

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

Vertical Tandem Bike Rack

v5.0

2" Receiver Insert

Parts List:

Item	Tn1 Qty	Item	Tn1 Qty
Hex Head Bolt 1/2" x 1-1/2" - Armor	2	FTS-200 PG H2 36" Bottom Strut	1
Lock Washer 1/2" Yellow Zinc	2	FS-200 PG LS 36" Top Strut	1
Channel Nut 1/2"	2	Receiver Insert - 2" x 32" - Black	1
Flange Head Bolt 3/8" x 1-1/4"	1	J-Bolt Assembly - 7"	2
Flange Head Bolt 3/8" x 3"	4	FS-400 PG LS 18"	1
Flat Washer 3/8" - Armor Coat	3	FS-200 PL LS 12" with Welded Nut	1
Lock Washer 3/8" - Yellow Zinc	1	Rubber Pad - 5-pack	5
Flat Washer 3/8" - Nylon - Black	2	Wheel Stop - Black	2
Channel Nut 3/8"	1	Wheel Tray - Black	1
3/8" Self-Locking Nut	3	Hand Knob	2
Hex Head Bolt 1/4" x 1" - Armor	5	Flat Bracket - 2-hole - Silver	2
Lock Washer 1/4" - Yellow Zinc	5	Z-Bracket - Silver	2
Flat Washer 1/4" - Armor Coat	5	Cam Buckle Strap 18"	2
Channel Nut 1/4"	5	Cam Buckle Strap 25"	1
Square Washer 3/8"	1		

The flange head bolts are black and 3/8" in diameter

The hex head bolts are silver and 1/2" in diameter

The lock washer has a split ring

The flat washer is flat.

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.

COMPONENTS:



Tower Bottom Strut (36" x 1 7/8" x 1 7/8").



Tower Top Strut (36" x 1 5/8" x 1 5/8")



One Tandem Insert with Welded Nut (12" x 1 5/8" x 1 5/8")



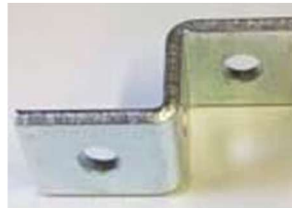
Slide 18" long



Wheel Tray with Cam Buckle Strap



Wheel Stop



Z-Bracket



Flat Bracket - 2-hole



J-Bolt for One Tandem

CAUTION:

The use of a 1.25" to 2" hitch receiver adapter is not recommended. If you use one in spite of this warning, only do so with anti-rattle bolts at each joint.

Nuts & Bolts:



Assembly Instructions 2" Receiver Insert for One Tandem Bike Rack v5

Figure 1: All Bolts requiring a Channel or Square Nut must be assembled in the following fashion. This is a Bolt and Channel Nut or Bolt and Square Nut Assembly. The various kinds are shown below. Each may have either a square nut or a channel nut in accordance with the instructions

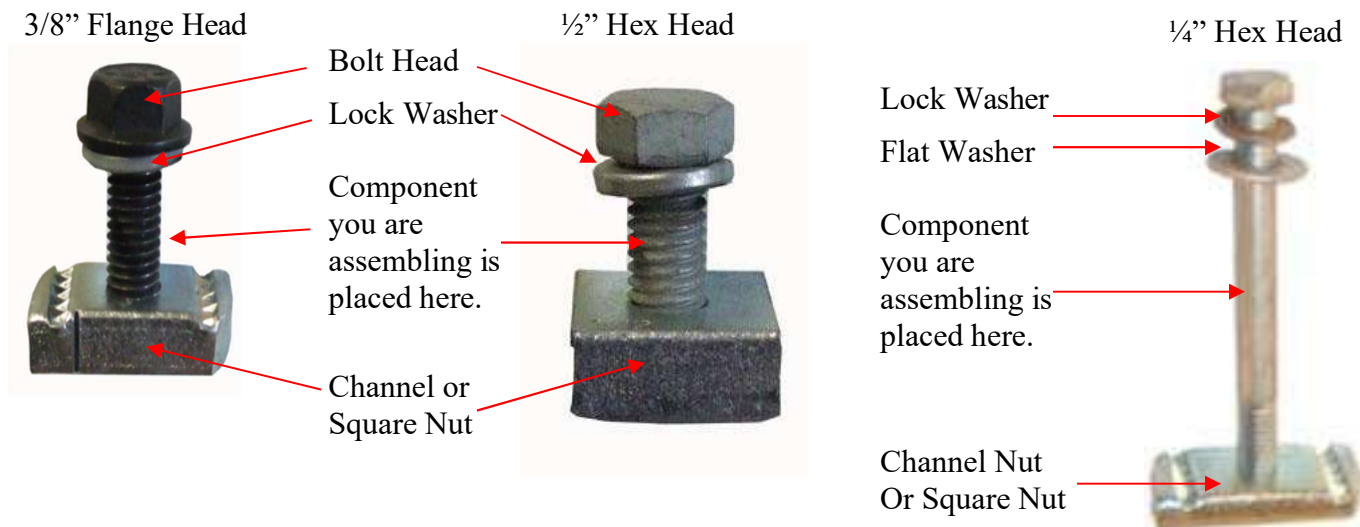
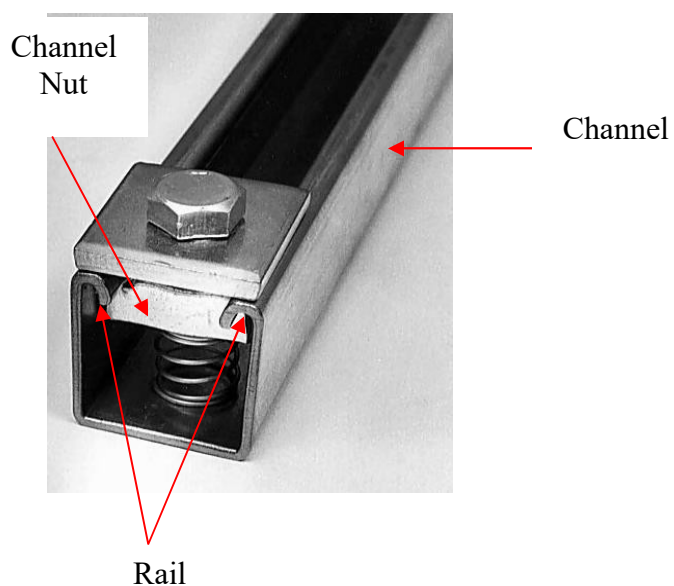
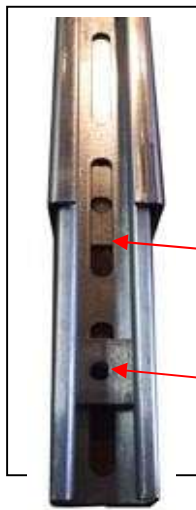


