

**CycleSimplex Assembly Instructions, Maintenance
Instructions, Warrantee Information and Liability Agreement**

**Two Trike Tower 2" Non-Tilt Receiver Insert
One Delta Trike and One Tadpole Trike Rack v4.3**

Two Trike Tower - Delta and Tadpole FGTk2DeltaTadHDnoNT2SPRno Parts List

| Item | Tk2 2" Tower Delta Tad Qty | Bin | Item | Tk2 2" Tower Delta Tad Qty | Bin |
|-----------------------------------|-------------------------------------|-----|----------------------------------|-------------------------------------|-----|
| Baggie 6 x 6, 4ml | 1 | 46 | Brace Tk2 Towr .25x1x30-2 | 1 | 2 |
| Box 5 Panel Folder-One Trike | 1 | 32 | Cam Buckle Strap 12" | 10 | 49 |
| Box 5 Panel Folder-Tk1+Tn1 | 1 | 33 | FS-400 PL LS 15" | 2 | 42 |
| Hex Head Armor 1/2-13 x 1 | 9 | 46 | FS-400 PL LS 28" | 2 | 27 |
| Lock Washer 1/2 Yellow Zinc | 9 | 46 | FS-400 PL LS 36" | 2 | 28 |
| Channel Nut 1/2 Thread 3/8 thick | 9 | 46 | FS-400 PL LS 48" | 2 | 29 |
| Flg Head Grade 8 3/8-16 x 1 | 3 | 46 | RI 2 x 30-7 TK2 | 1 | 4 |
| Flg Head Armor 3/8-16 x 2 | 3 | 46 | Tower Delta 1.25 x 1.25 x 72-5 | 1 | 31 |
| Flange Head 3/8-18 x 2 3/4 | 5 | 46 | U-Clamp 1" | 3 | 47 |
| Flange Head 3/8-18 x 4 | 2 | 46 | Wheel Stop Long | 6 | 48 |
| Flat Washer 3/8 regular | 11 | 46 | Wheel Tray 60 Degree Roll Aboard | 6 | 48 |
| Lock Washer 3/8 | 3 | 46 | | | |
| Channel Nut 3/8 Thread, 3/8 thick | 3 | 46 | | | |
| Nut 3/8" SS Self-Lock | 10 | 46 | | | |
| Hex Head Armor 1/4-20 x 1 | 12 | 46 | | | |
| Lock Washer 1/4 Yellow Zinc | 12 | 46 | | | |
| Flat Washer 1/4 Armor Coat | 12 | 46 | | | |
| Channel Nut 1/4 Thread, 1/4 thick | 12 | 46 | | | |
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CycleSimplex Assembly Instructions

2 Inch Receiver Insert Two Trike Tower For One Delta and One Tadpole Trike v4.3

**If you have a heavy duty rack, the appropriate parts will
be heavy duty**

Precautionary and Maintenance Information:

The crank must be tight against the Hold Down with the hook in the J-Bolt around the crank. Tighten the knobs on the J-Bolts so that the cranks can not move. Align the Hold Downs so that each bike is standing straight upright and tighten the Hold Downs.

Each wheel must be secured with the Cinch straps. Run the end of the strap over the rim and through the plastic loop. Pull it tight back over itself. Be certain that the strap is properly installed so that the hook and loop engage tightly, otherwise the Cinch Strap will not hold the wheels in place.

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, the hook and loop must be meshed together just as it would with the 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 as necessary.

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 unused in like new condition for any reason by the purchaser to CycleSimplex, LLC within 15 days of its receipt by the purchaser. To be eligible for full refund of the bike rack purchase price the returned rack must arrive at CycleSimplex in good condition. Please assure that the parts are wrapped completely and the wrapping is taped in place as it was upon receipt.

