

The New Little Gracie II
Home Machine Quilting System

Parts List

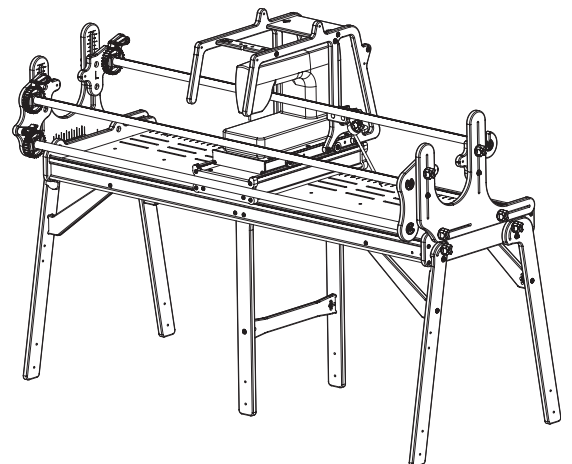
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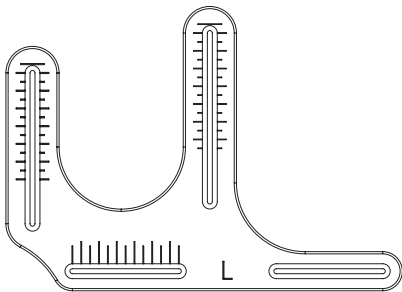
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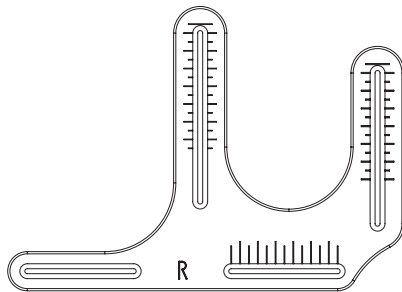


Little Gracie II

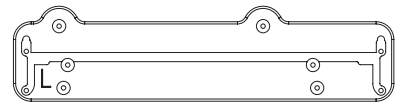
Parts List A



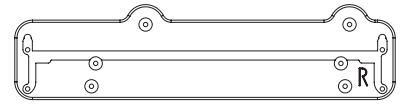
(1) Left Rail Mount End



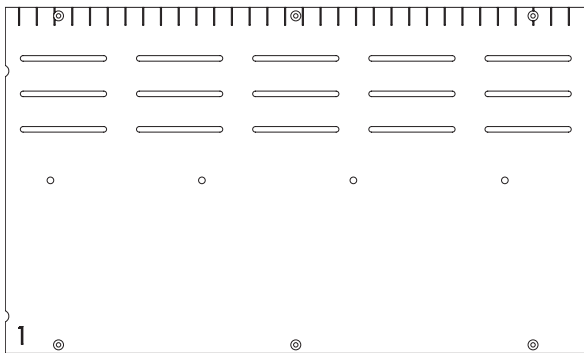
(1) Right Rail Mount End



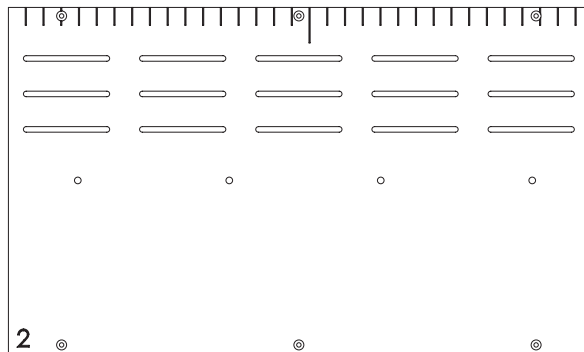
(1) Left Frame Side



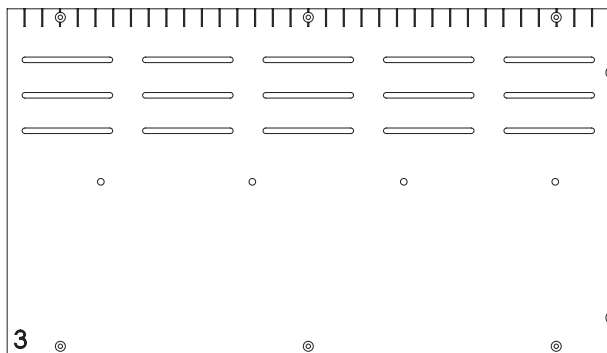
(1) Right Frame Side



(1) Table #1



(1) Table #2



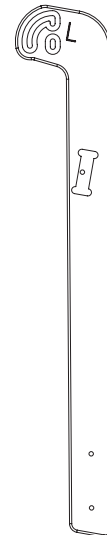
(1) Table #3



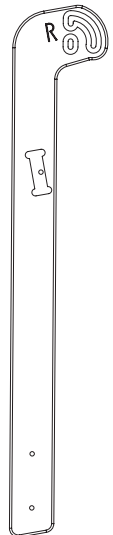
(1) Left Front Leg



(1) Right Front Leg

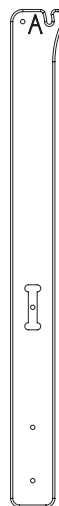


(1) Left Back Leg



(1) Right Back Leg

(3) Cone Thread Disk



(2) Middle Leg "A"



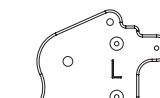
(2) Middle Leg "A"



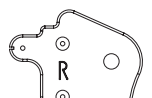
(1) Left Take Up Rail Mount End



(1) Right Take Up Rail Mount End



(1) Left Fabric Layers Rail Mount End



(1) Right Fabric Layers Rail Mount End



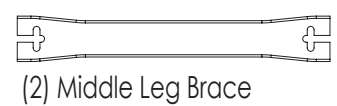
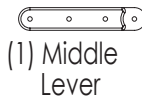
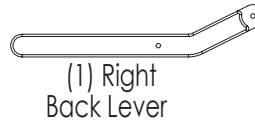
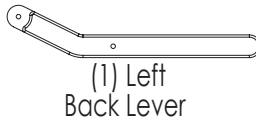
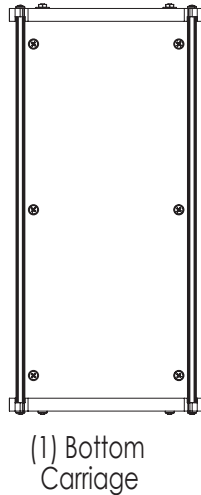
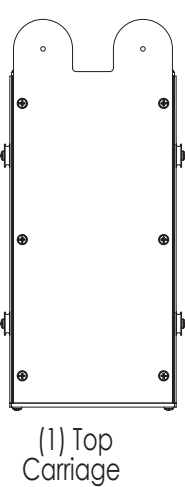
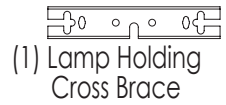
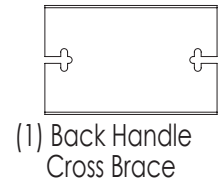
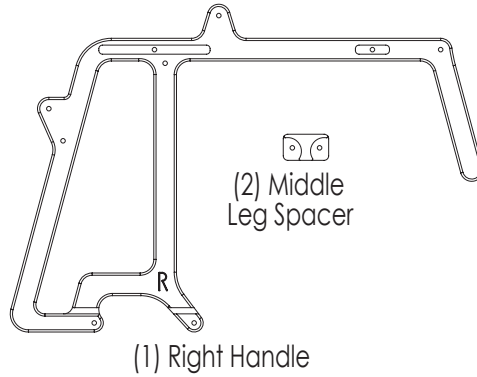
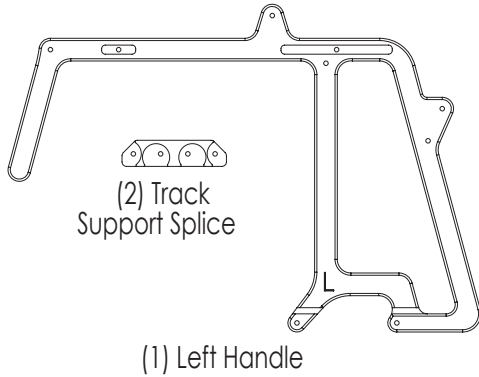
(2) Carriage Stop Base



(2) Carriage Stop Clamp

Little Gracie II

Parts List B



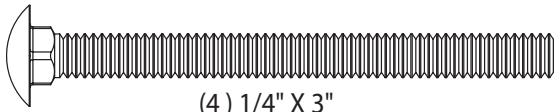
(3) Fabrifast Tubing-Pre-Installed in your 64" rail

(2) 65-1/2" Plastic Track -Pre-Installed in your Crib Table Aluminum Track Supports

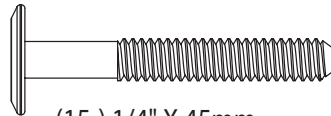
(2) 99-1/2" Plastic Track

Little Gracie II

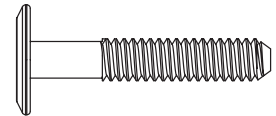
Parts List C



(4) 1/4" X 3"
Carriage Bolt



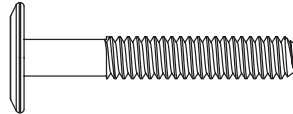
(15) 1/4" X 45mm
Connector Bolt



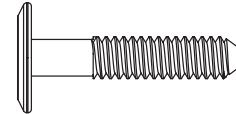
(3) 1/4" X 35 m
Connector Bolt



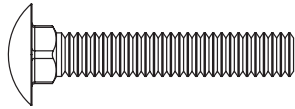
(2) 1/4" X 2-1/4"
Carriage Bolt



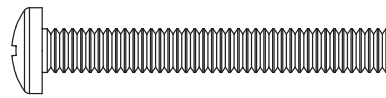
(2) 1/4" X 40 m
Connector Bolt



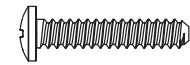
(4) 1/4" X 30mm
Connector Bolt



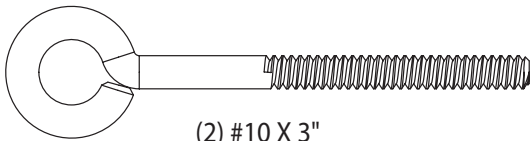
(20) 1/4" X 1-1/2"
Carriage Bolt



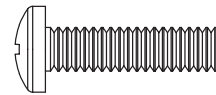
(8) 1/4" X 2" Phillips
Pan Head Screw



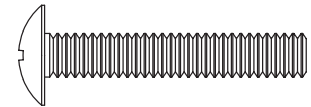
(6) #8 X 7/8"
Screw



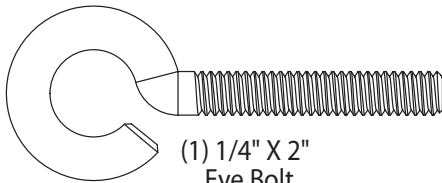
(2) #10 X 3"
Eye Bolt



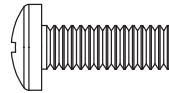
(8) 1/4" X 1" Phillips
Pan Head Screw



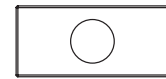
(3) 1/4" X 1-1/2"
Truss Bolt



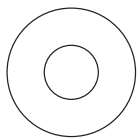
(1) 1/4" X 2"
Eye Bolt



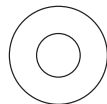
(26) 1/4" X 3/4" Phillips
Pan Head Screw



(12) 1/4" Rectangle
Nut



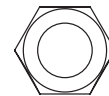
(27) 1/4" Flat
Washer



(67) 3/16" Flat
Washer



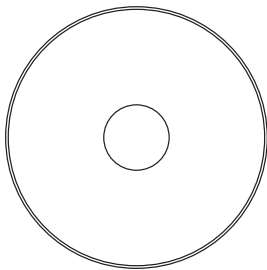
(4) #10 Hex
Nut



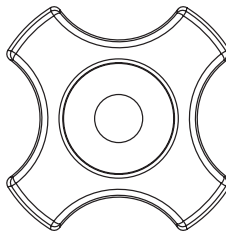
(57) 1/4" Jam
Nut



(20) 1/4" Nylock
Nut



(22) 1-1/4" Fender
Washer



(23) 1/4" Plastic
Knob



(1) Fabri-fast Tool



(1) 4mm Allen Wrench

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 or 1-801-485-6688.**

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!

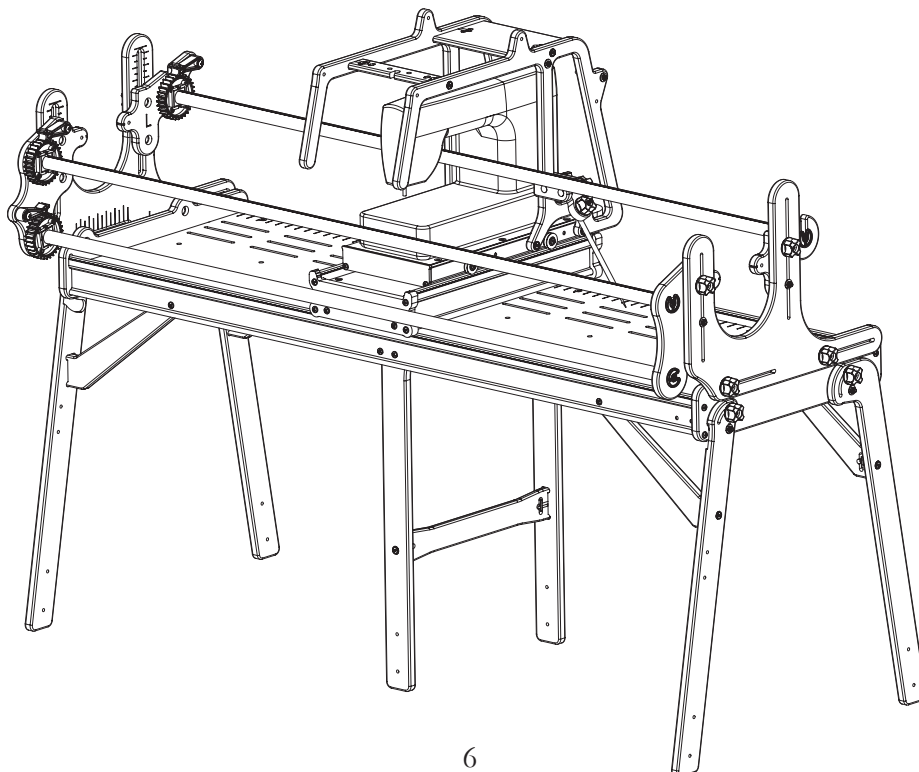


As you begin assembly of your new Little Gracie home machine quilting system, keep in the mind the following:

- 1) Plan to spend a minimum of 2-4 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 the box and make sure that you have them all. (If there is something missing or broken, contact the Grace Company at 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) Identify Hardware Packets: All hardware is separated by type and each packet is labeled for ease in identification you will find packets located in a rectangular box.
- 6) 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:

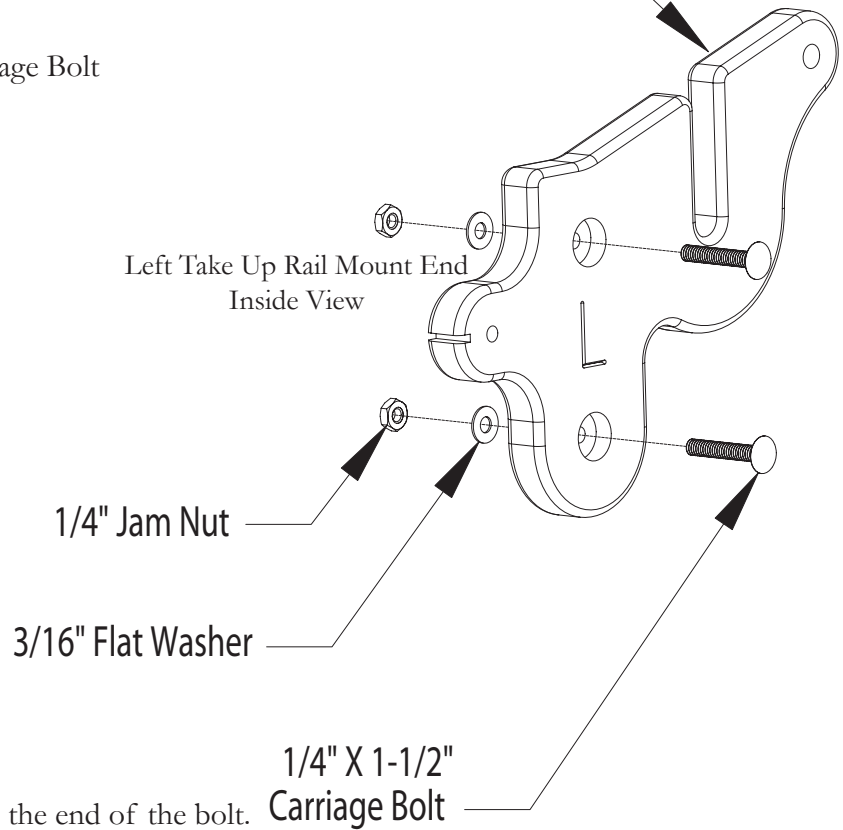
- 7/16” Socket Wrench
- Adjustable wrench
- Phillips Screw Driver
- Allen wrench (provided)
- Fabri-Fast Tool (to be used when installing your fabric).



Step 1: Take Up Rail Mount End Assembly

Parts Needed: 1- Right and Left Take Up Rail Mount End
4- 1/4" Jam Nut
4- 3/16" Flat Washer
4- 1/4" X 1-1/2" Carriage Bolt

Left Take Up Rail Mount End



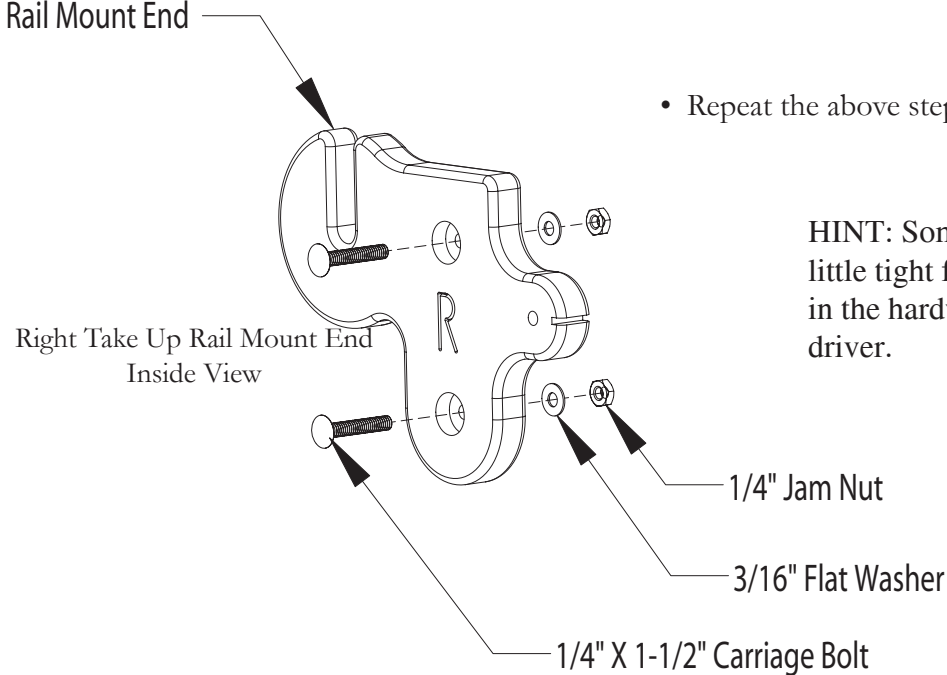
- Place one of the carriage bolts through each of the holes on the Left Take Up Rail Mount End, making sure the head of the bolt is on the side with the L.

