

The Little Gracie

Home Machine Quilting System

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Assembly Steps:

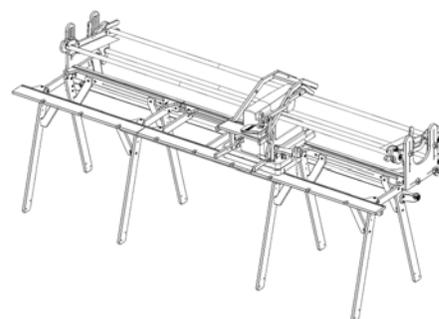
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- Method #1: Hemming Your Fabric
- Method #2: Cloth Leaders
- Placing the Top and Bottom Plates onto the Table
- Rolling your fabric
- The Four-Inch Principle
- Carriage Stop Assembly
- Turning Your Quilt Around
- Optional Fourth Pole Assembly
- Trouble Shooting Tips
- Sewing Machine Tips
- Available Accessories



Patent Pending

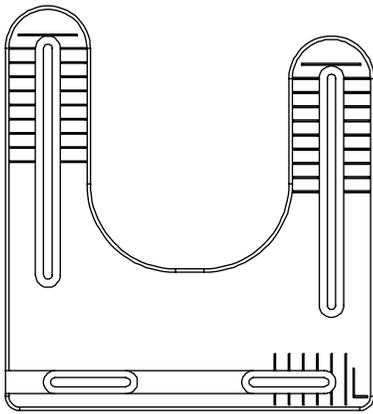
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Jim M. Bagley, GraceWood, Inc.

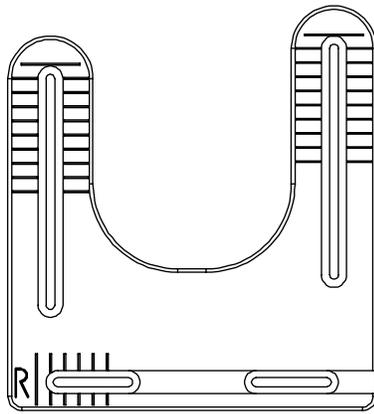
(Reproduction Prohibited)

Little Gracie Frame

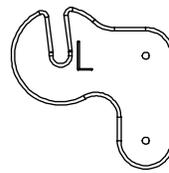
Parts List



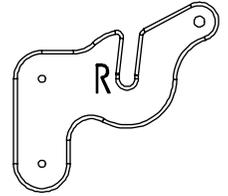
1-Left Frame End



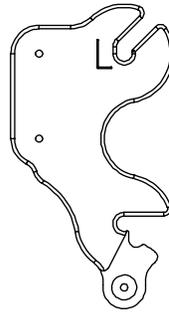
1-Right Frame End



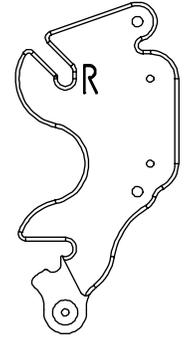
1-Left Front Pole Mount End



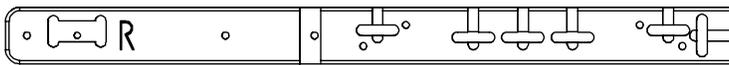
1-Right Front Pole Mount End



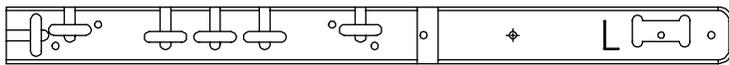
1-Left Back Pole Mount End



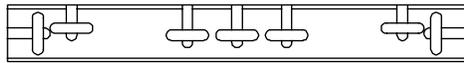
1-Right Back Pole Mount End



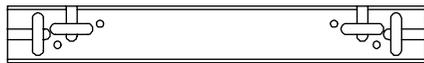
1-Right Brace Side Mount



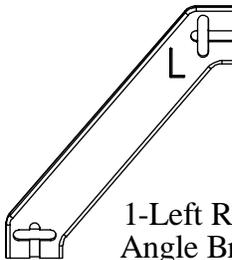
1-Left Brace Side Mount



3-Middle Cross Brace



2-Short Cross Brace



1-Left Rear Angle Brace



1-Left 3rd Rail Retainer



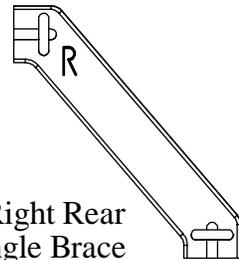
1-Right 3rd Rail Retainer



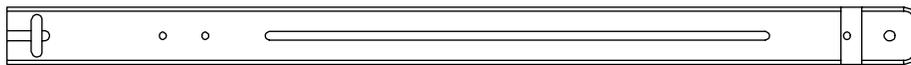
2-Carriage Stop Spacer



4-Carriage Stop Side



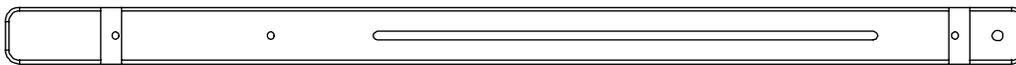
1-Right Rear Angle Brace



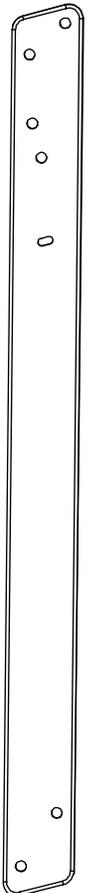
2-Short Brace



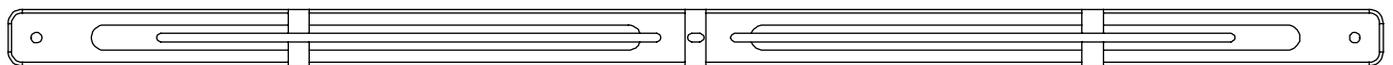
8-Leg Angle Brace



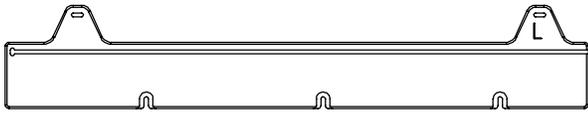
2-Long Brace



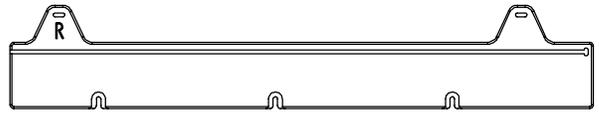
8-Leg



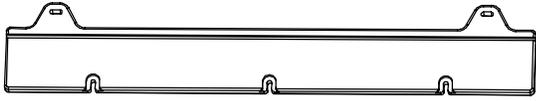
2-Middle Brace



1-Left Track Platform



1-Right Track Platform



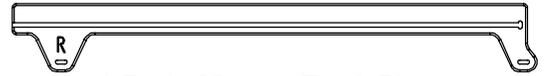
1-Middle Track Platform



1-Middle Narrow Track Platform



1-Left Narrow Track Platform



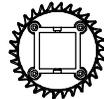
1-Right Narrow Track Platform



3-64" Rail



3-34" Rail



3-Ratchet Wheel



3-Ratchet Stop



3-Square End Cap



3-Round End Cap



6-End Cap Shoulder



1-107 7/8" Track



1-99 1/8" Track



1-73 7/8" Track

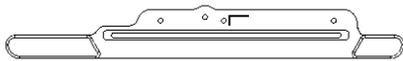


1-65 1/8" Track



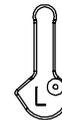
2-94" Fabric Retaining Tube

Edgemaster Parts List

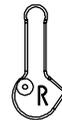


1-Left Edgemaster Base

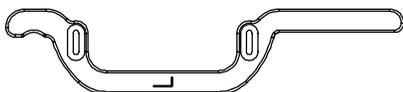
1-Right Edgemaster Base



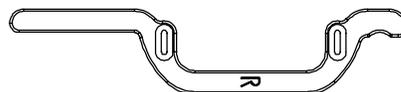
1-Left Cam



1-Right Cam



1-Left Clamping Bar



1-Right Clamping Bar



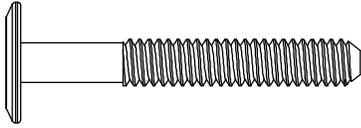
2-Edgemaster Sleeve



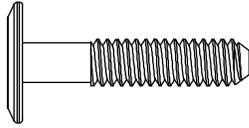
2-Edgemaster Dowel

Little Gracie Frame Hardware

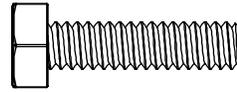
****Drawings display hardware in actual size****



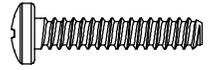
54-1/4" X 45mm
Connector Bolt



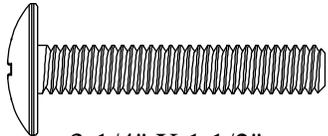
32-1/4" X 30mm
Connector Bolt



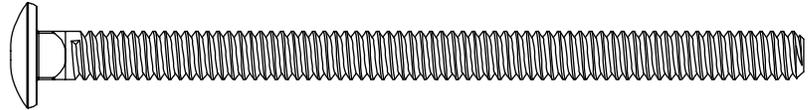
2-1/4" X 1"
Hex Bolt



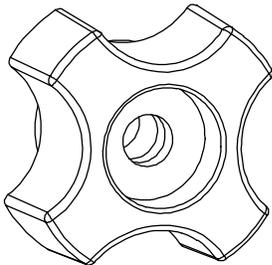
6-7/8" Screws



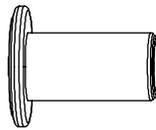
3-1/4" X 1 1/2"
Truss Bolt



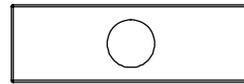
2-1/4 X 4"
Carriage Bolt



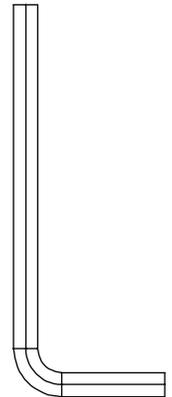
12-1/4" Plastic
Knob



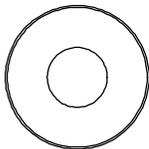
32-1/4" Cap
Nut



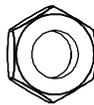
38-1/4" Rectangle
Nut



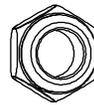
2-4mm Allen
Wrench



34-1/4" Flat
Washer

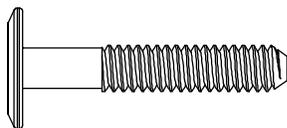


16-1/4" Jamb
Nut

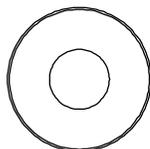


4-1/4" Nylock
Nut

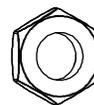
Edgemaster Hardware



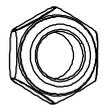
6-1/4" X 35mm
Connector Bolt



12-1/4" Flat
Washer

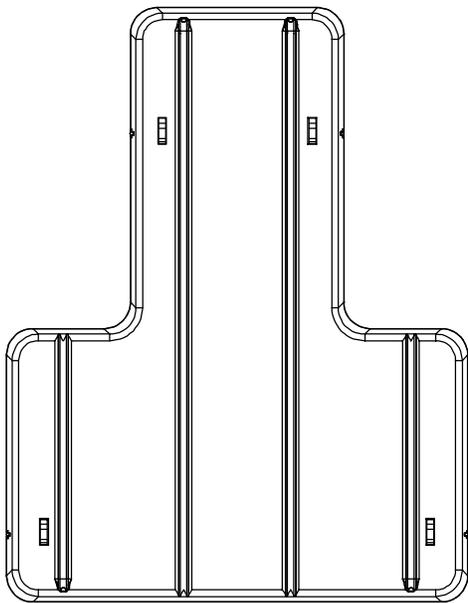


6-1/4" Jamb
Nut

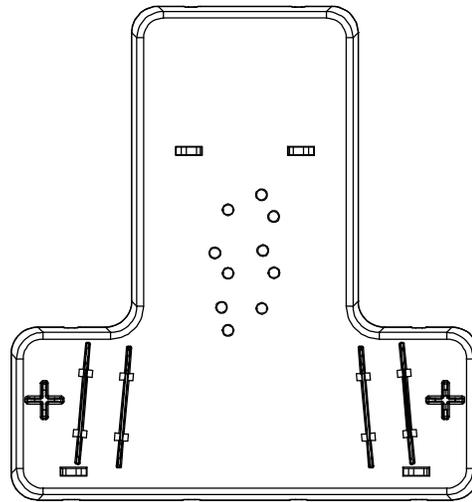


6-1/4" Nylock
Nut

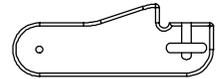
Carriage Assembly Parts List



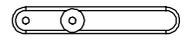
1-Bottom Plate



1-Top Plate



1-Stylus Arm



1-Lower Speed Control Lever



1-Lever Spacer



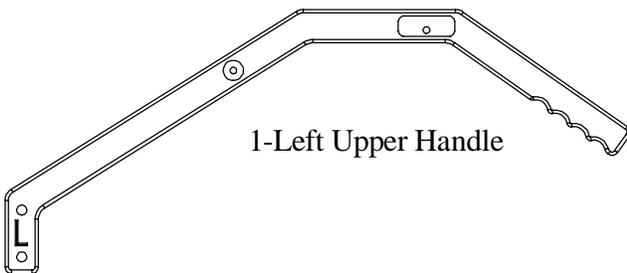
1-Stylus Clamp



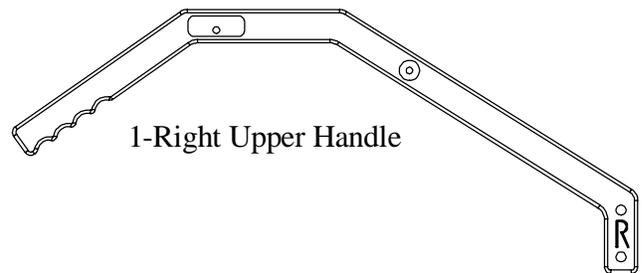
1-Left Lower Handle



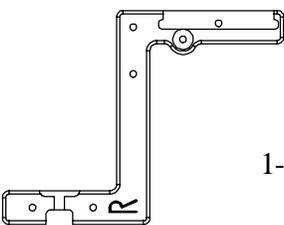
1-Right Lower Handle



1-Left Upper Handle



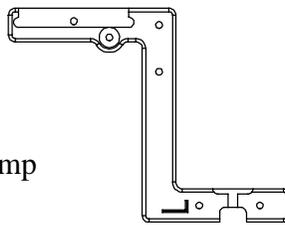
1-Right Upper Handle



1-Left Pedal Support



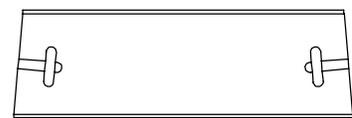
1-Pedal Clamp Wheel



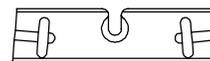
1-Right Pedal Support



1-Pedal Clamp



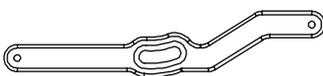
1-Pedal Platform



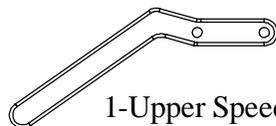
1-Upper Handle Brace



1-Stylus



1-Lower Lever Linkage



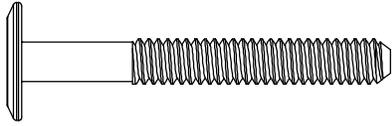
1-Upper Speed Control Lever



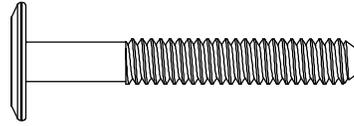
1-Upper Lever Linkage

Carriage Assembly Hardware

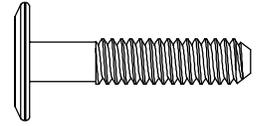
****Drawings display hardware in actual size****



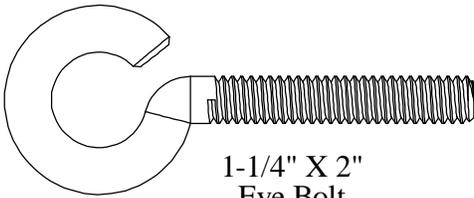
5-1/4" X 50mm
Connector Bolt



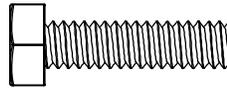
14-1/4" X 45mm
Connector Bolt



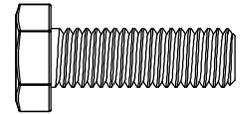
4-1/4" X 30mm
Connector Bolt



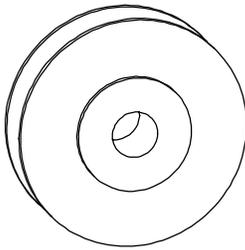
1-1/4" X 2"
Eye Bolt



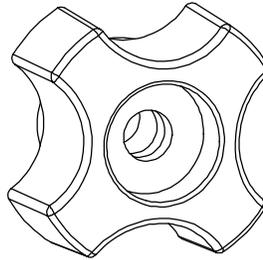
8-1/4" X 1"
Hex Bolt



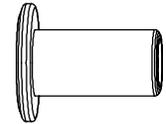
1-8mm X 25mm
Hex Bolt



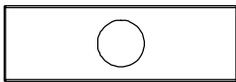
8-Wheel



3-1/4" Plastic
Knob



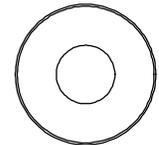
6-1/4" Cap
Nut



6-1/4" Rectangle
Nut



19-1/4" Nylock
Nut



23-1/4" Flat
Washer

CARE OF YOUR LITTLE GRACIE

Your Little Gracie frame is a machine quilting system that can be used finished or unfinished. Most use it unfinished with no problem, and doing so does not adversely affect warranty coverage. However, for extra protection, or to give it a finished look, you may seal, stain and/or finish the frame using a number of different applications. This is best done BEFORE YOU ASSEMBLE your frame.

To seal the wood, we recommend an application of tung oil or Danish Oil finish that will help preserve the wood and will help to prevent warping. We recommend the McCloskey's Tung Seal, Deft™ or Watco™ brands. Some prefer to use a urethane coat to add a more glossy finish.

Test stain on an inconspicuous place. Many different finishes and/or stains may be suitable for sealing and beautifying your frame. You may want to consult your local paint retailer for finishes that are easy to apply and dry hard—not oily.

Use and Storage Tip

--Store frame in a dry place. If not assembled, store with braces in vertical position. (This will prevent floor moisture from seeping into the parts).

Five-Year Limited Warranty

GraceWood, Inc. will replace or repair, at our choosing, any part of the Little Gracie Machine Quilting System, which may be shown to be defective. This warranty does not cover parts damaged through misuse, improper storage, improper assembly, loss, natural events and willful or accidental destruction. Defective parts may be returned only with a valid RMA# which may be obtained by calling **GraceWood, Inc. at 1-800-264-0644.**

NOTE: Warranty card must be filled out, stamped and mailed to the address on the card within 30 days of purchase.

Contact Information

For Technical Support or any other correspondence concerning your Little Gracie, call 1-800-264-0644 ~ OR ~ E-mail: robin@graceframe.com ~ OR ~ Fax: (801) 908-8888 ~

OR ~ Write to:

The Grace Company

P.O. Box 27823

Salt Lake City, UT 84127

For details on accessories and other information, see us online at www.graceframe.com

For shipping of materials to The Grace Company address package (postage prepaid) to: The Grace Company, 2225 South 3200 West, SLC, UT 84119. Materials may be returned only with a valid RMA# or Returned Merchandise Authorization Number which may be obtained by calling GraceWood, Inc. at **1-800-264-0644.**

If you call after business hours (M-F 8:00 a.m. – 5 p.m., MST) be assured that your call will be returned the next business day if you leave a message. Please report any errors in these instructions or make comments to the following: jaren@graceframe.com

Grace Quilting Frames and Hoops: Innovation and Evolution

Grace Quilting Systems have been developed over the past two decades with several original design innovations. Additionally, because of feedback from many of the thousands of quilters who have purchased and use our machine quilting systems, we have been able to make a frame that will truly enhance the entire process of machine quilting from beginning to end. If you have any suggestions that will help us to improve our product or service, let us know, using one of the above contact methods.

WELCOME!



As you begin assembly of your new Little Gracie home machine quilting system, keep in the mind the following:

- 1) Plan to spend a minimum of 3-4 hours in assembly. This process will be simple and step-by-step.
- 2) Read through each step completely before beginning that step.
- 3) Using the parts list as a reference, take the parts out of both boxes and make sure that you have them all. (If there is something missing or broken, contact the Grace Company 1-800-264-0644. Our offices are open from 8:00 am-5:00 pm MST Mon.-Fri. If calling after hours, you may leave your message and we will promptly ship any item needed).
- 4) For your convenience, an “L” and “R” have been etched into the INSIDES of most pieces to help you distinguish between left and right parts and inside and outside of parts.
- 5) Packaging Note: The dowels are packaged inside the aluminum rails.
- 6) Identify Hardware Packets: Frame Hardware Packet (F), Carriage Assembly Hardware Packet (CA). For ease in identifying bolts, keep the “CA” packet sealed until you work on the Carriage Sub-Assemblies.
- 7) This is a new product! We welcome your feedback on this product or these instructions. If you encounter a problem during assembly or use of the Little Gracie, and you can’t seem to overcome it, call us before frustration sets in!

Tools Needed:

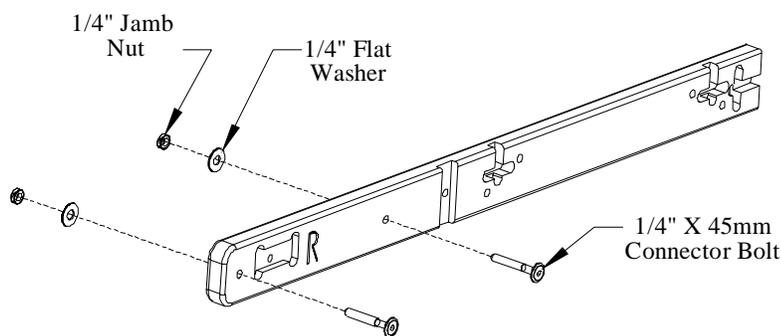
- 7/16” Socket Wrench
- Adjustable wrench
- Phillips Screw Driver
- Allen wrench (provided)

Step 1: Brace Mount Side Assembly

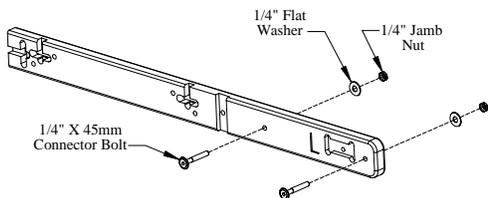
Parts Needed: 1 – Right and Left Brace Mount

- 4 – 45mm Connector Bolt
- 4 – 1/4” Flat Washer
- 4 – 1/4” Jamb Nut

- Open the hardware packet labeled “F” and empty the contents for use in this first half of assembly
- Thread two 45mm connector bolts through the two holes of the Right Brace Mount as pictured, starting from the INSIDE of the brace.
- Place a 1/4” flat washer and 1/4” jamb nut onto the end of each bolt. Using a 7/16” wrench,



Right Brace Mount Side Assembly
Inside View



Left Brace Mount Side Assembly
Inside View

TIGHTEN THE JAMB NUTS COMPLETELY ONTO EACH BOLT.

- Repeat these steps for the Left Side.
- These bolts will be connected to in a later step.

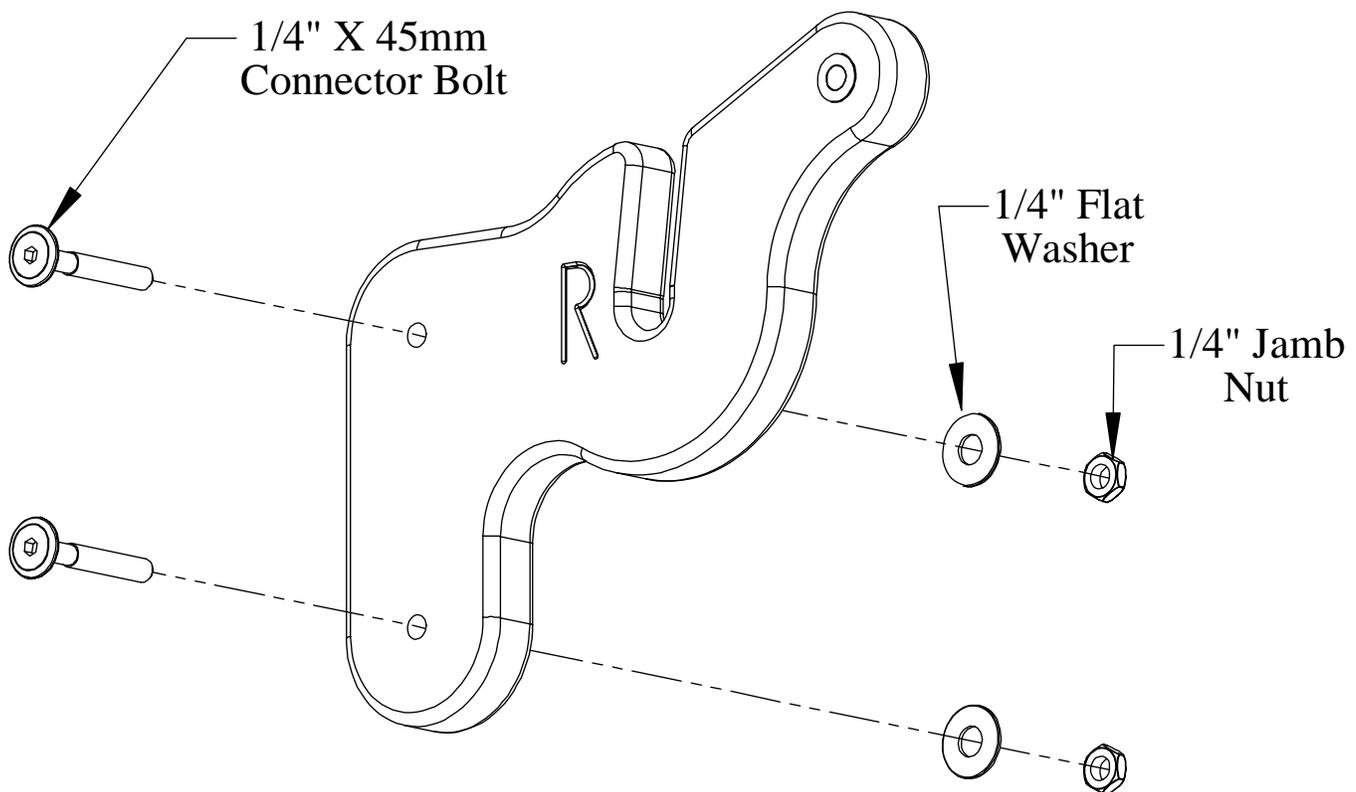
Step 2: Front Pole Mount End Assembly

Parts Needed: 1 – Right and Left Front Pole Mount Ends

4 – 1/4" x 45mm Connect Bolt

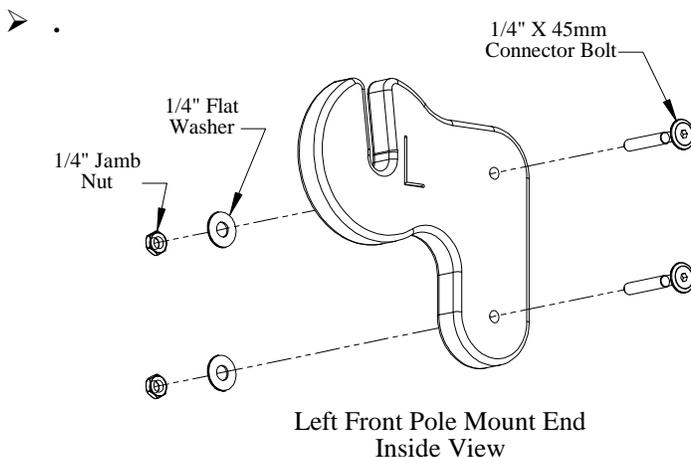
4 – 1/4" Flat Washer

4 – 1/4" Jamb Nut



Right Front Pole Mount End Inside View

- Thread two 45mm connector bolts through the two holes of the Right Front Pole Mount End as pictured, starting from the **INSIDE** of the part.
- Place a 1/4" flat washer and 1/4" jamb nut onto the end of each bolt.



