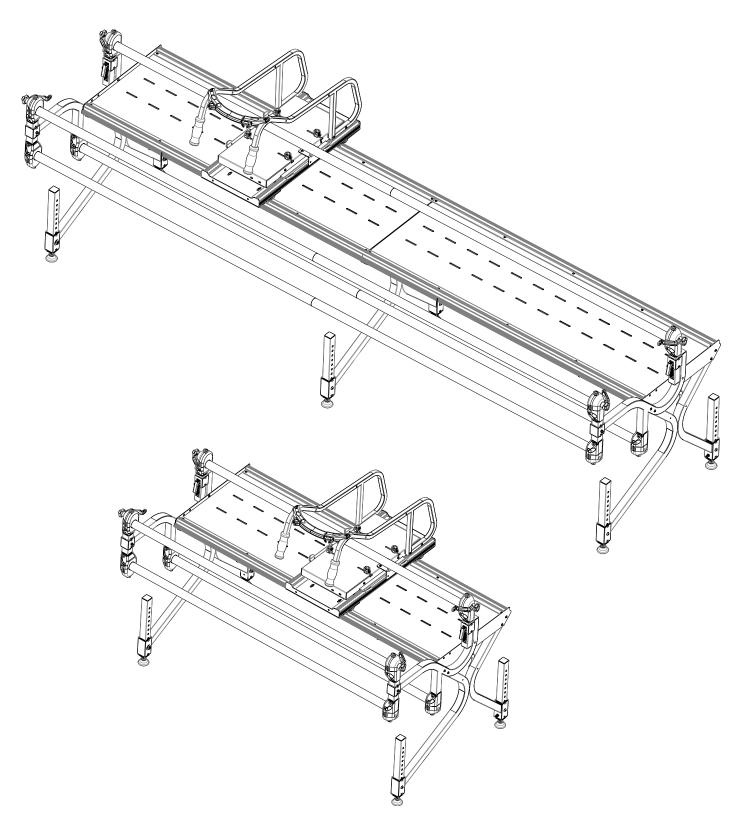
## Bernina Quilting Frame



#### Max Overall Dimensions:

Height Depth Length
Crib: 50" X 39" X 67"
King: 50" X 39" X 127"

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#### Welcome!

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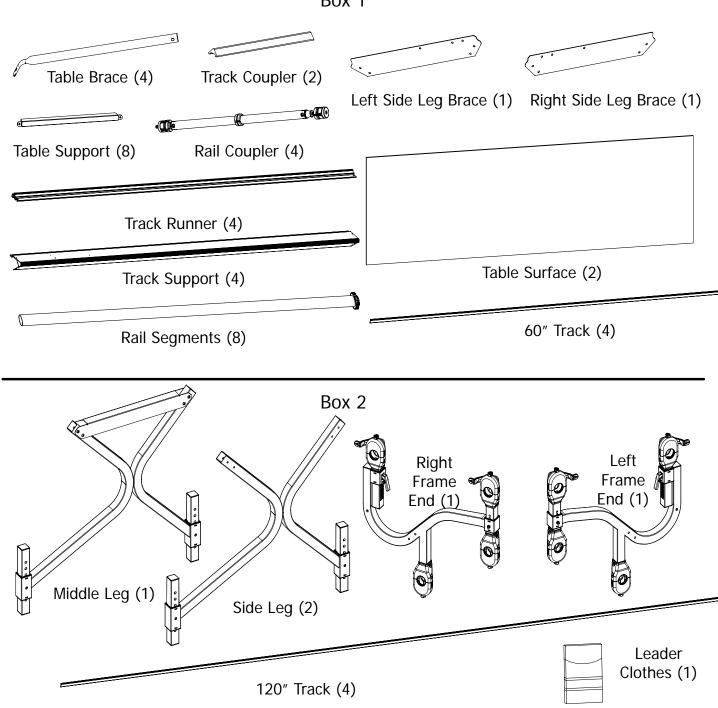
As you begin assembly of your new Bernina frame home machine quilting system, keep in mind the following:

- 1: The assembly 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.
- 4: Identify hardware packets: All hardware is separated by type and each packet is labeled for ease in identification.

