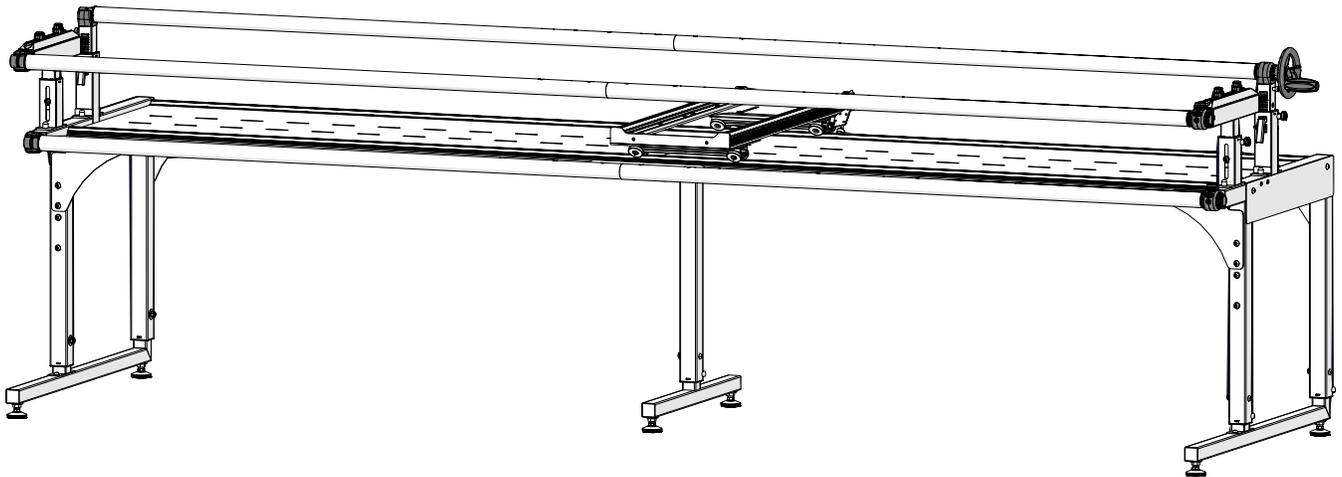


Continuum II

Assembly & Use



Copyright January 14, 2021

Grace Company

(Reproduction Prohibited)

Version 1.2

MADE BY
Grace



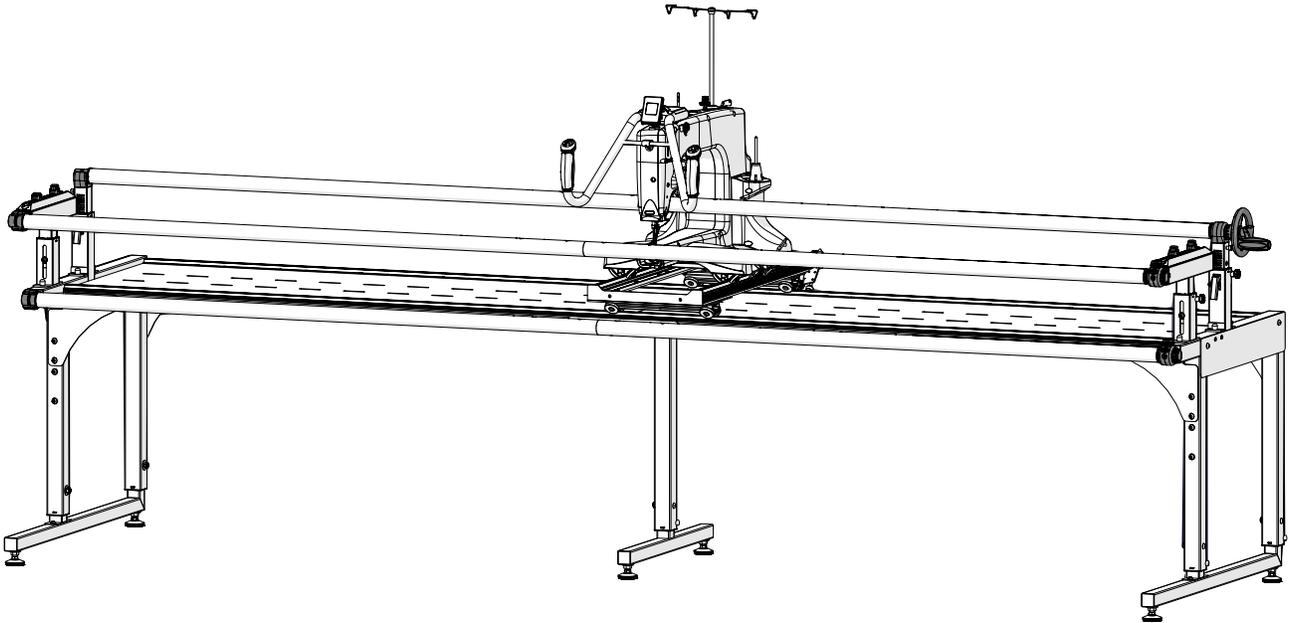
Contents

Frame Specifications	4
Included Parts & Tools	5
Full Frame Assembly	9
Step 1 - Setting the Frame Height.....	10
Step 2 - Building the Frame Table	12
Step 3 - Installing the Tracks	17
Step 4 - Assembling the Rail Supports	20
Step 5 - Installing the Bottom Carriage	21
Step 6 - Installing the Quilting Machine	23
Step 7 - Leveling the Frame	25
Step 8 - Installing the Rails	27
Step 9 - Assembling the Handwheel.....	31
Step 10 - Installing the Bungee Clamps	32
Step 11 - Adjusting the Rails	33
Step 12 - Installing the Velcro Tape.....	35
Step 13 - Installing Leader Cloth	38
Crib Frame Assembly	40
Step 1 - Setting the Frame Height.....	41
Step 2 - Building the Frame Table	42
Step 3 - Installing the Tracks	45
Step 4 - Assembling the Rail Supports	47
Step 5 - Installing the Bottom Carriage	48
Step 6 - Installing the Quilting Machine	50
Step 7 - Leveling the Frame	52
Step 8 - Installing the Rails	54
Step 9 - Assembling the Handwheel.....	57
Step 10 - Installing the Bungee Clamps	58
Step 11 - Setting the Rail Distances.....	59
Step 12 - Installing the Velcro Tape.....	61
Step 13 - Installing Leader Cloth	64
Using Your Frame	66
Sizing the Quilt Backing and Batting.....	67
Attaching the Fabric	68
Using the Channel Locks.....	72

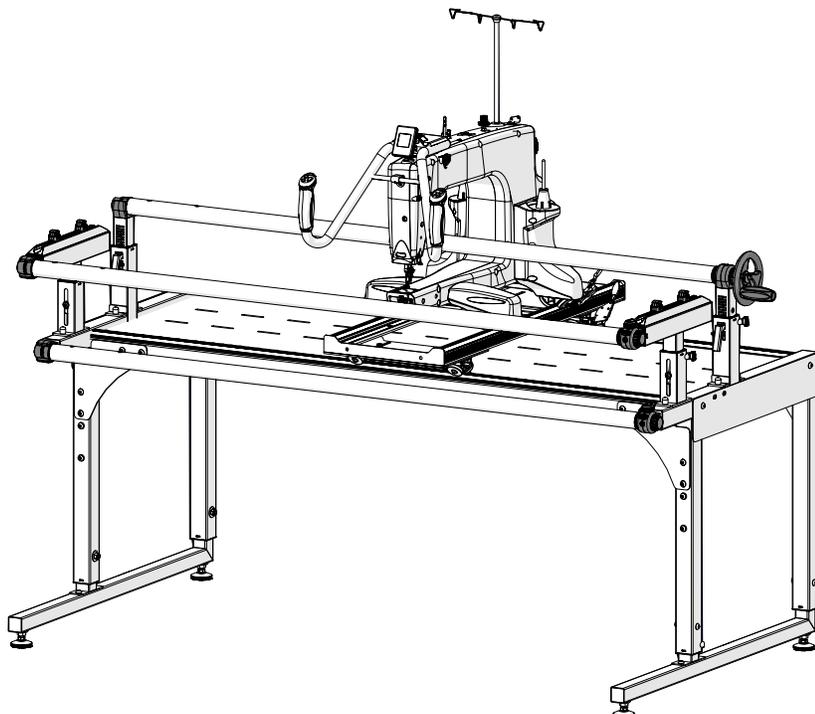
Frame Specifications

Your frame can be set up as a full-sized frame (8 feet or 10 feet, depending upon your model), or a half-sized "crib" frame (4 feet or 5 feet). Please provide at least 3 feet of clearance around the front, back, and right side of the frame.

Full Assembly:



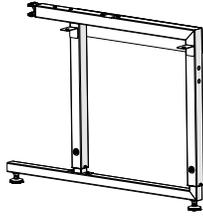
Crib Assembly:



Included Parts & Tools

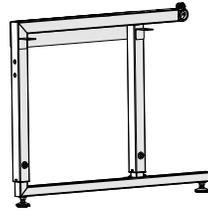
Please make sure all pieces are included in your kit.

Box 1



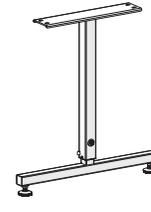
Left Leg

CII-09-14616
See page 10, 41



Right Leg

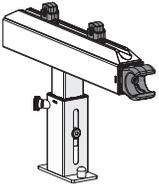
CII-09-14617
See page 10, 41



Middle Leg

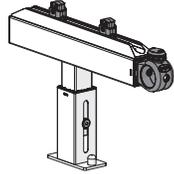
CII-09-14619
See page 10

Inner Box



**Front Rail Arm
(Non-Ratcheting)**

CII-09-14627
See page 20, 48



**Front Rail Arm
(Ratcheting)**

CII-09-14626
See page 20, 48



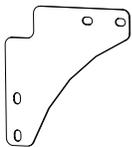
**Take-Up Rail Arm
(Non-Ratcheting)**

CII-09-14622
See page 20, 48



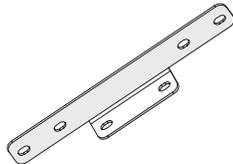
**Take-Up Rail Arm
(Ratcheting)**

CII-09-14623
See page 20, 48



**Corner Leg
Brace (x4)**

CII-04-14503
See page 12, 43



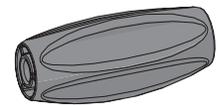
**Middle Leg
Brace (x2)**

CII-04-14504
See page 12



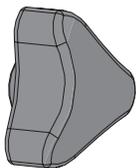
Handwheel

PLA-05-11550
See page 31, 58



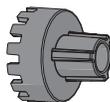
Handwheel Knob

PLA-05-11551
See page 31, 58



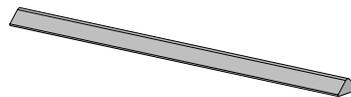
**Three-arm
Handwheel Knob**

PLA-05-14600
See page 31, 58



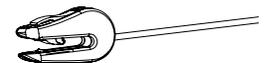
Handwheel Coupler

PLA-05-10926
See page 31, 58



**Track Support
Connector (x2)**

CNT-04-11041
See page 17



Bungee Clamp (x4)

ACC-01-10261
See page 32



Allen Wrench 3 mm

HDW-03-10166



Allen Wrench 5 mm

HDW-03-10741



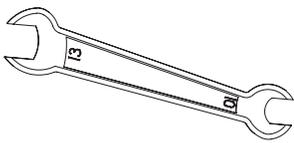
Allen Wrench 6 mm

HDW-03-10742



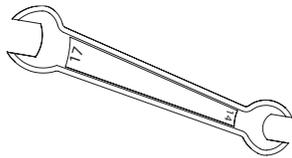
T-Handle Allen Wrench 4 mm

HDW-03-10167



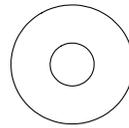
Open-end Wrench 10 mm & 13 mm

HDW-03-10743



Open-end Wrench 14 mm & 17 mm

HDW-03-12347



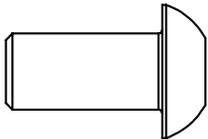
M10 Washer

HDW-03-10952
See page 31, 58



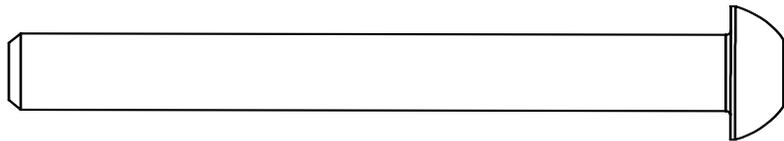
Set Screw M6 x 6 mm (x8)

HDW-03-10037
See page 17



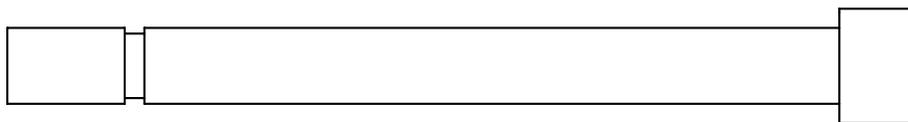
SBHCS Screw M8 x 16 mm (x36)

HDW-03-10951
See page 12, 43



SBHCS Screw M8 x 55 mm (x8)

HDW-03-10726
See page 20, 48



Shoulder Bolt M8 x 85 mm SHCS

HDW-03-11195
See page 31, 58

NOTE: Some parts will come in one of two sizes, depending on the frame. **You will only receive one size of these parts.**

Box 2



Long Plastic Track 8 ft or 10 ft (x4)

8 ft: PLA-05-11764
10 ft: PLA-05-10560
See page 17

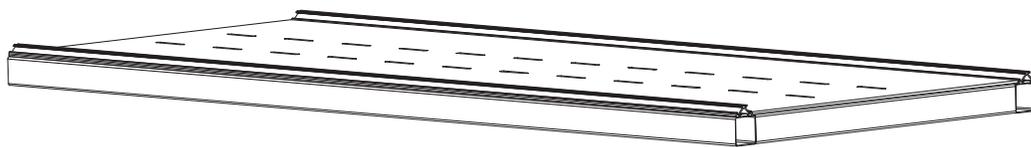


Table Section 4 ft or 5 ft (x2)

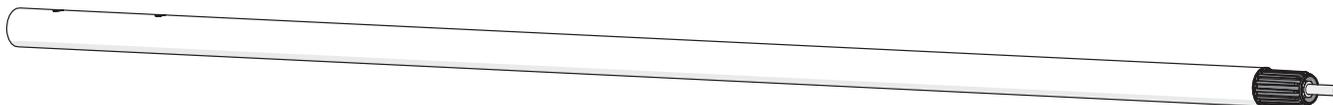
4 ft: CII-09-14631
5 ft: CII-09-14630
See page 12, 43



Short Plastic Track (x4)

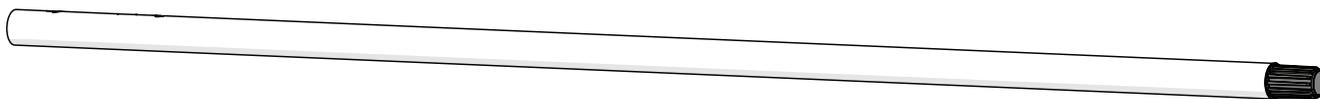
4 ft: PLA-05-11763
5 ft: PLA-05-11371
See page 46

Box 3



Handwheel Rail 4 ft or 5 ft

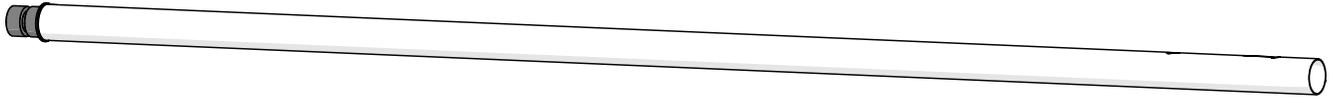
4 ft: CII-09-14886
5 ft: CII-09-14887
See page 27, 55



Ratchet Rail Section 4ft or 5 ft (x2)

4 ft: CII-09-14636
5 ft: CII-09-14634
See page 27, 55

Box 3 Continued

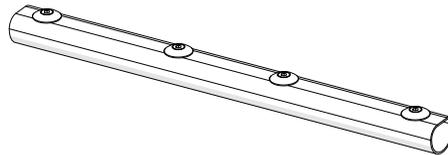


Non-ratchet Rail Section 4 ft or 5 ft (x3)

4 ft: CII-09-14638

5 ft: CII-09-14635

See page 27, 55

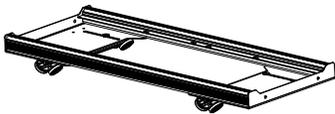


Rail Coupler (x3)

CNT-08-11865

See page 27

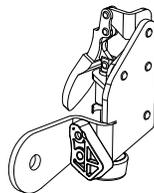
Box 4



Bottom Carriage

CNT-09-13523

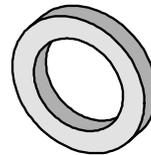
See page 21, 49



Channel Lock (x2)

ACC-09-13507

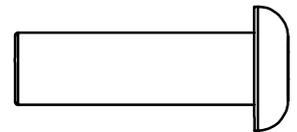
See page 21, 49



Channel Lock Washer (x2)

CNT-04-11580

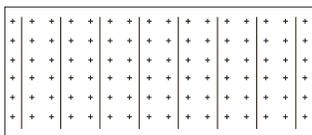
See page 21, 49



SBHCS Screw M6 x 20 mm (x2)

HDW-03-10088

See page 21, 49



Leader Cloth Set

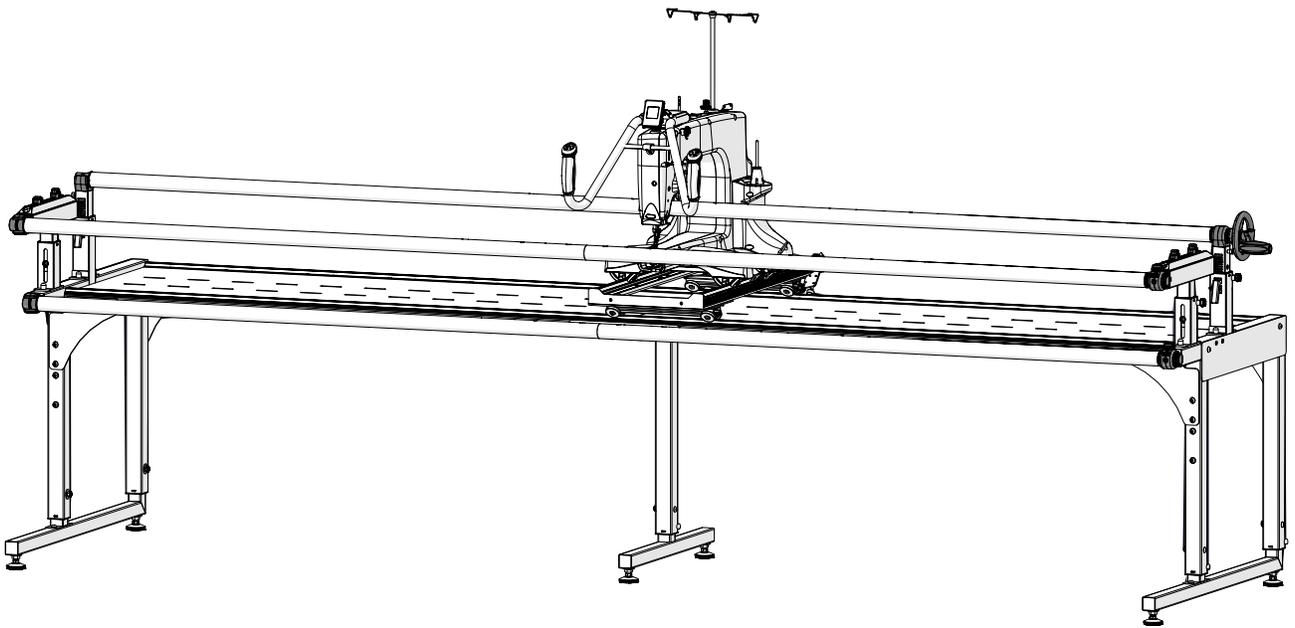
88": CNT-08-13281

112": ACC-01-10748

See page 35, 62

Full Frame Assembly

This section describes the steps for setting up the full-sized frame. For instructions on the half-sized (crib) setup, see “Crib Frame Assembly” on page 40.



Tip: For additional help, scan the QR code below with the camera on your iphone to visit our online support videos!

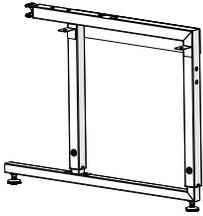


<https://www.graceframe.com/en/resources/support/videos>

Step 1 - Setting the Frame Height

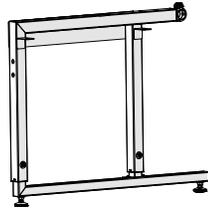
Parts & Tools Needed:

Left Leg



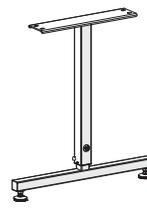
(Box 1)

Right Leg



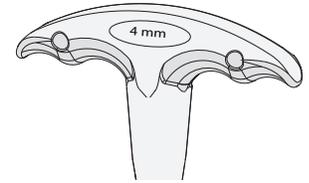
(Box 1)

Middle Leg



(Box 1)

T-Handle Allen Wrench 4 mm



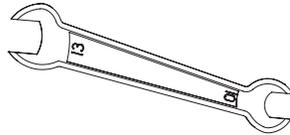
(Box 1: Inner Box)

Allen Wrench 5 mm



(Box 1: Inner Box)

Open-end Wrench 10 mm & 13 mm

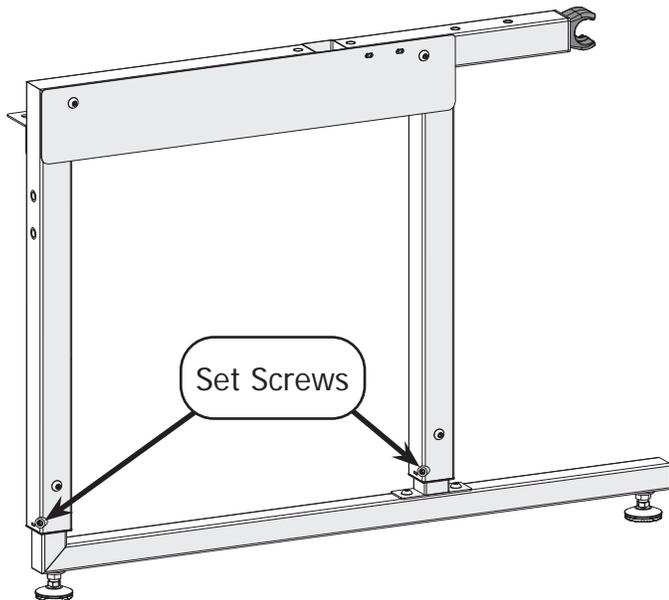


(Box 1: Inner Box)

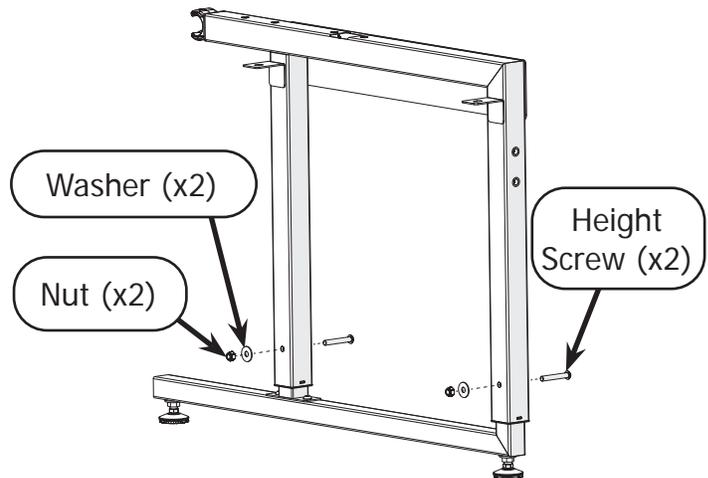
Instructions

The frame height is most easily adjusted prior to frame assembly. Follow these steps for one leg and then repeat for other two legs. Please take the following steps:

- 1 Loosen (do not remove) the **set screws** toward the base of each leg with the 4 mm Allen wrench.
- 2 Remove the M8 x 55 mm SBHCS **height screws, washer**, and **nut** with the 10 mm Open-end wrench and 5 mm Allen wrench.



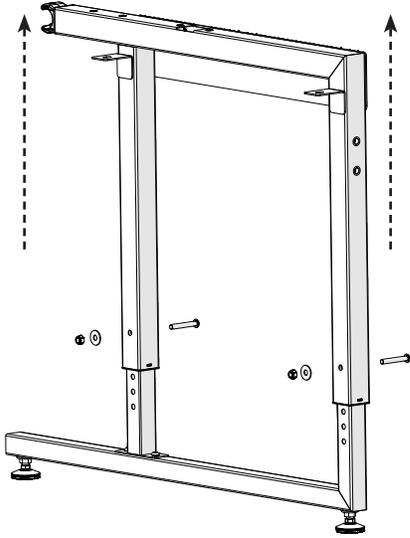
Note: Middle leg has only one set screw.



Note: Middle leg has only one nut, washer, and M8 x 55 mm SBHCS height screw.

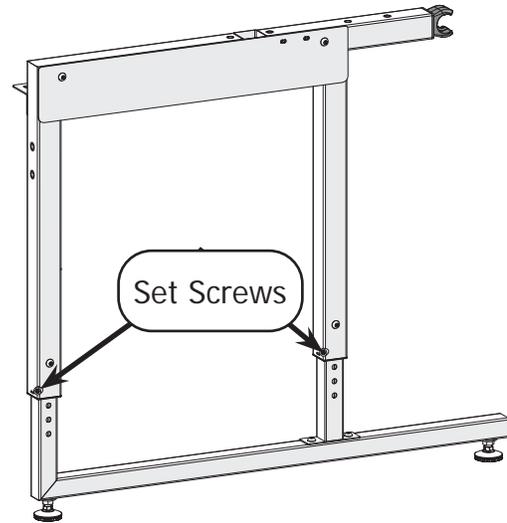
Setting the Frame Height (Continued)

- 3 Raise the top of the leg until the leg is the desired height. Re-install the height screws, washer and nut.



Important: Set all the legs to the same height hole.

- 4 Re-tighten the **set screws** with the 4 mm Allen wrench. The middle leg has only one set screw.



Note: Final height may vary slightly after adjusting the leveling feet (see page 25).

