The GMQ Pro
Home Machine Quilting System
Equipped with the Professional Series Rails

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Print Date 02-01-2010
GMQ Pro
Parts List B

Table #1
- (1) Table
- (1) Table #2
- (1) Table #3
- Table #4
- (1) Bottom Carriage
- (1) Top Carriage
- (3) Cone Thread Disk
- (1) Stylus Base
- (1) Stylus Clamp
- (1) Stylus Mount
- (1) Lamp Holding Cross Brace
- (3) Table Splice
- (1) Right Back Lever
- (1) Left Back Lever
- (1) Front Lever
- (1) Middle Lever
- (1) Front Lever Linkage
- (1) Back Lever Linkage
- (1) Pedal Clamp
- (1) Pedal Clamp Wheel
- (3) Pedal Clamp Spacer
- (1) Right Handle
- (1) Left Handle
- (1) Pedal Cross Brace
- (1) Thin Cross Brace

Plastic Parts
- (4) Square End Cap
- (4) Round End Cap
- (8) End Cap Shoulder
- (4) Bungee Clamp
- (1) Fabri-fast Tool
- (3) Ratchet Stop
- (3) Ratchet Wheel
- (1) Fabri-fast Tool

(1) 2" x 70" Rail
(3) 2" x 34" Rail
(3) 2" x 24" Rail
(6) 2" Rail Coupler
(3) Ratchet Wheel
(4) Square End Cap
(4) Round End Cap
(8) End Cap Shoulder
(4) Bungee Clamp
(1) Fabri-fast Tool
(3) Ratchet Stop
(3) Ratchet Wheel

GMQ Pro
Parts List C

(1) Crib Back Track Support

(1) Crib Front Track Support

(1) Queen Front Track Support

(1) Queen Back Track Support

(1) King Front Track Support

(1) King Back Track Support

(3) 2” x 70” Rail

(3) 2” x 34” Rail

(3) 2” x 24” Rail

(6) 2” Rail Coupler

(1) 1.5” x 70” Rail

(1) 1.5” x 34” Rail

(1) 1.5” x 24” Rail

(2) 1.5” Rail Coupler

(4) Fabrifast Tubing -Pre-Installed in your 70” rail

(2) 129-1/2” Track

(2) 105-1/2” Track

(2) 71-1/2” Track
GMQ Pro
Parts List D

<table>
<thead>
<tr>
<th>Description</th>
<th>Quantity</th>
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</thead>
<tbody>
<tr>
<td>(56) M6 x 20mm Phillips Pan Head Screw</td>
<td></td>
</tr>
<tr>
<td>(12) M6 x 50mm Phillips Pan Head Screw</td>
<td></td>
</tr>
<tr>
<td>(6) M6 x 55mm Carriage Bolt</td>
<td></td>
</tr>
<tr>
<td>(8) M6 x 25mm Phillips Pan Head Screw</td>
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<tr>
<td>(40) M3.5 x 15mm Wood Screw</td>
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<tr>
<td>(10) M6 x 45mm Connector Bolt</td>
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<tr>
<td>(96) M5 x 10mm Socket Head Screw</td>
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<tr>
<td>(24) M5 x 16mm Socket Head Screw</td>
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</tr>
<tr>
<td>(24) M5 Square Nut (Pre-Installed)</td>
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</tr>
<tr>
<td>(10) M6 Rectangle Nut</td>
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<tr>
<td>(82) M5 Flat Washer</td>
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<td>(18) M6 Flat Washer</td>
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<td>(18) M6 Nylock Nut</td>
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<td>(82) M6 Jam Nut</td>
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<td>(1) 4mm Allen Wrench</td>
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<tr>
<td>(10) M8 x 45mm Leveling foot</td>
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<td>(24) M8 Fender Washer 9.0mm id x 32.0mm od x 1.6mm thick</td>
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<tr>
<td>(24) 6mm Plastic Knob</td>
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<td>(24) M6 x 16mm Socket Head Screw</td>
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<td>(24) M6 x 40mm Carriage Bolt</td>
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<td>(24) M6 x 40mm Carriage Bolt</td>
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</tr>
<tr>
<td>(24) M6 x 20mm Phillips Pan Head Screw</td>
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</tbody>
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CARE OF YOUR GMQ PRO

Your GMQ Pro 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. Avoid the possibility of moisture coming into contact with your wood.