# Warranty Information

for your Machine Quilting Frame

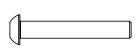
The Machine Quilting Frame has a One-Year limited warranty on all parts. Parts with problems due to manufacturing, or defects in materials will be repaired or replaced, at the discretion of the manufacturer. This warranty does not cover parts damaged through misuse, improper storage, improper assembly,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



#### Box 2 Hardware



Screw (SBHCS) (4)



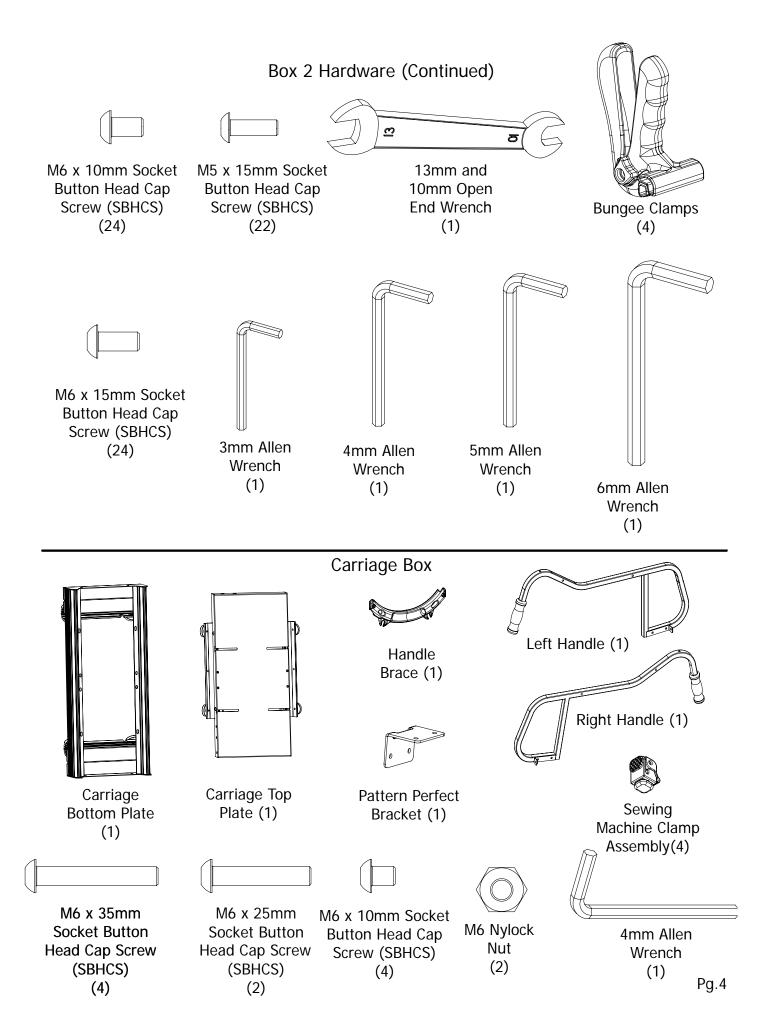
M6 x 35mm Socket Button **Head Cap Screw** (SBHCS) (4)



M5 x 8mm Socket **Button Head Cap** Screw (SBHCS) (26)



M6 Nylock Nut (6)



#### **Step 1: Height Adjustable Leg Assembly**

Casing M8 x 55mm Parts Needed: **SBHCS** M8 Washer 6- Leveling Foot(pre-installed) 6- M8 x 55mm SBHCS(pre-installed) Fig. 1-1 6- M8 Washer(pre-installed) M8 Nylock Nut 6- M8 Nylock Nut(pre-installed) Height 1- Middle Leg Adjustable Side Leg. 2- Side Lea Legs Fig. 1-2 Tools Required: 5mm Allen Wrench Open End Wrench Height of Fabric Surface Top Hole 45" 5th Hole 40" Height Adjustable 9th Hole 44" 4th Hole 39" Leg 38" 8th Hole 43" 3rd Hole SBHCS M8 X 55mm 7th Hole 42" 2nd Hole 37" Leveling

**1-1:** The Height Adjustable Legs will come pre-installed into your leg, as shown in Fig. 1-1.

36"

- **1-2:** Start with (1) Height Adjustable Leg, the height from the ground to an elbow is good place to set the height of fabric surface in above table. Adjustment can be made to comfort from there.
- **1-3:** Remove the M8 X 55mm SBHCS and slide your Height Adjustable Leg to the desired position, lining up the appropriate holes.
- **1-4:** Insert one (1) M8 x 55mm SBHCS through the hole in the casing and then through the hole in the Height Adjustable Leg and out the other side, as shown in Fig. 1-2.
- **1-5:** Place (1) M8 Washer and thread one (1) M8 Nylock Nut onto the end of the screw and use the provided Allen Wrench and Open Ended Wrench to tighten the nut down.
- **1-6:** Repeat **Step 1-3 through 1-6** for the remaining (5) Height Adjustable Legs. Remember to keep the Height Adjustable Legs at the same height.