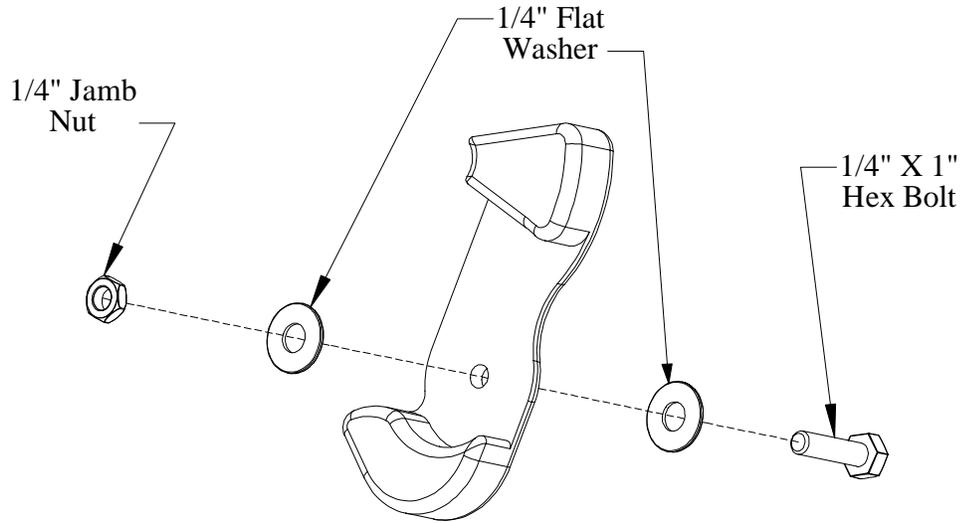
- Using a 7/16" wrench, **TIGHTEN THE JAMB NUTS COMPLETELY ONTO EACH BOLT** (you will need to steady the 45 mm connector bolts with an allen wrench while you tighten).
- Repeat these steps for the Left Side.

Step 3: Rail Retainer Assembly

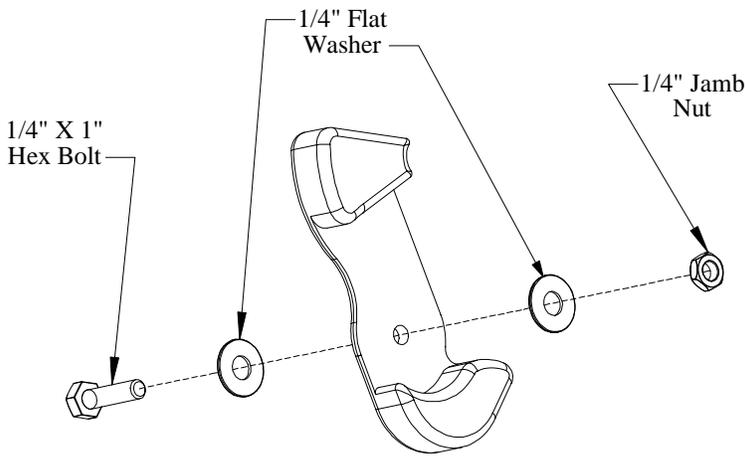
Parts Needed: 1 – Right and Left 3rd Rail Retainer
2 – 1/4" x 1" Hex Bolt

- 4 – 1/4" Flat Washer
- 2 – 1/4" Jamb Nut

- First, place a 1/4" flat washer onto a 1/4" x 1" hex head bolt.
- Next, place the hex head bolt through the hole of the Right 3rd Rail Retainer, starting from the OUTSIDE of the part, as pictured.
- Put another 1/4" flat washer onto the end of the bolt.

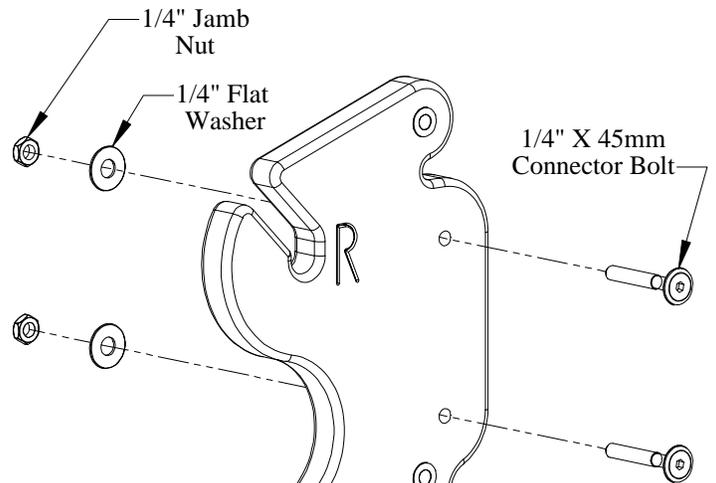


Right 3rd Rail Retainer
Inside View



Left 3rd Rail Retainer
Inside View

- Thread a 1/4" jamb nut onto the hex bolt and COMPLETELY TIGHTEN using a 7/16" wrench on both the nut and the bolt head.
- Repeat these steps for the left side.

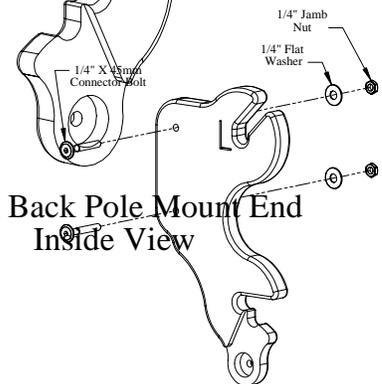


Right Back Pole Mount End
Inside View

Step 4: Back Pole Mount Assembly

- Parts Needed: 1 – Right and Left Back Pole Mount End
 4 – 1/4" x 45mm Connector Bolt
 4 – 1/4" Flat Washer
 4 – 1/4" Jamb Nut

- Place two 45mm connector bolts throught the two holes, as pictured, from the *inside* of the part.



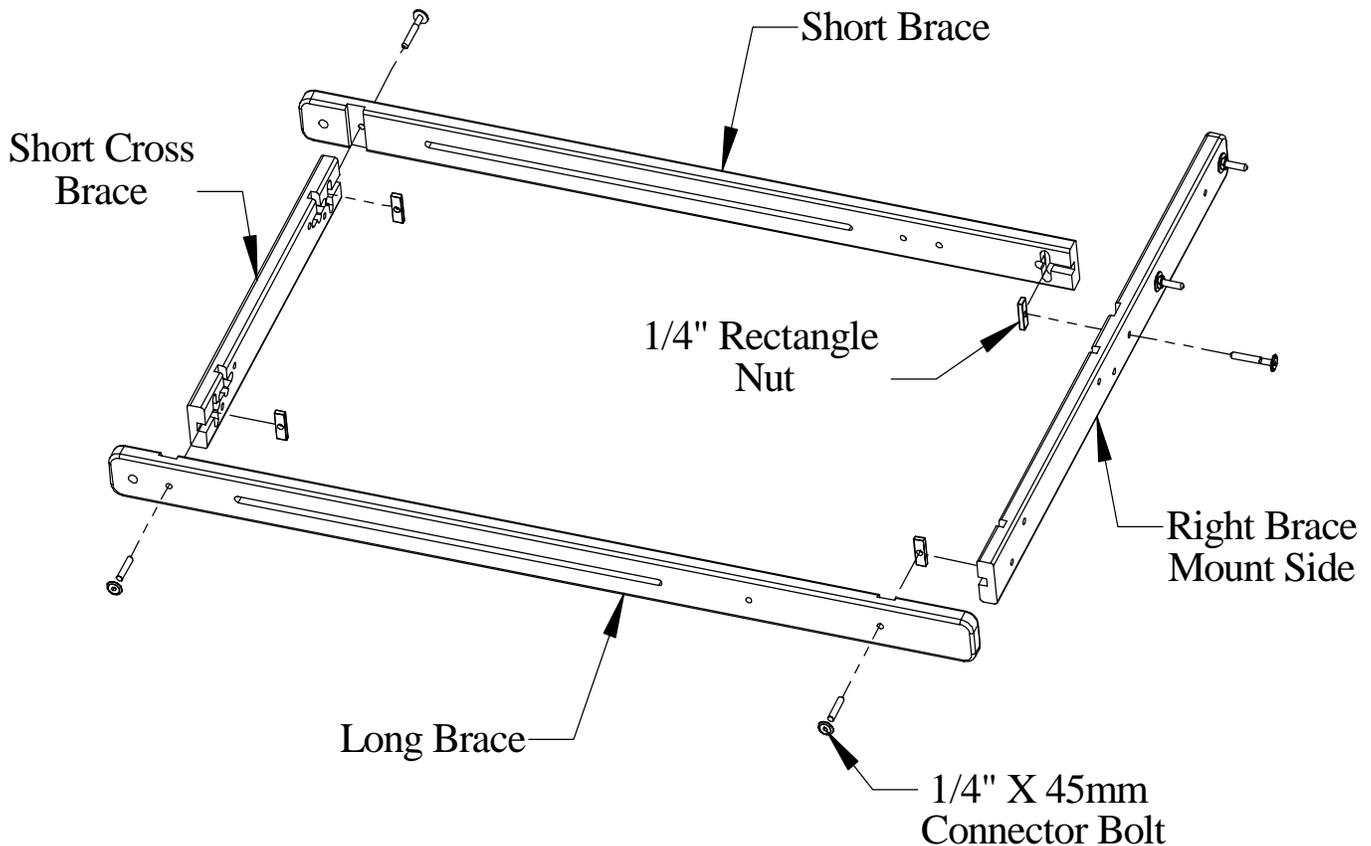
Left Back Pole Mount End
Inside View

- Place one 1/4" flat washer on each bolt.
- Thread a 1/4" jamb nut onto the end of each bolt and tight completely.
- Repeat these steps for the Left Side (see right).

Step 5: Right Brace Mount Assembly

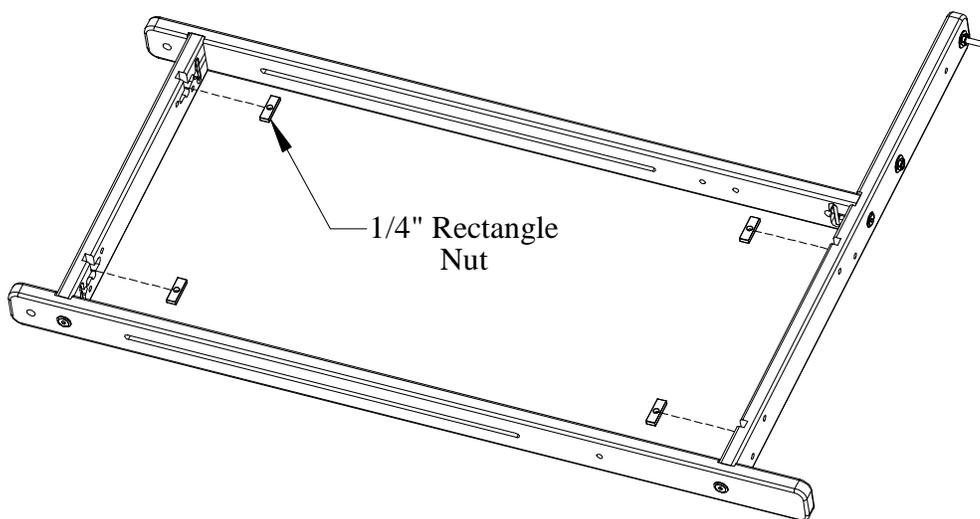
- Parts Needed:
- 1 – Short Brace
 - 1 – Short Cross Brace
 - 1 – Long Brace
 - 1 – Right Brace Mount Side
 - 4 – 1/4" x 45mm Connector Bolt
 - 8 – 1/4" Rectangle Nut

- Next, you will connect the Right Brace Mount Assembly, using 45 mm connector bolts and rectangle nuts.
- Locate the Short Brace and Long Brace and place them opposite each other, with "t" slots facing inside.
- Locate the Right Brace Mount and Short Cross Brace and place them opposite each other, with slots facing inside, as pictured.
- Connect the braces together by threading 45mm connector bolts through the holes of the brace and into the rectangle nuts. (Hold the rectangle nuts in place, while using the provided allen wrench to tighten these bolts).



- Place rectangle nuts vertically in the "t" slots, as illustrated below.

- With this assembly completed, place 1/4" rectangle nuts in the horizontal slots—two in the Short Cross Brace, and two in the Right Brace Mount as pictured. (These need to be in place before you fasten the legs in the next step).



Step 6: Right Brace to

Leg Assembly

Parts Needed: 4 -- Legs

8 – 1/4" x 30 mm Connector Bolt

8 – 1/4" Cap Nut

- Next, position two legs inside the Short Cross Brace, lining the two holes at the top of the legs, with the holes in the Cross Brace. (NOTE: Be sure the legs are right side up—there are five holes near the top end of each leg).

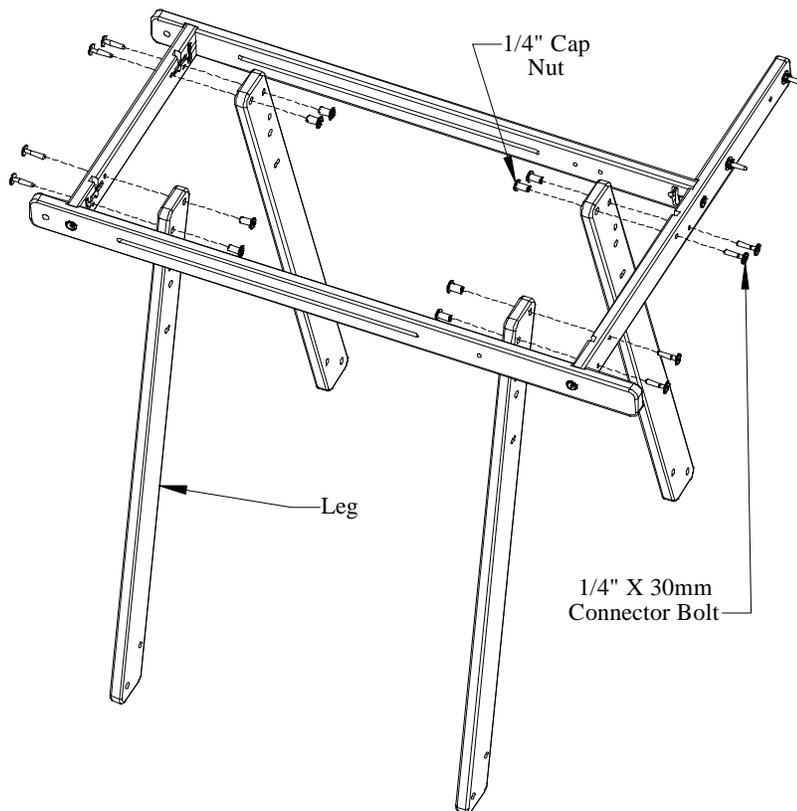
- **NOTE! Before connecting the legs, make sure the rectangle nuts are in the horizontal slots discussed at the end of the last step.**

- Connect these legs to the Cross Brace by placing 1/4" cap nuts through the two leg holes and two 30mm connector bolts through the holes of the Cross Brace.

- Place an allen wrench in the heads of both the cap nut and bolt to tighten. Do this for all four bolts.

- Repeat this procedure for the other two legs on the Right Brace Mount.

- Set aside this assembly. You will now repeat Steps 5 and 6 for the Left Side.



Step 7: Left Brace Side Mount Assembly

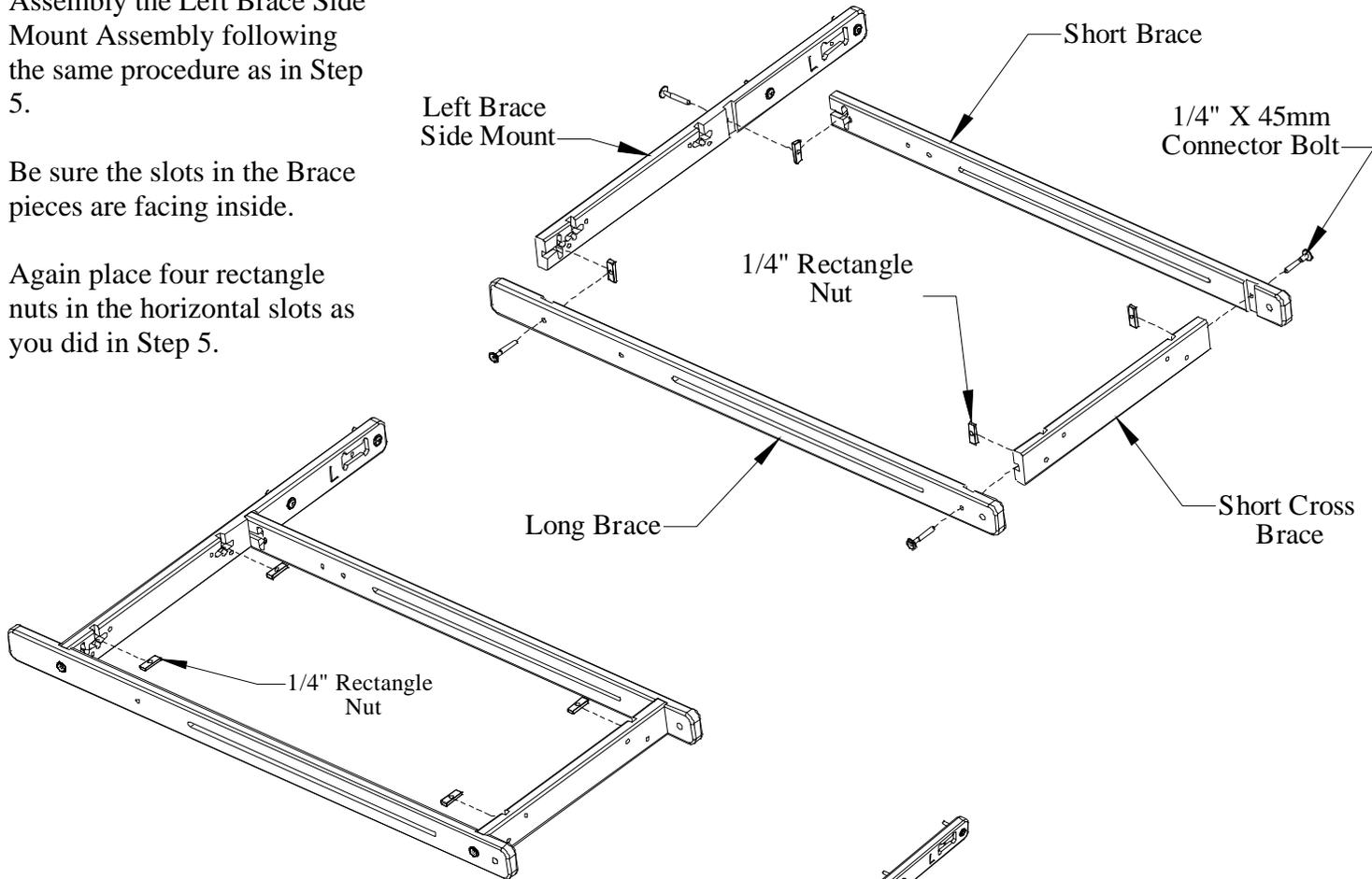
Parts Needed: 1 – Left Brace Side Mount

- 1 – Short Brace
- 1 – Long Brace
- 1 – Short Cross Brace
- 4 – 1/4" x 45mm Connector Bolt
- 8 – 1/4" Rectangle Nut

➤ Assembly the Left Brace Side Mount Assembly following the same procedure as in Step 5.

➤ Be sure the slots in the Brace pieces are facing inside.

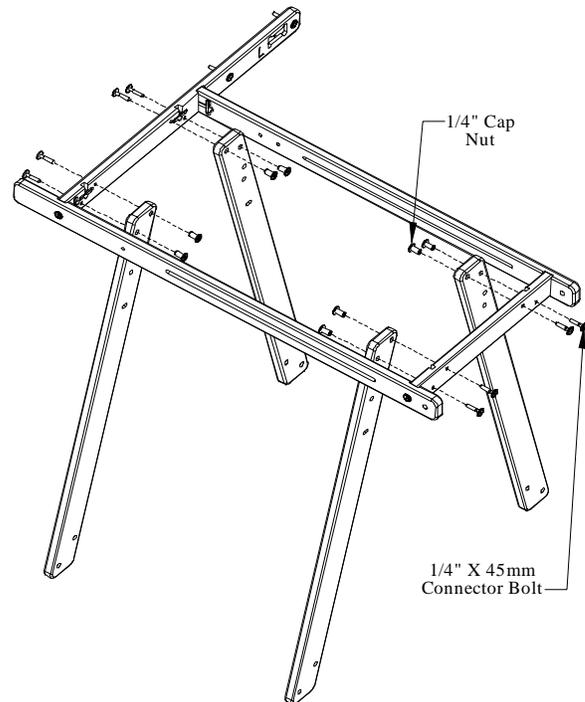
➤ Again place four rectangle nuts in the horizontal slots as you did in Step 5.



Step 8: Left Brace to Leg Assembly

- Parts Needed: 4 – Legs
 8 – 1/4" x 45mm Connector Bolt
 8 – 1/4" Cap Nut

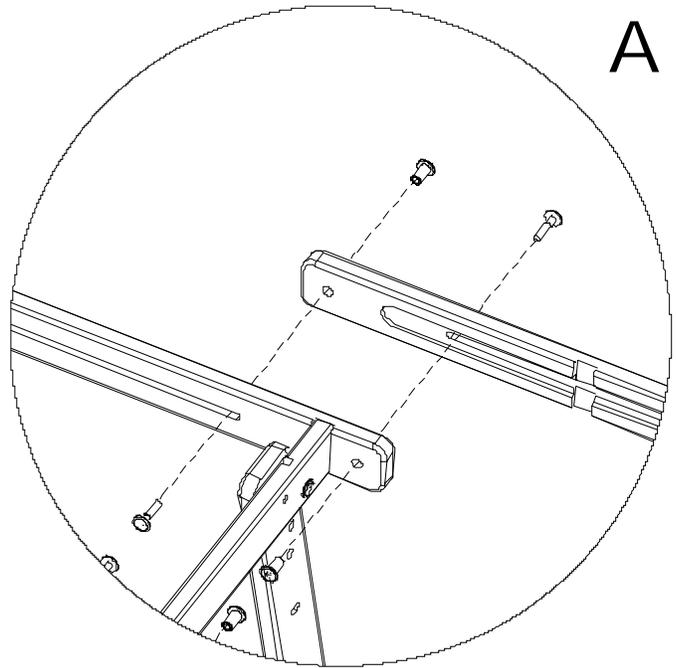
➤ Now follow the same procedures as in Step 6 to connect the Left Brace Assembly to the four legs, **being sure the four rectangle nuts are in place before you connect the legs.**



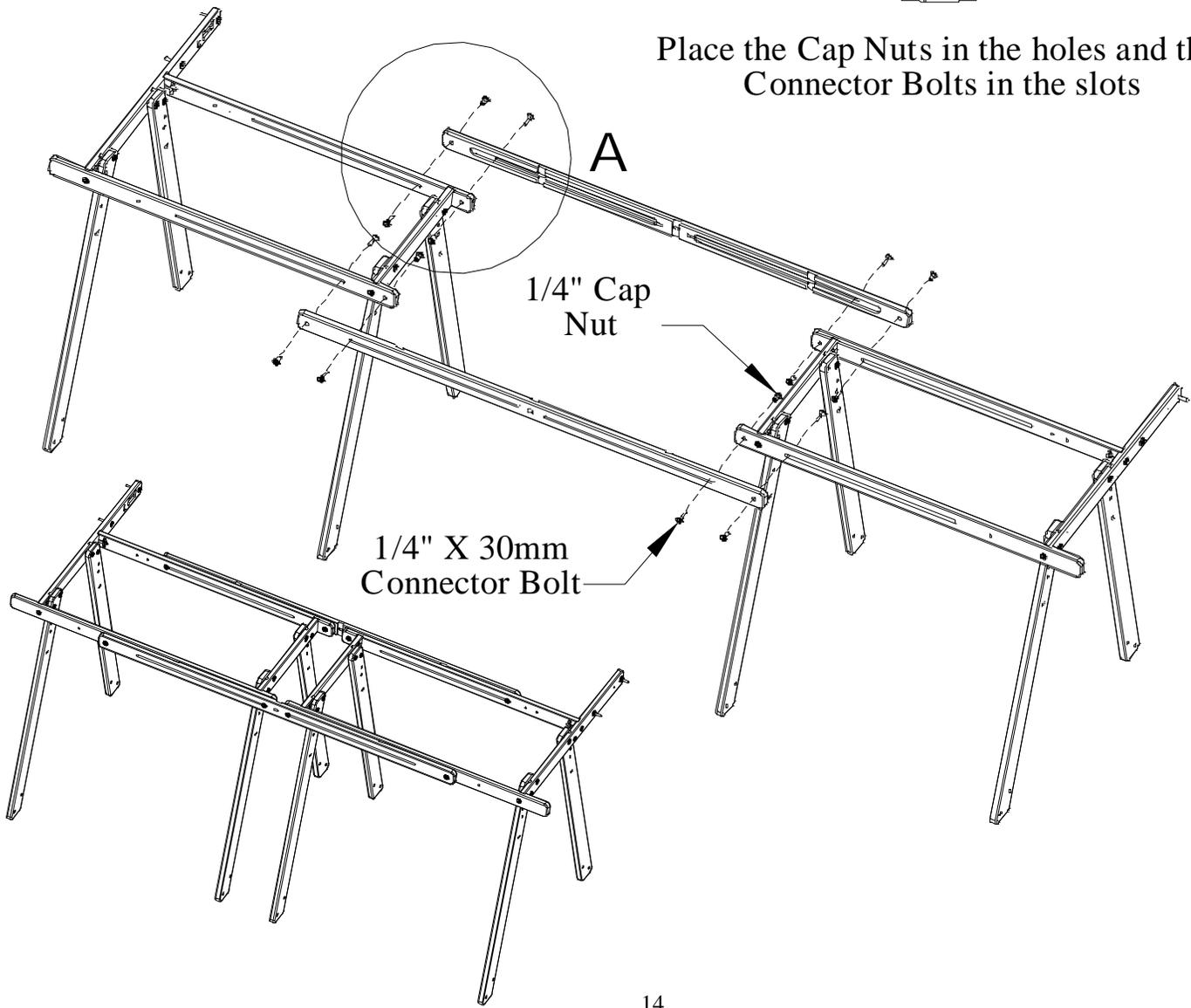
Step 9: Attaching the Right and Left Brace Assembly

