#### The New Little Gracie II Home Machine Quilting System

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



#### CARE OF YOUR LITTLE GRACIE II

Your Little Gracie II 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<sup>™</sup> or Watco<sup>™</sup> 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 <u>within 30 days of</u> <u>purchase</u>.

## **Contact Information**

For Technical Support or any other correspondence concerning your Little Gracie II, call **1-800-264-0644** ~ OR ~ E-mail: info@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 <u>www.graceframe.com</u>

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.



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:

10mm Socket Wrench Adjustable wrench Phillips Screw Driver Allen wrench (provided) Fabri-Fast Tool (to be used when installing your fabric).





• 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.



## Step 2: Fabric Layers Rail Mount End Assembly



• 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



• 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



• 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 countersunk hole.









- 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!

# 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- M6 Nylock Nut
- 4- M6 Flat Washer
- 4- M8 Fender Washer
- 4- M6 Plastic Knob

• Put the Right Front Side Leg on the preinstalled 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 preinstalled bolts on the Right Frame End (below the Take Up Rail Mount End).



#### Step 9: Table Assembly



• Place the Tabe #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



- 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 M6 X 50mm 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



NOTE: You have been provided plastic track for both possible frame sizes so that you will never have more than 1 piece of track in each track support. Seamless track ensures smooth sewing machine movement.

- Snap one of the plastic track ("V" SIDE DOWN) into the front table aluminum track support.
- Snap the last plastic track ("V" SIDE DOWN) into the back table aluminum track support.





Step 13: 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\*- M6 X 45mm Connector Bolt 2 or 4\*- M6 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.

Instructions continued from previous page

- The M6 X 20mm phillips pan head screw goes through the aluminum track support to the Side Leg Brace. (as illustrated left).
- Two of the M6 X 25mm 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.



on the bolts, which are on the front of

your frame.



• 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.



- 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.



• First you will install one square end cap on the end of each 64" Rail.



• If you are setting your frame up in the queen size, you will need to add a coupler to the end that does not have the square end cap on the 64" Rail.

• First, insert one end of the coupler into the end of the rail. Insert a M5 X 10mm socket head screw through each hole of the rail and into the threaded hole of the coupler. Tighten this screw all the way.

• Repeat this step for the other end of the coupler, connecting it to the 34" rail.



#### Step 16: Rails to Frame Assembly

Parts Needed: 3- Ratchet Wheels 6 - M4 X 30mm Screw

6 - End Cap Shoulders

\*\*To make it easier to put your rails in you could loosen both knobs on your Left and Right Rail Mount Ends. This will allow you to move your Rail Moutn Ends away from your frame slightly, making it easier to insert your rails on your frame.



• Note the direction in which the teeth arc on the ratchet wheel in the picture on the following page. The teeth arc clockwise on the upper two rails and counter-clockwise on the lower rail.

• Put the rails into the rail mount ends by putting the stem of the end cap from the ratchet side of each rail into the hole in the left rail mount end. Then force the end cap on the opposite side of the frame into the hole on the right rail mount end. You will have to flex the side of the frame out a little to accomplish this. Repeat this process for all three rails. Reference the picture to the left for rail and ratchet wheel position.

End Cap Shoulder

M4 X 25mm Screw



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# Step 17: Ratchet Stop Assembly

Parts Needed: 3- Ratchet Stops 3- M6 X 40mm 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 rachet stop goes to the right of the ratchet wheel.

## Step 18: Carriage Stop Assembly

Parts Needed: 2- Carriage Stop Base

- 2- Carriage Stop Clamp
- 2- M6 X 55mm Carriage Bolt
- 2- M5 Flat Washer
- 2- M6 Jam Nut
- 2- M8 Fender Washer
- 2- M6 Plastick 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.







Congratulations! You have completed the assembly of your Little Gracie II 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<sup>®</sup>.

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 II 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.

**Step 3:** Attach Quilt Backing to Take Up Rail

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 3nd rail and roll up.



# 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).



using your foot pedal as a guide, stitching the fabric together 3/4" from the fold. This will leave about  $\frac{1}{4}$ " 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).



- Center your cloth leader lengthwise along the rail. Using Grace's new Fabri-Fast<sup>TM</sup> 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 selvedges off and flatten 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 2<sup>nd</sup> 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 2<sup>nd</sup> 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 Take Up Leader



#### **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 3<sup>rd</sup> 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 3<sup>rd</sup> 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 3<sup>rd</sup> 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 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.

(When you have finished using your machine for a little bit, you will want to park it to one side of your frame.)



# **Rolling your fabric**

- When you have completed your work area and are ready to roll to the next, simply take the stops off the 2<sup>nd</sup>  $\geq$ and 3<sup>rd</sup> rails, allowing them to roll freely. Then, with one or both hands, roll the 1<sup>st</sup> 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  $\geq$ slightly as needed, so that the bottom of the rolled up fabric stays about 1/8" above the thoat 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 4<sup>th</sup> Rail option: Install Batting to 4<sup>th</sup> 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 your bungie cord 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 bungie cord will go through the Left Fabric Layer Rail Mount End.

• Follow the above steps to complete the right side.