**Note:** As a general recommendation, most users from 5'4" to 5'6" tall prefer the legs positioned with the screws in the sixth hole from the bottom. Preferred heights may vary.

Track Support

#### **Step 2: Track Support Assembly**

Parts Needed:

6th Hole

41"

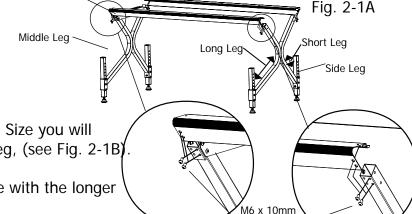
**Bottom Hole** 

- 4- Track Support
- 16- M6 X 10mm SBHCS
- 2- Side Leg
- 1- Middle Leg\*

\*Note: If you're setting the frame up in Crib Size you will need to use both Side Legs, not the Middle Leg, (see Fig. 2-1B)

**Note**: The front of the Side Legs, are the side with the longer legs, as shown in Fig. 2-1A.

**2-1**: Attach a track support to the outside holes on the front of the Side Leg with (4) M6 X 10mm SBHCS.



Foot

**Note**: If setting up in crib attach to outside holes as shown in Fig. 2-1B

**2-2**: Attach the other side of the Track Support to the inside holes on the front side of the Middle Leg with (4) M6 x 10mm SBHCS, as shown in Fig 2-1A.

**2-3:** Attach another Track Support to the outside holes on the back side of the right leg stand with (2) M6 x 10mm SBHCS.

**2-4:** Attach the other side of the back Track Support to the inside holes on the Middle Leg with (2) M6 x 10mm SBHCS.

**2-5**: Now attach (2) Track Supports to the outside holes on the other Side Leg and the remaining holes on the Middle Leg using

(8) M6 X 10mm SBHCS, as shown in Fig. 2-2.

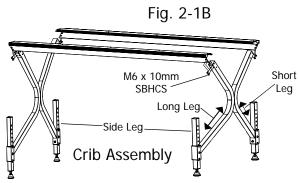
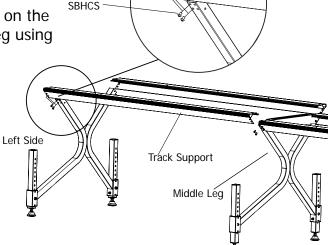


Fig. 2-2



M6 X 10mm

Track Support

**Table Brace** 

M6 Nylock Nut

M6 X 35mm

**SBHCS** 

#### Step 3: Table Brace Assembly

Parts Needed:

- 4- Table Brace
- 4- M6 x 15 mm SBHCS
- 4- M6 x 35 mm SBHCS
- 4- M6 Nylock Nut
- 1- Middle Leg
- 2- Side Leg

Tools Required:

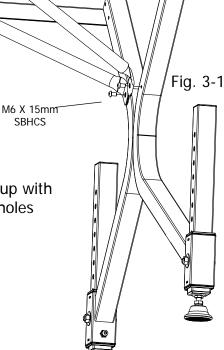
4mm Allen Wrench Open End Wrench

**3-1**: Attach (2) Table Braces to right side of the frame using (2) M6 x 15mm SBHCS, as shown in Fig 3-1, making sure not to fully tighten.

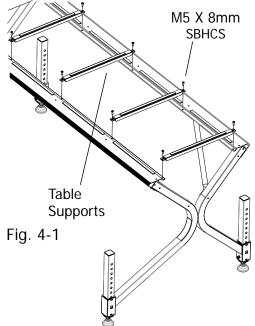
**3-2:** Connect (2) Table Braces to the Tack Support by lining the holes up with the slots on Tack Support, placing (2) M6 x 35mm SBHCS through the holes and tighten it down with (2) M6 Nylock Nuts.