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 2 Inch Receiver Insert One Delta and One Tadpole Trike Tower – v4.2

| Task | Bolts | Lock Washer | Flat Washer | Self Lock Nut | Channel Nut |
|--|-------------------------------|-------------|------------------|---------------|-------------|
| Attach Brace to Receiver Insert | 1 – 3/8" x 2 3/4" Flange Head | | 1 silver | 1 | 0 |
| Attach Tower to Receiver Insert | 2 – 3/8" x 4" Flange Head | | 2 silver | 2 | 0 |
| Attach 2 Struts to Receiver Insert | 4 – 3/8" x 2 3/4" Flange Head | | 2 silver | 4 | 0 |
| Attach 2 Slides to Tower | 2 – 3/8" x 2" Flange Head | | 2 silver | 2 | 0 |
| Attach Brace to Tower | 1 – 3/8" x 2" Flange Head | | 1 silver | 1 | 0 |
| Attach 2 Delta Wheel Strut Assemblies to Delta Rear Wheel Crossbar | 3 – 3/8" x 1" Flange Head | 3 | 3 silver | 0 | 3 |
| Total 3/8" | | 3 | 11 silver | 10 | 3 |
| Attach 1 U-Clamp to join Tower and Long Crossbar | 3 – 1/2" x 1" Hex Head | 3 | 0 | 0 | 3 |
| Attach 2 U-Clamps to join Delta Rear Wheel Crossbar and Struts | 6 – 1/2" x 1 Hex Head | 6 | 0 | 0 | 6 |
| Total 1/2" | | 9 | 0 | 0 | 9 |
| Attach 6 Trike Wheel Trays | 6 – 1/4" x 1" Hex Head | 6 | 6 silver | 0 | 6 |
| Attach 6 Wheel Stops to Wheel Struts | 6 – 1/4" x 1" Hex Head | 6 | 6 silver | 0 | 6 |
| Total 1/4" | 12 | 12 | 12 silver | | 12 |

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|---|---|
| U-Clamp Fittings (may be packed inside the receiver insert) | 3 |
| Wheel Strut (47 Strut Channel) | 2 |
| Receiver Insert (2 inches square by 28.5 inches long) | 1 |
| Crossbar (36" long Strut Channel) | 1 |
| Brace (30" long flat bar) | 1 |
| Slides (28" Strut Channel with slots) | 2 |

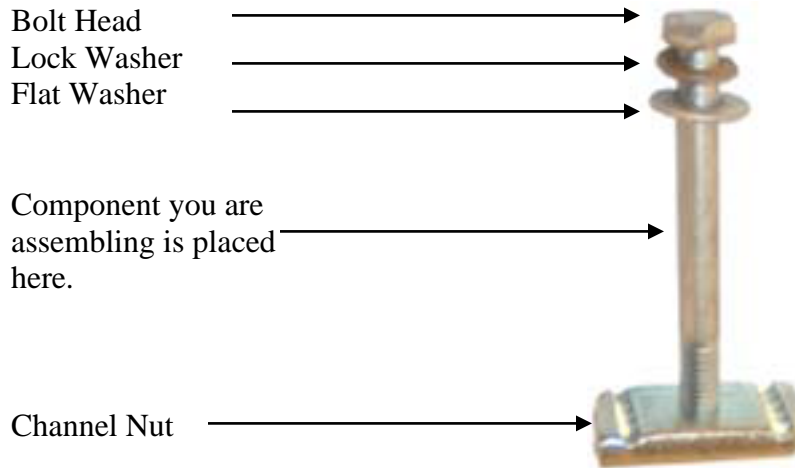
| | |
|---|----|
| Delta Single Wheel Strut (15" Strut Channel with Short Slots) | 3 |
| Wheel Trays | 6 |
| Wheel Stops - Short | 6 |
| Tower (1.25" x 1.25" that is 60"-72" long) | 1 |
| Cam Buckel Straps | 10 |

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 previous assembly.

