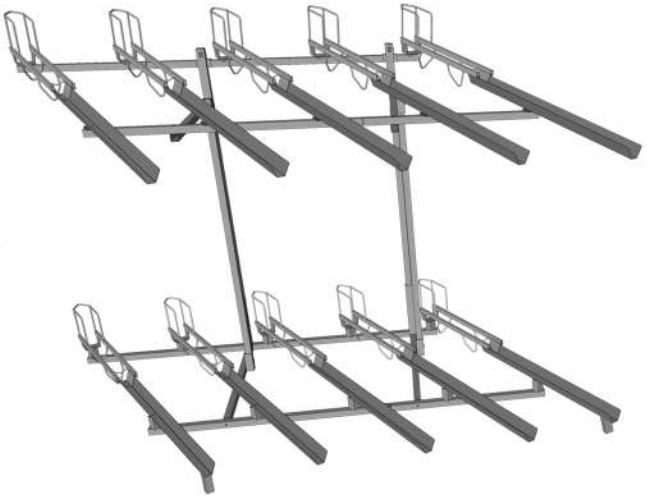
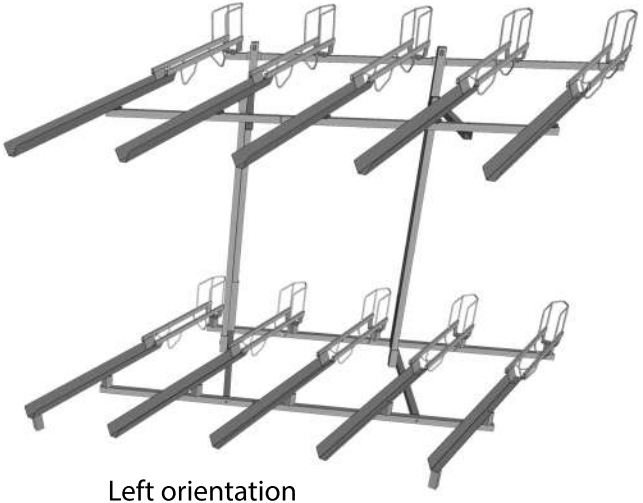
10 BIKE STRAIGHT FORWARD

Recommended Team Members Needed: 2

Designed & Made in the **USA**



Right orientation



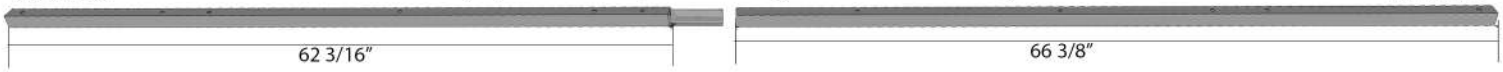
Left orientation

Locate all parts and hardware before beginning rack assembly

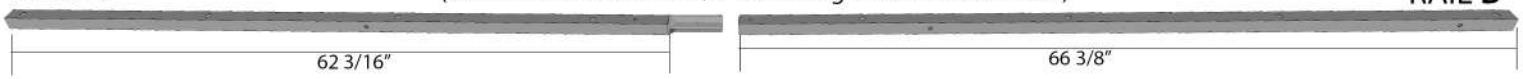
SPLIT RAIL PAIRINGS

24 bike, 16 bike

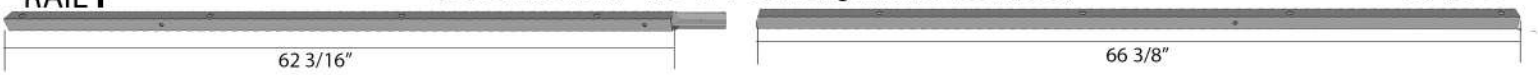
RAIL **D** (Top rails--128" 3/4" total length when assembled) RAIL **A**



