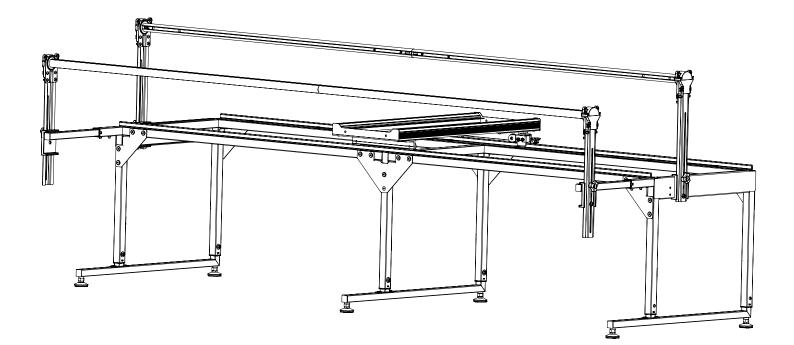
Q-Zone Queen

Assembly Instructions



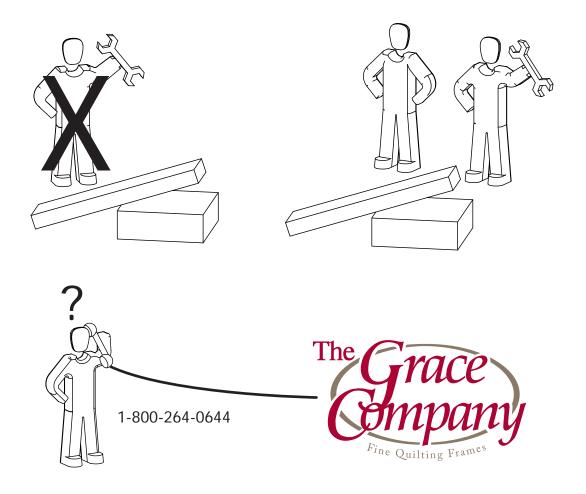
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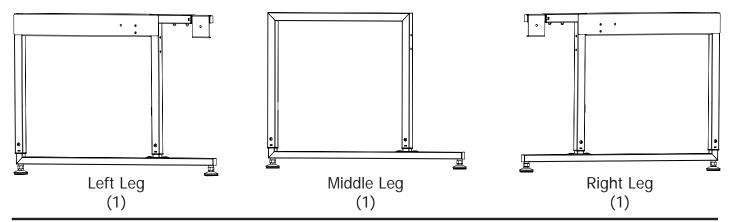
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Warranty Information for your Q-Zone Queen Quilting Frame

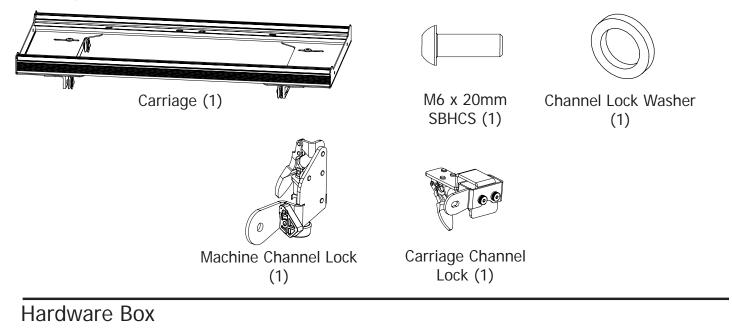
The Q-Zone Queen Quilting Frame has a One-Year limited warranty on all parts. The Grace Company will repair or replace, at its discretion, any part with problems due to our manufacturing or defects in materials. This warranty does not cover parts damaged through misuse, improper storage, improper assembly, loss, natural events, and willful destruction. Parts must be returned to the Grace Company, shipping prepaid, before we can repair or replace them. We will promptly return the repaired/replaced part at our expense if done within a year of the purchase date.

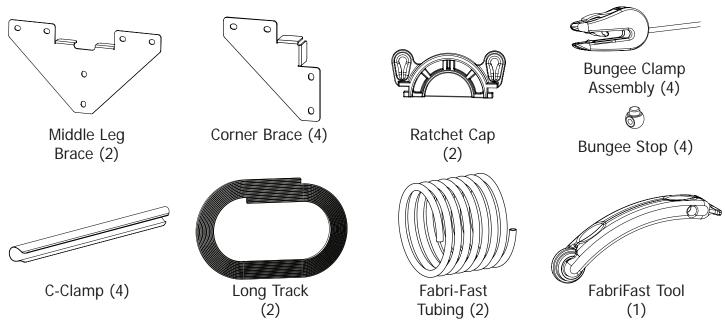


Parts List Box 1



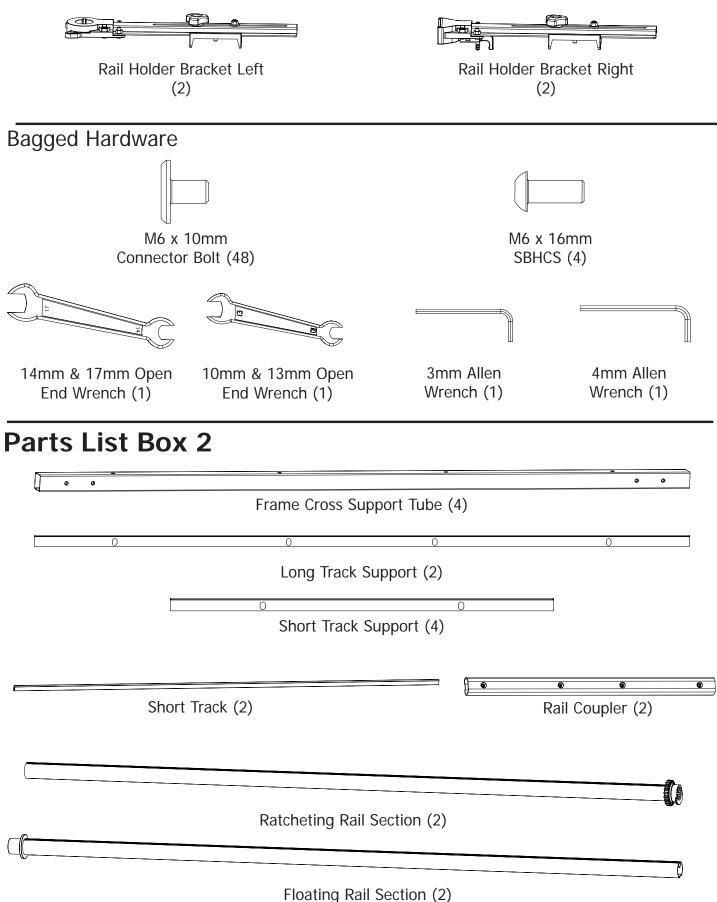
Carriage Box



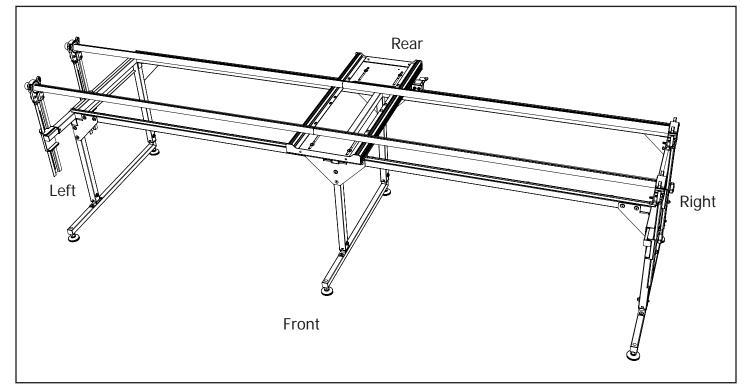


Parts List Box 1 (Continued)

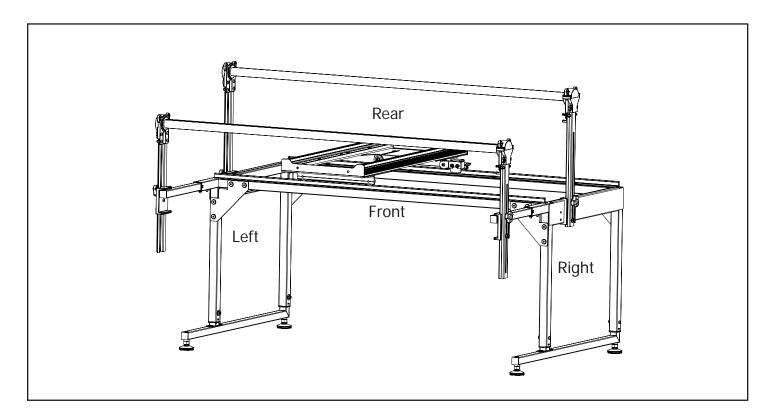
Rail Holder Bracket Box



Assembly Options Queen Assembly - See Pages 1-15

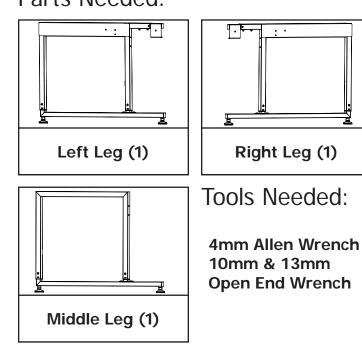


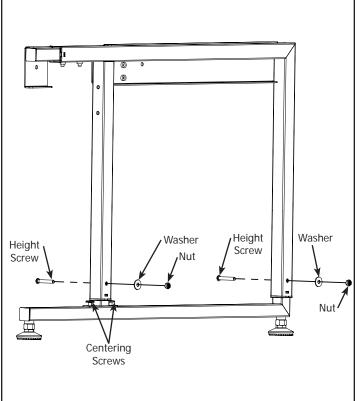
Crib Assembly - See Pages 16-29



Queen Assembly

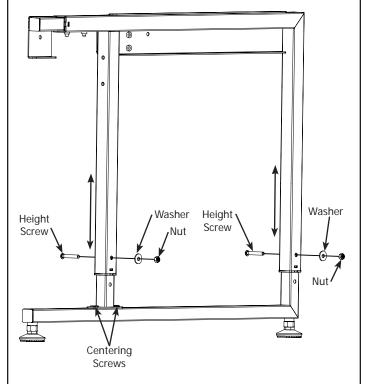
Frame End Assembly - Queen Assembly Step 1 - Table Height Setup Parts Needed:





1-1 Remove height screws and loosen centering screws.