Step 2 - Building the Frame Table

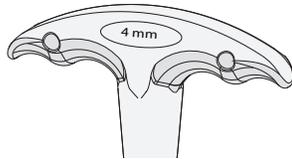
Parts & Tools Needed:

Table Section (x2)

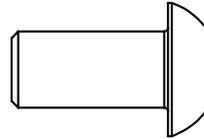


(Box 2)

T-Handle Allen Wrench 4 mm



SBHCS Screw M8 x 16 mm (x36)



(Box 1: Inner Box)

Allen Wrench 5 mm



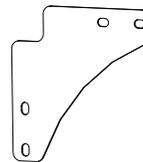
Left Leg



Middle Leg

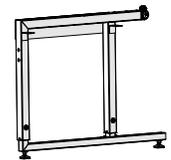


Corner Brace (x4)

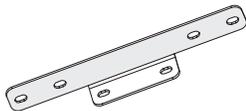


(Box 1: Inner Box)

Right Leg



Middle Leg Brace (x2)

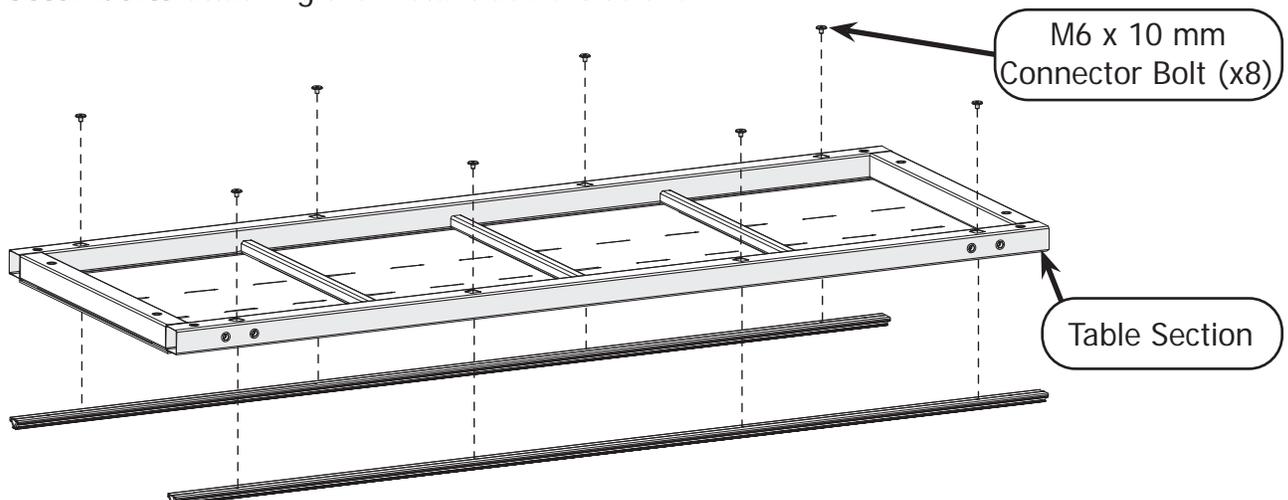


(Box 1: Inner Box)

Instructions

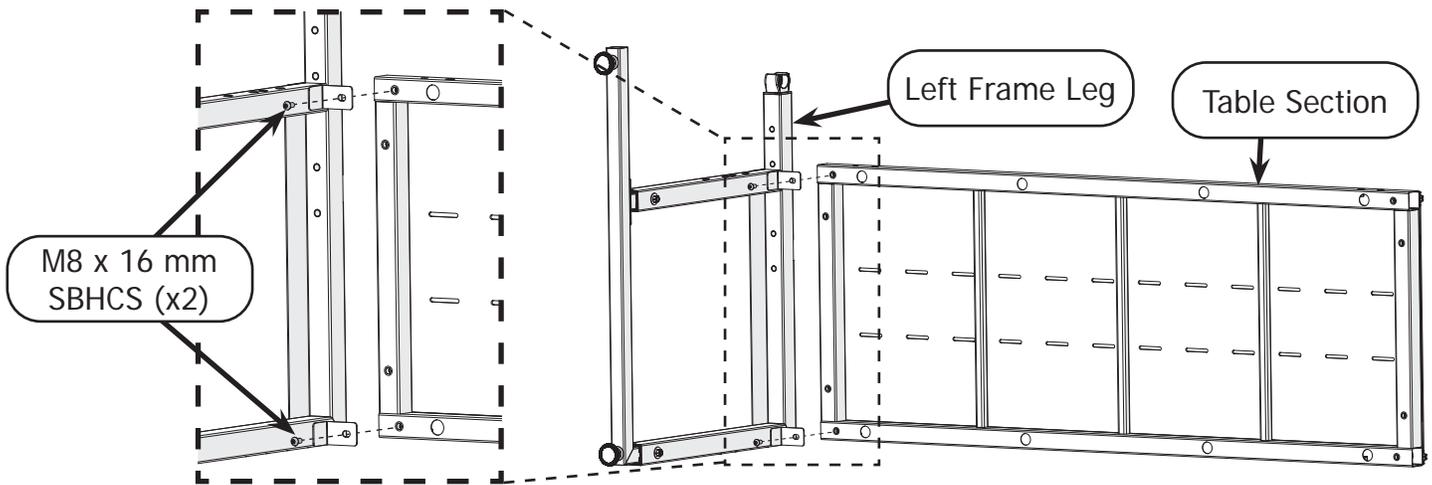
Attach the table tops to the frame legs by taking the following steps:

- 1 On both table sections:** Use the 4 mm T-handle Allen wrench to remove eight **M6 x 10 mm connector bolts** attaching the metal track extrusions.

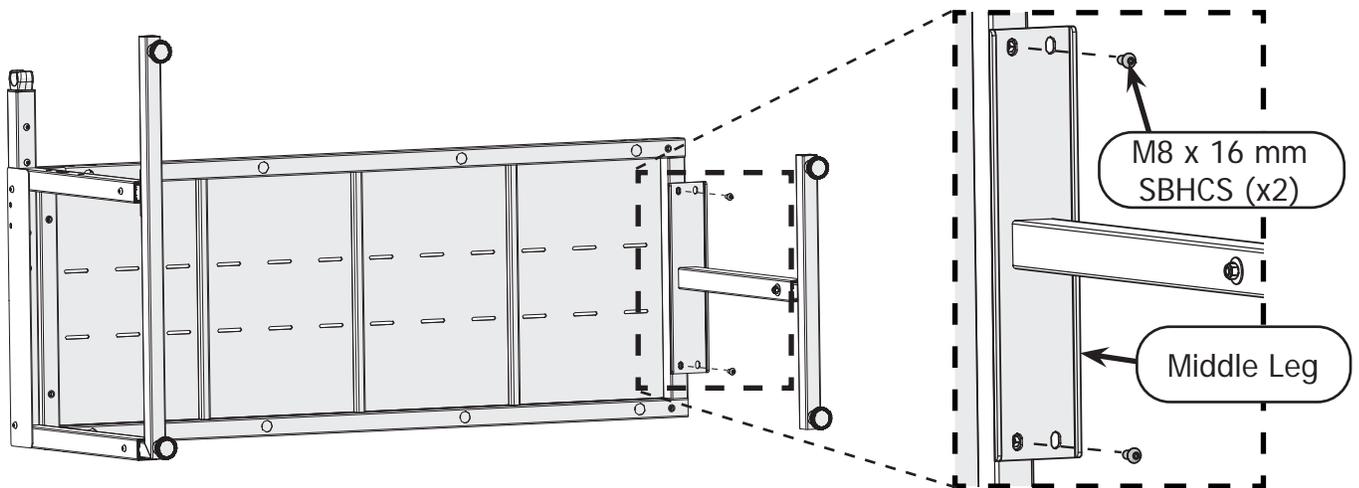


Building the Frame Table (Continued)

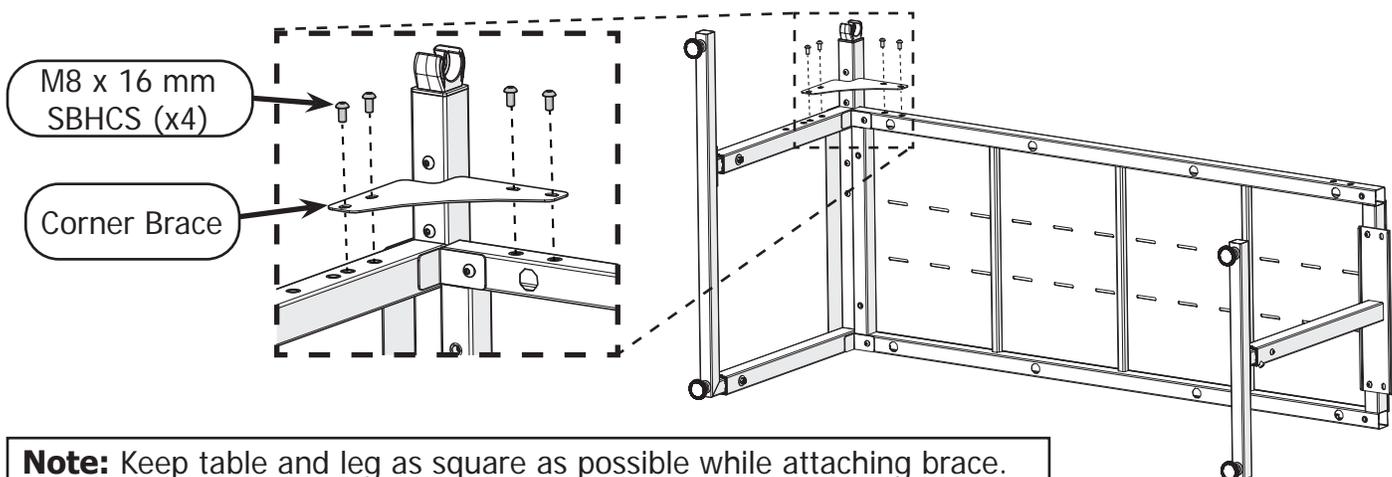
- 2 Use two **M8 x 16 mm SBHCS** screws to attach the **left frame leg** to the underside of one of the **table sections**. Tighten with the 5 mm Allen wrench.



- 3 Use two **M8 x 16 mm SBHCS** screws and the 5 mm Allen wrench to attach the left table section to the **middle leg**.



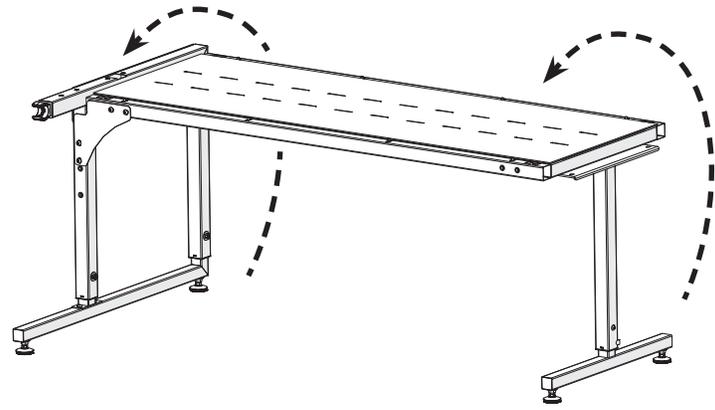
- 4 Attach one of the **corner braces** to the top left corner of the frame with the 5 mm Allen wrench and four **M8 x 16 mm SBHCS screws**.



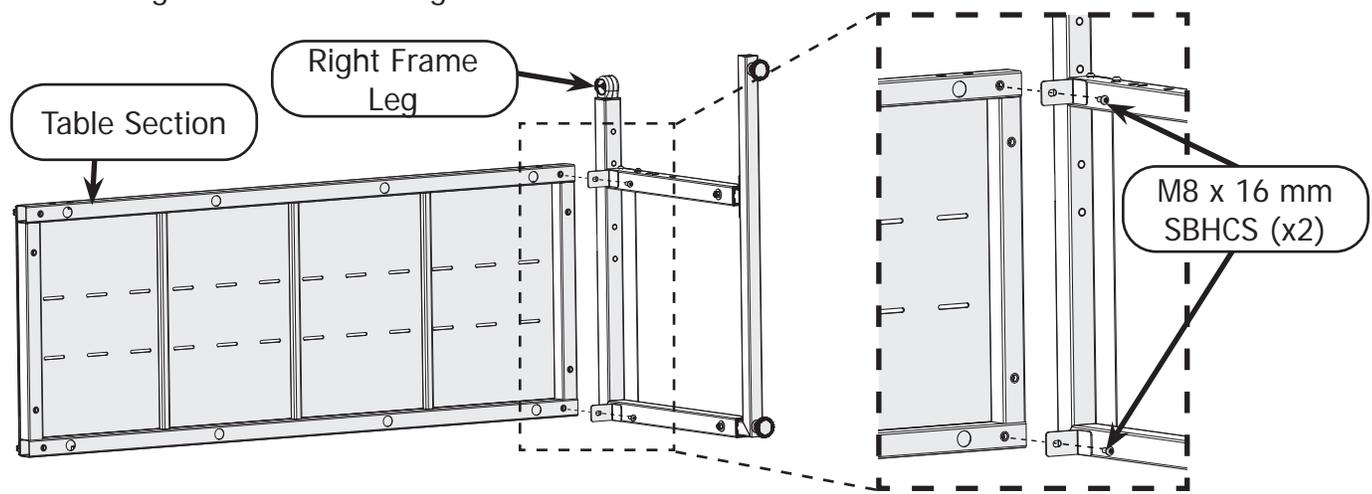
Note: Keep table and leg as square as possible while attaching brace.

Building the Frame Table (Continued)

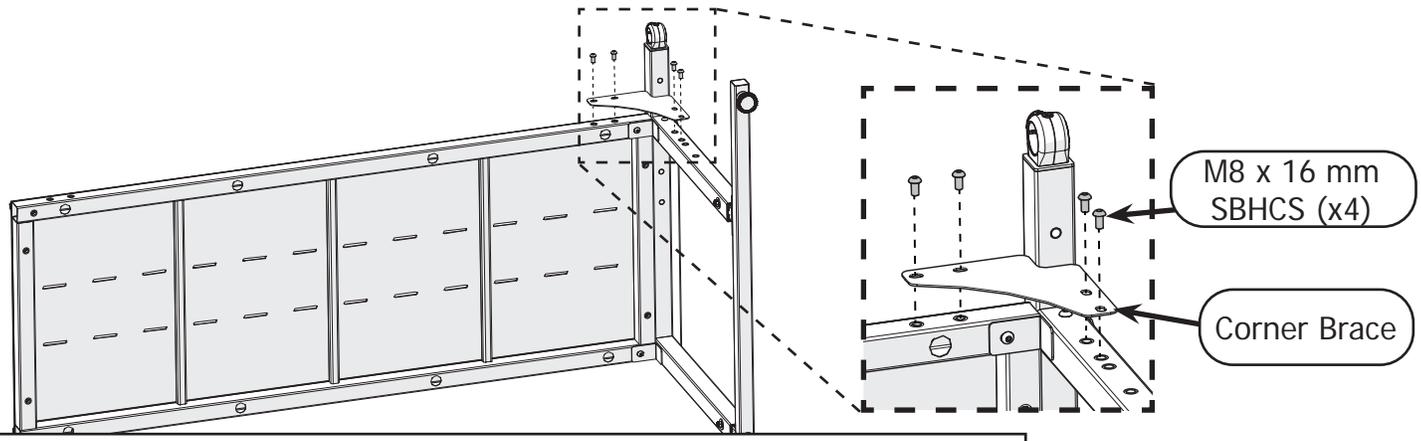
5 Carefully lift the table to a standing position.



6 Use two **M8 x 16 mm SBHCS** screws to attach the **right frame leg** to the underside of the remaining **table section**. Tighten with the 5 mm Allen wrench.



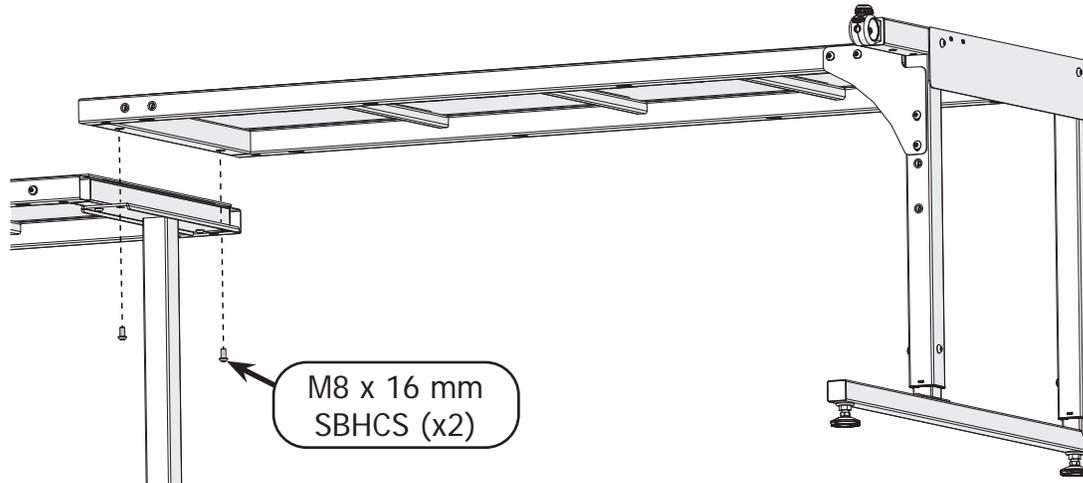
7 Attach one of the **corner braces** to the top right corner of the frame with the 5 mm Allen wrench and four **M8 x16 mm SBHCS screws**.



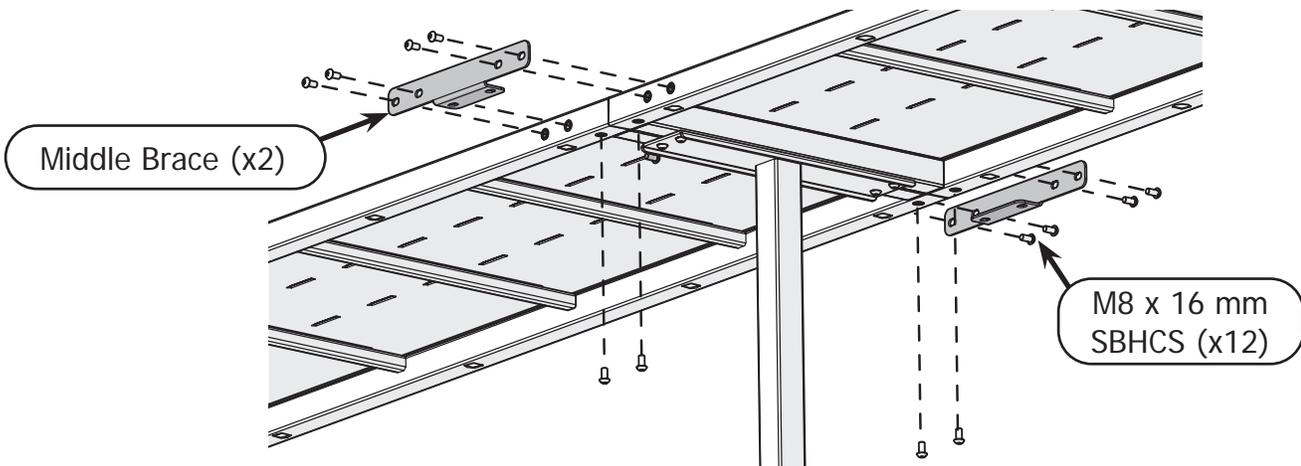
Note: Keep table and leg as square as possible while attaching brace.

Building the Frame Table (Continued)

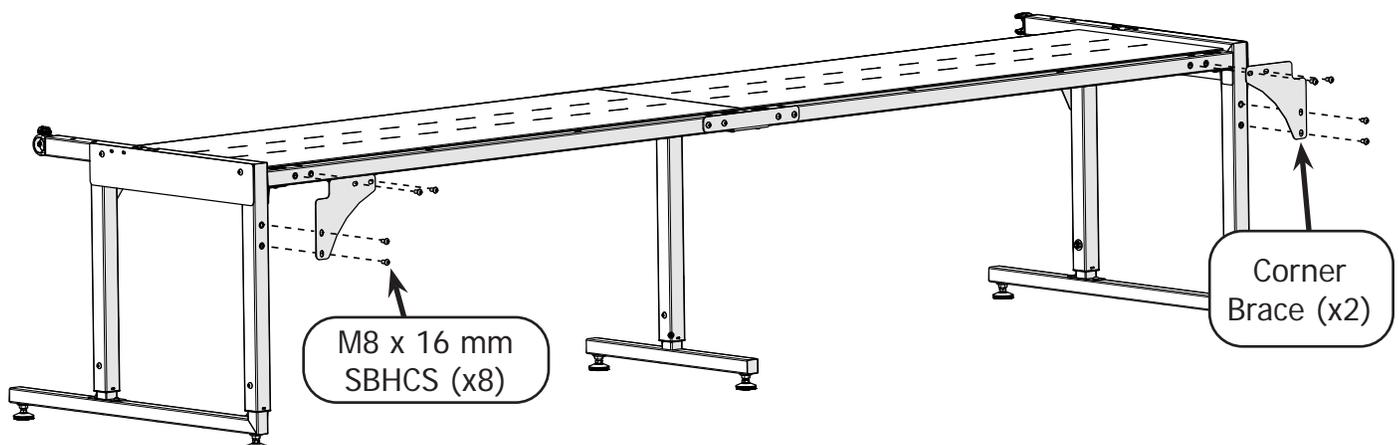
- 8 Line up the two table sections and use two **M8 x 16 mm SBHCS screws** to attach the right table section to the middle leg. Tighten with the 5 mm Allen wrench.



- 9 Install a **middle brace** onto the front and back of the middle leg with six **M8 x 16 mm SBHCS screws** each and the 5 mm Allen wrench.



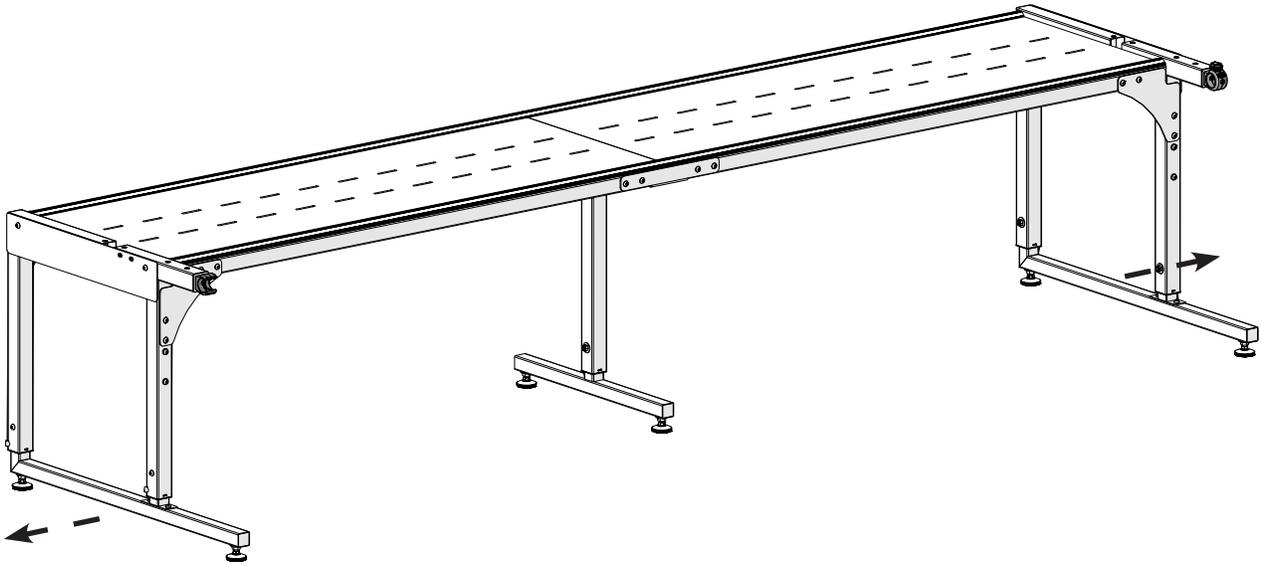
- 10 Install **corner braces** onto the rear corners of the frame with four **M8 x 16 mm SBHCS screws** each and the 5 mm Allen wrench.



Full Frame Assembly

Building the Frame Table (Continued)

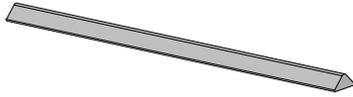
- 11 Pull the bottom of the left and right legs out, away from the center, to help square up the frame.



Step 3 - Installing the Tracks

Parts & Tools Needed:

Track Support Connector (x2)



(Box 1: Inner Box)

Set Screw M6 x 6 mm (x8)



(Box 1: Inner Box)

Allen Wrench 3 mm



(Box 1: Inner Box)

Long Plastic Track (x4)



(Box 2)

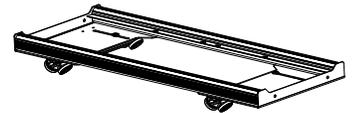
T-Handle Allen Wrench 4 mm



(Box 1: Inner Box)

- **Track Supports (x4)**
(Removed from table sections in Step 2)
- **Connector Bolts (x16)**
(Removed from table sections in Step 2)

Bottom Carriage

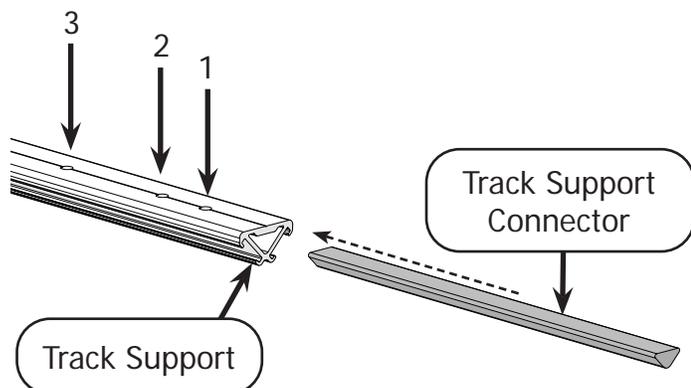


(Box 4)

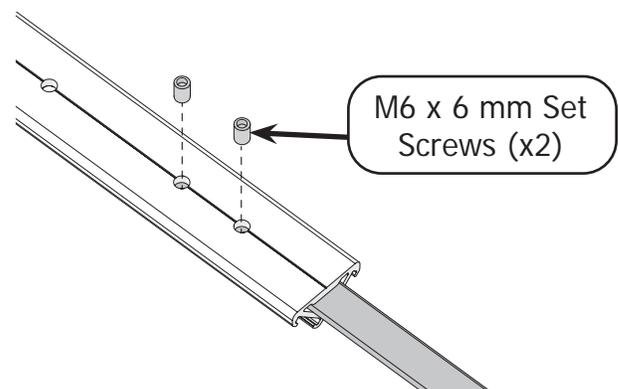
Instructions

The frame tracks allow the quilting machine to move across the frame. To install the frame tracks, take the following steps:

- 1 Slide a **track connector** into one of the **track supports** so that it passes the first two holes, but not the third.

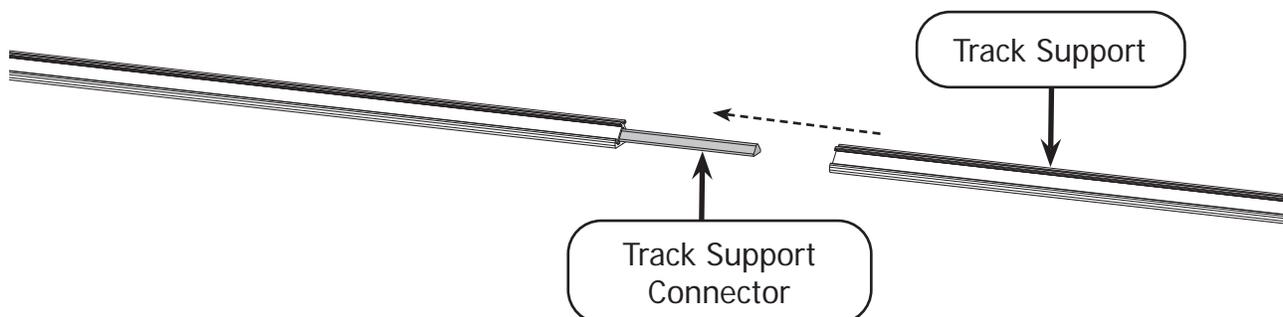


- 2 Screw two **M6 x 6 mm set screws** into the track support with the 3 mm Allen wrench. Tighten until the connector is held firmly in place.