RAIL **E** (Bottom rear rail--128" 3/4" total length when assembled) RAIL **B**



RAIL **F** (Bottom front rail--128" 3/4" total length when assembled) RAIL **C**



21 bike, 14 bike

RAIL **G** (Top rails--110" 3/8" total length when assembled) RAIL **A**

RAIL **H** (Bottom rear rail--110" 3/8" total length when assembled) RAIL **B**

RAIL **I** (Bottom front rail--110" 3/8" total length when assembled) RAIL **C**

18 bike, 12 bike

RAIL **G** (Top rails--92 3/8" total length when assembled) RAIL **J**

RAIL **H** (Bottom rear rail--92 3/8" total length when assembled) RAIL **K**

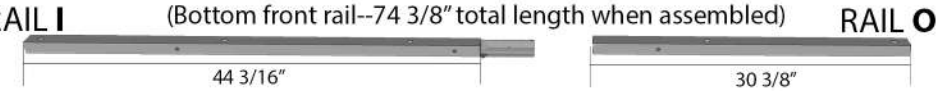
RAIL **I** (Bottom front rail--92 3/8" total length when assembled) RAIL **L**

15 bike, 10 bike

RAIL **G** (Top rails--74 3/8" total length when assembled) RAIL **M**

RAIL **H** (Bottom rear rail--74 3/8" total length when assembled) RAIL **N**

RAIL **I** (Bottom front rail--74 3/8" total length when assembled) RAIL **O**



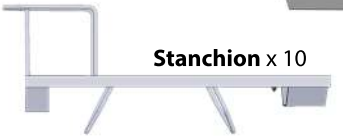
Parts - 10 BIKE STRAIGHT FORWARD

Tray x 8

Stabilizer Tray x 2

Spacer x 10

Slide x 10

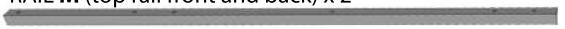


Stanchion x 10

57" Vertical Post x 2

64" Vertical Post x 2

RAIL **M** (top rail front and back) x 2

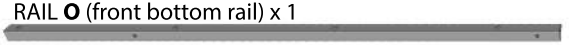


RAIL **G** (top rail front and back) x 2

RAIL **N** (rear bottom rail) x 1

RAIL **H** (rear bottom rail) x 1

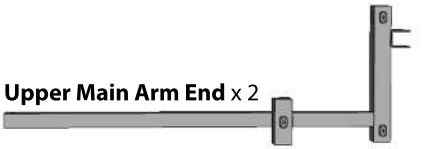
RAIL **O** (front bottom rail) x 1



RAIL **I** (front bottom rail) x 1

*These rails can be re-oriented to build a right facing or left facing rack. See **Step 2/pg. 4** for details.

Floor Support End x 2



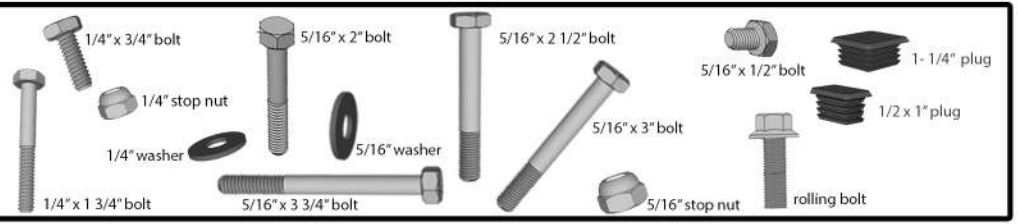
Upper Main Arm End x 2

Due to the modular nature of rack instructions, part quantities may vary. See packing list for part and hardware quantities.

TOOLS NEEDED:

*socket wrench with 7/16" and 1/2" sockets
*7/16" wrench
*1/2" wrench
*rubber mallet
*drill (recommended for rolling bolts on rails)
*tape measure

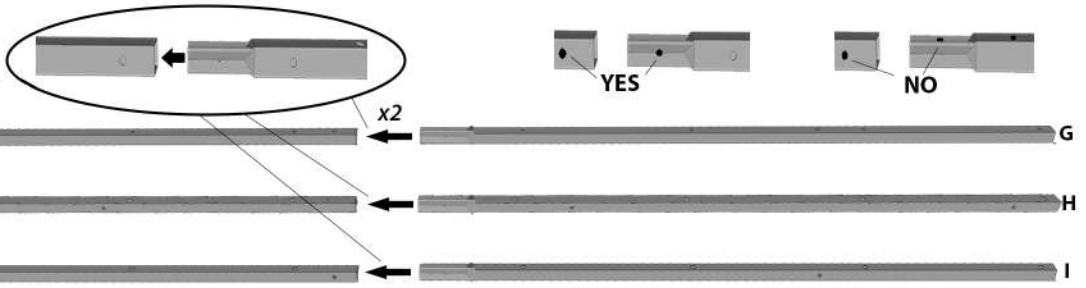
HARDWARE



STEP 1: Assembling split rails.