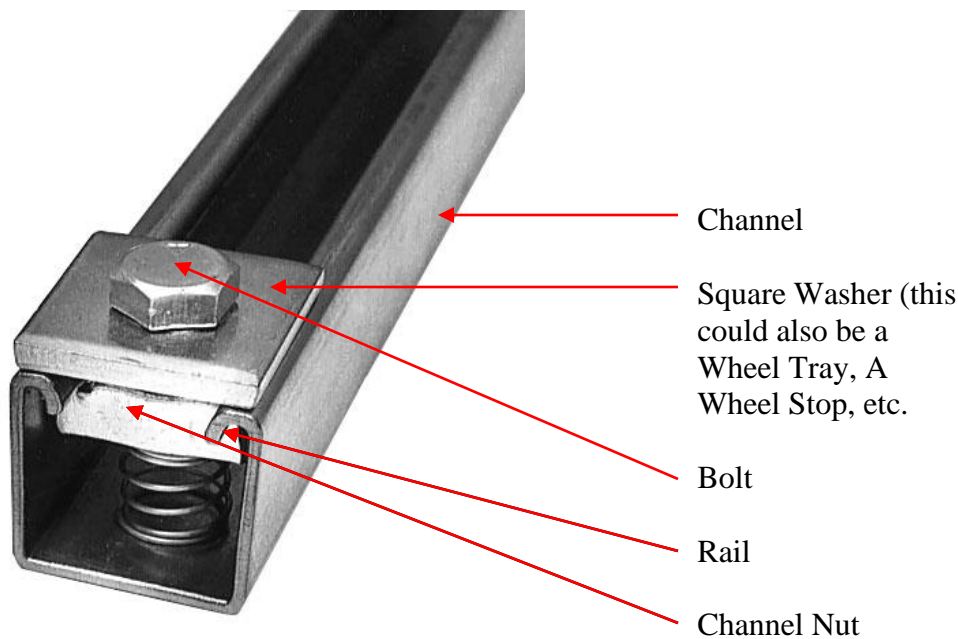
Assembly Instructions

CycleSimplex 2 Inch Receiver for One Delta and One Tadpole Trike Tower – v4.2

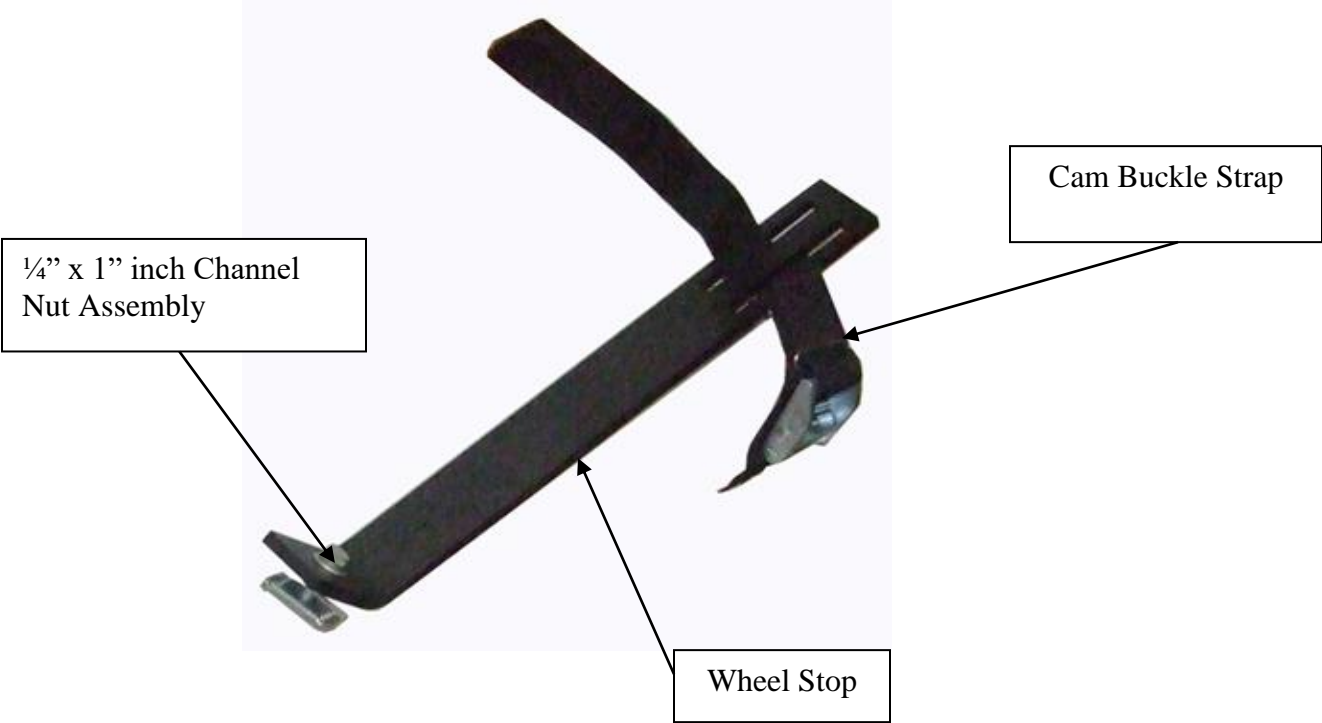
All Bolts requiring a Channel Nut must be assembled in the following fashion. This is a Bolt and Channel Nut Assembly