Note: Left Leg Shown. Repeat for all legs.



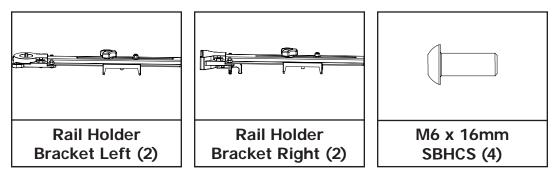
1-2 Adjust table height by sliding legs up or down and replace each height screw and tighten each centering screw.

Note: Repeat for all legs.

Hole	Floor to Top of		
Number	Fabric		
1	31 1/2 Inches		
2	32 1/2 Inches		
3	33 1/2 Inches		
4	34 1/2 Inches		
5	35 1/2 Inches		
6	36 1/2 Inches		
7	37 1/2 Inches		
8	38 1/2 Inches		
9	39 1/2 Inches		
10	40 1/2 Inches		

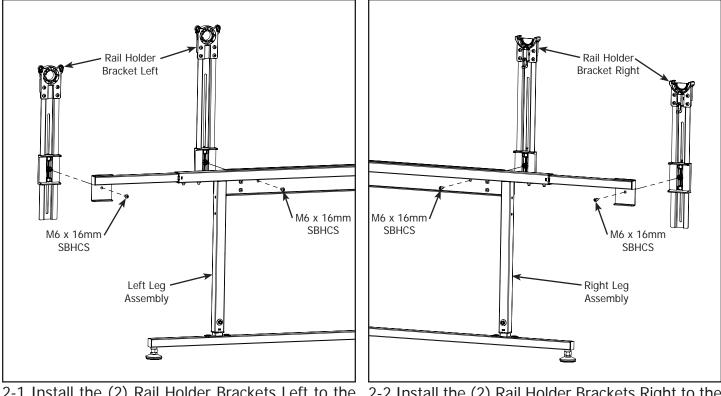
Note: Height will vary slightly after adjusting Leveling Feet in Step 12-1.

Frame End Assembly - Queen Assembly Step 2 - Rail Holder Bracket Installation Parts Needed:



Tools Needed:

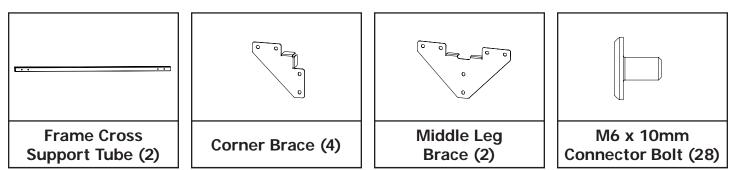
4mm Allen Wrench



2-1 Install the (2) Rail Holder Brackets Left to the Left Leg Assembly using (2) M6 x 16mm SBHCS. **Note:** Rail Holder Bracket Height will be adjusted in Step 11.

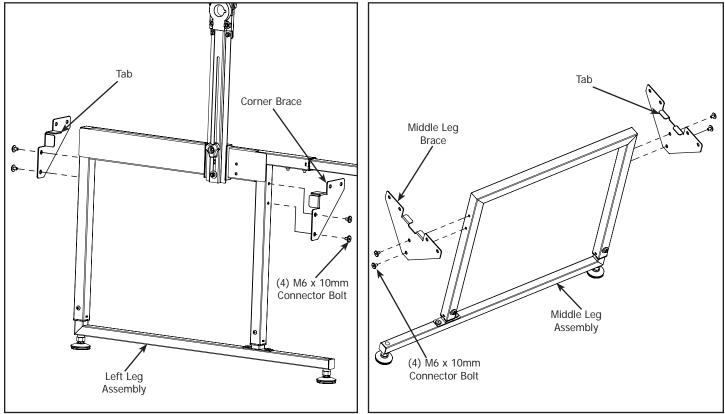
2-2 Install the (2) Rail Holder Brackets Right to the Right Leg Assembly using (2) M6 x 16mm SBHCS. **Note:** Rail Holder Bracket Height will be adjusted in Step 11.

Frame Assembly - Queen Assembly Step 3 - Frame Cross Support Tube Installation Parts Needed:



Tools Needed:

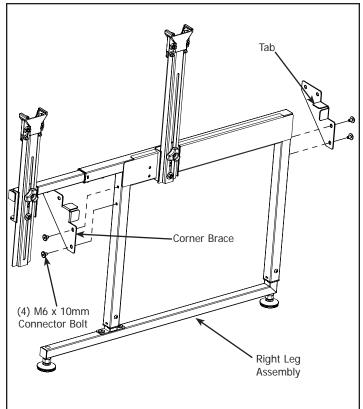
4mm Allen Wrench

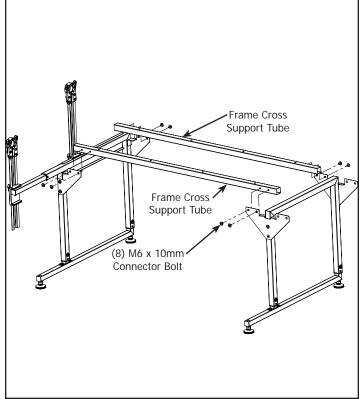


3-1 Install (2) Corner Braces to the Left Leg 3-2 Install (2) Middle Leg Braces to the Middle Leg Assembly with the tabs toward the inside of the Assembly using (4) M6 x 10mm Connector Bolts. leg using (4) M6 x 10mm Connector Bolts. Note: Leave bolts loose at this time.

Note: Leave bolts loose at this time.

Frame Assembly - Queen Assembly

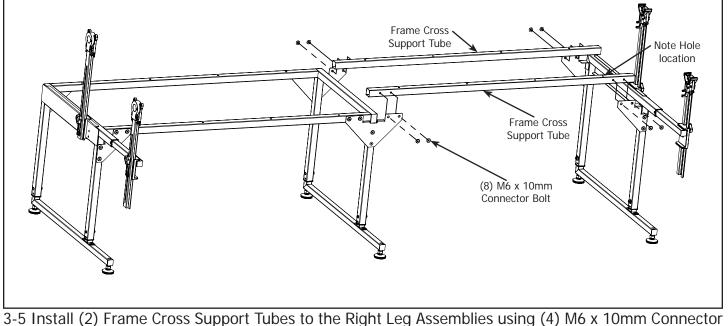




3-3 Install (2) Corner Braces to the Right Leg Assembly with the tabs toward the inside of the leg using (4) M6 x 10mm Connector Bolts. **Note:** Leave bolts loose at this time.

3-4 Making sure the holes in the Frame Cross Support Tubes are up, assemble the Frame Cross Support Tubes to the Left Leg using (4) M6 x 10mm Connector Bolts. Then assemble the Frame Cross Support Tubes to the Middle Leg using (4) M6 x 10mm Connector Bolts.

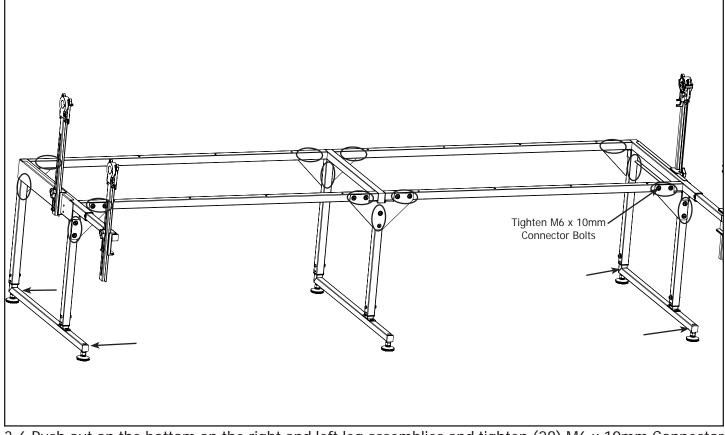
Note: Leave bolts loose at this time.



3-5 Install (2) Frame Cross Support Tubes to the Right Leg Assemblies using (4) M6 x 10mm Connector Bolts. Then assemble the Frame Cross Support Tubes to the Middle Leg using (4) M6 x 10mm Connector Bolts.