Figure 2: All Bolt and Nut Assemblies must be tightened with the nut under the rail of the channel as shown below. The grooves in the channel nut must be up and under the rail of the channel. Your channel or square nut will not have a spring under it as shown below.



Step 1: Place the One Tandem Insert with the welded nut inside the Tower Bottom Strut as shown in Picture A. Slide the Insert inside the Tower Bottom Strut until the hole in the nut aligns with the 3/8" hole that is furthest from the end of the Bottom Strut (Picture B)

Picture A



One Tandem
Insert

Welded Nut

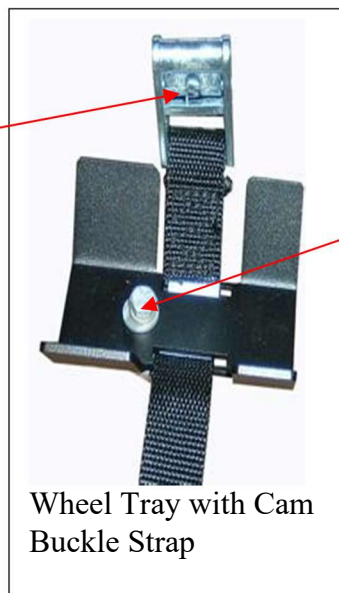
Picture B



Welded Nut

Step 2. Complete the 1 Wheel Tray Assembly as follows:

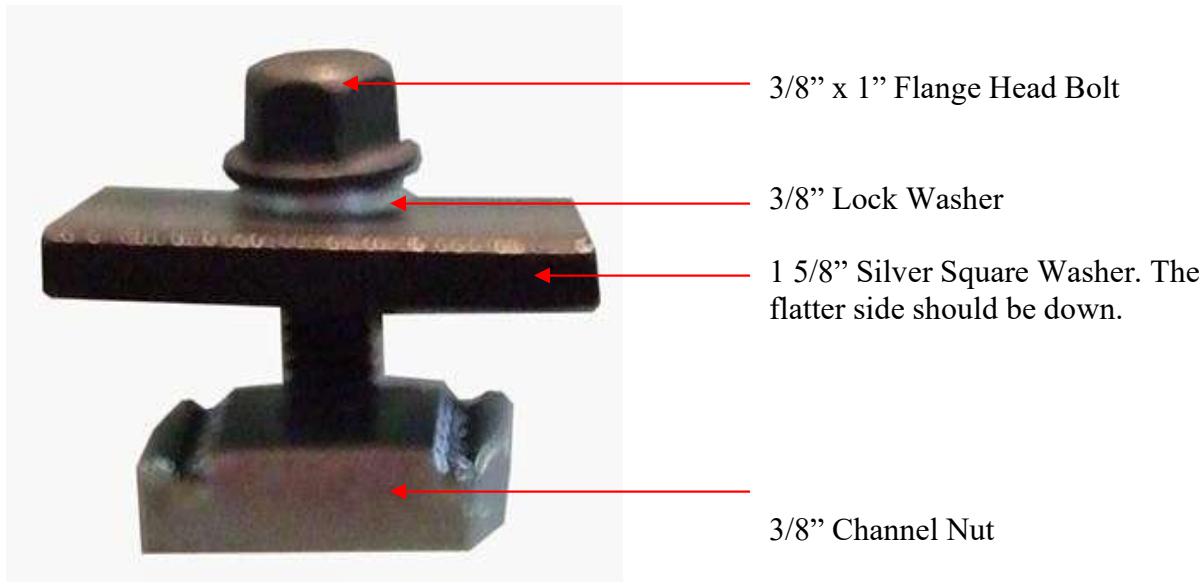
Cam Buckle Strap



1/4" x 1" Bolt and
Channel Nut
Assembly as shown
in Figure 1. The
larger hole in the
Wheel Tray is not
used.