Five-Year Limited Warranty

GraceWood, Inc. will replace or repair, at our choosing, any part of the GMQ Pro 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 GMQ Pro, call 1-800-264-0644 ~ OR ~ E-mail: support@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 GMQ Pro 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 GMQ Pro, and you can't seem to overcome it, call us before frustration sets in!

Tools Needed:
- 10mm Socket Wrench
- Adjustable wrench
- Phillips Screw Driver (Cordless Preferred)
- 3mm, and 4mm Allen wrenches (provided)
- Fabri-Fast Tool (to be used when installing your fabric)

Step 1: Leveling Feet Assembly

Parts Needed: 1- ea. Left and Right Front Legs
1- ea. Left and Right Back Legs
3- Middle Leg “A”
3- Middle Leg “B”
10- Leveling Feet
10- Leveling Foot Saddles
40- M3.5 x 15mm Wood Screw

- Place One Leveling Foot Saddle over the end of each Leg.
- Insert four M3.5 x 15mm wood screws into the holes of each of the Leveling Foot Saddles (there are two holes on each side). Screw these in completely.
- Insert Leveling Foot into the Leveling Foot Saddles as shown in the picture to the left. Make sure to screw it in all the way.
Step 2: Outer Leg Brace “A” Assembly

Parts Needed:
- 2- Outer Leg Brace “A”
- 1- Right Front Leg
- 1- Left Back Leg
- 2- M6 X 45mm Connector Bolt
- 2- M6 Rectangle Nut (threaded)

- Place a rectangle nut vertically in the “T” slot of the Leg Brace “A”, as illustrated above.

- Connect the Right Front Leg to the Outer Leg Brace “A” by threading the connector bolt through the hole in the Right Front Leg and into the rectangle nut. (Hold the rectangle nut in place, while using the provided Allen wrench to tighten the connector bolts.)

- Repeat the above steps again for the Left Back Leg.
Step 3: Outer Leg Brace “B” Assembly

Parts Needed:
- 2- Outer Leg Brace “B”
- 1- Right Back Leg
- 1- Left Front Leg
- 2- M6 X 45mm Connector Bolt
- 2- M6 Rectangle Nut (threaded)

- Place a rectangle nut vertically in the “t” slot of the Outer Leg Brace “B”, as illustrated to the upper right.

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

- Complete the above steps again for the Left Front Side Leg.
Step 4: Table Assembly

Parts Needed:
1- Table #1
1- Table #2
1*- Table #3
1**- Table #4
1- Front Crib and *Queen and **King Table Aluminum Track Support
1- Back Crib and *Queen and **King Table Aluminum Track Support
12 or 18* or 24**- M6 x 20mm Phillips Pan Head Screw
12 or 18* or 24**- M5 Flat Washer
12 or 18* or 24**- M6 Jam Nut
* Queen assembly ONLY
* King assembly ONLY

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

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

• 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. Be sure the “extra two holes” are on the end of Table #2. (See picture to the left).

• Put a phillips pan head screw through the middle hole on the Table #1 through the front crib table aluminum track support. Next, place a M5 flat washer and M6 jam nut on the end of each screw. Tighten these nuts completely.

• Put a phillips pan head screw through the other two holes on the top of 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.
QUEEN ASSEMBLY:

- Place the Table #3 on the front queen table aluminum track support (as pictured left). IMPORTANT! Again, carefully identify your Front and Back Queen Track Supports based on the position of the holes. Mount the Queen Back Track Support to the “slotted side” of the table.

- 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 Queen Table #3, and then put a flat washer followed by a jam nut on each end. Tighten all jam nuts completely.

KING ASSEMBLY:

- Place the Table #4 on the front king table aluminum track support (as pictured left).