**3-3**: Repeat **Steps 3-1 and 3-2** for the left side of the frame.

**3-4:** Tighten the M6 x 15mm SBHCS on the (4) Table Braces.



Pq.6



**4-3:** Follow **Step 4-1 and 4-2** for the other (7) Table Supports.

#### **Step 4: Table Support Assembly**

Parts Needed:

8- Table Supports\*
16- M5 x 8mm SBHCS\*

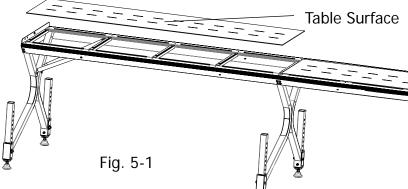
Tools Required:

3mm Allen Wrench (Provided)

\*Note: If you are setting the frame up in Crib size you will only need to use (4) Table Supports and (8) M5 x 8mm SBHCS.

**4-1:** Take (1) of the Table Supports and place it on the lip of the Track Support, as shown in Fig. 4-1.

**4-2:** Attach the Table Support to the frame by tightening an M5 X 8mm SBHCS, from above, into each end of the support.



#### **Step 5: Table Surface Assembly**

Parts Needed:

2- Table Surface\*

\*Note: If you are setting the frame up in Crib Size you only need (1) Table Surface.

**5-1:** Lay the plastic table approximately centered, **with the textured surface side UP** on the Table Supports as shown in Fig. 5-1.

5-2: Repeat Step 5-1 so that both plastic Table Surfaces are laying centered on the table assembly.

#### Step 6: Track Runners Assembly

Parts Needed:

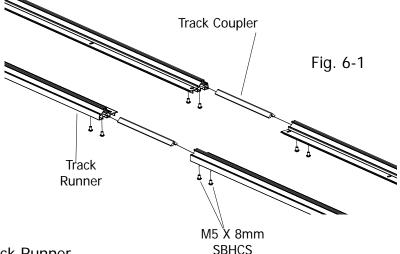
- 4- Track Runners
- 2- Track Couplers
- 8- M5 X 8mm SBHCS
- 20- M5 X 15mm SBHCS

Tool Required:

3mm Allen Wrench

**Note:** For crib assembly only do Steps 6-5 through 6-6.

6-1: Slide a Track Coupler half way into a Track Runner.



Pg.7

**6-2:** Thread (2) M5 X 8mm SBHCS into the first two holes on the Track Runner to tighten the coupler in place, as shown in Fig. 6-1.

Table Surface

**6-3:** Slide another Track Runner onto the other side of the coupler, making the top surface of the Track Runners as flush as possible. Thread in (2) M5 X 8mm SBHCS into the inside holes as shown in Fig. 6-1.

**6-4:** Repeat this process for the other Track Runner assembly.

**6-5:** Place a Track Runner Assembly on the Front Track Support, line up the holes on Track Support with the holes on the Track Runners.

**6-6**: Thread (10) M5 X 15mm SBHCS down through the Track Runner and Track Support but don't tighten the SBHCS until the Step Placing Your Sewing Machine.

**6-7**: Repeat **Steps 6-5 through 6-6** for the back Track Runner.

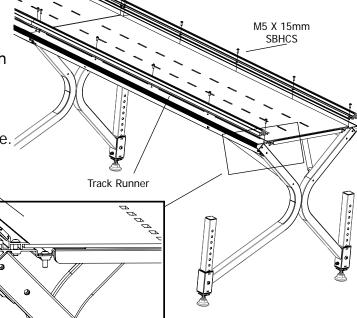


Fig. 6-2

#### **Step 7: Track Installation**

Parts Needed:

- 4- 120" Track (King setup only)
- 4- 60" Track (Crib setup only)

**7-1:** Slide two pieces of Track into the Front Track Support, as shown in Fig. 7-1.

**7-2:** Slide two pieces of the Track into the Back Track Support.

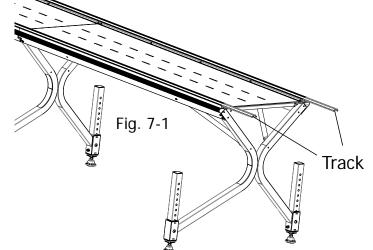
#### **Step 8: Frame End Assembly**

Parts Needed:

- 1- Right Side Leg Brace
- 1- Left Side Leg Brace
- 1- Right Frame End
- 1- Left Frame End
- 6- M6 x 10mm SBHCS
- 4- M6 x 45mm SBHCS