Wheel Tray with Cam
Buckle Strap

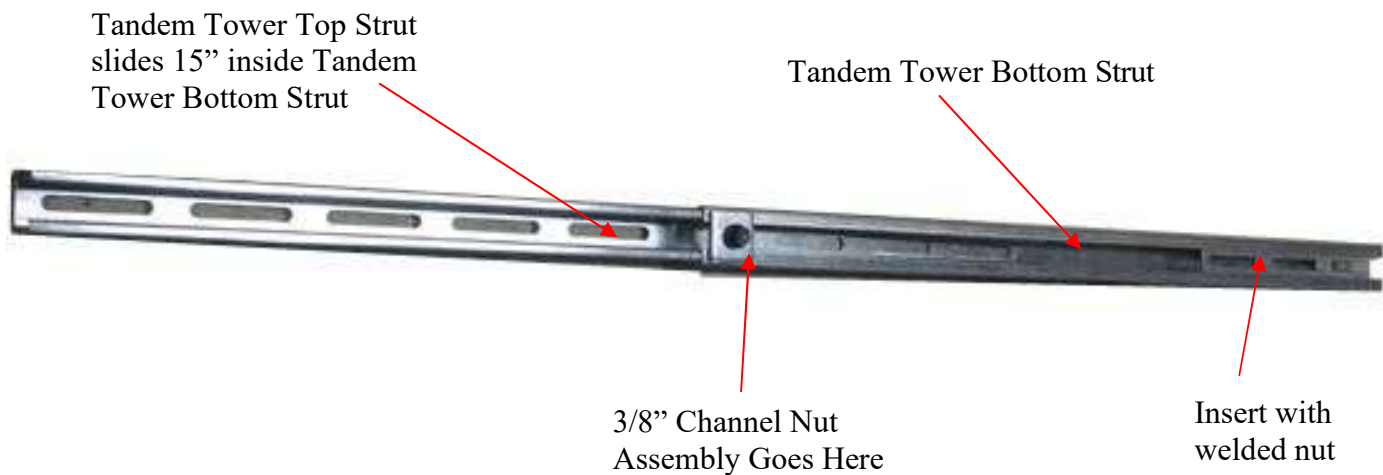
Step 3: Create one 3/8" x 1" Channel Nut Assemblies: Place a lock washer then a 1 5/8" square silver washer under the heads of the bolts. Put 3/8" channel nuts on the end of the bolts. This is a 3/8" Channel Nut Assembly



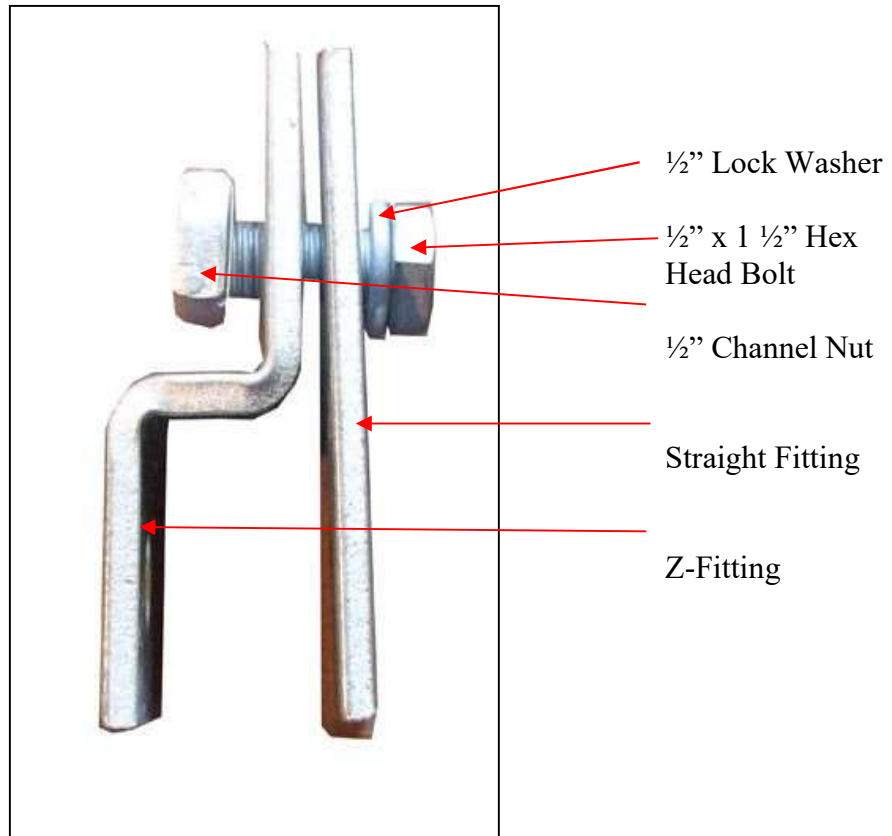
Step 4. Create the Tandem Tower Assembly: Slide the Tandem Tower Top Strut inside the Tandem Tower Bottom Strut approximately 15". NOTE: One end of the Tandem Tower Bottom Strut may slide inside easier than the other end.