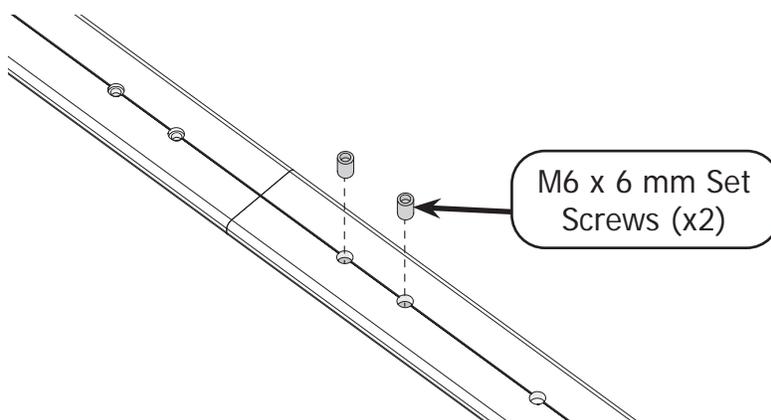


Installing the Tracks (Continued)

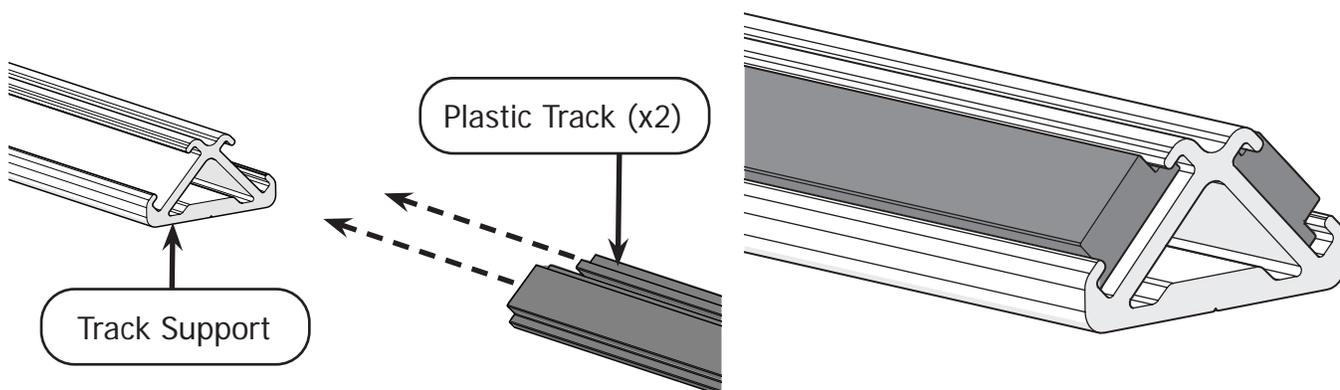
- 3 Slide another **track support** onto the **track connector**.



- 4 Use two **M6 x 6 mm set screws** and the 3 mm Allen wrench to tighten the track support firmly to the connector.

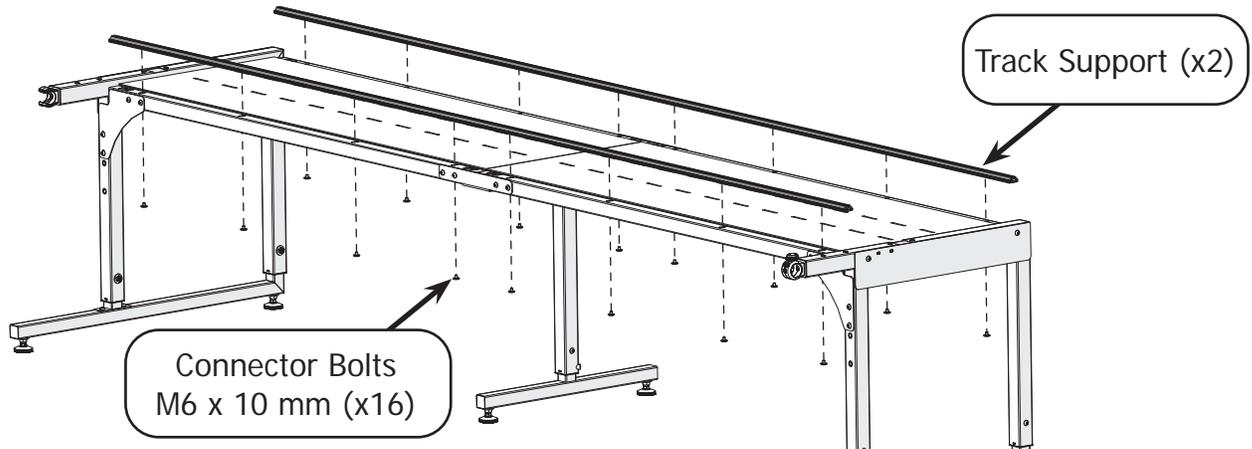


- 5 Thread each of the **plastic tracks** into the **track supports**. Repeat steps 1–5 for the remaining track supports.

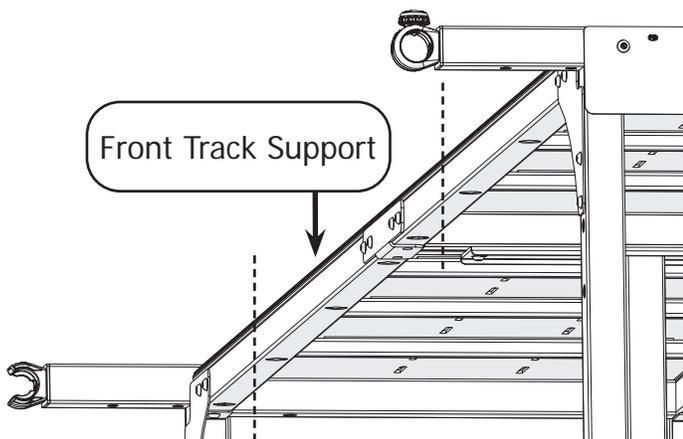


Installing the Tracks (Continued)

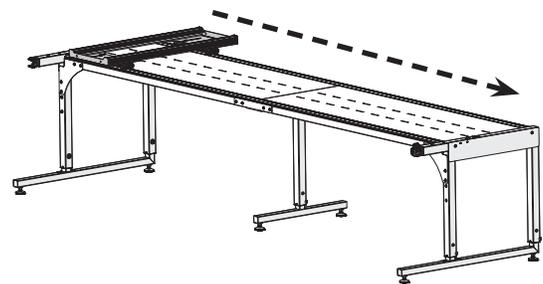
- 6 Loosely connect the **track supports** to the frame with the 4 mm Allen wrench and the sixteen **M6 x 10 mm connector bolts** removed in "Step 2 - Building the Frame Table" on page 12.



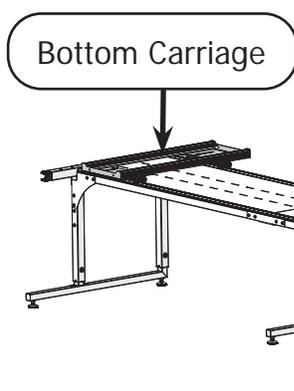
- 7 Line up the **front track support** as close to the edge of the frame as possible and tighten the connector bolts.



- 9 Slowly slide the carriage from one side of the frame to the other. Tighten each of the connector bolts in the back as the bottom carriage passes over them.



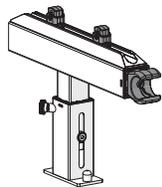
- 8 Carefully place the bottom carriage onto the frame.



Step 4 - Assembling the Rail Supports

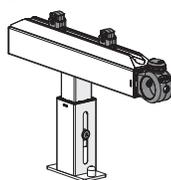
Parts & Tools Needed:

**Front Rail Arm
(Non-Ratcheting)**



(Box 1: Inner Box)

**Front Rail Arm
(Ratcheting)**



(Box 1: Inner Box)

**Take-Up Rail Arm
(Non-Ratcheting)**



(Box 1: Inner Box)

**Take-Up Rail Arm
(Ratcheting)**

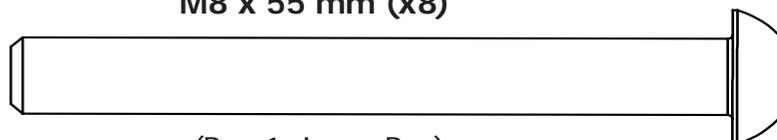


(Box 1: Inner Box)

Allen Wrench 5 mm



**SBHCS Screw
M8 x 55 mm (x8)**

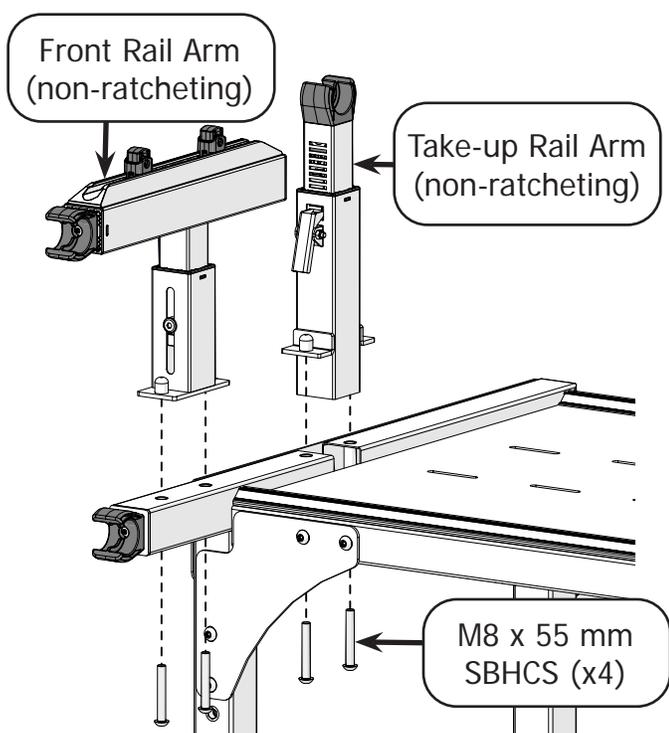


(Box 1: Inner Box)

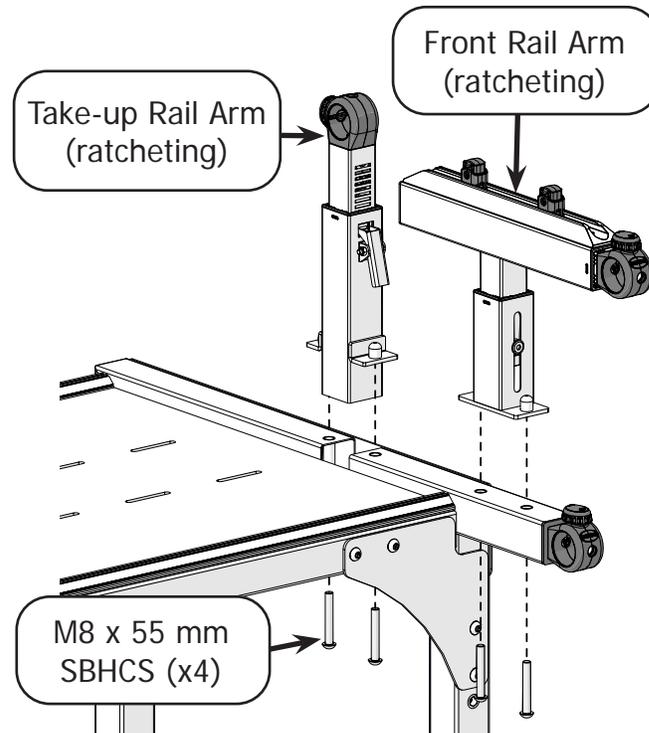
Instructions

The rails hold and position the quilt on the frame.

- 1 Install the **non-ratchet front rail arm and take-up rail arm** on the left side of the frame using four **M8 x 55 mm SBHCS screws**.



- 2 Install the **ratcheting front rail arm and take-up rail arm** on the right side of the frame using four **M8 x 55 mm SBHCS screws**.



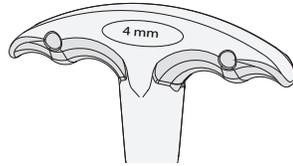
Step 5 - Installing the Bottom Carriage

Parts & Tools Needed:

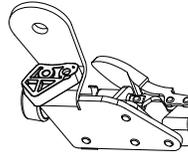
Bottom Carriage



T-Handle Allen Wrench 4 mm

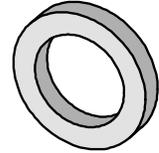


Channel Lock (x1)



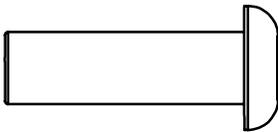
(Box 4)

Channel Lock Washer (x1)



(Box 4)

SBHCS Screw M6 x 20 mm (x1)



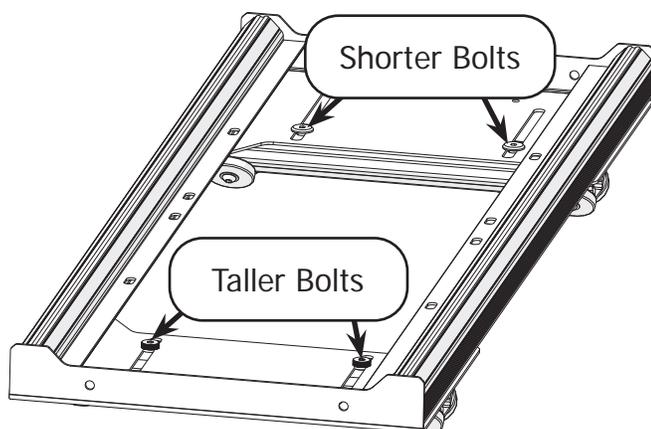
(Box 4)

Instructions

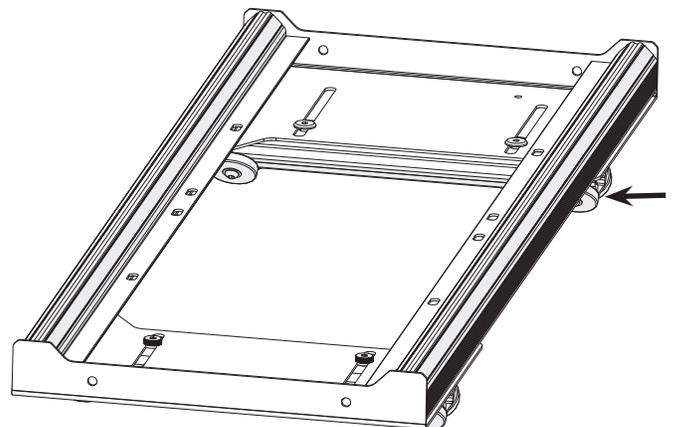
Install a channel lock on the bottom carriage before placing the bottom carriage onto the frame. Channel locks assist with stitching straight lines.

Note: Instructions for using the channel locks can be found on page 73.

- 1 Find the front of the bottom carriage. The bolts at the front of the carriage have **taller** heads.



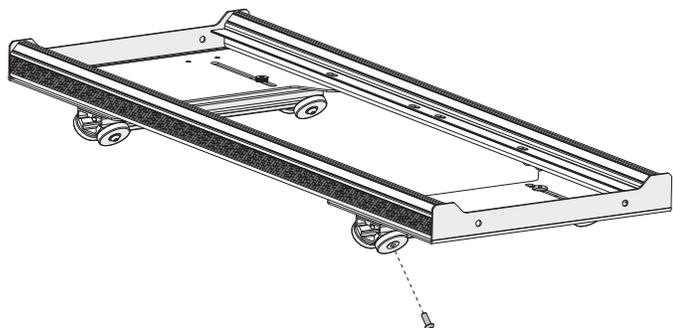
- 2 Locate the right-rear bottom carriage wheels.



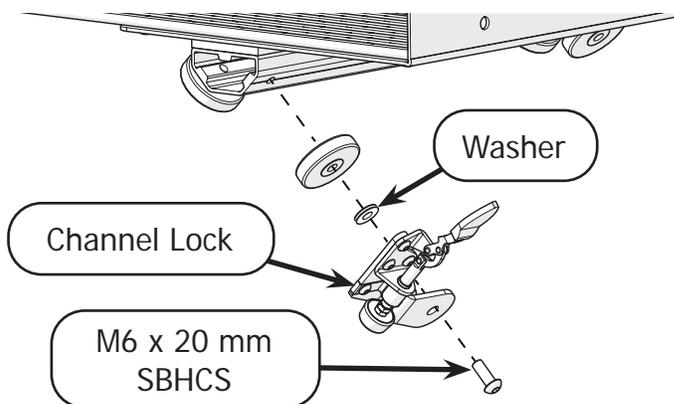
Full Frame Assembly

Installing the Bottom Carriage (Continued)

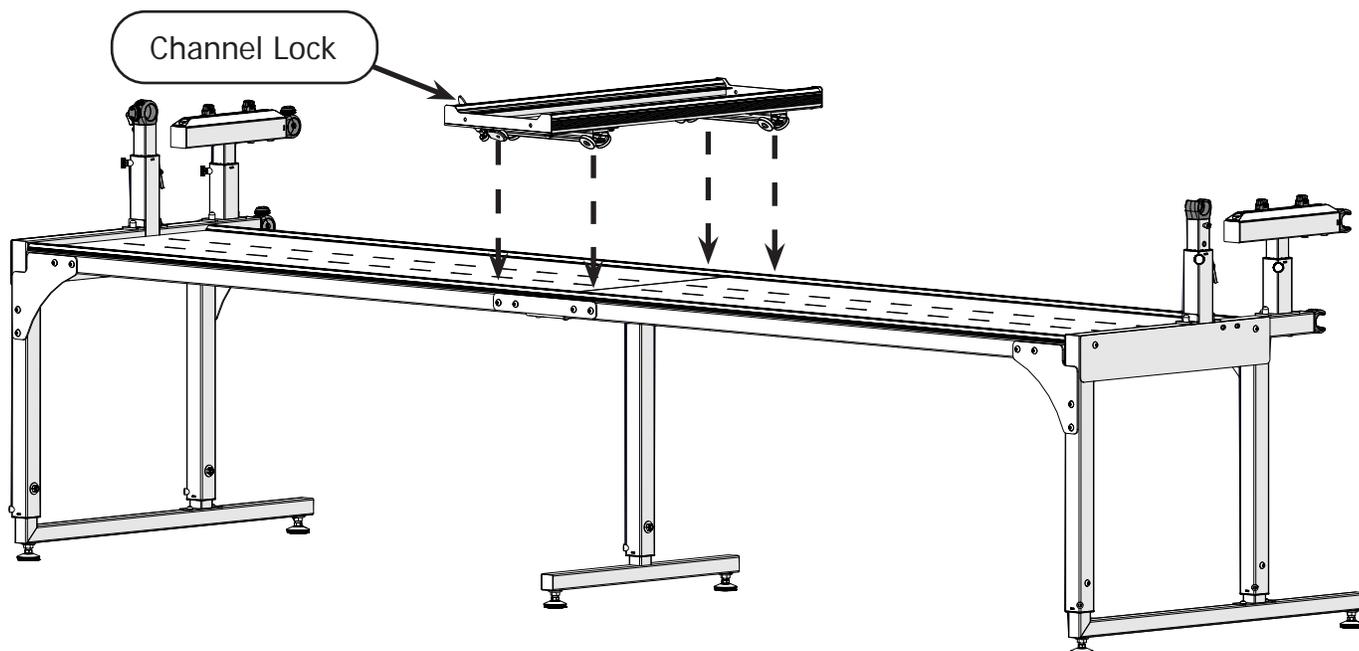
- 3 Remove the screw attaching the outside, right-rear wheel to the bottom carriage using the 4 mm Allen wrench.



- 4 Screw the **channel lock** and **washer** onto the right-rear bottom carriage wheel with an **M6 x 20 mm SBHCS** and 4 mm Allen wrench.



- 5 With the channel lock in the open position, place the bottom carriage onto the frame so the wheels slide over the frame track. The **channel lock** should be positioned on the rear track.



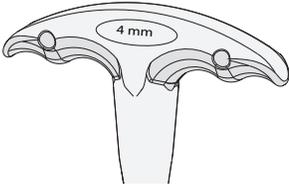
- 6 **STOP HERE** if you are using a top plate and home sewing machine. Please follow the instructions in your top plate manual. When finished, skip to "Step 7 - Leveling the Frame" on page 25. If you are using a quilting machine, continue on to "Step 6 - Installing the Quilting Machine" on page 23.

Step 6 - Installing the Quilting Machine

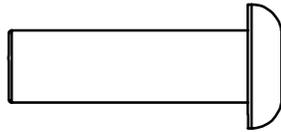
If using a **top carriage** and **home sewing machine**, please follow the instructions in your top carriage manual and then go to page 25.

Parts & Tools Needed:

T-Handle Allen Wrench 4 mm

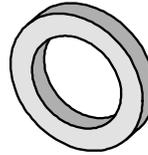


SBHCS Screw M6 x 20 mm (x1)



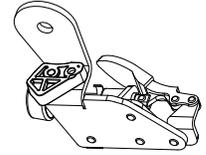
(Box 4)

Channel Lock Washer (x1)



(Box 4)

Channel Lock (x1)

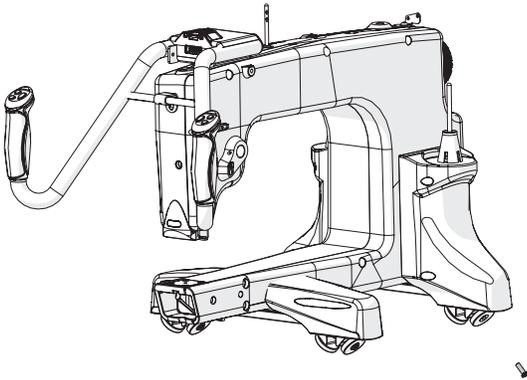


(Box 4)

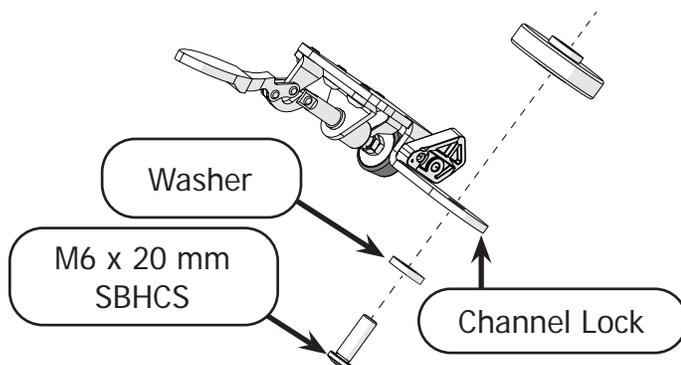
Instructions

A channel lock should be installed on your quilting machine or top carriage before it is placed on the frame. The channel locks assist with quilting straight, even lines.

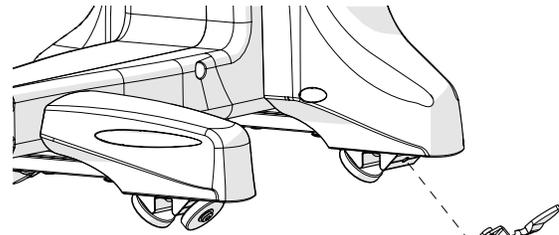
- 1 Remove the rear wheel on the right side of your quilting machine or top carriage with the 4 mm Allen wrench.



- 2 Place the **washer**, **channel lock** and machine wheel onto the **M6 x 20 mm SBHCS screw**.



- 3 Use the 4 mm Allen wrench to screw the **M6 x 20 mm SBHCS** into the machine.



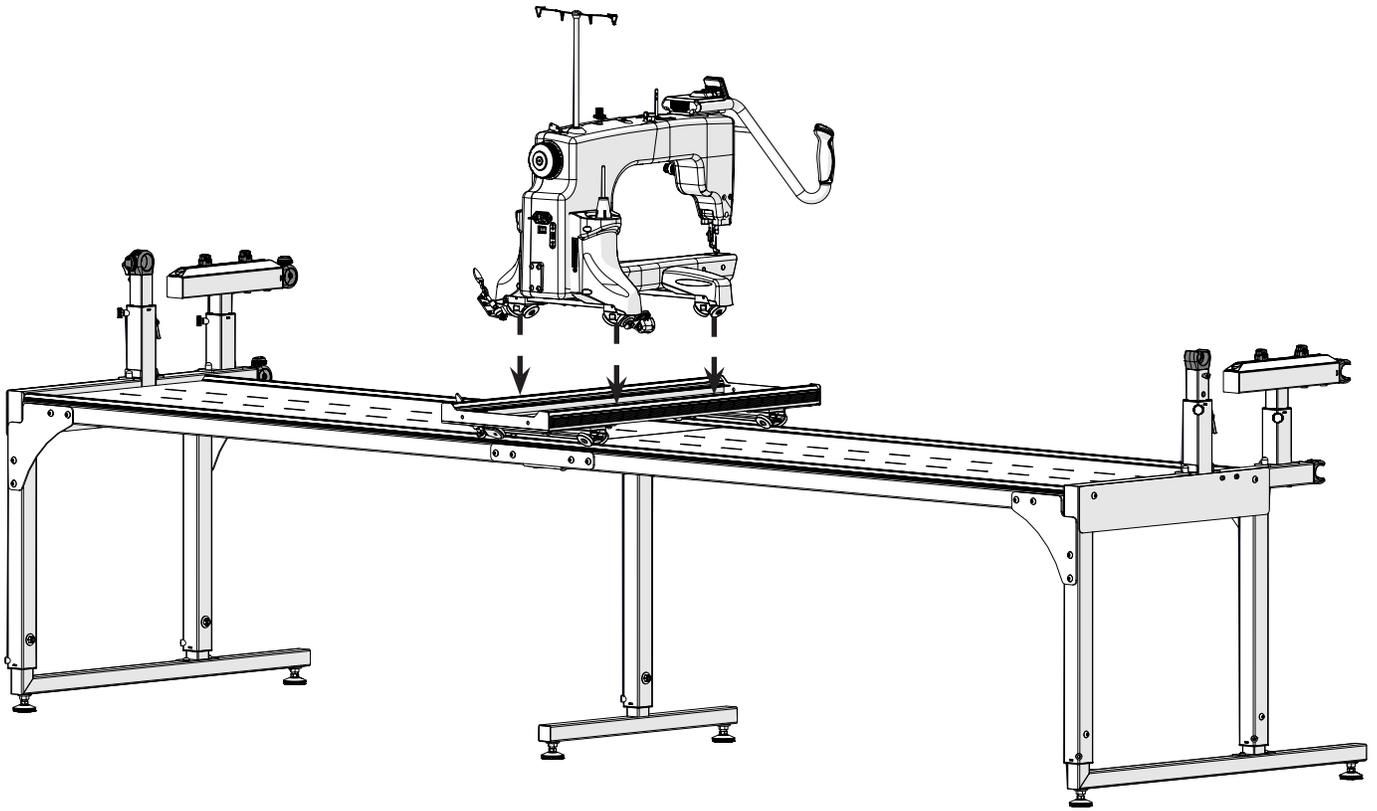
M6 x 20 mm
SBHCS

- 4 **STOP HERE.** Follow the instructions in your machine manual to fully assemble the machine. Continue with frame instructions only after machine is completed.