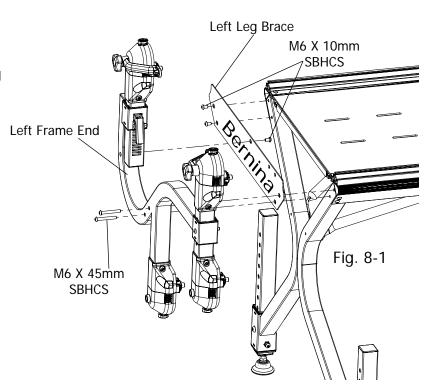


4mm Allen Wrench (Provided)



**8-1:** Attach the Left Side Leg Brace to the Side Leg with (2) M6 x 10mm SBHCS, as shown in Fig. 8-1, making sure the Bernina Logo faces out.

- **8-2:** Screw (2) M6 x 45mm SBHCS through the Left Frame End, Left Side Leg Brace, and the Side Leg, as shown in Fig. 8-1.
- **8-3:** Screw (1) M6 x 10mm SBHCS through the Left Side Leg Brace and into the Left Frame End.
- **8-4:** Follow **Step 8-1 through 8-3** for the right side.



#### **Step 9: Rail End Assembly**

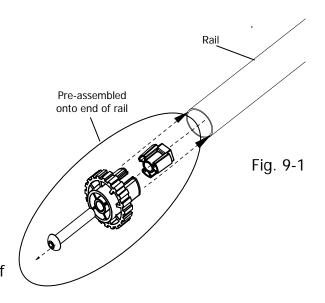
Parts Needed:

- 4- Rail Segments\*
- 8- Ratchet Wheel Assembly (Pre-Installed)

Tool Required:

6mm Allen Wrench

\*Note: If you set the frame up in Crib Size you will need to make sure only (4) rails have a ratchet assembly attached to each end of the rail. Make sure that all (8) rails only have (1) ratchet assembly attached to each end if you are setting your frame up in the King Size.



**Note:** The ratchet wheel assembly comes pre-installed. If setting your frame up in King Size, skip to **Step 12**.

- **9-1:** To remove the ratchet, loosen and completely remove the M10 screw using a 6mm Allen Wrench.
- **9-2:** Attach the removed ratchet wheel assembly to the end of (1) rail with a ratchet wheel attached, as shown in Fig. 11-1.
- **9-3:** Follow **Step 9-1 thru 9-2** to complete the other (3) rails.

#### Step 10: Rail Assembly

Parts Needed:

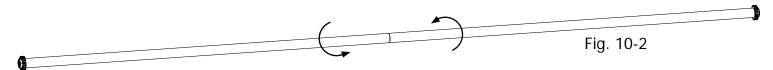
- 8- Rail Segments
- 4- Rail Couplers

**Note:** Skip this step if setting up in Crib size.



**Tip:** Unscrew the end of Coupler partly if Coupler doesn't fit in Rail.

- **10-1:** Take (1) Rail and slide a Coupler inside the Rail until the center plastic ring on the Coupler meets the end of the Rail, as shown in Fig. 10-1.
- **10-2:** Slide another Rail on the open end of the Coupler until it meets the other Rail and the plastic ring.
- **10-3:** Turn the Rails in the opposite direction, as shown in Fig. 10-2, until you can't turn them anymore.
- **10-4:** Follow **Step 10-1 through 10-3** for the other (3) rails.



#### **Step 11: Rail to Frame Assembly**

Parts Needed:

4- Rail Assembly

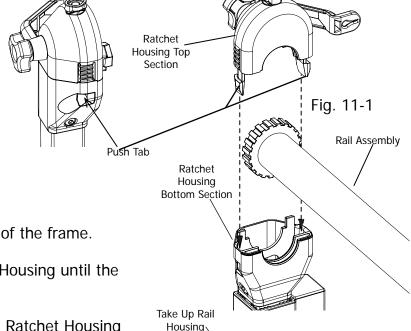
Note: Complete each rail separately.

**11-1:** Take the Ratchet Housing Top off by squeezing the Push Tabs in on each side of the Ratchet and slide off the top. Set the Ratchet Housing Top aside.

