

CycleSimplex Assembly Instructions

Two Delta 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 trike(s)/bike(s), 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 or bike on the rack, otherwise they may be lost.

There is always some flex in metal. Because of this you should check and tighten bolts before each use.

You should check the straps for wear before each use and replace if they show any wear.

This trike or 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. Your rack or trike(s)/bike(s) may also extend beyond the sides of your vehicle so caution is required not to hit the rack or your trike(s)/bike(s) on other objects.

Liability Information

CycleSimplex, LLC’s liability from all causes is limited to the purchase price of the trike or bike rack.

Warranty Information

This trike or bike rack may be returned unused for any reason by the purchaser to CycleSimplex, LLC within 15 days of its receipt by the purchaser. For full refund, returns must be packaged so that no damage occurs to the rack in shipment and the trike or bike rack is received by CycleSimplex in like new condition...

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

Material List 2 Inch Receiver Insert

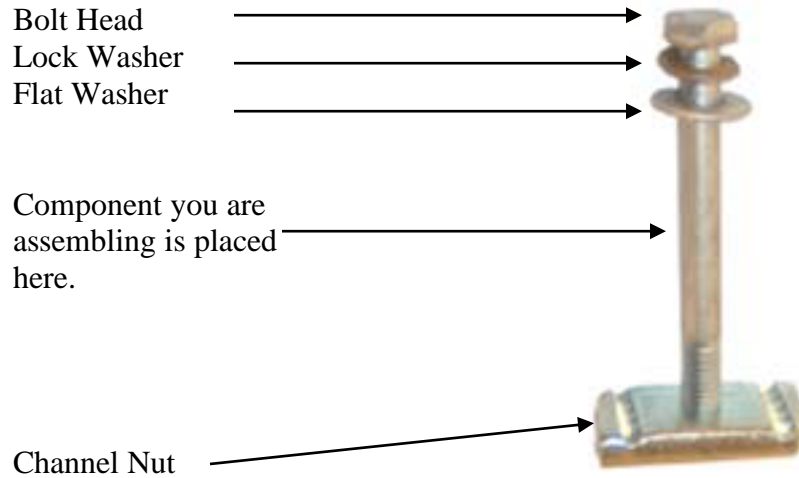
Two Trike Tower Delta – v4.3

Attach 2 Wheel Struts to Receiver Insert (one or the other)	4 – 2 3/4" x 3/8" Flange Head for 2" hitch or 2 - 2 1/4" x 3/8" Flange Head for 1.25" hitch
Attach Brace to Receiver Insert (one or the other)	1 – 2 3/4" x 3/8" Flange Head for 2" hitch or 1 – 2 1/4" x 3/8" Flange Head for 1.25" hitch
Attach 4 U-Clamps to join Wheel Struts and 2 Long Crossbars	12 – 1" x 1/2" Hex Head
Attach 6 Trike Wheel Trays	6 – 1" x 1/4" Hex Head
Attach 8 Wheel Stops to Single Wheel Tray Assembly	8 – 1" x 1/4" Hex Head
Attach (4) 15" Struts to the 2 Crossbars	4 – 1" x 3/8" Flange Head
Attach Brace to Tower	1 – 2" x 3/8" Flange Head
Attach 2 Slides to Tower	2 – 2" x 3/8" Flange Head
Attach Tower to Receiver Insert (one or the other)	2 – 4" x 3/8" Flange Head for 2" hitch or 1 – 3" x 3/8" Flange Head for 1.25" hitch
1/4" Channel Nuts	14
3/8" Channel Nuts	4
1/2" Channel Nuts	12
1/4" lock washers	14
3/8" lock washers	4
3/8" Self-Lock Nuts	10
1/2" lock washers	12
1/4" flat washers	14
3/8" flat silver washer	2
U-Clamp Fittings (may be packed inside the receiver insert)	4
Wheel Strut (47" Strut Channel)	2
Receiver Insert (1.25" or 2 inches square by 30 inches long)	1
Long Crossbar (36" long Strut Channel)	2
Slides (28" long Strut Channel)	2
15" Single Wheel Struts (15" long Strut Channel)	4
Wheel Trays	6
Wheel Stops Long	8
Cam Buckel Straps	8
Tower (1.25" square by 72" long)	1
Brace (30" flat)	1