Note: Leave bolts loose at this time.

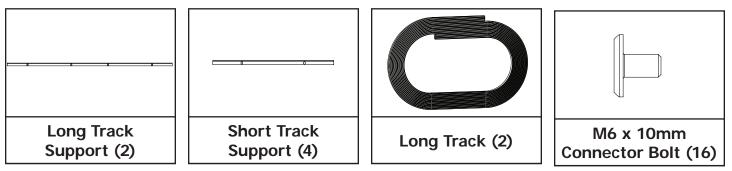
Frame Assembly - Queen Assembly



3-6 Push out on the bottom on the right and left leg assemblies and tighten (28) M6 x 10mm Connector Bolts at this time.

Step 4 - Track Installation

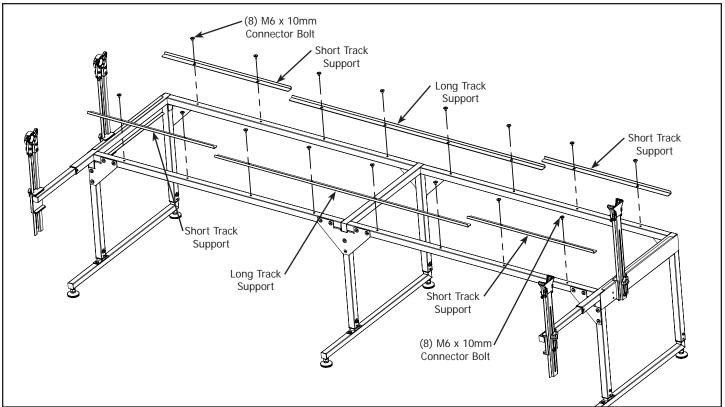
Parts Needed:



Tools Needed:

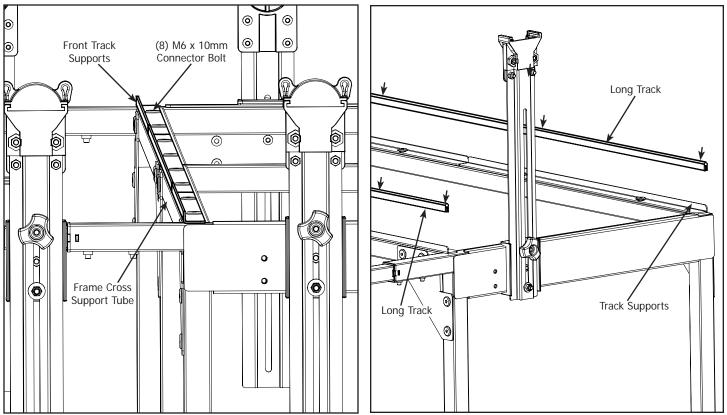
4mm Allen Wrench

Frame Assembly - Queen Assembly



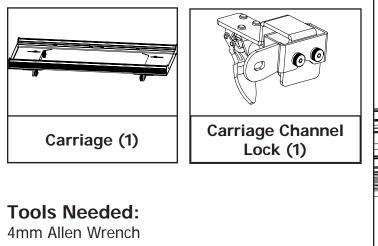
4-1 Attach the (4) Short Track Supports and the (2) Long Track Supports using (16) M6 x 10mm Connector Bolts.

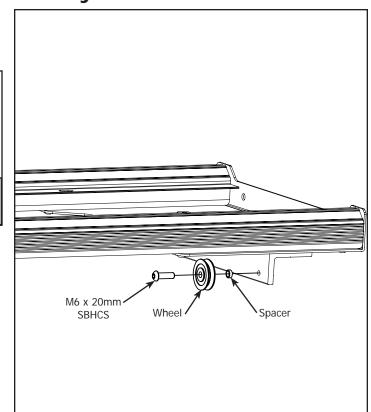
Note: Leave bolts loose.



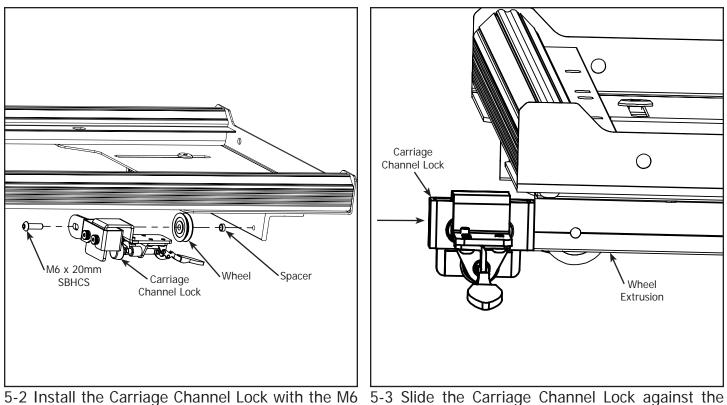
4-2 Slide the Front Track Supports until the Frame
4-3 Press the Long Track firmly onto the Track Cross Support Tubes are flush with the front of Supports until it bottoms out making sure there the Front Track Supports. Tighten the front (8) are no gaps between the Track Supports.
M6 x 10mm Connector Bolts only.

Carriage Assembly - Queen Assembly Step 5 - Carriage Installation Parts Needed:



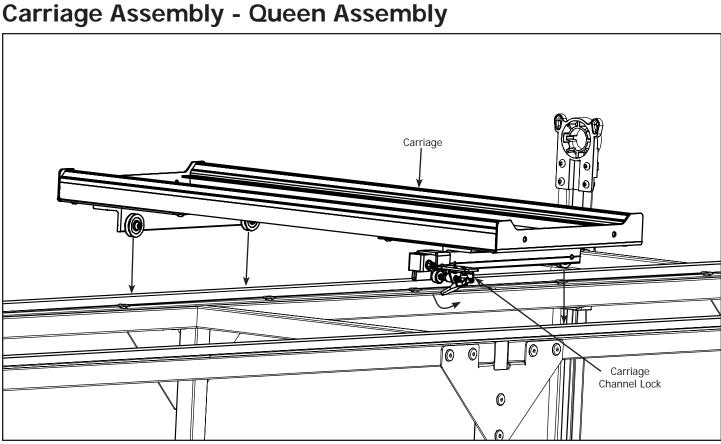


5-1 Remove the right rear M6 x 20mm SBHCS Wheel and Spacer from the Carriage.

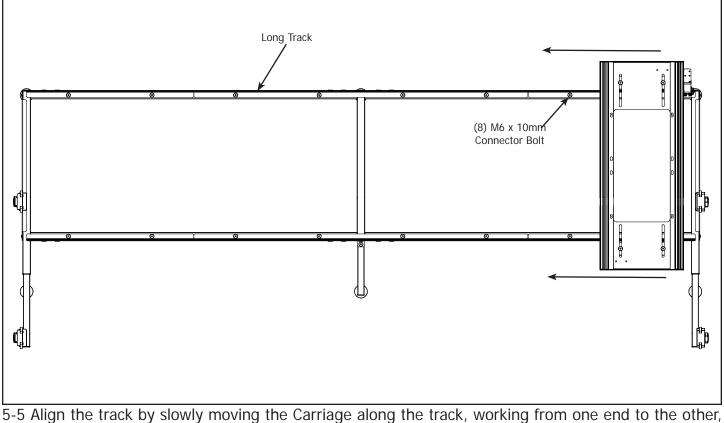


Do not tighten M6 x 20mm SBHCS until next step. Lock adjustments.

x 20mm SBHCS Wheel and Spacer, making sure Wheel Extrusion and tighten the M6 x 20mm the spacer is between the Wheel and the carriage. SBHCS from step 5-2. See Step 12 for Channel

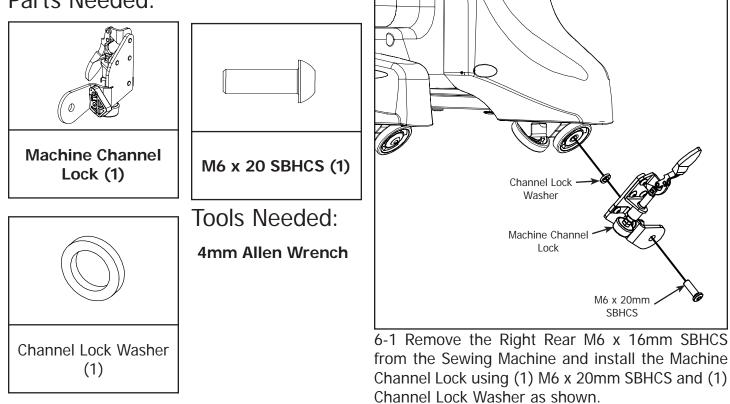


5-4 With the Channel Lock in the open position place the Carriage onto the Track.



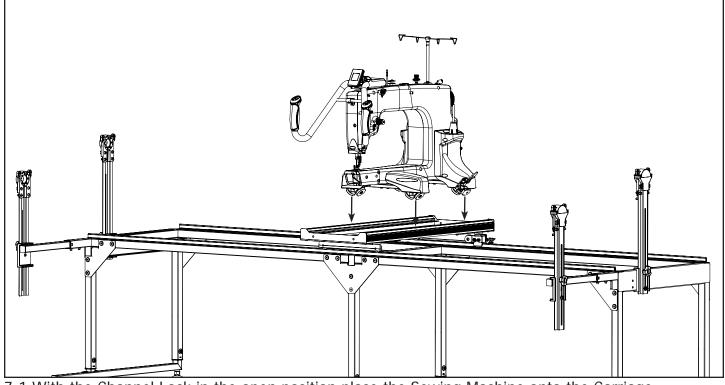
5-5 Align the track by slowly moving the Carriage along the track, working from one end to the other, tightening each of the back (8) M6 x 10mm Connector Bolts as you go.