needed: rails G, M, H, I, O, N
rolling bolts, rubber mallet, drill or socket wrench, 7/16" socket

1a. Match the split rails as they are paired on ***page 2***. ***All rails are laser cut with their letters.***



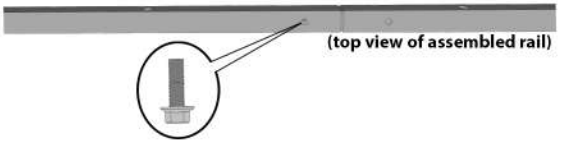
1b. Connect all paired split rails--G and M to make the two top rails, H and N to make the rear bottom rail, and I and O to make the front bottom rail.

NOTES--READ BEFORE CONTINUING RAIL ASSEMBLY!

*the identification letters of rail sections should be facing DOWN and on the ends of the completed rail.
*be sure holes are lined up before sliding together each pair of rail pieces
*use a rubber mallet to gently tap on the rail ends to snug each pair together
*gold rivets in the bottom front, and rear rail holes should face **UP**

Assembling split rails (contd. from pg. 3)

1c. Secure each assembled rail with a rolling bolt. A drill with a 7/16" socket is recommended. If using a hand socket use moderate downward pressure, making sure bolt is straight.



STEP 2: Deciding Rack Orientation.

needed: Bottom rear rail (N+H), bottom front rail (O+I), floor support ends, 5/16"x 2" bolts, 5/16" washers

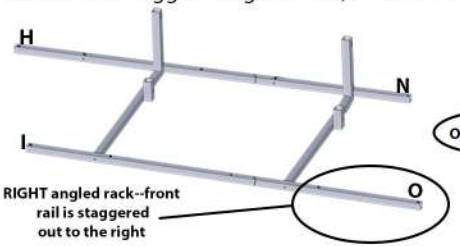
2a. Lay out both the bottom rear rail(N+H) and bottom front rail (O+I) , again making sure the letters of the assembled rails are facing *downward* (note from pg.3).

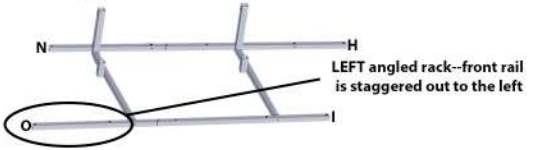
2b. Whichever way the crimped end of the split rail assembly faces, that will be the direction your trays face.

right orientation

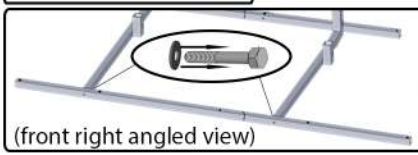
left orientation

2c. Set rails staggered right or left, then set floor supports between them as shown below.



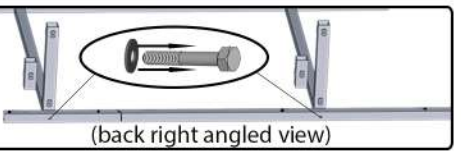


NOTE: rail assemblies in **step 2a** are laid out for a RIGHT orientation. For a left orientation, simply flip each rail 180 degrees.



(front right angled view)

2d. Attach floor support ends to rails with 5/16"x 2" bolts and 5/16" washers. Snug tighten bolts.

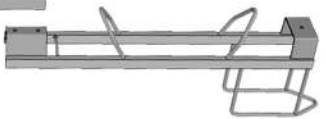


(back right angled view)

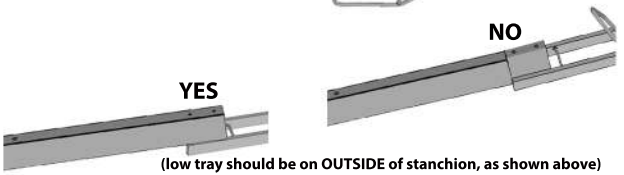
STEP 3: Pre-assemble trays.

needed: trays, stabilizer trays, stanchions, 1/4" washers, 1/4" x 3/4" bolts, 1/4" stopnuts, 1/2"x1" plugs, 1-1/4" plugs, 7/16" socket, socket wrench, 7/16" wrench

3a. Turn stanchion and low tray upside down. Align the 2 holes on the stanchion with the 2 holes on the low tray.