Place the 3/8" Channel Nut Assembly made in the previous step inside the two Tower struts. It should be placed 2" from the top of the Tandem Tower Bottom Strut. Turn the channel nut so that it is under the rails of the Tandem Tower Top Strut (as previously shown in the Figure 1 example) and tighten the bolt.

The completed Tandem Tower Assembly is shown below.

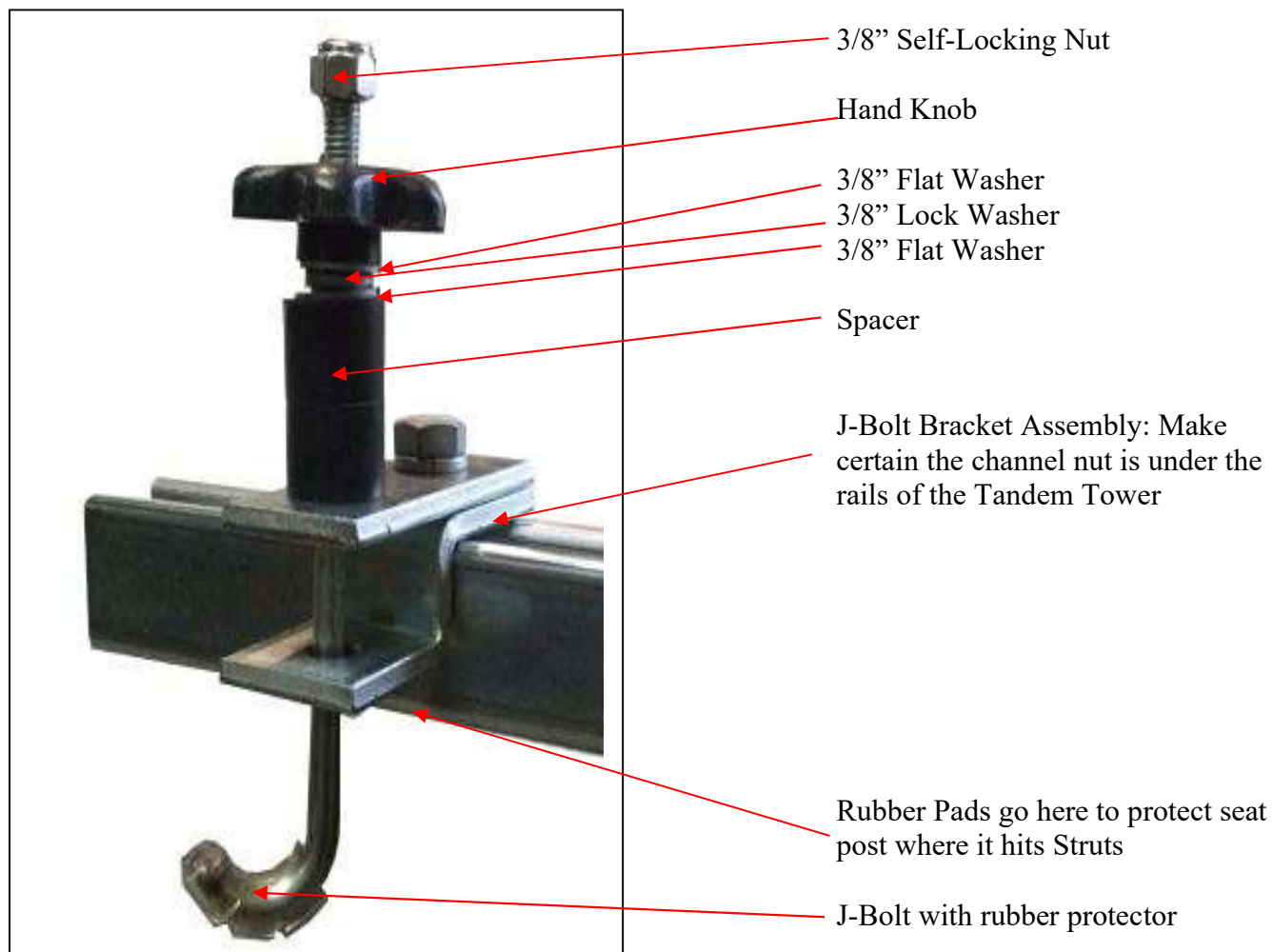


Step 5: Make two J-Bolt Brackets as shown below



Step 6: Complete and Attach the J-Bolt Bracket Assembly to the Tower Struts: Measure from the back of the back tire to each seat post tube on your tandem. Add 4" to each measurement. These will be the approximate Rear Seat Tube and Front Seat Tube Measurement from the very bottom of the tower.