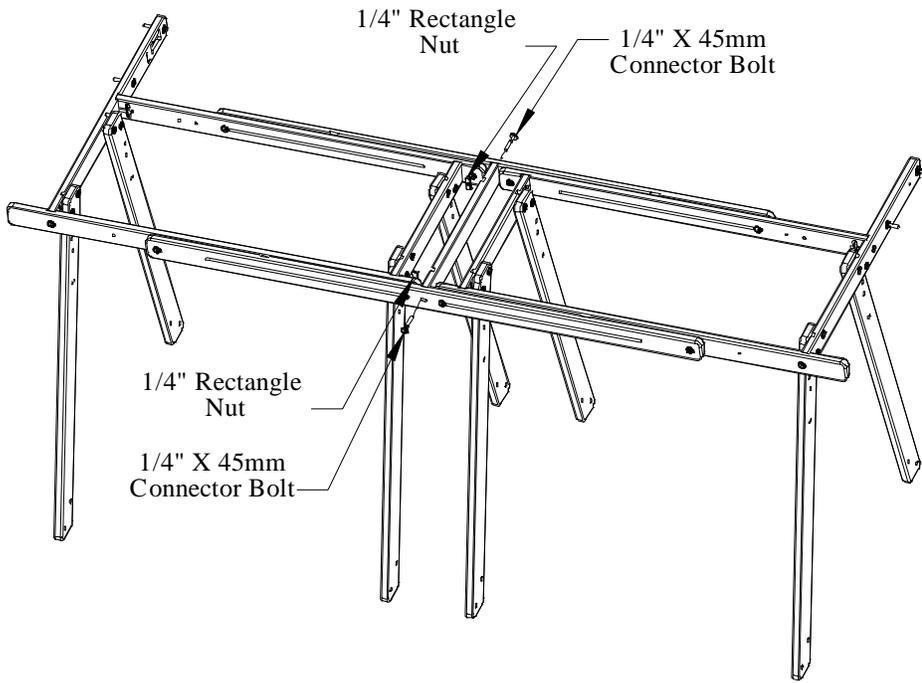
- Parts Needed: 2 – Middle Brace
 1 or 3* – Middle Cross Brace
 4 – 1/4" x 30mm Connector Bolt
 4 – 1/4" Cap Nut
 2 or 6* – 45 mm Connector Bolt
 2 or 6* – Rectangle Nut
 *For queen size assembly

- Next, you will connect the left and right leg assemblies using the Middle Braces.
- Place the 1/4" cap nuts in the *holes* located at the ends of the middle brace and long brace.
- Put 30mm connector bolts through the *slots* of the long and middle braces and into the cap nuts. **Do not completely tighten at this time.**



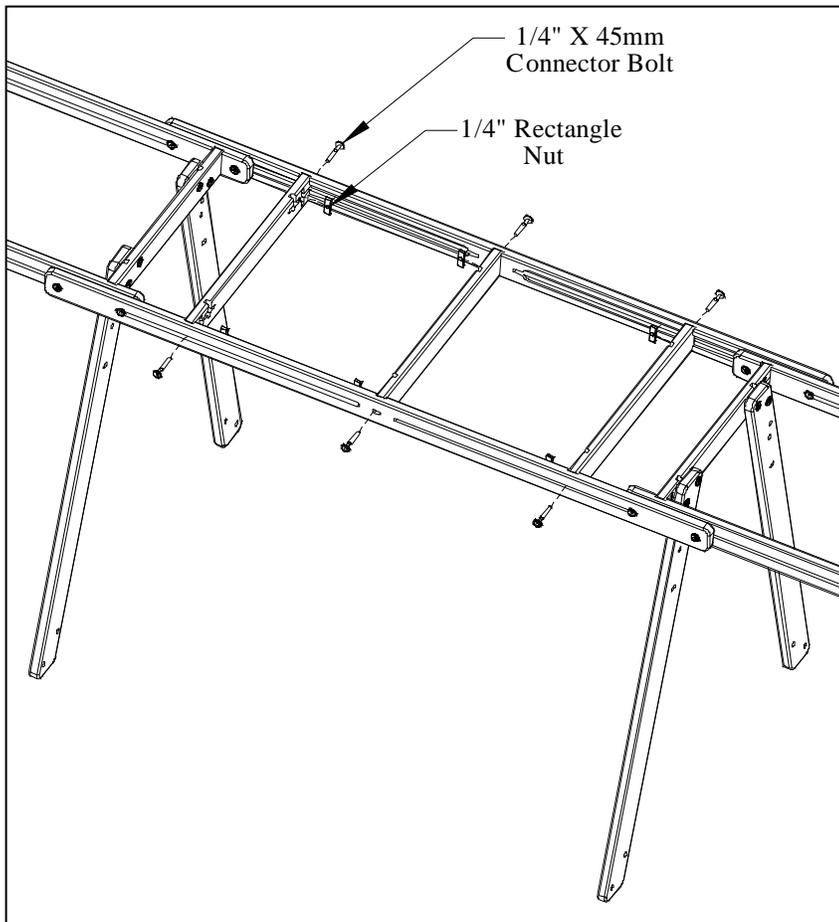
Place the Cap Nuts in the holes and the Connector Bolts in the slots





- Next, place one Middle Cross Brace as pictured (left) in between to the two Short Cross Braces and connect it to the front and back Middle Braces.
- This is done by placing rectangle nuts in the slots of the Cross Brace and threading 45mm connector bolts through the Cross Brace holes and into the rectangle nuts.
- If you are setting up the crib size frame, this step is now complete.

MAKING THE QUEEN SIZE



- To complete your queen size set-up, pull your frame ends out so the middle braces extend their furthest.
- Place connect all three Middle Cross Braces, as pictured (see right).
- Connect them to the front and back Middle Braces by placing rectangle nuts in the slots of the Middle Cross Braces and threading 45 mm connector bolts through the Middle Brace slots and into the rectangle nuts.

Step 10: Leg Angle Brace Assembly

Parts Needed: 8 – Leg Angle Braces

8 – 1/4" Cap Nuts

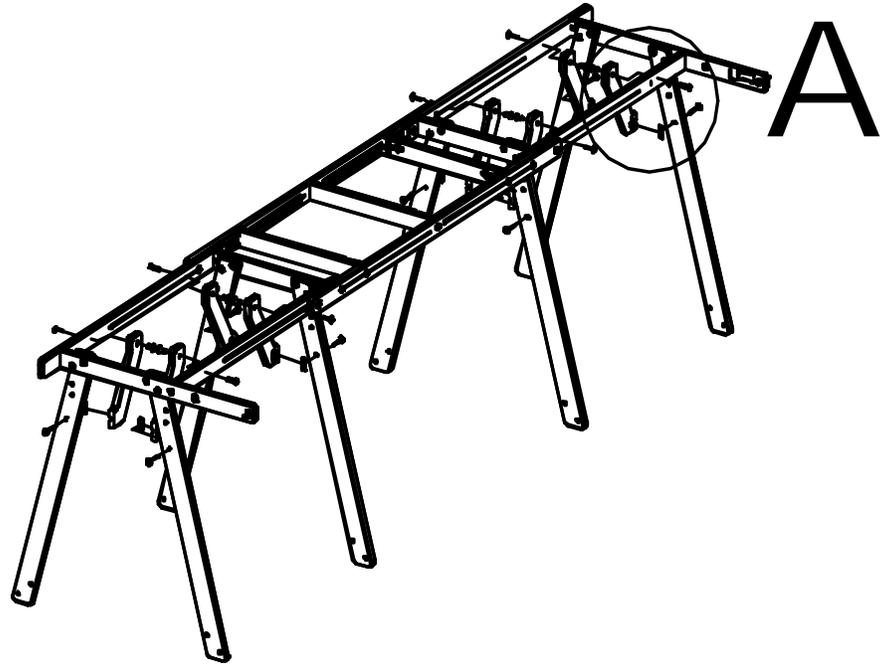
12 or 8* – 1/4" x 45mm Connector Bolts

4 or 8* – 1/4" x 30mm Connector Bolts

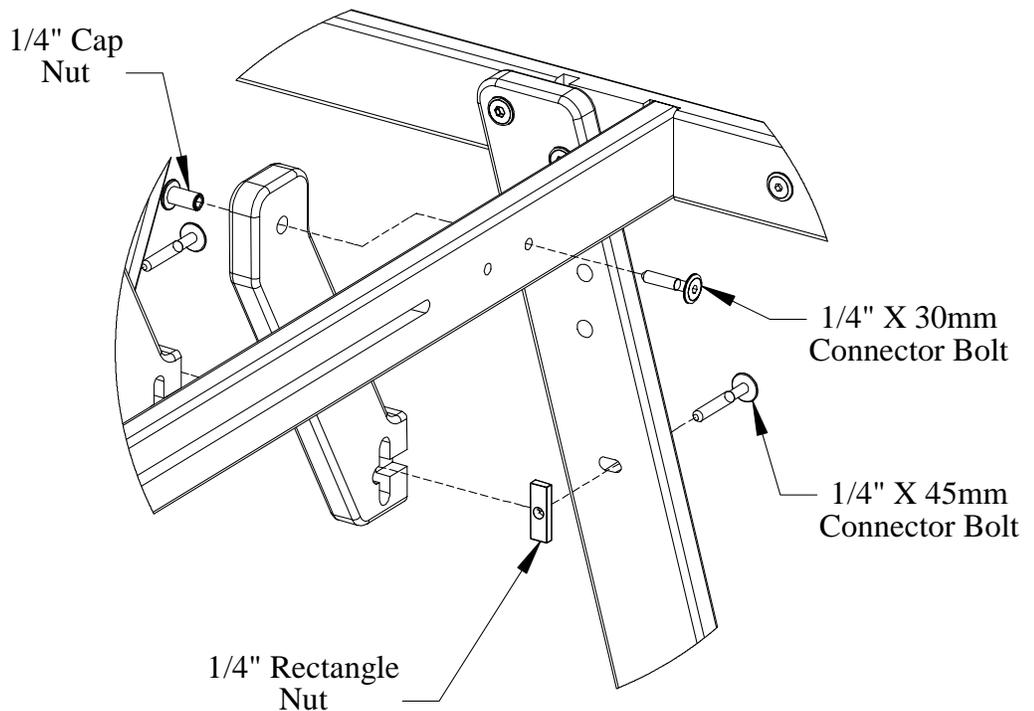
8 – 1/4" Rectangle Nuts

**Queen Size Assembly*

- In this step, you will connect a Leg Angle Brace to each Leg in the assembly. (Note: Slotted end of Leg Angle Brace is down, toward Leg).
- First connect the Leg Angle Brace to each Leg using a 45 mm connector bolt and rectangle nut. (see closeup below).
- Tighten the connector bolt using the Allen wrench.
- Next, connect the other end of the Leg Angle Brace to the Brace by placing a 30 mm connector bolt through the Brace hole and into the hole in the Leg Angle Brace.

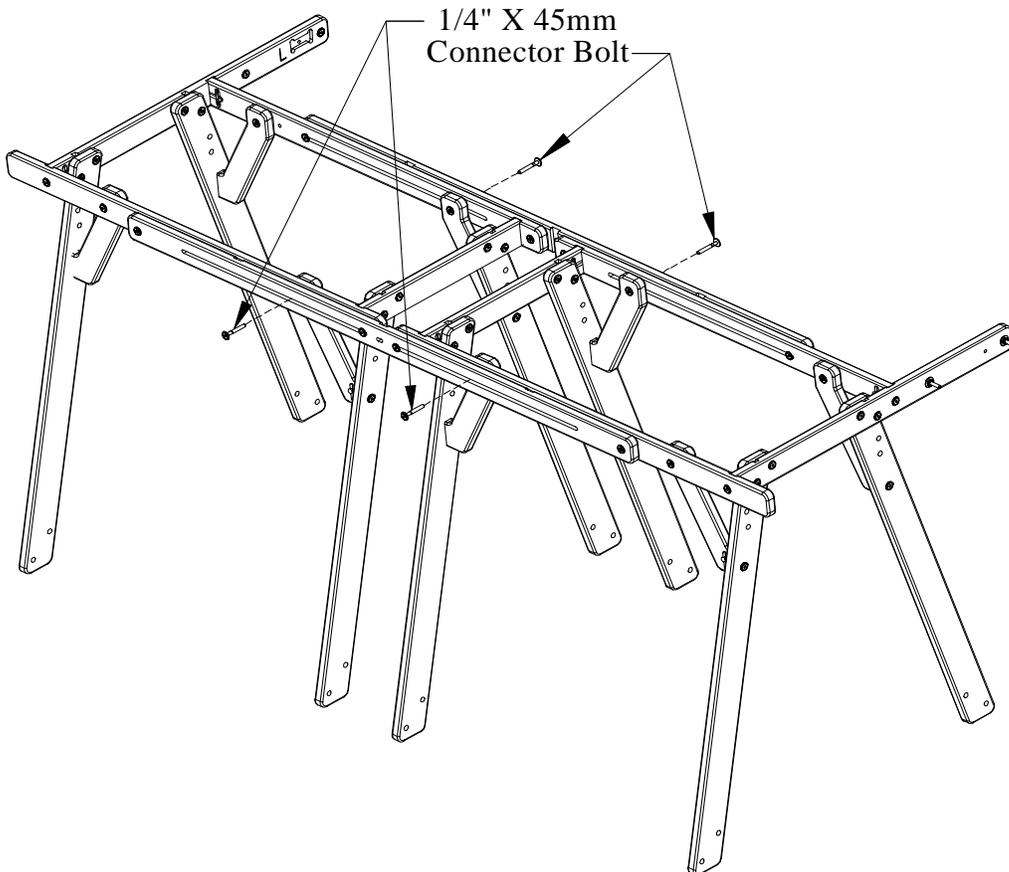
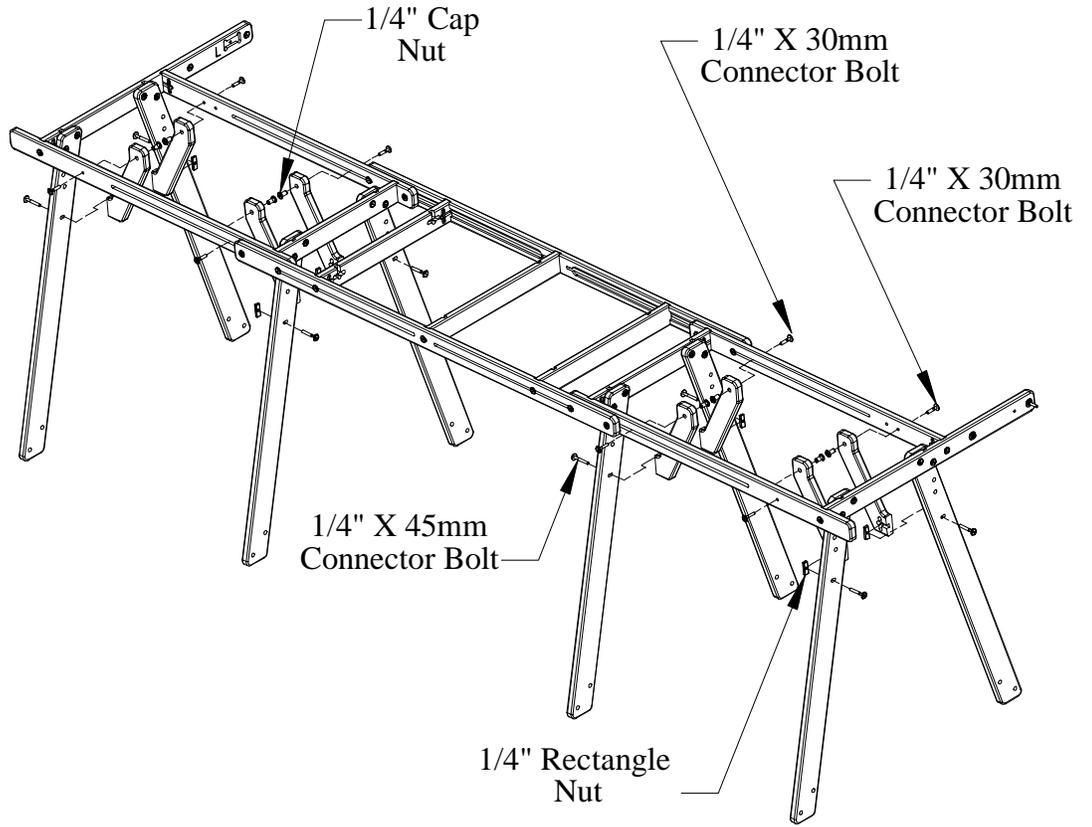


- Then, place a cap nut through the other side of the Leg Angle Brace hole and thread it onto the connector bolt. Use both Allen wrenches to tighten these completely.
- If setting up the queen size, repeat this procedure for all remaining Leg Angle Braces.



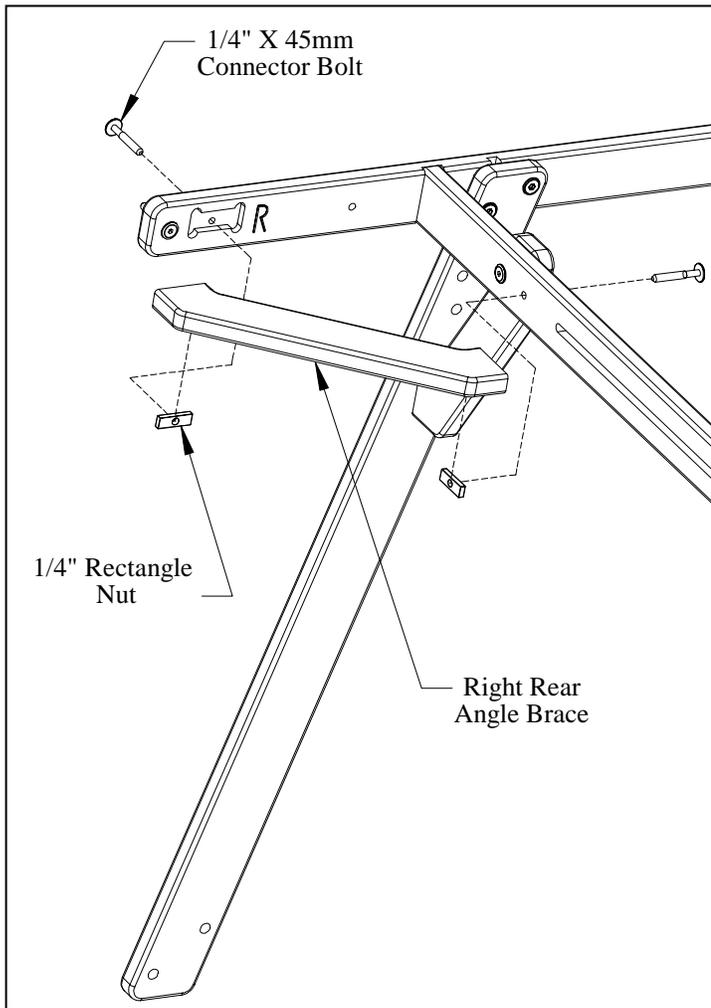
**Leg Angle Brace
Assembly Close Up**

➤ This illustration (right) shows the queen size set-up. Detail for the crib size assembly is below.



➤ If you are setting up your frame in the Crib Size, the Leg Angle Braces connected to the outside legs are assembled as stated above.

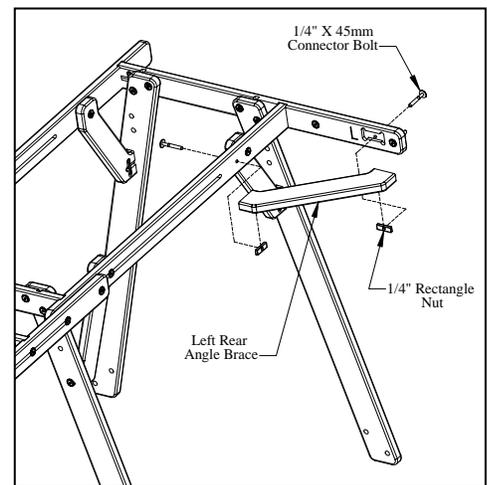
➤ However, the Leg Angle Brace connecting to the inside Legs are different: they connect to the Braces using 45 mm connector bolts and cap nuts, instead of 30 mm bolts (see left).



Step 11: Rear Angled Brace Assembly

Parts Needed: 1 – Left and Right Rear Angle Brace
 4 – 1/4" x 45mm Connector Bolts
 4 – 1/4" Rectangle Nuts

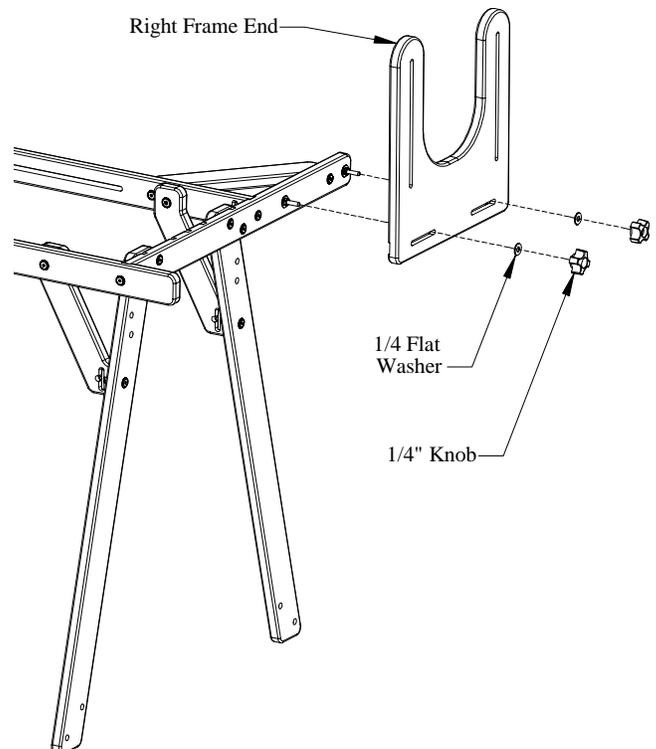
- Next, connect the Left and Right Rear Angle Braces to your assembly using 45 mm connector bolts and rectangle nuts on each end of the Braces.
- Note! Be sure and use the part marked "R" for the right side and "L" for the left side (letter facing down, as pictured)



Step 12: Left and Right Frame End Assembly

Parts Needed: 1 – Left and Right Frame End
 4 – 1/4" Flat Washer
 4 – 1/4" Black Plastic Knob

- Connect the Right Frame End (with the "R" facing inside) to the Right Side Mount by placing the horizontal slots at the bottom of the mount to the bolts on the Mount.
- Place a 1/4" flat washer onto the ends of each bolt, once they are through the slots.
- Next, thread a 1/4" plastic knob onto the end of each bolt and hand tighten.
- Repeat this procedure for the Left Frame End and Left Side Mount.



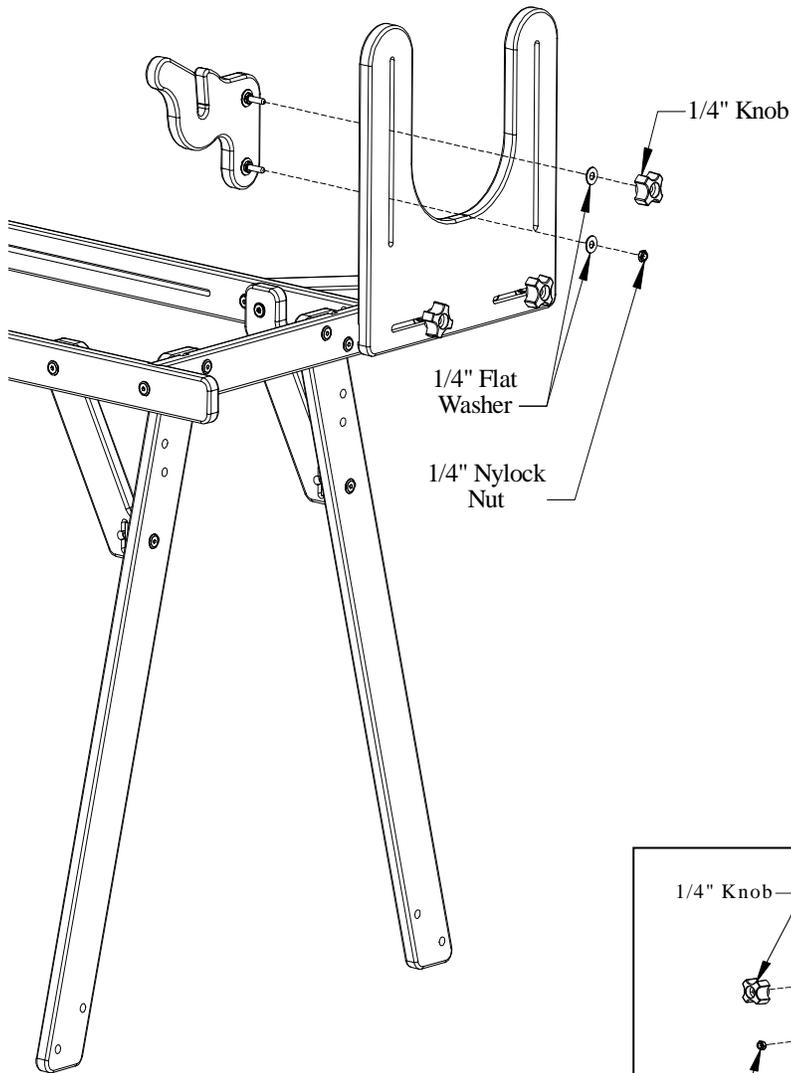
Step 13: Front Pole Mount End to Frame Ends

Parts Needed: 1 – Left and Right Front Pole Mount End

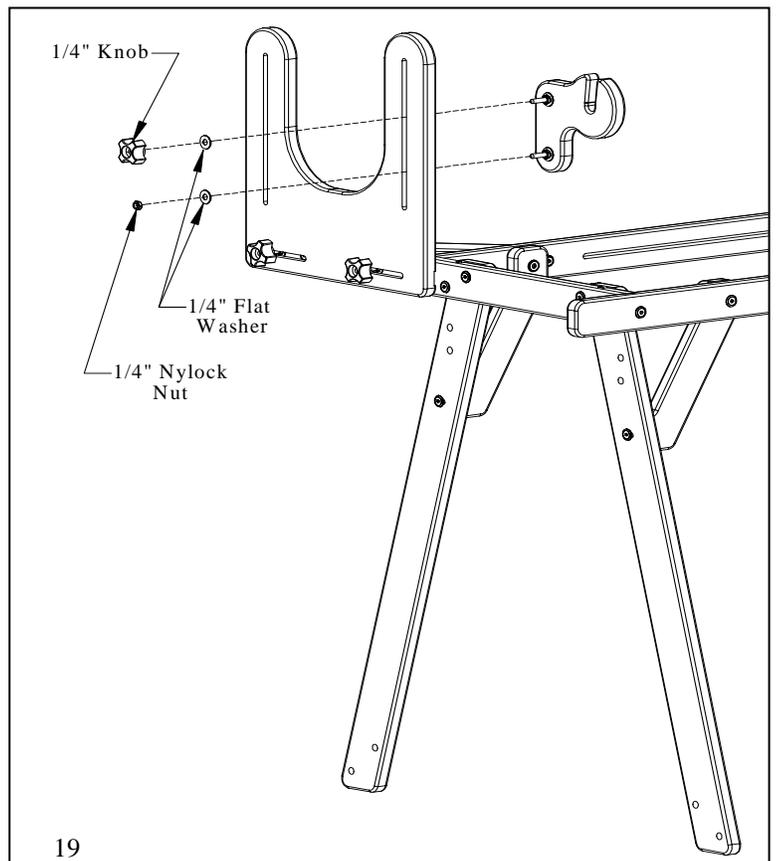
4 – 1/4" Flat Washers

2 – 1/4" Black Plastic Knob

2 – 1/4" Nylock Nut



- Attach the Right Front Pole Mount End, with previously installed hardware, to the Right Frame End as pictured below.
- Be sure the “R” is right-side-up facing toward the inside of the frame.
- With the two bolts going through the front vertical slot of the Right Frame End, place a 1/4" flat washer onto the end of each bolt.
- Next, thread a 1/4" plastic knob onto the top bolt.
- Thread a 1/4" nylock nut onto the bottom bolt and tighten just enough to allow the washer to still spin.
- Repeat this procedure for the Left Front Pole Mount End.