- Place one washer and one jam nut on the end of the bolt.

- **TIGHTEN JAM NUTS COMPLETELY ONTO EACH BOLT**

- **IMPORTANT:** Completely tighten the jamb nut onto the bolt until the head of the bolt is pulled into the counter-sunk hole.

Right Take Up Rail Mount End

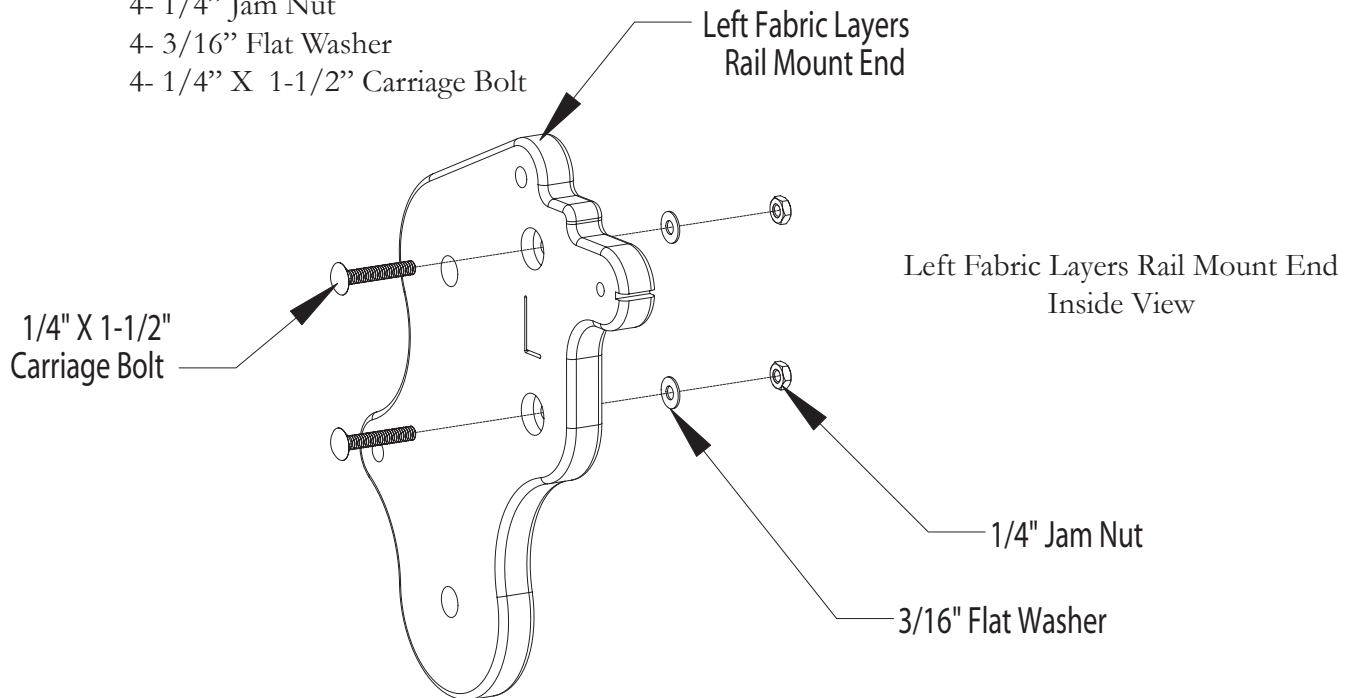


- Repeat the above steps for the Right side.

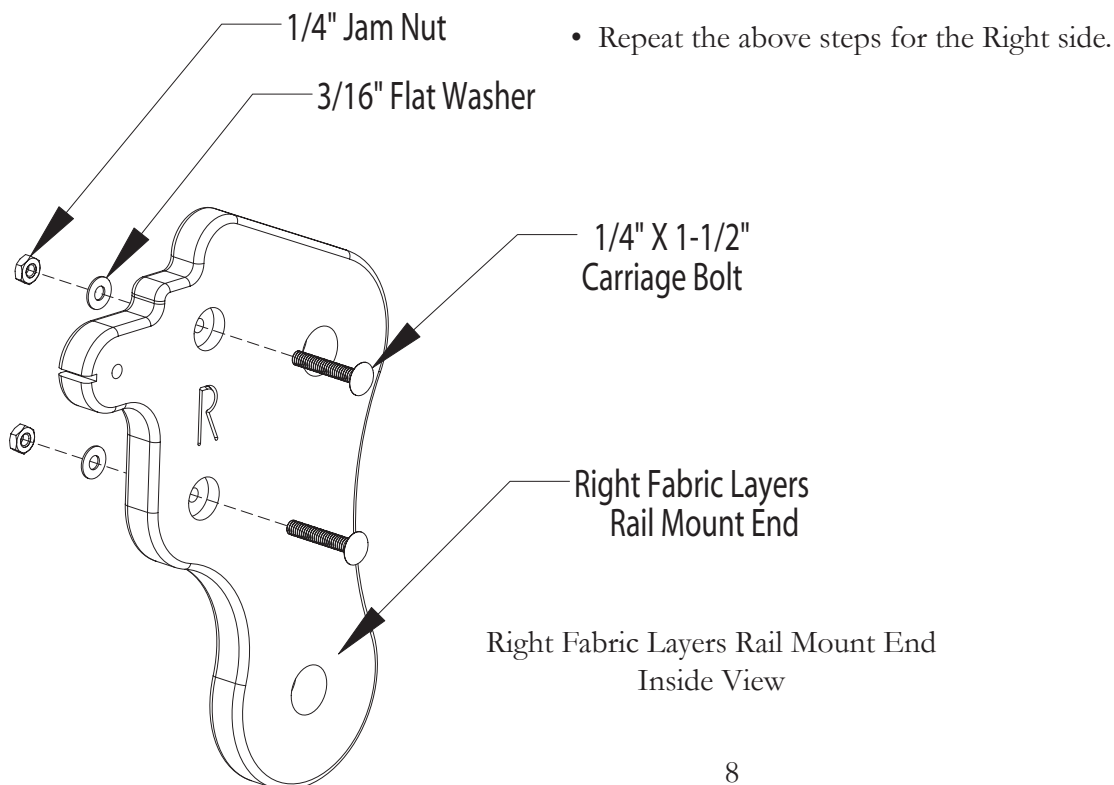
HINT: Some holes in the wood pieces may be a little tight for the hardware. If this is case, tap in the hardware using the handle of your screw driver.

Step 2: Fabric Layers Rail Mount End Assembly

Parts Needed: 1- Right and Left Fabric Layer Rail Mount End
4- 1/4" Jam Nut
4- 3/16" Flat Washer
4- 1/4" X 1-1/2" Carriage Bolt



- Place one of the carriage bolts through each of the holes on the Left Fabric Layer Rail Mount End, making sure the head of the bolt is on the side with the L.
- Place one washer and one jam nut on the end of the bolt.
- **IMPORTANT:** Completely tighten the jamb nut onto the bolt until the head of the bolt is pulled into the counter-sunk hole.



Step 3: Rail Mount End Assembly

Parts Needed: 1- Right and Left Take Up Rail Mount End

1- Right and Left Fabric Layer Rail Mount End

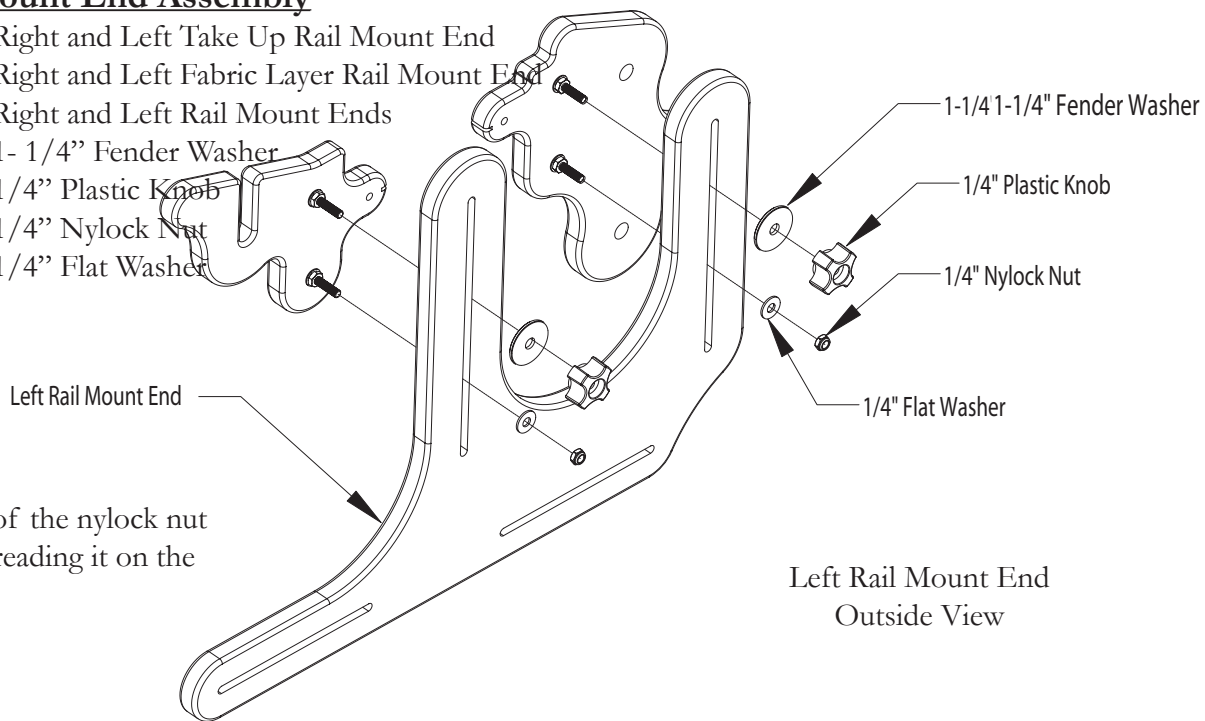
1- Right and Left Rail Mount Ends

4- 1- 1/4" Fender Washer

4- 1/4" Plastic Knob

4- 1/4" Nylock Nut

4- 1/4" Flat Washer



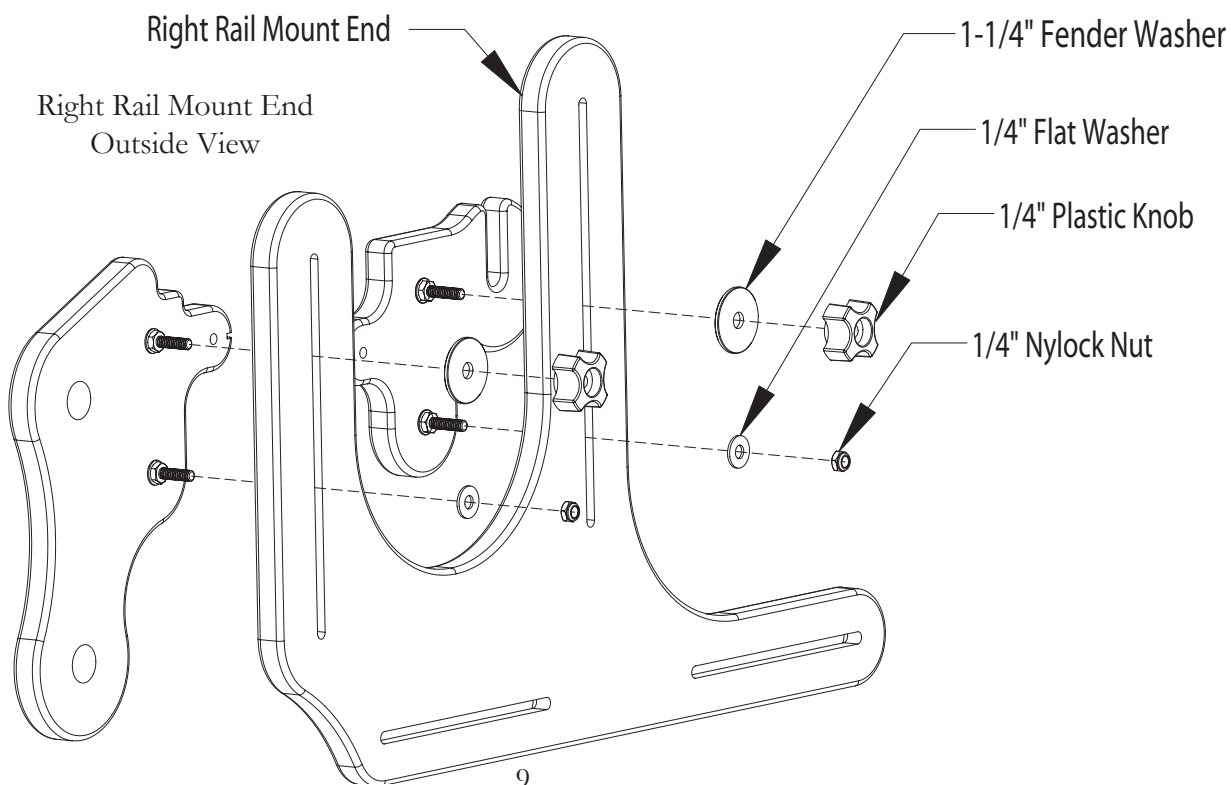
- The nylon side of the nylock nut faces out when threading it on the bolt.

- As shown in the drawing, place the bolts in the Right Take Up Rail Mount End through the first slot on the Right Rail Mount End.

- Place a fender washer followed by a plastic knob on the top bolt.

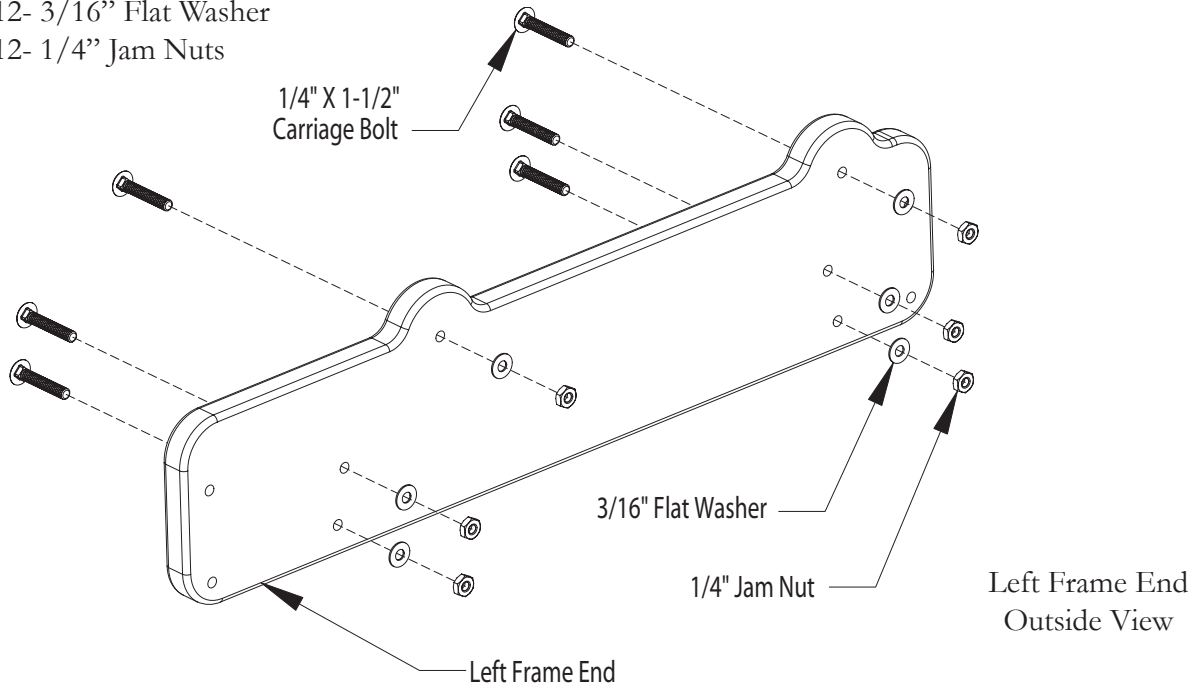
- Put a washer and then a nylock nut on the bottom bolt. **NOTE!!** Leave all the nylock nuts loose to allow the washer to turn in your fingers!

- Follow the above steps for the Left Take Up Rail Mount End, Right Fabric Layer Rail Mount End, and the Left Fabric Layer Rail Mount End.