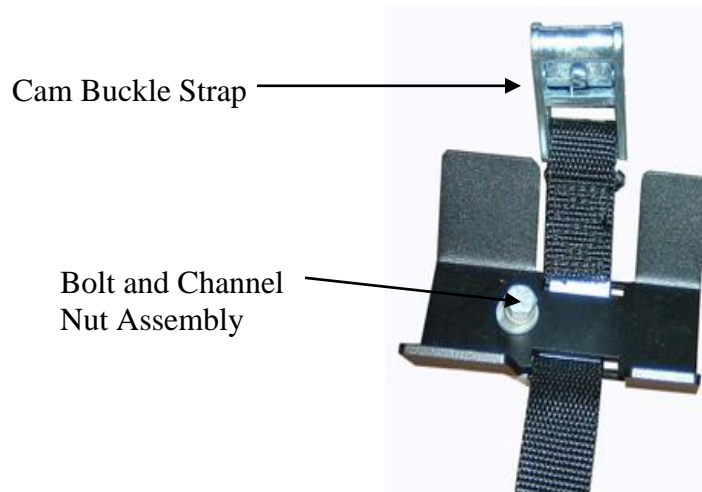
When you are asked to use a Channel Nut Assembly to connect a part to a channel, it will look like the following (you will not have a spring on the channel nut). This example shows a square washer being connected to a channel. Other examples are the connection of Wheel Trays and Wheel Stops. Note that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



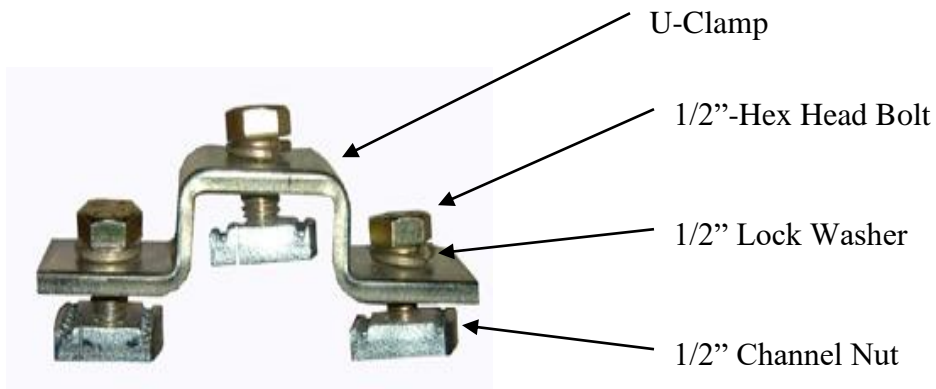
Step 1: Complete four Wheel Stop Assemblies as shown below. Two will have Cam Straps and two will not



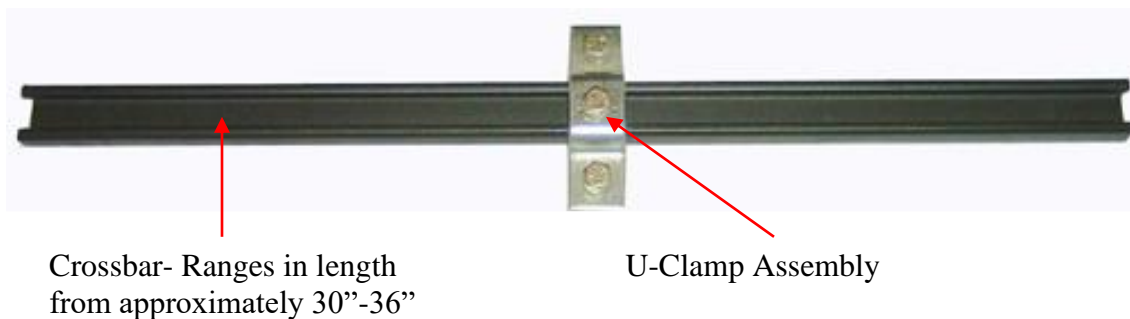
Step 2: Complete the 6 Wheel Tray Assemblies as follows:



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

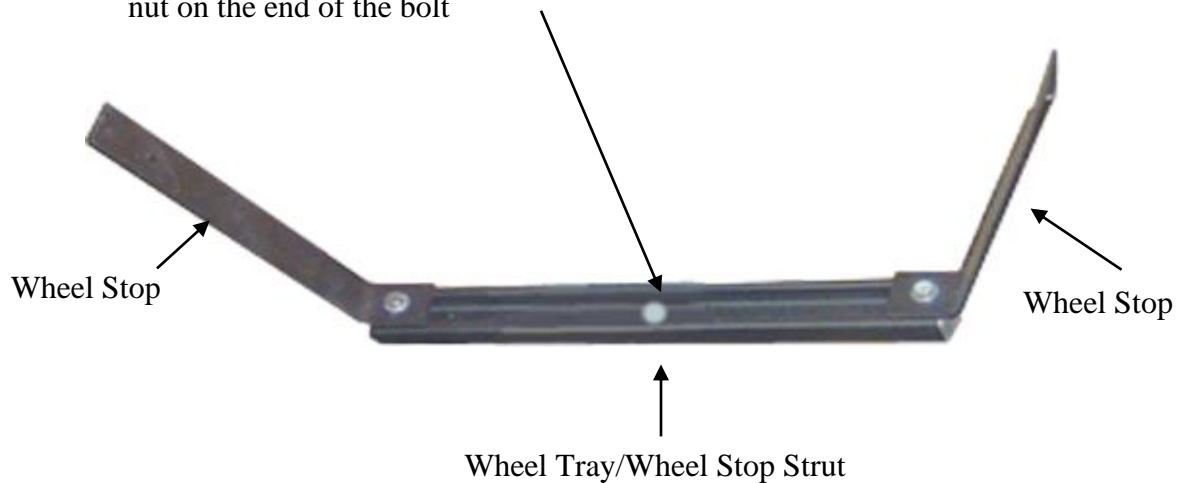


Step 4: Complete two Crossbar Assemblies as follows. The one that goes on the tower for your tadpole will look like this. The one that goes on the Struts for your delta will have two U-Clamp Assemblies

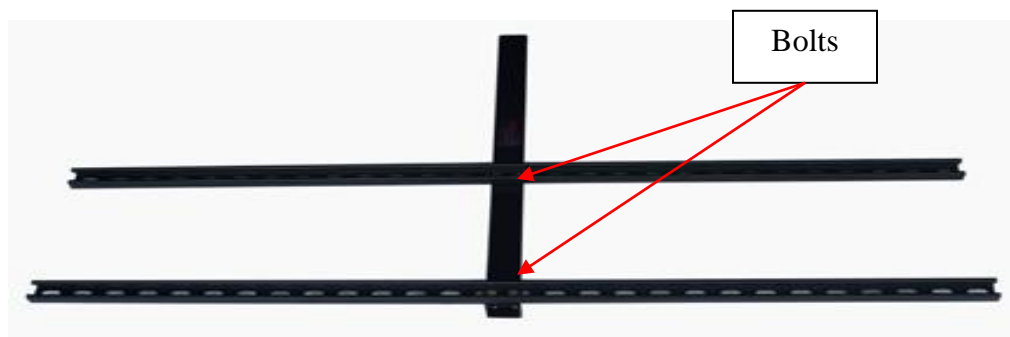


Step 5: Complete 2 Delta Wheel Assemblies as shown below. Be certain to install the Cam Buckle Strap on one Wheel Stop for each bike (Cam Buckle Strap not shown in this drawing. See Wheel Stop drawing). Later in the instructions, when you place these assemblies on the Long Crossbars, you will adjust the distance between the Wheel Stops to match your tire diameter.

3/8" Bolt and Channel Nut Assembly. Place a lock washer and silver washer next to the head of a 1" flange head bolt. Pass the bolt thru the center slot of the Wheel Strut. Place a 3/8" channel nut on the end of the bolt



Step 6: Attach the two 47" Struts to the Receiver Insert using four 3/8" flange head bolts. Find the center of the Strut and pass the bolts through the slots in the Strut and through the holes in the Receiver Insert. Place a silver washer and a self-locking nut on the end of each bolt and tighten.