Step 14: Back Pole Mount Ends to Frame Ends

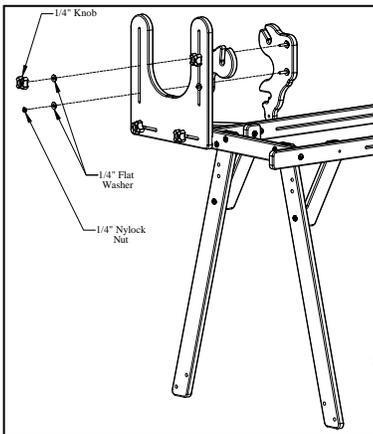
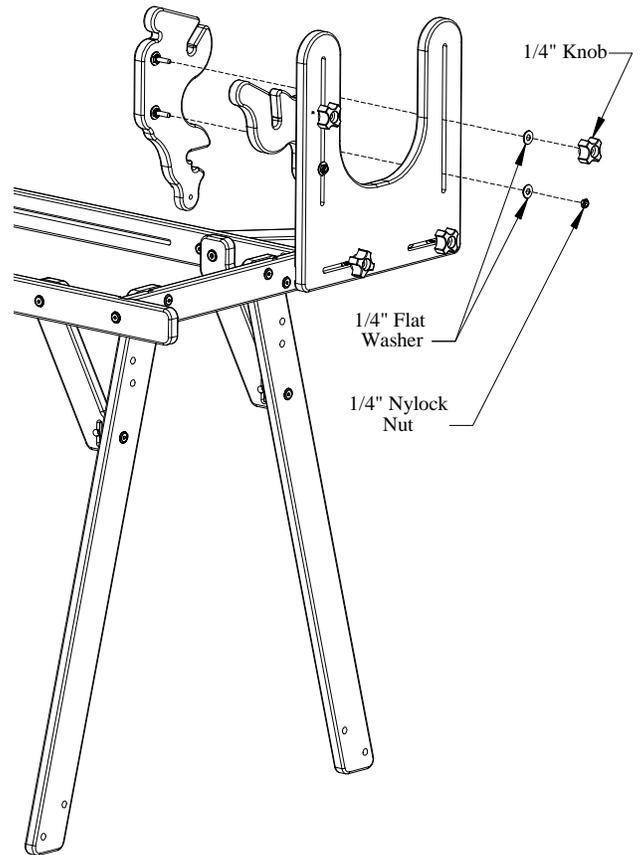
Parts Needed: 1 – Left and Right Back Pole Mount End

4 – 1/4" Flat Washers

2 – 1/4" Black Plastic Knobs

2 – 1/4" Nylock Nut

- The Right Back Pole Mount End will connect to the back slot of the Right Frame End as pictured (see right).
- Again, be sure the "R" is right-side-up facing toward the inside of the frame.
- With the two bolts going through the back vertical slot of the Right Frame End, place a 1/4" flat washer onto the end of each bolt.
- Next, thread a 1/4" plastic knob onto the top bolt.
- Thread a 1/4" nylock nut onto the bottom bolt and tighten just enough to allow the washer to still spin.
- Repeat this procedure for the Left Back Pole Mount End.



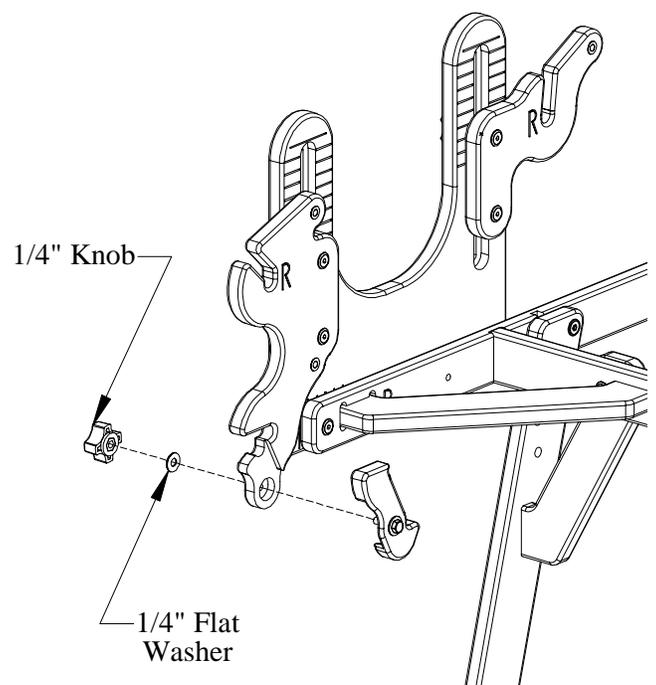
Step 15: Third Rail Retainer Assembly

Parts Needed: 1 – Left and Right 3rd Rail Retainers

2 – 1/4" Flat Washers

2 – 1/4" Black Plastic Knobs

- Next, connect the Right 3rd Rail Retainer to the bottom of the Back Pole Mount End, as pictured.
- Place the previously installed bolt through the hole in the bottom of the Back Pole Mount End.
- Place a 1/4" flat washer and 1/4" plastic knob onto the end of the bolt and hand tighten.
- Repeat this procedure for the left side.
- This completes the Left and Right End assembly.



Step 16: Rail Assembly

Parts Needed: 3 or 4* – 64" Rail

3 or 4* – 34" Rail w/ Coupler (if setting up queen size)

3 or 4* -- Square End Cap

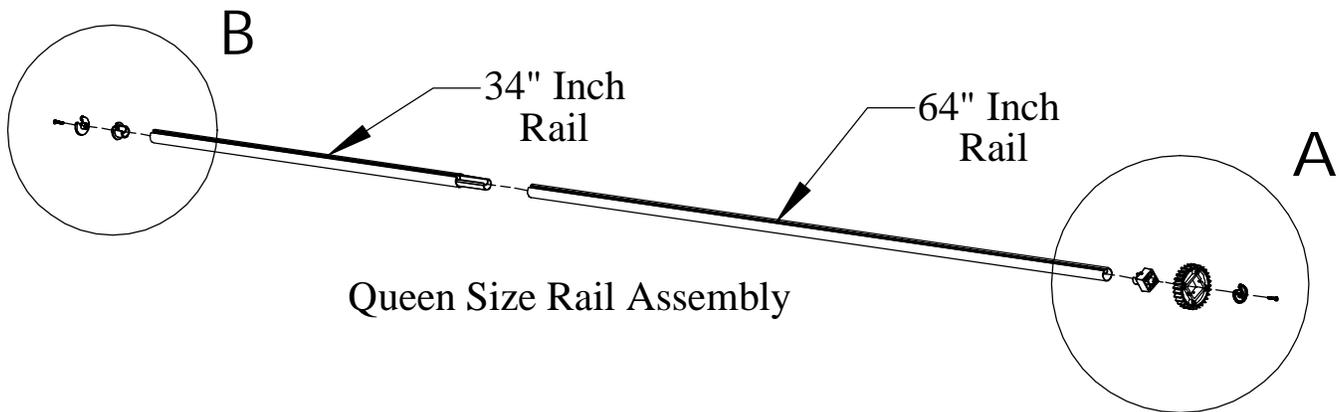
3 or 4* -- Round End Cap

6 or 8* – Shoulder Cap

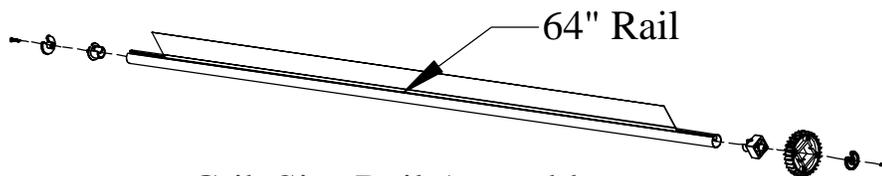
3 or 4* – 7/8" Screw

3 – Ratchet Wheel

**with optional 4th Rail kit*



Queen Size Rail Assembly



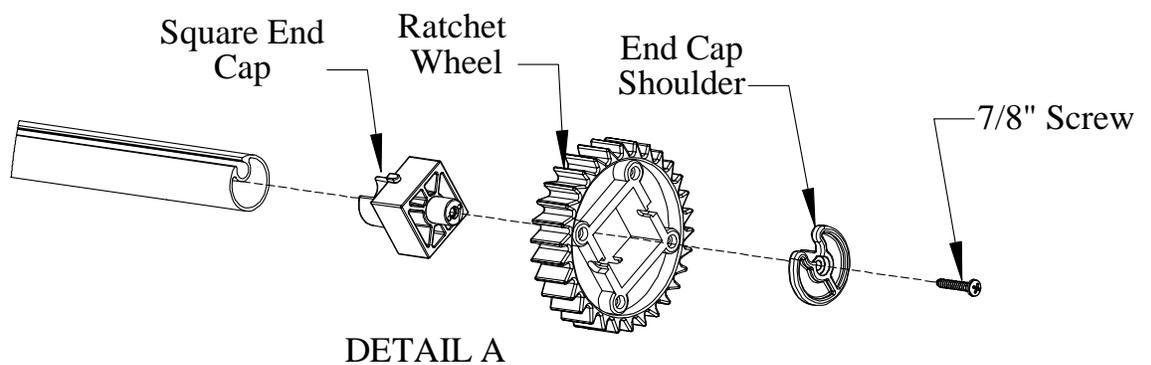
Crib Size Rail Assembly

- Choose the rail size that corresponds to the frame size you have set-up.

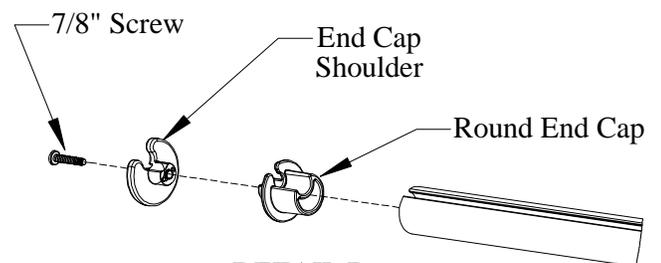
- Follow the diagrams above in assembly the particular size you have chosen.

- Place the Square and Round End Caps firmly in appropriate ends of the rails. Be sure they are completely seated into the rail, with no gaps.

- Place the ratchet wheels onto the Square End Caps.



DETAIL A

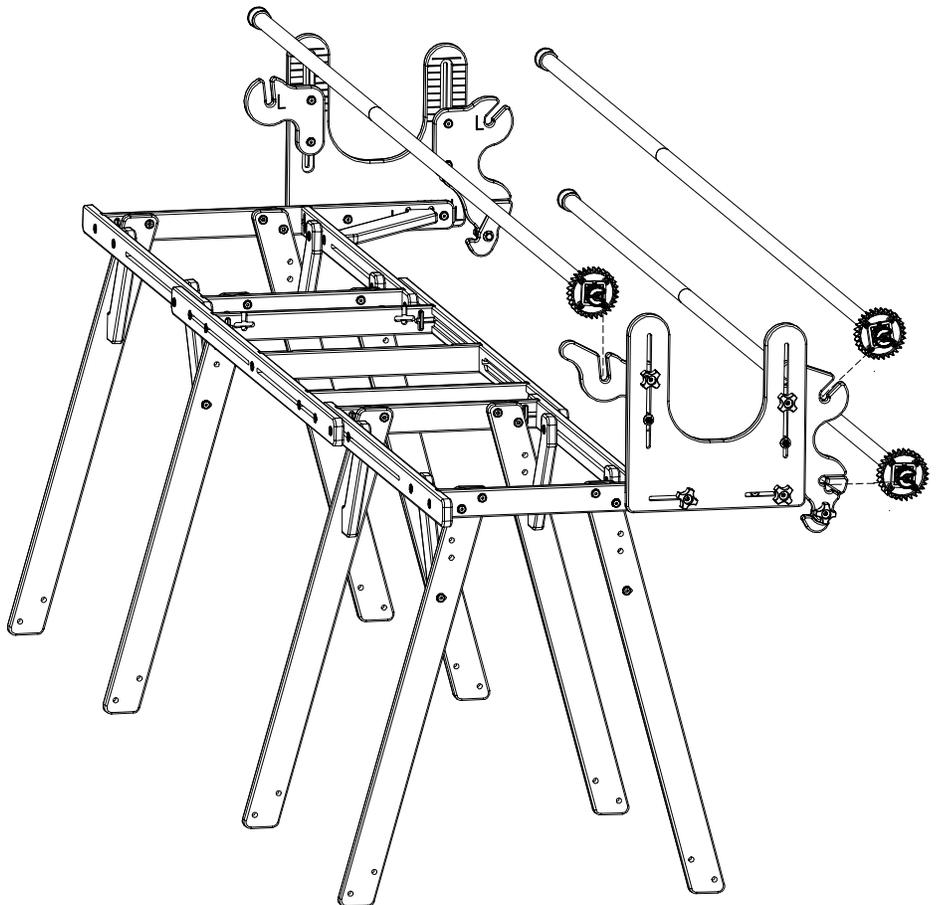


DETAIL B

- Lay out the three rails on the floor, each with the wheels on your right. With these layed out, the teeth on all three wheels should point toward you.
- The rails will go onto the frame with the wheel teeth all pointing toward the Carriage Assembly.
- Next, place a Shoulder Cap onto the end of each Square End Cap and fasten them using the 7/8" screw and a Phillips screw driver.
- Place a Shoulder Cap onto the end of each Round End Cap and fasten them together the same as above.

Step 17: Rail to Frame Assembly and Adjustment

- Slide each rail into place as pictured below, with the Shoulder Caps on the outside of the Mount Ends and the Square and Round End caps on the inside.
- To install the 3rd Rail, loosen the plastic knob of the 3rd rail retainer (on both sides) and open the retainers.
- Place the rail into the slot and re-close the retainer and tighten both knobs.
- If there are gaps between the ends of the rails and the rail mounts, push the ends in closer together.
- **Crib Size Adjustments:** Check the Middle Cross Brace at the center of the frame. Make sure that it is centered in relation to the Short Cross Braces on either side of it.
- **Queen Size Adjustments:** Check the Middle Cross Braces as a whole and make sure the gap on the right (from the furthest right Cross Brace to the Right Side Mount) is the same as the gap on the left.
- Having completed these adjustments, you are now ready to tighten all connector bolts and cap nuts on the middle braces, etc.



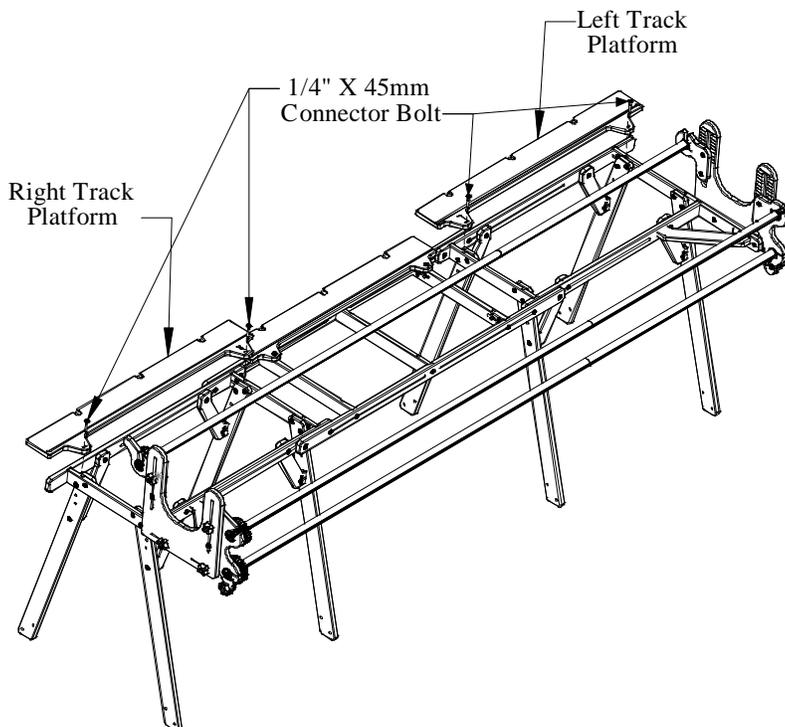
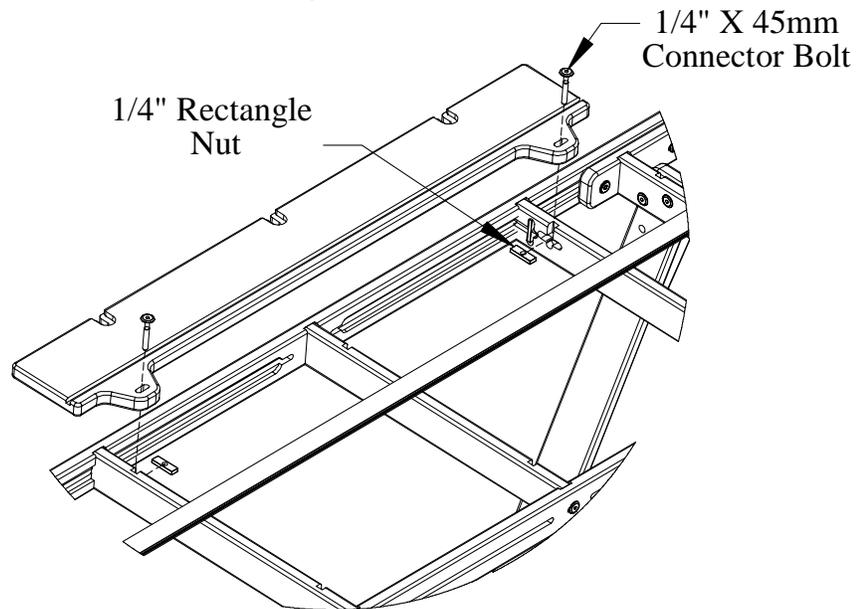
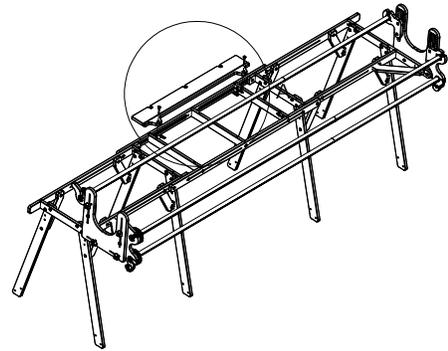
Step 18: Track Platform Assembly

Parts Needed: 1 – Right Track Platform
 1 – Left Track Platform
 1 – Middle Track Platform*
 1 – Right Narrow Track Platform
 1 – Left Narrow Track Platform
 1 – Middle Track Platform*
 8 or 12* -- 45 mm Connector Bolts
 8 or 12* -- Rectangle Nuts

**If setting up queen size*

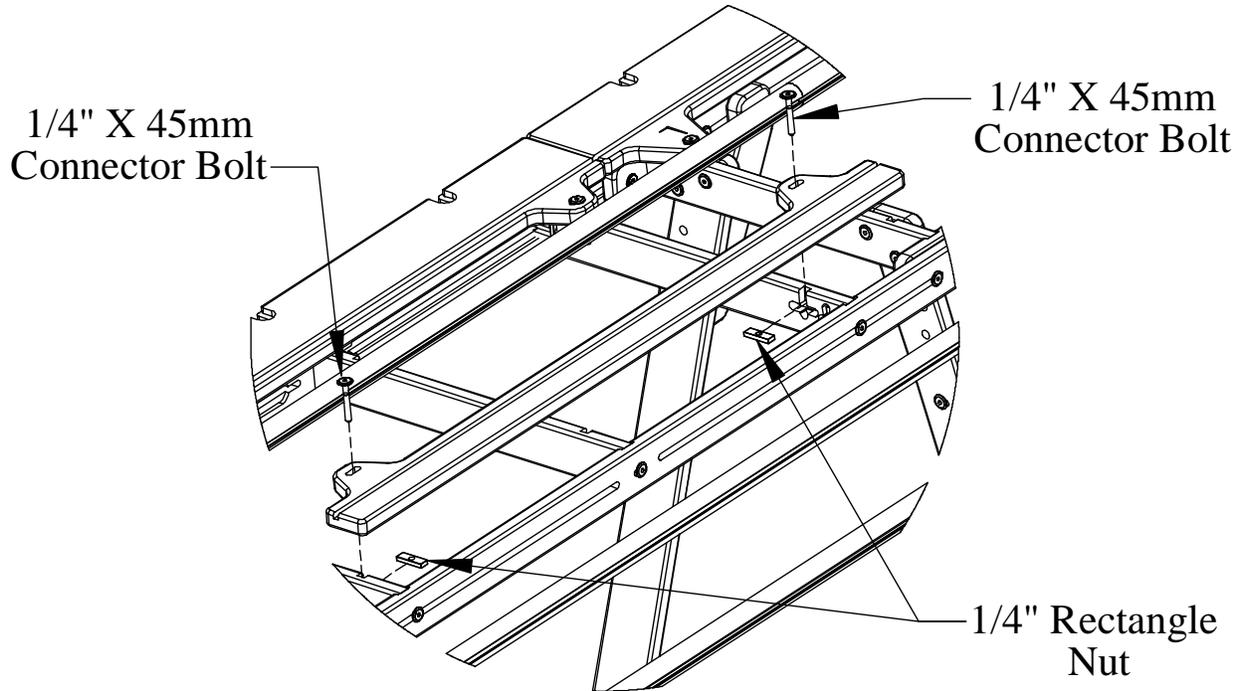
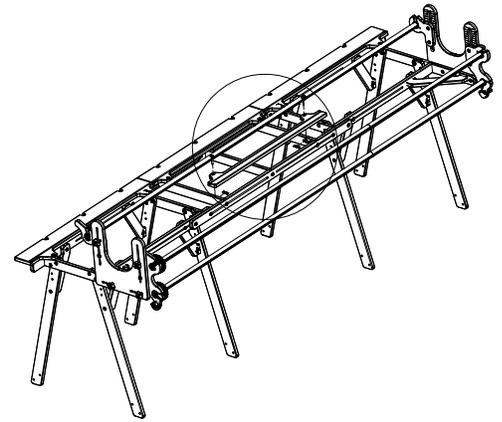
FOR QUEEN SIZE ASSEMBLY (*Note—read this entire step, even if doing crib size*):

- Assemble the track platforms to your Little Gracie, beginning with the Middle Track Platform (see right).
- Align your Middle Track Platform, centering it over the Middle Cross Braces of your frame.
- Place 45 mm connector bolts in the holes on the left and right end of the Middle Track Platform.
- Place rectangle nut into the “T” slots of the corresponding Middle Cross Braces, as pictured.

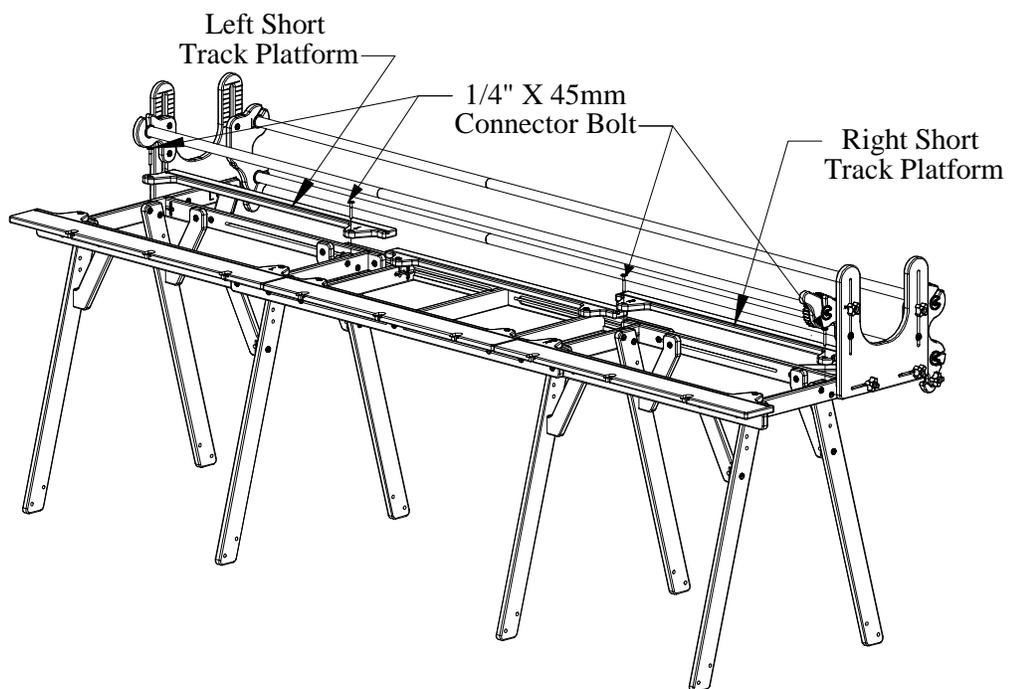


- Thread the connector bolts through the rectangle nuts and tighten.
- Repeat this step for the Right and Left Platforms. The Right Platform connects to the Short Cross Brace and Right Brace Side Mount*.
- The Left Platform connects to the Short Cross Brace and Left Brace Side Mount*.
- The Right and Left Brace Side Mounts contain the rectangle nuts you put in place in steps 5 and 7. Place the 45 mm connector bolt into the hole. By turning it, it will find the threads of the nut and begin tightening as you continue to turn it.

- Now, connect the Narrow Track Platforms beginning with the Middle Narrow Track Platform.
- Align your Middle Narrow Track Platform, centering it over the Middle Cross Braces.
- Place 45 mm connector bolts in the holes on the left and right end of the Middle Narrow Track Platform.