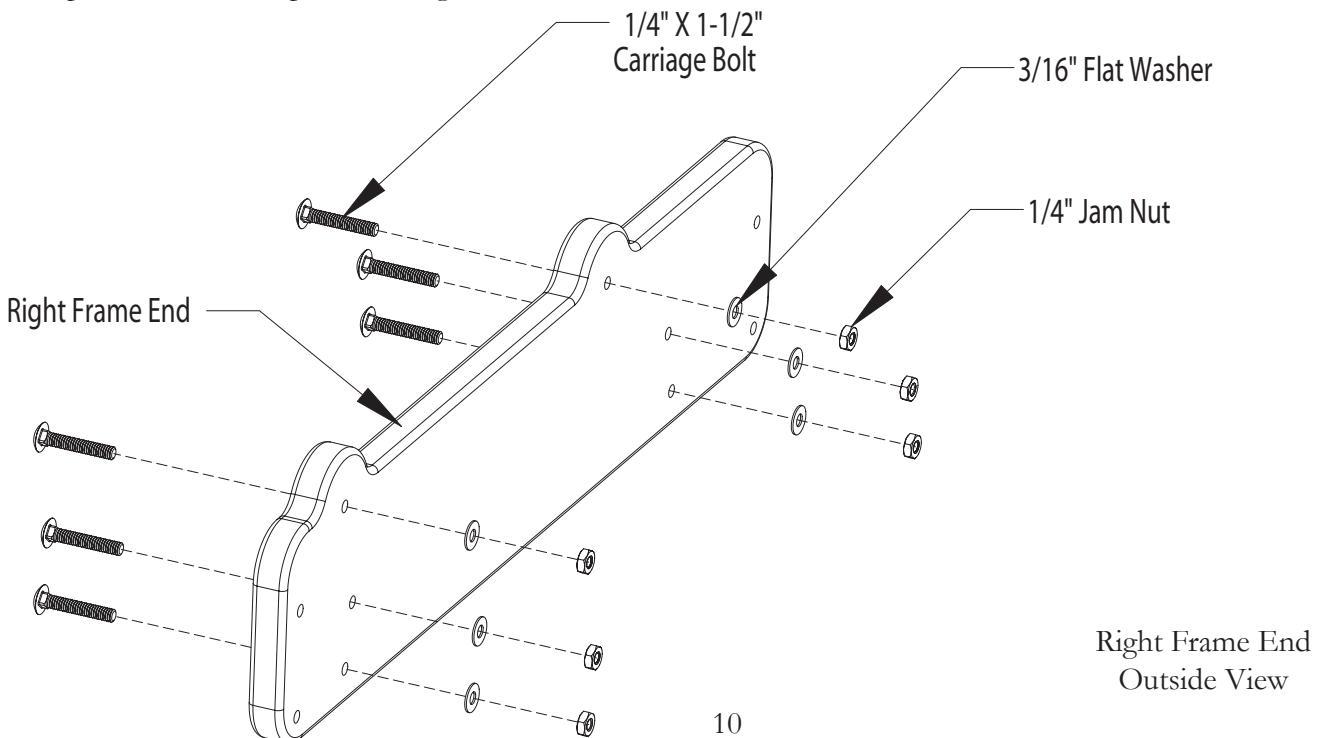


Step 4: Frame End Hardware Assembly

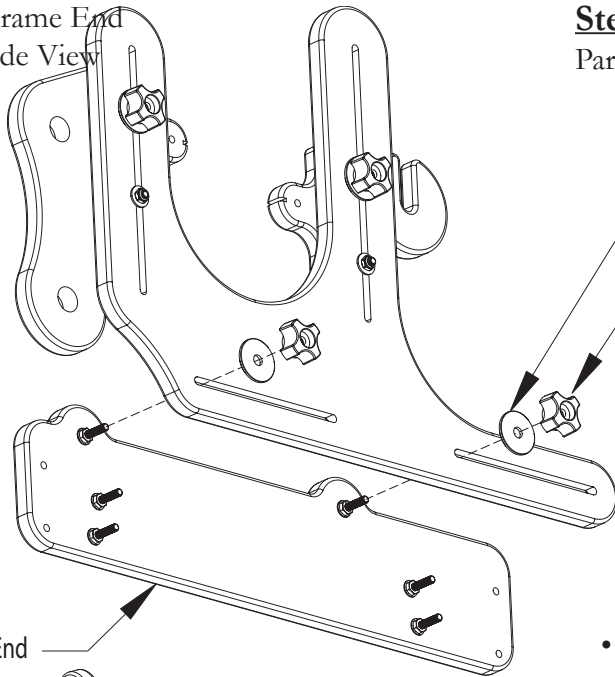
Parts Needed: 1- Right and Left Frame End
12- 1/4" X 1-1/2" Carriage Bolt
12- 3/16" Flat Washer
12- 1/4" Jam Nuts



- Place one of the carriage bolts through each of the holes, except for the two on each end, on the Right Frame End, making sure the head of the bolt is on the side with the R.
- Place one washer and one jam nut on the end of the bolt.
- REMINDER: Completely tighten the jamb nut onto the bolt until the head of the bolt is pulled into the counter-sunk hole.
- Repeat the above steps for the right side.



Right Frame End
Outside View



Step 5: Frame End Assembly

- Parts Needed: 1- Right and Left Frame End
 1- Right and Left Rail Mount End
 4- 1-1/4" Fender Washer
 4- 1/4" Plastic Knob

1-1/4" Fender Washer

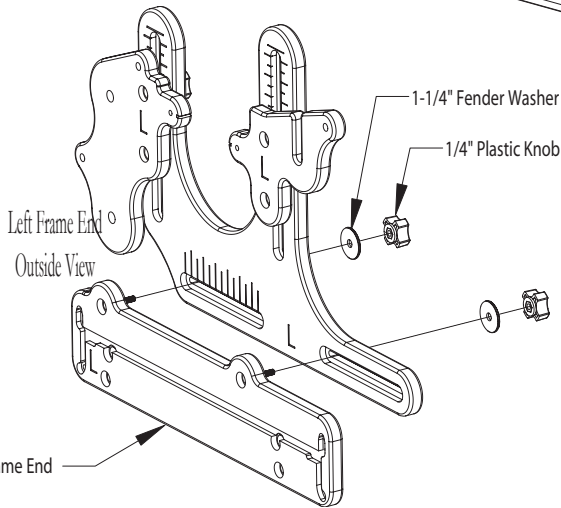
1/4" Plastic Knob

- Place the top two bolts on the Right Frame End in the slots on the bottom of the Right Rail Mount.
- Put a washer and then a plastic knob on each of the bolts.

- Follow the above steps again to complete the left side.
- The nylon side of the nylock nut faces out when threading it on the bolt.

- NOTE!! Leave all the nylock nuts loose enough to slide in the joint, and loose enough to allow the washer to turn in your fingers!

Right Frame End



Left Frame End

Step 6: Side Leg Brace "B" Assembly

- Parts Needed: 2- Side Leg Brace "B"
 1- Right Back Side Leg
 1- Left Front Side Leg
 2- 1/4" X 45mm Connector Bolt
 2- 1/4" Rectangle Nut (threaded)

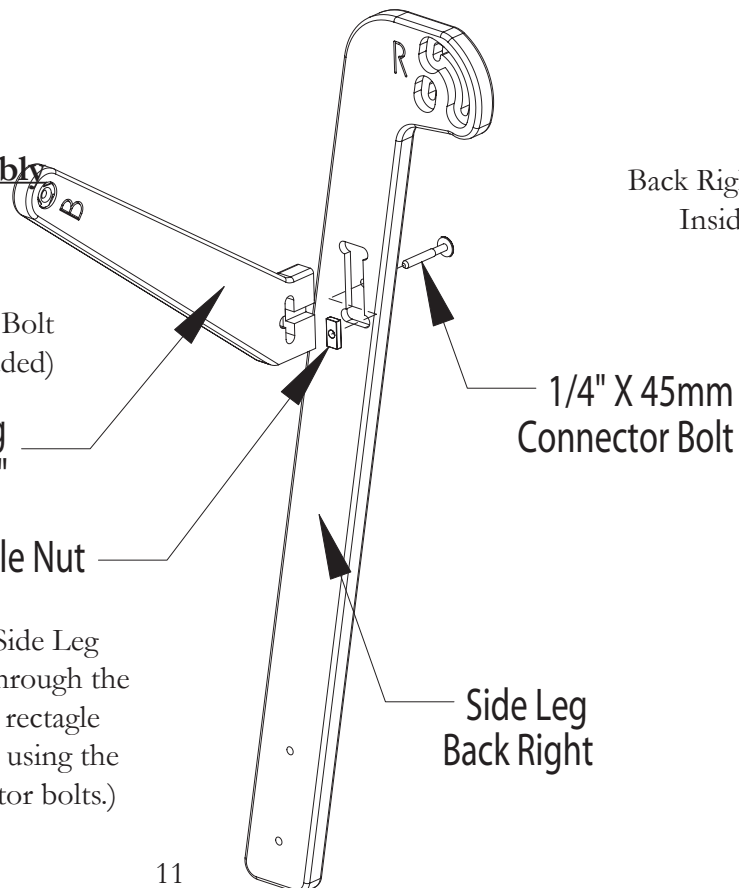
- Place a rectangle nut vertically in the "t" slot of the Side Leg Brace "B", as illustrated to the right.

- Connect the Right Back Side Leg to the Side Leg Brace "B" by threading the connector bolt through the hole in the Right Back Side Leg and into the rectangle nut. (Holding the rectangle nut in place, while using the provided allen wrench to tighten the connector bolts.)

Side Leg
Brace "B"

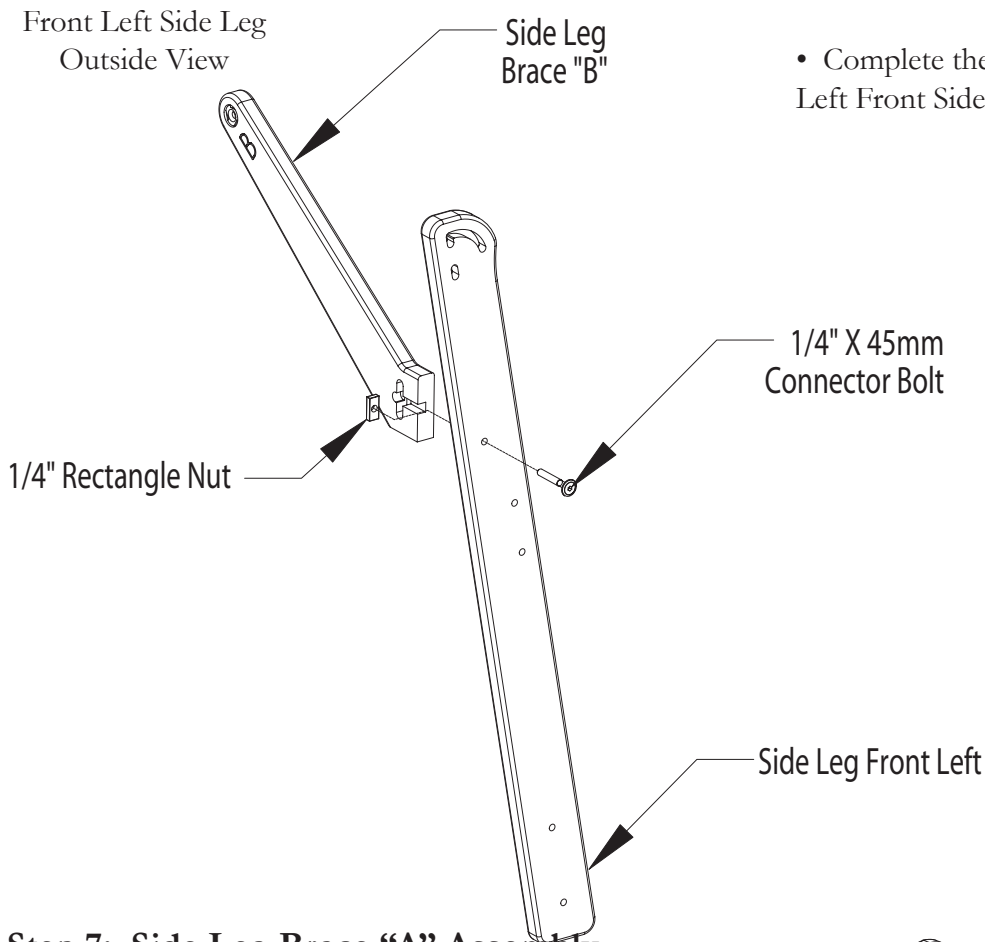
1/4" Rectangle Nut

Back Right Side Leg
Inside View



1/4" X 45mm
Connector Bolt

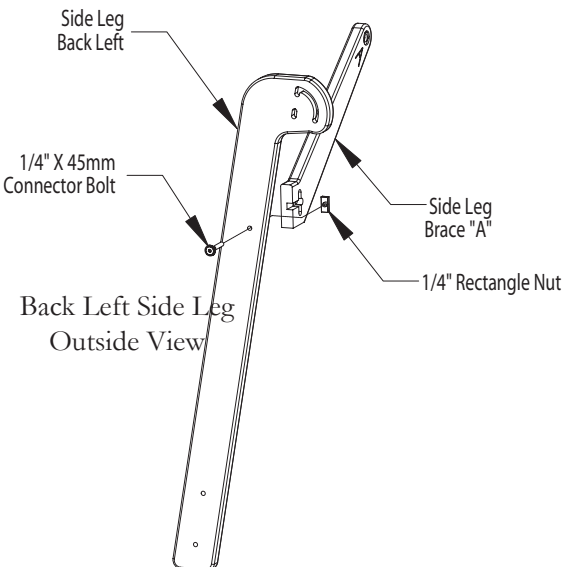
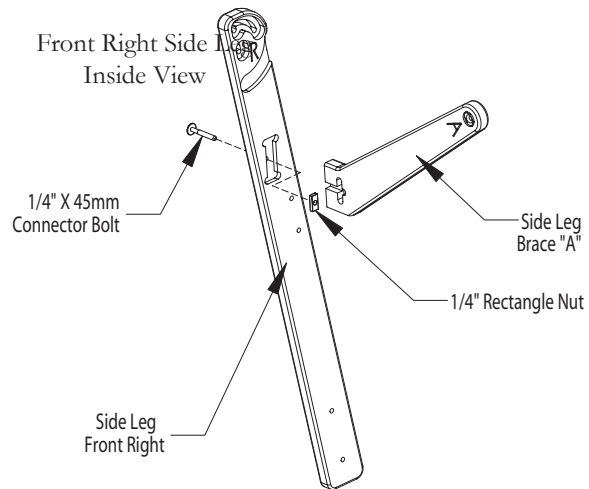
Side Leg
Back Right



- Complete the above steps again to complete the Left Front Side Leg.

Step 7: Side Leg Brace "A" Assembly

- Parts Needed: 2- Side Leg Brace "A"
 1- Right Front Side Leg
 1- Left Back Side Leg
 2- 1/4" X 45mm Connector Bolt
 2- 1/4" Rectangle Nut (threaded)



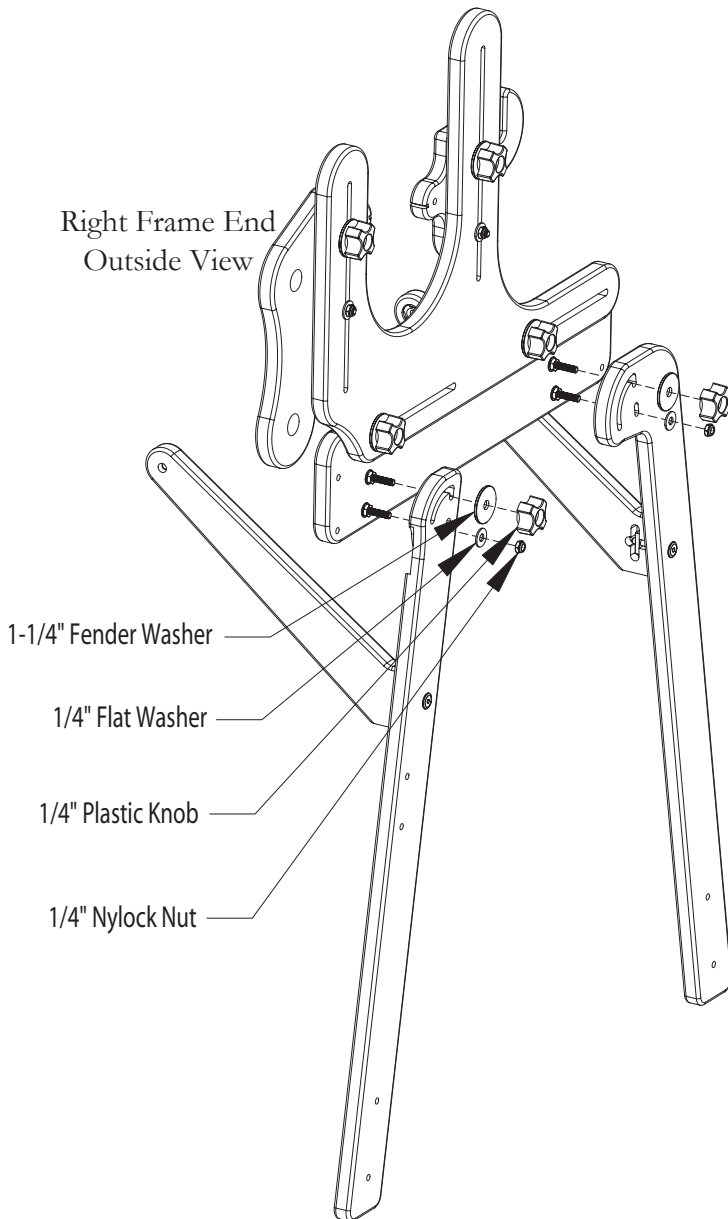
- Place a rectangle nut vertically in the "t" slot of the Side Leg Brace "A", as illustrated to the left.

- Connect the Right Front Side Leg to the Side Leg Brace "A" by threading the connector bolt through the hole in the Right Front Side Leg and into the rectangle nut. (Holding the rectangle nut in place, while using the provided allen wrench to tighten the connector bolts.)

- Complete the above steps again to complete the Left Back Side Leg.

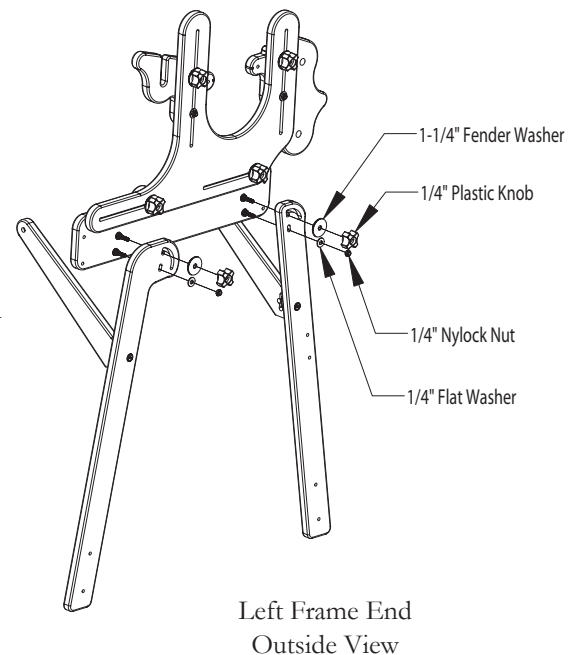
Step 8: Legs to Frame End Assembly

Parts Needed: 1- Right and Left Frame End
1- Right and Left Front Side Leg
1- Right and Left Back Side Leg
4- 1/4" Nylock Nut
4- 1/4" Flat Washer
4- 1-1/4" Fender Washer
4- 1/4" Plastic Knob



- Place a fender washer on the top bolt, and then thread and tighten the plastic knob onto the bolt.
- Place the flat washer on the bottom bolt, and then tighten the nylock nut.
- Make sure nylock nuts are loose enough to allow the washer to turn in your fingers.
- Follow the above steps to complete the left side.
- The nylon side of the nylock nut faces out when threading it on the bolt.
- NOTE!! Leave all the nylock nuts loose enough to slide in the joint, and loose enough to allow the washer to turn in your fingers!