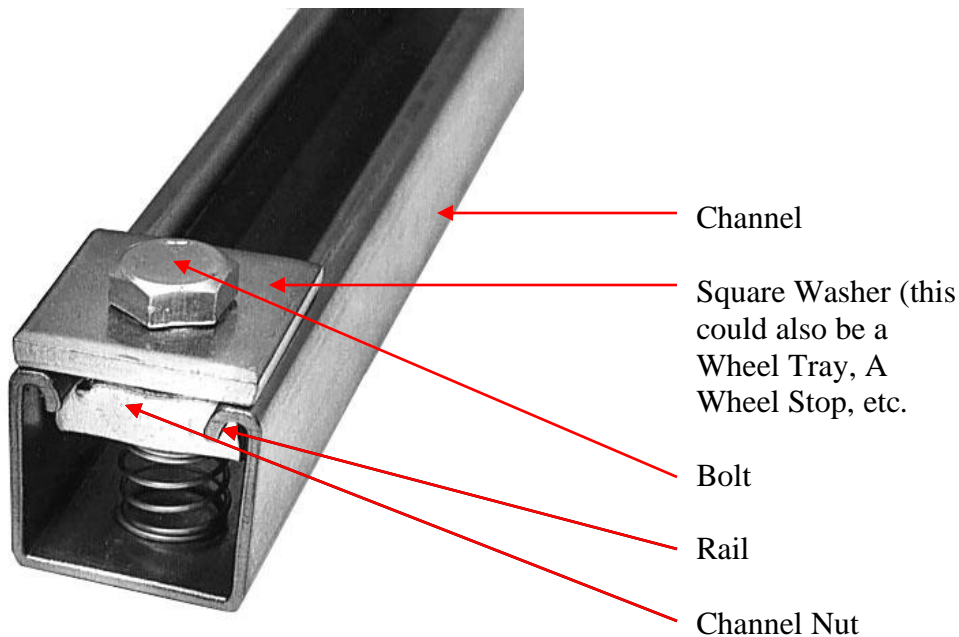
Note: Some components for your Trike Tower Bike Rack are hand crafted. The trike rack is then fully assembled to assure proper fit. For this reason you may see evidence in the powder coat paint of this assembly.

Assembly Instructions CycleSimplex Two Trike Tower - Delta

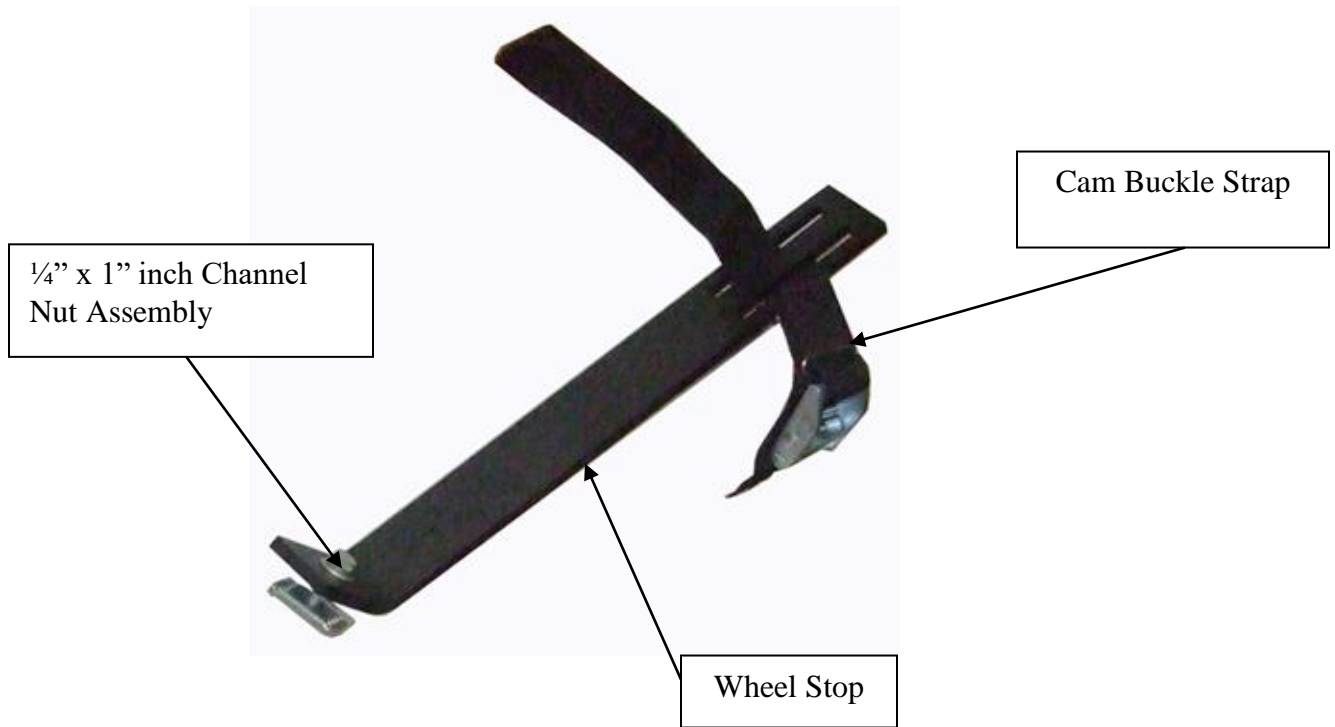
All Bolts requiring a Channel Nut must be assembled in the following fashion. This is a Bolt and Channel Nut Assembly