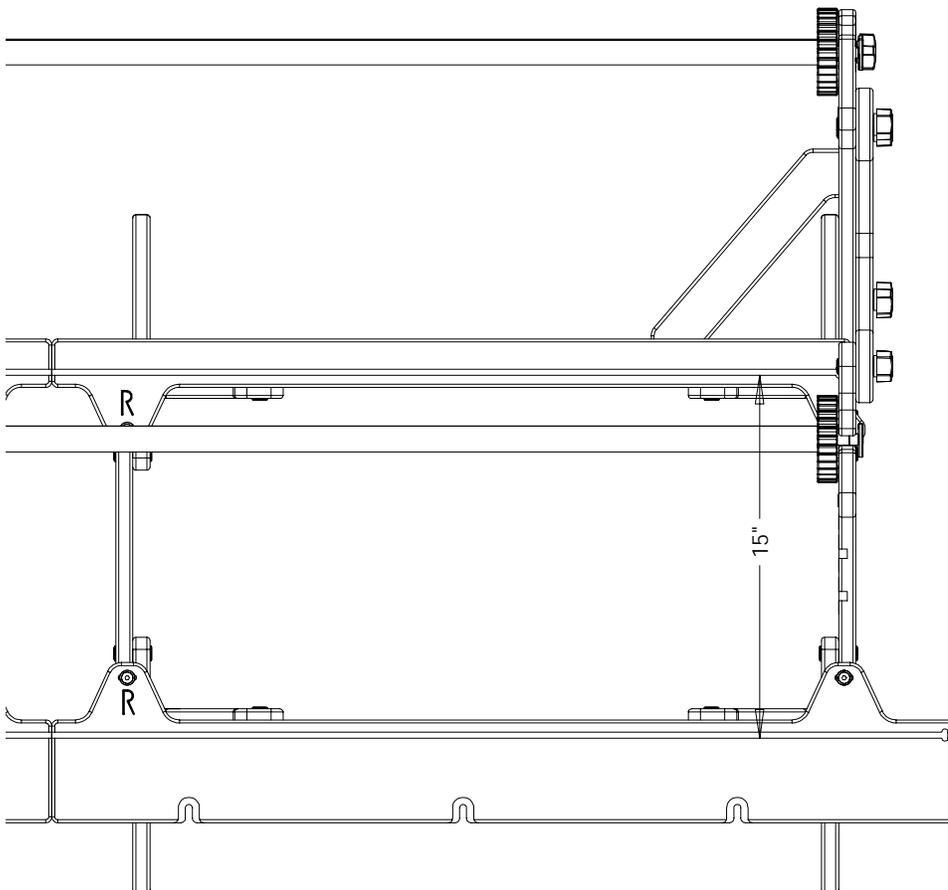
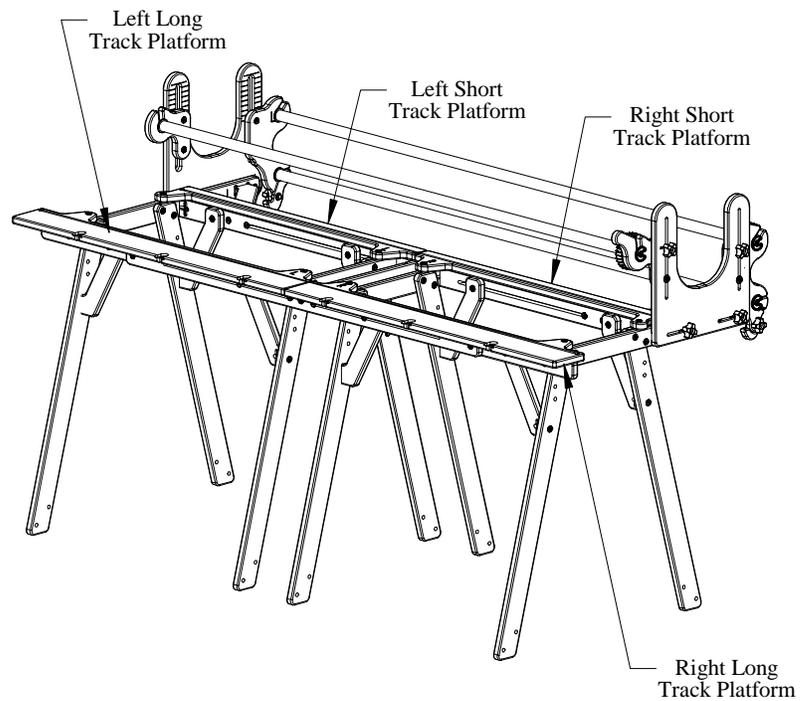


- Place rectangle nut into the “T” slots of the corresponding Middle Cross Braces, as pictured.
- Thread the connector bolts through the rectangle nuts and tighten.
- Repeat this step for the Right and Left Narrow Platforms. As before, the Right Narrow Platform connects to the Short Cross Brace and Right Brace Side Mount.
- The Left Platform connects to the Short



Cross Brace and Left Brace Side Mount.
FOR CRIB SIZE ASSEMBLY:

- The crib size assembly follows the exact procedures the queen size, only omitting the Middle Track Platforms.
- The Left and Right Track Platform (both regular and Narrow) attach to the Short Cross Braces in the center, and the Left and Right Brace Side Mounts on the ends.



- With your platforms in place, it is important to measure the distance between the track at different intervals along the frame.
- This is to make sure the tracks are equal distance apart along the entire width of the frame.
- If the tracks are not completely parallel, this will result in less smooth tracking and increased resistance and friction.
- Measure from the inside of the back track slot to the outside of the front track slot (or, standing at the front of the frame, the front edge of each slot—see left). This measurement should be 15” in each spot measured.

Step 19: Track to Track Platform Assembly

Parts Needed: 1 – 107 7/8” Track (Longest)*

1 – 99 7/8” Track (Second Longest)*

1 – 65 7/8” Track (Shortest)

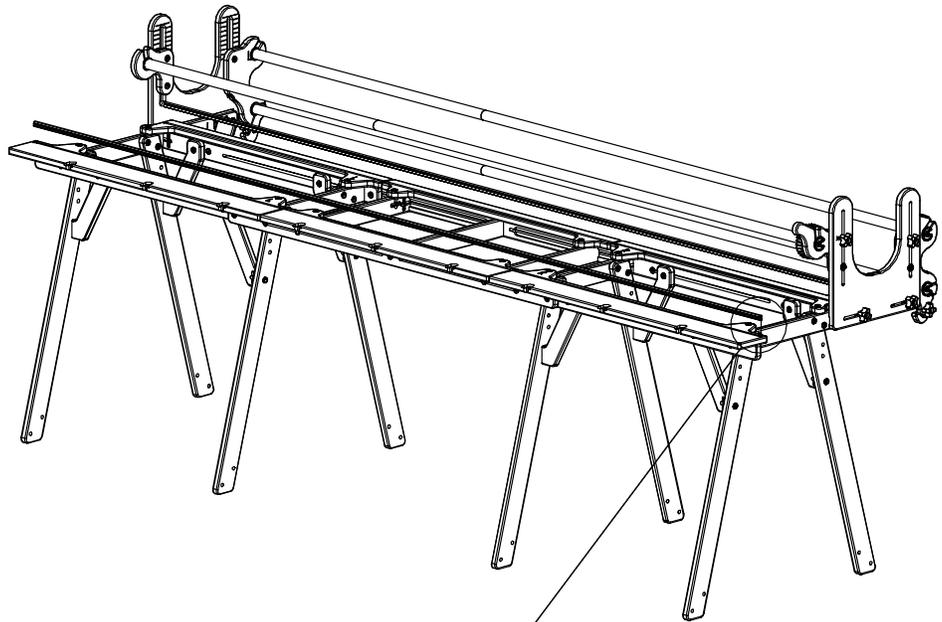
1 – 73 7/8” Track (Second Shortest)

**If setting up queen size*

- First, it is helpful to identify your track pieces by the above distinction, so you are sure to use the correct track pieces.

FOR QUEEN SIZE ASSEMBLY:

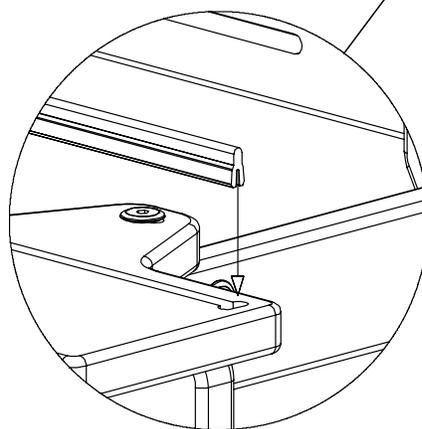
- Place the 107 7/8 (longest) track piece into the Track Platform, beginning on the right side, as pictured.
- Press the track into the slot, moving toward the left, making the sure the track is completely seated into the slot.
- Place the 99 7/8” (second longest) Track piece into the slot of the Narrow Track Platform, beginning at the right and repeat the procedure.



FOR CRIB SIZE ASSEMBLY:

- The procedure is the same for crib size, only using the 73 7/8 (second shortest) Track piece in the Track Platform slot, and the 65 7/8” (shortest) Track in the Narrow Track Platform slot.

NOTE: If the length of the track is slightly shorter than the length of the slot. It is best to center the track in the slot so the slight gap is not all on one side. You may also set your stops to prevent the carriage from going off the track.

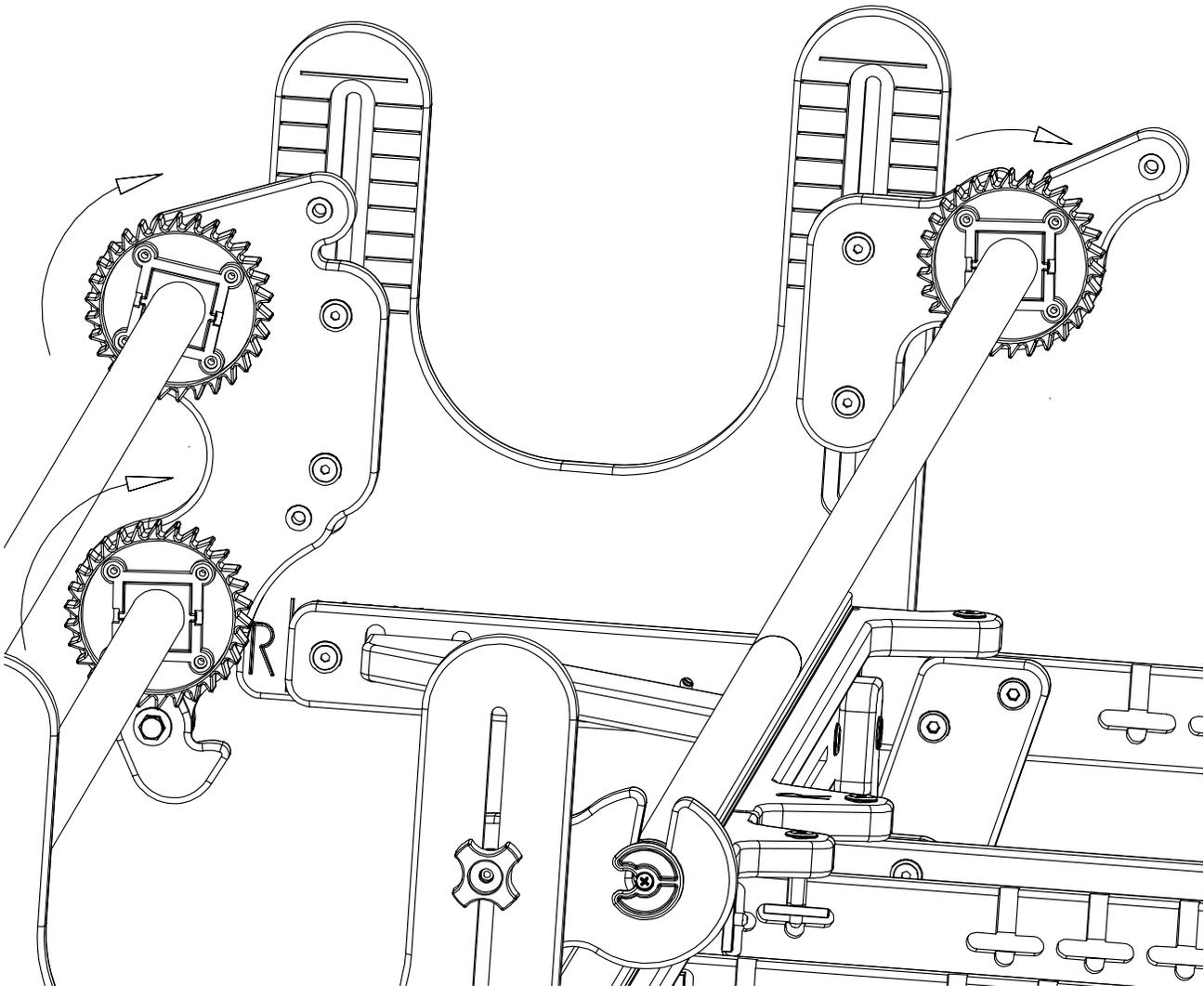


Step 20: Ratchet Stop Assembly

Parts Needed: 3 – Ratchet Stops

3 -- ¼" x 1 ½" Truss Bolts

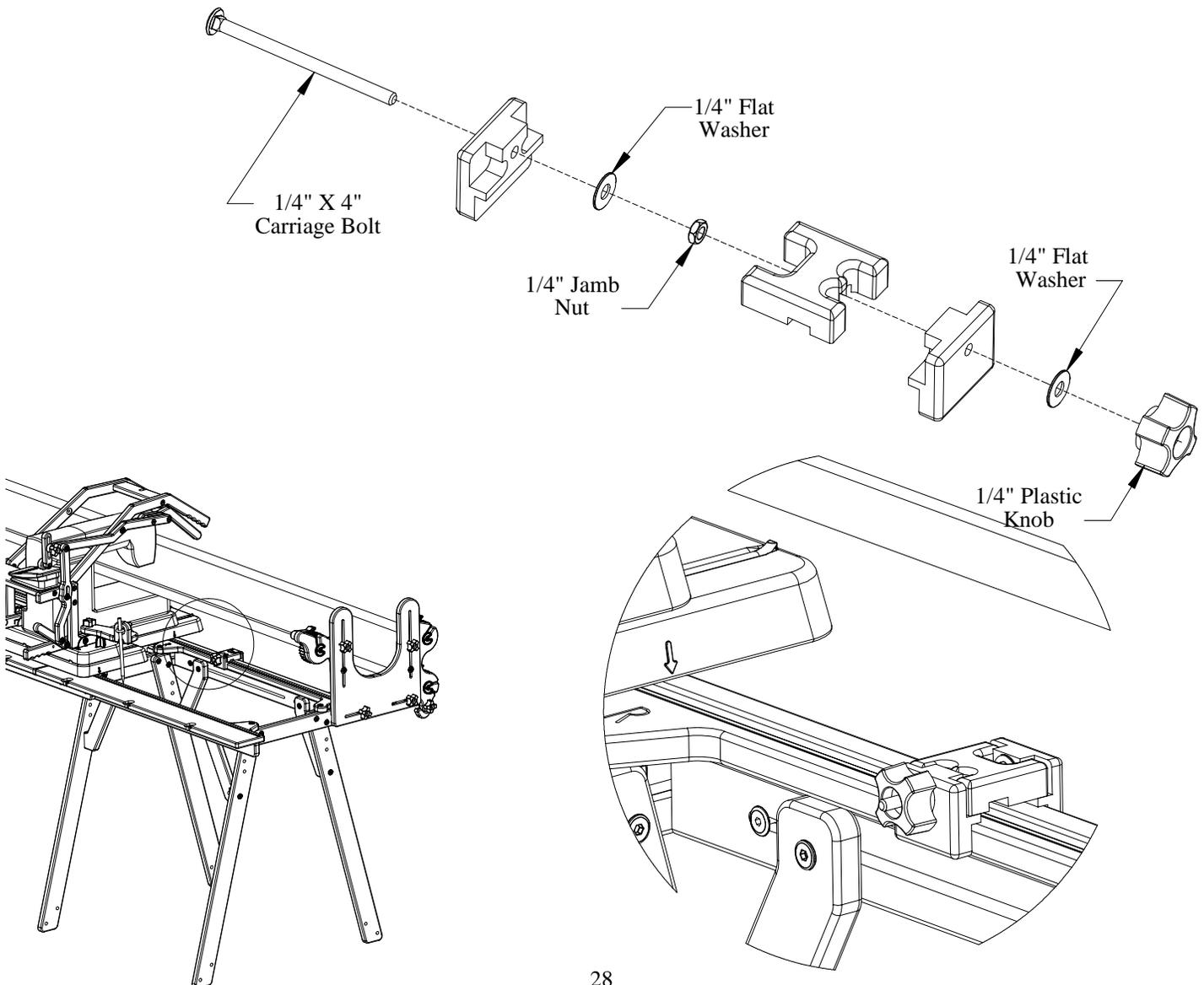
- **IMPORTANT:** Do not use any tools in this step! **HAND TIGHTEN** the truss bolts.
- Attach the three Ratchet Stops using the three ¼" x 1 ½" truss bolts.
- For the front Ratchet Stop, place the truss bolt through the hole of the Ratchet Stop and into the metal insert of the Front Pole Mount. Hand-tighten the truss bolt into the insert. A small gap will remain between the head of the bolt and the Ratchet Stop. This is normal, do not over-tighten the bolt!
- Repeat this procedure for the two back Ratchet Stops, connecting them to the Back Pole Mount, as pictured.
- **NOTE:** If the Ratchet Stop does not fit precisely into the teeth of the Ratchet Wheel, remove the pole and reverse the wheel so the teeth point the other direction.
- All the Ratchet Wheels should have their teeth pointing forward (toward to Track Platform).



Step 21: Carriage Stop Assembly

Parts Needed: 2 – Carriage Stop Spacer
4 – Carriage Stop Side
2 – 1/4" x 4" Carriage Bolt
4 – 1/4" Flat Washer
2 – 1/4" Jamb Nut
2 – Plastic Knob

- To assemble the Carriage Stops place a 1/4" x 4" carriage bolt through a Carriage Stop Side. Then place a 1/4" flat washer and 1/4" jamb nut onto the end of the bolt. Tighten the jamb nut completely, using a 7/16" wrench.
- Place a Carriage Stop Spacer horizontal in between the two sides, being sure the right end is going the right direction (exactly as illustrated, below) and sandwich it into place with another Carriage Stop Side, as pictured.
- Once in place, push the bolt through the hole in the second Carriage Stop Side and put a 1/4" flat washer and 1/4" plastic knob onto the end.
- Place this assembly over the track in the Narrow Platforms, with the knob to the inside (see close-up, lower right).

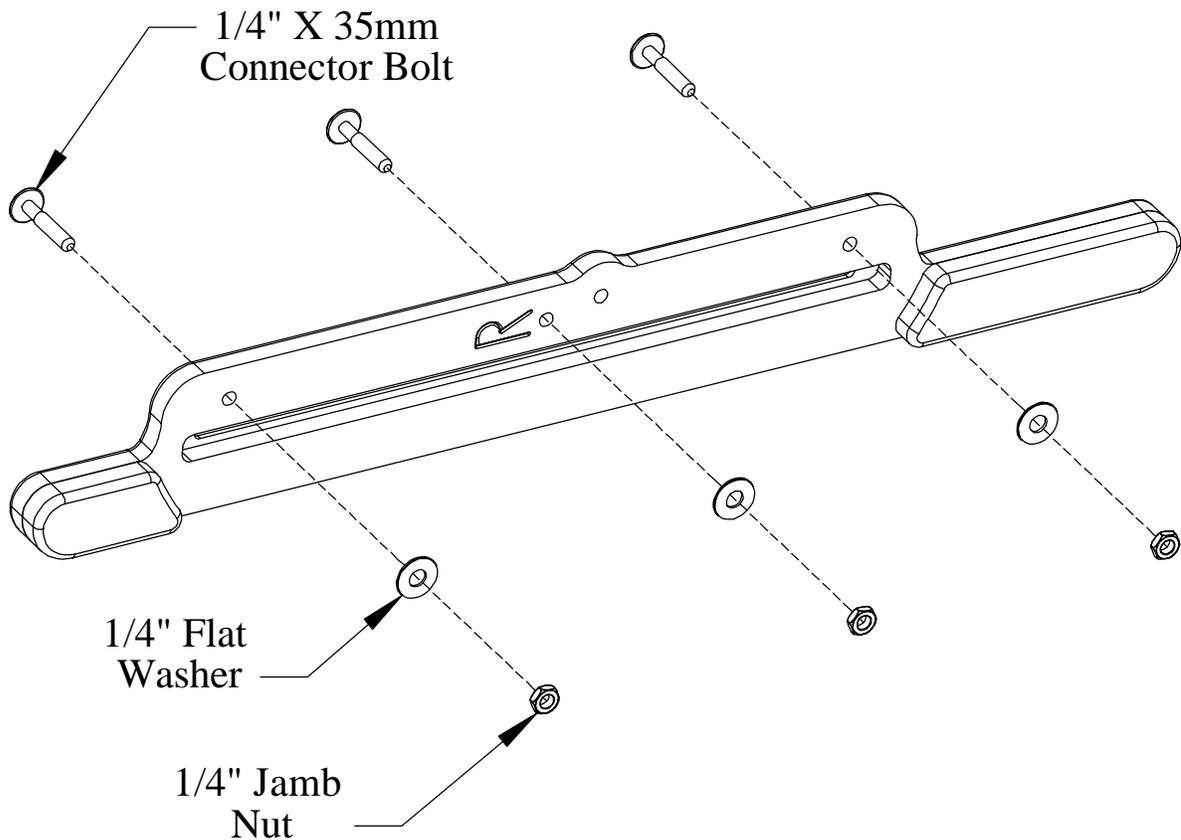


Step 22: EdgeMaster Assembly

SECTION I

Parts Needed: 1 – Right EdgeMaster Base
1 – Left EdgeMaster Base
6 – 1/4" x 35mm Connector Bolts
6 – 1/4" Flat Washers
6 – 1/4" Jamb Nuts

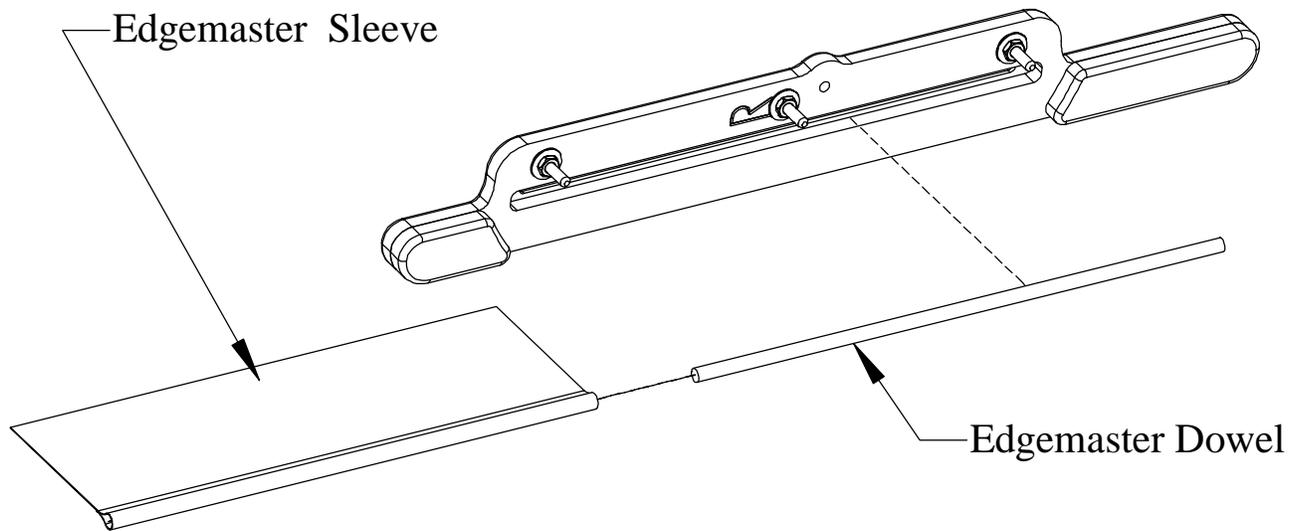
- First install three 35 mm connector bolts into the Right and Left Base as pictured, coming from the outside of the base. (Make sure the middle bolt goes through the hole closest to the "R").
- Place a 1/4" flat washer and 1/4" jamb nut onto the end of each bolt and tighten completely using a 7/16" wrench.
- Repeat this step for the Left Base.



SECTION II

**Parts Needed: 2 – Edgemaster Sleeves
2 – Edgemaster Dowels**

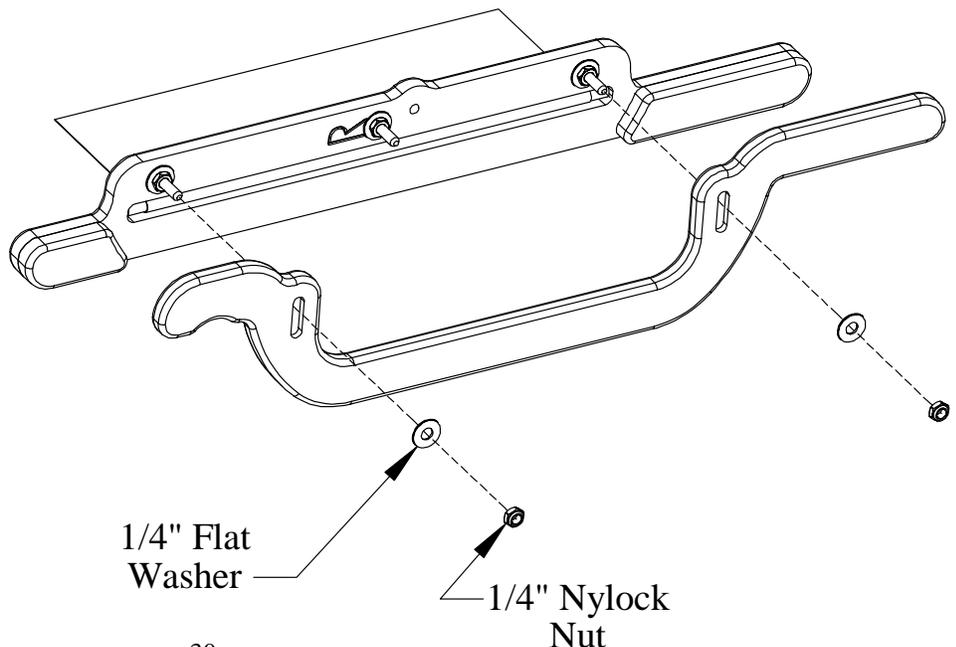
- Place the wooden dowel into the hemmed end of the cloth EdgeMaster Sleeve (see picture, next page)/
- Pull the other edge of the sleeve through the thin slot of the Base so the dowel is forced up against the Base.
- Repeat this step for the Left Base.



SECTION III

**Parts Needed: 1 – Left and Right
Clamping Bar
4 – 1/4" Flat Washer
4 – 1/4" Nylock Nut**

- Next, attach the Clamping Bar to the Base by placing the bar marked "R" onto the Right Base. ("R" faces toward base)
- The two end bolts go through the slots of the Clamping Bar.
- Fasten together by placing a 1/4" flat washer and 1/4" nylock nut onto the ends of each bolt.



- As with previous nylocks, tighten just enough to still allow the washer to spin freely.
- Repeat this procedure for the Left Side.