Full Frame Assembly

Installing the Quilting Machine (Continued)

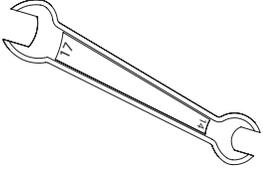
- 5 With the channel lock in the open position, carefully place machine onto the bottom carriage, if not already done.



Step 7 - Leveling the Frame

Parts & Tools Needed:

Open-end Wrench
14 mm & 17 mm

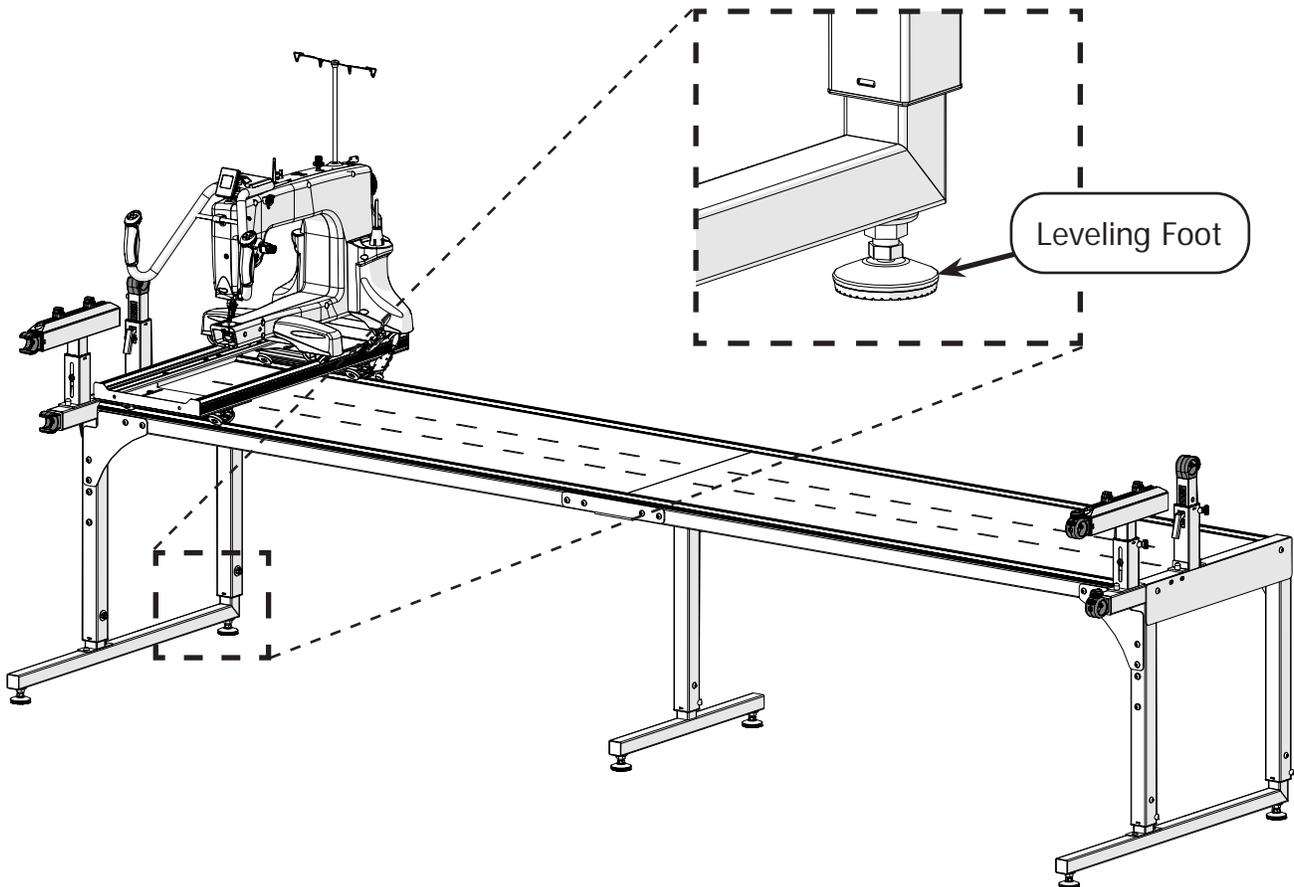


(Box 1: Inner Box)

Instructions

Leveling the frame ensures the machine doesn't drift or pull to one side when stitching.

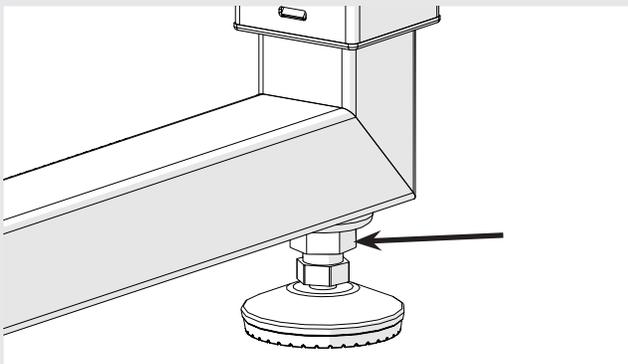
- 1 Move the machine and bottom carriage to one corner of the frame, and release. If the machine rolls away from the corner, use the 17 mm Open-end wrench to adjust the **leveling foot** at the bottom of the leg.



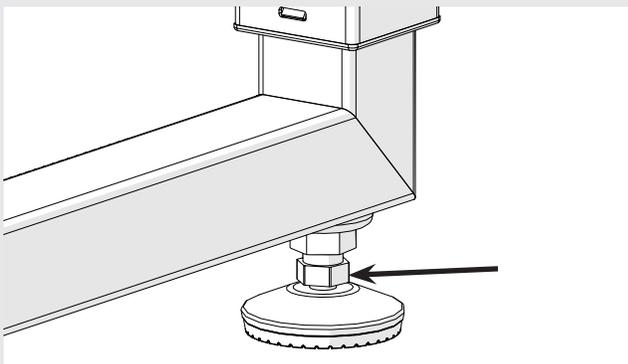
Leveling the Frame (Continued)

Leveling Foot Adjustment

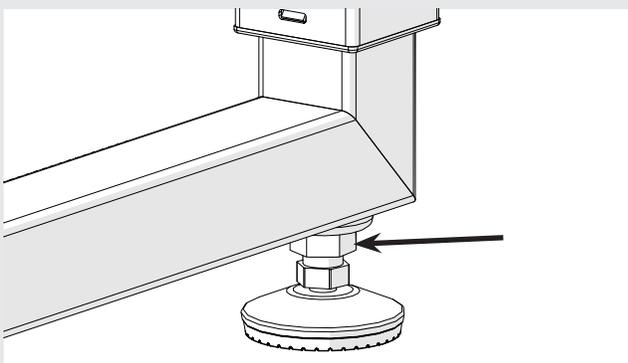
- a Loosen the top nut on the leveling foot with the 17 mm Open-end wrench.



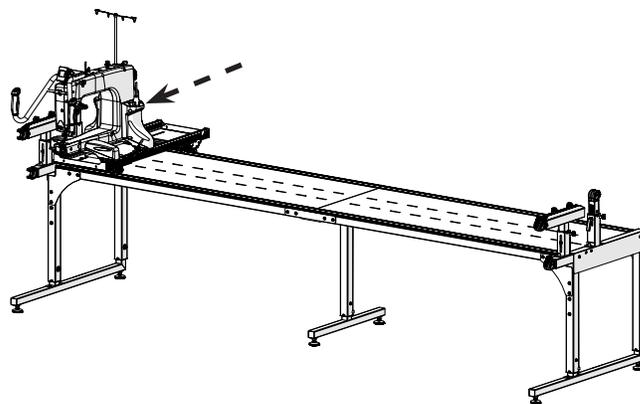
- b Turn the bottom nut with the 14 mm Open-end wrench until the desired height is set.



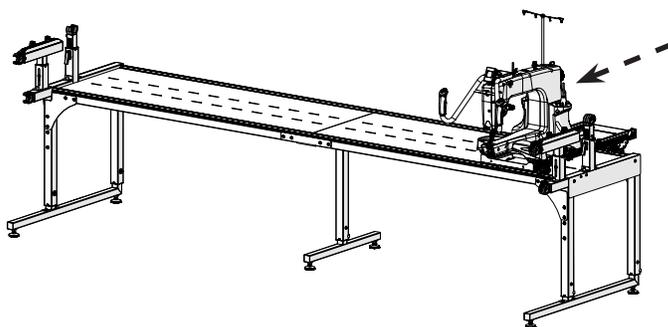
- c Tighten the top nut with the 17 mm Open-end wrench until it is firm against the frame leg.



- 2 Test the next corner of the frame, and adjust the leveling foot underneath if needed.



- 3 Test the middle of the frame next, and then the other two corners.



Step 8 - Installing the Rails

Parts & Tools Needed:

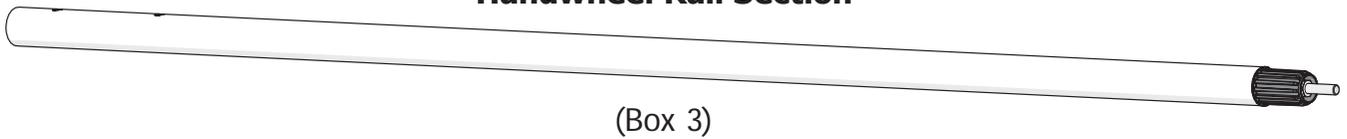
Ratchet Rail Section (x2)



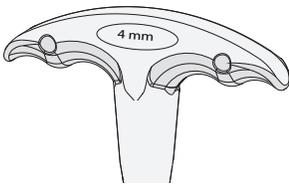
Non-ratchet Rail Section (x3)



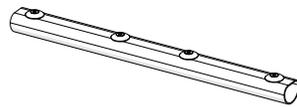
Handwheel Rail Section



T-Handle Allen Wrench 4 mm



Rail Coupler (x3)

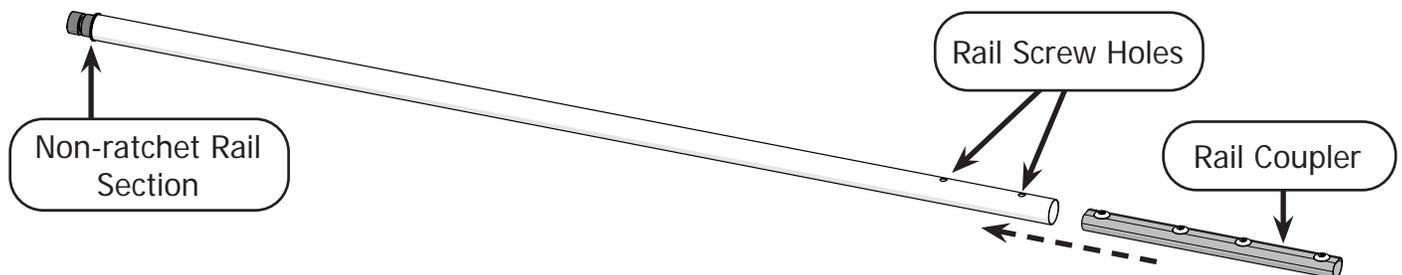


(Box 3)

Instructions

The rails hold and position the quilt on the frame.

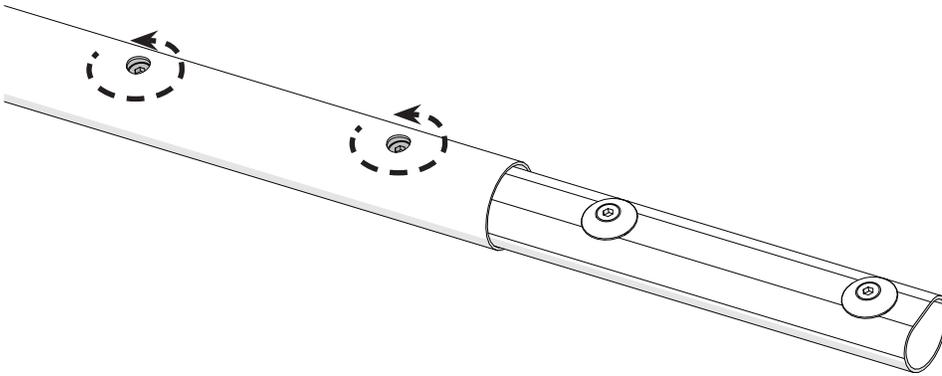
- 1 Slide a **rail coupler** into one of the **non-ratchet rail section**. Line up the screws on the coupler with the **holes** on the rail.



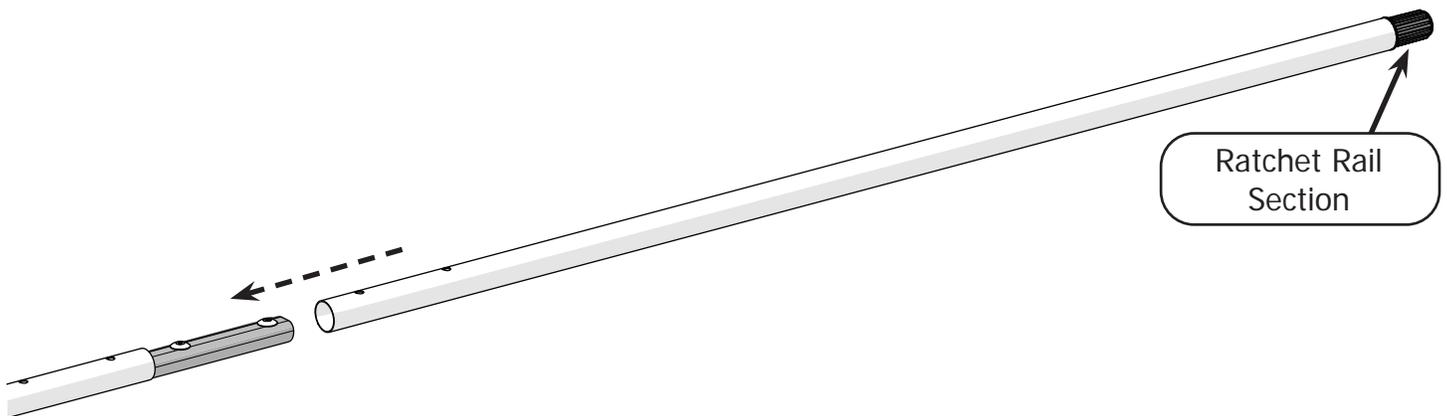
Full Frame Assembly

Installing the Rails (Continued)

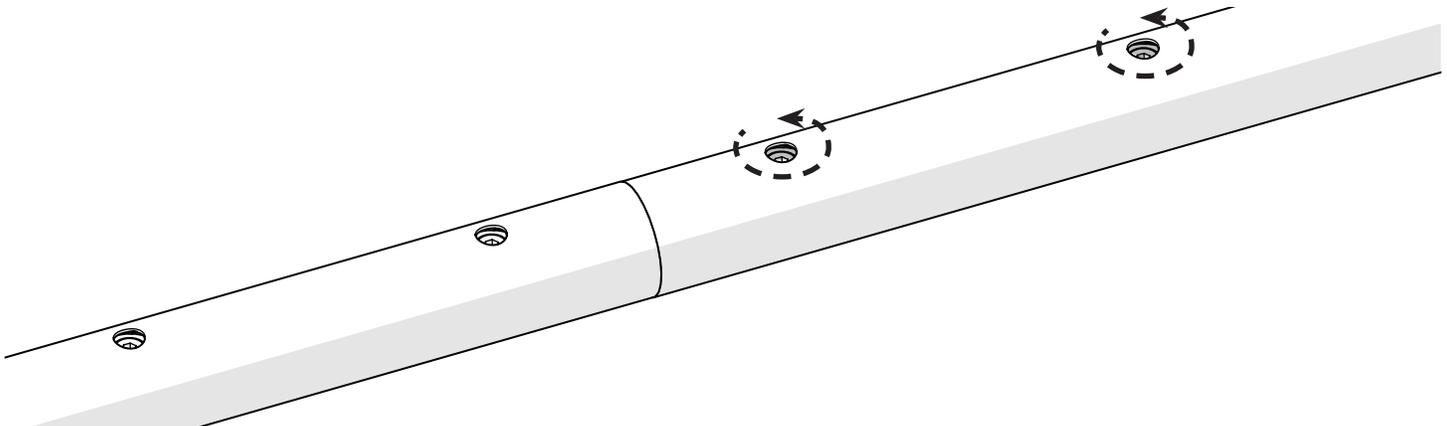
- 2 Use the 4 mm Allen wrench to loosen (turn counter-clockwise) the coupler screws inside the rail until they press firmly against the rail.



- 3 Slide one of the **ratcheting rail sections** onto the other side of the rail coupler.

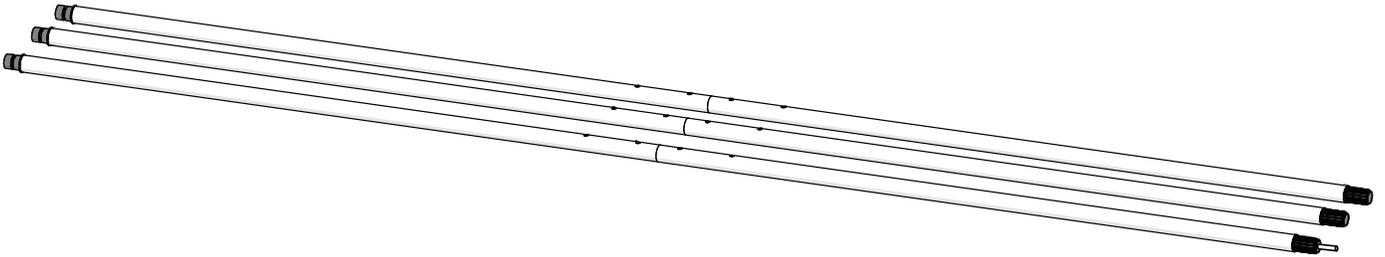


- 4 Line the coupler screws with the holes in the rail and loosen them with the 4 mm Allen wrench until they press firmly against the inside of the rail.

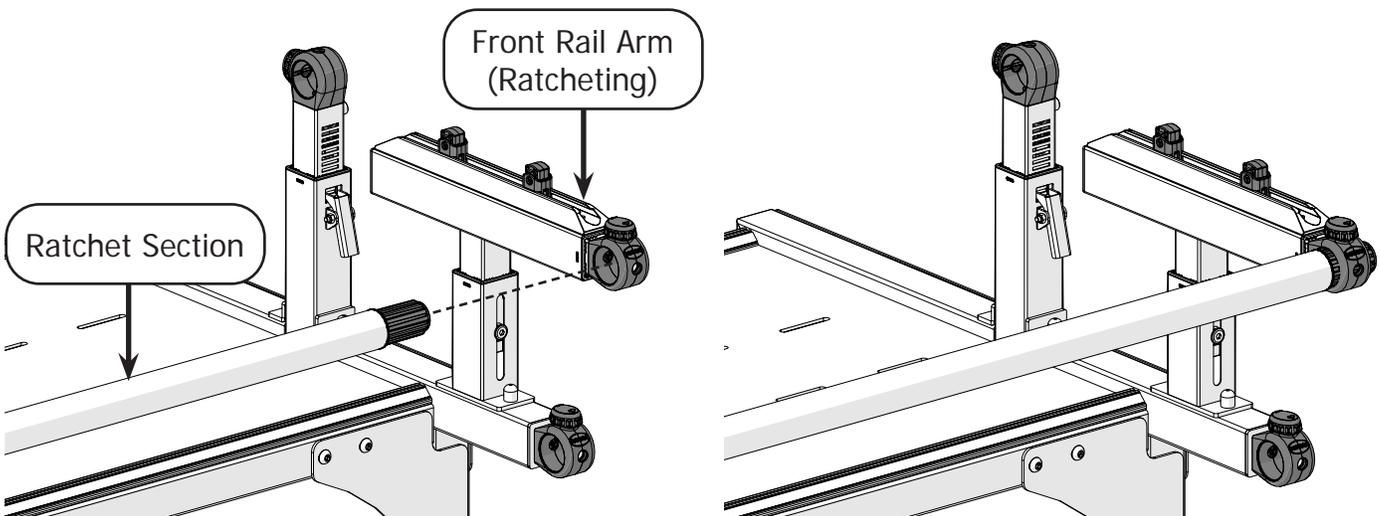


Installing the Rails (Continued)

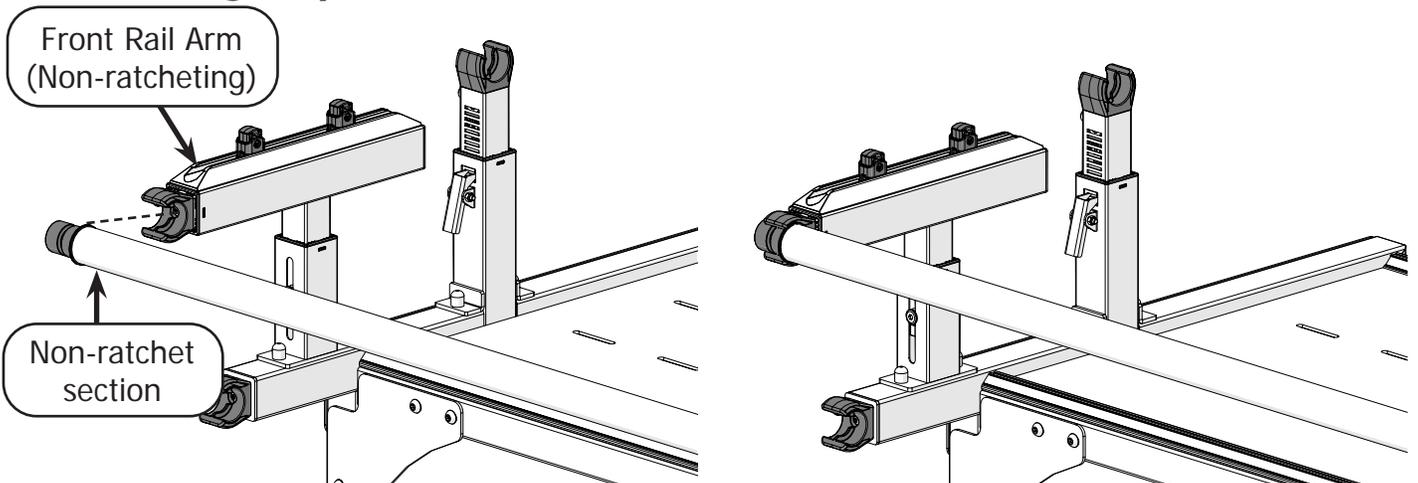
- 5 Repeat steps 1-4 with the remaining rails. One rail will be completed with the handwheel rail section in place of the ratcheting rail section.



- 6 Insert the **ratchet section** end of one of the rails into the **front rail arm (ratcheting side)**.



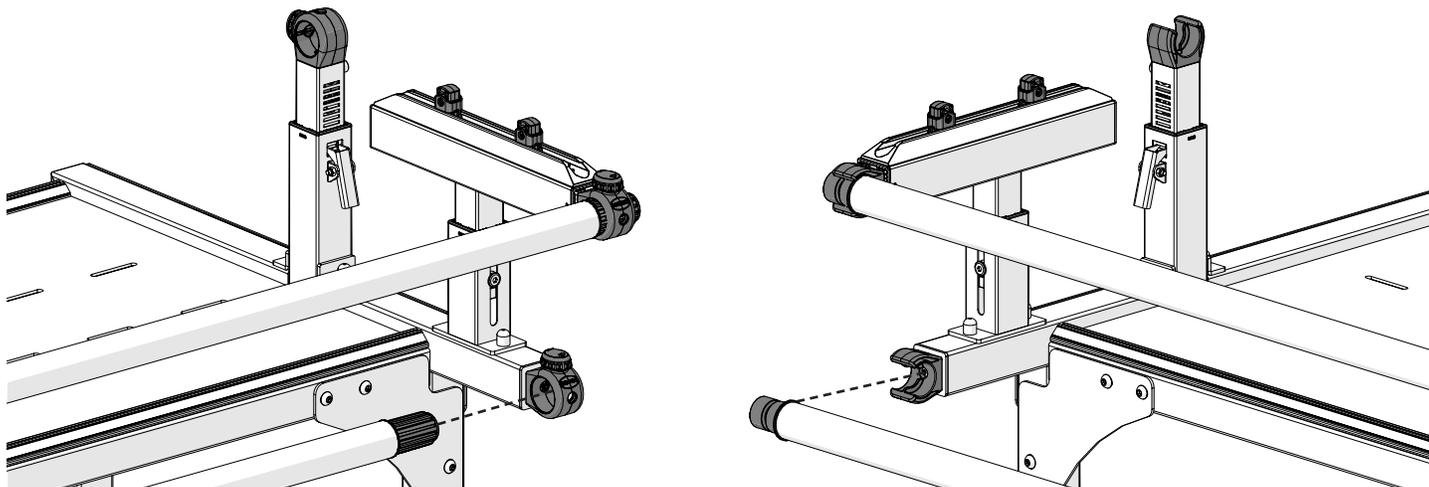
- 7 Press the other end of the rail (the **non-ratchet section**) into the **front rail arm (non-ratcheting side)**.