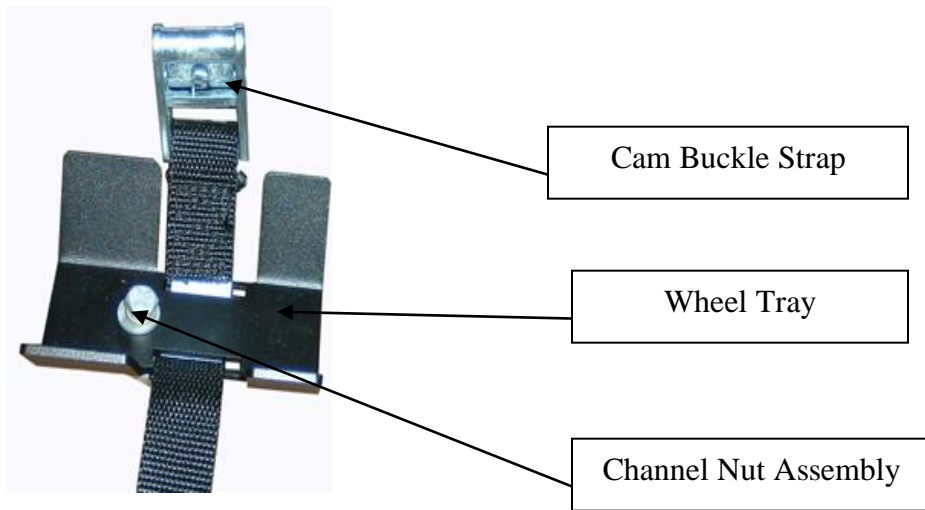
When you are asked to use a Channel Nut Assembly to connect a part to a channel, it will look like the following (you will not have a spring on the channel nut). This example shows a square washer being connected to a channel. Other examples are the connection of Wheel Trays and Wheel Stops. Note that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



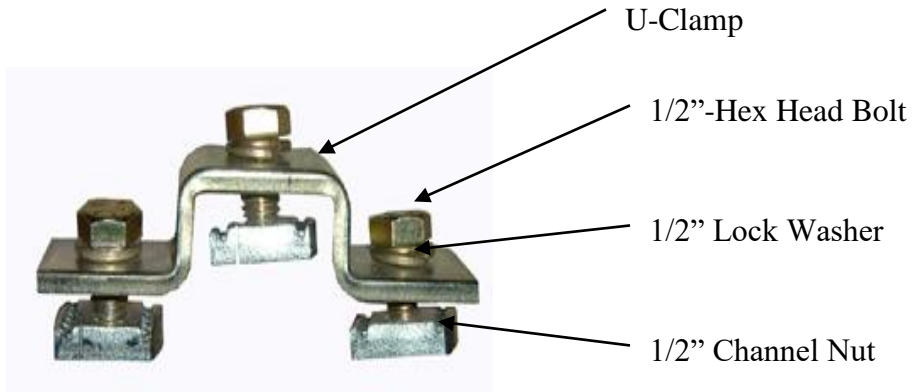
Step 1A: Complete eight Wheel Stop Assemblies as shown below. Two will have Cam Straps and two will not