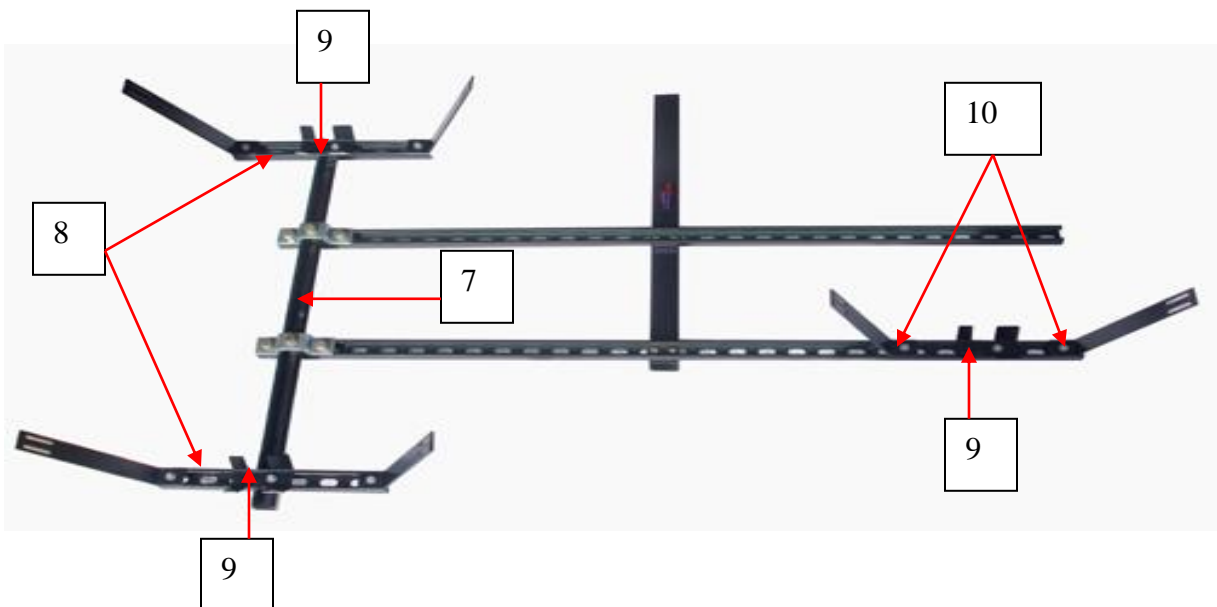


Step 7: Attach the Delta Crossbar Assembly that you made in Step 4 to the Struts using the two U-Clamps as shown in **Step A** below.

Step 8: Attach the Delta Wheel Struts that you made in Step 6 above to the ends of the Crossbar Assembly using two 3/8" Channel Nut Assemblies. Place a lock washer next to the head of the bolt. Pass the bolt through the middle slot in the Wheel Strut Assembly. Turn the channel nut so that it is under the rails and finger tighten. After both Wheel Strut Assemblies are attached, slide them until they are a distance apart equal to your trike's rear wheel track width. The delta rear wheels will set between the Wheel Stops. The Wheel Stops will be adjusted to fit against your tire and then tightened. This is shown in **Step B** below.

Step 9: Attach Wheel Trays Assemblies that you made in Step 2 above. Their location is shown in **Step C** below.

Step 10: Attach tadpole Wheel Stop Assemblies that you build in Step 1 above. Their location is shown as Step D below. Finger tighten for now. The tadpole rear wheel will set between the Wheel Stops. The Wheel Stops will be adjusted to fit against your tire and then tightened.



Now we are going to build the Tower portion of the trike rack. The steps below refer to the picture on page 7.

Step A: Attach the 1.25" x 1.25" x 72" square tube Tower to the Receiver Insert using two 3/8" x 4" flange head bolts. Slide the bolts through the Tower and the Receiver Insert and place a 3/8" flat washer and a self-lock nut on the end and tighten.

Step B: Attach the Brace to the Receiver Insert using a 3/8" x 2 3/4" flange head bolt. Pass the bolt through the Brace and Receiver Insert. Place a silver washer and a self-lock nut on the end of the bolt and finger tighten