**11-2:** Follow **Step 11-1** for the opposite side of the frame.

**Note:** Don't install a rail into the Take Up Rail Housing until the Step Placing Your Sewing Machine.

- **11-3:** Place the Rails into the attached bottom Ratchet Housing section and then return the top of the ratchet to its place. (Make sure you put the Top Housing you took off on the exact same Bottom Housing from which it was removed.)
- 11-4: Follow Step 11-1 through 11-3 for the other Rails, with the (2) rails that are installed from the below, it may be necessary to enlist the help of a second person. While both ends of the rail are being held up into the housing, slide the Ratchet Housing Top back into the bottom section.



Pq.10

Fig. 11-2

#### Step 12: Top Plate Carriage Assembly

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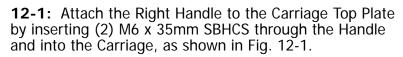
M6 x 10mm SBHCS

#### Parts Needed:

- 1- Right Handle
- 1- Left Handle
- 4- M6 x 35mm SBHCS
- 2- M6 x 25mm SBHCS
- 2- M6 x 10mm SBHCS
- 1- Carriage Top Plate
- 1- Handle Brace
- 1- Carriage Bottom Plate
- 1- Bottom Plate Surface
- 2- M6 Nylock Nut

#### Tools Required:

Open Ended Wrench (Provided) 4mm Allen Wrench

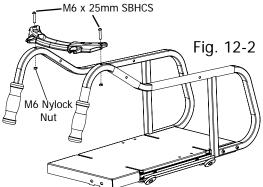


**12-2:** Insert (1) M6 x 10mm SBHCS through the back of the Handle and through the Carriage Top Plate.

**12-3:** Follow **Step 12-1 through 12-3** for the Left Handle.

**12-4:** Attach the Handle Brace to the Right and Left Handles by sliding (2) M6 x 25mm SBHCS, through the Handle Brace then into an M6 Nylock Nut, as shown in Fig. 12-2. Tighten the screws with the provided 4mm Allen Wrench and the Open Ended Wrench.

**12-5:** Place the Bottom Plate onto your quilting frame then place your top plate on your bottom plate with your handles facing towards the front of the frame. Adjust the Track Runners (which were left loose in step 6) so the wheels line up centered on the track, as shown in Fig 12-3. (Leave the track runners loose until the Step Placing Your Sewing Machine.)



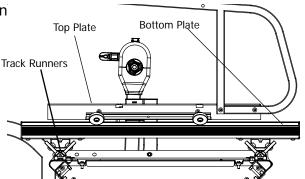
M6 x 35mm SBHCS

Fig. 12-3

Left Handle

Fig. 12-1

Right Handle



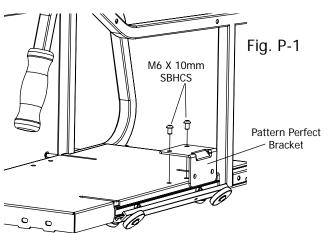
#### Pattern Perfect Bracket (optional accessory)

#### Parts Needed:

- 1- Pattern Perfect Bracket
- 2- M6 X 10mm SBHCS

**Step 1-** Insert (2) M6 X 10mm SBHCS through the Pattern Perfect Bracket, and into the Carriage Top Plate, as shown in Fig. P-1.

**Note**: The Pattern Perfect<sup>™</sup> Bracket is provided for installing the optional Pattern Perfect<sup>™</sup> template system.



#### Placing your Sewing Machine.

Parts Needed:

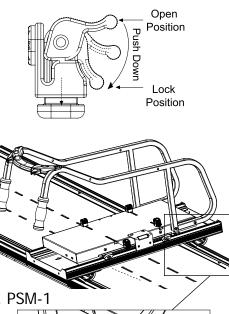
- 4- Sewing Machine Clamp Assembly
- 1- Assembled Carriage and Frame

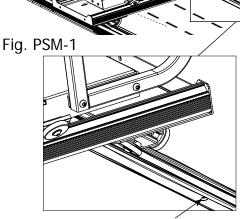
Place your sewing machine onto the Top Plate of the Carriage, and center it, from side to side and from front to back.

Pull the Sewing Machine Clamp Handle in the open position slide it into the slot on the Top Plate until it is touching the sewing machine. Push the handle down to lock the Clamp into position. Repeat this with the remaining (3) clamps.