- Put a phillips pan head screw through the middle hole on the Table #4 through the front king 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 #4, and then put a flat washer followed by a jam nut on each end. Tighten all jam nuts completely.
Step 5: Middle Leg Spacer Assembly

Parts Needed:

- 1- Crib Table (assembled)
- 1*- Queen Table (assembled)
- 1**- King Table (assembled)
- 1- Middle Leg Spacer A
- 1- Middle Leg Spacer B
- 1* or 2**- Track Support Splice A
- 1* or 2**- Track Support Splice B
- 4 or 8* or 12**- M6 x 50mm Phillips Pan Head Screw
- 8* or 16**- M6 x 20mm Phillips Pan Head Screw
- 4 or 12* or 24** M5 Flat Washer
- 4 or 12* or 24**- M6 Jam Nut

* Queen assembly ONLY
**King assembly ONLY

- You will not want to completely tighten the nuts on this step until you have completed track installation in step 9. Your tracks will go in easier if the bolts are not tight.

QUEEN ASSEMBLY:

- Place your Table #3 next to your Table #1 & 2 assembly. (NOTE! Be sure the “extra two holes” in the Track Supports are on the end opposite from Tables #1 & 2).

- Where your Crib Table meets your Queen table you will need to place a Table Splice (flat end against the aluminum track support).

- Place a 50mm phillips pan head screw through the center two holes (see close-up next page) in the aluminum track support and then through the Track Support Splice. Place a washer and jam nut on the ends of the screws and tighten completely.

- Follow the above steps to attach the Middle Leg Spacer to the back crib table aluminum track support.

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

- Put two 50mm phillips pan head screw through the two holes in the front crib table aluminum track support, which will then go through the Middle Leg Spacer.

- Place a M5 flat washer on the end of the screws, and then a jam nut. Tighten all jam nuts completely as you go.
Step 6: Table Splice to Table Assembly

Parts Needed:
- 1- Crib or Queen* or King** Table
- 1 or 2* or 3**. Table Splice
- 4 or 8** or 12**. M6 x 20mm Phillips Pan Head Screw

- Place a Table Splice over the seam in the table (between Table #1 and #2).
- Thread the phillips pan head screws through the top of the table with the ends screwing into the Table Splice under the table, as pictured left and above).
- Place a Table Splice over the seam between Table #2 and #3 (if you are setting up in Queen or King), and follow the above directions.
- Place a Table Splice over the seam between Table #3 and #4 (if you are setting up in King).

**Notes**
- The M6 X 20mm 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.
- 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. Then place a washer and jam nut onto the ends of the screws.

KING ASSEMBLY:
- Place Table #3 next to Table #4, and follow the above steps to complete your king set up.
Step 7: Frame End Hardware Assembly

Parts Needed: 1- Right and Left Frame End
12- M6 Jam Nut
12- M5 Flat Washer
12- M6 x 40mm Carriage Bolt

- Place an 40mm 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.

**TIGHTEN JAM NUTS COMPLETELY ONTO EACH BOLT UNTIL THE HEAD OF THE BOLT IS PULLED INTO THE COUNTER-SUNK HOLE.**

- Repeat the above steps for the right side.

Step 8: Track Installation

Crib Parts Needed: 2- 71-1/2” Plastic Track
1- Crib Table (assembled)

Queen Parts Needed: 2- 105-1/2” Plastic Track
1- Queen Table (assembled)

King Parts Needed: 2- 129-1/2” Plastic Track
1- King Table (assembled)

NOTE: You have been provided plastic track for all 3 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.

**CRIB TRACK is pre installed in your Crib Track Support pieces.**

- Snap one of the plastic tracks (“V” SIDE DOWN) into the front table aluminum track support.

- Snap the other plastic track (“V” SIDE DOWN) into the back table aluminum track support.
Step 9: Frame End Assembly to Table Assembly

Parts Needed:
- 1- Table Assembled (Crib or Queen or King)
- 1- Right and Left Frame End Assembly
- 8- M6 X 25mm Phillips Pan Head Screw

• Attach the Left Frame End to Table #1, as pictured below, with the bolts facing away from the frame.

• Put a screw through each hole on the outside corners of the Left Frame End, and into the holes in the track supports.