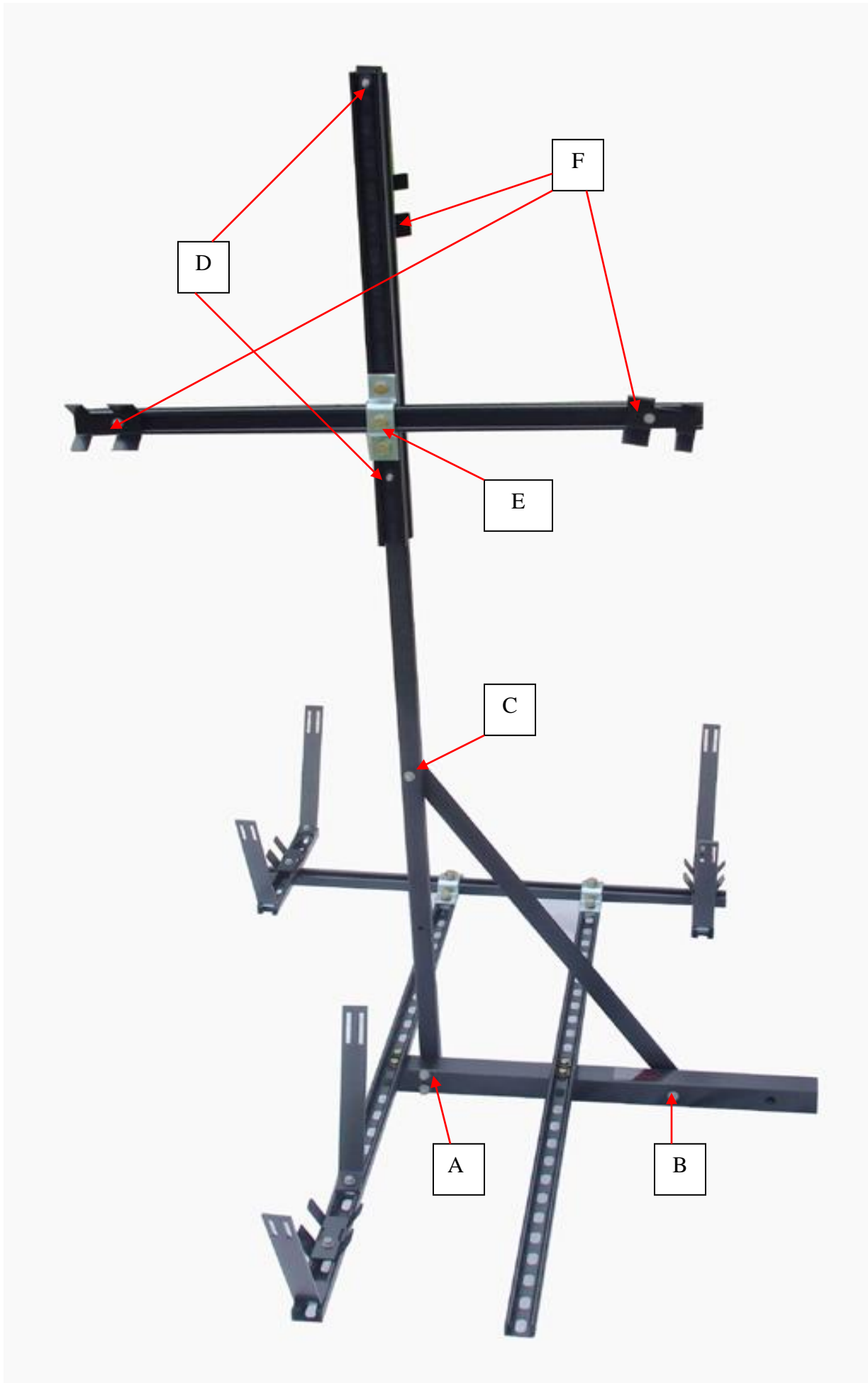
Step C: Attach the Brace to the Tower using a 3/8" x 2" flange head bolt. Place a silver washer and a self-lock nut on the end of the bolt and finger tighten.

Step C1: Align the Tower so that it is vertical and tighten both ends of the brace as well as the bolts that hold the Tower to the Receiver Insert.

Step D: Attach the Slides to each side of the Tower. The Slide is a piece of Strut Channel 28" long with Slots in the flat surface. There will be a Slide on each side of the Tower. Place two 3/8" x 2" flange head bolts through each Slide in a location that aligns with the two holes in the Tower. Place another thick flat washer and a self lock nut on the end of the bolts and tighten.

Step E: Attach the Crossbar Assembly that you made in Step 4 above to the Slide.

Step F: Attach the Wheel Trays



CAUTION:

- **Each wheel must be secured with the cam buckle strap.**
- **When you are not carrying bicycles, you can either leave the straps attached through the slots or remove them. They must be attached when not in use or they may be lost.**
- **There is always some flex in metal. Because of this you should check and tighten bolts before each use**
- **There can be wear in the Cam Buckle Straps. They should be checked each time before use.**