- Put the Right Front Side Leg on the pre-installed bolts on the Right Frame End (below the Fabric Layer Rail Mount End).
- Place a fender washer on the top bolt, and then thread and tighten the plastic knob onto the bolt.
- Place the flat washer on the bottom bolt, and then tighten the nylock nut.
- Make sure nylock nuts are loose enough to allow the washer to turn in your fingers.
- Put the Right Back Side Leg on the pre-installed bolts on the Right Frame End (below the Take Up Rail Mount End).



Step 9: Table Assembly

Parts Needed: 1- Table #1

1- Table #2

1*- Table #3

1- Front Crib and *Queen Table Aluminum Track Support

1- Back Crib and *Queen Table Aluminum Track Support

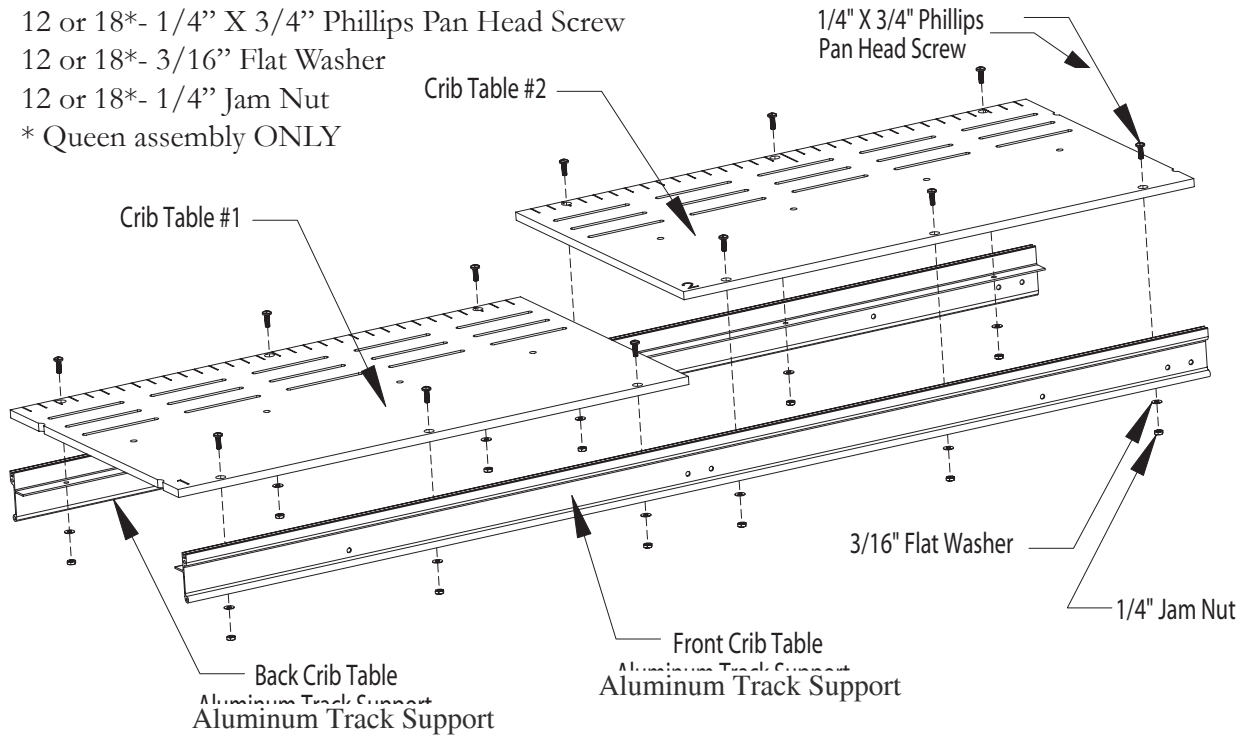
12 or 18*- 1/4" X 3/4" Phillips Pan Head Screw

12 or 18*- 3/16" Flat Washer

12 or 18*- 1/4" Jam Nut

* Queen assembly ONLY

•IMPORTANT! Carefully identify your Front and Back Crib Track Supports based on the position of the holes.
NOTE: The Crib Back Track Support mounts to the "slotted" side of the table.



• Place the Table #1 on the front crib table aluminum track support (as pictured above). ** You might want to stand the table on it's side to make it easier to tighten the nuts.**

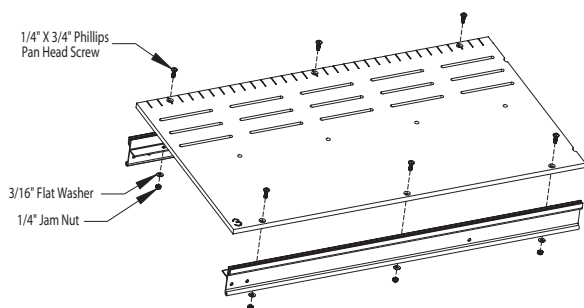
• Put a phillips pan head screw through the middle hole on the Table #1 through the front crib table aluminum track support, and then on the end of the phillips pan head screw put a flat washer followed by a jam nut.

• Put a phillips pan head screw through the other two holes on the Table #1, and then put a flat washer followed by a jam nut on each end.

• Follow the above steps to attach the front crib table aluminum track support to the Table #2.

• Follow the above steps to attach the back crib table aluminum track support to the Table #1 and #2.

• Place the Table #3 on the front queen table aluminum track support (as pictured left).



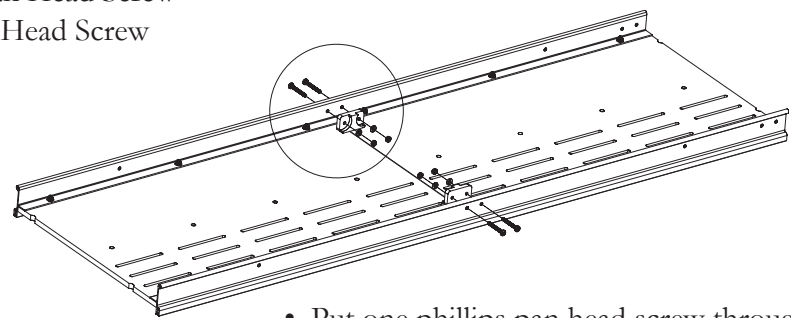
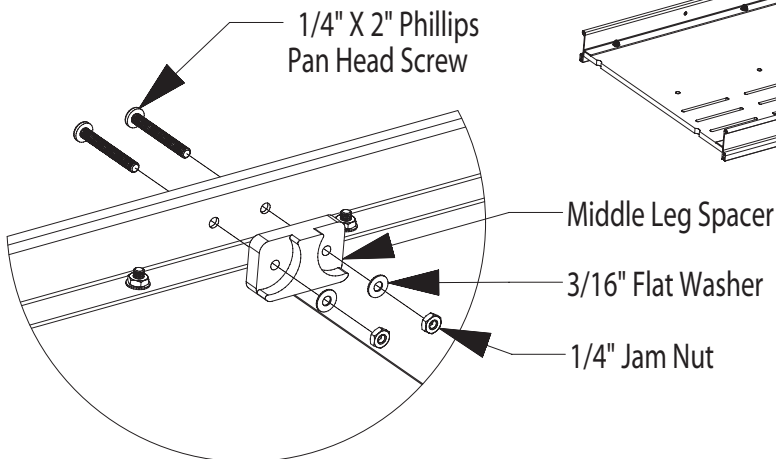
• Put a phillips pan head screw through the middle hole on the Table #3 through the front queen table aluminum track support, and then on the end of the phillips pan head screw put a flat washer followed by a jamb nut.

• Put a phillips pan head screw through the other two holes on the Table #3, and then put a flat washer followed by a jam nut on each end.

Step 10: Middle Leg Spacer Assembly

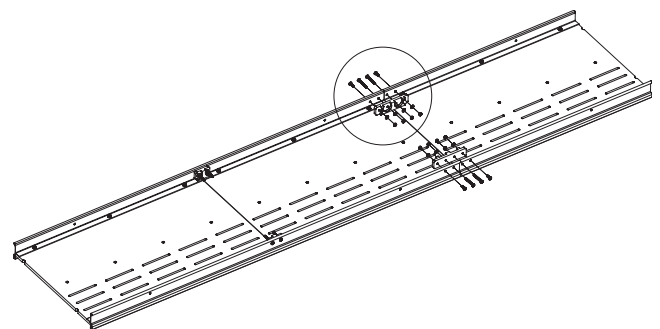
Parts Needed: 1- Crib Table (assembled)
 1*- Queen Table (assembled)
 2- Middle Leg Spacer
 2*- Table Splice
 4 or 8*- 1/4" X 2" Phillips Pan Head Screw
 4*- 1/4" X 3/4" Phillips Pan Head Screw
 4 or 12*- 3/16" Flat Washer
 4 or 12*- 1/4" Jam Nut

- Place the flat side of the Middle Leg Spacer against the front crib table aluminum track support (as show above, and to the left).

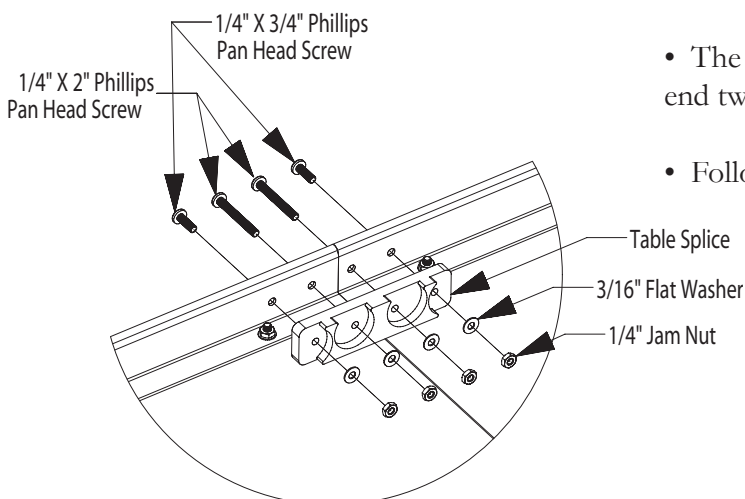


- Put one phillips pan head screw through the right most hole in the front crib table aluminum track support, which will then go through the Middle Leg Spacer.
- You will then put a flat washer on the end of the screw, which will be followed by a jam nut.

- Put a phillips pan head screw through the left hole following the same steps as you did for the right.
- Follow the above steps to attach the Middle Leg Spacer to the back crib table aluminum track support.
- Place your Crib Table #2 next to you Queen Table #3.
- Where your Crib Table meets your Queen table you will place a Table Splice (flat end against the aluminum track support).



- You will place a 1/4" X 2" phillips pan head screw through the center two holes in the aluminum track support and then through the Table Splice. A washer and jam nut will go on the end of the screws.



- The 1/4 X 3/4" phillips pan head screws will go through the end two holes with a washer and jam nut on the end.

- Follow the above steps for the other side

- You will place a 1/4" X 2" phillips pan head screw through the center two holes in the aluminum track support and then through the Table Splice. A washer and jam nut will go on the end of the screws.

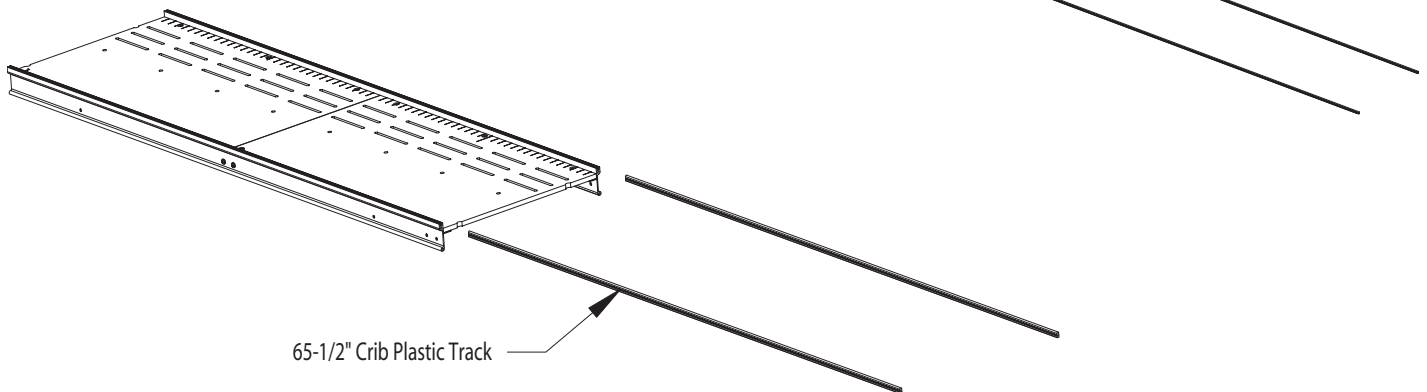
Step 11: Track Installation

Crib Parts Needed: 2- 65-1/2" Plastic Track

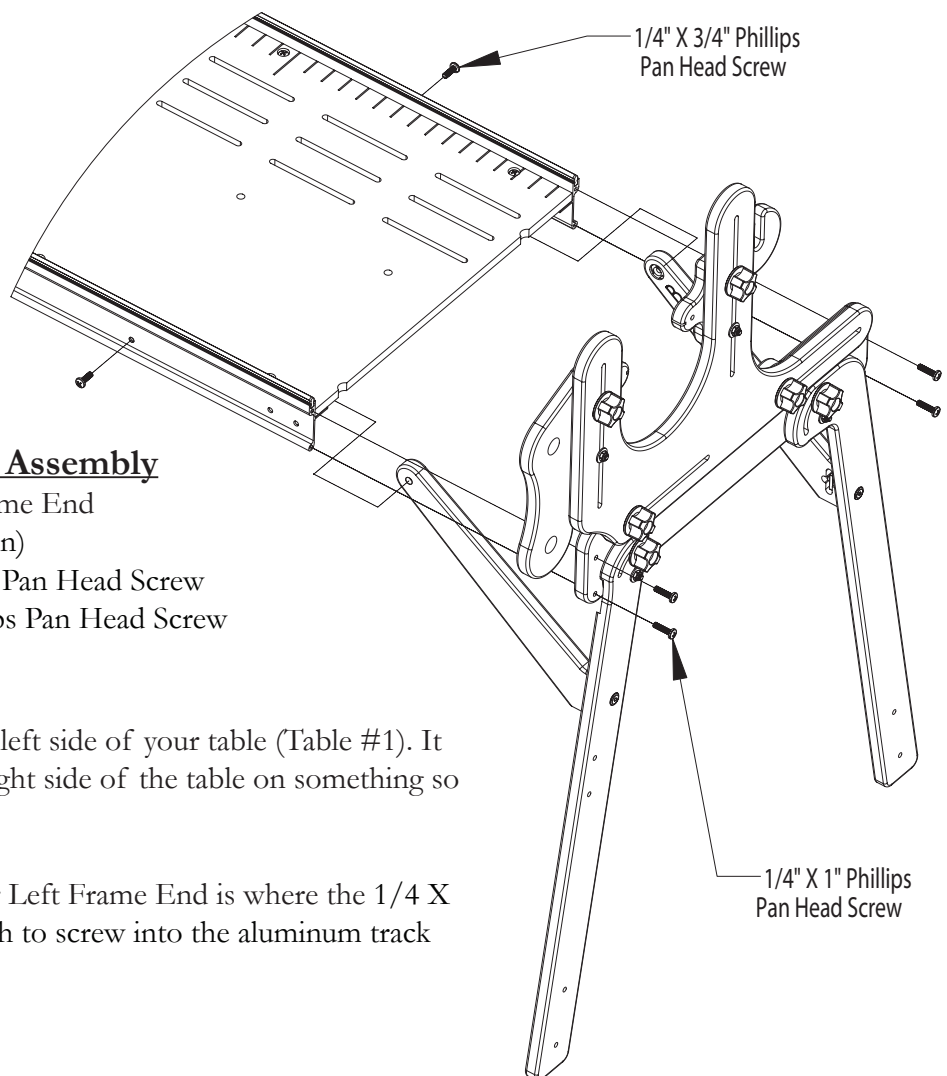
1- Crib Table (assembled)

Queen Parts Needed: 2- 99-1/2" Plastic Track

1- Queen Table (assembled)



- Slide one of the plastic track (FLAT SIDE DOWN) into the front table aluminum track support.
- Slide the last plastic track (FLAT SIDE DOWN) into the back table aluminum track support.



Step 12: Frame End to Table Assembly

Parts Needed: 1- Right and Left Frame End

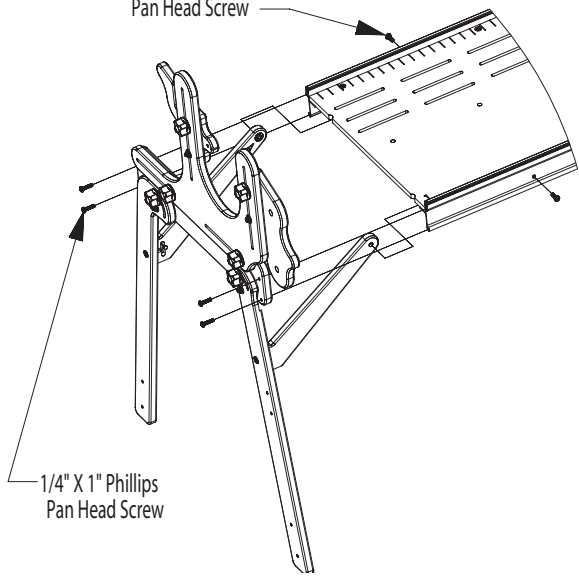
1- Table (crib or queen)

8- 1/4" X 1" Phillips Pan Head Screw

4- 1/4" X 3/4" Phillips Pan Head Screw

- Place your Left Frame End on the left side of your table (Table #1). It is recommended that you prop the right side of the table on something so you can put the left side on first.
- The two holes on the back of your Left Frame End is where the 1/4 X 1" phillips pan head screw go through to screw into the aluminum track support.