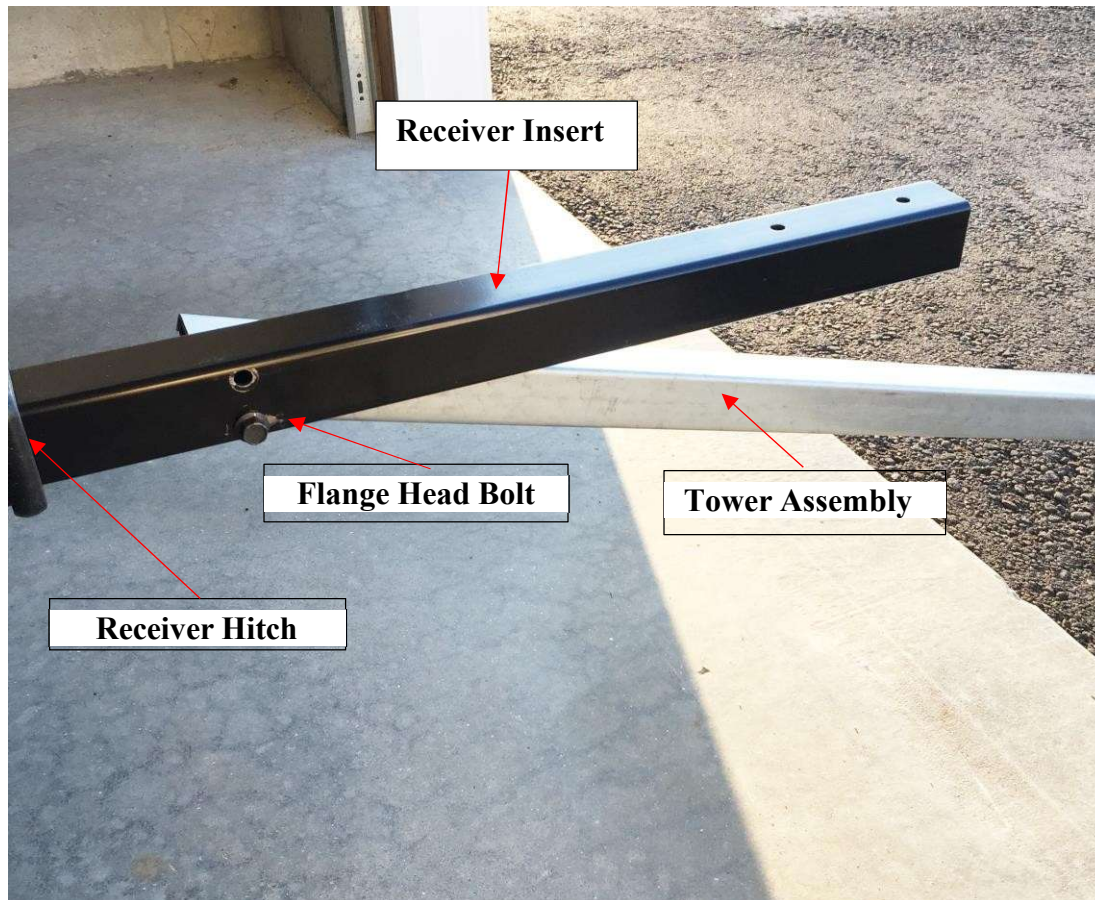
Place a J-Bolt and J-Bolt Bracket Assembly on the Tandem Tower as shown in the picture below on the Tandem Tower so that the center of the holes is equal to each Seat Tube Measurement from the bottom of the Tandem Tower Assembly



Step 7: Attach the Tandem Tower Assembly to the Receiver Insert: It is easiest to attach the Tower Assembly to the Receiver Insert if you slide the Receiver Insert into the receiver hitch on your vehicle.

1. Place the Receiver Insert into the receiver hitch with the large holes in the Receiver Insert aligning with the holes in your receiver hitch as shown in Picture C below.
2. Slide a 3/8" x 3" black flange head bolt through the bottom hole in the Receiver Insert as shown in Picture C. Place a 3/8" nylon washer on the bolt and then place the flange head bolt through the hole closest to the end of the Tower Assembly. The solid side of the Tower Assembly should be against the passenger side of the Receiver Insert. Place a nylon washer, a flat silver washer and then a self-locking nut on the end of the flange head bolt and finger tighten