With the sewing machine sitting centered on the Top Plate and the Top Plate sitting centered on the Carriage Bottom Plate, roll the Carriage to one end of the frame. Tighten the (2) M5 X 15mm SBHCS closest to the carriage, one at the front of the carriage and one at the back of the carriage, as shown in Fig PSM-1. Next roll the carriage close to the next set of screws and tighten them. Continue this process moving toward the other end of the frame until all the screws in the track runners are tight. This process will align the track runners to your carriage providing a smooth gliding system.

Now, put the take up rail through the open area of the throat of your sewing machine and into the take up rail housing.





**Step 1:** Install quilt backing to 2nd rail and roll up.

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

M5 X 15mm SBHCS

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

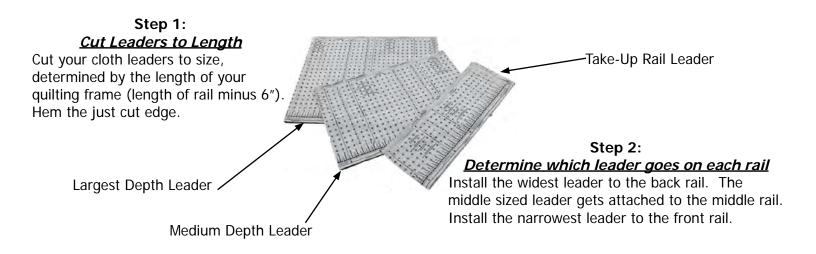
We recommend you begin with practice material allowing you to experiment with machine settings and stitching techniques.

**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.

#### Fabric Installation:

Using leader cloths enable you to finish your quilt completely, to the end, without having to take your quilt off the rails.

**Fabric installation overview Step 2:** Install quilt top to the 3rd rail and roll up. **Step 3:** Install batting to the 4th rail and roll up. **Step 4:** Attach guilt backing to take up rail. take up leader **Step 5:** Attach batting to take up rail. **Step 6:** Attach quilt top to take up rail. 1st rail 2nd rail 2nd rail - 1st rail (take up rail) top fabric backing (Step 1) 3rd rail 3rd rail backing batting top fabric (Step 2) batting (Step 3) 4th rail 4th rail Fig. FI-1 Fig. FI-2 Pg. 13



Step 3: Installing Leaders into your frame

Velcro® Method

Attach the leaders to your rails by first laying down sticky-backed Velcro® to each rail. Lay the Velcro® side of the leaders over the Velcro® previously installed on the rail.



## Step 4: Applying your fabric to the leaders

(Here is one option for fabric attachment, although there are other ways)

First, locate and mark the center of each of your quilt layers.

Attach each quilt layer to it's respective leader starting in the center of the fabric, then working out to each edge. Line the edge of your fabric layer with the edge of your leader, as illustrated.

**Note:** Attach the quilt backing to the leader so the finished side of the fabric is face-down. Attach the quilt top with the finished side face-up.



#### Step 4 Option: <u>Pinning Method</u>

Line the edge of your fabric layer with the edge of your leader, as pictured. Pin the edges together working from the center out.

**NOTE:** <u>Do not stretch your fabric</u> as you attach it to your leader cloths. This will cause your quilt layers to roll unevenly onto your frame. As you attach your fabric, let it lay as naturally as possible.





#### Installing fabric layers onto rails

#### STEP 1: Quilt Backing to 2nd Rail

**Step 1-1:** To begin, determine which will be the front and back edges of your quilt **backing** (make sure the backing is not wider than your quilting frame).

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.

**Step 1-2:** 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. Note: Do not stretch or pull the fabric during this process, let it lay as naturally as possible.

**Step 1-3:** Roll your leader and backing onto the 2nd rail completely. Watch to make sure the fabric stays 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 (Fig. FI-5).

#### STEP 2: Quilt Top to 3rd Rail

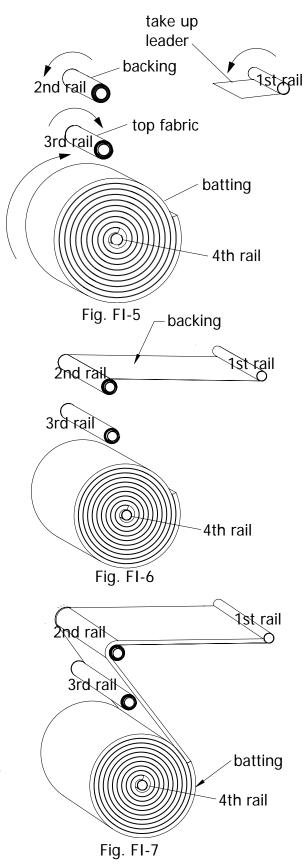
**Step 2-1:** Determine which will be the front and back edges of your quilt.