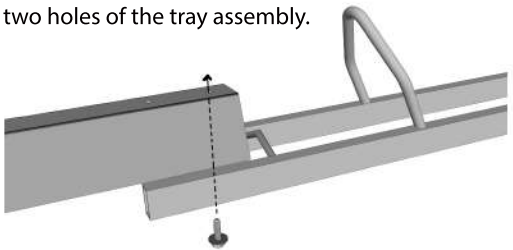


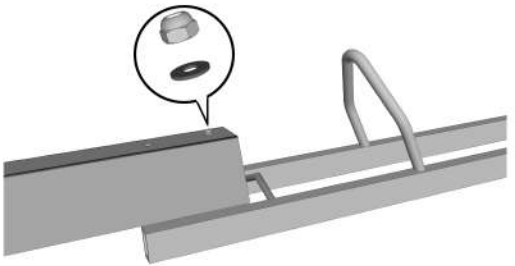
3b. Place a 1/4" washer over a 1/4" x 3/4" bolt.



(low tray should be on OUTSIDE of stanchion, as shown above)

3c. Insert bolt and washer combo into one of the two holes of the tray assembly.





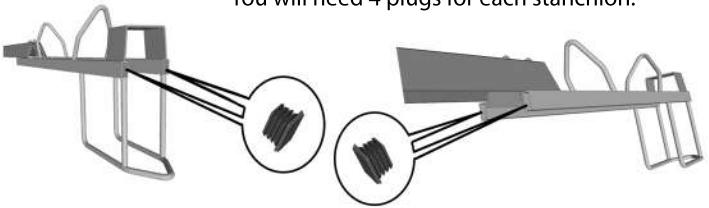
3d. Fasten bolt/washer in place using a 1/4" washer and 1/4" stop nut. Tighten LOOSELY using both the 7/16" socket/wrench and 7/16" wrench.

3e. Repeat steps 3b.-3d. for second hole, then finish tightening both bolts and stop nuts with the 7/16" socket/wrench and 7/16" wrench.

3f. Repeat steps 3a.-3e. for all remaining trays (including stabilizer trays) and stanchions.

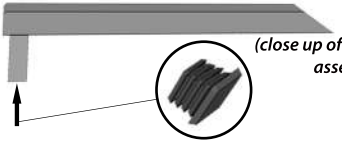
Pre-assembling trays (contd. from page 5)

3g. Insert 1/2"x 1" plugs into the front and back of the stanchion as shown.
You will need 4 plugs for each stanchion.



3h. Repeat step 3g. for the remaining assembled trays.

3i. Insert a 1-1/4" plug on the bottom foot of each of the stabilizer trays.



(close up of stabilizer tray assembly)

NOTE: the remainder of the instructional diagrams will be for a ***right oriented*** rack. For a left oriented rack, simply mirror the remaining parts.

STEP 4: Attach tray assemblies to bottom rails.

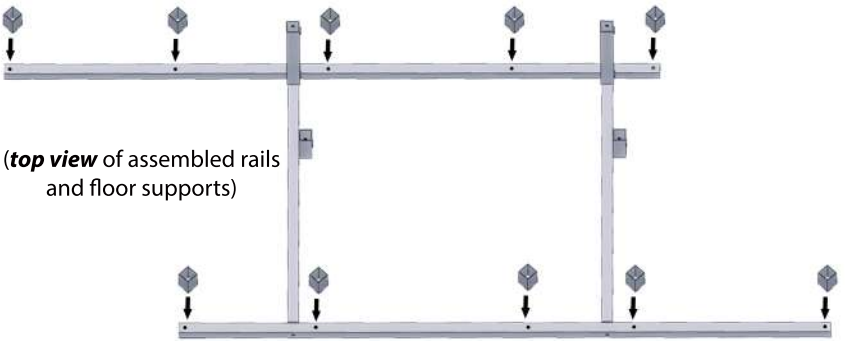
needed: tray/stanchion assemblies, bottom front and rear rails with attached floor supports, spacers, 5/16" washers, 5/16" x 3 3/4" bolts, 1/2" socket/wrench

4a. Place spacers over the riv nut holes (holes with metal inserts) on the rails. Place spacers ***at an angle, not flush*** with rails.

