# **CycleSimplex Assembly Instructions**

# Two Tadpole Trike Tower Trike Rack v4.3

Please Note: If you ordered a heavy duty rack, your appropriate components will be the heavy duty ones

### **Precautionary and Maintenance Information:**

Each wheel and Wheel Stop must be secured with the straps.

When you are not carrying bicycles, you can either leave the straps attached through the slots or remove them. If you leave the straps on the rack, they should be connected just as they would with the trike on the rack, otherwise they may be lost.

There is always some flex in metal. Because of this you should check and tighten bolts as necessary.

You should check the straps for wear before each use.

This bike rack will extend quite a distance behind your vehicle. Caution must be used not to "bottom out" on sharp dips or rises in your path. It may also extend beyond the sides of your vehicle so caution is required not to hit it or your bikes on other objects.

## **Liability Information**

CycleSimplex, LLC's liability from all causes is limited to the purchase price of the product.

#### **Warrantee Information**

This bike rack may be returned in like new condition for any reason by the purchaser to CycleSimplex, LLC within 15 days of its receipt by the purchaser. Please pack in a manner to prevent damage during shipment

CycleSimplex, LLC warrantees the bike rack from defects in material or workmanship for 90 days from the date of the purchaser receiver the product. During that 90 day period, CycleSimplex, LLC will at its sole discretion either replace defective components or refund the full purchase price upon return of the product.

# Material List

#### Two Tadpole Trike Tower v4.3

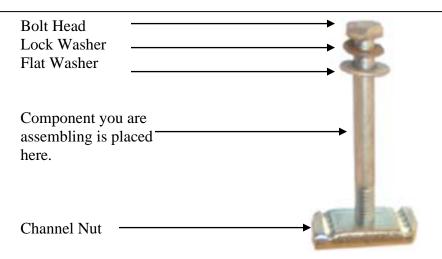
Task	Bolts	Lock	Flat	Self-lock	Channel
		Washer	Washer	Nut	Nut
Attach (2) U-Clamps to join Tower and (2) 36" Crossbars	6 – ½" x 1" Hex Head	6	0	0	6
Attach Brace to Receiver Insert	$1 - 3/8$ " x 2 $\frac{3}{4}$ " or 1 - 2 $\frac{1}{4}$ " Flange He	ad	1	1	0
Attach (1) 47" Wheel Strut to Receiver Insert	$2 - 3/8$ " x 2 $\frac{3}{4}$ " or 1 - 2 $\frac{1}{4}$ " Flange He	ad	1 or 2	1 or 2	0
Attach Tower to Receiver Insert	2 - 3/8" x 4" or $1 - 3$ " Flange Head		1 or 2	1 or 2	0
Attach (2) 28" Slides to Tower	2 – 3/8" x 2" Flange Head		2	2	0
Attach 30" Brace to Tower	$1 - 3/8$ " x 2 $\frac{3}{4}$ " or $1 - 2 \frac{1}{4}$ " Flange He	ad	1	1	0
Attach (4) Wheel Stops to Wheel Strut	4 – ¼" x 1" Hex Head	4	4	0	4
Attach (6) Trike Wheel Trays	6 – 1/4" x 1" Hex Head	6	6	0	6

U-Clamp Fittings (may be packed inside the receiver insert)	2
Wheel Strut (47" Strut Channel)	1
Receiver Insert (1.25 or 2 inches square by 30 inches long)	1
Crossbar (36" Strut Channel)	2
Brace (30" long flat bar)	1
Slides (28" Strut Channel)	2
Wheel Trays	6
Wheel Stops Long or Short	4
Tower (1.25" x 1.25" that is 60" long)	1
Cam Buckel Straps (12")	8

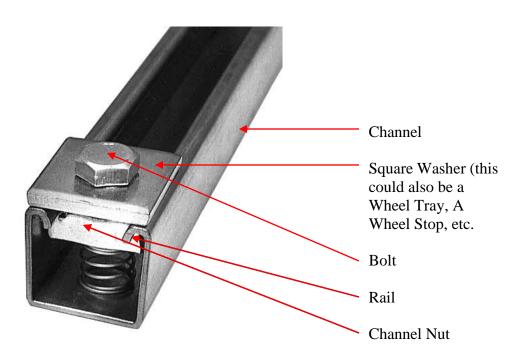
Box: Combine Tk1 Tad or Delta Tilt - 40 1/4" x 7 1/8" x 2 5/8" and Tk1 Tad Plus Rg1 - 48 1/4" x 7 7/16" x 2 3/4"

# Assembly Instructions CycleSimplex Two Tadpole Trike Tower v4.3

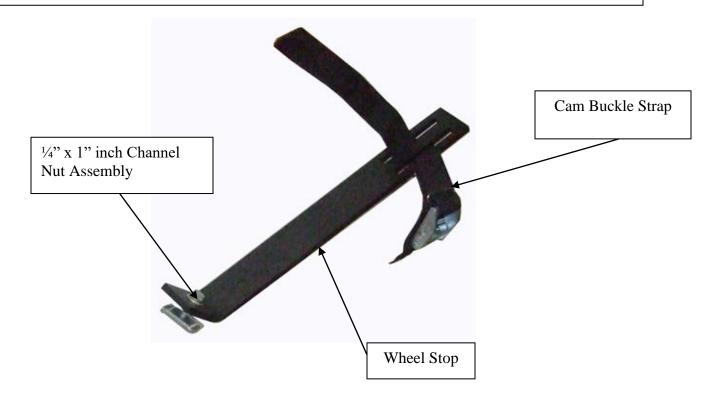
All Bolts requiring a Channel Nut must be assembled in the following fashion. This is a Bolt and Channel Nut Assembly