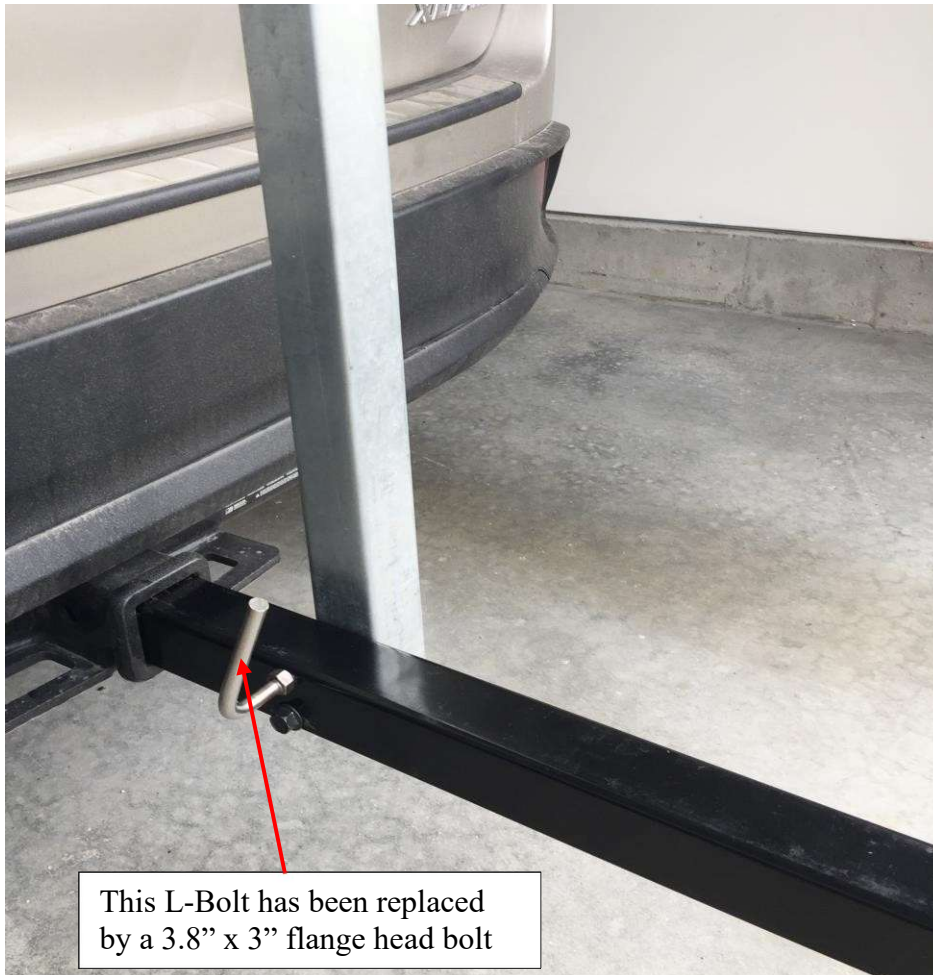
Picture C



Step 8: Swivel The Tower Assembly into the upright position. Make certain the welded nut is still over the upper hole in the Tower Assembly. Place a 3/8" lock washer next to the head of a 3/8" x 3" flange Head Bolt and place into the Tower Assembly as shown in Picture D below. This bolt will replace the L-Bolt shown in the drawing

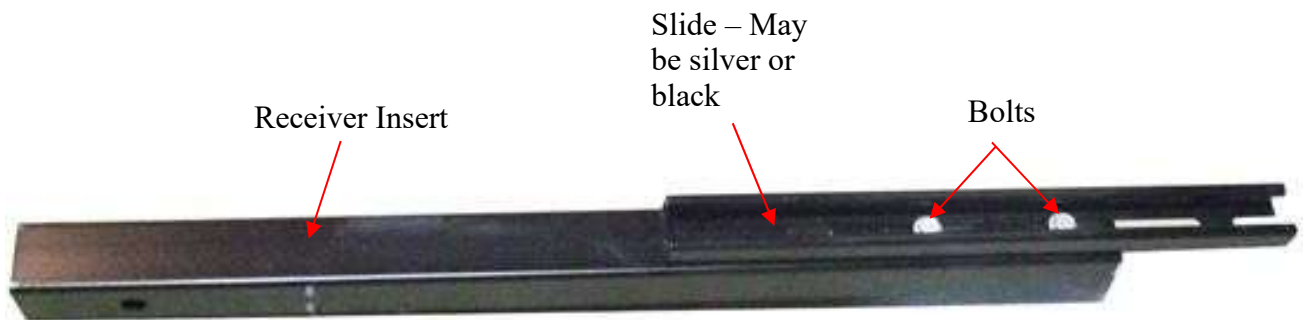
NOTE: You will remove the Flange Head Bolt to tip the Tandem Tower Assembly down to open your tailgate.

Picture D



This L-Bolt has been replaced
by a 3.8" x 3" flange head bolt

Step 9: Attach the Slide to the Receiver Insert: Set the Slide on the Receiver Insert so that it overhangs 5" or more inches as shown in the picture below. Place two 3/8" x 2 3/4" flange head bolts through the slots in the Slide and the holes in the Receiver Insert. Place a 3/8" flat metal washer self-locking nut on each bolt and tighten.

