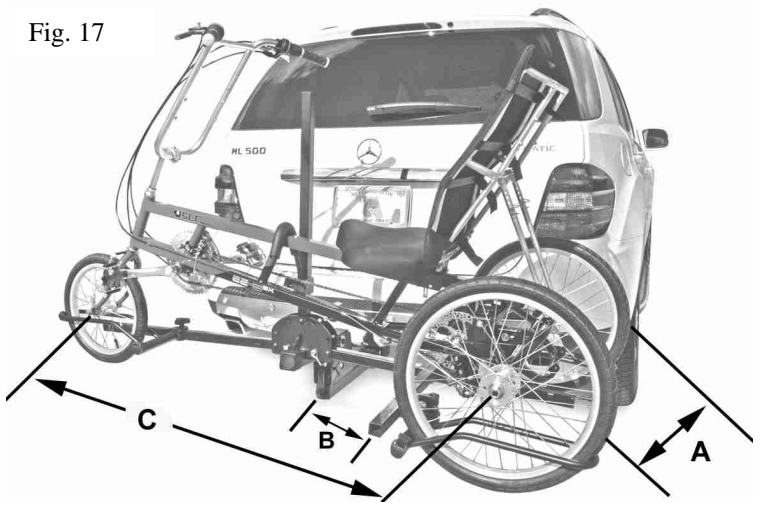


Fig. 16

H. Continued

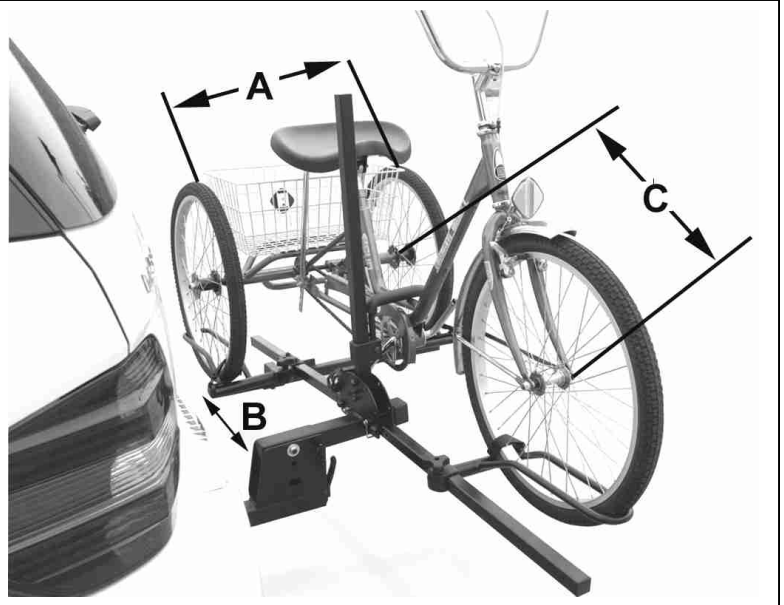
For Trike recumbents as shown on the previous page (Fig. 17), a good way to start would be to place the front edge of your front wheel at the end of the driver's side of the car. Position and tighten your front wheel holder. Take your "C" measurement and slide the long trike bar along the wheel support tube so as to obtain the "C" dimension. Snug up the set screws (Fig. 14a). **Note: If you have a 16" front wheel, install the small wheel adapter!** Install the bike onto the rack. If it feels to "heavy" in on the rear wheel, remove the bike and slide both the front wheel holder and long trike adapter a little to the left. However, be careful to not allow the front wheel to extend beyond the side view mirror.

If you have a lightweight, short wheel base trike and there is no weight balance problem, you can slide the wheel holder and long trike bar to the right so it is more centered.

I. Securing the bike to the rack: Once you have found the desired/correct position, tighten the set screws on the long trike bar and all knobs. Use either the flat or curved frame hook, and slide the hook down the vertical post onto the frame of the bike. Tighten the knob securely. Use the Velcro straps on the wheel holders to secure the wheels to the wheel holders.

J. Red Safety flag: If your bike protrudes more than 36" from the rear of your vehicle, attach the red safety flag to the bike.

K. Extra Tie down strap: For extra bike holding security (especially for heavy trikes or when carrying two recumbents), use the tie down strap. Simply place the looped end onto the vertical post **below** one or both clamps, wrap the strap around the bike(s), then fasten the loose strap end to the buckle. Pull lose strap end to tighten.



Special notes for carrying adult bikes

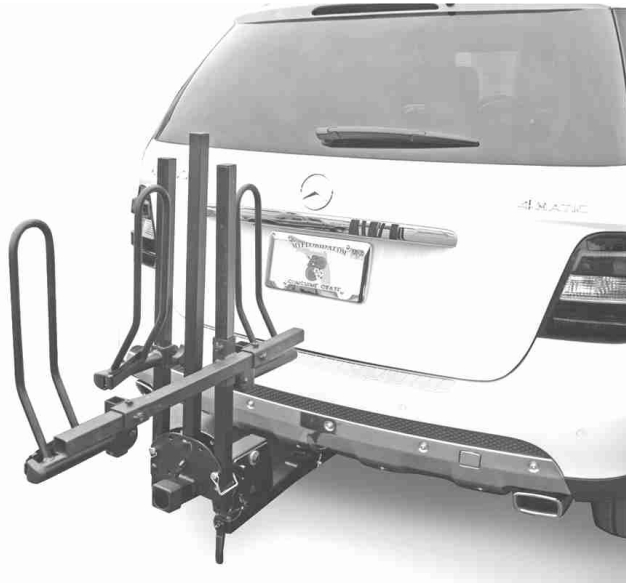
Due to awkward weight distribution and short wheel base for adult trikes, the "B" distance during setup will be very small (almost as small as possible). This will allow the heaviest part of the rack to be as close to the base assembly as possible.



In setup above, note position of frame clamp is close to the recumbent's seat and use of Velcro wheel straps on wheel holders.

L. Fold Together Feature

For on-vehicle storage when using
The trike adapter, fold the rack together in
the same procedure as
Described in section 5, fig. 10:
The rack's wheel support tubes can be
rotated to the side as an alternative way of
folding up the racks. Simply remove pins,
rotate the wheel tube so it is pointing
upwards, align holes and re-insert the pin.



Double check before driving off:

- Knobs are tight on all wheel trays and frame hooks
- All retaining pins are properly inserted and secure
- Wheel straps are fastened
- Hitch pin is secure and hitch pin clip is installed
- Extra strap or flag installed if necessary
- Drive slowly on bumpy or dirt roads

The SUNLITE recumbent hitch rack is distributed by J&B Importers, Miami FL

Warranty:

This rack is warranted for a period of one year against defects in materials and workmanship, effective from the date of purchase to the original purchaser. The manufacturer will repair or replace any defective parts due to materials or workmanship. The manufacturer of this product shall not extend the warranty to: 1.) Any failure or malfunction of the product do to any of or modifications to the product; or 2.) Damages not attributable to a defect in materials or workmanship; or 3.) Damages resulting from improper installation on vehicle or attachment of bicycles on rack. **Consequential or Incidental Damages:** The manufacturer shall not be liable for any consequential or incidental damages in connection with the purchase, use or handling of this bike rack.

Purchaser's Rights: 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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