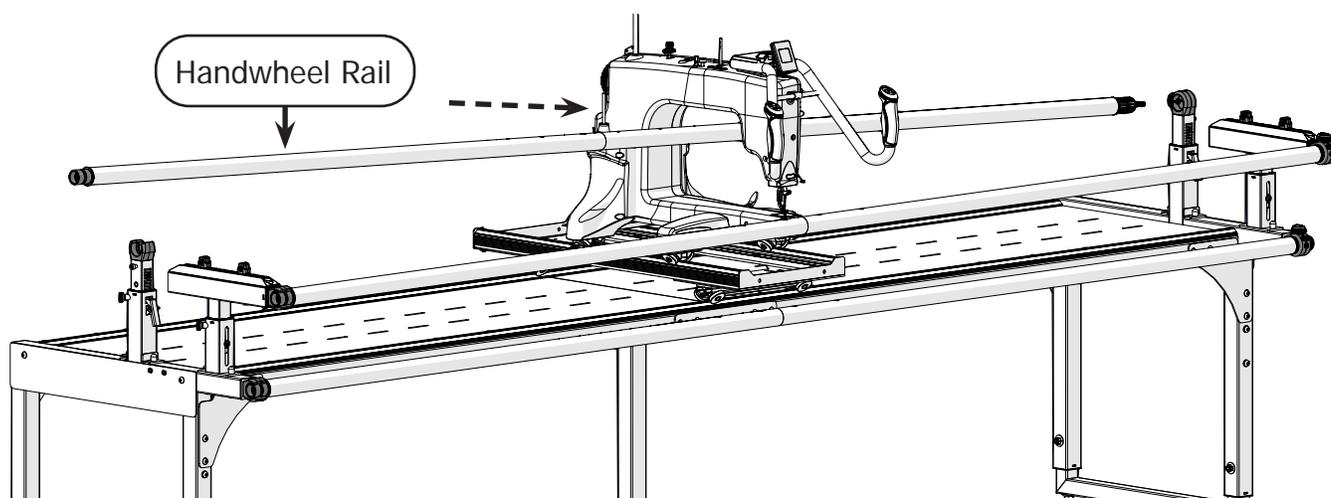
Full Frame Assembly

Installing the Rails (Continued)

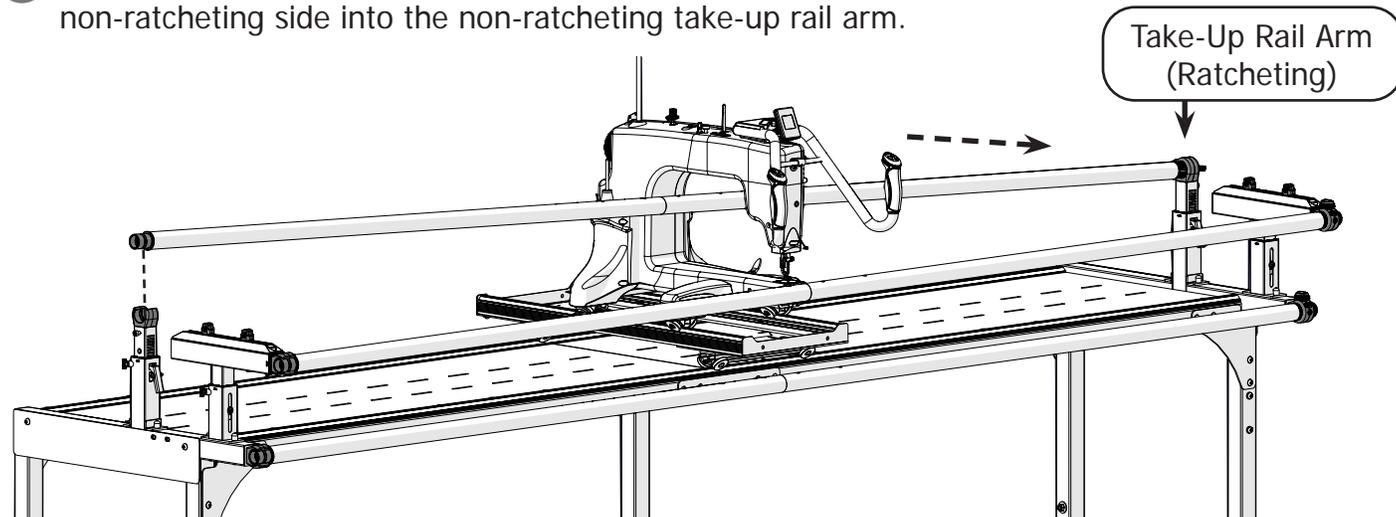
- 8 Repeat steps 6-7 for the bottom rail.



- 9 Insert the **handwheel rail** through the throat of the machine, handwheel side first.



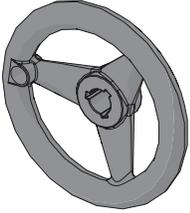
- 10 Place the ratcheting side of the rail into the **ratcheting take-up rail arm**, and then press the non-ratcheting side into the non-ratcheting take-up rail arm.



Step 9 - Assembling the Handwheel

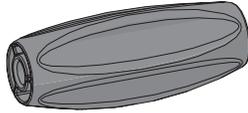
Parts & Tools Needed:

Handwheel



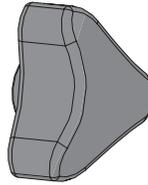
(Box 1: Inner Box)

Handwheel Knob



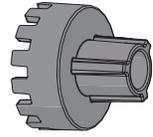
(Box 1: Inner Box)

Triangular Knob



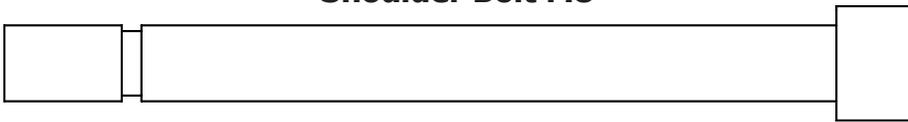
(Box 1: Inner Box)

Handwheel Coupler



(Box 1: Inner Box)

Shoulder Bolt M8



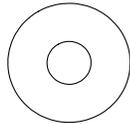
(Box 1: Inner Box)

Allen Wrench 6 mm



(Box 1: Inner Box)

M10 Washer

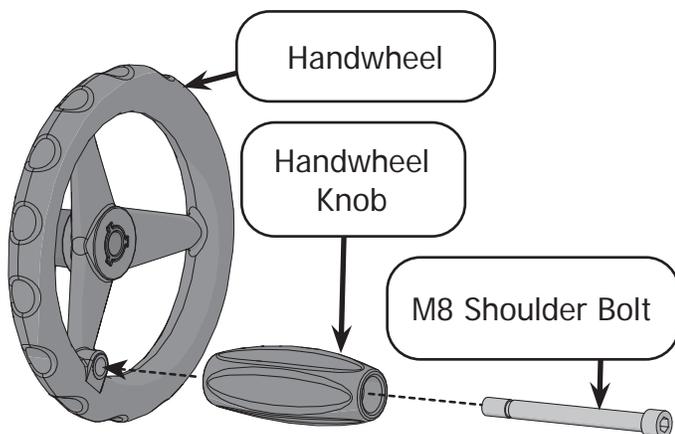


(Box 1: Inner Box)

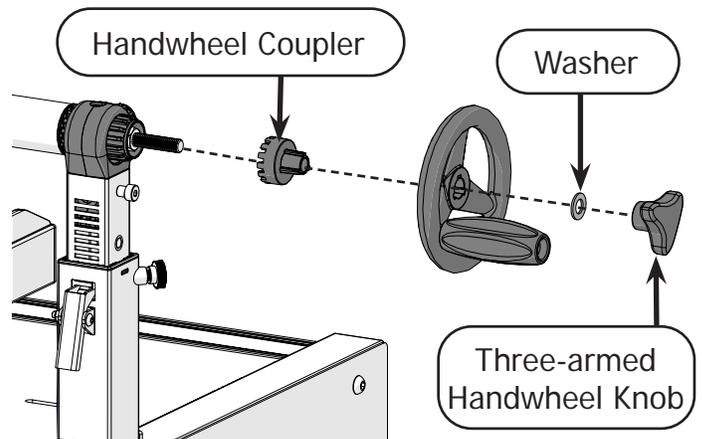
Instructions

The handwheel allows you to conveniently roll the quilt up as you go.

- 1 Use the **M8 shoulder bolt** and 6 mm Allen wrench to attach the **handwheel knob** to the **handwheel**.



- 2 Screw the **handwheel coupler**, handwheel, **washer**, and **three-armed handwheel knob** to the take-up rail.



Full Frame Assembly

Step 10 - Installing the Bungee Clamps

Parts & Tools Needed:

Bungee Clamp (x4)

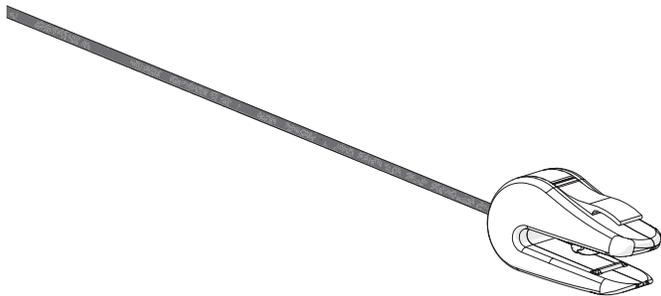
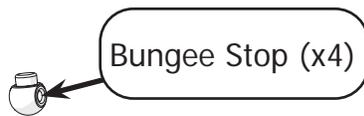


(Box 1: Inner Box)

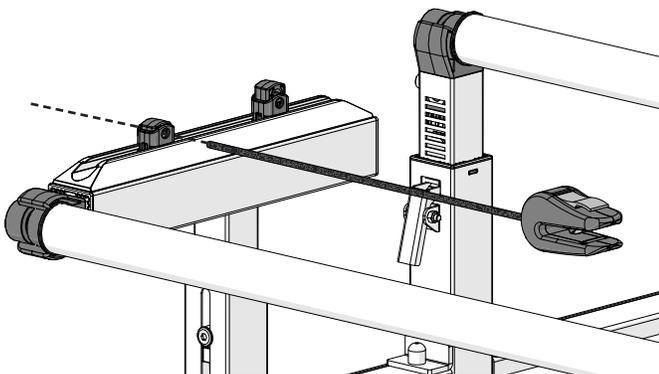
Instructions

The bungee clamps hold the edges of the quilt up and provide additional tension to the quilt surface. Take the following steps:

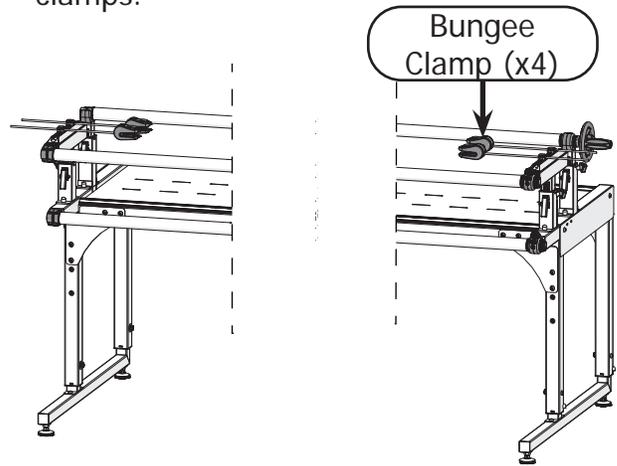
- 1 **Note:** Your bungee clamps may have come with **bungee stops**. These will not be used.



- 2 Press down the bungee stop in the front rail arm and thread the bungee cable through. Release to tighten.



- 3 Repeat step 2 to install all four bungee clamps.

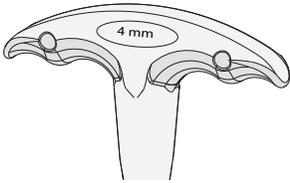


Step 11 - Adjusting the Rails

Parts & Tools Needed:

T-Handle Allen
Wrench 4 mm

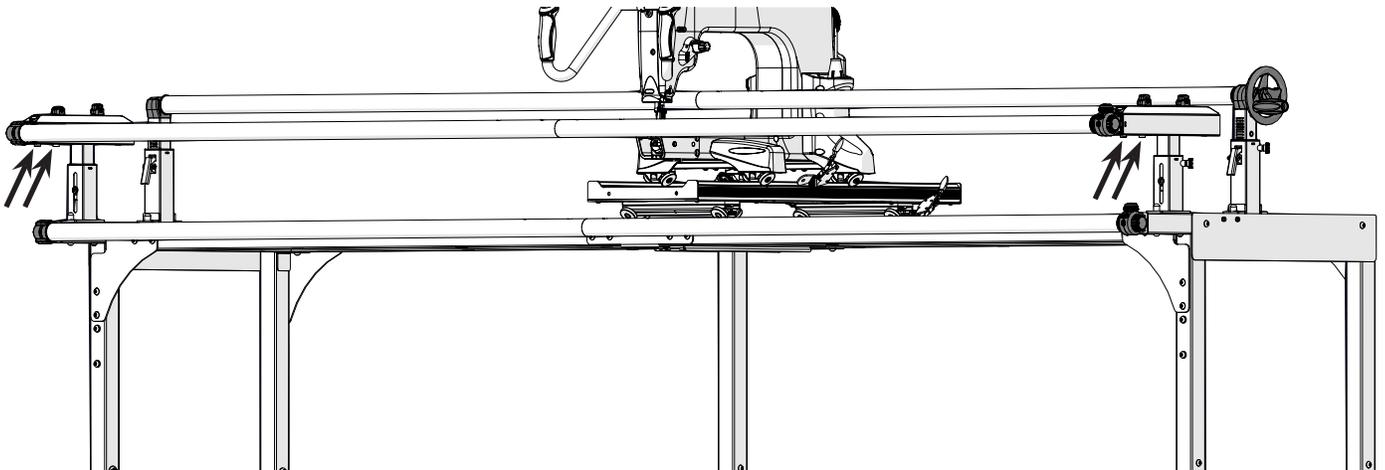
Allen Wrench 5 mm



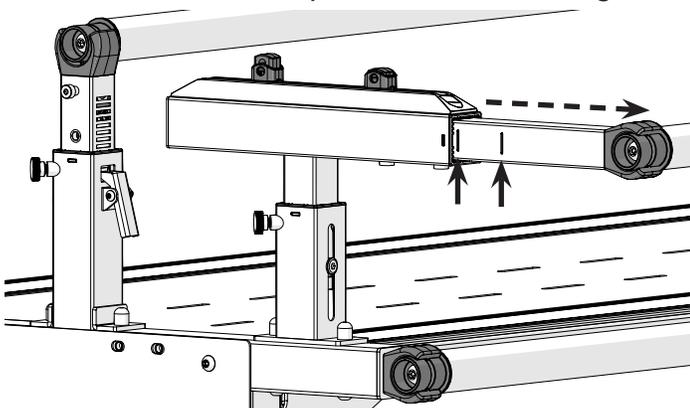
Instructions

The placement of the rails in relation to the machine is crucial for proper quilt alignment and quality sewing. For customers using the idler or batting accessory rails, please refer to the instructions that came with your accessories on how to configure your rails. For the standard setup, please take the following steps:

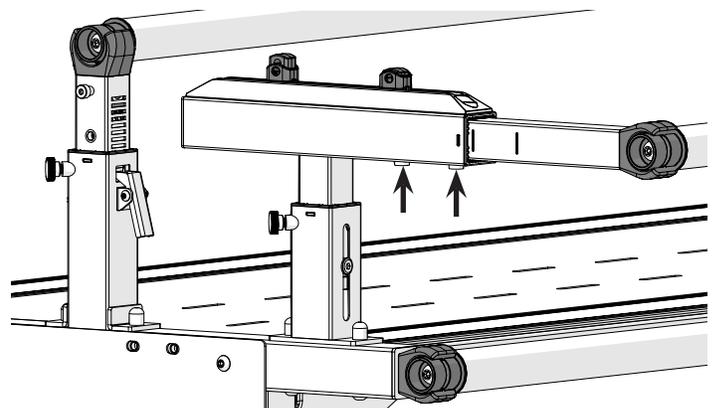
- 1 If the throat of your machine is greater than 15", you will need to extend your front rail. Use the 4 mm Allen wrench to loosen the set screws on both the front rail arms.



- 2 Extend the arm out to the first notch for machines with a throat of up to 19" in length. Extend to the second notch for machines with up to a 21" throat length.



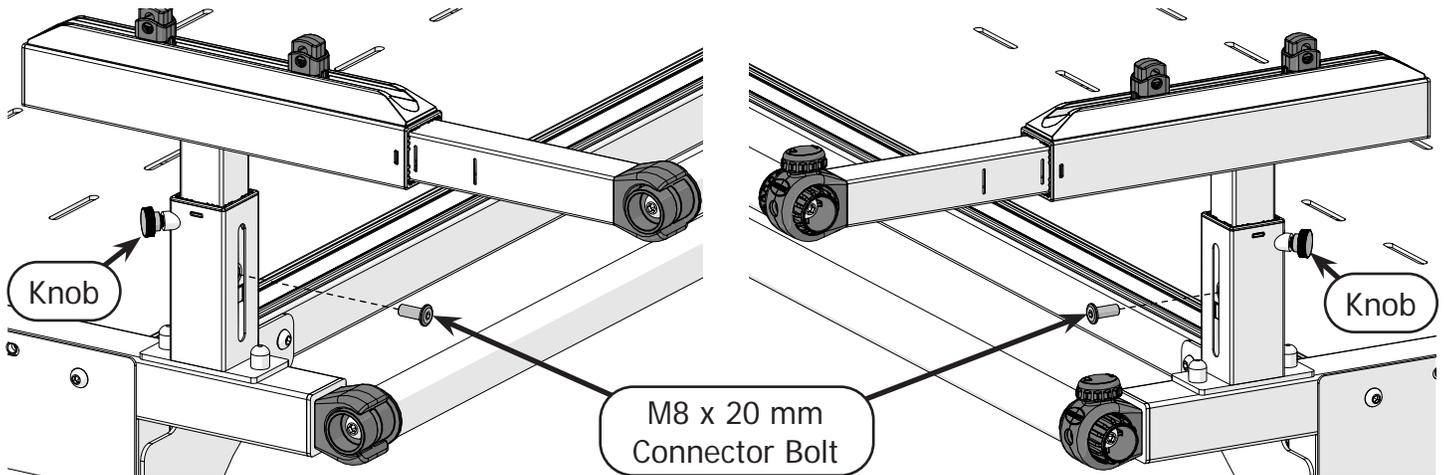
- 3 Re-tighten the set screws on both front rail arms with the 4 mm Allen wrench.



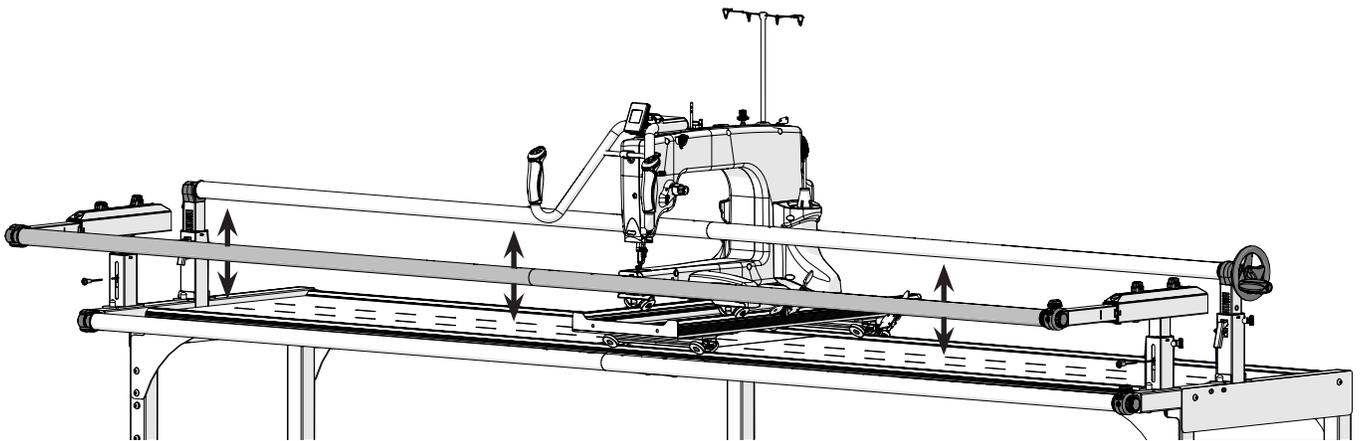
Full Frame Assembly

Adjusting the Rails (Continued)

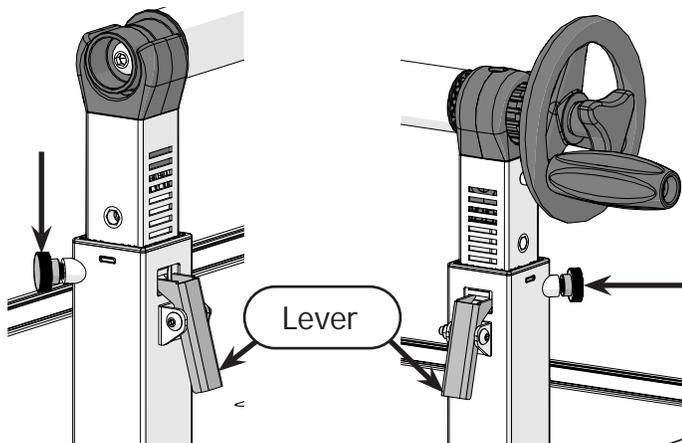
- 4 To set the front rail height, turn the **knobs** on the necks of both front rail arms, and remove the **M8 x 20 mm connector bolts** from the rail arms with the 5 mm Allen wrench.



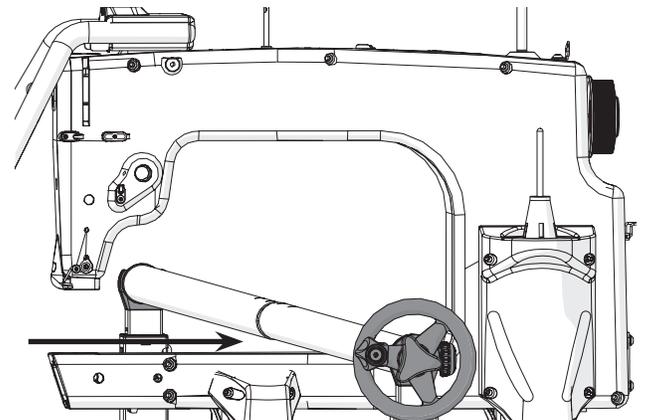
- 5 Set the top of the rail so it is level with the machine's needle plate. When the height is set, re-install the M8 x 20 mm connector bolts and tighten the height knobs on the rail arms.



- 6 Loosen the knobs on both take-up rail arms. Press in on the **levers** to set the rail height.



- 7 Set the take-up rail so there is just enough space to slide a finger between it and the machine. Re-tighten the knobs.



Step 12 - Installing the Velcro Tape

Parts & Tools Needed:

Velcro Tape (x3)



Found in Leader
Cloth Set (Box 4)

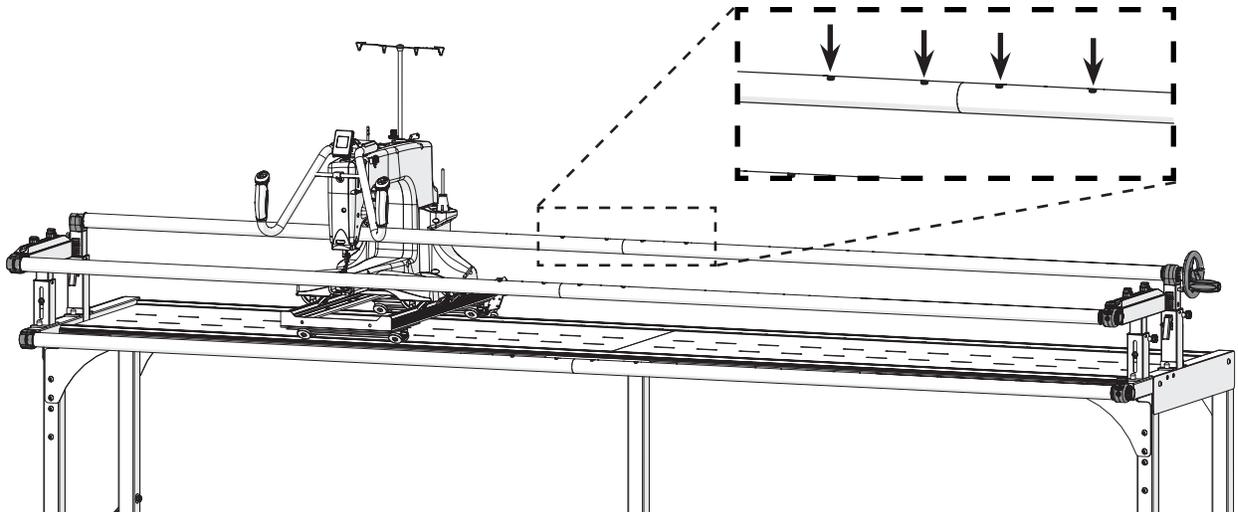


Marker (not included)

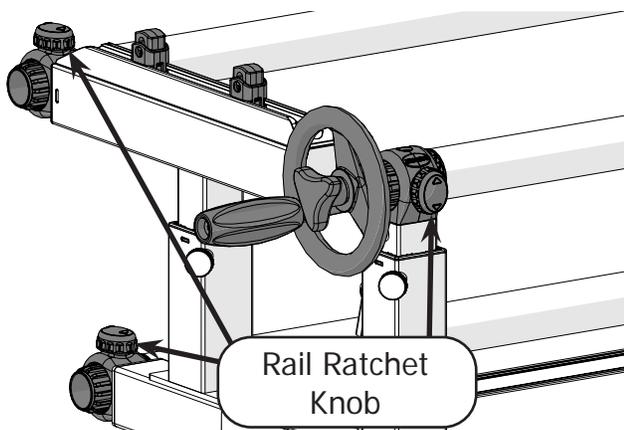
Instructions

Velcro strips are used to attach the leader cloth to your frame. The leader cloths help align the quilt and maximize the are of the quilt surface that the machine will be able to reach.

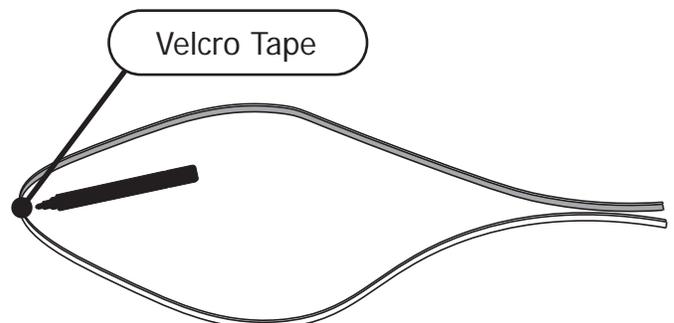
- 1 Turn all three rails so the holes on the rails face up.



- 2 To help keep the rails in place, twist each **rail ratchet knob** to activate the one-way ratchet.



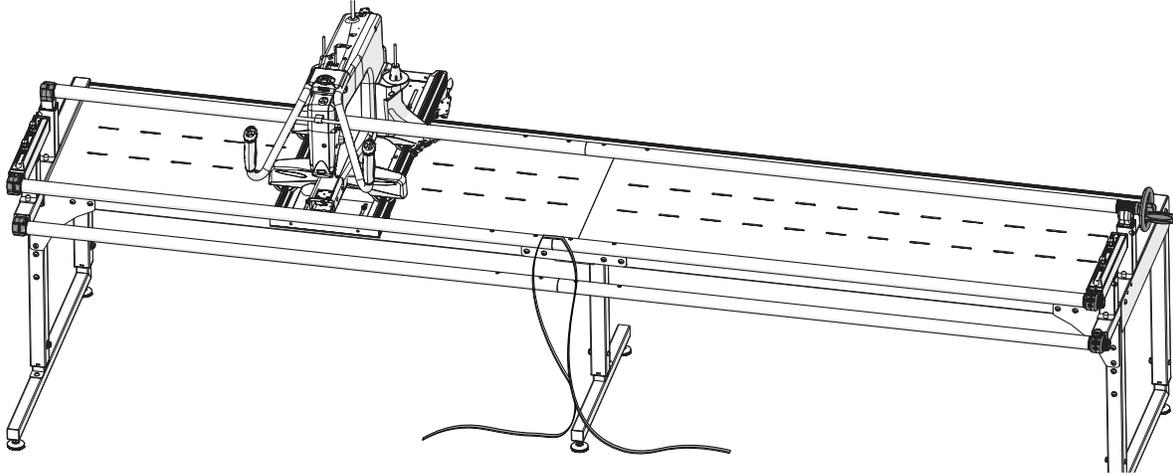
- 3 Fold the **Velcro tape** in half to find and mark the center.