• You will attach the Right Frame End to the right side of your table. (#2 if Crib, #3 if Queen, and #4 if King)

Step 10: Side Leg to Table Assembly

Parts Needed:
- 1- Table Assembly (Crib or Queen or King)
- 2- Right and Left Back Leg (assembled)
- 2- Right and Left Front Leg (assembled)
- 4- M6 x 20mm Phillips Pan Head Screw
- 4- M6 Flat Washer
- 4- M6 Nylock Nut
- 4- M8 Fender Washer
- 4- 6MM Plastic Knob

• Tip your table so it is upside down, if it is not that way already.

• Take your Front Left Leg and place it on the bolts that stick out of your Left Frame End, (as pictured left).

• The bolt closest to the floor is where you will place a fender washer followed by a plastic knob.

• Then you will take a screw and insert it through the front track support to the Outer Leg Brace B, where it will screw into a pre installed nut.

• Place a flat washer followed by a nylock nut on the bolt above the plastic knob.

**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!**

• Follow the above instructions to install the Left Back Leg as well as the Right Front and Back Legs.
NOTE: This illustration shows the Middle Leg Brace assembled to the Middle Legs. Do this AFTER you have installed your Middle Legs to the frame (Step 13).

**Step 11: Middle Leg Installation**

**Parts Needed:**
- 1 or 2* or 3**- Middle Leg (assembled)
- 2 or 4* or 6**- 6MM Plastic Knob
- 2 or 4* or 6**- M8 Fender Washer
- 2 or 4* or 6**- M6 Nylock Nut
- 2 or 4* or 6**- M6 Flat Washer
*Queen Assembly ONLY
**King Assembly ONLY

- Make sure your GMQ Pro is still upside down, as illustrated left.
- Put the “B” side of your Middle Leg on the bolts, which are on the front of your frame. **Don’t worry about putting side “A” on yet.**

- You will have to push the “A” Side in 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 bottom, closest to the table, is where you will put a flat washer followed by a nylock nut.

**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!!**

- On the top bolt you will put a fender washer and then a plastic knob.

- You will follow the above steps to put on your other legs for Queen or King.
Step 12: Middle Leg Assembly

Parts Needed:
- 1 or 2* or 3**- “A” Middle Leg
- 1 or 2* or 3**- “B” Middle Leg
- 1 or 2* or 3**- Middle Leg Brace
- 2 or 4* or 6**- M6 X 45mm Connector Bolt
- 2 or 4* or 6**- M6 Rectangle Nut (threaded)

* Queen assembly ONLY
** King assembly 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 assemble two sets of legs, and three for king.**
Step 13: Take Up Sides Assembly
Parts Needed: 1- Right and Left Take Up Side
4- M6 Jam Nut
4- M5 Flat Washers
4- M6 x 40mm Carriage Bolt

- Place one of the carriage bolts through each of the holes on the Left Take Up Side, 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.

**Make sure the top of the bolt is flush against the wood, this will require the use of a wrench.**

- Follow the above steps to complete the Right Take Up Side.

Step 14: Take Up Sides to Table Assembly
Parts Needed: 1- Right and Left Take Up Side (assembled)
4- 6MM Plastic Knobs
4- M8 Fender Washers

- Make sure your table is right side up, if it is not that way already, as pictured left.

- Take your Left Take Up Side and place it on the bolts that stick out of your Left Frame End, (as pictured left).

- Place a fender washer on the end of each of the bolts.

- Screw a plastic knob on the end of each of the bolts.

- Follow the above instructions to attach the Right Take Up Side to the Table.
Step 15: Take Up Rail Mount End Assembly

Parts Needed:
- 1 Right and Left Take Up Rail Mount End
- 4 M6 Jam Nut
- 4 M5 Flat Washer
- 4 M6 x 40mm Carriage Bolt

- 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.

- Make sure the top of the bolt is flush against the wood, this may require the use of a wrench, or something like a wrench that you have around your house.

- Repeat the above steps for the Right side.

Hint - If it is hard to push the bolt through, try turning it as you put it into the hole. After a little bit you should be able to push it.

Step 16: Take Up End to Table Assembly

Parts Needed:
- 1 Right and Left Take Up End Assembly
- 2 M8 Fender Washer
- 2 6MM Plastic Knob
- 2 M6 Nylock Nut
- 2 M6 Flat Washer

- 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.

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

- Put a washer and then a nylock nut on the bottom bolt.