YES

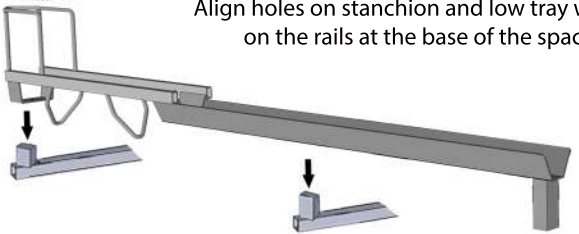
NO

(***top view*** of assembled rails and floor supports)

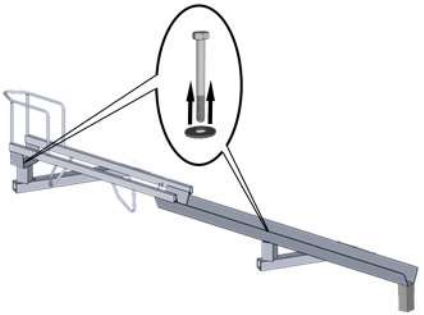


Attach tray assemblies to bottom rails (contd. from pg. 6)

4b. Starting on one of the ***ends*** of the bottom rail assembly, Place a ***stabilizer tray assembly*** on top of a set of spacers. Align holes on stanchion and low tray with holes on the rails at the base of the spacers.



4c. Attach the stabilizer tray assembly and spacers to rails using *(2)* 5/16"x 3 3/4" bolts and *(2)* 5/16" washers.



4d. Repeat steps 3b. and 3c. for all remaining trays, ***making sure both stabilizer trays are on the ENDS of the bottom rail assembly.***

The base of your rack is now complete!

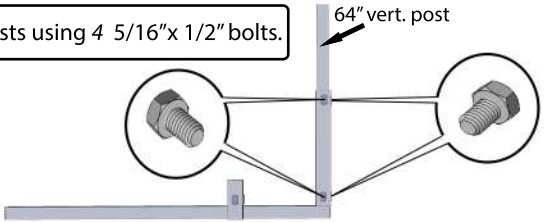
STEP 5: Beginning to build the 2nd tier.

needed: 64" and 57" vertical posts, 5/16" x 1/2" bolts, 1/2" socket and wrench

NOTE: After securing/bolting both sets of vertical posts to the floor supports, there WILL BE PLAY in the vertical posts and bottom base assembly until the main arms and top rails are attached.

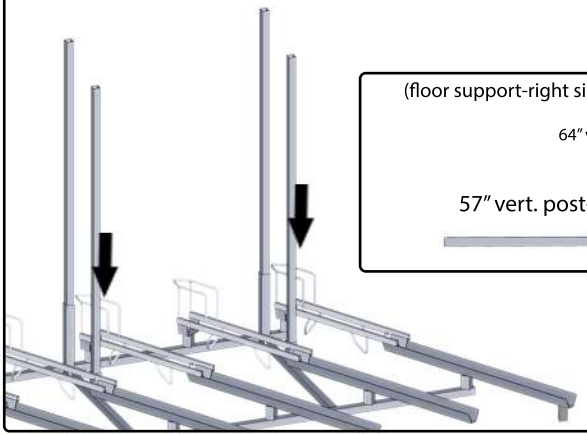
5a. Insert the 64" vertical posts into the rear vertical portion of the floor supports.

5b. Secure 64" posts using *4* 5/16"x 1/2" bolts.



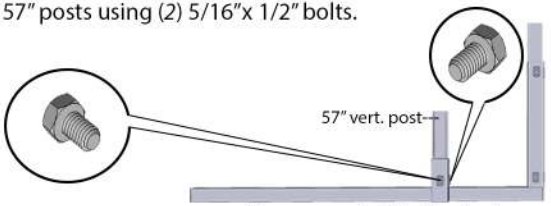
(floor support-right side view)

5c. Insert the 57" vertical posts into the shorter middle portion of the floor supports.



Beginning to build the 2nd tier (contd. from pg. 8)

5b. Secure 57" posts using (2) 5/16"x 1/2" bolts.