SECTION IV

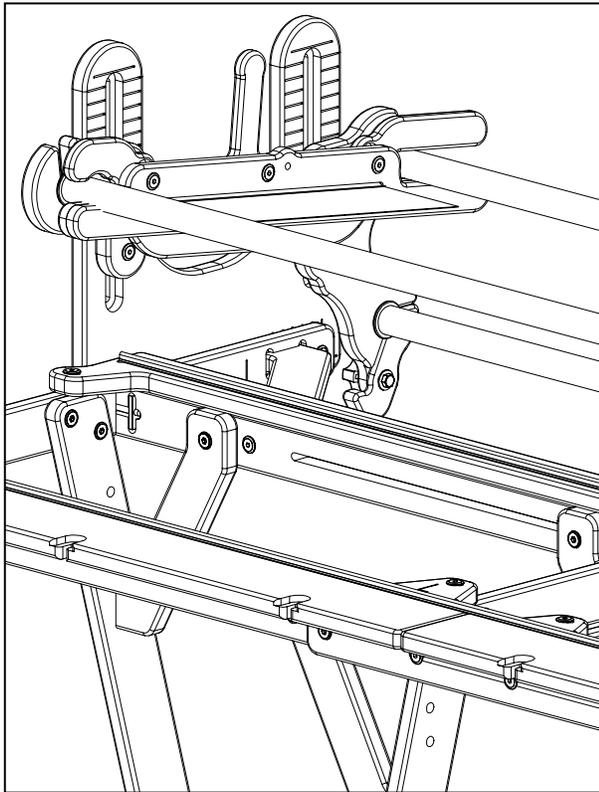
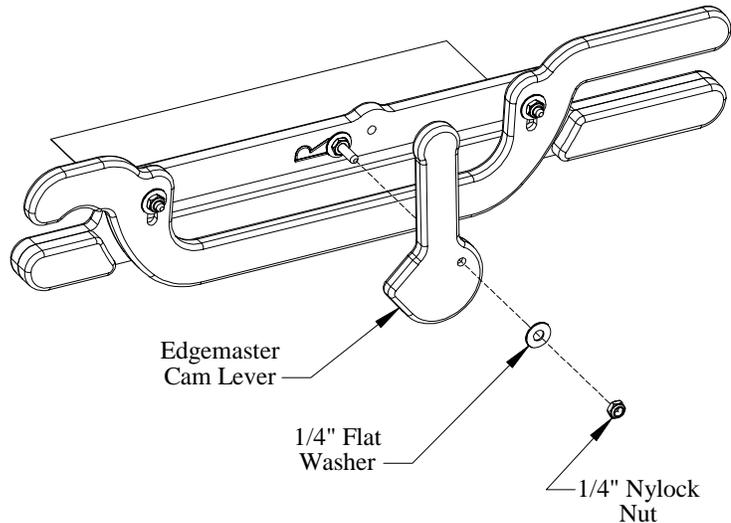
Parts Needed 1 – Right and Left Cam Lever

1 – Left Cam Lever

1 – 1/4" Flat Washer

1 – 1/4" Nylock Nut

- Next, connect the Right Cam Lever to the Right Base by placing the Cam Lever onto the middle 35 mm connector bolt installed in the first step of this assembly ("R" of Lever should face Base).
- With the bolt coming through the lever, place a 1/4" flat washer and 1/4" nylock nut onto the end of the bolt and tighten just enough to still allow the washer to freely spin.



the Cam Lever to lock down and create side tension.

- Repeat this step for the Left Base and Cam Lever.
- With these steps completed, you are ready to place your EdgeMasters onto the rails of the Little Gracie.
- The Left assembly goes on the left side of the frame and right on the right (ratchet wheel) side (sleeves should face toward the work area).
- To place on the rails, turn the EdgeMaster sideways between the rails and then straighten them with the rails in between the Base and Clamping Bar of the EdgeMaster.
- Pulling the Cam Lever should tighten the Clamping Bar onto rails.
- During use, you will pin the cloth sleeve to all three layers of your quilt.
- Then pull the EdgeMaster outward as you tighten

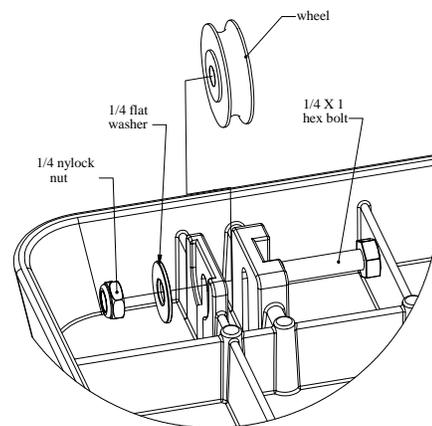
➤ You have now completed the frame portion of your Little Gracie. **If you assembled your frame in the crib size, do not be concerned that you have extra hardware.** Keep these in the baggy and save them for future queen size assembly use.

➤ **Before proceeding, take the hardware packet marked “CA” and remove the hardware.** We recommend that you stand up all the flat-head connector bolts in-line and put them in order of size. This will help you distinguish them as you move through each step, as some are very close in size.

Carriage Sub-Assemblies

Step 1: Wheels to Top and Bottom Plates

- Parts Needed
- 1 – Top and Bottom Plate
 - 8 – Metal Wheel
 - 8 – 1/4" x 1" Hex Head Bolt
 - 8 – 1/4" Flat Washer
 - 8 – 1/4" Nylock Nut



Close Up of Wheel Assembly

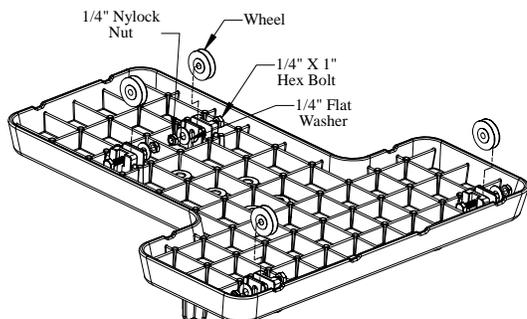
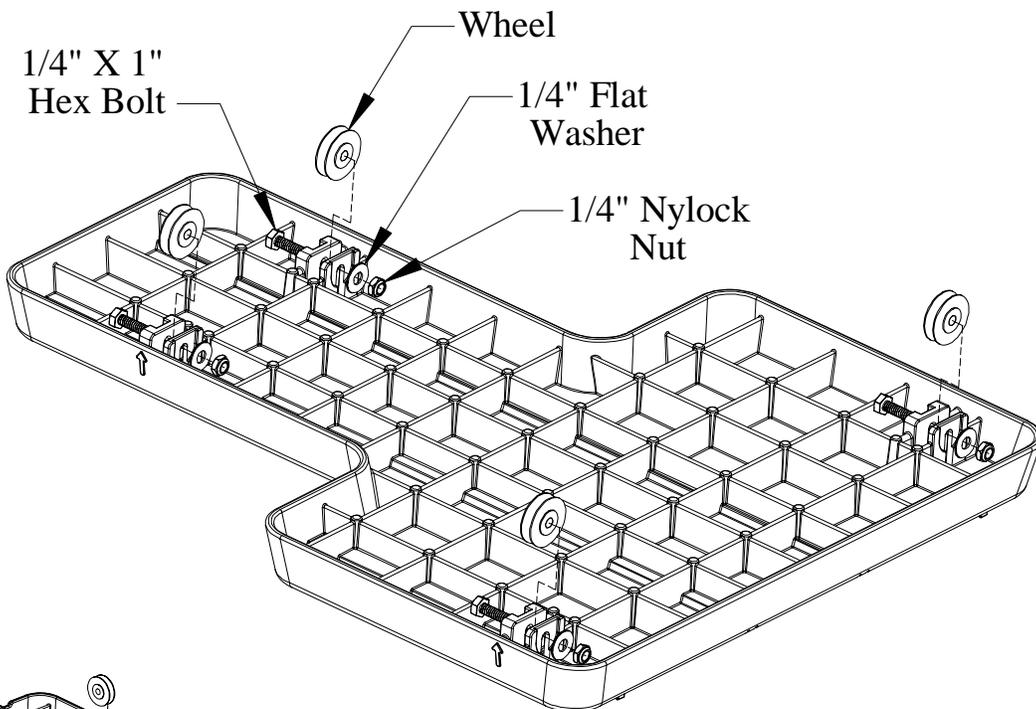
➤ **NOTE!** The bolts and wheels may be a tight fit going into the platform. This is normal.

➤ First, turn the Top and Bottom Plates upside down. Each plate has four places for wheels to be installed.

➤ The hardware for this step is found in the separate hardware packet marked with a “CA”.

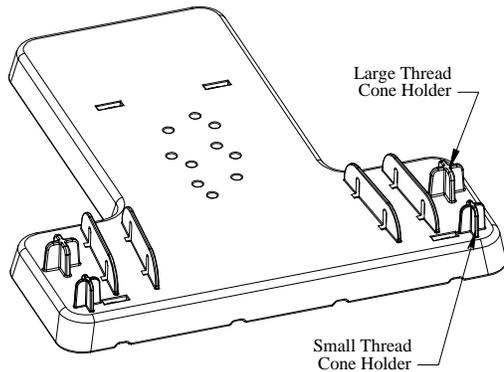
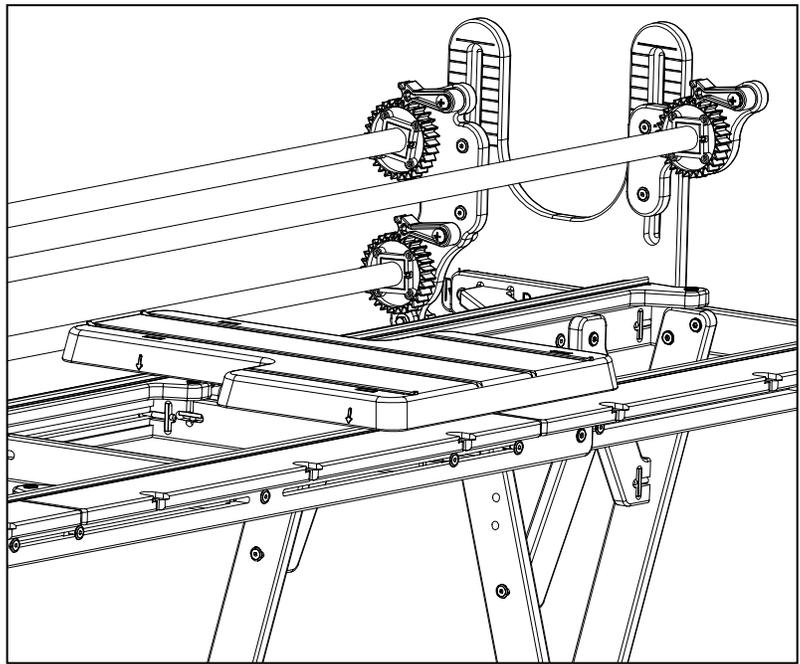
➤ To install a wheel you need a 1/4" x 1" hex head bolt, a 1/4" flat washer and a nylon lock nut.

➤ Identify the slots where the wheel will sit. There is a bolt wall and a washer wall surrounding this slot. Using the diagram as a guide, place a hex head bolt into the hole on the bolt side of the slot.



➤ Push the bolt through the hole, through the wheel, and through the hole on the opposite wall.

- You are now ready to place the Bottom Plate onto the Little Gracie Frame.
- Line-up the channels in the wheels with the track. NOTE the arrows on the side of the platform to assist you in lining up the wheels properly.
- This should glide smoothly from left to right.

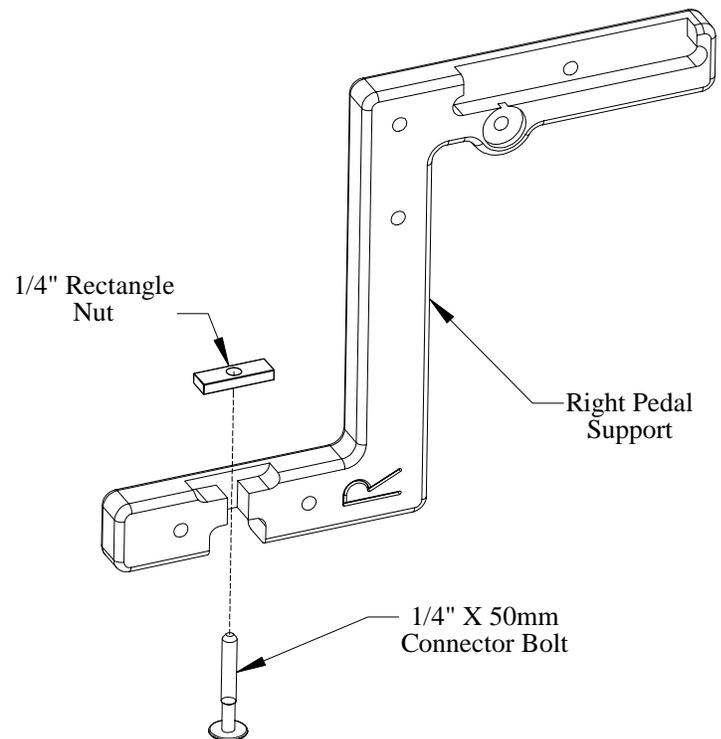


- Note the thread cone holders (large and small) located on each side of the Top Plate. Depending on your machine these may become a handy way to run thread into your machine. The following steps (after step 1) will be done on this Plate.

Step 2: Hardware to Pedal Support

Parts Needed: 1 – Right and Left? Pedal Support
 2 – 1/4" Rectangle Nut
 2 – 1/4"x 50mm Connector Bolt

- This step is reversible. The Pedal Support you choose to use in this step will determine whether your stylus arm will be on the right or left of your Carriage Assembly.
- Install a 50 mm connector bolt into the Right and Left Pedal Support by placing the bolt through the slot, as pictured.
- Thread a rectangle nut onto the end of the bolt.
- Use an Allen wrench to tighten the bolt with the nut in place in the cut-away.
- If you want to change this to the other side, simply undo your bolts in the next step (Step 3) and switch the bolt to the other side.



Step 3: Handle and Supports to Upper Plate

Parts Needed: 1 – Top Plate

1 – Left and Right Pedal Support

1 – Left and Right Lower Handle

4 – 1/4" x 50mm Connector Bolts

4 – 1/4" Flat Washers

4 – 1/4" Nylock Nuts

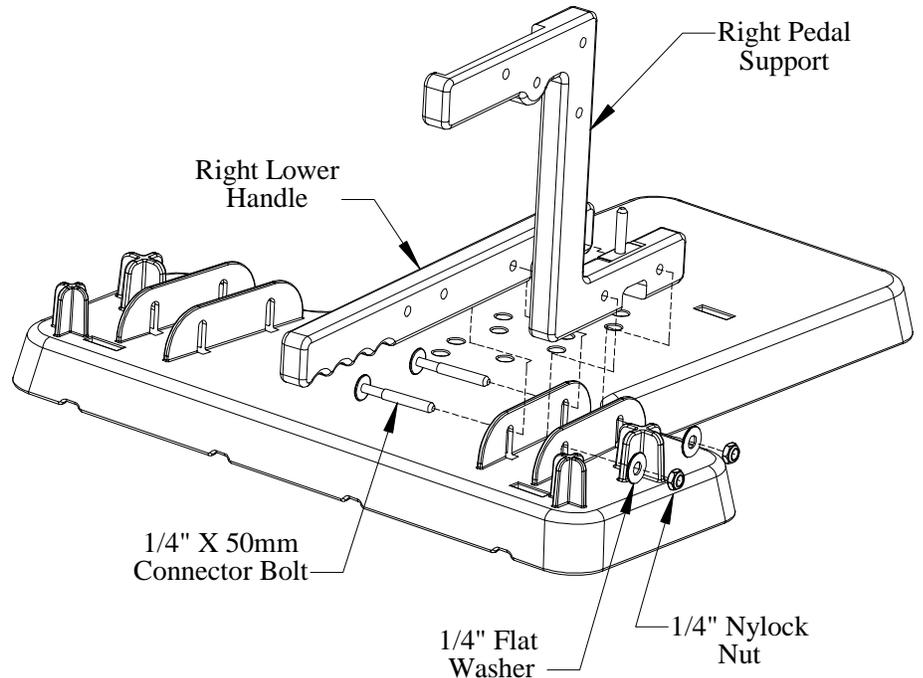
➤ Pair the Right Pedal Support and Right Lower Handle together as pictured.

➤ With the Right Pedal Support on the outside, line up the holes place them inside the walls on the right side of the Top Plate.

➤ NOTE: The fit between to Plate walls may be tight. It may require you to gently tap the wood pieces so they sit all the way onto the surface of the plate.

➤ Insert 50mm connector bolts into the inside wall, through the handles and out the other wall.

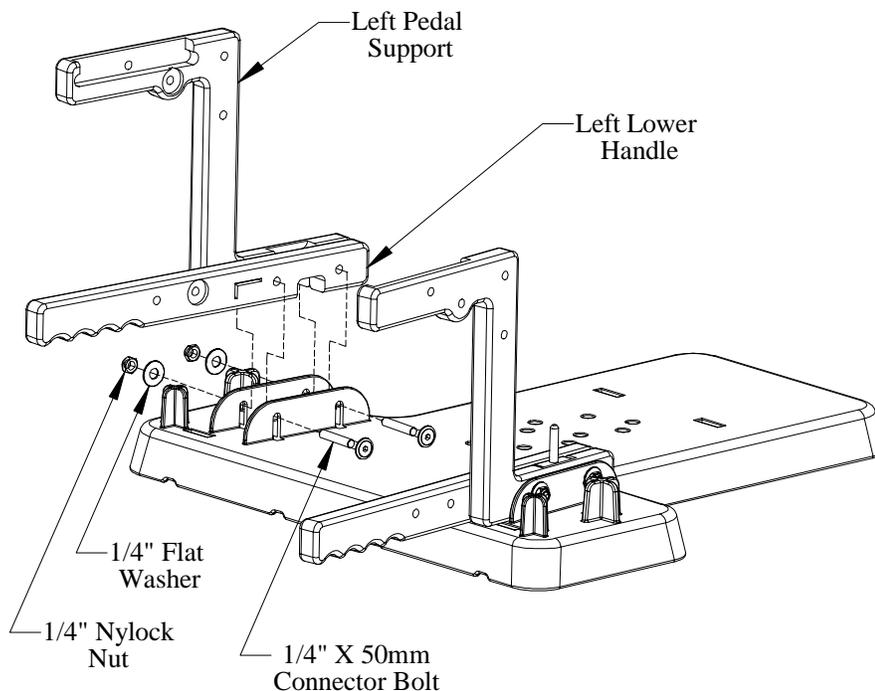
➤ Place a 1/4" flat washer and 1/4" nylock nut on each bolt.



➤ Completely tighten the nylocks on both bolts.

➤ Repeat this process for the Left Pedal Support and Left Lower Handle.

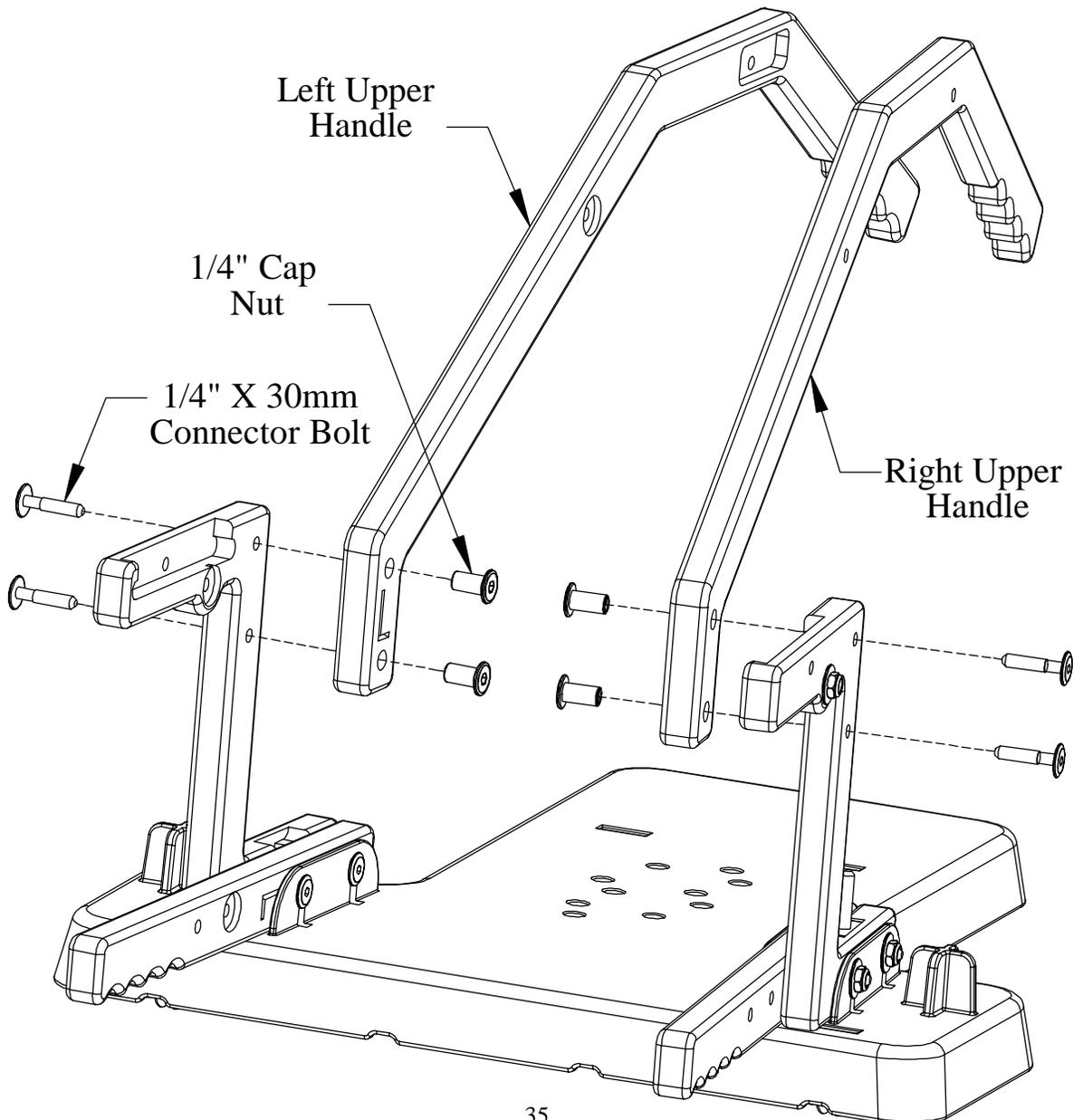
➤ Be sure the "L" and "R" are facing inside, toward each other.



Step 4: Upper Handles to Carriage Assembly

Parts Needed: 1 – Left and Right Upper Handle
4 – 1/4" x 30mm connector bolts
4 – 1/4" Cap Nuts

- To install the Upper Handles, line up the holes at the bottoms of the Upper Handles with the holes at the tops of the Pedal Supports. Be sure the "L" and "R" are facing inside, toward each other.
- Place 30 mm connector bolts through the holes of the Pedal Support and through the Upper Handle holes.
- Place 1/4" cap nuts through the holes in the Upper Handles and onto all four connector bolts.
- Use both Allen wrenches to tighten each bolt and cap nut completely.



Step 5: Platform and Brace to Carriage Assembly

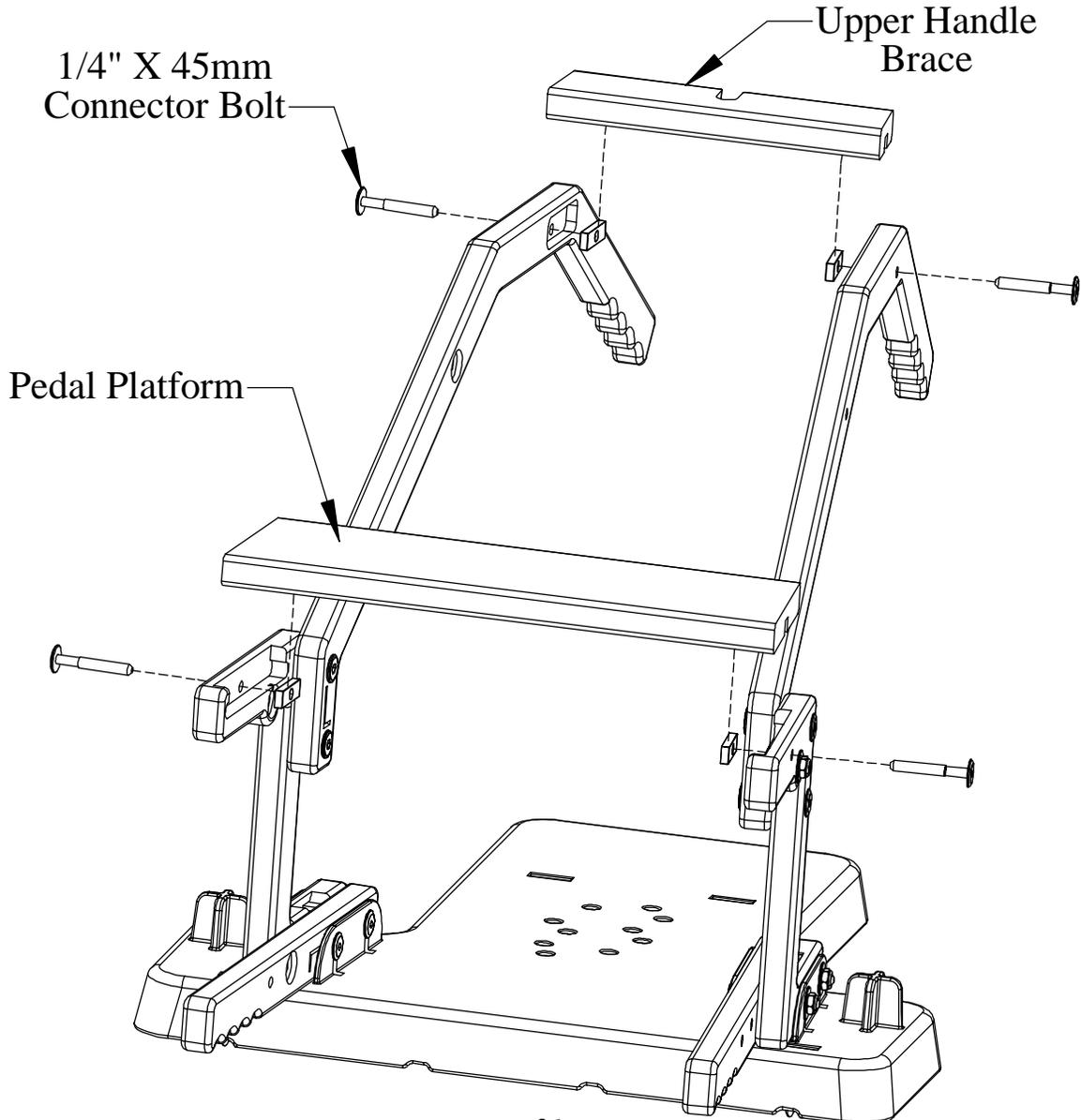
Parts Needed: 1 – Upper Handle Brace

1 – Pedal Platform

4 – ¼" x 45mm Connector Bolt

4 – ¼" Rectangle Nuts

- Install the Upper Handle Brace and Pedal Platform by first placing both into the cut-out grooves, making sure they fit all the way in. NOTE: Slots should be facing down.
- Secure the Upper Handle into place by threading 45 mm connector bolts through the holes of the Upper Handles and into the slots of the Upper Handle Brace.
- Put a rectangle nut into each slot and thread the connector bolts through them. Use an Allen wrench to completely tighten the bolts into the rectangle nuts.
- Repeat this procedure for the Pedal Platform.