- Follow the above steps for the Left Take Up Rail Mount End.
Step 17: Three Rail Side to Table Assembly
Parts Needed: 1- Right and Left Three Rail Side
2- M8 Fender Washer
2- 6MM Plastic Knob
2- M6 Nylock Nut
2- M6 Flat Washer

- Take your Right Three Rail Side and place it on the bolts that stick out of your Right Take Up Side, (as pictured above).
- On the front most bolt you will need to put a fender washer followed by a plastic knob.
- A flat washer followed by a nylock nut will go on the other 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!!
- Follow the above instructions to attach the Left Three Rail Side Left Take Up Side, illustrated right.

Step 18: Pivot End to Fabric Layer Rail Mount End
Parts Needed: 1- Right and Left Pivot End
1- Right Left Fabric Layer Rail Mount End
4- M6 x 55mm Carriage Bolts
4- M5 Flat Washers
4- M6 Jam Nuts

- Place a carriage bolt through each of the holes above and below the “L” on your Left Fabric Layer Rail Mount End.
- The bolts in your Left Fabric Layer Rail Mount End need to go through the holes above and below the “L” on your Left Pivot End, with the “L’s” on top of each other, as pictured right.
- On the end of each bolt you will place a flat washer followed by a jam nut, which needs to be tight.
- 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.
- Follow the same process to complete the right side assembly.
**Step 19: Pivot End / Fabric Layer Rail Mount End to Table Assembly**

Parts Needed:
- 1- Right and Left Pivot End / Fabric Layer Rail Mount End Assembly
- 2- M6 Plastic Knob
- 2- M8 Fender Washer
- 2- M6 Nylock Nut
- 2- M6 Flat Washer

- As shown in the drawing, place the bolts in the Right Pivot End / Fabric Layer Rail Mount End Assembly through the slots in the Right Three Rail Side.

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

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

- Put a washer and then a nylock nut on the bottom bolt.

- Follow the above steps for the Left Pivot End / Fabric Layer Rail Mount End Assembly.

**Step 20: Batting Rail Mount End**

Parts Needed:
- 1- Right and Left Batting Rail Mount End
- 4- M6 x 40mm Carriage Bolt
- 4- M5 Flat Washer
- 4- M6 Jam Nut

- Thread a bolt through each of the top two holes of your Right Batting Rail Mount End, with the heads of the bolt on the side with the “R”.

- Put a washer and then a jam nut on each of the bolts.

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

- Follow the above steps for the Left Pivot End / Fabric Layer Rail Mount End Assembly.

**HINT:** Some holes in the wood pieces may be a little tight for the hardware. If this is the case, tap the hardware in using the handle of your screw driver.
Step 21: Batting Rail Mount End to Table Assembly

Parts Needed:
1- Right and Left Top Fabric Rail Mount End
2- M6 Nylock Nut
2- M6 Flat Washer
2- M6 Plastic Knob
2- M8 Fender Washer

- Put the top bolt on your Left Batting Rail Mount End through the hole in the Left Pivot End, while the bottom bolt will slip through the slit in the Left Pivot End.

- On the top bolt you will need to put a flat washer followed by a nylock nut.

- 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!!

- On the bottom bolt you will need to add a fender washer followed by a plastic knob.

- Follow the above instructions to add the Right Batting Rail to your frame.

Step 22: Rail Assembly

Parts Needed:
4 - 70” Rail
4*- 34” Rail
4**- 24” Rail
4* or 8**- Rail Coupler
4 - Round End Caps
4 - Square End Caps
48* or 96**- M5 x 10mm Socket Head Screw
* Queen, or ** King ONLY
24- M5 x 16mm Socket Head Screw
24 - M5 Square Nut

- First you will install one square end cap on the end of each 70” Rail. (Remember that your M5 Square nuts are pre-installed into your end caps.)
• Next, insert an M5 x 16mm socket head screw through the hole and into each square nut in the end cap.

• Follow the above instructions to put the rest of the square end caps on the 70” Rails.

• If you are setting up your frame in crib size you will put a round end cap on the other end in the same manner as above.