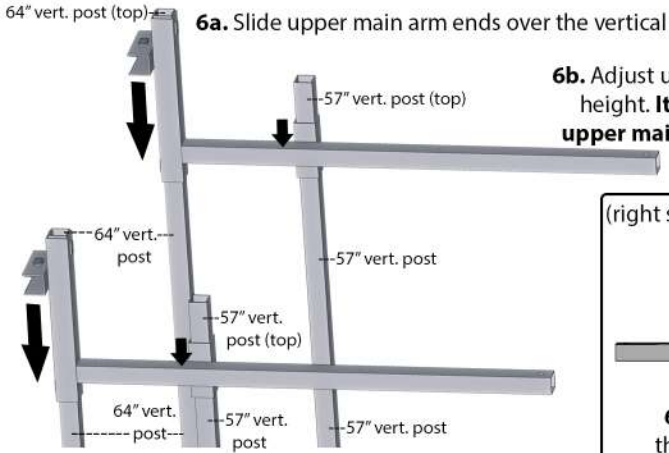


(floor support-right side view)

NOTE: After securing/bolting both sets of vertical posts to the floor supports, there WILL BE PLAY in the vertical posts and bottom base assembly until the main arms and top rails are attached.

STEP 6: Attaching arms and top rails.

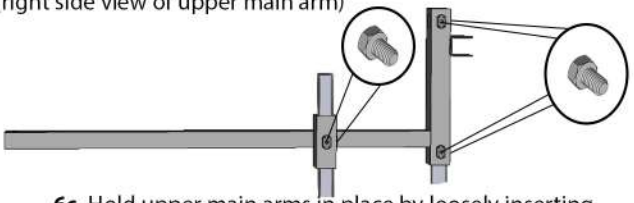
needed: upper main arm ends, assembled top rails, 5/16" x 1/2" bolts, 5/16"x 3" bolts, 5/16" washers, 5/16" stopnuts, 1/2" socket and wrench, tape measure



6a. Slide upper main arm ends over the vertical posts, as shown.

6b. Adjust upper main arms up or down the vertical posts for desired rack height. **It's recommended to make the rear insertion point of the upper main arm ends flush with the tops of the 64" vertical posts as shown on the diagram.**

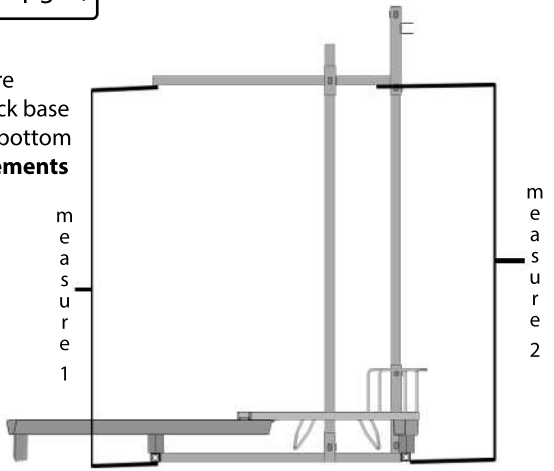
(right side view of upper main arm)



6c. Hold upper main arms in place by loosely inserting the 5/16"x 1/2" bolts into the main arms (6 bolts per arm)

Attaching the arms and top rails (contd. from pg. 9)

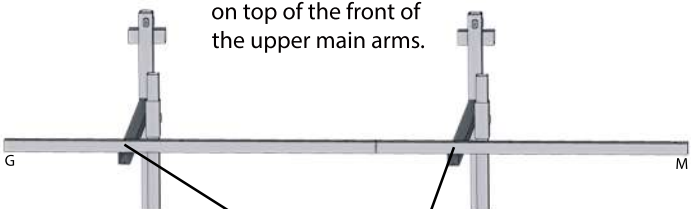
6d. Using a tape measure, confirm that main arm ends are level with **2 measurements**: the height from the bottom of rack base to the front bottom of the upper main arm end, and the back bottom main arm end to back bottom of rack base. **These 2 measurements should be equal.** Adjust upper main arm end up and down as needed.



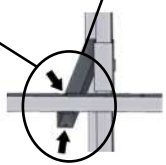
(right side view)

6e. Tighten bolts that were in inserted in step 6c.

6f. Place one of the top rails (1 of the 2 G+M assemblies-they're interchangeable) on top of the front of the upper main arms.



6g. Align holes on the rail with holes in upper main arms.