Carriage Assembly - Queen Assembly Step 6 - Channel Lock Installation (Grace Machines Only) Parts Needed:



Note: See step 12 for Channel Lock Adjustment.

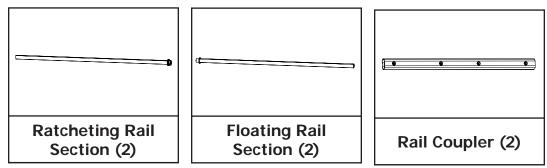
Step 7 - Sewing Machine Installation



7-1 With the Channel Lock in the open position place the Sewing Machine onto the Carriage. **Note:** See your Sewing Machine Instructions for Encoder installation instructions.

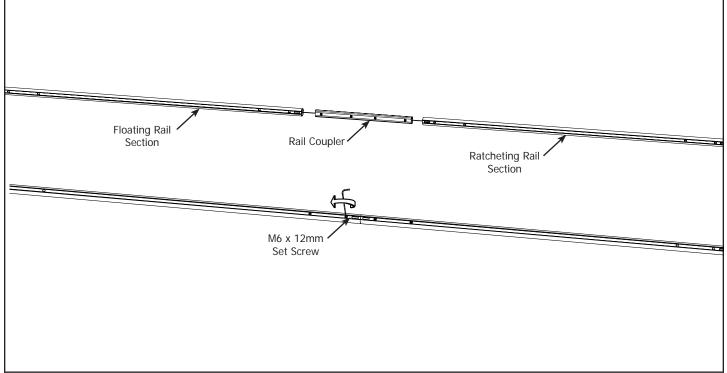
Rail Assembly - Queen Assembly Step 8 - Rail Assembly

Parts Needed:



Tools Needed:

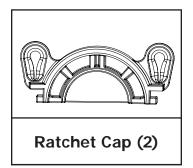
3mm Allen Wrench

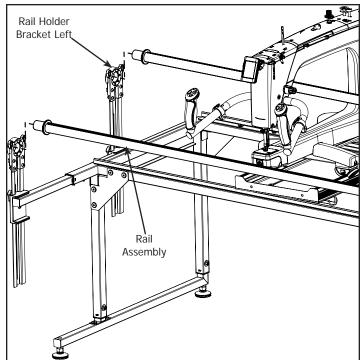


8-1 Put (1) Rail Coupler into (1) Ratcheting Rail Section, aligning the (2) M6 x 12mm set screws (preinstalled) on the Rail Coupler with the (2) bigger holes in the Rail. Tighten the (2) M6 x 12mm set screws (pre-installed) into the Rail through the hole. Repeat using (1) Floating Rail Section on the opposite side. Assemble Rails on a flat surface.

Note: Do not remove the set screws from the Rail Coupler. Repeat for second rail.

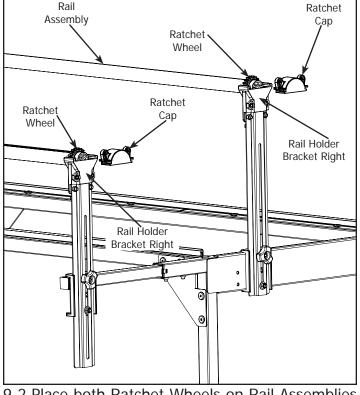
Rail Assembly - Queen Assembly Step 9 - Rail Installation Parts Needed:





9-1 Slide a Rail Assembly through the throat of the sewing machine and into the back Rail Holder Bracket Left. Install the remaining Rail Assembly into the front Rail Holder Bracket Left.

Note: If the rails fall out of Rail Holder Bracket Left Push the bottom of the legs out to ensure the rails don't fall out.

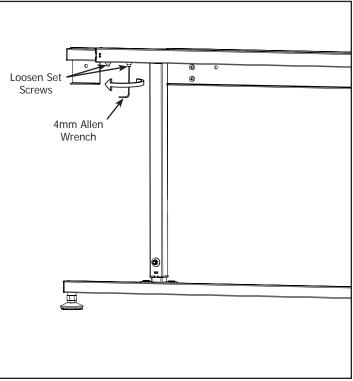


9-2 Place both Ratchet Wheels on Rail Assemblies into the Rail Holder Bracket Rights. Slide the Ratchet Caps onto the Rail Holder Bracket Rights.

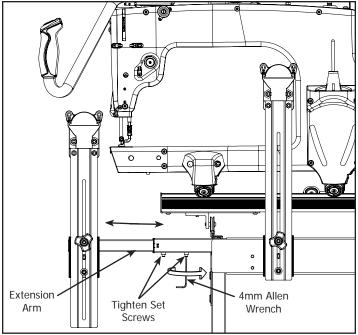
Frame Setup - Queen Assembly **Step 10 - Extension Arm Adjustment**

Tools Needed:

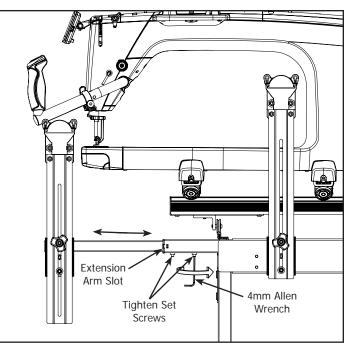
4mm Allen Wrench



10-1 Loosen set screws without removing from frame end.



10-2 For machines with a throat less than 16", 10-3 For machines with a throat greater than 16", move the Machine as far forward as possible and adjust the Extension Arms to the slot. Tighten the adjust the Extension Arms so the Front Rail is 1" from the front of the Machine. Tighten the Set Screws.

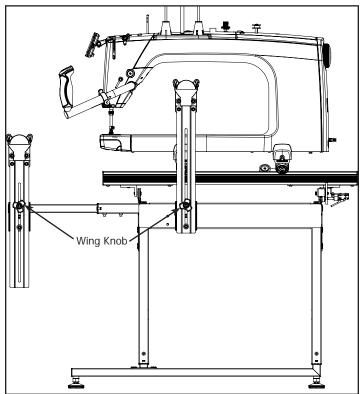


Set Screws.

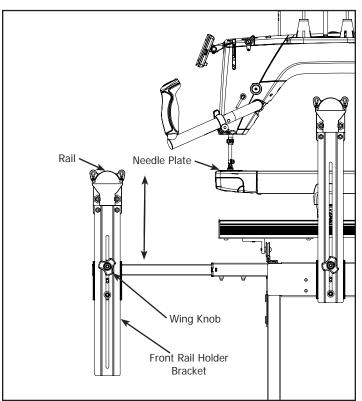
Frame Setup - Queen Assembly Step 11 - Adjusting the Rail Holder Brackets

Tools Needed:

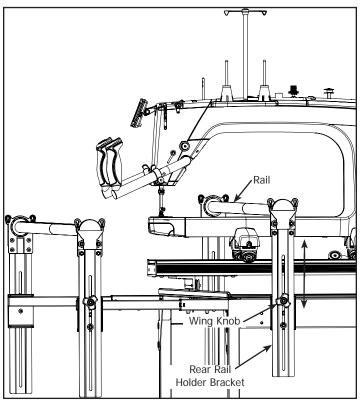
4mm Allen Wrench 10mm & 13mm Open End Wrench



11-1 Loosen the Wing Knobs on each of the rail holders.



11-2 Move the Front Rail Holder Bracket so the top 11-3 Adjust the Rear Rail Support Holder Bracket of the Rail is even with the Needle Plate. Tighten so the Rail is approximately 1/4 inch from the the Wing Knobs.

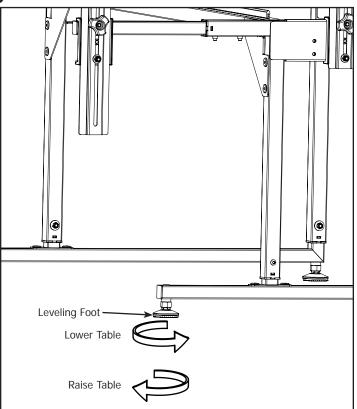


throat of the machine. Tighten Wing Knobs.

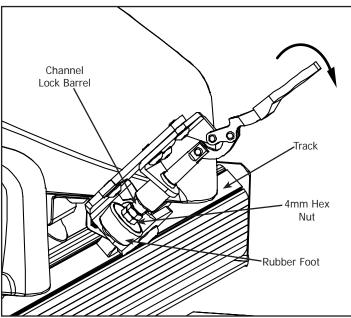
Frame Setup - Queen Assembly Step 12 - Basic Setup

Tools Needed:

3mm Allen Wrench 10mm & 13mm Open End Wrench 14mm & 17mm Open End Wrench

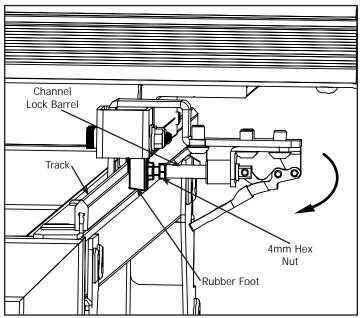


12-1 Adjust the Leveling Feet to level the frame and make sure it is stable. Adjust so the Carriage and Machine do not move on their own.