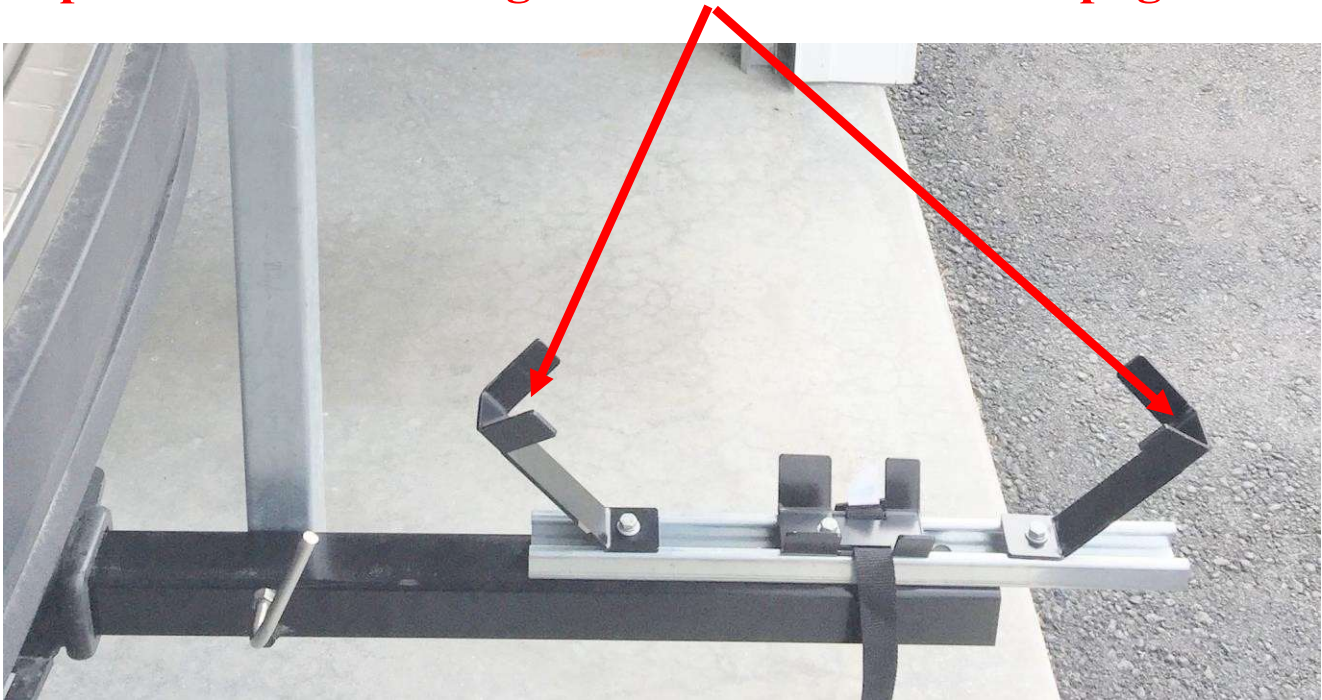


Step 10: Attach the Wheel Tray and Wheel Stops to the Slide and then attach the Slide to the Receiver Insert.

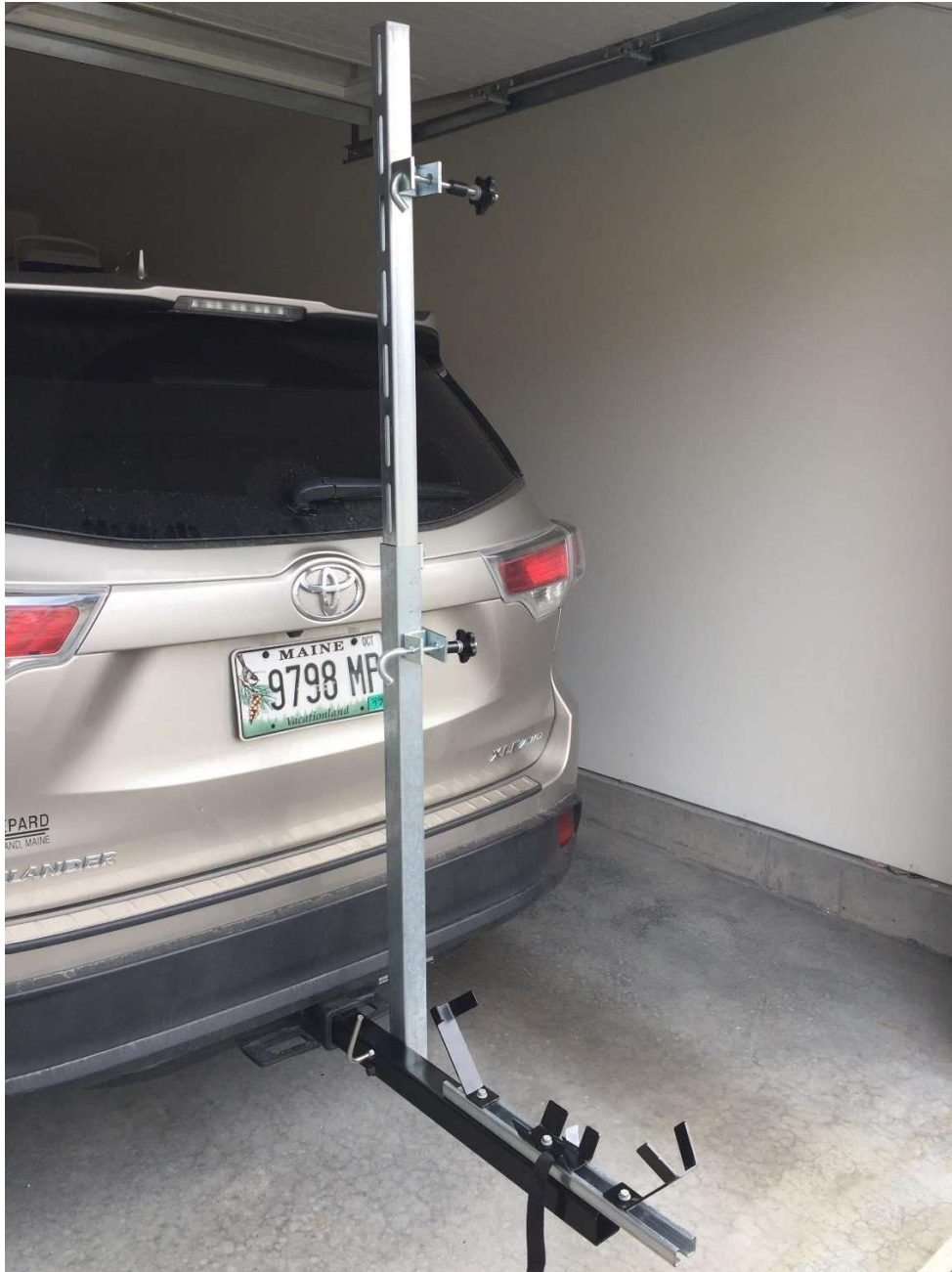
1. Place the Wheel Tray from Step 2 on the Slide. **Make certain the channel nut is turned so that it engages the rails of the Slide.** Tighten the ¼" hex head bolt.
2. Place a ¼" lock washer and then a flat washer on two ¼" hex head bolts. Pass the bolts through the Wheel Stops and place a ¼" channel nut on each. Place the Wheel Stops on the Slide as shown below. **Make certain the channel nut is turned so that it engages the rails of the Slide.** Tighten the ¼" hex head bolt.