1/4" X 3/4" Phillips
Pan Head Screw



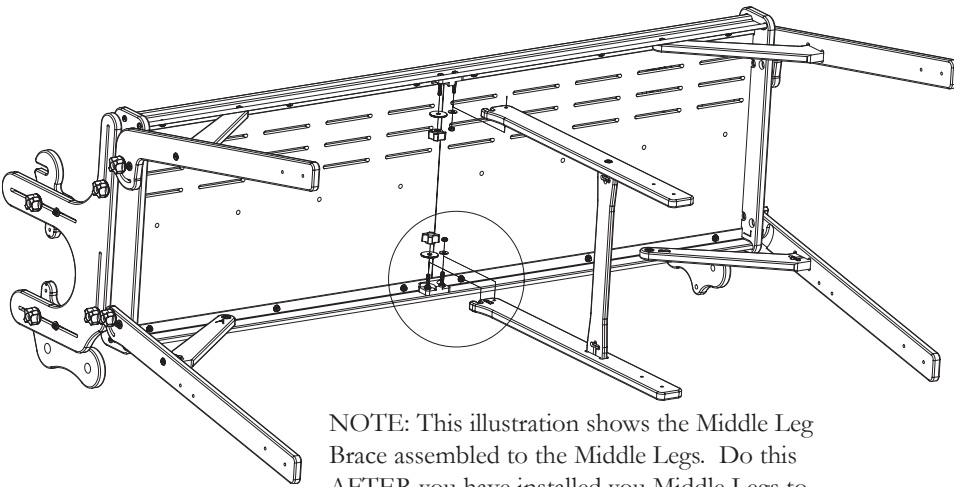
Instructions continued from previous page

- The 1/4 X 3/4" phillips pan head screw goes through the aluminum track support to the Side Leg Brace. (as illustrated left).
- Two of the 1/4 X 1" phillips pan head screw go through the front Left Frame End to screw into the aluminum track support, similar to what you just did on the back.
- Follow the above instructions to attach your Right Frame End to your table, except the Left Frame End can hold up your table.

1/4" X 1" Phillips
Pan Head Screw

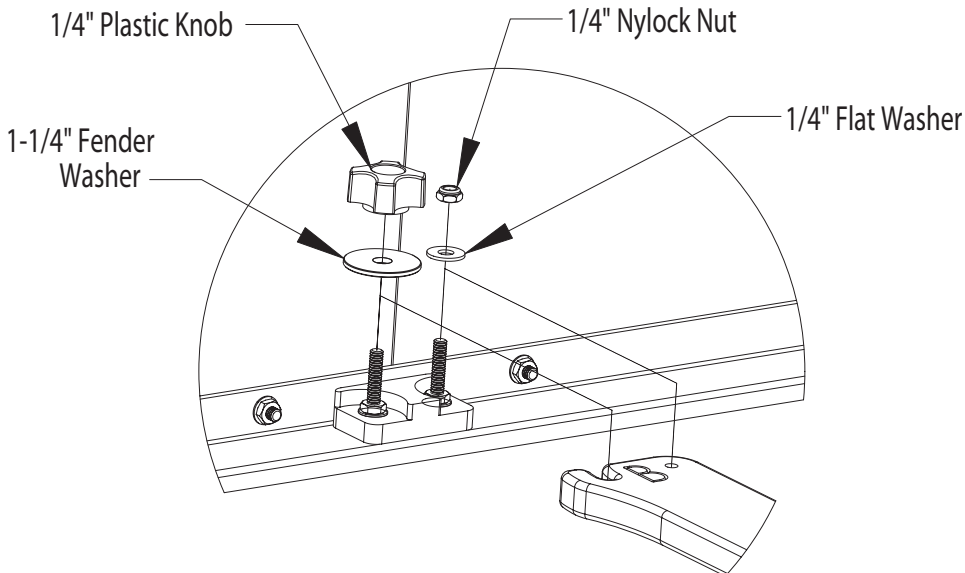
Step 13: Middle Leg Installation

Parts Needed: 1 or 2*- Middle Leg (assembled)
2 or 4*- 1/4" Plastic Knob
2 or 4*- 1-1/4" Fender Washer
2 or 4*- 1/4" Nylock Nut
2 or 4*- 1/4" Flat Washer
*Queen Assembly ONLY



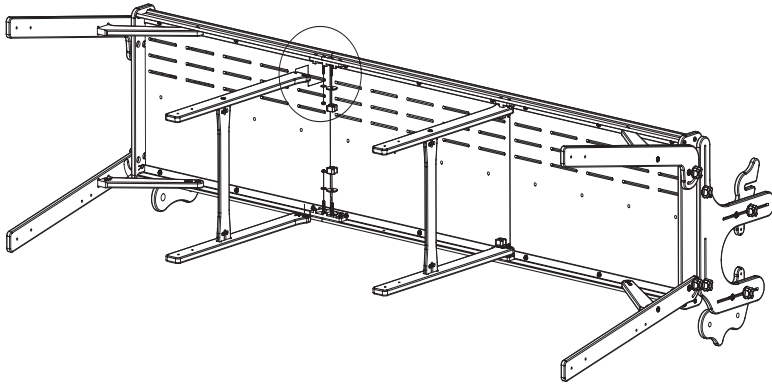
- Lay the Little Grace on it's side with the front down, as illustrated.
- Put the "B" side of your Middle Leg on the bolts, which are on the front of your frame.

NOTE: This illustration shows the Middle Leg Brace assembled to the Middle Legs. Do this AFTER you have installed you Middle Legs to the frame (Step 14).

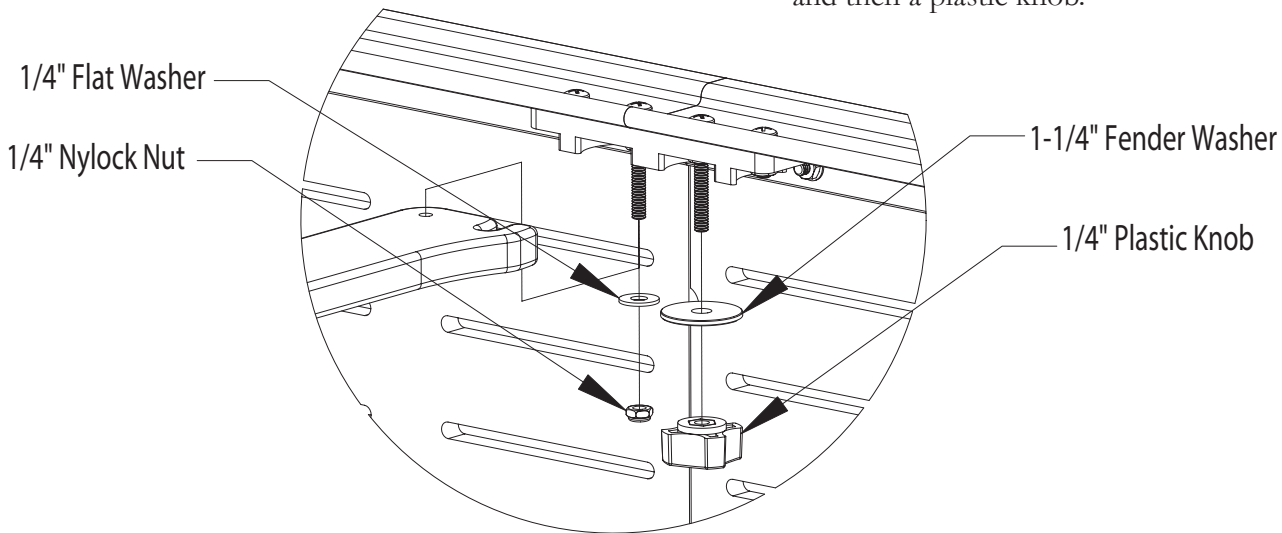


- You will have to push the "A" Side down enough to get it on the bolts on the back side of your frame.
- It is okay to tap the leg into place with your hand, it will be a tight fit when you start
- The bolt to the right of the "B" is where you will put a flat washer followed by a nylock nut.

- On the other bolt you will put a fender washer and then a plastic knob.
- The right side is just opposite of the above instructions. The illustration on the previous page will help.



- Lay the Little Grace on it's side with the front down, as illustrated.
- Put the "B" side of your Middle Leg on the bolts, which are on the front of your frame.
- The bolt to the right of the "B" is where you will put a flat washer followed by a nylock nut.
- On the other bolt you will put a fender washer and then a plastic knob.

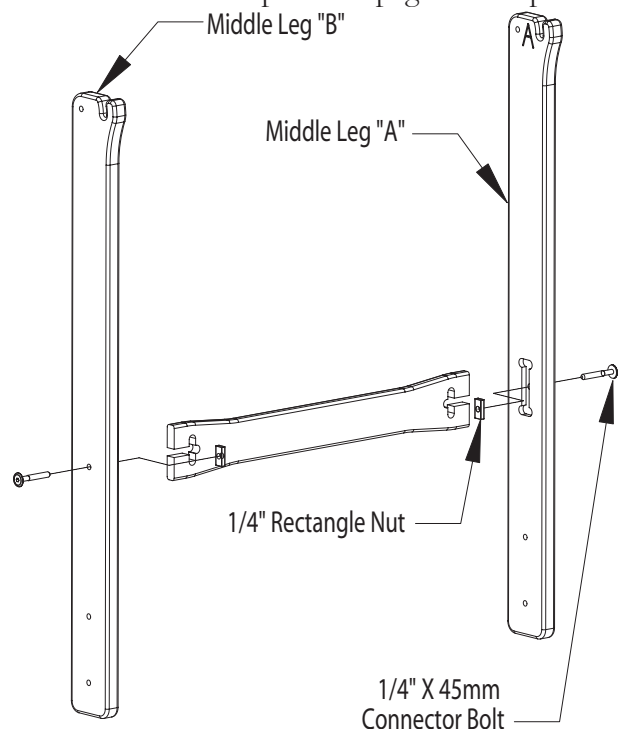


- You will have to push the "A" Side down enough to get it on the bolts on the back side of your frame.
- The right side is just opposite of the above instructions. The illustration on the previous page will help.

Step 14: Middle Leg Assembly

- Parts Needed: 1 or 2*- "A" Middle Leg
 1 or 2*- "B" Middle Leg
 1 or 2*- Middle Leg Brace
 2 or 4*- 1/4 X 45mm Connector Bolt
 2 or 4*- 1/4 Rectangle Nut (threaded)
 * Queen set up ONLY

- Connect the "A" and "B" Middle legs by placing the connector bolts through each leg hole as pictured, and into the Middle Leg Brace.
- Place a rectangle nut in the Middle Leg Brace so the connector bolt can be screwed into the nut tight.
- NOTE if you are setting up for queen, you will assembly two sets of legs.



Step 15: Rail Assembly

Parts Needed: 3- 64" Rail (Crib)

3- 34" Rail w/ Coupler (Queen ONLY)

3- Square Plastic Cap

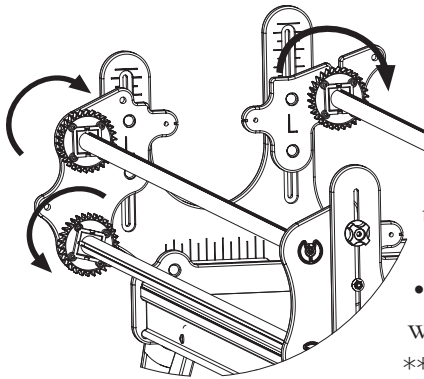
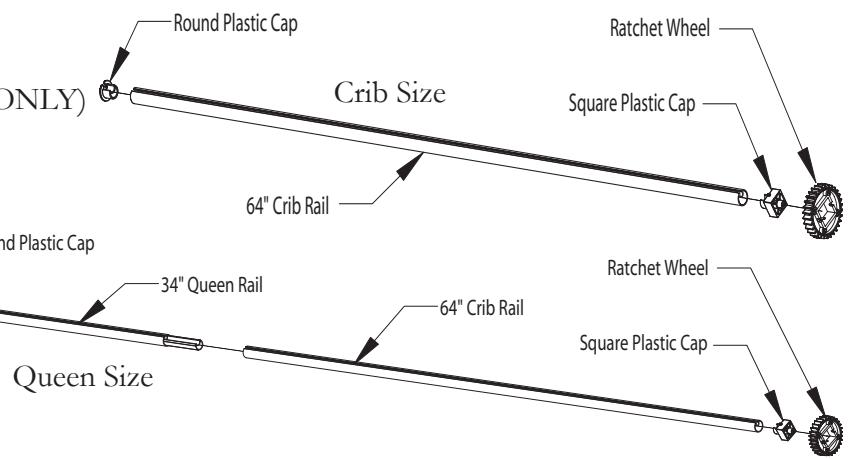
3- Round Plastic Cap

6- Plastic End Cap

6- #8 X 7/8" Screw

3 - Ratchet Wheels

- Choose the rail size that corresponds to the frame size you have set up, and follow the above diagrams to assist you in assembling that particular size.

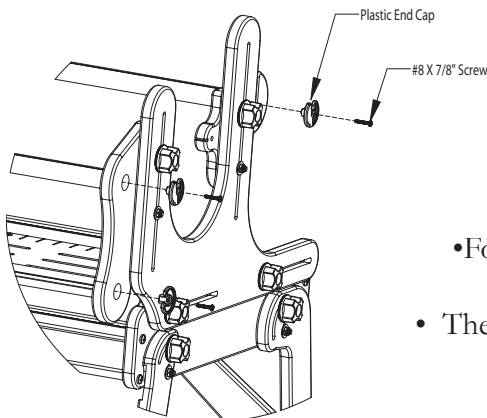


- On the left side of the rail you will firmly place the square plastic cap, and on the right side you will put the round plastic cap in the rail firmly. Be sure that they are completely seated into the rail with no gaps.
- Place the ratchet wheel on the square plastic cap, and then place all your rails on the floor where they can lay flat.
- Take one of your rails and place it in the bottom front rail position, with the cog wheel on the left side and the round plastic cap on the right side, as shown below.

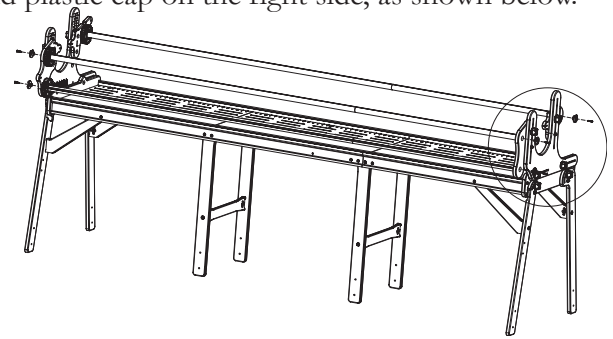
**Make sure the teeth on the cog

wheel are facing counter clockwise.**

- Place a plastic end cap in the hole on the outside of the Left Frame End. You will then screw the plastic end cap to the square plastic cap.



- Place a plastic end cap in the hole on the outside of the Right Frame End and use a screw to tighten the plastic end cap to the outside of the Right Frame End.



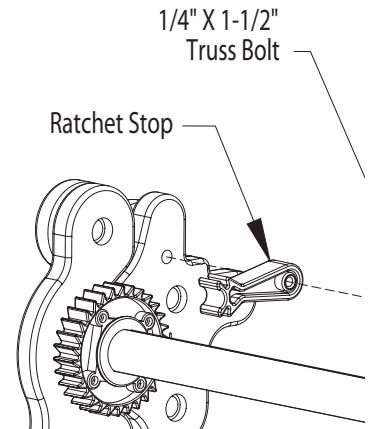
- Follow the above steps for the other two rails on top.
- The teeth on the remaining two rails will roll clockwise.

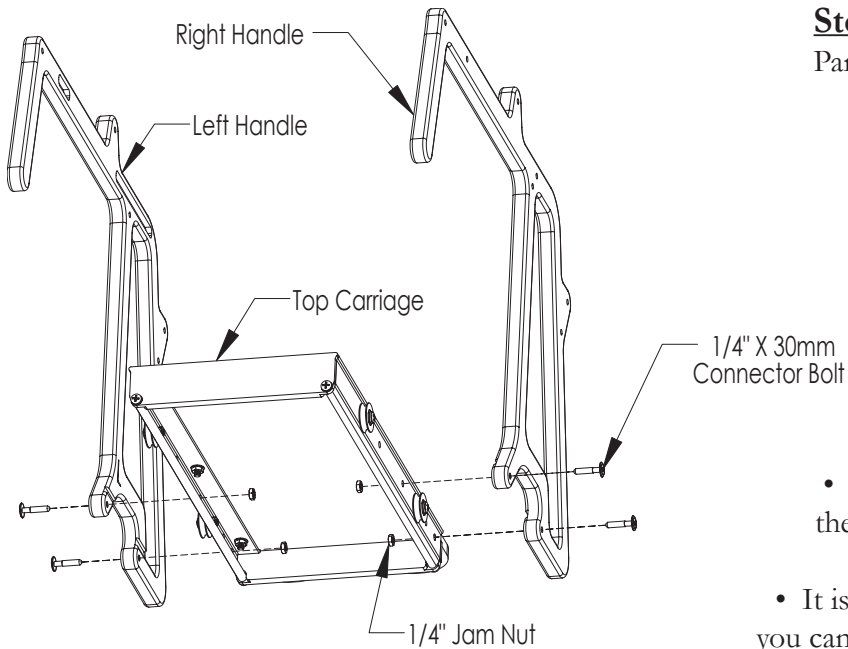
Step 16: Ratchet Stop Assembly

Parts Needed: 3- Ratchet Stops

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

- You will need to put the bolt through the ratchet stop.
- As pictured right, you will screw the ratchet stops into the holes near the ratchet wheels. (The bottom rail the ratched stop goes to the left, while the other two the ratchet stop goes to the right of the ratchet wheel.





Step 17: Carriage Handle Assembly

Parts Needed: 1- Top Carriage (preassembled)
 1- Right and Left Handle Base
 4- 1/4" X 30 mm Connector Bolt
 4- 1/4" Jamb Nut

- Put a connector bolt through both holes on the bottom of your Left Handle Base and through your Top Carriage.

- Under your Top Carriage is where you will put the jam nut on your connector bolt.

- It is easier if you will bend the handle out a little so you can get the nut started on the bolt. Then you can straighten the handles and tighten the nut onto the bolt.