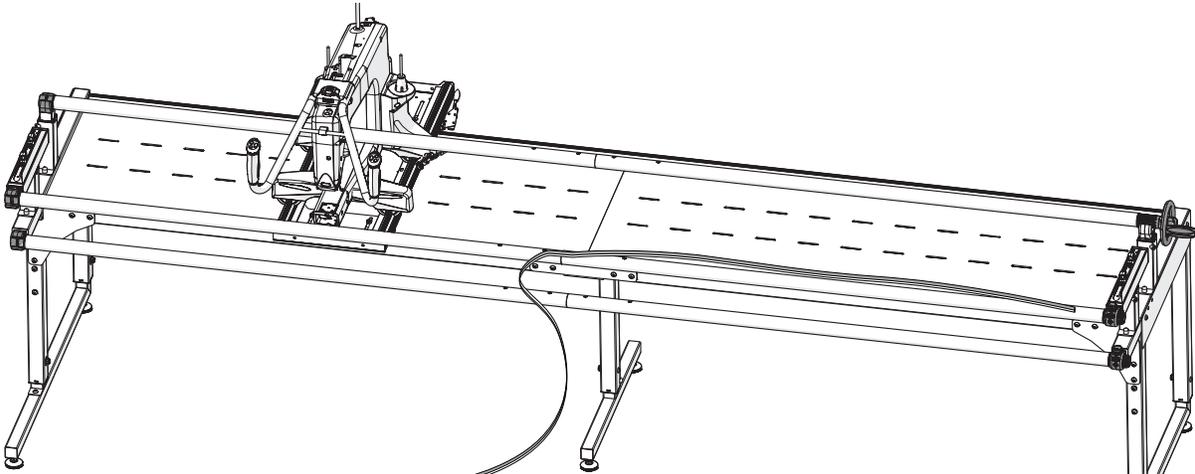
Full Frame Assembly

Installing the Velcro Tape (Continued)

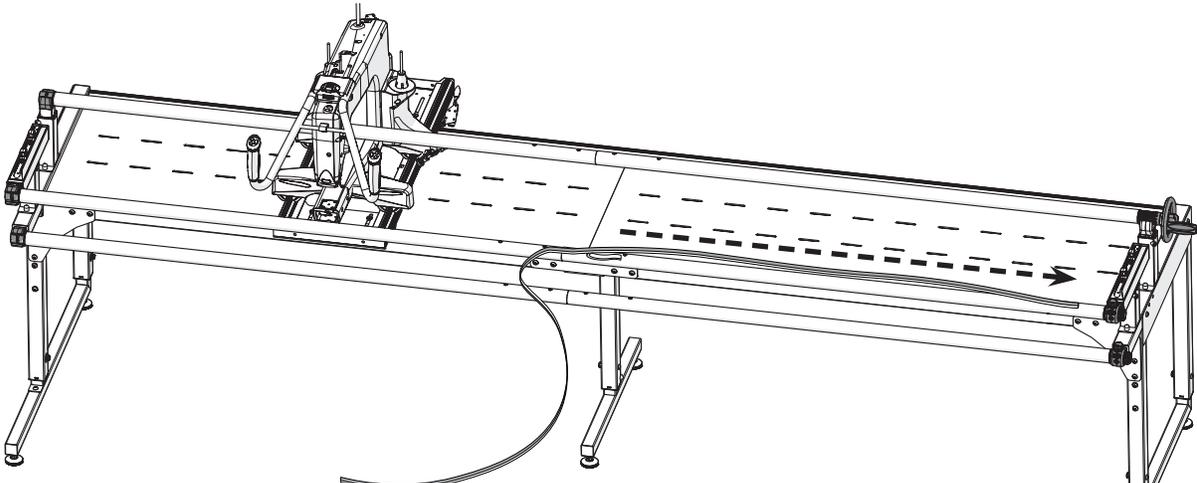
- 4 Remove some of the backing from the center of the tape and attach the tape to center of one of the rails.



- 5 Peel off some of the backing from the end of the tape. Use the holes on the rail to keep the tape straight, and attach it to the end of the rail.

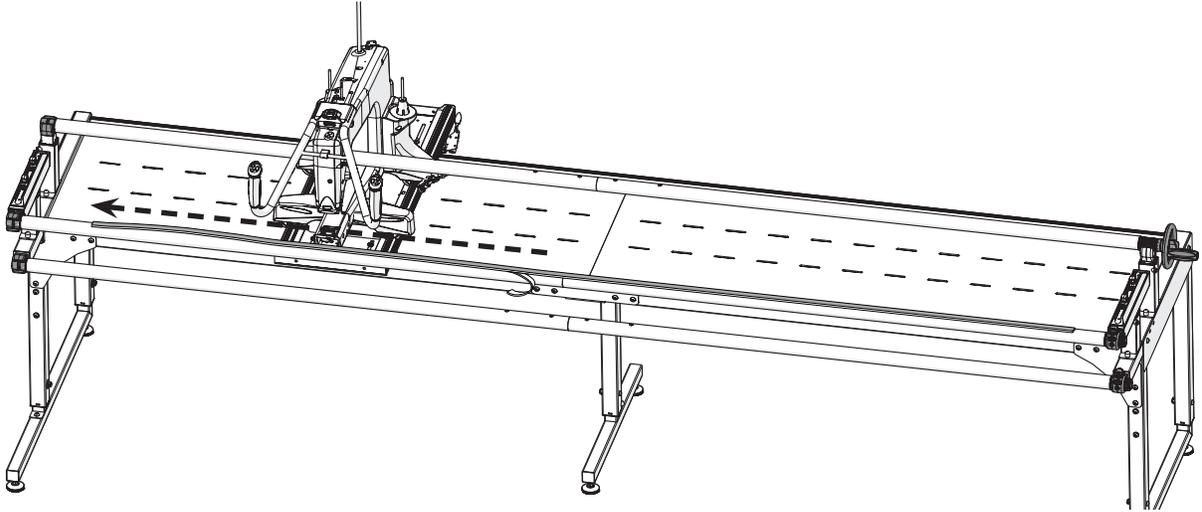


- 6 Start from the center and carefully peel away the backing of the tape, flattening as you go.

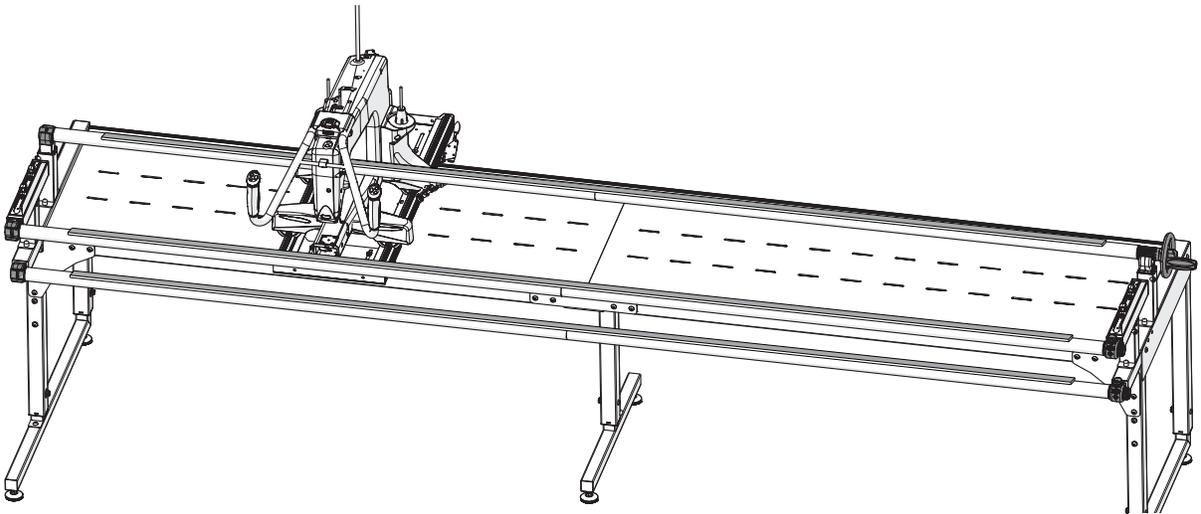


Installing the Velcro Tape (Continued)

- 7 Now do the same for the other side of the rail.



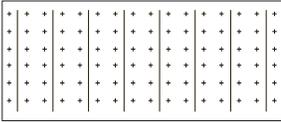
- 8 Repeat steps 3–7 for the other two rails.



Step 13 - Installing Leader Cloth

Parts & Tools Needed:

Leader Cloth Set



Tape Measure (not included)

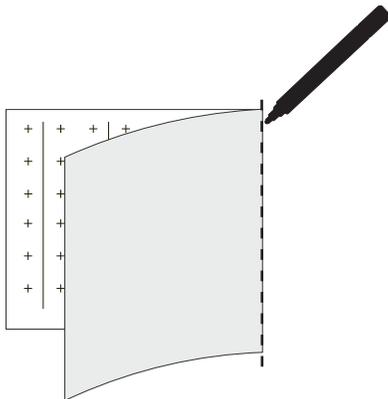


Marker (not included)

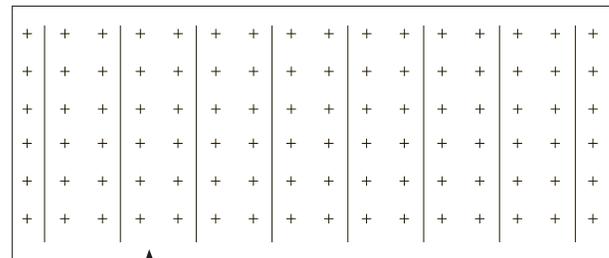
Instructions

The leader cloths attach the quilt to the frame while maximizing the quilt surface that the machine can reach.

- 1 **On all three leader cloths:** Fold each cloth in half and mark the center-mark on the front and back, top and bottom, with a marker.

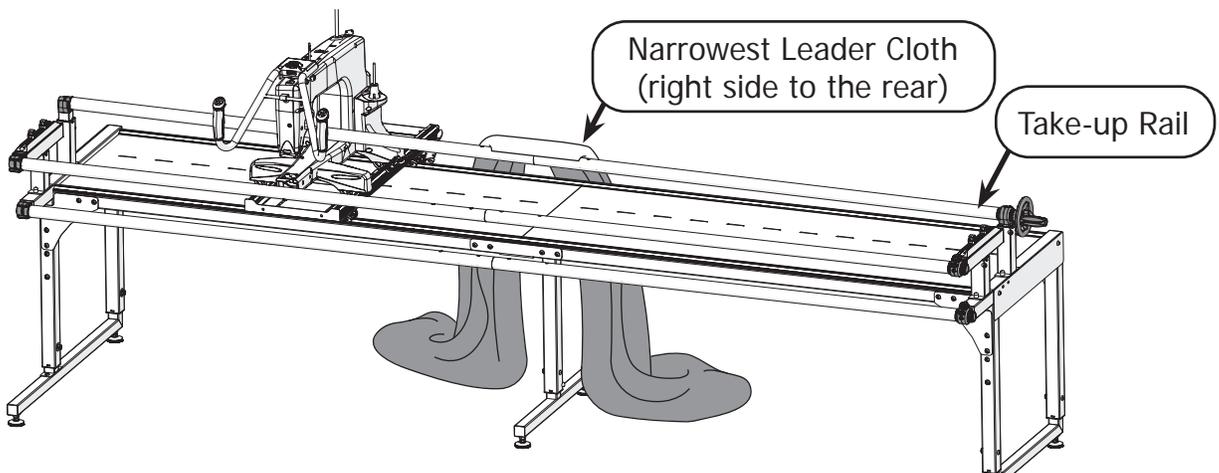


- 2 Locate the **narrowest leader cloth**.



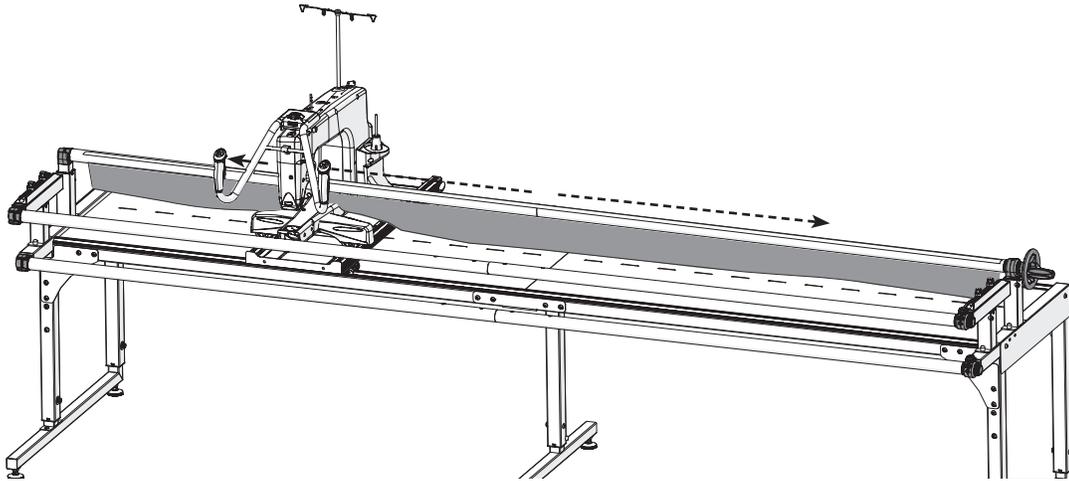
Narrowest Leader Cloth

- 3 Place the center of the **narrowest leader cloth** onto the Velcro tape in the center of the **take-up rail**, right side facing away from the frame.

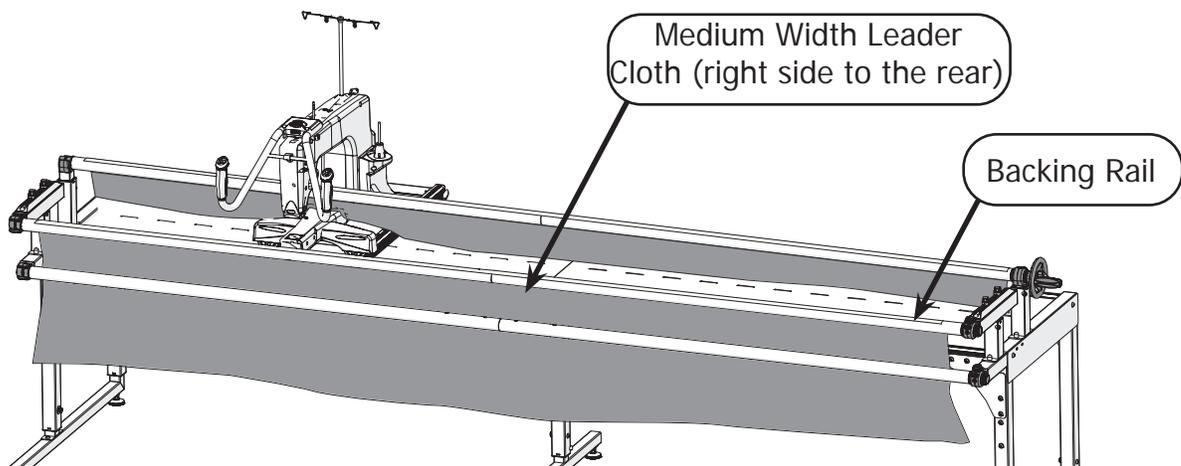


Installing the Leader Cloth (Continued)

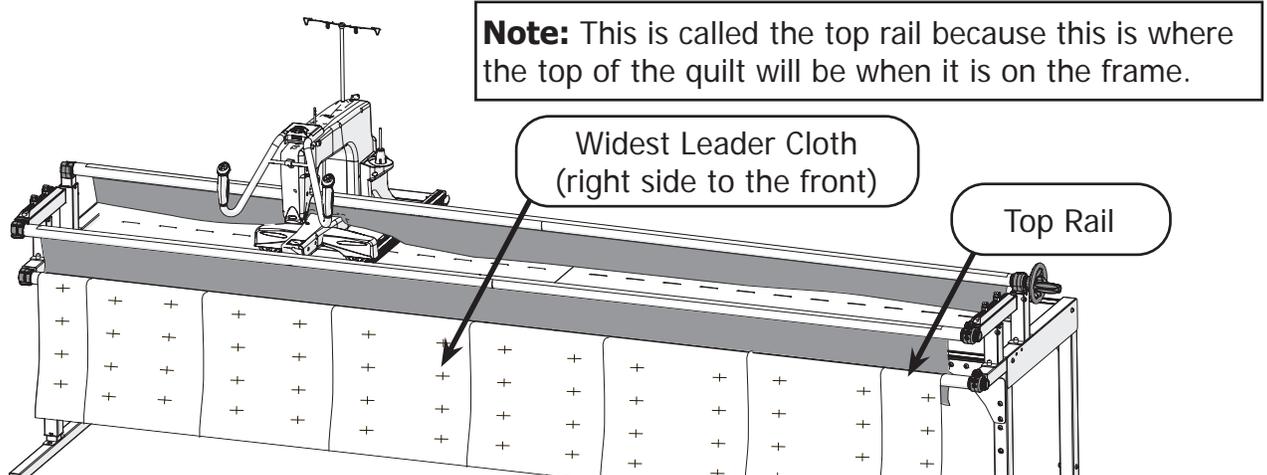
- 4 Moving from the center outward, smooth the top edge of the leader cloth across the Velcro.



- 5 Repeat steps 3–4 for the **medium width leader cloth** on the **backing rail**.

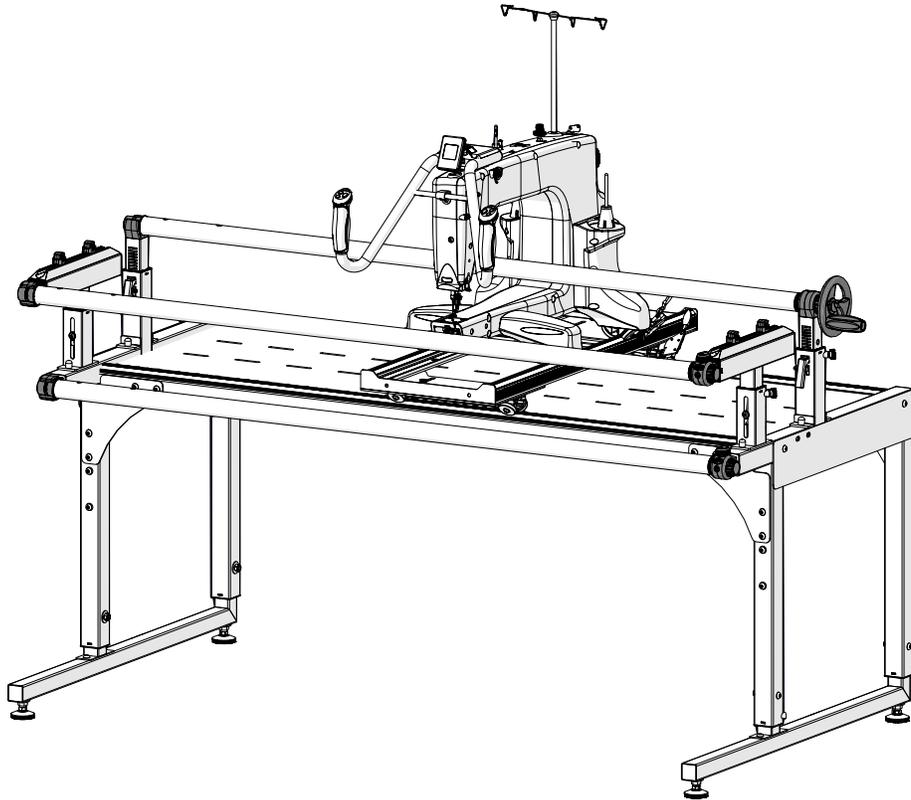


- 6 For the **widest leader cloth**, repeat steps 3–4 on the **top rail**, but drape the leader cloth over the front of the rail, right side facing the front.



Crib Frame Assembly

This section describes the steps for setting up the half-sized (crib) frame. For instructions on the full-size setup, see page 9.



Tip: For additional help, scan the QR code below with the camera on your iPhone to visit our online support videos!

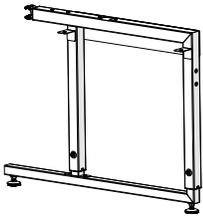


<https://www.graceframe.com/en/resources/support/videos>

Step 1 - Setting the Frame Height

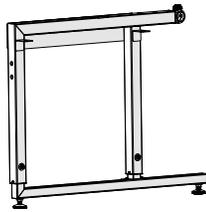
Parts & Tools Needed:

Left Leg



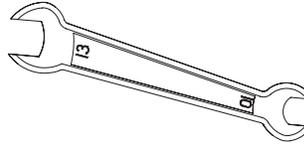
(Box 1)

Right Leg



(Box 1)

**Open-end Wrench
10 mm & 13 mm**



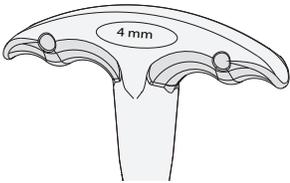
(Box 1: Inner Box)

Allen Wrench 5 mm



(Box 1: Inner Box)

**T-Handle Allen
Wrench 4 mm**

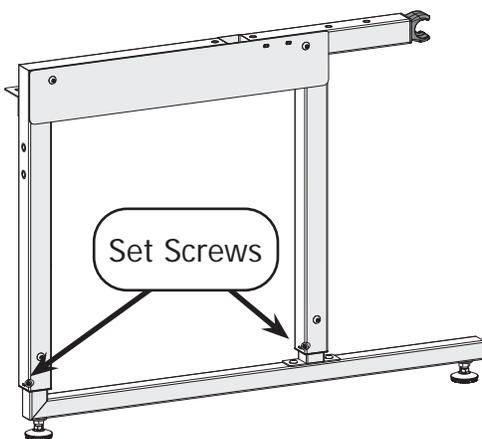


(Box 1: Inner Box)

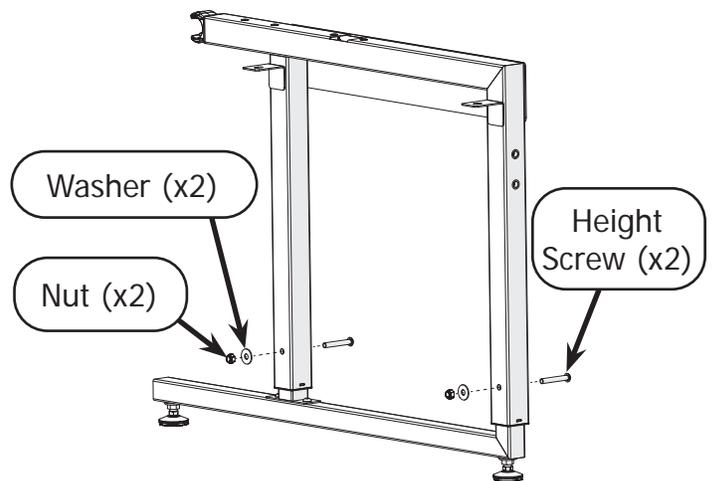
Instructions

The frame height is most easily adjusted prior to frame assembly. Please take the following steps:

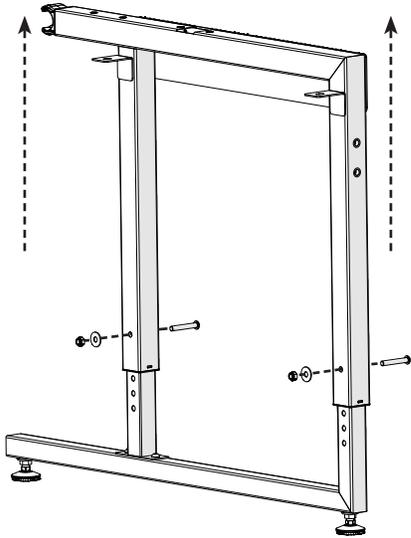
- 1 Loosen (do not remove) the **set screws** toward the base of each leg with the 4 mm Allen wrench.



- 2 Remove the **height screws, washer,** and **nut** with the 10 mm box-end wrench and 5 mm Allen wrench.

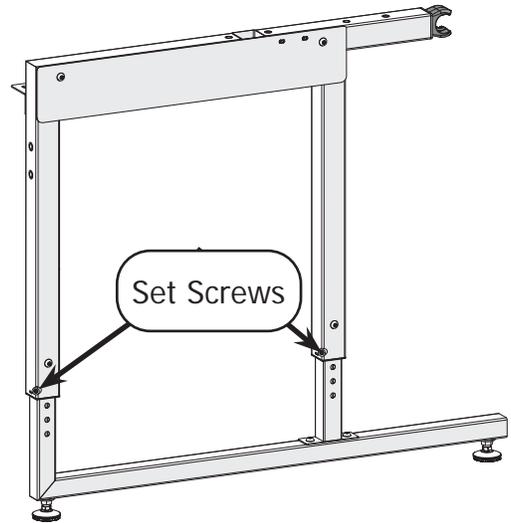


- 3 Raise the top of the leg until the leg is the desired height. Re-install the height screws, washer and nut.



Important: Set all the legs to the same hole.

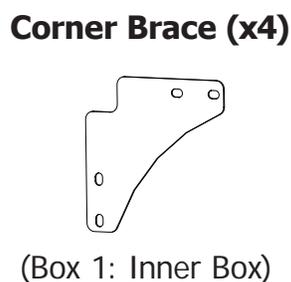
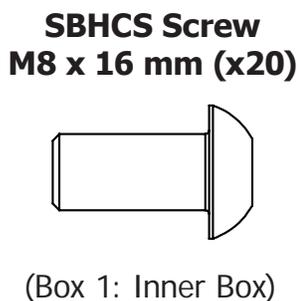
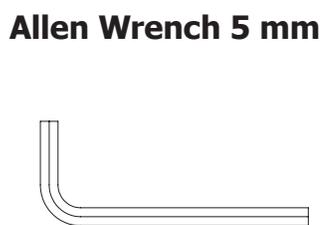
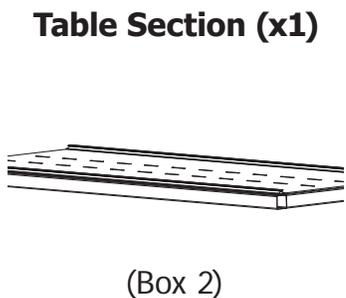
- 4 Re-tighten the **set screws** with the 4 mm Allen wrench. The middle leg has only one set screw.



Note: Final height may vary slightly after adjusting the leveling feet (see page 25).