**Step 2-2:** 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.

**Step 2-3:** Do not stretch or pull the fabric during this process. Let it lay as naturally as possible.

**Step 2-4:** 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 Fig. FI-5).



STEP 3: Batting

**Step 3-1:** A light, bonded batting is recommended.

**Step 3-2:** Center the batting on the 4th rail. Roll the batting onto the 4th rail, being sure to roll the proper direction so that it, like the quilt top, comes off the rail from the bottom when unrolling. (No leader cloth is used for the fourth rail. Lightly roll the batting onto the rail.)

# quilt top 2nd rail backing batting 3rd rail backing

#### Step 4: Attaching Your Quilt Layers to The Take-Up Rail

**Step 4-1:** 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.

**Step 4-2:** 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.

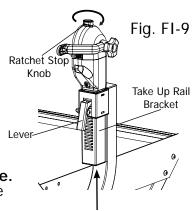
Fig. FI-8

**Step 4-3:** 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 so that it is smooth.

Rolling your fabric

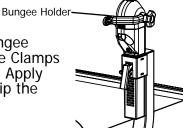
When you have completed your work area and are ready to move to the next, simply release the ratchet stops, by turning the knob 90 degrees, on the 2nd and 3rd rails, allowing them to roll freely. Then, roll the 1st rail forward, rolling the completed work area onto that rail.

**TIP!** As you roll forward, the quilt will accumulate on the 1st rail. Be sure to raise the take up rail brackets 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. To raise the take up rail, pull up on the take up rail on one side, and then the other to equal heights. If you need to lower the take up rail press the lever and push down on the ratchet housing.



#### **Bungee Clamp Installation**

There are 4 Bungee Clamps provided with your Bernina Quilting Frame. The Bungee Clamps allow you to easily add side tension to your quilt fabric. Clip your Bungee Clamps to the quilt fabric, then insert the loose Bungee end through the Bungee Holder. Apply some tension to the Bungee then slide the bungee toward the tapered side to grip the bungee in place.



#### **Sewing Tips**

- Be careful not to sew too close to the edge, to prevent hitting your Bungee Clamps, or running off the edge of the guilt. Also, if you are using side leaders, avoid accidently stitching the leaders to your guilt.
- If your quilt will fit onto your frame Length-wise attach your quilt's fabric to the rails along it's length. You will have to roll the quilt less often, since your work surface will be as large as possible. Also, the quilt will not be as fat under the arm of the machine when you get to the end.
- You will need 4-5 bobbins to quilt a small sized quilt (less than a queen).
- Make sure to turn off your sewing machine any time you leave your quilting room, especially if you are using the peddle pushing mechanism. If the mechanism pushes the pedal at all it may cause your sewing machine and peddle to get very hot.
- Keeping the fabric on the Take-Up Rail touching the bed of the sewing machine, instead of above the bed yields better results. If the fabric is too high off the bed, bouncing will occur.
- When rolling the quilt, pull the batting a little to each side to make sure that it is not bunching. After rolling and tightening all the rollers, check under the quilt to see that the back is smooth.

## Bernina Quilting Frame Accessories

Be sure to check out these amazing quilting accessories for the Bernina Quilting Frame.



#### **Gracie Laser**

Pattern tracing is easier than ever on your quilting frame with the Gracie Laser!

- Attaches to the front OR back of your frame's carriage!
- Locking swivel to position the stylus at any angle
- Fully adjustable swivel
- Battery powered (No cords to get in the way!)
- Includes four different laser tips to control the size of your laser.



#### **Plastic Pattern Perfect**

For perfect patterns every time, use the Plastic Pattern Perfect! A stylus attaches right to your carriage and then guides your machine through the pattern templates as you move the carriage. Each basic set template is double-sided and has eight patterns.



### Quilter's Creative Touch With QuiltMotion

Quilt your masterpiece with ease using Quilter's Creative Touch for QuiltMotion. Enjoy the benefits of a professional automated quilting system in the comfort of your own home! Use the software to design and layout your projects and let QuiltMotion quilt it!