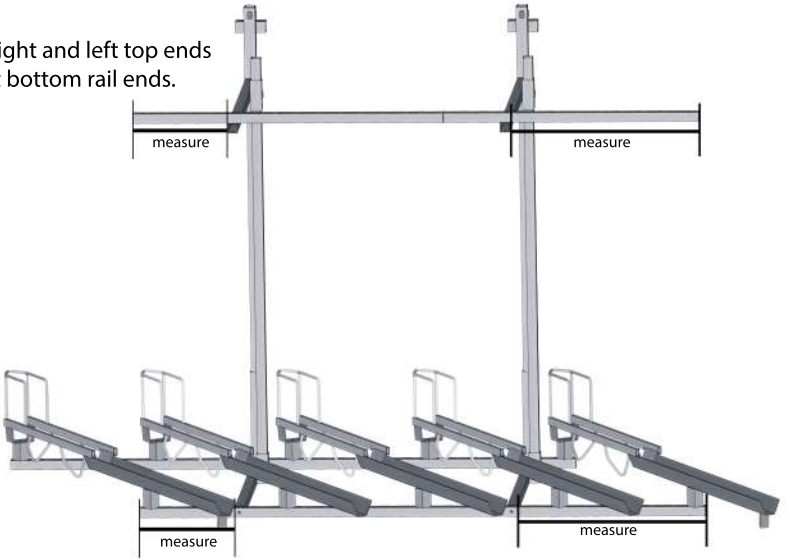
NOTES ON RAIL PLACEMENT FOR BOTH FRONT AND BACK TOP RAILS:

*letters of top rails should be on the bottom/facing the floor.

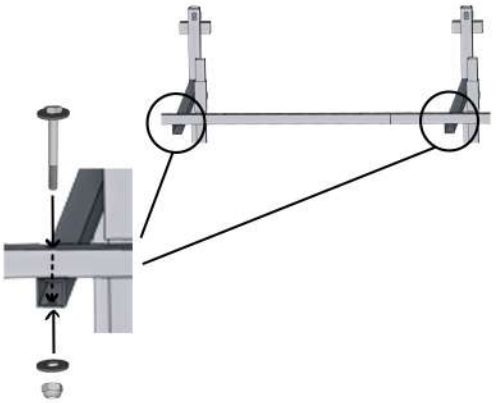
*the crimped half rail of each split rail assembly will face the way the rack is oriented--if rack is right angled, the crimped half rail will face right, and vice versa for a left angled rack.

Attaching the arms and top rails (contd. from pg. 10)

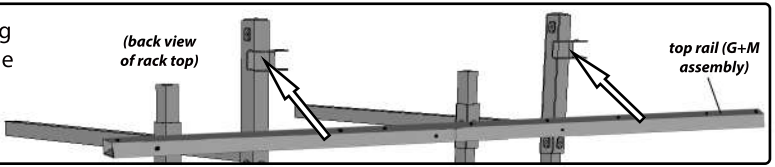
6h. Using a tape measure, make sure right and left top ends of rail are equal to the left and right bottom rail ends.



6i. After double checking that upper main arm and rail holes are aligned, secure top front rail to upper main arms with 5/16"x 3" bolts, 5/16" washers, and 5/16" stopnuts.

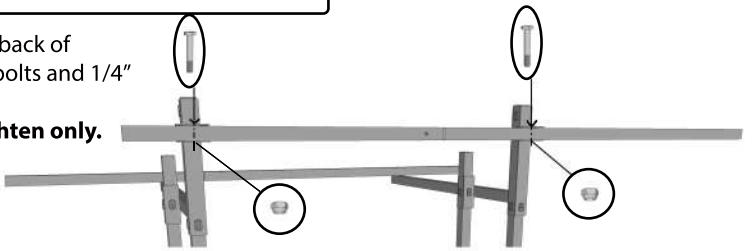


6j. From the *back side* of the rack, place remaining top rail (G+M assembly) into the C-channels on the back of the upper main arms. ***Follow notes on rail placement on page 10*** to ensure proper hole/angle alignment.



Attaching the arms and top rails (contd. from pg. 11)

6k. Fasten rear top rail to the back of upper main arms with 1/4"x 1 3/4" bolts and 1/4" stopnuts.
DO NOT over tighten--hand tighten only.



NOTE: the 1/4" x 1 3/4" bolts are inserted through the holes in the arm c-channels, in ***front*** of the rail, not ***through*** the rail.