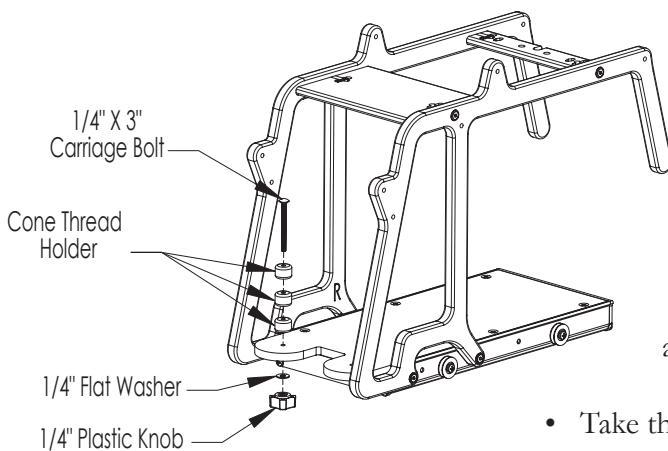
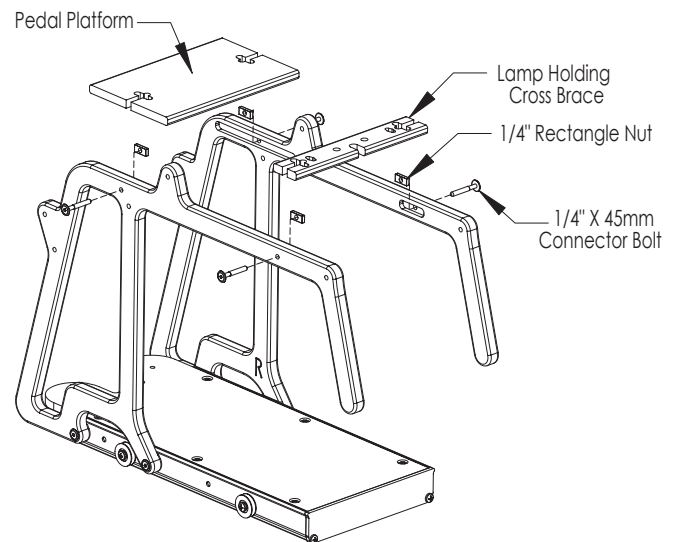
- Follow the above steps to attach your Right Handle Base

Step 18: Cross Brace Assembly

Parts Needed: 1- Top Carriage (with handles)
 1- Front Handle Cross Brace
 1- Back Handle Cross Brace
 4- 1/4" X 45 mm Connector Bolt
 4- 1/4" Rectangle Nuts (threaded)

- Stand your Top Carriage up so you can see the top of your Handles.

- Attach the Back Handle Cross Brace with connector bolts and rectangle nuts as illustrated.



Step 19: Cone Thread Holder Assembly

Parts Needed: 1- Top Carriage (with handles & braces)
 3- Cone Thread Holders
 1- 1/4" X 3" Carriage Bolt
 1- 1/4" Flat Washer
 1- 1/4" Plastic Knob

- Attach the Front Handle Cross Brace in the same manner as you did the back one.

- Take the three Cone Thread Holders and place them on either the back right or the left side.

- You will then put the carriage bolt through the Cone Thread Holders and your Top Carriage, where you will put a washer and then a plastic knob on to hold the Cone Thread Holders in place.

Step 20: Cone Thread Guide Assembly

Parts Needed: 2- #10 X 3" Eye Bolt
 4- #10 Hex Nut
 4- 3/16" Flat Washer

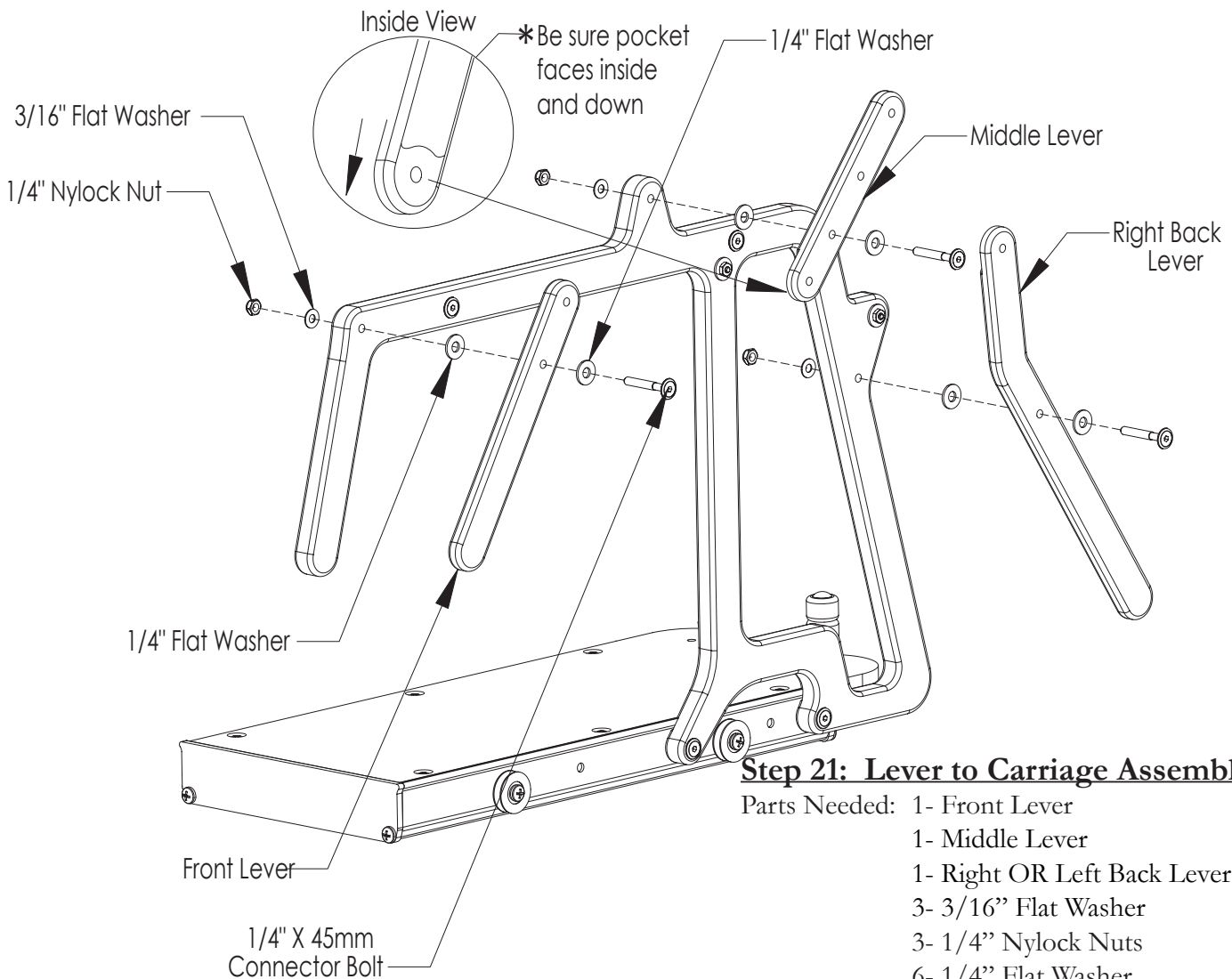
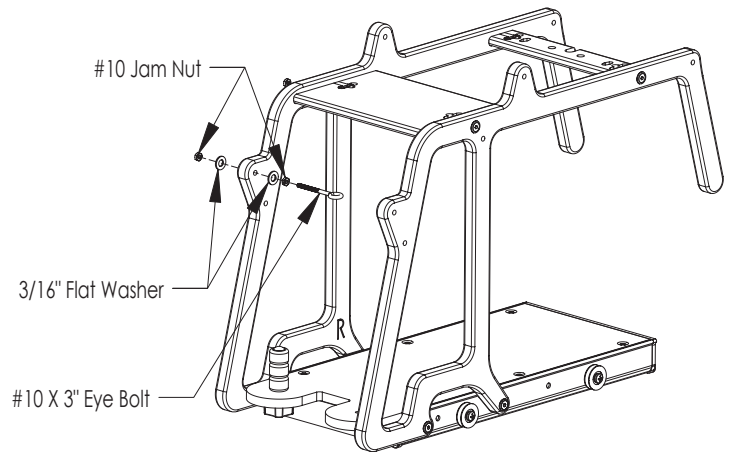
- Tighten one of the jam nuts so it is almost to the end of the threads, by the eye.

- Place a washer on the end of that bolt and then guide the bolt through the first hole, if you are looking at it from the back.

- The eye of the bolt must be right over the Cone Thread Holder; as soon as you have it in the correct place you will want to loosen the jam nut so it is right against the handles.

- Place a washer on the end of the bolt and follow it with a jamb nut.

- You will follow the above instructions for the other bolt, except you must have the second bolt even with the first one.



Step 21: Lever to Carriage Assembly

Parts Needed: 1- Front Lever
 1- Middle Lever
 1- Right OR Left Back Lever
 3- 3/16" Flat Washer
 3- 1/4" Nylock Nuts
 6- 1/4" Flat Washer
 3- 1/4" X 45mm Connector Bolt

- You have the option of having the handles on the Left or Right side. You will want to decide the side you want them on before you get started on the rest of the steps.**
- Slide a 1/4" washer on the end of a bolt and then thread the bolt through the hole that is the farthest away from the end of the Front Lever, as shown above.
- On then end of the bolt you will put another 1/4" washer and slide the bolt through the hole on the Front Right or Left Handle.
- Once the bolt is through the Handle you will put a 3/16" flat washer and then a 1/4" nylock nut on the end of the bolt. **Make sure nylock nuts are loose enough to allow the washer to turn in your fingers.**
- On your Middle Lever you will place a bolt, which has 1/4" washer on the end, through the middle hole above the bottom cut out part of your Middle Lever.
- On the end of the bolt sticking out of your Middle Lever you will place a 1/4" washer and then slide the bolt through the hump on top of the Handle.
- Place a 3/16" washer on the end of the bolt and then screw a nylock nut on the end. **Make sure nylock nuts are loose enough to allow the washer to turn in your fingers.**
- On your Right or Back Lever you will place a bolt, which has 1/4" washer on the end, through the hole on the longer side, as shown on the previous page.
- On the end of the bolt sticking out of your Back Lever you will place a 1/4" washer and then slide the bolt through the hole on the back of your Handle. Place a 3/16" washer on the end of the bolt and then screw a nylock nut on the end. **Make sure nylock nuts are loose enough to allow the washer to turn in your fingers.**

Step 22: Lever Linkage to Handle Assembly

Parts Needed: 1- Front Lever Linkage

1- Back Lever Linkage

2- 1/4" x 35mm Connector Bolt

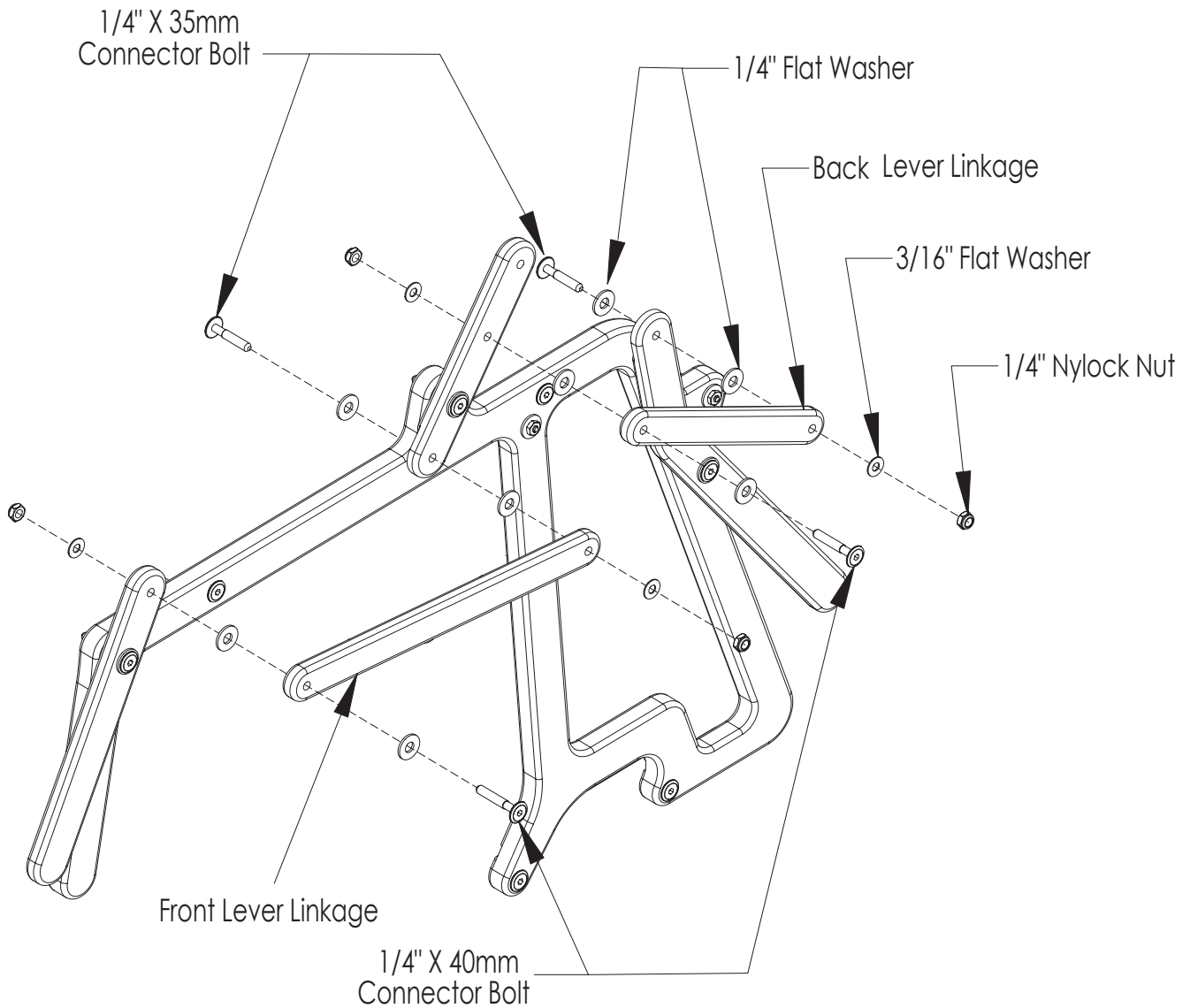
2- 1/4" x 40mm Connector Bolt

8- 1/4" Flat Washer

4- 3/16" Flat Washer

4- 1/4" Nylock Nut

- On the end of a 40mm connector bolt you will want to put a 1/4" washer and then thread the bolt through one end of the Front Lever Linkage.
- On the end of the bolt sticking out of your Front Lever Linkage you will place a 1/4" washer and then slide the bolt through the hole on your Front Lever. Place a 3/16" washer on the end of the bolt and then screw a nylock nut on the end. **Make sure nylock nuts are loose enough to allow the washer to turn in your fingers.**
- On the end of a 35mm connector bolt you will want to put a 1/4" washer and then thread the bolt through the cut out part of the Middle Lever.



- On the end of the bolt sticking out of your Middle Lever you will place a 1/4" washer and then slide the bolt through the hole on your Front Lever Linkage. Place a 3/16" washer on the end of the bolt and then screw a nylock nut on the end. ****Make sure nylock nuts are loose enough to allow the washer to turn in your fingers.****
- On the end of a 40mm connector bolt you will want to put a 1/4" washer and then thread the bolt through one end of the Back Lever Linkage.
- On the end of the bolt sticking out of your Back Lever Linkage you will place a 1/4" washer and then slide the bolt through the middle hole on your Middle Lever. Place a 3/16" washer on the end of the bolt and then screw a nylock nut on the end. ****Make sure nylock nuts are loose enough to allow the washer to turn in your fingers.****
- On the end of a 35mm connector bolt you will want to put a 1/4" washer and then thread the bolt through the cut out part of the Back Lever.
- On the end of the bolt sticking out of your Back Lever you will place a 1/4" washer and then slide the bolt through the hole on your Back Lever Linkage. Place a 3/16" washer on the end of the bolt and then screw a nylock nut on the end. ****Make sure nylock nuts are loose enough to allow the washer to turn in your fingers.****

Step 23: Pedal Clamp to Handle Assembly

Parts Needed: 1- Pedal Clamp

1- Pedal Wheel

3- Pedal Clamp Spacer

1- 1/4" x 3" Carriage Bolt

1- 1/4" x 35mm Connector Bolt

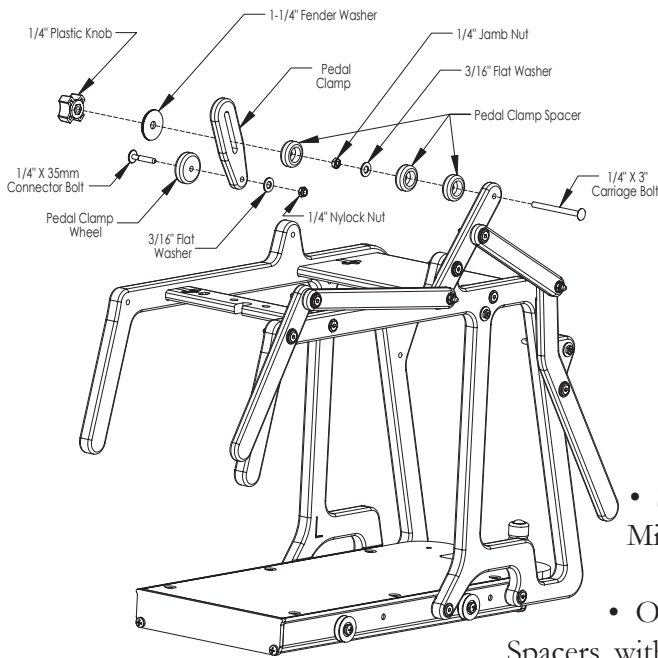
2- 3/16" Flat Washer

1- 1/4" Jamb Nut

1- 1/4" Nylock Nut

1- 1-1/4" Fender Washer

1- 1/4" Plastic Knob



- Slide the 1/4" x 3 carriage bolt through the top hole on your Middle Lever.

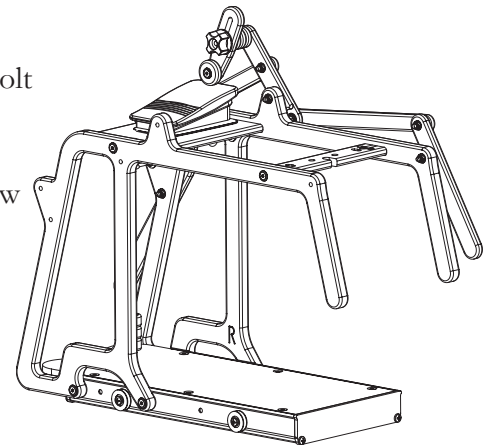
- On the end of the bolt you will want to slide 2 Pedal Clamp Spacers, with the more hollow side towards the head of the bolt.

- On the end of the bolt you will now want to put a 3/16" washer followed by a jamb nut, which needs to be **TIGHTENED COMPLETELY** on the bolt. Then place the last Pedal Clamp Spacer on the end of the bolt with the hollow side towards the jamb nut.

- Slide the Pedal Clamp onto the end of the bolt, and then place a fender washer on the end of the bolt. After the fender washer you will want to screw on the plastic knob.