12-2 Rotate the Channel Lock handle down. To adjust the Channel Lock, twist the Rubber Foot until it presses against the track. Turn the 4mm upper Hex Nut until it is snug against the Channel Lock barrel.

Note: Channel Locks are used to lock the Sewing Machine, or the Carriage to assist in straight line stitching.



12-3 Rotate the Channel Lock handle down. To adjust the Channel Lock, twist the Rubber Foot until it presses firmly against the track. Turn the 4mm upper Hex Nut until it is snug against the Channel Lock barrel.

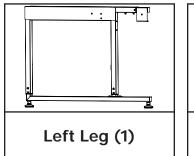
Note: Channel Locks are used to lock the Sewing Machine, or the Carriage to assist in straight line stitching.

Continue to page 30 for Fabric Setup

Crib Assembly

Frame End Assembly - Crib Assembly

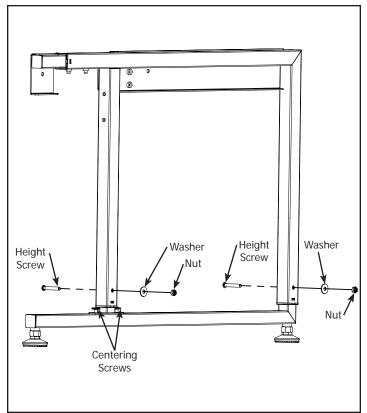
Step 1 - Table Height Setup Parts Needed:



Right Leg (1)

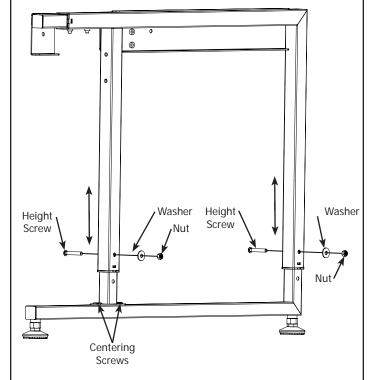
Tools Needed:

4mm Allen Wrench 10mm & 13mm Open End Wrench



1-1 Remove height screws and loosen centering screws.

Note: Left Leg Shown. Repeat for all legs.



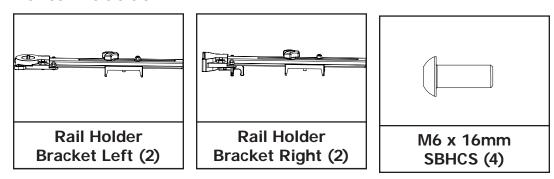
1-2 Adjust table height by sliding legs up or down and replace each height screw and tighten each centering screw.

Note: Repeat for all legs.

Hole	Floor to Top of		
Number	Fabric		
1	31 1/2 Inches		
2	32 1/2 Inches		
3	33 1/2 Inches		
4	34 1/2 Inches		
5	35 1/2 Inches		
6	36 1/2 Inches		
7	37 1/2 Inches		
8	38 1/2 Inches		
9	39 1/2 Inches		
10	40 1/2 Inches		

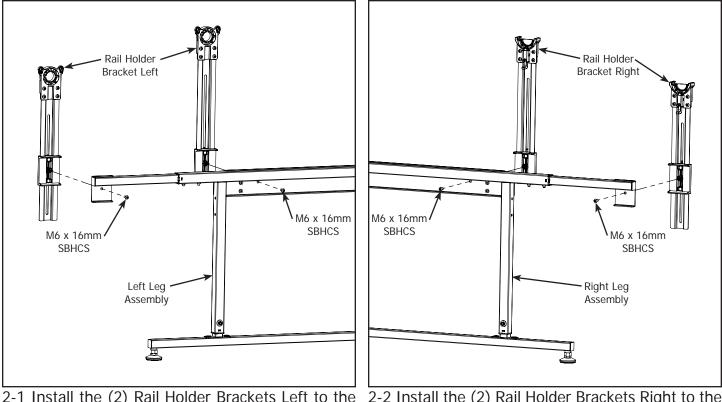
Note: Height will vary slightly after adjusting Leveling Feet in Step 12-1.

Frame End Assembly - Crib Assembly Step 2 - Rail Holder Bracket Installation Parts Needed:



Tools Needed:

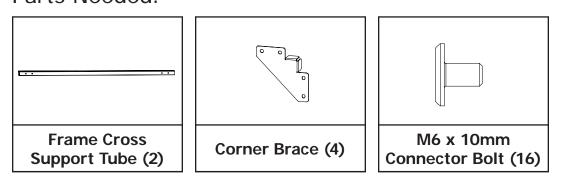
4mm Allen Wrench



2-1 Install the (2) Rail Holder Brackets Left to the Left Leg Assembly using (2) M6 x 16mm SBHCS. **Note:** Rail Holder Bracket Height will be adjusted in Step 11.

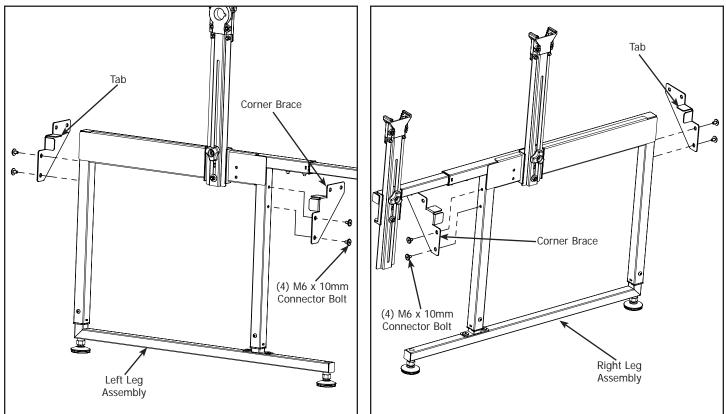
2-2 Install the (2) Rail Holder Brackets Right to the Right Leg Assembly using (2) M6 x 16mm SBHCS. **Note:** Rail Holder Bracket Height will be adjusted in Step 11.

Frame Assembly - Crib Assembly Step 3 - Frame Cross Support Tube Installation Parts Needed:



Tools Needed:

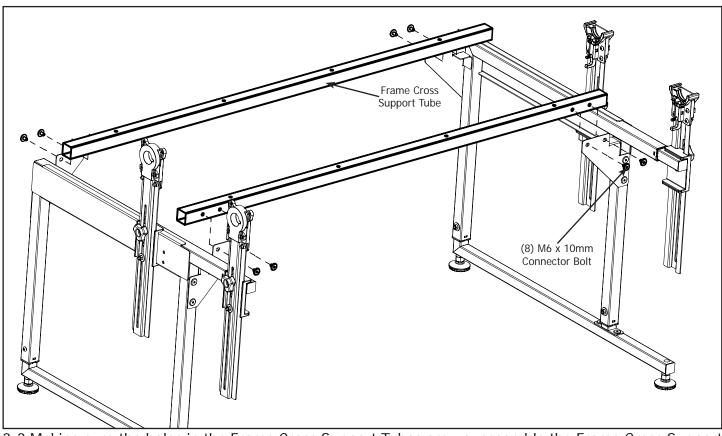
4mm Allen Wrench



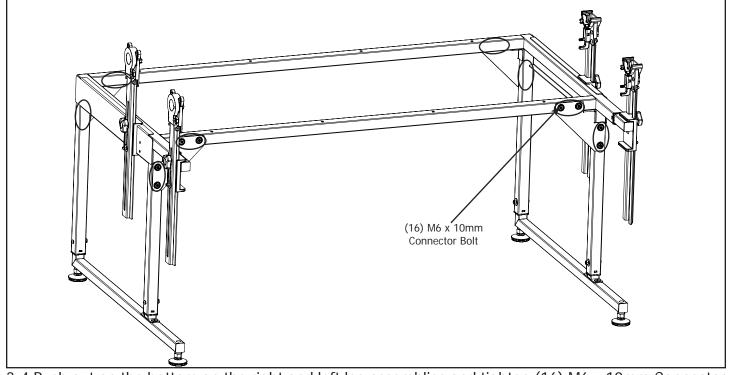
3-1 Install (2) Corner Braces to the Left Leg Assembly with the tabs toward the inside of the leg using (4) M6 x 10mm Connector Bolts. **Note:** Leave bolts loose at this time.

3-2 Install (2) Corner Braces to the Right Leg Assembly with the tabs toward the inside of the leg using (4) M6 x 10mm Connector Bolts. **Note:** Leave bolts loose at this time.

Frame Assembly - Crib Assembly



3-3 Making sure the holes in the Frame Cross Support Tubes are up, assemble the Frame Cross Support Tubes to the Left Leg using (4) M6 x 10mm Connector Bolts. Then assemble the Frame Cross Support Tubes to the Right Leg using (4) M6 x 10mm Connector Bolts. **Note:** Leave bolts loose at this time

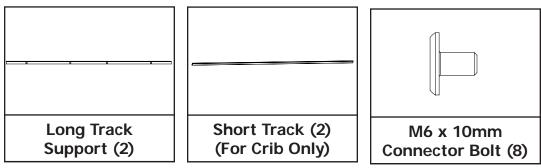


3-4 Push out on the bottom on the right and left leg assemblies and tighten (16) M6 x 10mm Connector Bolts at this time.