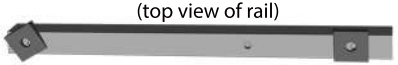
STEP 7: Aligning top rear rail/ attaching tray assemblies.

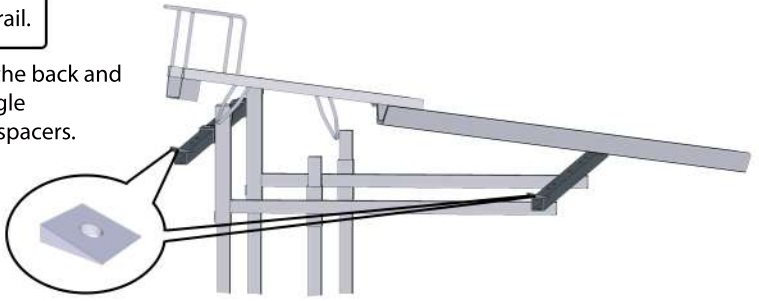
needed: tray assemblies, slides, 5/16" x 1/2" bolts, 5/16"x 2-1/2" bolts, 5/16" washers, 5/16" stopnuts, 1/2" socket and wrench, tape measure

7a. Repeat Step 6h (from pg 11) with top rear rail.

7b. Place slides on top of end holes of both the back and front rail. Angle slides to match angle of trays, as done in ***Step 4a (pg. 6)*** with spacers.

(top view of rail)



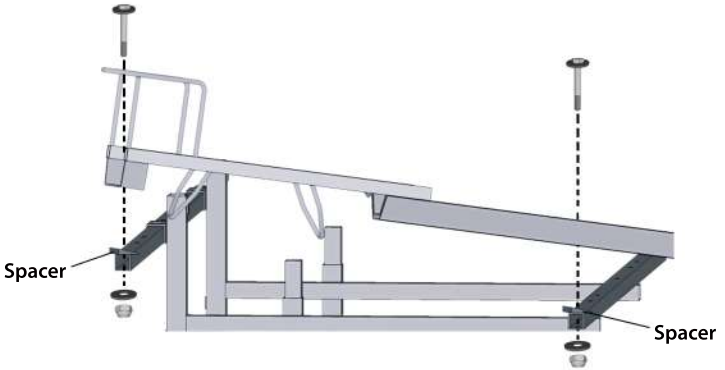


Aligning top rear rail/ attaching tray assemblies (contd. from pg.12)

7c. Place first tray assembly. Line up bolt holes on tray assembly with the corresponding holes on the top front and top rear rails. ***Be sure spacers are still placed properly (see pg 12) on top of the rails.***

7d. Fasten tray assembly to both top rails with 5/16" x 2-1/2" bolts (2 per tray), 5/16" washers (4 per tray), and 5/16" stopnuts (2 per tray).

7e. Repeat **Steps 7c-7d.** for all remaining tray assemblies.

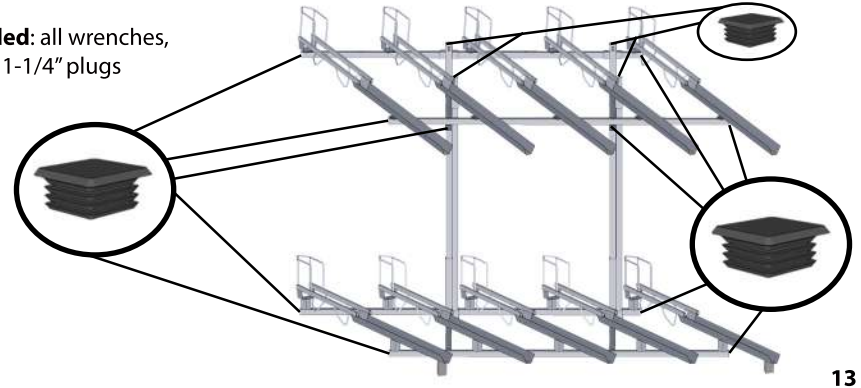


STEP 8: Finishing Touches.

needed: all wrenches, 1-1/4" plugs

8a. Go back through the assembled rack and tighten any loose bolts.

8b. Insert 1-1/4" plugs into all exposed ends of supports, rails, and arms.



Your rack is now complete!

BEFORE LOADING BIKES:

It is recommended that the rear derailleur is set on the middle cog and the front derailleur is set on the largest chain ring to prevent chain or derailleur damage.