NOTE: The Slide Assembly should be placed such that the tandem stands parallel to the Tower.

The wheel stops shown have been replaced by two longer wheel stops without the “wings” on them as shown on page 5



Your completed rack should look like the picture below. The 12” strap goes in the rear wheel and wheel tray. The 16” strap holds the front wheel to the frame. The 23” strap should go around the tandem’s frame and the vertical post on the rack as a safety precaution. The 16” and 23” may be interchanged as needed.



Step 11: Adjust Rack to Fit Your Tandem:

1. When you first stand your tandem on the rack you will need to adjust the position of the Wheel Tray so the tandem stands straight up and the top of the tubes for the seat posts are each equidistant from the tower
2. The Wheel Stops should be slide so that they are very tight against the tire
3. The J-Bolt and J-Bolt Bracket Assemblies should be placed so that the lower J-Bolt is under your rear seat post and the top J-Bolt is above the front seat post

WARNING:

Your seat posts must fit tight in the seat post tube. If this is not the case, do not use the bike rack.

There may be some movement of the Tower from front to back. This is normal.

CycleSimplex Return Policy

At CycleSimplex, we aim to provide high-quality trike and bike racks built for safety, convenience, and durability. We understand that sometimes a purchase may not meet your expectations, or you may need to return a product due to defect or other reasons. This page outlines our **return policy**, **warranty information**, and **shipping guidelines**, so you know exactly what to expect.

Returns

CycleSimplex accepts returns of unused trike or bike racks within **15 days of delivery**. To be eligible for a return:

- The product must be **unused and in like-new condition**.
- It should be **packaged carefully** to prevent any damage during shipment.

Once your return is received and inspected, we will process a **full refund** to the original payment method.

If the returned rack arrives damaged due to improper packaging or shipping, we may **deduct the cost of repairing the damage** from your refund. To avoid this, please use the original packaging if possible, or secure the rack adequately to prevent any dents, scratches, or other damage during transit.

Returns can be initiated by contacting our customer support team, who will provide instructions and a return address. Please include your order information so the process can be completed smoothly.

Warranty Information

CycleSimplex provides a **90-day warranty** on all trike and bike racks, covering defects in **materials or workmanship**. This warranty starts from the **date the product is received** by the purchaser.

During the 90-day period, if a defect is identified, CycleSimplex may, at its discretion:

1. **Replace the defective component**, or
2. **Refund the full purchase price**, provided the rack is returned in like-new condition.

The warranty does **not cover damage caused by misuse, improper installation, accidents, or normal wear and tear**. Our goal is to ensure that every rack functions as designed, providing safe and secure transport for your bicycles or trikes.

Liability Limitation

CycleSimplex limits its liability from all causes to the **purchase price of the trike or bike rack**. This means that in the event of a defect or other issue, the maximum amount CycleSimplex is responsible for is the amount you paid for the rack. Any other losses, damages, or consequential costs are not covered under this policy.

Shipping and Handling

We normally **ship all orders within a week** of receiving them. Orders are carefully packaged to prevent damage during transit.

If you select **expedited shipping** at checkout, please note that this only ensures faster delivery **once the product leaves our facility**. Expedited shipping does not guarantee that your order will ship sooner than the standard timeframe.

For returned items, the customer is responsible for shipping costs unless the return is due to a defect or an error on our part. We recommend using a **trackable shipping method** for all returns to ensure the product arrives safely.

Tips for a Smooth Return Process

- **Keep the original packaging** whenever possible.
- **Inspect the rack immediately upon delivery** to report any damage or defects promptly.
- **Use secure packaging** when returning the rack to prevent additional charges for repairs.
- **Include all components** and accessories that came with the rack.

Following these steps will ensure your return or warranty claim is handled efficiently.

Why This Policy Matters

At CycleSimplex, our goal is to provide **reliable, safe, and convenient bicycle transport solutions**. We know that returns and warranties are part of giving our customers confidence in their purchase. A clear and fair return policy ensures that you can order with peace of mind, knowing you have options if a product does not meet your needs or has a defect.

We encourage customers to review this policy before purchasing and to reach out to our support team for any questions. By following the outlined steps, both CycleSimplex and our customers can ensure that returns, refunds, or warranty claims are processed smoothly, quickly, and transparently.

For Customer Service & Support:

Please contact us at cyclesimplexllc@gmail.com