Frame Assembly - Crib Assembly

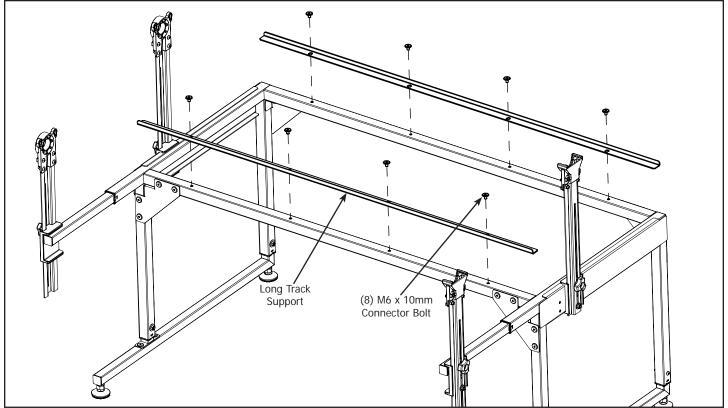
Step 4 - Track Installation

Parts Needed:



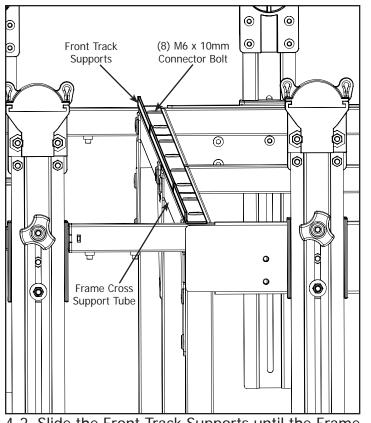
Tools Needed:

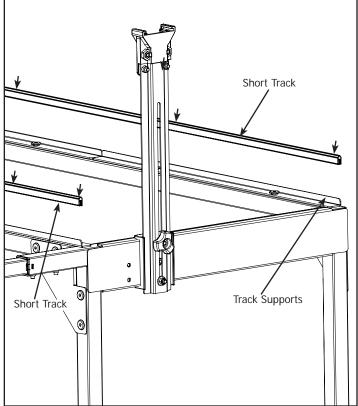
4mm Allen Wrench



4-1 Attach the (2) Long Track Supports using (8) M6 x 10mm Connector Bolts. **Note:** Leave bolts loose.

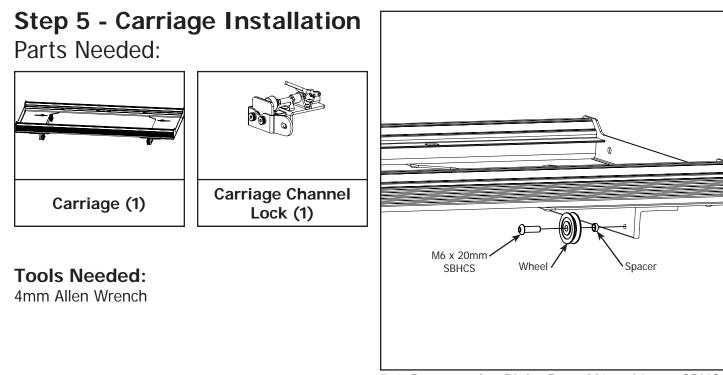
Frame Assembly - Crib Assembly





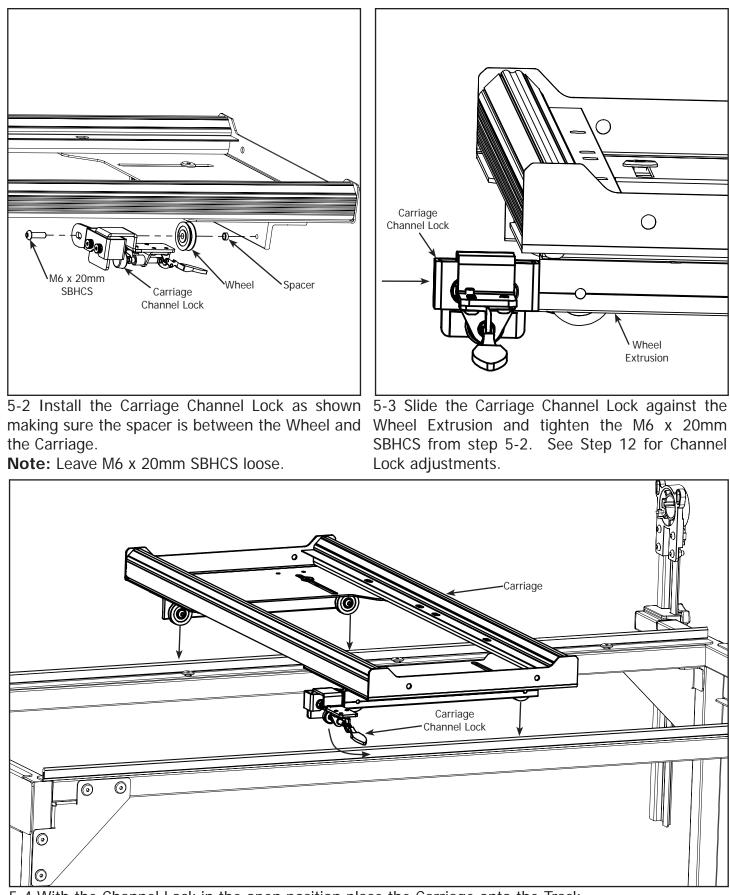
4-2 Slide the Front Track Supports until the Frame 4-3 Press the Long Track firmly onto the Track the Front Track Supports. Tighten the front (4) are no gaps between the Track Supports. M6 x 10mm Connector Bolts only.

Cross Support Tubes are flush with the front of Supports until it bottoms out making sure there



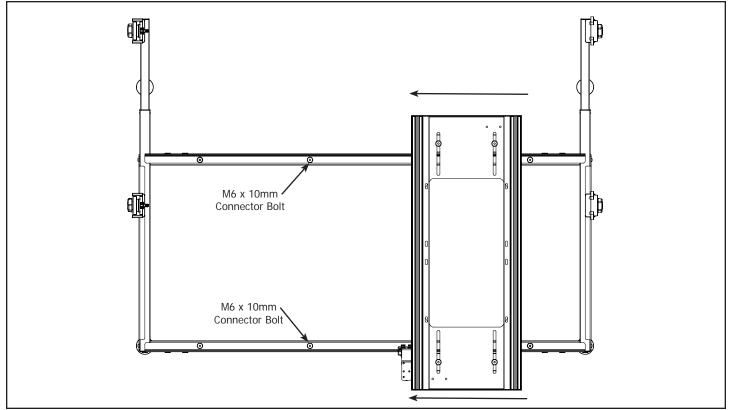
5-1 Remove the Right Rear M6 x 20mm SBHCS, Wheel, and Spacer from the Carriage.

Carriage Assembly - Crib Assembly



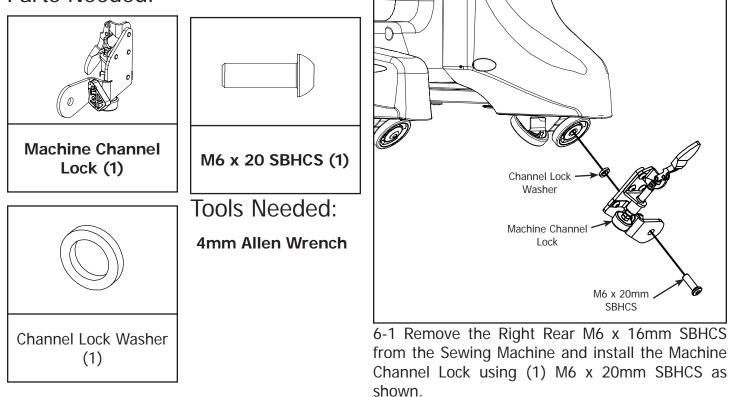
5-4 With the Channel Lock in the open position place the Carriage onto the Track.

Carriage Assembly - Crib Assembly



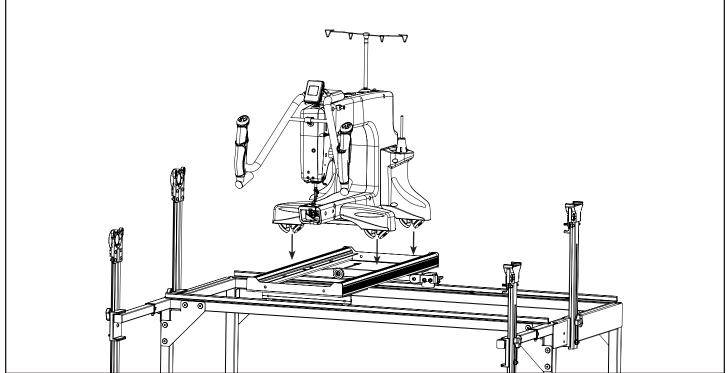
5-5 Align the track by slowly moving the Carriage along the track, working from one end to the other, tightening each of the back (4) M6 x 10mm Connector Bolts as you go.