• If you are setting your frame up in the queen size, or king, you will need to add a coupler to the end that does not have the square end cap on the 70” Rail.

• First, insert one end of the coupler into the end of the rail. Insert an 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.
• If you are setting up your frame in king size, follow the same previous steps to attach an additional coupler onto the 34” and 24” rails.

• When you have the two rails attached you will put the round end caps in the end of the 24” Rail in the same manner as you did the square end caps.

**Step 23: Rails to Frame Assembly**
Parts Needed: 3- Ratchet Wheels
8 - M4 x 20mm Screw
8 - End Cap Shoulders

**Note:** The Take Up Rail (inside the throat of your machine) is the 1.5” rail. This rail allows more quilt to roll up and not be as bulky.

• Place the ratchet wheel on three of the square plastic cap, and then place all your rails on the floor where they can lay flat.

• Take the rail without the ratchet wheel on it and place it in the bottom of the Batting Rail Mount End, with the square end cap on the left side of the frame.

• Place an end cap shoulder in the hole on the outside of the square end cap. You will then screw the end cap shoulder to the square plastic cap, but just enough for the screw to be inside the end cap.

• Place an end cap shoulder in the hole on the outside of the round end cap. You will then screw the end cap shoulder to the round plastic cap, but just enough for the screw to be inside the end cap.

• Take a rail with the ratchet wheel on it and place it in the middle of the Batting Rail Mount End. MAKE SURE THE RATCHET WHEEL TEETH ARE FACING AWAY FROM THE FRAME, as pictured on the next page.

**Note:** The Take-Up Rail is 1.5” diameter. All the rest of the rails are 2” diameter.

**To make it easier to put your rails in you could loosen both knobs on your Left and Right Take Up Sides. This will allow you to move your Take Up Sides away from your frame slightly, making it easier to insert your rails on your frame.
Step 24: Ratchet Stop Assembly

Parts Needed:
- 3- Ratchet Stops
- 3- M6 x 40mm Truss Bolt

- You will want to put an end cap shoulder on each end of the rail, leaving them loose just as you did on the first rail.

- Put the last two rails on in the same way you did the last one, except YOU WILL WANT THE TEETH ON THE RATCHET WHEELS GOING TOWARDS THE FRAME.

- When you have all the rails on you will want to tighten all of the screws into the end caps.

Take-Up Rail 1.5” (Smaller)

- 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 RATCHET STOP GOES TO THE LEFT, WHILE THE OTHER TWO THE RATCHET STOP GOES TO THE RIGHT OF THE RATCHET WHEEL.)
Step 25: 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 Plastic Knob

- You will be building two carriage stops, but one at a time.

- You will be building two carriage stops, but one at a time.

- Take the carriage bolt and place it through the Carriage Stop Base.

- At 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 GMQ Pro 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 GMQ Pro 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 batting.

GMQ FABRIC INSTALLATION

Methods of 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 the 3rd rail and roll up.
Step 3: Install Batting to 4th rail and roll up.

Step 4: Attach Quilt Backing to Take Up rail.
Step 5: Attach Batting to Take Up rail.
Step 6: 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 more difficult getting it installed 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 rail mount ends to accommodate a larger machine (16” or larger throat)).

- Take Up Leader 5”
- Backing Leader 24”
- Top Fabric Leader 18”

➢ Mark a dashed line along the length of your leader about ½” in from the edge. You will use this as a guide to help you insert your leader into the slot in a 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 presser foot as a guide, stitching the fabric together 3/4” from the fold. This will leave about ¼” 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 ½” 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 shows 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 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 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).

STEP 2: QUILT TOP TO 3rd 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.
STEP 4: ATTACHING YOUR QUILT LAYERS TO THE TAKE-UP RAIL

- Center the batting on the 4th rail and attach one end of the batting using the fabri-fast tubing. (NOTE: Fabri-Fast tubing will work with most batting, however, if the batting is too thick to squeeze into the slot, you may tape the batting to the rail to keep it in place).
- 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.

- 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 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/CARRIAGE ONTO FRAME

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

- 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 will 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 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 plate of your 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, you will want to follow the four-inch principle: Limit any quilting pattern to four inches or less from front to back.

- The Grace Machine Quilter 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 take up 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.