Step 6: Upper Speed Control to Carriage Assembly

Parts Needed: 1 – Upper Speed Control Lever

1 – Lever Spacer

1 – Upper Lever Linkage

3 – 1/4" x 45mm Connector Bolts

2 – 1/4" Cap Nuts

1 – 1/4" Flat Washer

1 – 1/4" Nylock Nut

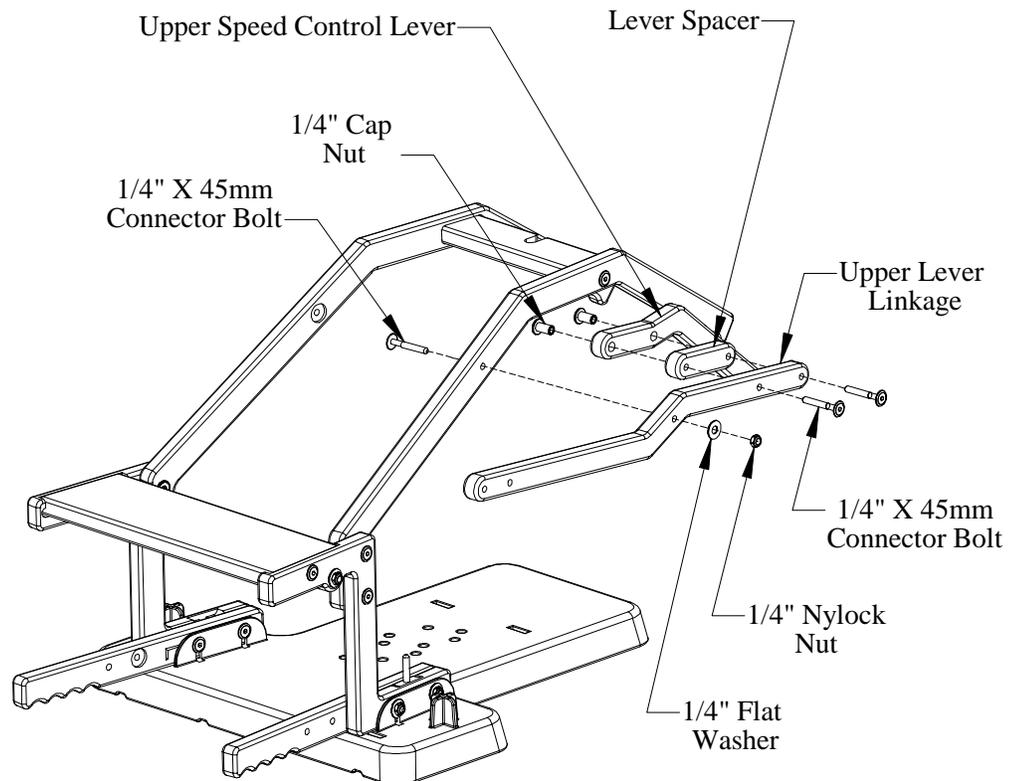
- **NOTE: The parts in this step are completely reversible. If you desire to free-hand quilt from the needle-side of the Little Gracie and want the Speed Control Lever on your right hand, rather than left, reverse this step so the Speed Control Lever is on the Left Upper Handle.**

- First connect Upper Lever Linkage to the Right (or Left, as desired) Upper Handle (**NOTE: Be very careful to make sure the Linkage is faced the proper way. There are two holes on each end of the Linkage. The end of the linkage that goes toward the Pedal Platform is the end where the two holes are closer together. The end with the holes that are further apart from each other is the end closer to the end near the Upper Handle Brace—see picture below).**

- Connect the Linkage at the center of the Upper Handle by placing a 45 mm connector bolt through the hole of the Upper Handle (from the inside) and through the hole of the Linkage.

- Place a 1/4" flat washer and 1/4" nylock nut onto the end of the bolt.

- Tighten the nylock nut just enough to still allow the flat washer to spin freely on the bolt. **NOTE: It is critical in this and following steps that you do not over tighten the nylock nuts as this will cause the parts to move and interact freely as designed.**



- Next, connect the Lever Spacer and Upper Speed Control Lever to the Upper Lever Linkage, by placing 45 mm connector bolts through the two holes on the end of the Upper Lever Linkage.

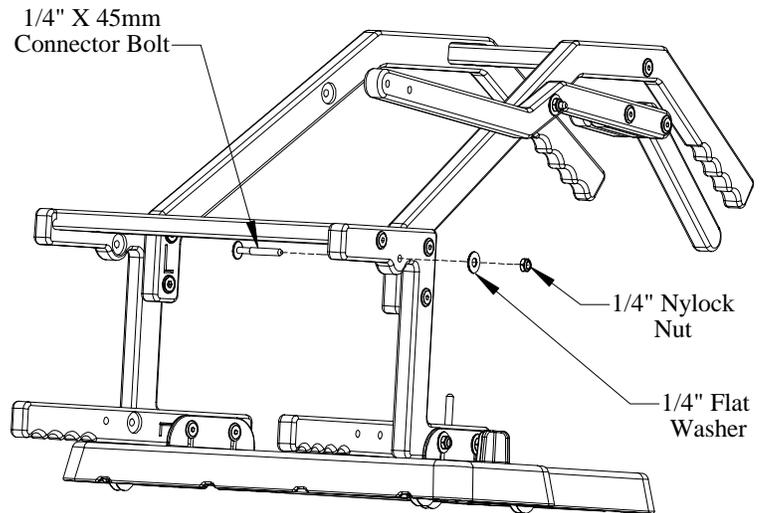
- Next, place the Lever Spacer onto the ends of the bolts, followed by the Upper Speed Control Lever.

- Finally, place 1/4" cap nuts into the holes of the Speed Control Lever and onto the ends of the bolts. Tighten these together using the two Allen wrenches.

Step 7: Hardware to Pedal Support

Parts Needed: 1 – 45 mm Connector Bolt
 1 – 1/4" Flat Washer
 1 – 1/4" Nylock Nut

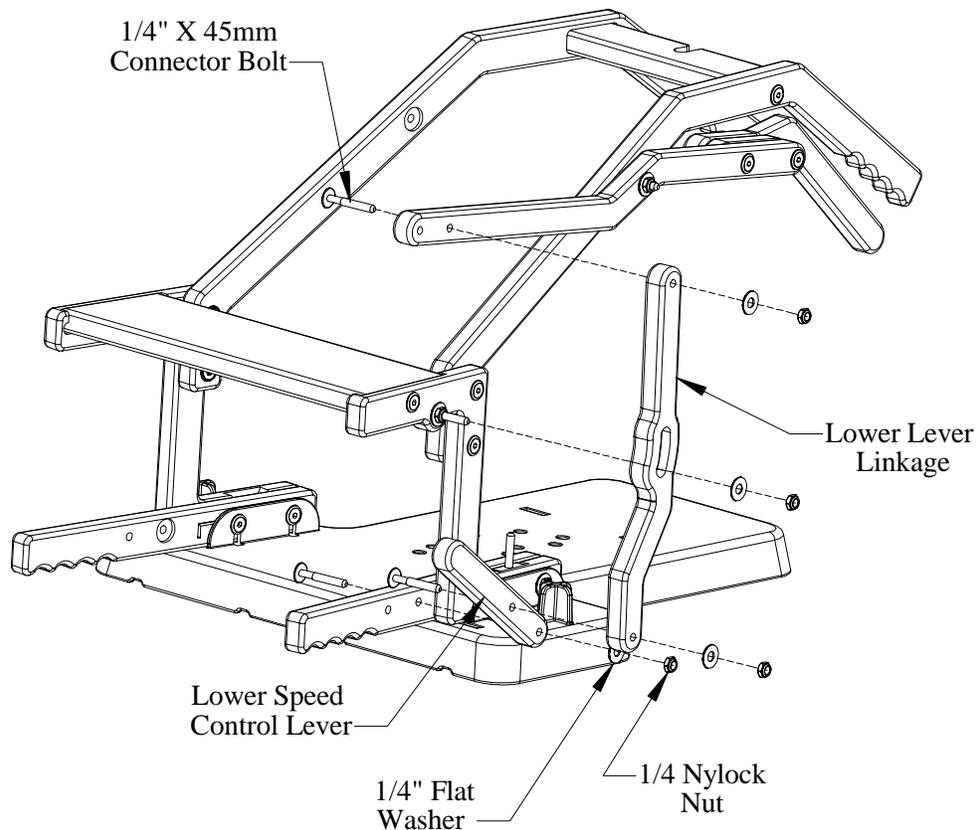
- Place the 45 mm connector bolt through hole of the Pedal Support (from the inside, as pictured).
- Once through, place a 1/4" flat washer and 1/4" nylock nut onto the bolt.
- **TIGHTEN THIS NYLOCK NUT COMPLETELY ONTO THE BOLT.**



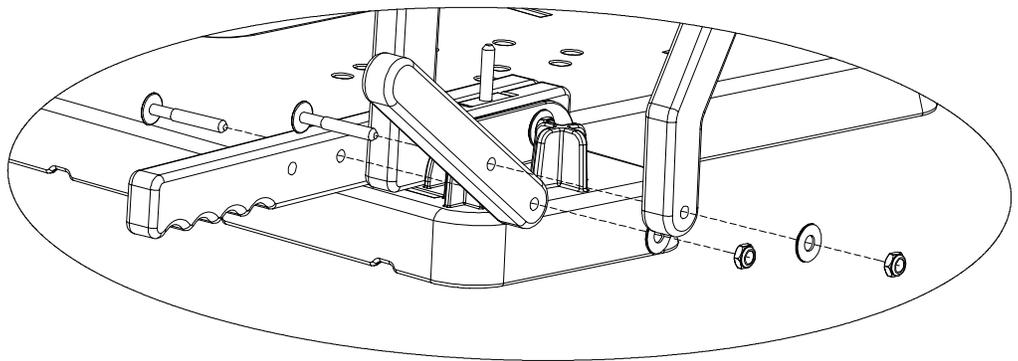
Step 8: Lower Speed Control to Carriage Assembly

Parts Needed: 1 – Lower Lever Linkage
 1 – Lower Speed Control Lever
 3 – 1/4" x 45mm Connector bolts
 4 – 1/4" Flat Washers
 4 – 1/4" Nylock Nuts

- First connect the Lower Lever Linkage to the Upper Lever Linkage. Do this by placing a 45 mm connector bolt through the second to last hole on the Upper Lever Linkage (from the inside, as picture).
- Place the top hole of the Lower Lever Linkage onto the end of the bolt. Make sure the Lower Lever Linkage is right-side-up, as pictured.
- Fasten together by placing a 1/4" flat washers and then a nylock nut onto the end of the bolt. (NOTE: Tighten this and all other nylock nuts in this step just enough to still allow the washer to spin freely).



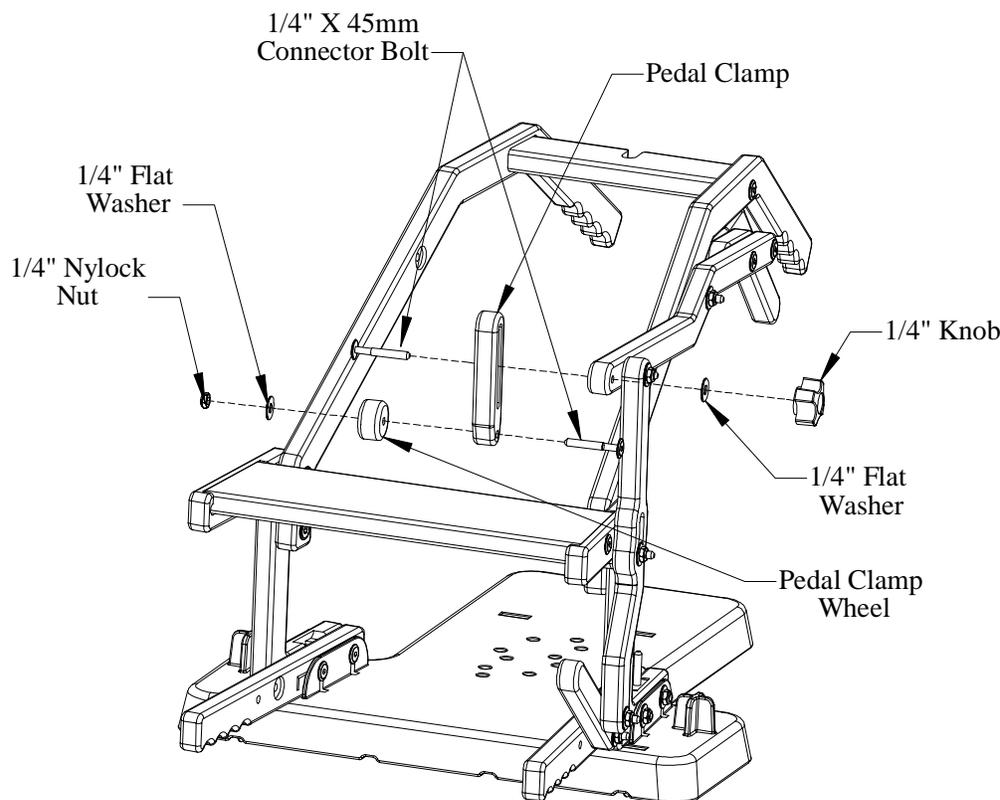
- The bolt installed in the last step will go into the slot in the middle of the Lower Lever Linkage.
- Fasten together with a 1/4" flat washer and 1/4" nylock nut (do not over-tighten).
- Next, connect the Lower Speed Control to the Right (or Left, depending on which side you choose) Lower Handle by placing a 45 mm connector bolt through the second to last hole (the hole that is pocketed) in the Right Lower Handle.
- Then place the Lower Speed Control Lever onto the bolt, so the bolt comes through the hole on the end of the Lever.
- Fasten together with a 1/4" flat washer and 1/4" nylock nut onto the end of the bolt (do not over-tighten).
- Now connect the Lever to the Lower Lever Linkage by placing a 45 mm connector bolt through the remaining hole in the Speed Control Lever, then placing it through the hole at the bottom of the Lower Lever Linkage.
- Fasten these together using a 1/4" flat washer and 1/4" nylock nut (do not over-tighten)



Step 9: Pedal Clamp to Carriage Assembly

- Parts Needed: 1 – Pedal Clamp
 1 – Pedal Clamp Wheel
 2 – 1/4" x 45mm Connector
- Connector
 2 – 1/4" Flat Washers
 1 – 1/4" Nylock Nut
 1 – 1/4" Knob

- In this step, you will connect the Pedal Clamp and wheel to the Upper Lever Linkage.
- First, place a 45 mm connector bolt (from the inside, as pictured) through the long slot of the Pedal Clamp and into the remaining hole at the end of the Upper Lever Linkage.

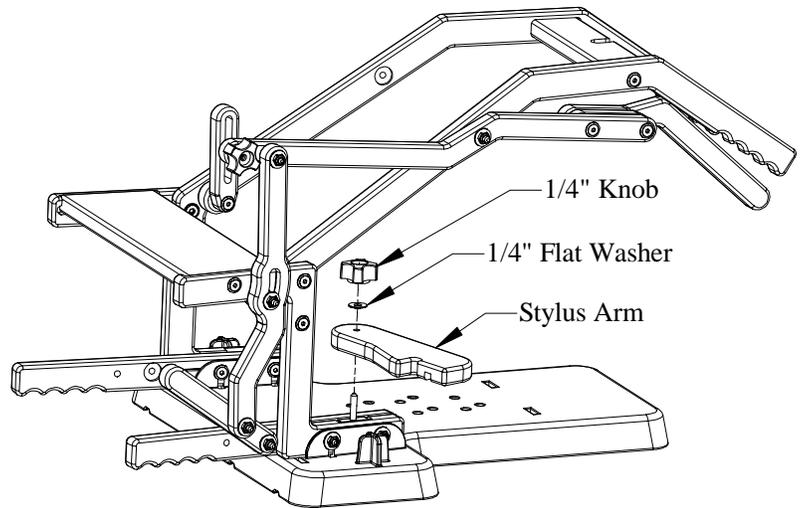


- Fasten using a 1/4" flat washer and 1/4" plastic knob.
- Next, place a 45 mm connector bolt through the hole at the end of the Pedal Clamp (going the opposite direction as the first bolt).
- Place the Pedal Clamp Wheel onto the end of the bolt and fasten using a 1/4" flat washer and 1/4" nylock nut (do not over tighten—wheel should be able to roll).

Step 10: Stylus Arm to Carriage Assembly

Parts Needed 1 – Stylus Arm
 1 – 1/4" Knob
 1 – 1/4" Flat Washer

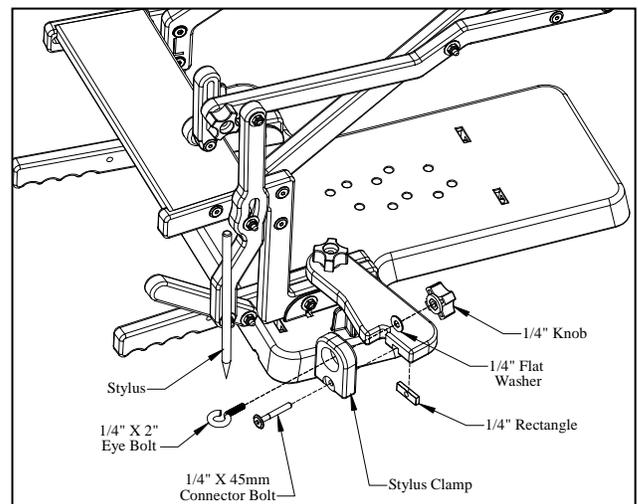
- Next, you will connect the Stylus Arm to the bolt you installed into the Right Pedal Support in Sub-Assembly Step 2.
- Place the wooden Stylus Arm (slotted side down) onto the bolt, followed by a 1/4" flat washer and 1/4" plastic knob.
- Hand tighten the knob down completely.



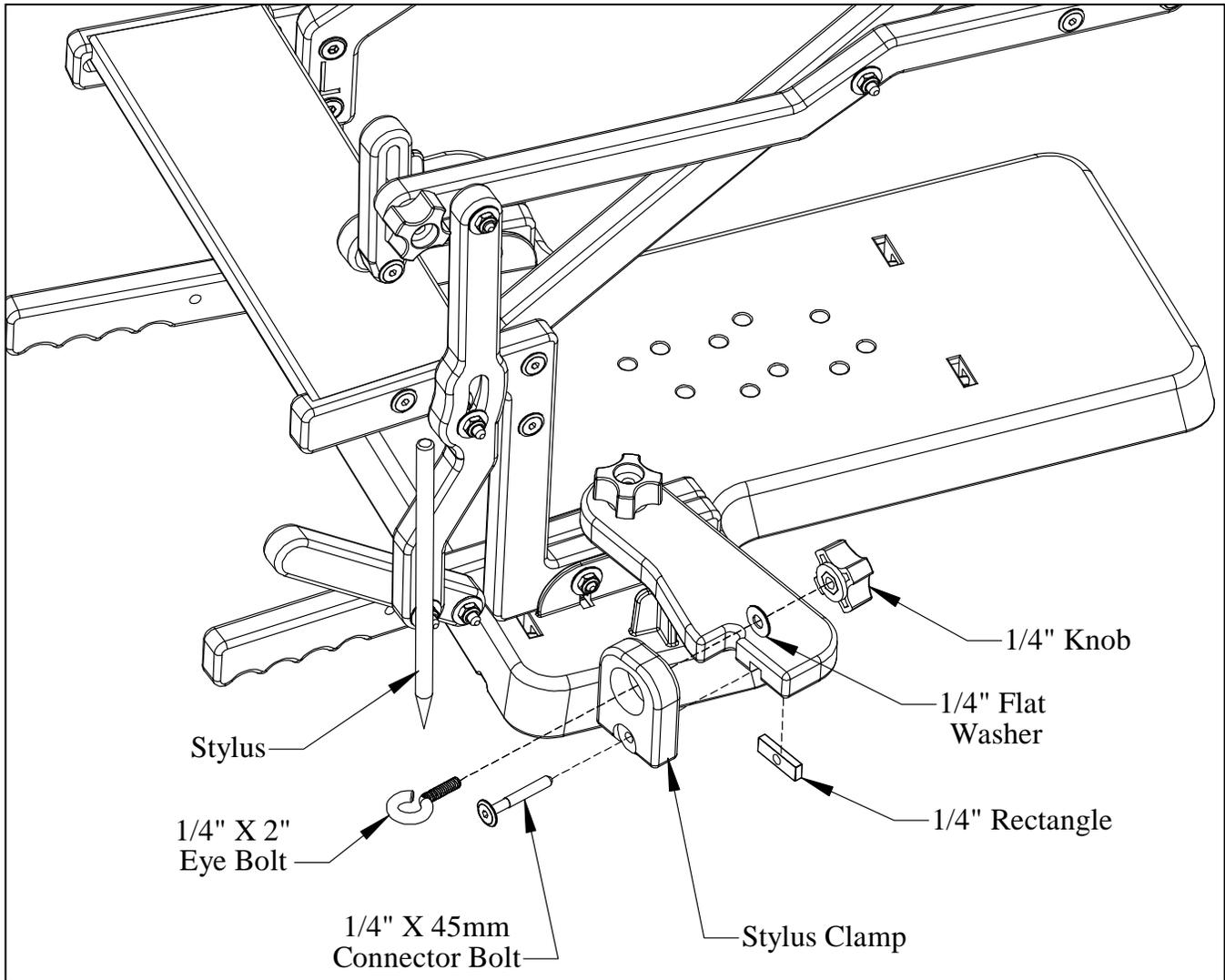
Step 11: Stylus Clamp Assembly

Parts Needed 1 – Stylus
 1 – Stylus Clamp
 1 – 1/4" Knob
 1 – 1/4" Flat Washer
 1 – 1/4" Rectangle Nut
 1 – 1/4" x 2" Eye Bolt
 1 – 1/4" x 45mm Connector Bolt

- First, connect the Stylus Clamp to the Stylus Arm by placing a 45 mm connector bolt through the small hole in the bottom of the Clamp, and into the slot in the under-side of the Arm (as pictured below—or see larger image on next page).
- Place a rectangle nut in the slot in the Arm and thread onto the bolt. Completely tighten the bolt using the Allen wrench.
- Next, place the 1/4" eye bolt through the larger hole in the Stylus Clamp (stem first) and place a 1/4" flat washer and 1/4" knob onto the end of the eye bolt.



- Before tightening, place the wooden Stylus into the eye of the eye bolt. Tighten the knob to secure it in place.
- You are now ready to place your sewing machine onto the Top Plate.



Step 12: Installing the Sewing Machine and Foot Pedal

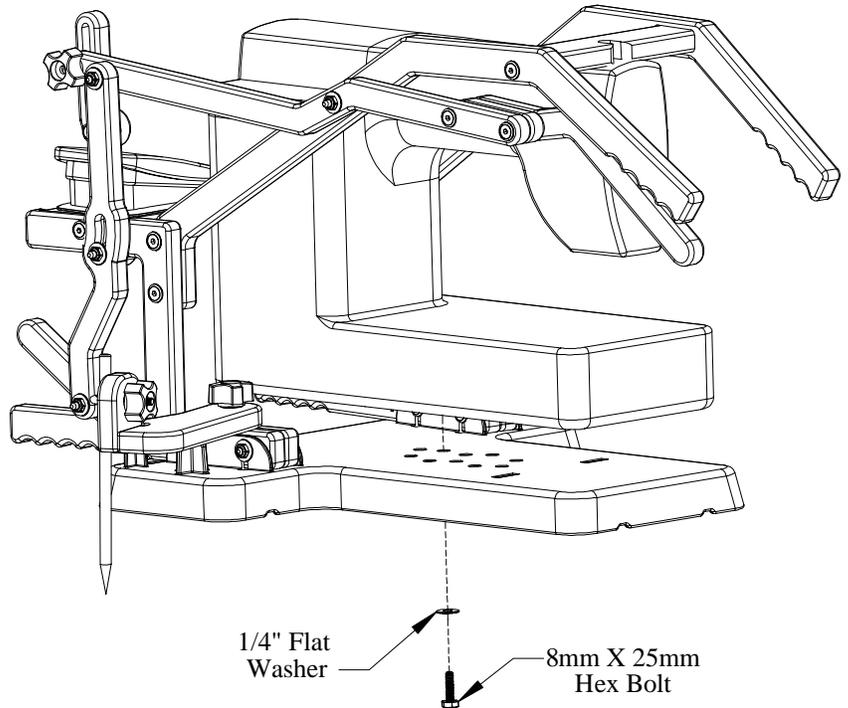
Parts Needed: 1 – Sewing Machine and Foot Pedal

1 – 8mm x 25mm Bolt

6 – 5/16" Flatwasher

- **NOTE!** Before you install your machine to the top plate, it is a good idea to plug the power cord into your machine (but not yet into the wall).
- First install your sewing machine onto the Top Plate using the 8mm machine screw provided. There are several holes in the Top Plate you can use to connect your machine. Choose one that reasonably centers your machine on the Top Plate.

NOTE! Almost all sewing machines have a threaded hole on the machine's underside. However, some machines do not have a hole that fits the 8mm bolt provided, and some do not have any hole at all. If your machine has a different size hole you will need to find bolt locally that will fit your machine. If your machine does not have any hole, you can simply center your machine on the Top Plate unattached (you may also fasten it with nylon ties, tape or other methods that won't drag against the fabric).



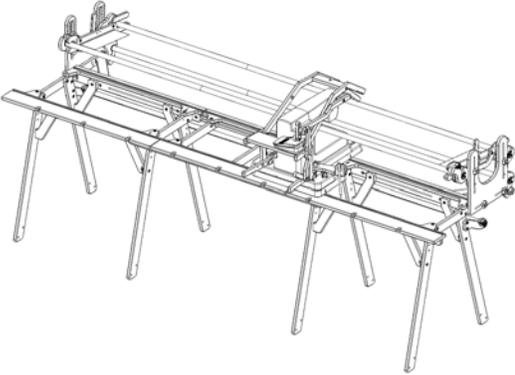
- Place one 5/16" flat washer onto the bolt and then push the bolt through the Top Plate.
- Thread up to five flat washers onto the machine bolt (you may not need all five washers as spacers depending on the size of the feet on your sewing machine. You want just enough washers to fill the gap between the bottom of the machine and Top Plate).
- Thread the bolt into the hole in your machine.
- As you tighten this bolt with a socket wrench, **avoid over-tightening as this will cause the Top Plate to bow slightly, and not roll smoothly.**
- Place your sewing machine's foot pedal onto the Pedal Platform of the Carriage Assembly. Adjust the Pedal Clamp so that the round spacer touches the raised end of the foot pedal.
- At this point you will not need to put the Top Plate, with sewing machine, onto the frame, as it will be in the way during fabric installation. Set it aside, along with the Bottom Plate.

Tips:

- The moveable joints in the Carriage Assembly can sometimes stiffen due to humidity and other factors. If this happens it is recommended that you lubricate all the pivot points with a **Teflon based dry lube**

product. Be sure not to use a silicon based lubricant and do not use WD-40. These will worsen the problem.

- Along with the use of dry lube, you may also want to loosen all the nylock nuts and readjust their tightness.
- Some sewing machines have foot pedals with weaker springs that don't push the pedal back up all the way when you release the trigger. If this happens, you may give your trigger an extra nudge as you release so that it completely removes the Pedal Clamp from your foot pedal.



Congratulations! You have completed the assembly of your Little Gracie.

Save any extra hardware you have left over (if you assembly the crib size you will have bolts and wood pieces remaining).

Store these in a safe, dry place for later use.

All that remains is to install your fabric and begin quilting!

We recommend you begin with practice material allowing you to experiment with machine settings and stroke techniques.

PREPARING TO INSTALL FABRIC:

You will now install the fabric and batting into your Little Gracie. At this point, place the Top and Bottom Plates aside, and turn your attention to the frame with rails.

LITTLE GRACIE FABRIC INSTALLATION

Two Methods of Installation

- There are two methods for installing fabric onto the rails: The **Hem Method** and the **Cloth Leader Method**. With either method it is very important to cut all your fabric square. This will make all the following steps much easier! A rotary cutter helps achieve precise results.
- NOTE: Read through both methods to get a clearer understanding of installing your fabric.