Step 6 - Channel Lock Installation (Grace Machines Only) Parts Needed:



Note: See Step 12 for Channel Lock Adjustment.

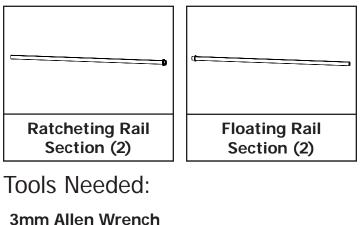
Machine Assembly - Crib Assembly Step 7 - Sewing Machine Installation

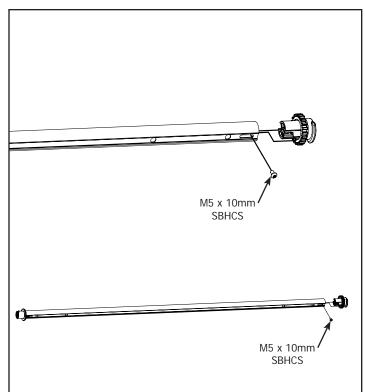


7-1 Place the Sewing Machine onto the Carriage, with Channel Lock in open position. **Note:** See your Sewing Machine Instructions for Encoder installation instructions.

Step 8 - Rail Assembly

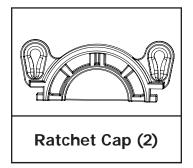
Parts Needed:

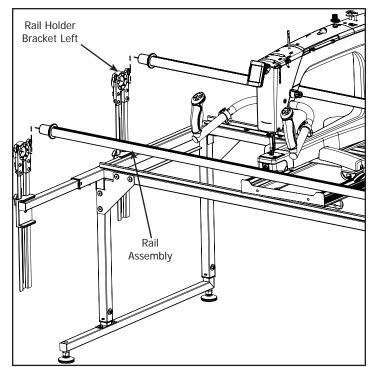




8-1 Remove the Ratchet Wheel from (2) of the Ratcheting Rail Sections and insert them into the (2) Floating Rail Sections.

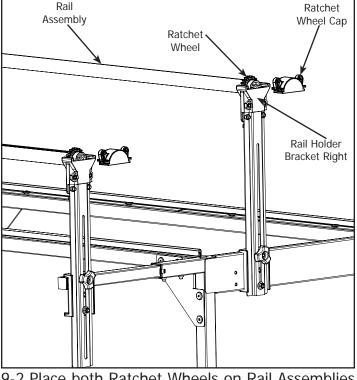
Rail Assembly- Crib Assembly Step 9 - Rail Installation Parts Needed:





9-1 Slide a Rail Assembly through the throat of the sewing machine and into the back Rail Holder Bracket Left. Install the remaining Rail Assembly into the front Rail Holder Bracket Left.

Note: If the rails fall out of Rail Holder Bracket Left Push the bottom of the legs out to ensure the rails don't fall out.

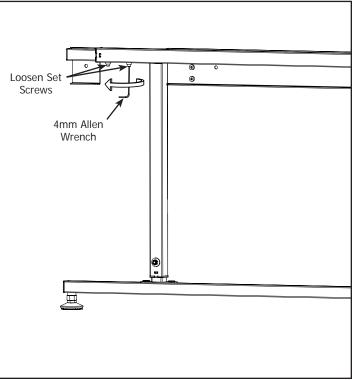


9-2 Place both Ratchet Wheels on Rail Assemblies into the Rail Holder Bracket Rights. Slide the Ratchet Wheel Caps onto the Rail Holder Bracket Rights.

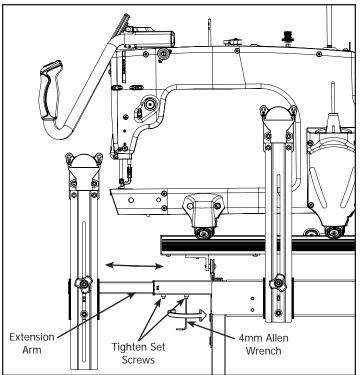
Frame Setup - Crib Assembly **Step 10 - Extension Arm Adjustment**

Tools Needed:

4mm Allen Wrench



10-1 Loosen set screws without removing from the frame end.



Extension Arm Slot 4mm Allen Tighten Set Wrench Screws

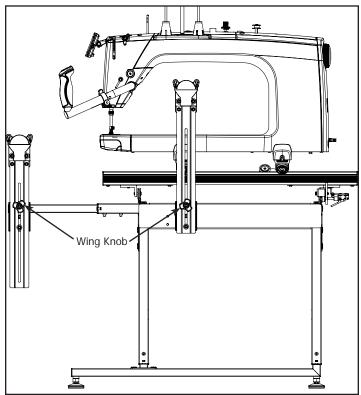
10-2 For machines with a throat less than 16", 10-3 For machines with a throat greater than 16", move the Machine as far forward as possible and adjust the Extension Arms to the slot. Tighten the adjust the Extension Arms so the Front Rail is 1" from the front of the Machine. Tighten the Set Screws.

Set Screws.

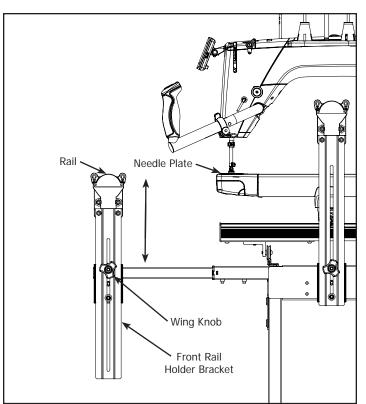
Frame Setup - Crib Assembly Step 11 - Adjusting the Rail Holder Brackets

Tools Needed:

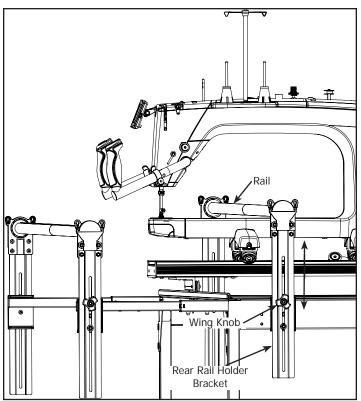
4mm Allen Wrench 10mm & 13mm Open End Wrench



11-1 Loosen the Wing Knobs on each of the rail holders.



11-2 Move the Front Rail Holder Bracket so the top 11-3 Adjust the Rear Rail Support Holder Bracket of the Rail is even with the Needle Plate. Tighten so the Rail is approximately 1/4 inch from the the Wing Knobs.

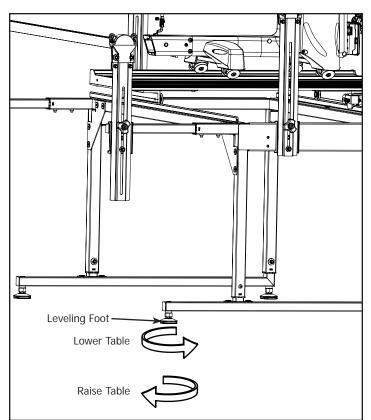


throat of the machine. Tighten Wing Knobs.

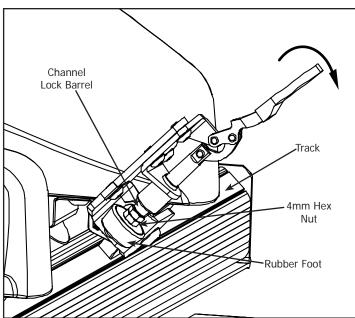
Frame Setup - Crib Assembly Step 12 - Basic Setup

Tools Needed:

3mm Allen Wrench 10mm & 13mm Open End Wrench 14mm & 17mm Open End Wrench

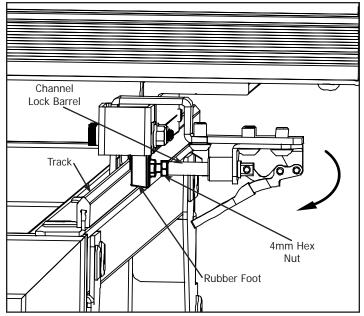


12-1 Adjust the Leveling Feet to level the frame and make sure it is stable. Adjust so the Carriage and Machine do not move on their own.



12-2 Rotate the Channel Lock handle down. To adjust the Channel Lock, twist the Rubber Foot until it presses against the track. Turn the 4mm upper Hex Nut until it is snug against the Channel Lock barrel.

Note: Channel Locks are used to lock the Sewing Machine, or the Carriage to assist in straight line stitching.

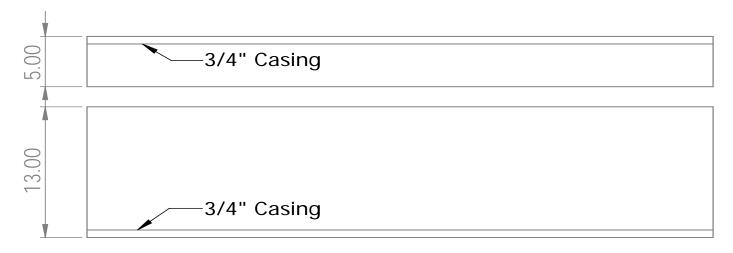


12-3 Rotate the Channel Lock handle down. To adjust the Channel Lock, twist the Rubber Foot until it presses firmly against the track. Turn the 4mm upper Hex Nut until it is snug against the Channel Lock barrel.