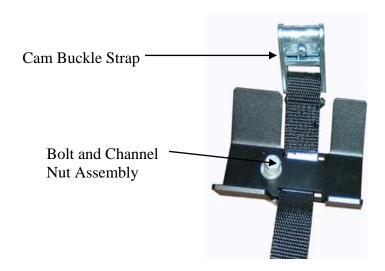
When you are asked to use a Channel Nut Assembly to connect a part to a channel, it will look like the following (you will not have a spring on the channel nut). This example shows a square washer being connected to a channel. Other examples are the connection of Wheel Trays and Wheel Stops. Note that the channel nut is perpendicular to the channel and is fully engaged under the curved rail of the channel



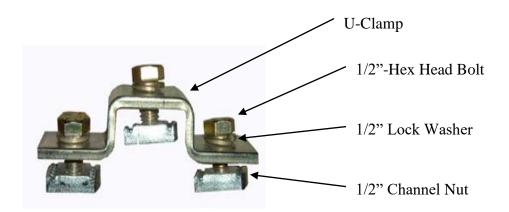
Step 1A: If you have Wheel Stops Long, complete four Wheel Stop Assemblies as shown below. Two will have Cam Straps and two will not



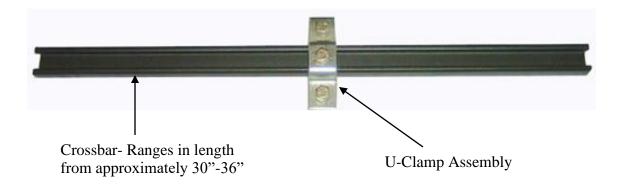
Step 2: Complete the 6 Wheel Tray Assemblies as follows:



Step 3: Complete two U-Clamp Assemblies as follows:



**Step 4: Complete two Crossbar Assemblies as follows:** 



#### Step 5: The following numbered instructions refer to the #'s on the Assembly Drawing on Page 5

1A. If you have a 2" hitch rack, attach the one 47" long Wheel Strut to the Receiver Insert using (2) - 3/8" x 2 3/4" Flange Head Bolts. Place each 3/8" flange head bolt through the Wheel Strut and the Receiver Insert. Place a 3/8" silver flat washer and a 3/8" self-lock nut on the end of the bolts and tighten.

Note: The bolts may be able to straddle the solid part of the Strut or they may have to go in a slot.

- 1B. If you have a 1.25" hitch rack, attach the one 47" long Wheel Strut to the Receiver Insert using (1) 3/8" x 2 1/4" Flange Head Bolt. Place the 3/8" flange head bolt through the Wheel Strut and the Receiver Insert. Place a 3/8" silver flat washer and a 3/8" self-lock nut on the end of the bolt and tighten.
- 2. Attach the 4 Wheel Stops to the Wheel Strut as shown in 2 on the Assembly Drawing. These will be the ones made in Step 1A or 1B above .The distance apart will be based on the diameter of your wheel. Your trike's single wheel will sit here. Finger tighten the Bolt and Channel Nut Assembly. You will slide the Wheel Stops tightly against each side of each tire. One Wheel Stop on each wheel will have a
- 3. Attach two of the Wheel Tray Assemblies to the Wheel Strut using 1/4 inch Bolt and Channel Nut Assemblies. The Wheel Tray Assemblies should be positioned so that the Cam Buckle Strap is half way between each Wheel Stop.
- 4. Attach the Tower to the Receiver Insert. If you have a 2" Receiver Insert, pass two 3/8" x 4" flange head bolts through the Tower and then the Receiver Insert. If you have a 1.25" Receiver Insert, pass one 3/8" x 3" flange head bolts through the Tower and then the Receiver Insert. Place a 3/8" flat washer and self-lock nut on each bolt and finger tighten the nuts.
- 5. Place the Brace between the Tower and Receiver Insert as shown in the diagram on the next page. The tower bolt is a flange head 3/8" x 2" and the bolt in the Receiver Insert is a flange head either 3/8" x 2 3/4" for a 2" Receiver Insert or 2 1/4" for a 1.25" Receiver Insert. Pass the bolts through their two components and place a flat washer and self-locking nut on the end each bolt. Make certain the Tower is perpendicular to the Receiver Insert and tighten the bolts on both ends of the Brace. Now go back and tighten the two bolts joining the Tower to the Receiver Insert.
- 6. Place the Slides on the Tower. The Slide is a piece of Strut Channel 24" or 28" long with slots. There will be a Slide on each side of the Tower. Measure from the back edge of the back tire to the front axel. The Slides should be positioned so that measurement falls within the Slide. Using two 3/8" x 2" flange head bolts, pass the bolts through a Slide and the Tower and the other Slide. Place a 3/8" flat washer on the end of each bolt and secure each with a self locking nut. Tighten nuts.
- 7. Using three 1/2" Bolt and Channel Nut Assemblies, attach Crossbar Assemblies to the Slide using U-Clamps. The Crossbars will attach to the top of the Slide approximately the same distance from the Wheel Strut as your trike's wheelbase plus 1/2 the diameter of the single wheel. As an example, if your wheel base is 40 inches and your single wheel is 20", the Crossbar will be 50 inches above the Wheel Strut. Do this for both Crossbars.
- 8. Attach the 2 Wheel Trays to each Crossbar using Bolt and Channel Nut Assemblies. When you stand the trikes up on the bike rack for the first time, you will need to adjust the position of the Wheel Trays so the front wheels sit in the Wheel Trays over the Cam Buckle Straps.

#### Two Trike Tower v3.1.4