Step 2 - Building the Frame Table

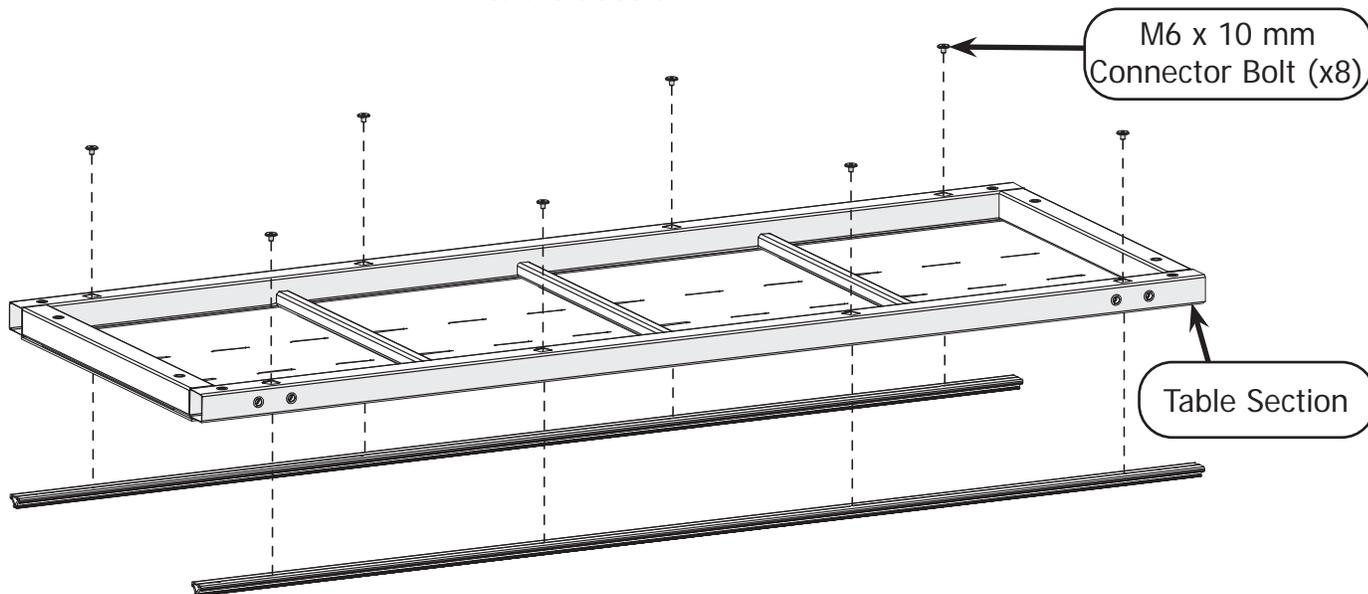
Parts & Tools Needed:



Instructions

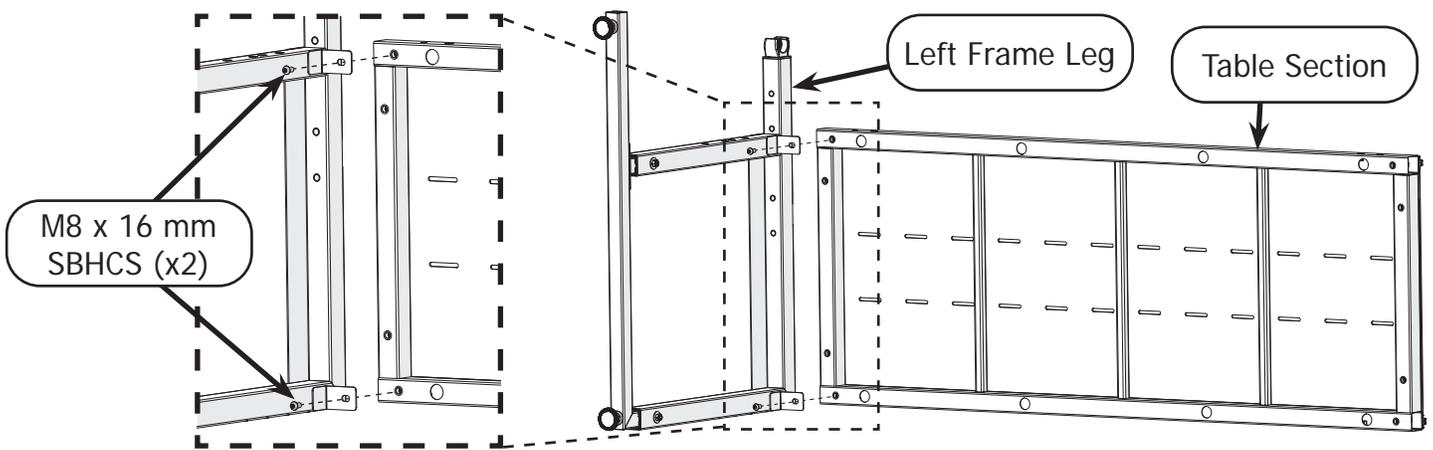
Attach a table section to the frame legs by taking the following steps:

- 1 Use the 4 mm T-handle Allen wrench to remove eight **M6 x 10 mm connector bolts** attaching the metal track extrusions to the **table section**.

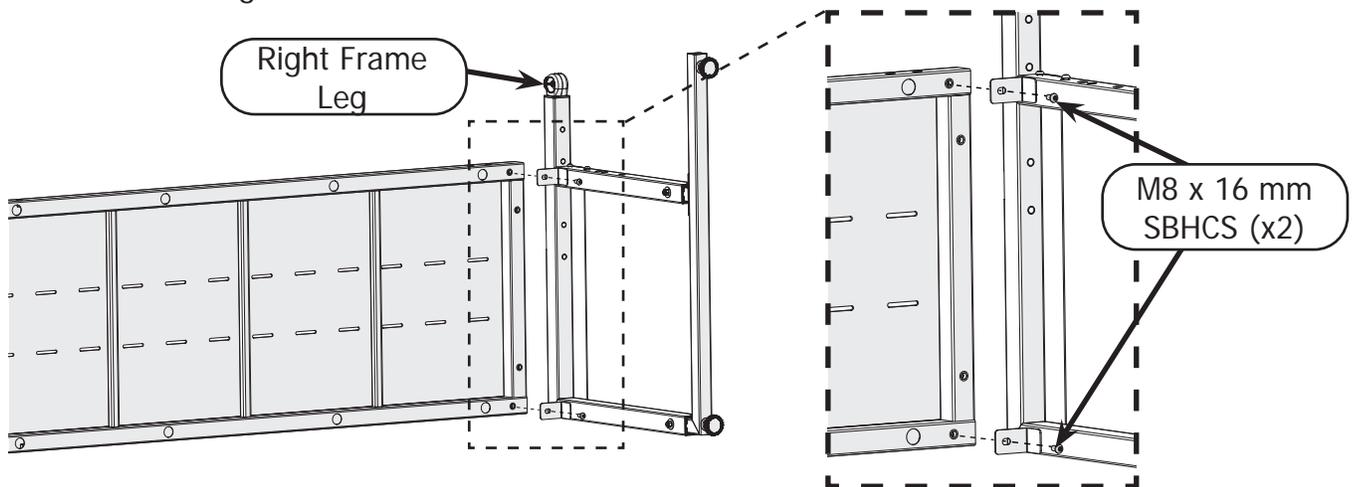


Building the Table (Continued)

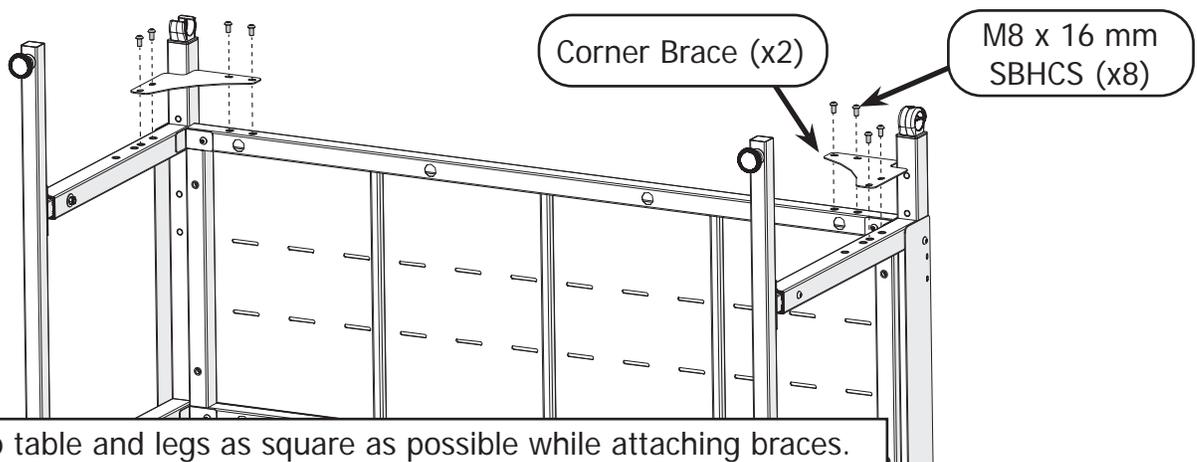
- 2 Use two **M8 x 16 mm SBHCS screws** to attach the **left frame leg** to the underside of the **table section**. Tighten with the 5 mm Allen wrench.



- 3 Use two **M8 x 16 mm SBHCS screws** to attach the **right frame leg** to the other side of the table section. Tighten with the 5 mm Allen wrench.



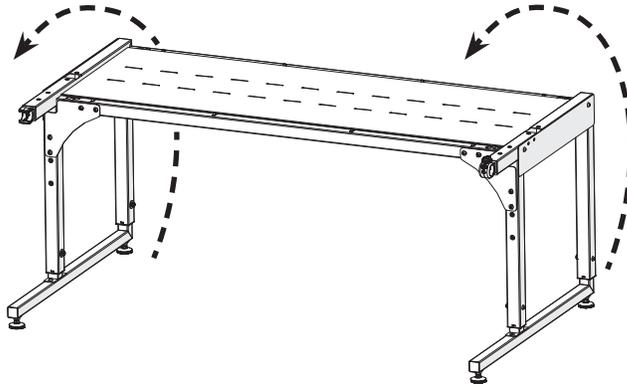
- 4 Install the corner braces onto the front of the left and right frame legs with eight **M8 x 16 mm SBHCS screws** and the 5 mm Allen wrench.



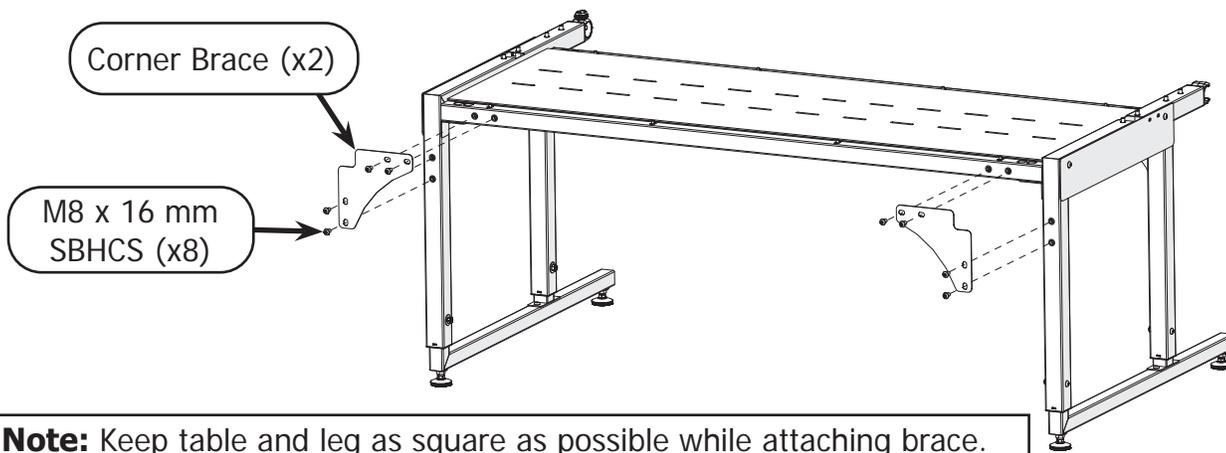
Note: Keep table and legs as square as possible while attaching braces.

Building the Frame Table (Continued)

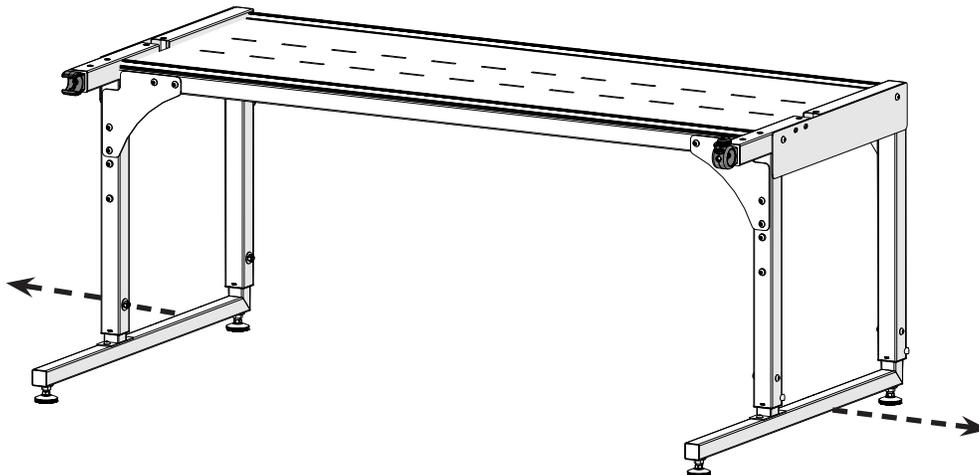
- 5 Carefully lift the table to a standing position.



- 6 Install the **corner braces** onto the rear of the left and right frame legs with eight **M8 x 16 mm SBHCS screws** and the 5 mm Allen wrench.



- 7 Pull the bottom of the left and right legs out, away from the center, to help square up the frame.



Step 3 - Installing the Tracks

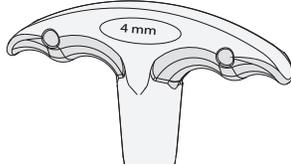
Parts & Tools Needed:

Short Plastic Track (x4)



(Box 2)

T-Handle Allen Wrench 4 mm



Bottom Carriage



(Box 4)

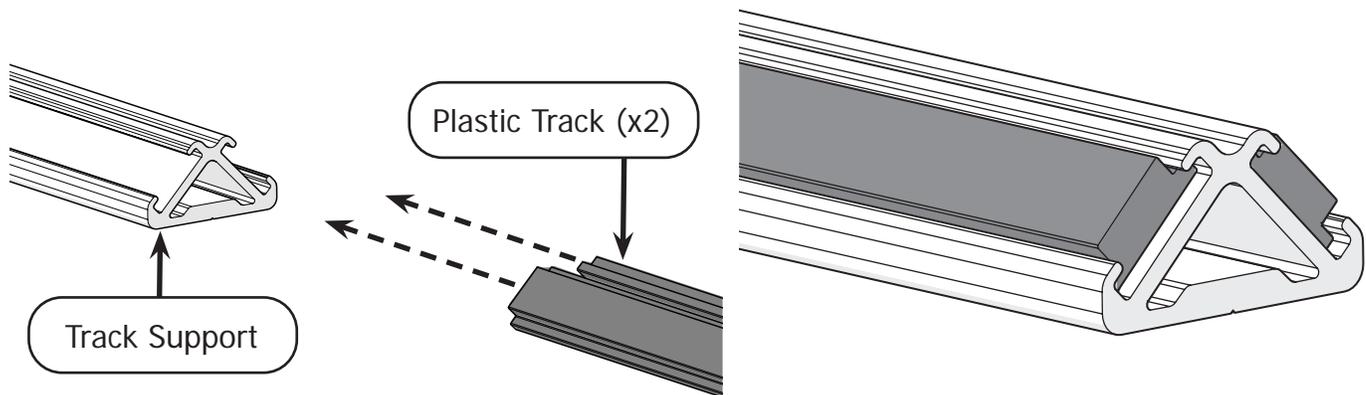
Track Supports (x2)
(Removed from table sections in Step 2)

Connector Bolts
(Removed from table sections in Step 2)

Instructions

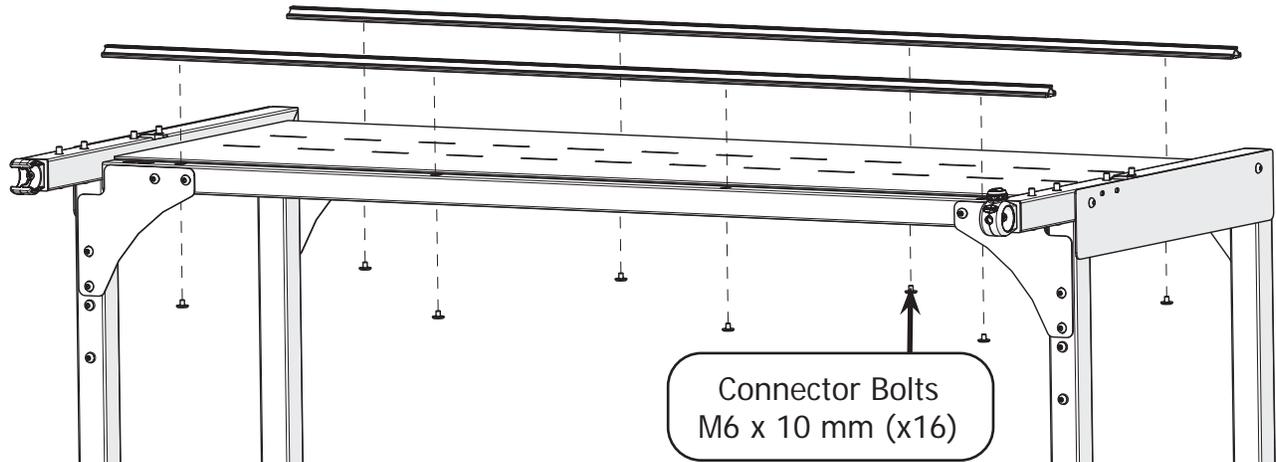
The frame tracks allow the quilting machine to move across the frame.

- 1 Thread two of the **plastic tracks** into each of the **track supports**.

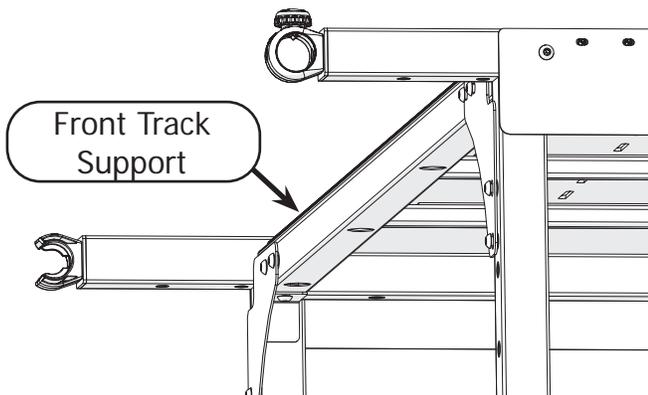


Installing the Tracks(Continued)

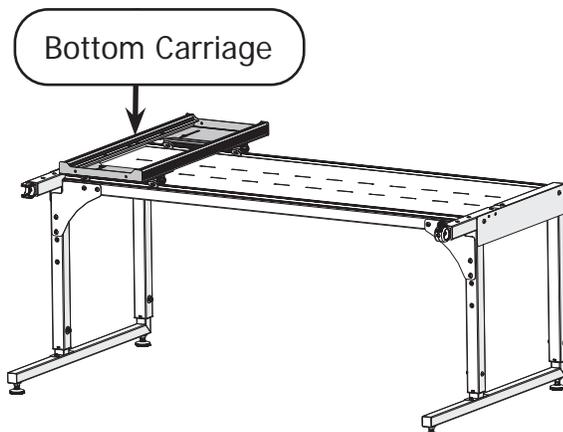
- 2 Loosely connect the track supports to the frame with the **M6 x 10 mm connector bolts** (removed in "Step 2 - Building the Frame Table" on page 43) and the 4 mm Allen wrench.



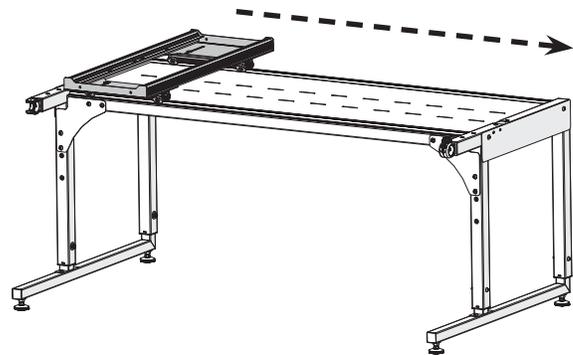
- 3 Line up the **front track support** as close to the edge of the frame as possible and tighten the connector bolts.



- 4 Carefully place the **bottom carriage** onto the frame.



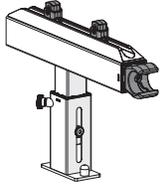
- 5 Slowly slide the carriage from one side of the frame to the other. Tighten each of the connector bolts in the back as the bottom carriage passes over them.



Step 4 - Assembling the Rail Supports

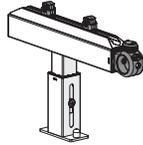
Parts & Tools Needed:

**Front Rail Arm
(Non-Ratcheting)**



(Box 1: Inner Box)

**Front Rail Arm
(Ratcheting)**



(Box 1: Inner Box)

**Take-Up Rail Arm
(Non-Ratcheting)**



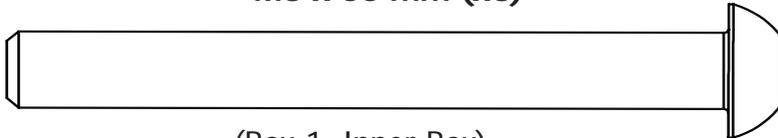
(Box 1: Inner Box)

**Take-Up Rail Arm
(Ratcheting)**



(Box 1: Inner Box)

**SBHCS Screw
M8 x 55 mm (x8)**



(Box 1: Inner Box)

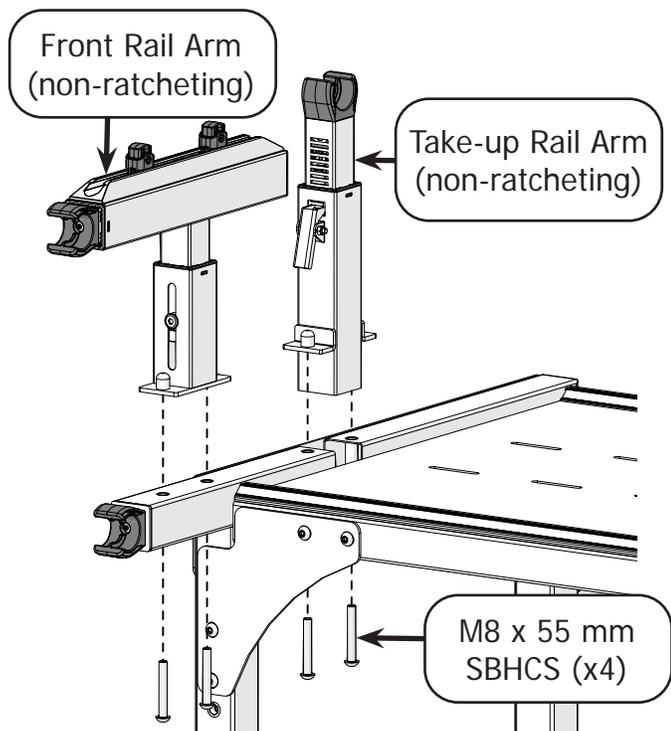
Allen Wrench 5 mm



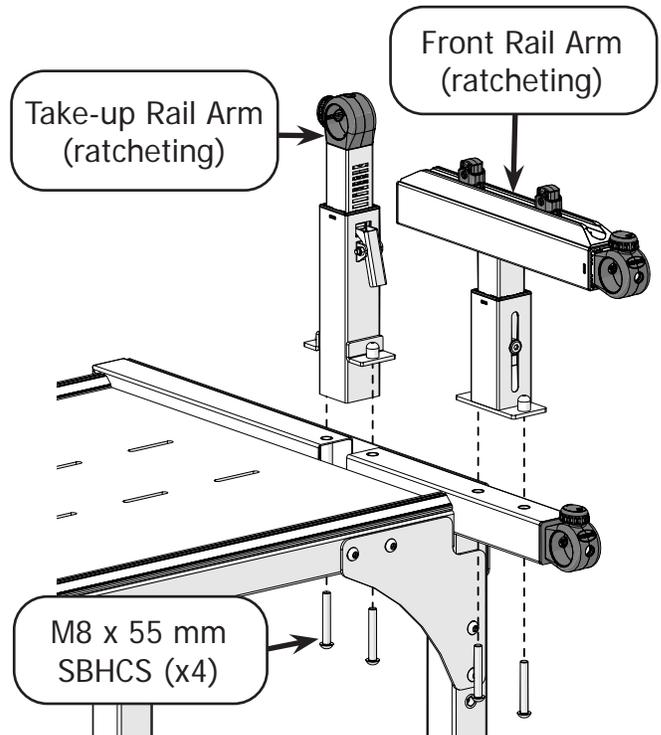
Instructions

The rails hold and position the quilt on the frame.

- 1 Install the **non-ratcheting front rail arm and take-up rail arm** on the left side of the frame using four **M8 x 55 mm SBHCS screws**.



- 2 Install the **ratcheting front rail arm and take-up rail arm** on the right side of the frame using four **M8 x 55 mm SBHCS screws**.



Step 5 - Installing the Bottom Carriage

Parts & Tools Needed:

Bottom Carriage

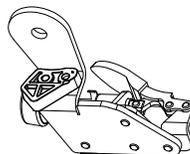


(Box 4)

T-Handle Allen Wrench 4 mm

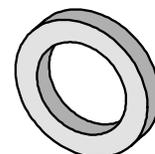


Channel Lock (x1)



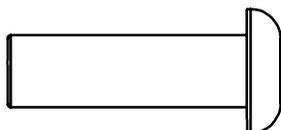
(Box 4)

Channel Lock Washer (x1)



(Box 4)

SBHCS Screw M6 x 20 mm (x1)

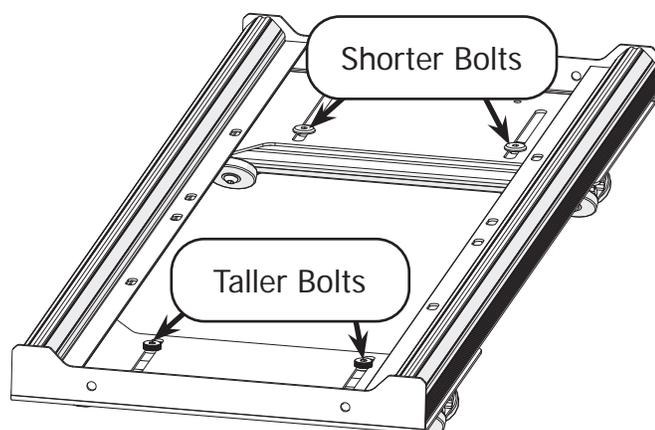


(Box 4)

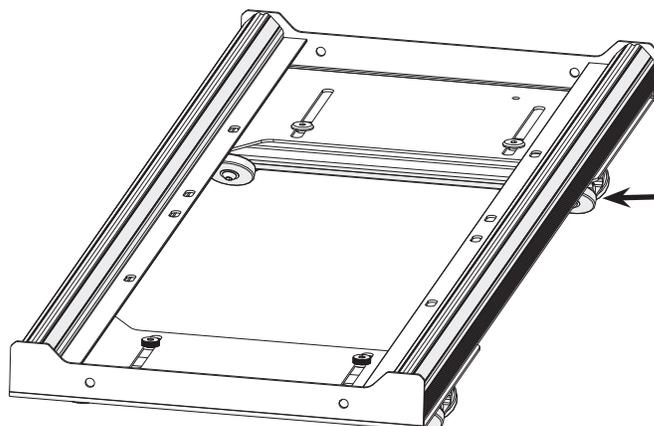
Instructions

Install a channel lock on the bottom carriage before placing the bottom carriage onto the frame. The channel locks assist with stitching straight lines.

- 1 Find the front of the bottom carriage. The bolts at the front of the carriage have taller heads.



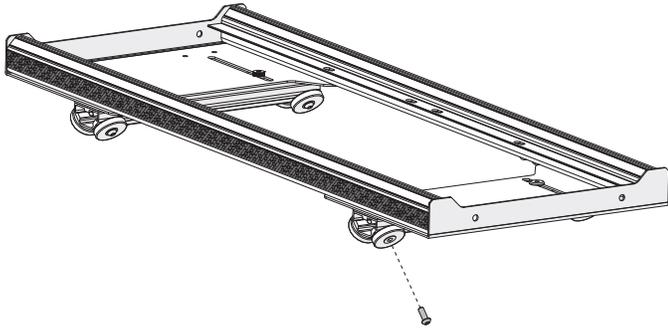
- 2 Locate the right-rear bottom carriage wheels.