Note: Channel Locks are used to lock the Sewing Machine, or the Carriage to assist in straight line stitching.

Fabric Installation

Fabric Installation Step 13 - Making Leader Cloths



1: First, select your cloth leader material. We recommend using a good quality muslin or similar fabric that has a good thread count. Be aware, that if the fabric is too thick, it may prove more difficult getting it installed into the rail slot.

2: Surge or hem your cloth leaders on all sides.

3: Make cloth leaders in the widths shown. (The recommended length is 105", this length will accommodate any width of quilt that can be made on your Quilting Frame.)

4: Make a dashed line along the length of your leader about $\frac{1}{2}$ " in from the edge with a pen or marker. 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 hem and then push the tubing into the hem before installing it into the slot. If you wish to do this, create a hem 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 $\frac{1}{4}$ " of fabric beyond the stitching. Leave the edges open on both ends. You may then slide your tubing into the hem.

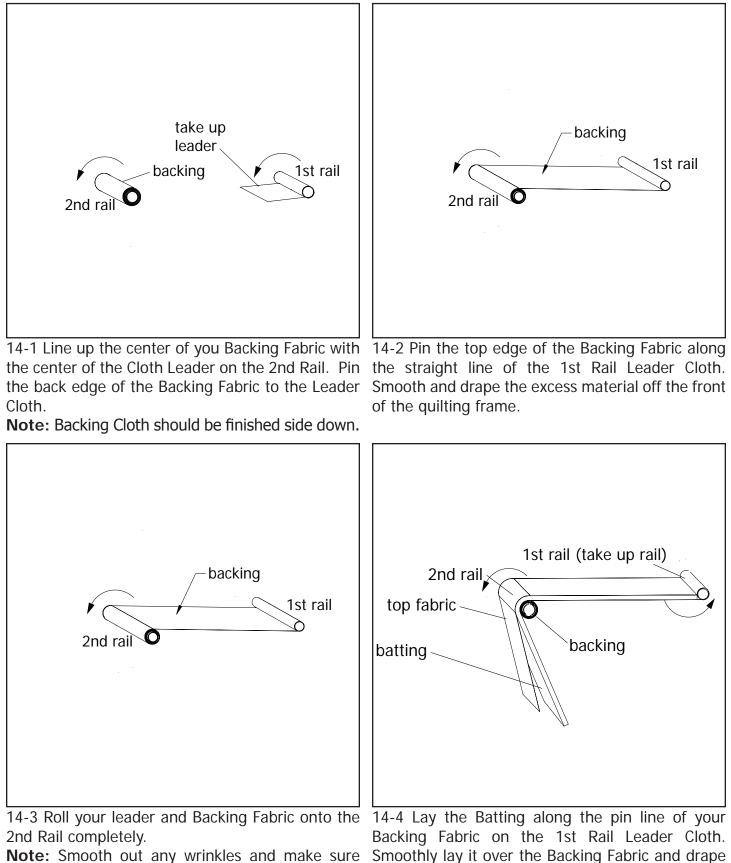
5: Mark each cloth leader at the center (length-wise).

6: Mark (or baste) a straight line about $\frac{1}{2}$ " in from the opposite (non-hemed, or non-dashed) end of the leader. This will be the line to which you attach your fabric layer.

7: Center your cloth leader lengthwise along the rail. Using Grace's Fabri-FastTM 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 hem, line up this hem w/ tubing over the slot and press it into the slot using the Fabri-Fast tool.

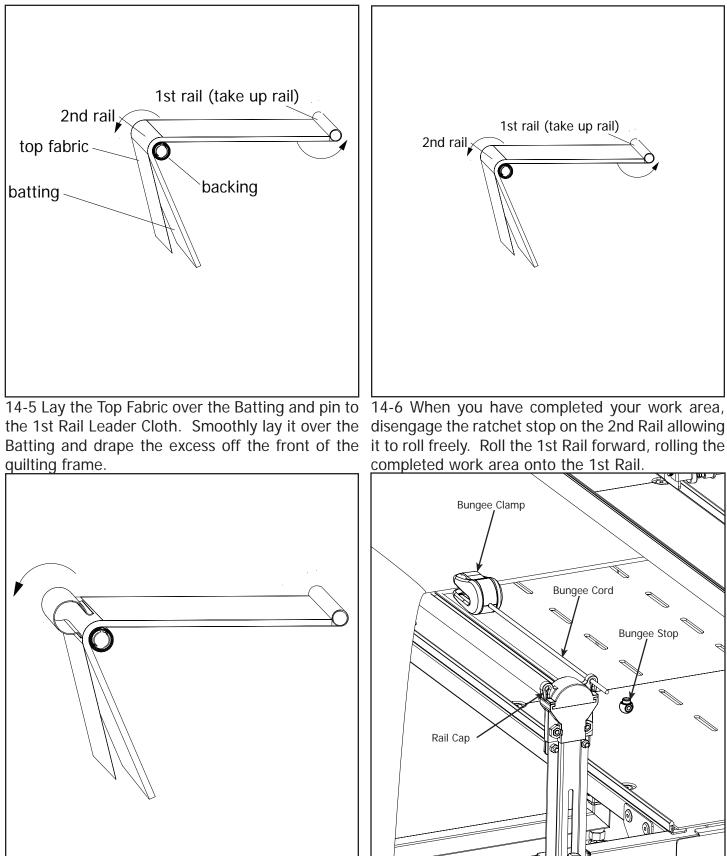
8: With Cloth Leaders in place, pin your Quilt Fabric to the Leaders, rather than attaching it directly to the Rails.

Fabric Installation Step 14 - Installing Fabric Layers onto Rails

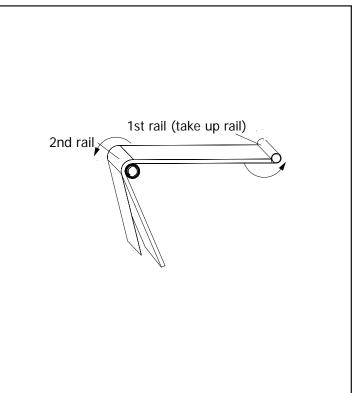


fabric stays lined up. Do not stretch or pull fabric. the excess off the front of the quilting frame.

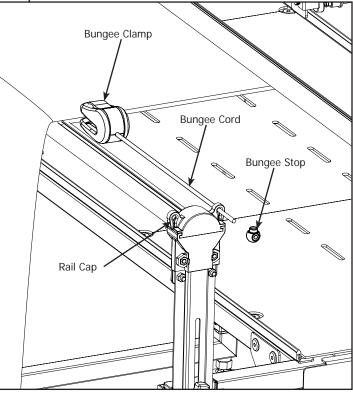
Fabric Installation



14-7 Place the C-Clamps over the Rails as shown. Rotate them to as directed by the arrows to secure the fabric in place.



completed work area onto the 1st Rail.



14-8 Attach Bungee Clamp to fabric and slide Bungee Cord through Ratchet Cap. Slide Bungee Stop onto bungee cord and pull bungee cord to tighten side of fabric.



Quilting Accessories

The following accessories are available for your new Q-Zone Queen Machine Quilting Frame. Each is designed to make your quilting projects easier and even more beautiful. They can all be purchased through your GraceFrame dealer, or directly from The Grace Company.

www.graceframe.com

1-800-264-0644

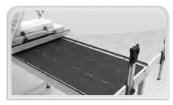


Table-Top Inserts

Table-Top insers add more working area to your frame. Use them for the Plastic Pattern Perfect, or as a place to put pantographs to be traced with Gracie Laser.



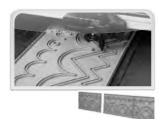
Sure Stitch Regulator

The GraceSure Stitch is both a stitch regulator and constant stitch speed control. As you speed up and slow down in Stitch Regulation Mode, so will your machine, keeping all of your stitches the same length. You can also use the SureStitch for a constant speed that you can adjust with the push of a button.



Start-Right Cloth Leaders

Start-Right Cloth Leaders save time during your project and help you attach fabric to your frame easily and accurately. The included three cloth leaders are printed with precise guide marks and pin lines.



Plastic Pattern Perfect

For perfect patterns every time, use the Plastic Pattern Perfect! The stylus attaches right to your carriage, and then guides your machine through the pattern templates as you move the carriage.

Note: Table-top inserts must be installed to use these templates.

Order online, or give us a call at:



Gracie Laser

Pattern tracing is easier than ever before with the Gracie Laser.

•Attaches to the front or back of your frame's carriage!

•Swivel and lock the stylus at any angle •Battery powered, no cords to get in the way

•Comes with four different laser tips to control the size of the laser.

www.graceframe.com



Plastic Pattern Perfect

Additional Templates 6 additional patterns to choose from, with more being added all the time! These additional patterns work with the stylus from the basic Plastic Pattern Perfect. They come in a set of 2 or a set of 6 for your whole frame.

1-800-264-0644

Notes		

The Grace Company 2225 South 3200 West Salt Lake City, UT 84119 Phone: 1-800-264-0644 Fax: 801-908-8888 www.graceframe.com