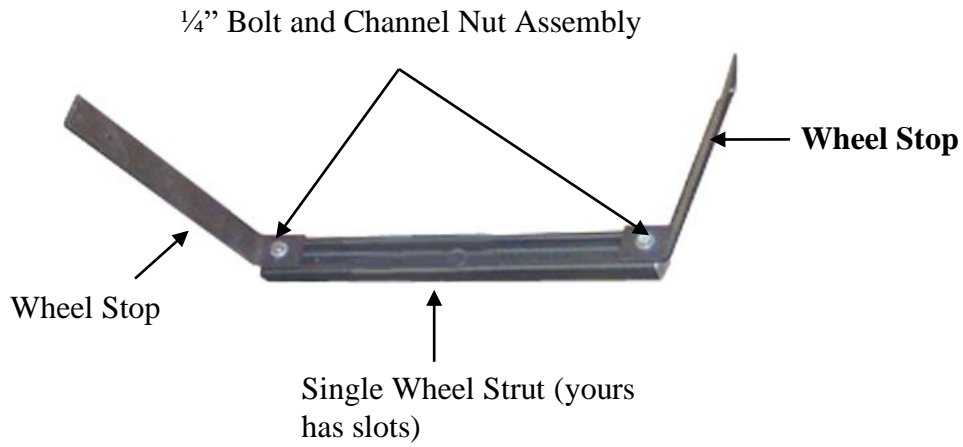
Step 2: Complete the six Wheel Tray Assemblies as shown below



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



Step 4: Complete 4 of the Single Wheel Assembly as shown below. Later in the instructions, when you place these assemblies on the Long Crossbars, you will adjust the distance between the Wheel Stops to match your tire diameter.



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

1A. If you have a 2" hitch rack, attach the two 47" long Wheel Struts to the Receiver Insert using (4) – 3/8" x 2 3/4" Flange Head Bolts, two in each Strut. Place each 3/8" flange head bolt through each 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 two 47" long Wheel Struts to the Receiver Insert using (2) – 3/8" x 2 1/4" Flange Head Bolt, one in each Strut. Place the 3/8" flange head bolt through the Wheel Struts 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 Single Wheel Assemblies to Crossbars as shown in the #2 on the Assembly Drawing (the drawing only shows 2). Place a silver 3/8" lock washer next to the head of four 3/8" x 1" Flange Head bolts. Pass each bolt through the center slot in the Single Wheel Assembly and attach a 3/8" Channel Nut. Place the Channel Nut under the rails of the 36" Long Crossbar and finger tighten. (Note: only two of the four Single Wheel Assemblies are shown. The other two go on the other end of the Wheel Struts. These will be placed on the Crossbars at a distance apart equal to your wheelbase.)

Each of your trike's rear wheels will sit in one of these assemblies. Finger tighten the Bolt and Channel Nut Assembly. Later when you mount your trikes for the first time, you will slide the Wheel Stops tightly against each side of each tire.

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4. Use a Bolt and Channel Nut Assembly to attach a Wheel Tray to each of the Single Wheel Assemblies and a Wheel Tray to each of the Long Crossbars.

5. Attach the Tower to the Receiver Insert. Place the two 3/8" x 4" Flange Head Bolts through the Tower and then the Receiver Insert. Place a 3/8" flat washer and a 3/8" self-locking nut on each bolt and finger tighten the nut.