OVERVIEW:

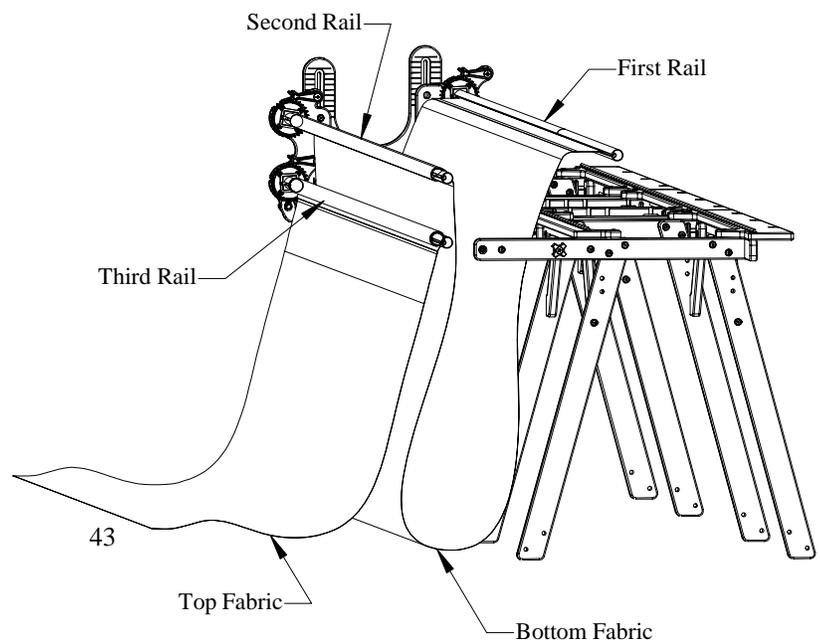
(Note: To keep verbiage simple, we will refer to the rail nearest the sewing machine the "1st" Rail, and the rail on the opposite end the "2nd" Rail, and the "3rd" Rail below).

Step 1: Install Quilt Bottom to 2nd rail and attach it to the 1st rail.

Step 2: Install Quilt Top to the 3rd rail and remove.

Step 3: Lay Batting over the Quilt Bottom.

Step 4: Re-insert Quilt Top rail and take Quilt Top from 3rd rail over the Batting and attach to 1st rail and pin together.



This is an overview to show which fabric layer will go onto which rail in what order. Now review Methods #1 and #2 to determine if you will do this with or without cloth leaders.

METHOD #1: USING CLOTH LEADERS

- This method is recommended when quilting a pieced top, or when you are not able to allow for the extra fabric needed in your quilt when using the Hem Method.
- First, select your cloth leader material. We recommend using a good quality muslin or similar fabric that has a good thread count. Be aware, however, that if the fabric is too thick, it may prove more difficult getting it installed into the rail slot.
- Make a cloth leader with the following pre-hemmed lengths (these are the longest the leaders will need to be. Depending on the throat size of your machine they can be smaller these dimensions below. These are dimensions are ideal for a machine with a small 3" throat space.

Leader Cloth Dimensions



First Rail Leader - Queen 3"X96" Crib 3"X62"

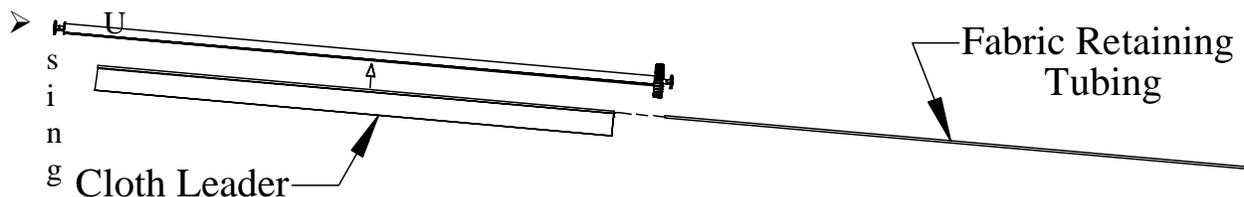


Second Rail Leader - Queen 16"X96" Crib 16"X62"



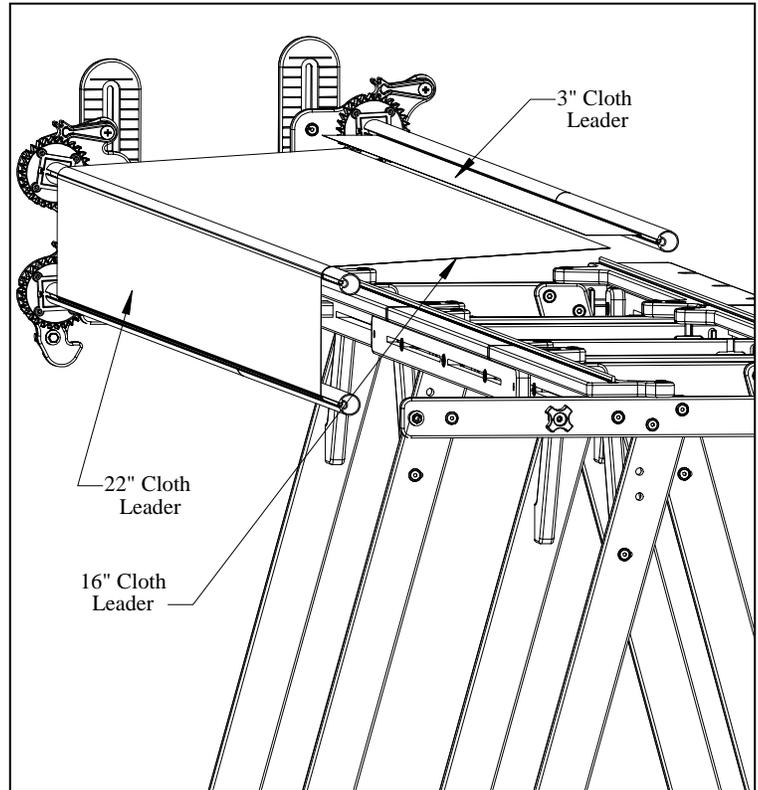
Third Rail Leader - Queen 22"X96" Crib 22"X62"

- Next, you will create a casing on one end of each leader. To do this fold the fabric one inch (1"), and, using your foot pedal as a guide, stitch the fabric together 3/4" from the fold. This will leave about 1/4" of fabric beyond the stitching. Leave the edges open on both ends.
- Mark (or baste) a straight line about one inch in from the opposite (non-casing) end of the leader. This will be the line to which you attach your fabric layer.



Grace's new Fabri-Fast™ System, take a piece of plastic tubing (cut to the appropriate length), and slide it through the casing.

- Squeeze the encased tubing into the slot of the rail.
- This illustration show the cloth leaders installed on each rail prior to your quilt layers being installed.
- Now pin your quilt layer along the straight line.



METHOD #2: HEMMING YOUR FABRIC LAYERS

This method is time-saving but only works well with non-pieced quilt tops where you can allow for several extra inches of fabric on each layer. The extra lengths required are as follows:

***Quilt Top: about 25"** (3" on the edge being attached to the 1st rail, and the remainder of extra fabric on the edge being attached to the 3rd rail);

***Quilt Bottom: about 16"** (3" on the edge being attached to the 1st rail, and the remainder of extra fabric on the edge being attached to the 2nd rail).

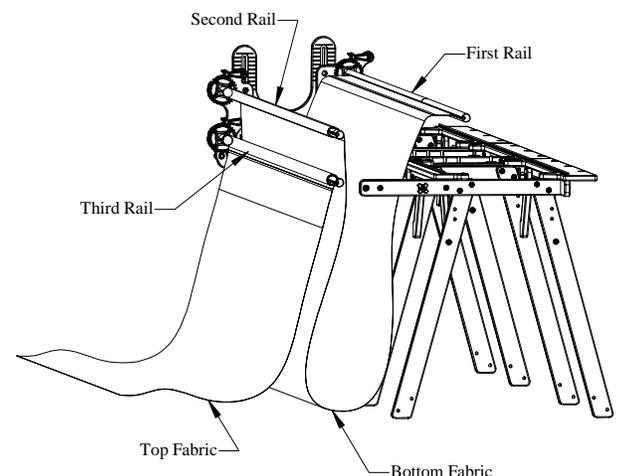
This will give you the extra length needed for the hem, and for feeding the quilt layers into your sewing area when you come to the end of your quilt.

INSTALLING YOUR FABRIC LAYERS TO THE RAILS

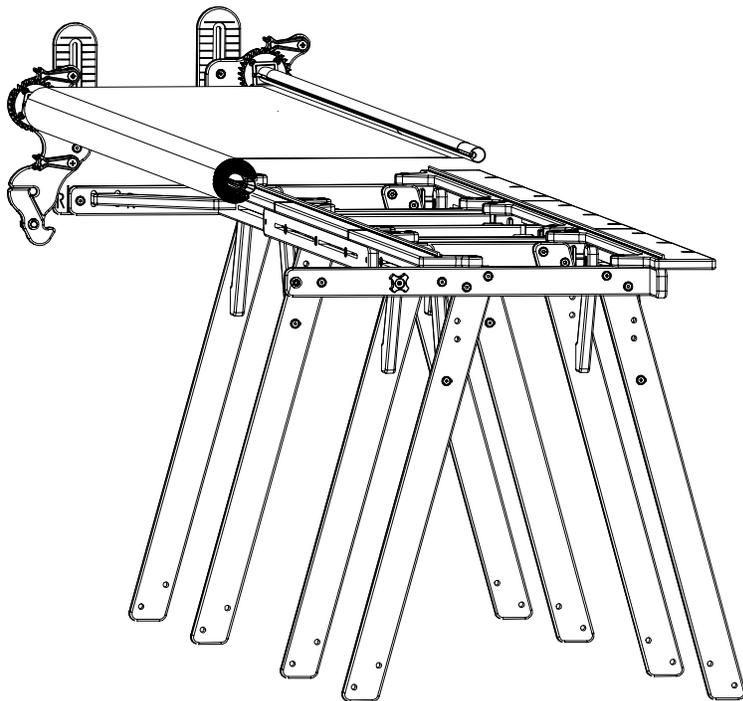
The following steps are written from the Method #2 perspective. If you are using cloth leaders, disregard instructions on making hems and using the Fabri-Fast tubing, as this has already been accomplished with your cloth leaders. Simply pin your quilt edge to cloth leader on the corresponding rail of the instructions.

STEP 1: QUILT BOTTOM TO SECOND RAIL

- To begin, determine which will be the front and back edges of your quilt bottom (be sure it will fit within the size of your frame—crib or queen).
- If not using cloth leaders, fold over the back edge of your quilt about 1" , with the unfinished side of the fabric on the inside of the fold. **Be sure not to stretch or pull the fabric during this process.** Let it lay naturally.



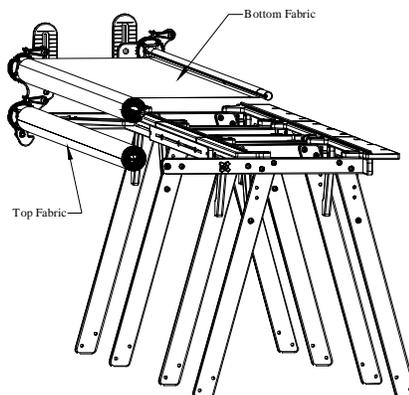
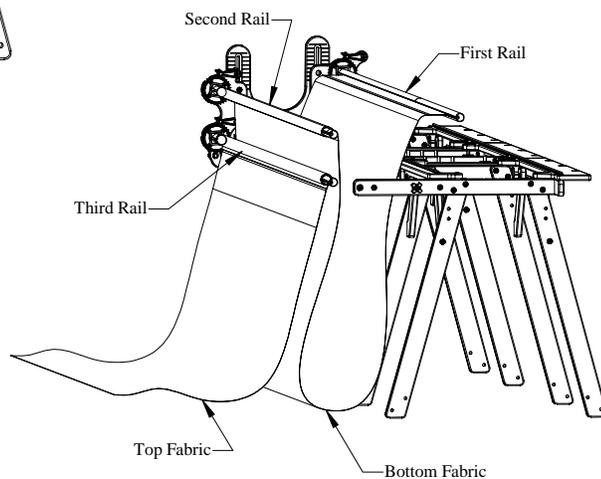
- Stitch the fabric together 3/4" from the fold. This will leave about 1/4" of fabric beyond the stitching.
- **If using clothing leaders**, pin this back edge to the leader cloth on the 2nd Rail.
- Now, repeat this for the front edge of the quilt bottom.
- Insert the Fabri-Fast tubing into the hems you have just created.
- Next, squeeze the tubing and fabric into the slot of the 2nd rail. As the fabric hangs down in between the 2nd and 1st rails, the unfinished or inside of the quilt bottom should be facing the 1st rail.
- Now take the other end of the quilt bottom with tubing, and insert it into the 1st rail. (The unfinished side of the quilt bottom should be face up).



- Slowly and gently roll up your quilt bottom *counter-clockwise* (as you face the ratchet wheels) onto the 2nd rail. As you do, make sure the fabric rolls up perfectly natural without wrinkles. However, as you smooth out any wrinkles, be very careful not to stretch or pull the fabric excessively.
- **NOTE!** It is important that you roll the rail counter-clockwise so the fabric rolls over and onto the 2nd rail.
- Make sure the layers are rolling on top of each other on each end of the quilt.

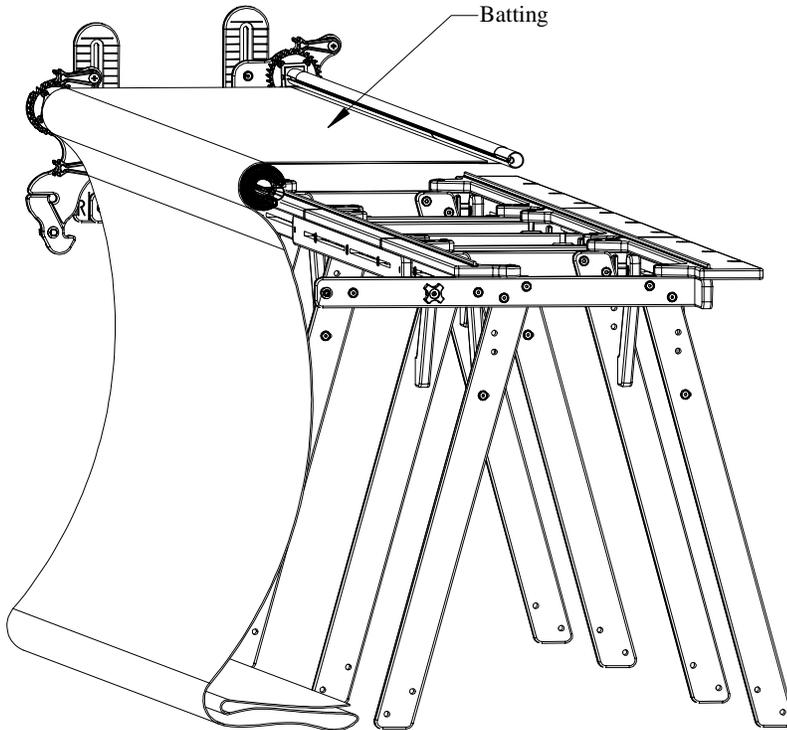
STEP 2: QUILT TOP TO 3rd RAIL

- Fold over the *back edge* of your backing about 1", with the unfinished side of the fabric on the inside of the fold.
- Stitch the fabric together 1" from the fold. This will leave about 1/4" of fabric beyond the stitching. Be sure not to stretch or pull the fabric during this process. Let it lay naturally.
- Now insert the Fabri-Fast tubing into this casing and squeeze this edge of the quilt top into the 3rd rail.
- With the quilt top draping down from the 3rd rail, the unfinished side should be facing *away* from the frame.
- Now you will roll the quilt top onto the 3rd rail. **NOTE!** It is important that you roll the 3rd rail counter-clockwise (as you face the ratchet wheels) so the fabric rolls over and onto the rail.
- As you smooth out any wrinkles, again be very careful not to stretch or pull the fabric excessively.



- Make sure the layers are rolling on top of each other on each end of the rail.
- Also be sure the backing and top are equal distance from the ends of the rail.
- NOW CAREFULLY REMOVE THE 3RD RAIL, LEAVING THE QUILT TOP ROLLED UP.

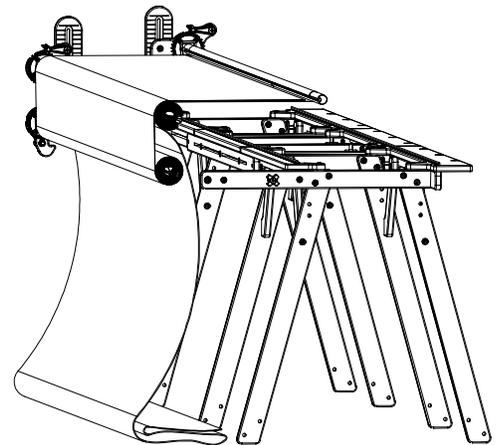
STEP 3: BATTING



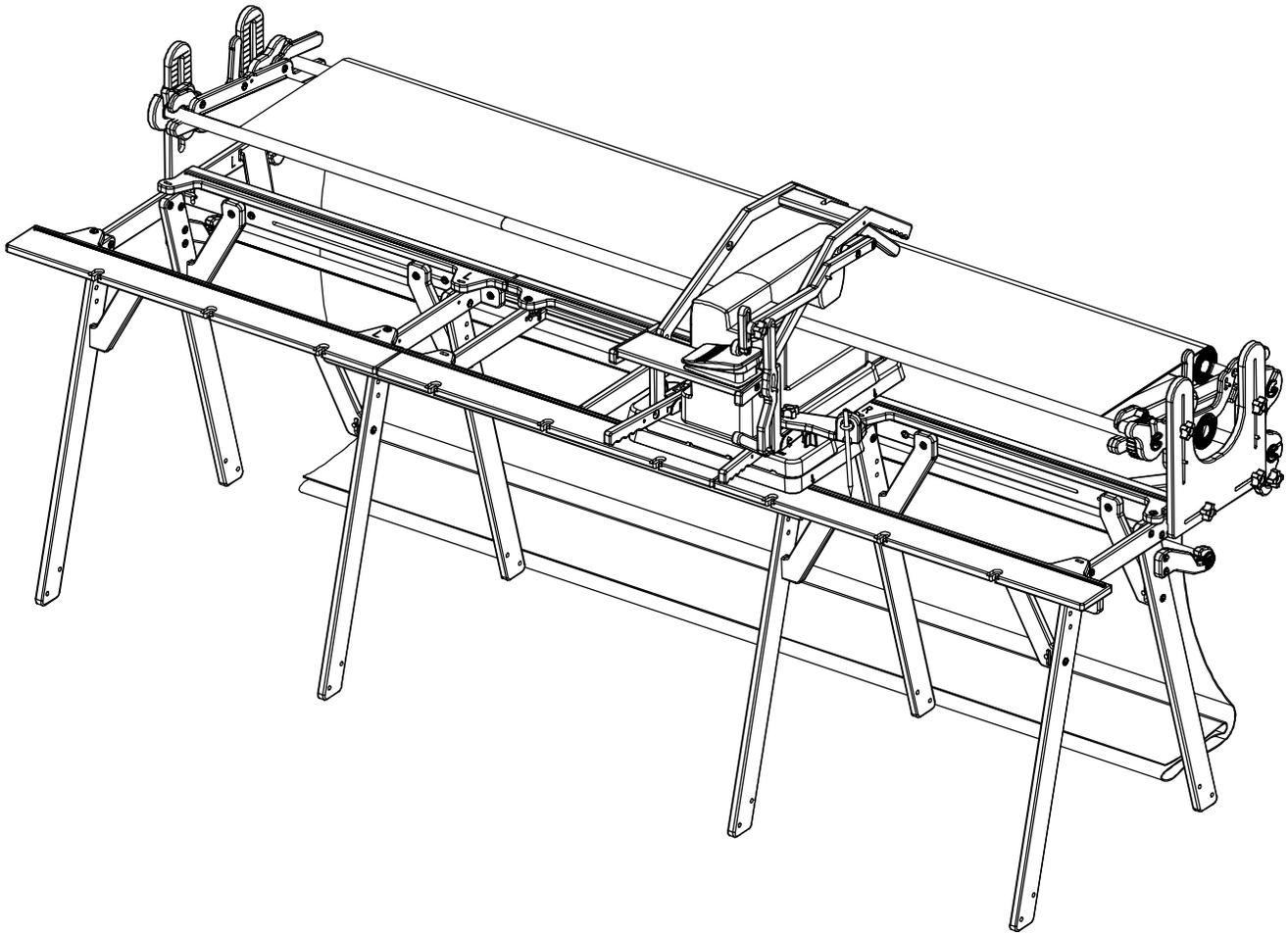
- A light, bonded batting is recommended.
- Drape the batting over the backing, lining up the front edge with the hem stitching on the backing at the 1st rail.
- The other end of the batting can hang freely over the 2nd pole and roll off the floor.

STEP 4: REPLACING THE THIRD RAIL AND PINNING TOGETHER FABRIC

- Now insert the 3rd rail back into its place on the frame.
- Take the edge of the quilt top and pull it up and over, aligning it with the front edge of the batting quilt bottom.
- Pin the quilt top and batting to the backing along this straight hem stitch.



- Once your fabric is in place, it is time to put your Top and Bottom Plates (with sewing machine) onto the frame.
- Lift the 1st rail up out of its slot and place the left end through the throat of the machine. Then place it back in the slot.
- Set the Top Plate onto the Bottom Plate making sure the wheels line up in the tracks of the Bottom Plate.



Rolling your fabric

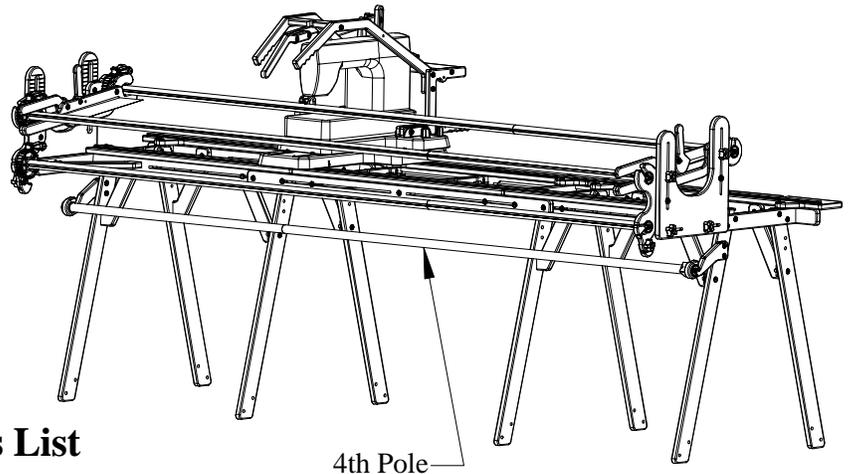
- As you roll forward, the quilt will accumulate on the 1st rail. Be sure to raise the Pole Mount Ends slightly as needed, so that the bottom of the rolled up fabric stays about 1/16" about the sewing machine base. Failing to do so will cause your Carriage Assembly to roll less smoothly.

The Four-Inch Principle

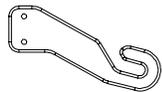
- If you are using a sewing machine with a regular size throat, you will want to follow the four-inch principle: Limit any quilting pattern to four inches or less from front to back.
- The Grace Machine Quilter actually gives you close to 7" or 8" of reach, but because of a limited throat size, and because the fabric will eventually roll up on the 1st rail, further decreasing space, you will want to keep patterns to a 4" limit.

The Little Gracie OPTIONAL 4th RAIL PARTS LIST AND ASSEMBLY:

The Fourth Rail is an optional rail that holds your batting up off the floor and keeps it in a nice roll. The 4th Rail allows the batting to roll freely into your work, with tension.



4th Pole Parts List



2-4th Pole Bracket



1-64" Rail



1-34" Rail



1-94" Fabric Retaining Tube



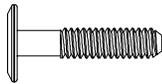
1-Square End Cap



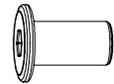
1-Round End Cap



2-End Cap Shoulder



4-1/4" X 30mm Connector Bolt

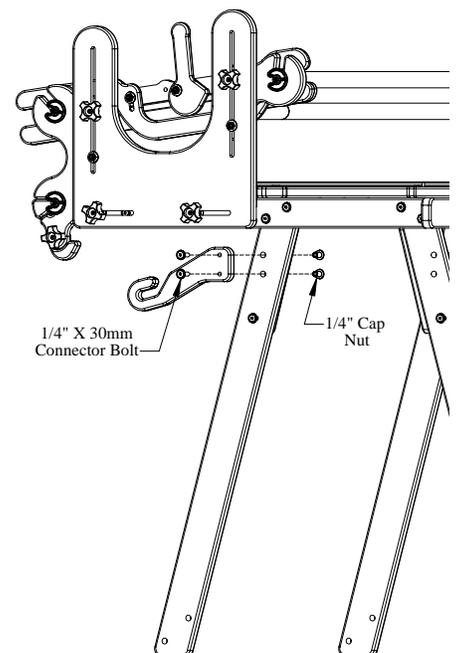


4-1/4" Cap Nut



2-7/8" Screws

- The Fourth Rail brackets install onto the outside of the back legs of the Little Gracie.
- This is done by putting a 1/4" cap nut into the two upper holes of the back leg (*from the inside*).
- Place a 1/4" x 30 mm connector bolt through each of the two holes in the bracket, as pictured.
- Connect the connector bolts and cap nuts and tighten using the two Allen wrenches.
- Assemble the rail according to the instructions in Step 16 of the Frame Instructions (minus the ratchet wheel)



TroubleShooting Tips:

The rail is binding and will not roll easily

If any of the rails are difficult to roll and/or are binding, you will need to readjust your frame to allow a little more room for your rail.

To do this, simply loosen the bolts that fasten the braces together, and loosen the connector bolts that fasten the Table Left Side.

As you loosen all these bolts the frame should naturally push out slightly. Roll the rails to make sure they are loosened, and then re-tighten all the bolts.

The sewing machine is bouncing or vibrating excessively when quilting

This may occur if the machine is not mounted to the Top Plate. If this is happening, move the sewing machine toward the back of the Top Plate.

There is resistance with the Carriage tracking from side-to-side

This may result from the track platforms not being completely parallel to one another. They need to be re-measured and possibly adjusted (see Step 19 of the Frame Assembly: Track Platform Assembly).

Additional Tips From Grace



Concerning Your Sewing Machine:

- Lower the bottom feed dogs completely so they do not catch the fabric. You want a completely smooth surface over which the fabric/rail can glide (see sewing machine manual).
- Select the Straight Stitch function on your machine. (See sewing machine manual).
- A larger throat machine is ideal.
- Faster stitching seems to work better than speeds. Select higher speeds on your machine, and/or push the speed control levers of your Carriage Assembly so that they are fully engaged.
- Make sure your machine is threaded correctly and the bobbin is installed correctly (see sewing machine manual).
- Perform a tension check by sewing somewhere in the EdgeMaster™ sleeve or in a part of the quilt that will be removed to see if the thread tension is correct (see sewing machine manual).
- Lower the Presser Foot.
- When reloading the bobbin into a top-loading machine, slide the machine all the way to the left of the frame and remove the EdgeMaster™ on that side. This will adequately expose the bobbin compartment for easier reloading.
- **TRACK TIP:** If you experience bumps in your tracking from left to right or front to back, you may try cleaning your track channels in the table and on the top platform with a cotton swab. You may also do the same to the channels in your wheels.

Accessories Available:

The following accessories are, or will soon be, available from the Grace Company or from the store from which you purchased your Little Gracie. Contact your local store to order, or, if they do not carry them, you may order direct at 1-800-264-0644

Pattern Perfect (Template Guide System)

Table Inserts

Height Adjustable Legs

Goose-Neck Lamp

True Color Bulb