- Slide the Pedal Wheel onto the 35mm connector bolt, and then slide the bolt through the hole in the bottom of your Pedal Clamp.

- On the end of the bolt you will want to place a 3/16" washer and the screw on a nylock nut. ****Make sure nylock nuts are loose enough to allow the washer to turn in your fingers.****



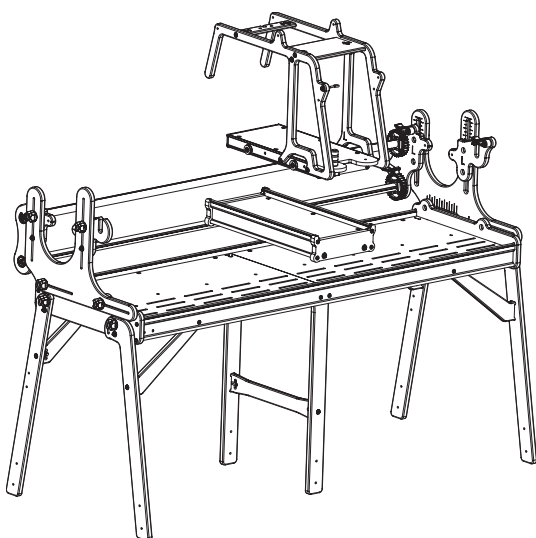
Step 24: Carriage to Frame Assembly

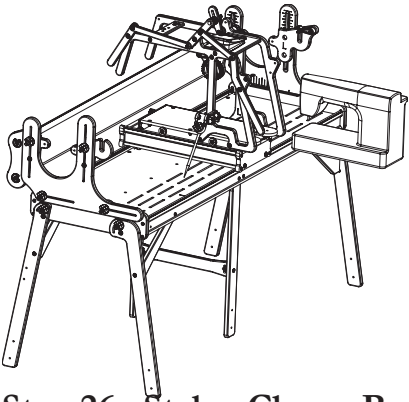
Parts Needed: 1- Frame (assembled)

1- Top Carriage (assembled)

1- Bottom Carriage (assembled)

- Lift your first rail out of place, as pictured to the left.
- Place your Bottom Plate on your tracks, and make sure the wheels are moving on the track.
- Place your Top Plate on your bottom plate, just make sure your wheels are on the track on your Bottom Plate.





Step 25: Sewing Machine to Frame Assembly

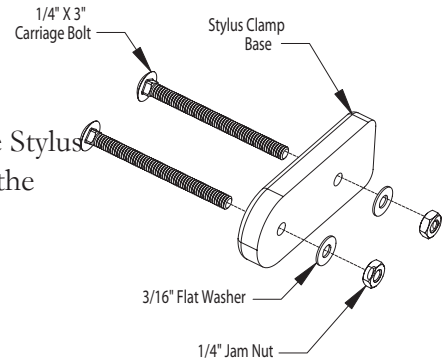
Parts Needed: 1- Frame (assembled)
1- Sewing Machine

- You must take your Cone Thread Holder off your carriage before you can slide your machine inside. You may have to take your cone thread guides out.
- Now you just slide your machine into the carriage. It might be easier if your carriage is all the way to the front, so it does not slide with you.
- Once you have your machine on you can put your Cone Thread Holder back on as well as putting your rail back in place.

Step 26: Stylus Clamp Base Assembly

Parts Needed: 1- Stylus Clamp Base
2- 1/4" X 3" Carriage Bolt
2- 1/4" Jam Nuts
2- 3/16" Flat Washer

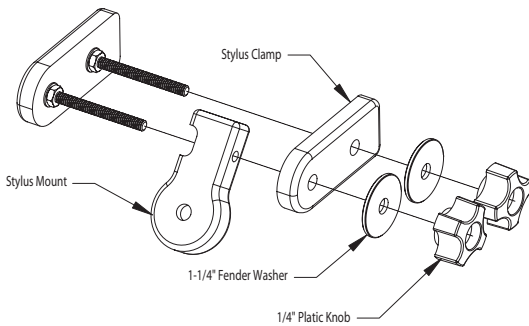
- Place one bolt through each hole in your Stylus Clamp Base (NOTE! The Stylus Clamp Base is very similar to the Stylus Clamp. The Stylus Clamp Base has the smaller holes).
- On the end of each bolt you will put a washer followed by a jam nut.
- TIGHTEN JAM NUTS COMPLETELY ONTO EACH BOLT
- Make sure the top of the bolt is flush against the wood, this will require the use of a wrench.



Step 27: Stylus Clamp Assembly

Parts Needed: 1- Stylus Clamp Base
1- Stylus Clamp
1- Stylus Mount
2- 1-1/4" Fender Washer
2- 1/4" Plastic Knobs

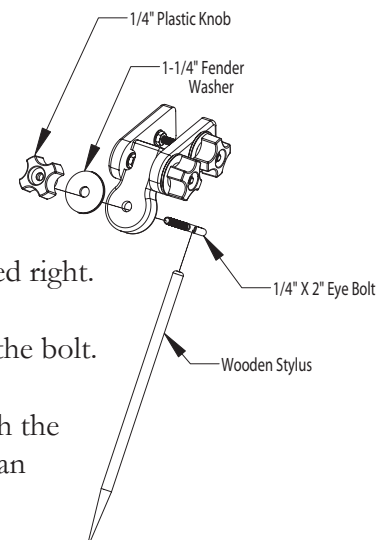
- On the bolt closest to the round end you will slide the Stylus Mount on the bolt, as pictured left with the big hollow area down.
- Place the Stylus Clamp on the end of both of the bolts, with the round end next to the Stylus Mount.
- Place a fender washer and then screw a knob on each of the bolts.



Step 28: Stylus Assembly

Parts Needed: 1- Stylus Clamp Base (assembled)
1- Wooden Stylus
1- 1-1/4" Fender Washer
1- 1/4" Plastic Knobs
1- 1/4" X 2" Eye Bolt

- You will place the eye bolt up through the bottom, or the hollow side, as pictured right.
- On the end of the bolt you will place a washer and then tighten the knob onto the bolt.
- Before you tighten the knob completely you will slide the wooden stylus through the eye of the bolt. When you tighten the bolt it will hold the stylus in place so you can follow patterns.

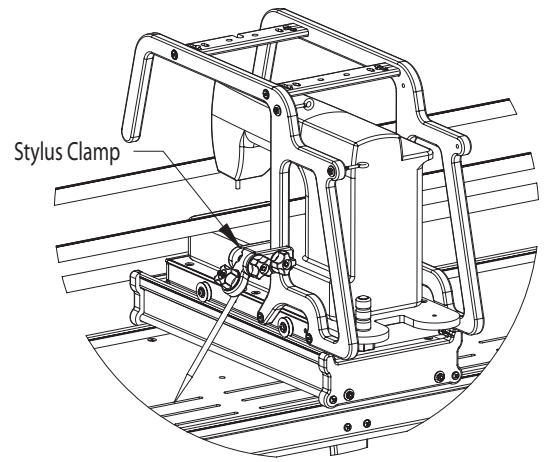
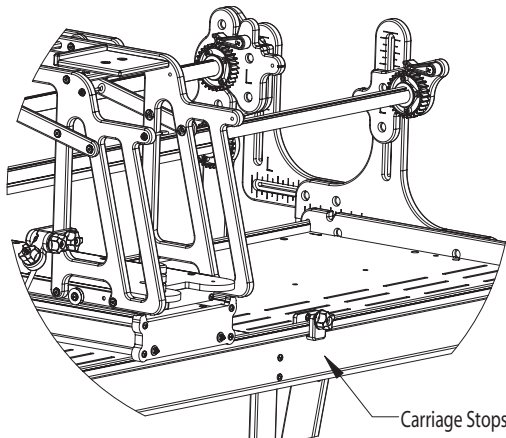


Step 29: Stylus to Carriage Assembly

Parts Needed: 1- Stylus (assembled)

1- Top Carriage (assembled)

- Choose which side you want your stylus on and then you will loosen the back knob.
- Slide the stylus onto the handles, as pictured right, and then tighten the knob back up.



Step 30: Carriage Stop Assembly

Parts Needed: 2- Carriage Stop Base

2- Carriage Stop Clamp

2- 1/4 X 2-1/4" Carriage Bolt

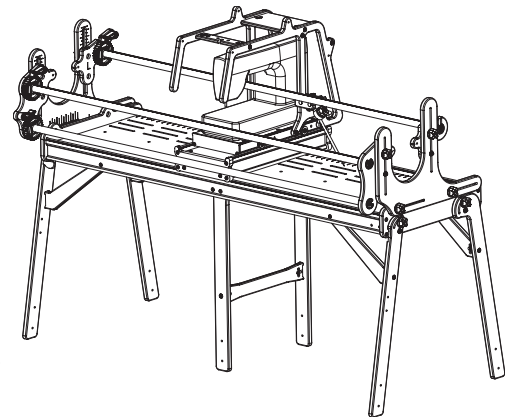
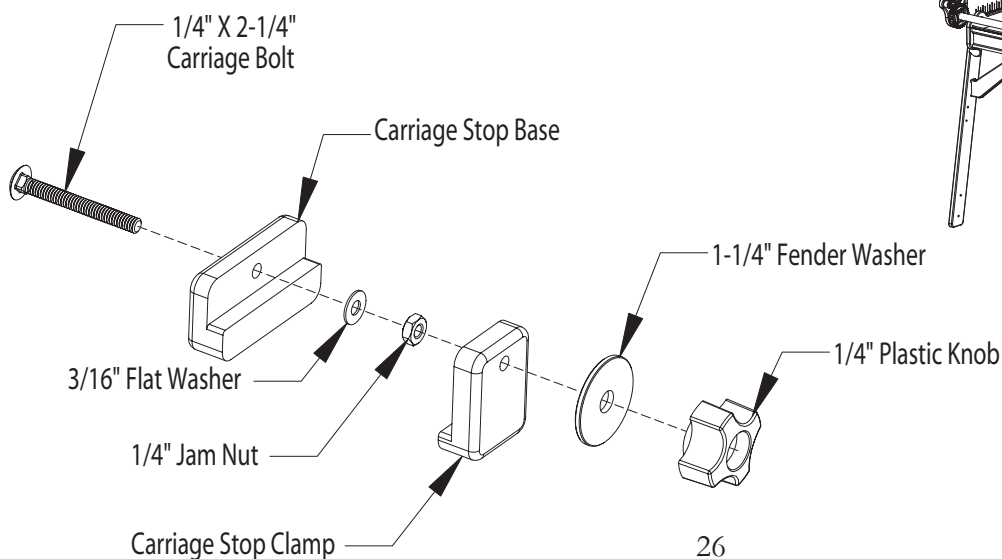
2- 3/16" Flat Washer

2- 1/4" Jam Nut

2- 1-1/4" Fender Washer

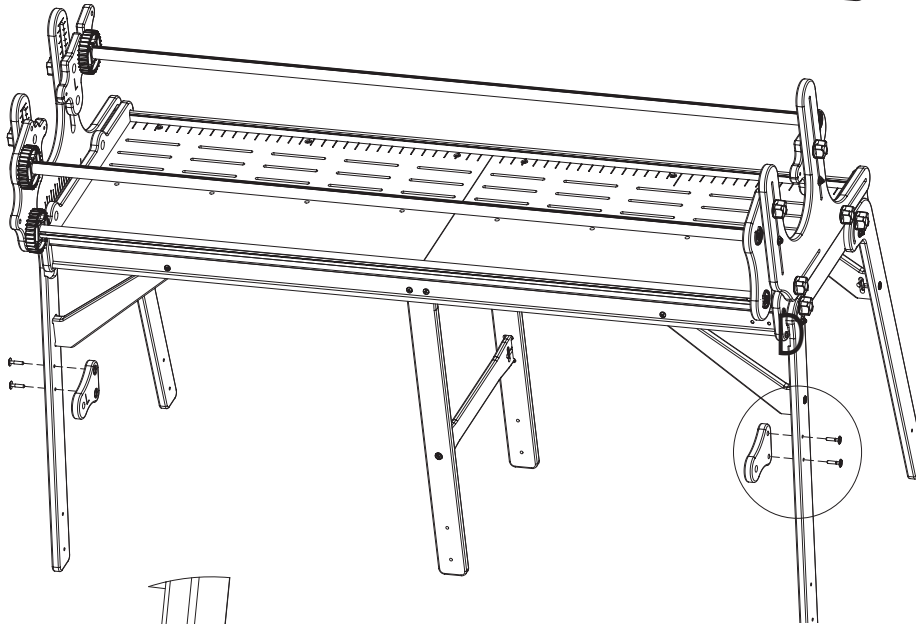
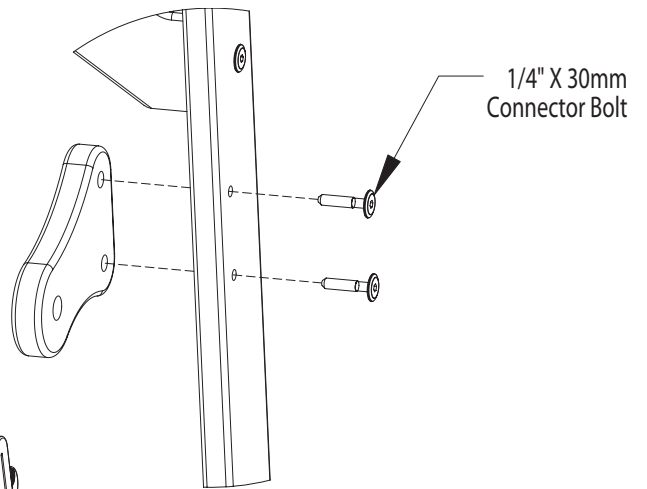
2- 1/4" Plastic Knob

- You will be building two carriage stops, but one at a time.
- Take the carriage bolt and place it through the Carriage Stop Base.
- The end of the carriage bolt you will need to put a flat washer followed by a jamb nut.
- **TIGHTEN** the jam nut completely on the bolt, and make sure the top of the bolt is flush against the wood.
- Once you have the jam nut on the bolt you will then slide the Carriage Stop Clamp on the bolt.
- On the end of the bolt you will put a fender washer and a plastic knob. Before you tighten the knob you will want to decide where you want your stop, as shown above, then you will tighten the knob so it will stay on your frame.
- You will follow the above steps to complete the other carriage stop.

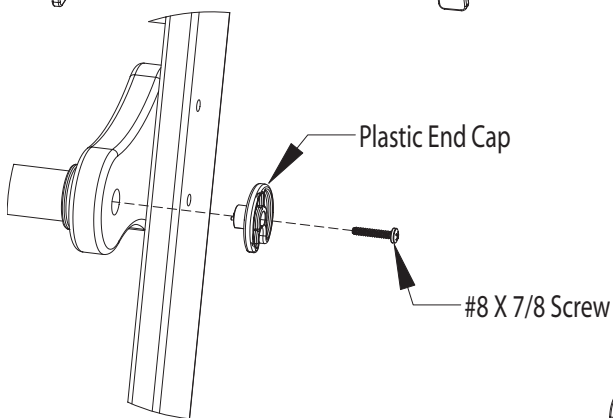


Optional 4th Rail Assembly

Parts Needed: 1- 64" Rail
1- 34" Rail w/ Coupler
1- Square Plastic Cap
1- Round Plastic Cap
2- Plastic End Cap
2- #8 X 7/8" Screw
2- 4th Rail Bracket
4- 1/4 X 30mm Connector Bolt



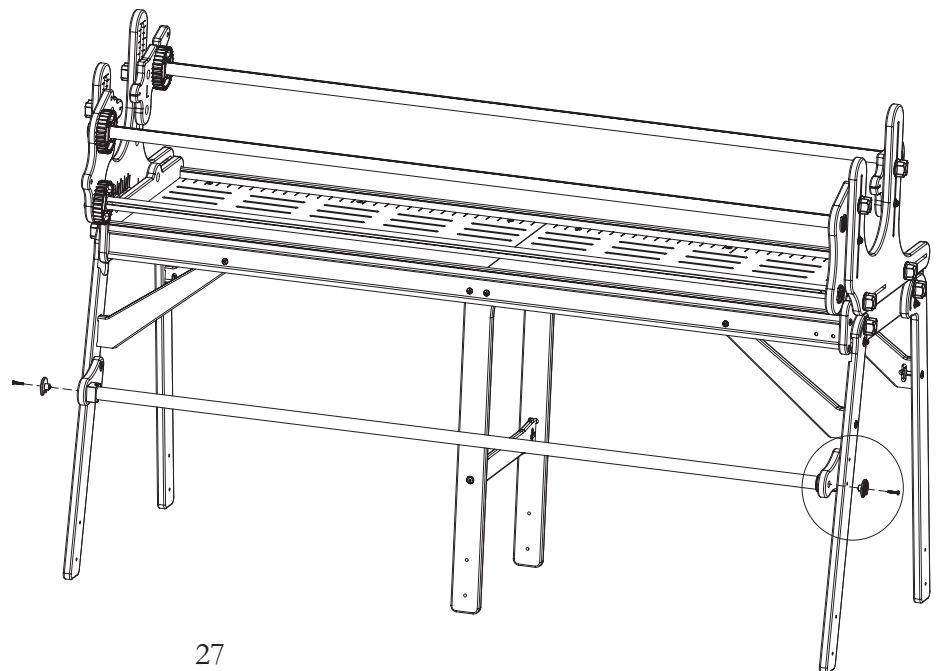
- Attach the 4th Rail Bracket to the Right Front Leg with the connector bolts, as illustrated to the right.
- Follow the above instruction for the left side.



- Take your rail and place it in between the 4th Rail Brackets, with the square plastic cap on the left side and the round plastic cap on the right side, as shown left.

- Place a plastic end cap in the hole on the outside of the Left Frame End. You will then screw the plastic end cap to the square plastic cap.

- Place a plastic end cap in the hole on the outside of the Right Frame End and use a screw to tighten the plastic end cap to the outside of the Right Frame End.



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

Save any extra hardware you have left over (if you assembled 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!

With the specially designed Fabri-Fast rails, installing your fabric is easier on the Little Gracie than on any other frame. Each rail has a Fabri-Fast slot and accompanying tubing. These work together to make your fabric installation much easier and faster than using tape, tacks or Velcro®.

Before you begin, please locate the plastic Fabri-Fast tool (red) included in your shipment.

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

NOTE: As you cut your fabric layers, we recommend making the quilt backing about 6-8" longer and 2-4" wider than your top. This will allow for a little give in the backing, especially if using thicker batts.