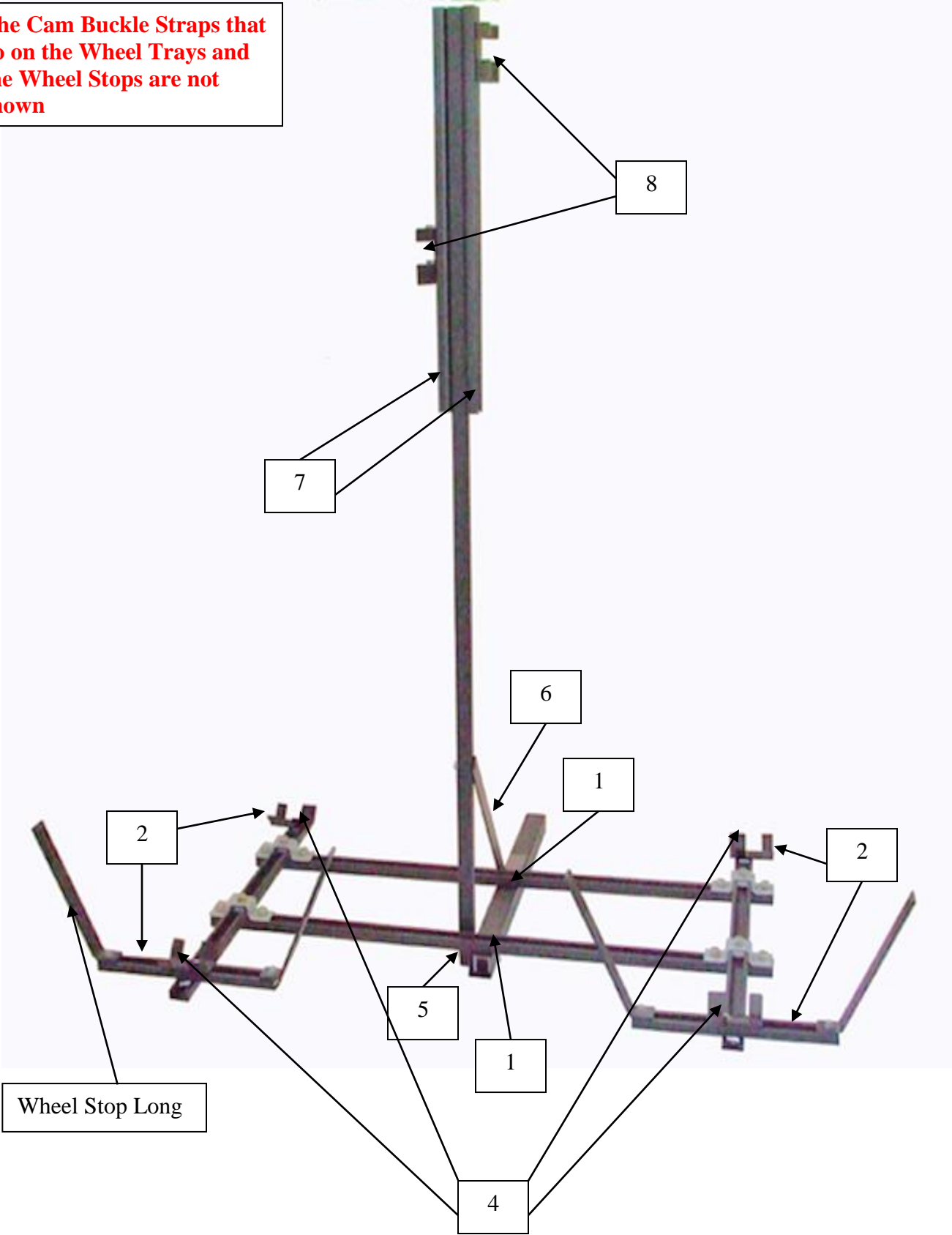
6. Place the Brace between the Tower and Receiver Insert as shown in the diagram on the next page. The tower bolt is a flange head 3/8" x 2" and the bolt in the Receiver Insert is a flange head either 3/8" x 2 3/4" for a 2" Receiver Insert or 2 1/4" for a 1.25" Receiver Insert. Pass the bolts through 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.

7. Place the Slides on the Tower. The Slide is a piece of Strut Channel 24" or 28" long with slots in the flat surface. There will be a Slide on each side of the Tower. Pass two 3/8" x 2" flange head bolts through a Slide, the Tower and the other Slide. Place a flat washer on the end of the bolts and secure each with a self locking nut. Tighten nuts.

8. Attach the 2 Wheel Trays to the Slides 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.

2 Inch Receiver - Two Trike Tower Bike Rack for Delta Trikes v3.1.4

The Cam Buckle Straps that go on the Wheel Trays and the Wheel Stops are not shown



CAUTION:

Each wheel must be secured with the cam buckle strap.

One Wheel Stop on each bike has a Cam Buckle Strap which must be used.

When traveling with no trike in the rack, put the end of the strap through the cam buckle to prevent loss

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