LITTLE GRACIE FABRIC INSTALLATION

- The recommended method for installing fabric onto the rails is to make and use **Cloth Leaders (instructions to follow)**. This will enable you to finish your quilt completely, to the end, without having to take your quilt off the rails.
- It is very important to cut all your fabric square. This will make the following steps much easier! A rotary cutter helps achieve more precise results.

This following is a brief overview to show which fabric layer goes to each rail

OVERVIEW:

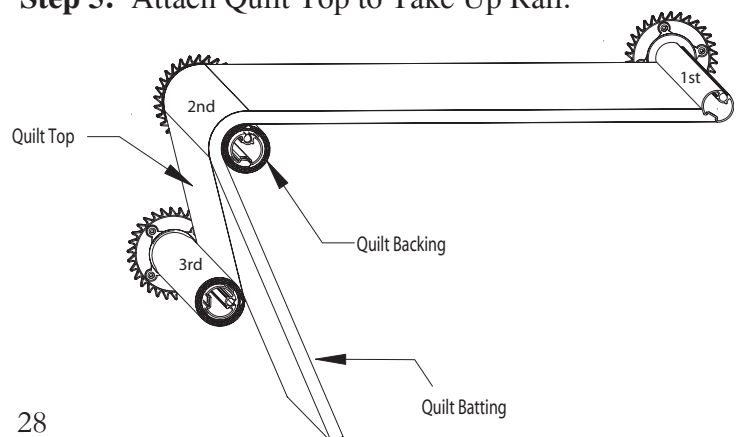
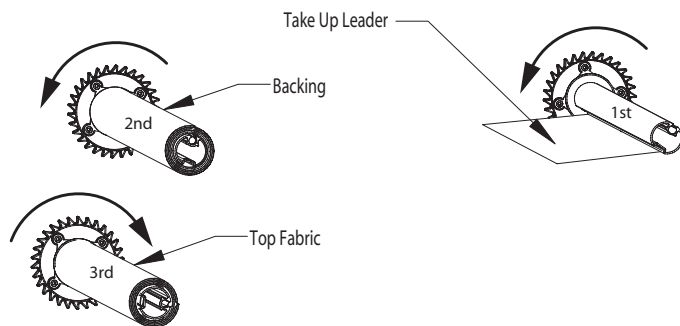
Step 1: Install Quilt Backing to 2nd rail and roll up.

Step 2: Install Quilt Top to 3rd rail and roll up.

Step 3: Attach Quilt Backing to Take Up Rail

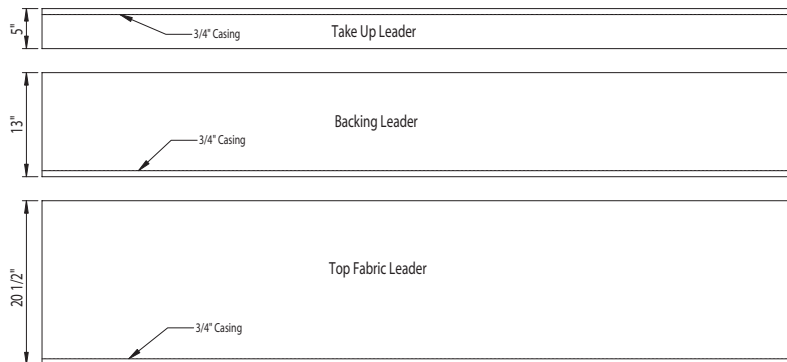
Step 4: Place Batting on floor underneath Quilt Top Rail, pull end of batting up between 3rd and 2nd rail, and lay over Quilt Backing.

Step 5: Attach Quilt Top to Take Up Rail.



MAKING CLOTH LEADERS

- 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 to be difficult installing it into the rail slot.
- Surge or hem your cloth leaders on all sides.
- Make cloth leaders so that their lengths are as follows (these may need to be slightly longer if spreading Pole mount ends).

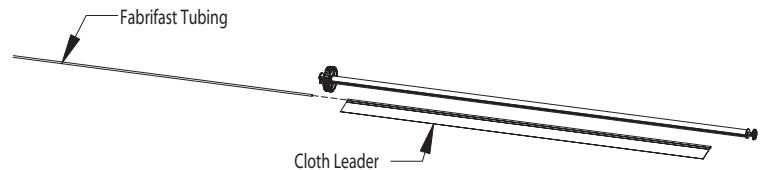


- Mark a dashed line along the length of your leader about 1/2" in from the edge. You will use this as a guide to help you insert your leader into the slot in straight line.

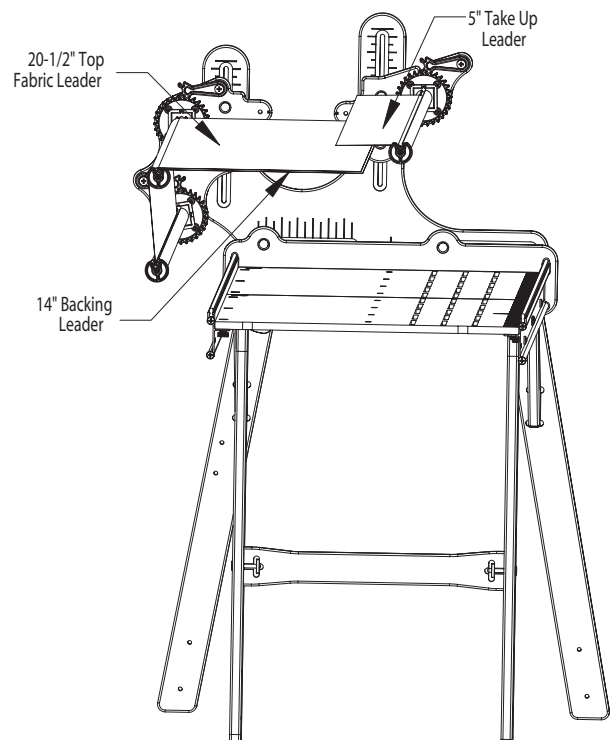
(OPTIONAL: For a straighter cloth leader installation, some may consider it easier to make a casing and push the tubing into the casing before installing it into the slot. If you wish to do this, create a casing on one end of each leader by folding over the fabric one inch (1"), and,

using your foot pedal as a guide, stitching 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. You may then slide your tubing into the casing).

- Mark each cloth leader at the center (length-wise).
- Mark (or baste) a straight line about 1/2" in from the opposite (non-casing, or non-dashed) end of the leader. This will be the line to which you attach your fabric layer.



- Center your cloth leader lengthwise along the rail. Using Grace's new Fabri-Fast™ System, take a piece of plastic tubing (cut to the appropriate length), and, holding your cloth leader to the slot (lining up the dashed line), press the tubing over the leader and into the slot. Use the Fabri-Fast tool to press the rest of the tube and fabric in quickly and easily. (If you have made a casing, line up this casing w/ tubing over the slot and press it into the slot using the Fabri-Fast tool.



- This illustration show the cloth leaders installed on each rail prior to your quilt layers being installed.

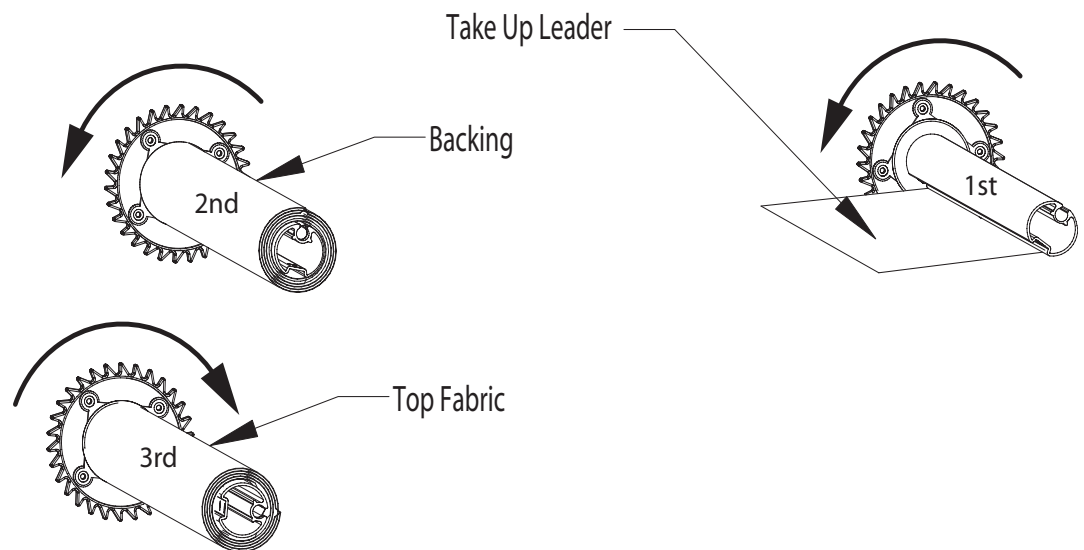
INSTALLING YOUR FABRIC LAYERS TO THE RAILS

STEP 1: QUILT BACKING TO SECOND RAIL

- To begin, determine which will be the front and back edges of your quilt BACKING (be sure it will fit within the width of your frame set-up).
- NOTE: If your backing is made up of more than one piece of fabric, cut your selvages off and attend them out to allow the backing the proper give it needs.
- Line up the center of your fabric layer with the center of the cloth leader on the 2nd Rail. Pin the back edge of your backing to the leader cloth. This is to be done with the finished side of the fabric facing down.
- Do not stretch or pull the fabric during this process. Let it lay as naturally as possible.
- Roll your leader and backing onto the 2nd rail completely. Watch to make sure the fabrics stay lined up. Smooth out any wrinkles as you roll by brushing the fabric from the center out. However, be very careful not to stretch or pull the fabric excessively.
- NOTE! It is important that you roll the rail the proper direction so the fabric rolls over and onto the 2nd rail (see picture).

- Attach the other end of the backing to the take up rail cloth leader. Pin along the solid line you made earlier.

As you pin, allow the quilt to lay natural. Avoid pulling or stretching the fabric.



STEP 2: QUILT TOP TO THIRD RAIL

- Determine which will be the front and back edges of your quilt.
- Line up the center of your fabric layer with the center of the cloth leader on the 3rd Rail. Pin the back edge of your top to the leader cloth. This is to be done with the finished side of the fabric facing up.
- Do not stretch or pull the fabric during this process. Let it lay as naturally as possible.
- Roll your leader and top onto the 3rd rail completely. Again, be sure the fabrics stay lined up. Smooth out any wrinkles as you roll by brushing the fabric from the center out, being very careful not to stretch or pull the fabric excessively.
- NOTE! It is important that you roll the rail the proper direction so the fabric rolls onto the 3rd rail the right way (when fabric rolls off the rail toward the take-up rail, it should roll under and off the rail. See picture).

STEP 3: BATTING

- A light, bonded batting is recommended.
- Lay your roll of batting on the floor below the Quilt Top Rail. Pull the end up between the Quilt Top Rail and Quilt Backing Rail, so that it comes up and over the Quilt Backing. Lay it over the top of the

backing, along the pinned edge on the take up rail.

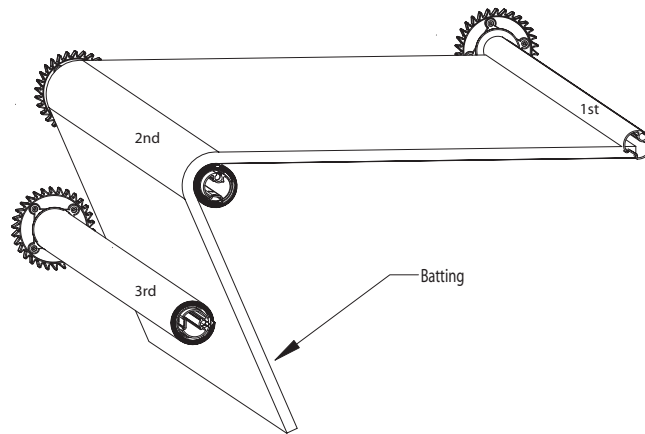
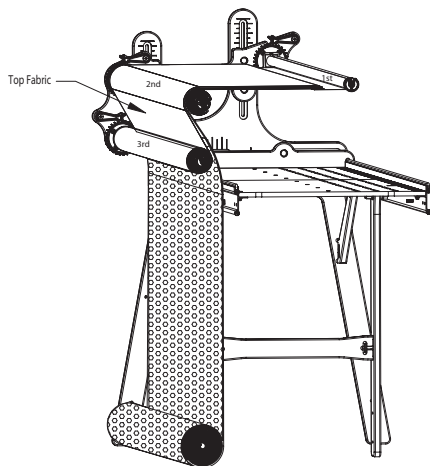
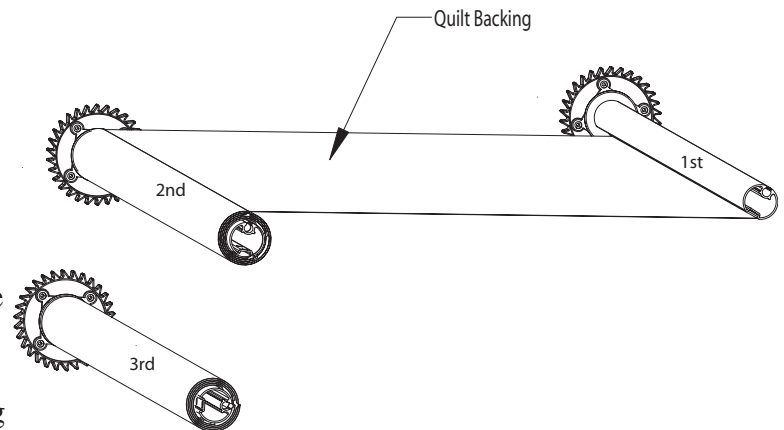
- **If you have the Optional 4th Rail**, roll the batting onto rail, being sure to roll the proper direction so that it, like the quilt top, comes off the rail from the bottom when unrolling.

STEP 4: ATTACHING YOUR QUILT LAYERS TO THE TAKE UP RAIL

➤ Take the edge of the quilt backing and pin it along the straight line of the take up rail leader in a smooth manner, without it stretching your fabric.

➤ Next, bring your batting up in between the 3rd rail and 2nd rail and drape over the backing. Lay it along the pin line of your backing on the take up rail cloth leader.

➤ Finally, bring the quilt top up over the backing and batting and lay it over the batting along the pin line on the take up rail cloth leader. Pin your top and batting along the same line as your backing in a smooth manner.



STEP 5: PUTTING YOUR MACHINE/CARRIAGES ONTO FRAME

- First, remove your Cone Thread Holder off your carriage before you can slide your machine inside. You may have to take your cone thread guides out.
- Remove the take up rail with fabric and rest it on the bottom of the rail mount ends.
- Slide your machine into the carriage from the back. It might be easier if your carriage is all the way to the front, so it does not slide with you.
- Once you have your machine on you can put your Cone Thread Holder back on as well as putting your rail back in place.
- Slide the carriages all the way to the left (non-ratchet wheel side).
- Put the left end of the take up rail with fabric through the throat of the machine (feeding the fabric layers under the raised presser foot).
- Put the take up rail back in the slots or the mounts.

Rolling your fabric

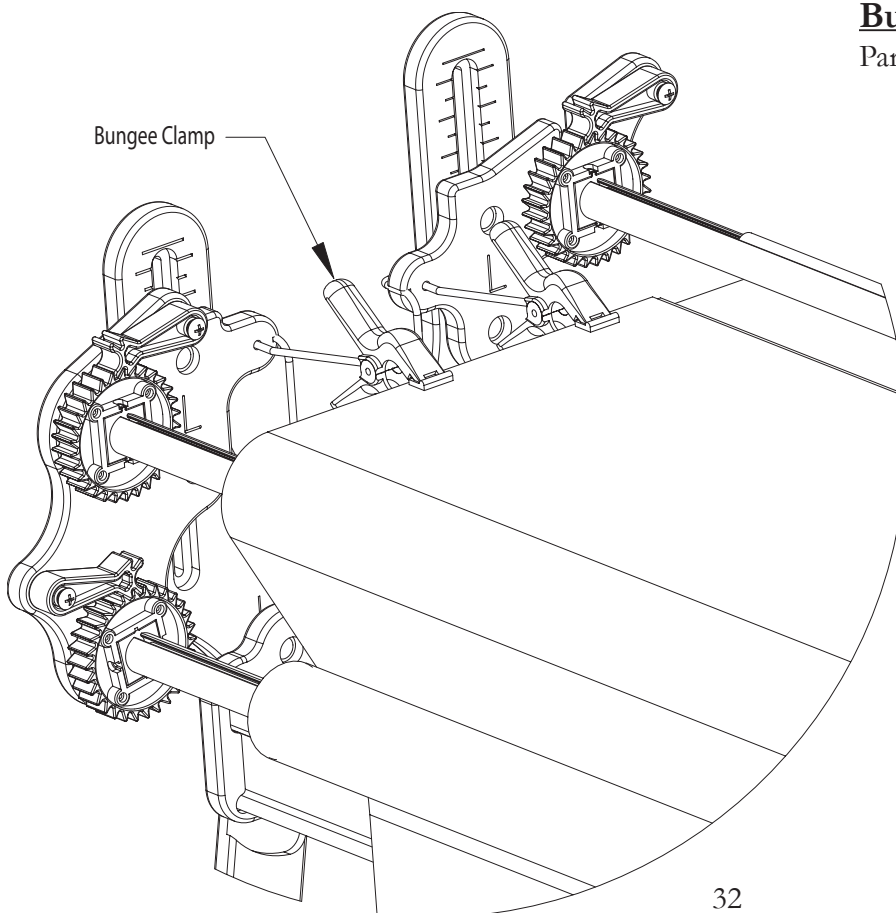
- When you have completed your work area and are ready to roll to the next, simply take the stops off the 2nd and 3rd rails, allowing them to roll freely. Then, with one or both hands, roll the 1st rail forward, rolling the completed work area onto that rail.
- **TIP!** As you roll forward, the quilt 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 1/8" above the throat place of 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 smaller size throat (3" to 7"), you will want to follow the four-inch principle: Limit any quilting pattern to four inches or less from front to back.

If you have the 4th Rail option: Install Batting to 4th Rail and roll up.

- The Little Gracie gives you close to 16" of reach, but because of a limited throat size of your machine, 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.



Bungee Clamp Assembly

Parts Needed: 4- Bungee Clamps

- You will want to thread the end of one of your bungee cords through the little hole on your left Take Up Rail Mount End, as pictured.
- You will then want to attach the clamp to your fabric.
- With the clamp attached and your cord through the hole you will want to pull the excess cord and when you get your fabric tight you will pull the cord through the slot next to where you threaded your cord.
- You will follow the above steps for the rest of the left side, except your bungee cord will go through the Left Fabric Layer Rail Mount End.
- Follow the above steps to complete the right side.