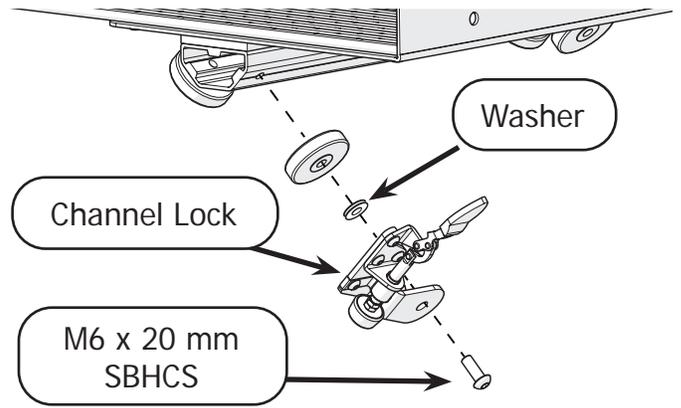
Crib Frame Assembly

Installing the Bottom Carriage (Continued)

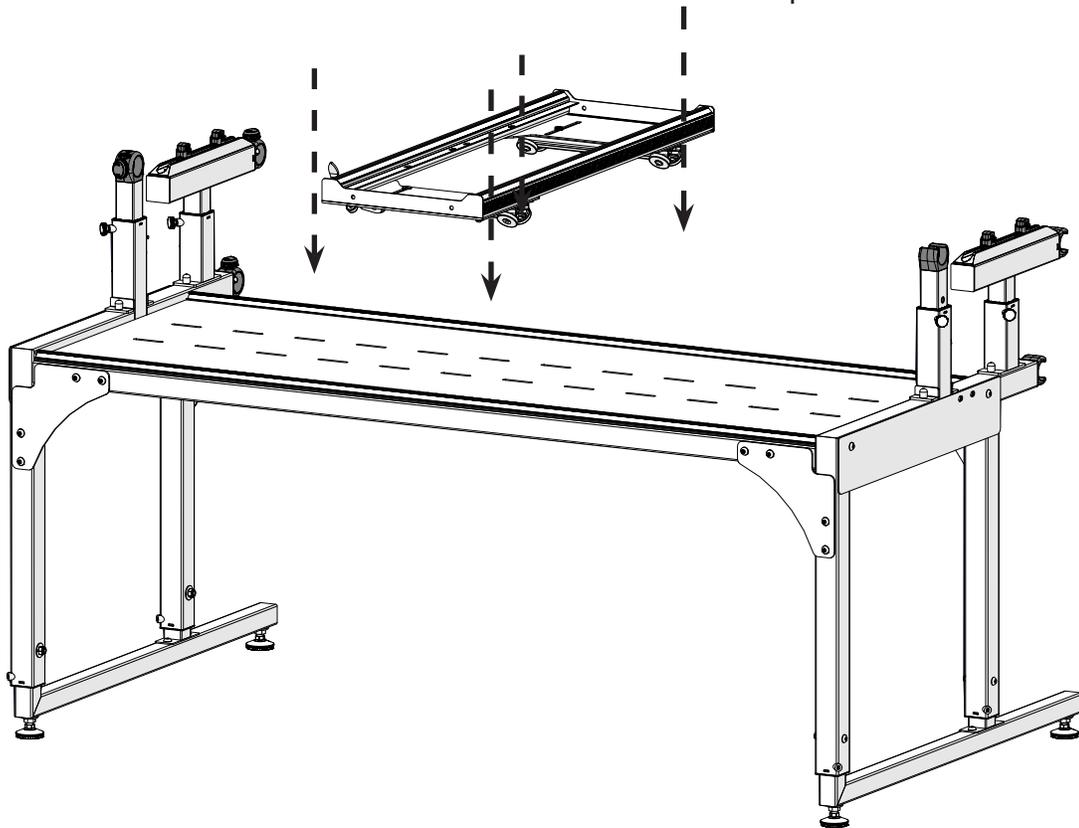
- 3 Remove the screw attaching the outside, right-rear wheel to the bottom carriage using the 4 mm Allen wrench.



- 4 Screw the **channel lock** and **washer** onto the right-rear bottom carriage wheel with an **M6 x 20 mm SBHCS** and 4 mm Allen wrench.



- 5 With the channel lock in the open position, place the bottom carriage onto the frame so the wheels slide over the frame track. The channel lock should be positioned on the rear track.



- 6 **STOP HERE** if you are using a top plate and home sewing machine. Please follow the instructions in your top plate manual. When finished, skip to "Step 7 - Leveling the Frame" on page 53. If you are using a quilting machine, continue on to "Step 6 - Installing the Quilting Machine" on page 51.

Step 6 - Installing the Quilting Machine

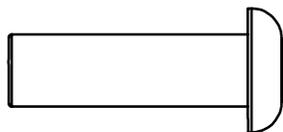
If using a **top carriage** and **home sewing machine**, please follow the instructions in your top carriage manual and then go to page 53.

Parts & Tools Needed:

T-Handle Allen Wrench 4 mm

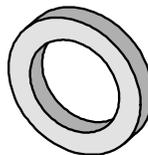


SBHCS Screw M6 x 20 mm (x1)



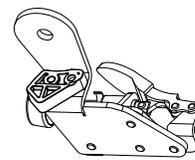
(Box 4)

Channel Lock Washer (x1)



(Box 4)

Channel Lock (x1)

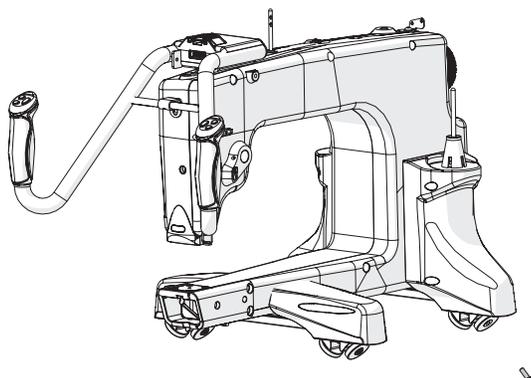


(Box 4)

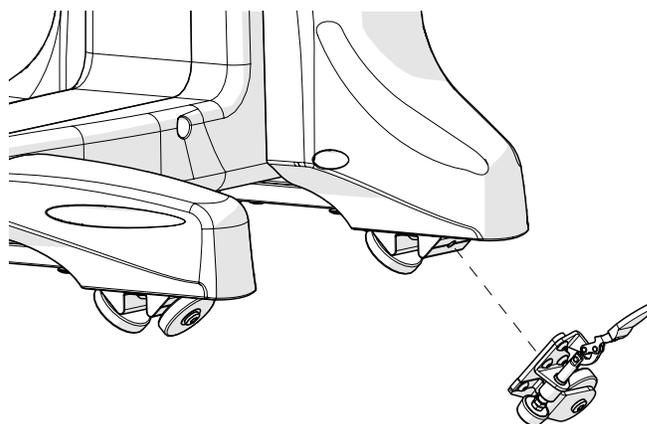
Instructions

A channel lock should be installed on your quilting machine or top carriage before it is placed on the frame. The channel locks assist with quilting straight lines.

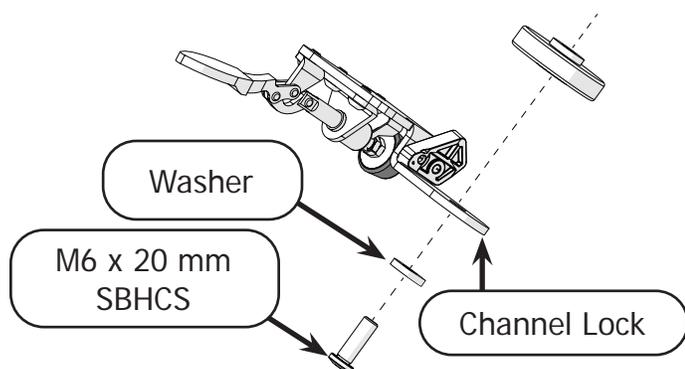
- 1 Remove the rear wheel on the right side of your quilting machine or top carriage with the 4 mm Allen wrench.



- 3 Use the 4 mm Allen wrench to screw the M6 x 20 mm SBHCS into the machine.



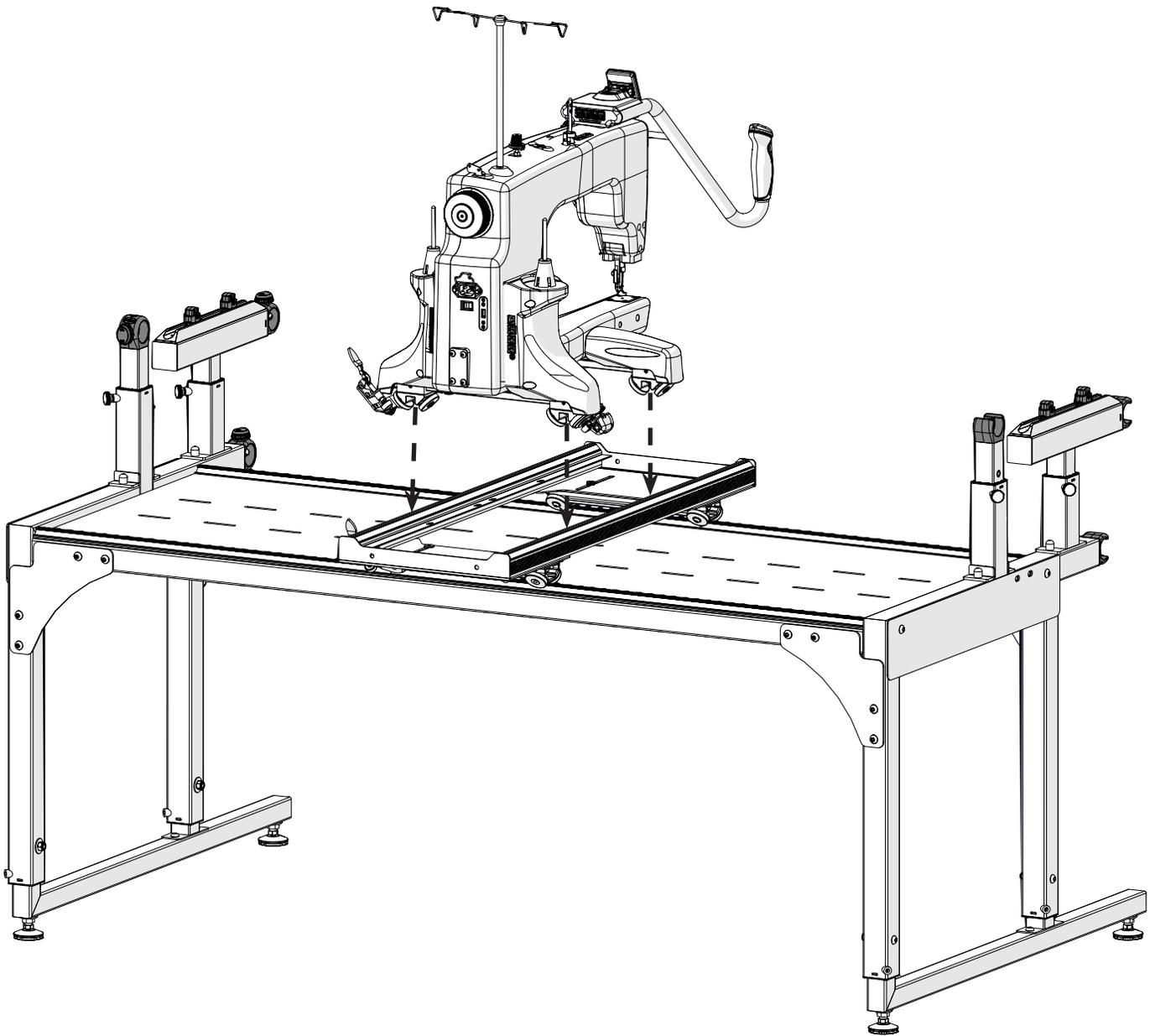
- 2 Place the **washer**, **channel lock** and machine wheel onto the **M6 x 20 mm SBHCS screw**.



- 4 **STOP HERE.** Follow the instructions in your machine manual to fully assemble the machine. Continue with frame instructions only after machine is completed.

Installing the Quilting Machine (Continued)

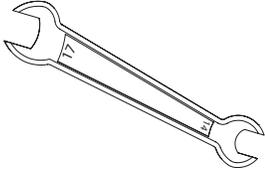
- 5 With the channel lock in the open position, carefully place machine onto the bottom carriage, if not already done.



Step 7 - Leveling the Frame

Parts & Tools Needed:

Open-end Wrench
14 & 17 mm

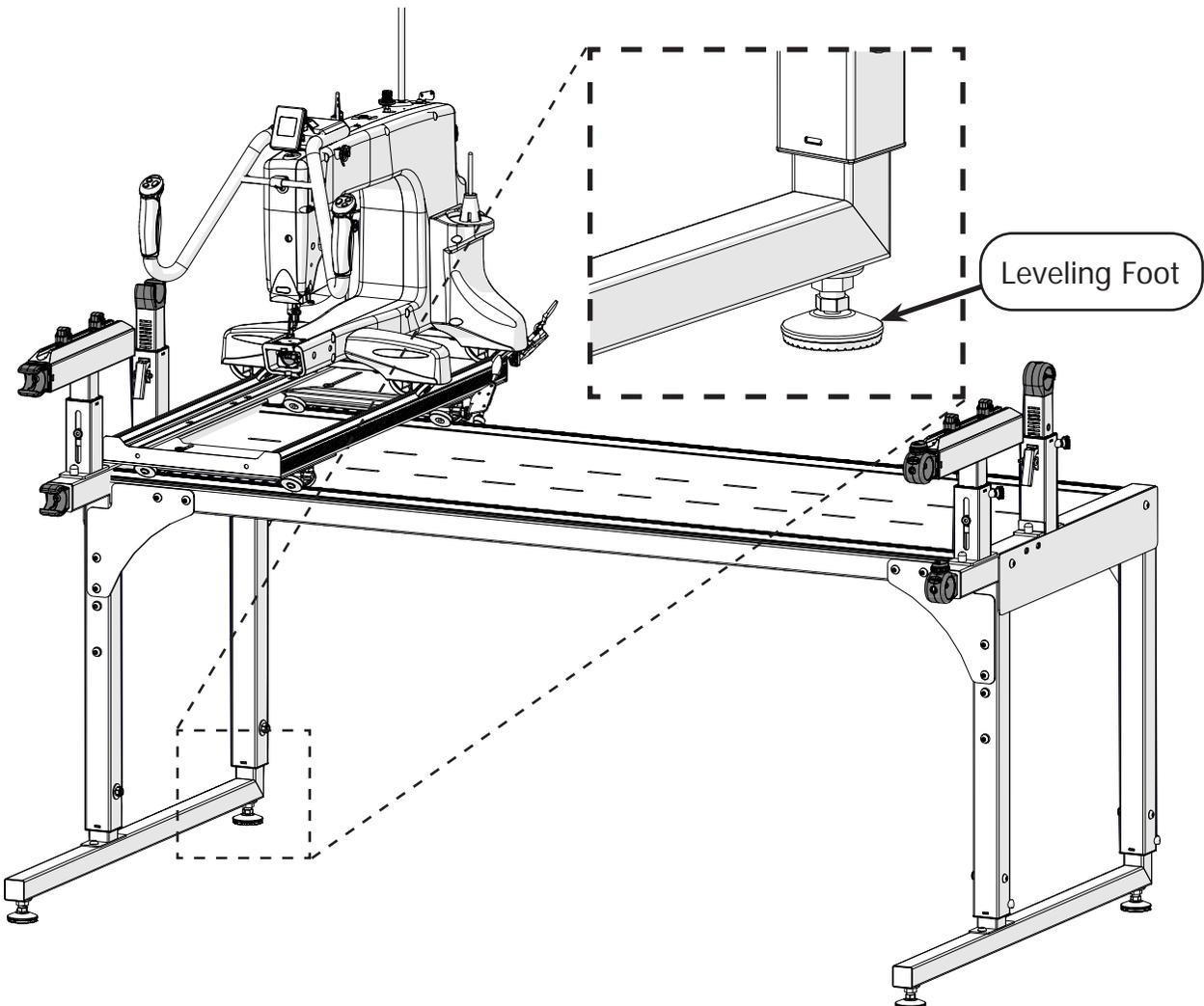


(Box 1: Inner Box)

Instructions

Leveling the frame ensures the machine doesn't pull away when stitching.

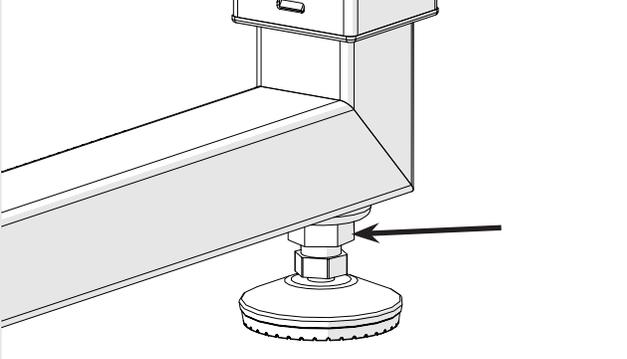
- 1 Move the machine and bottom carriage to one corner of the frame, and release. If the machine rolls away from the corner, use the 14 & 17 mm Open-end wrench to adjust the **leveling foot** at the bottom of the leg.



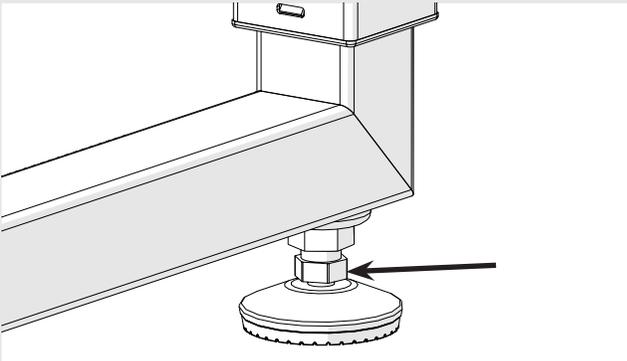
Leveling the Frame (Continued)

Leveling Foot Adjustment

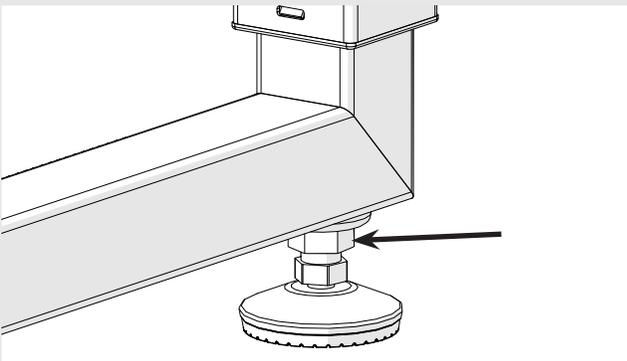
- a Loosen the top nut on the leveling foot with the 17 mm Open-end wrench.



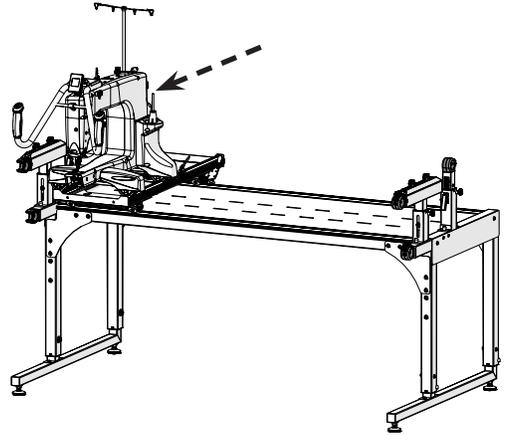
- b Turn the bottom nut with the 14 mm Open-end wrench until the desired height is set.



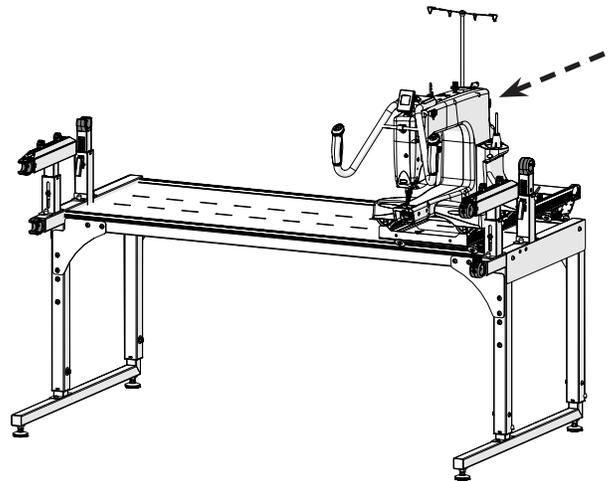
- c Tighten the top nut with the 17 mm Open-end wrench until it is firm against the frame leg.



- 2 Test the next corner of the frame, and adjust the leveling foot underneath if needed.



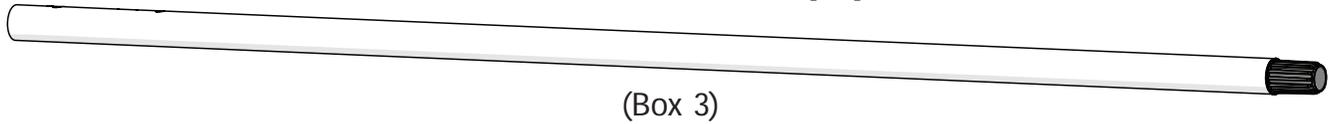
- 3 Test the other two corners.



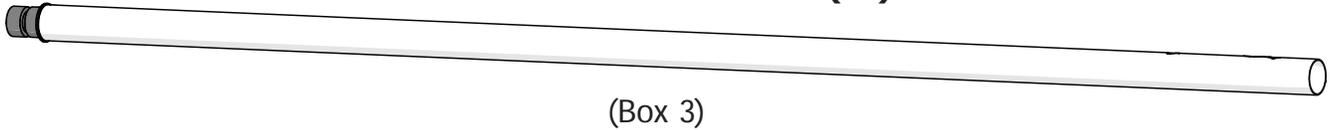
Step 8 - Installing the Rails

Parts & Tools Needed:

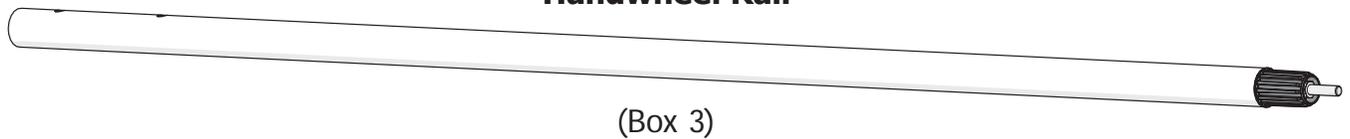
Ratchet Rail Section (x2)



Non-ratchet Rail Section (x3)



Handwheel Rail



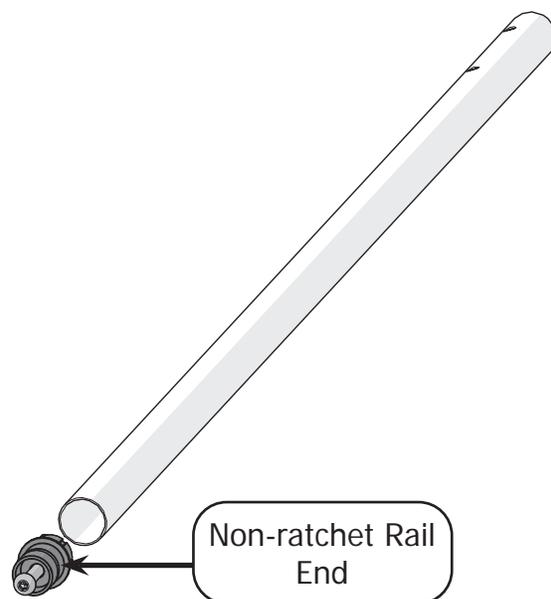
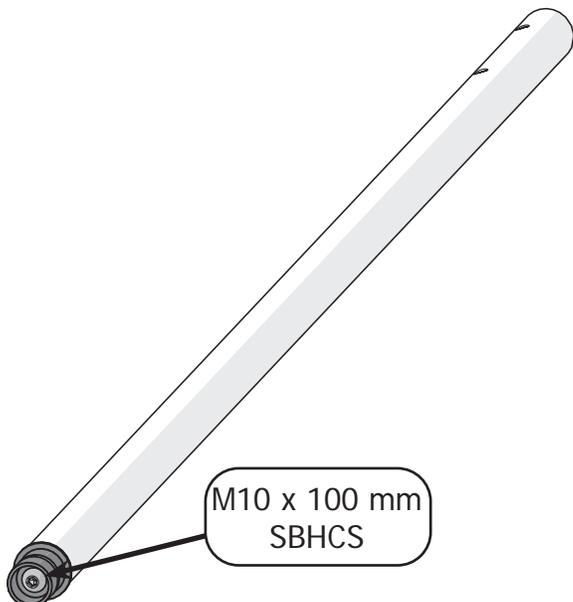
Allen Wrench 6 mm



Instructions

The rails hold and position the quilt on the frame.

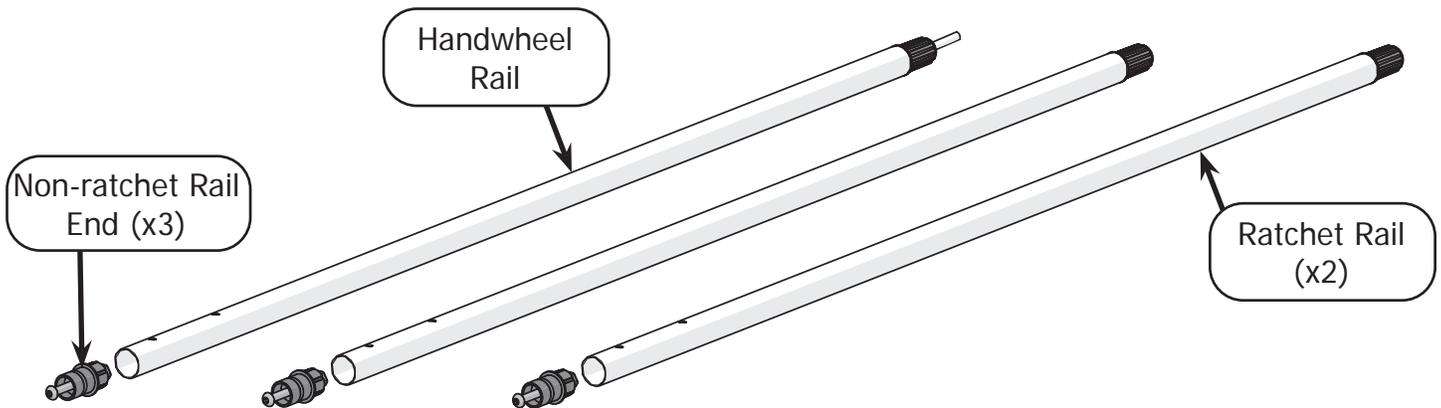
- 1 **On all non-ratchet rail sections:** Use the 6 mm Allen wrench to loosen the **M10 x 100 mm SBHCS** screw.
- 2 Remove the **non-ratchet rail end** from the metal tube.



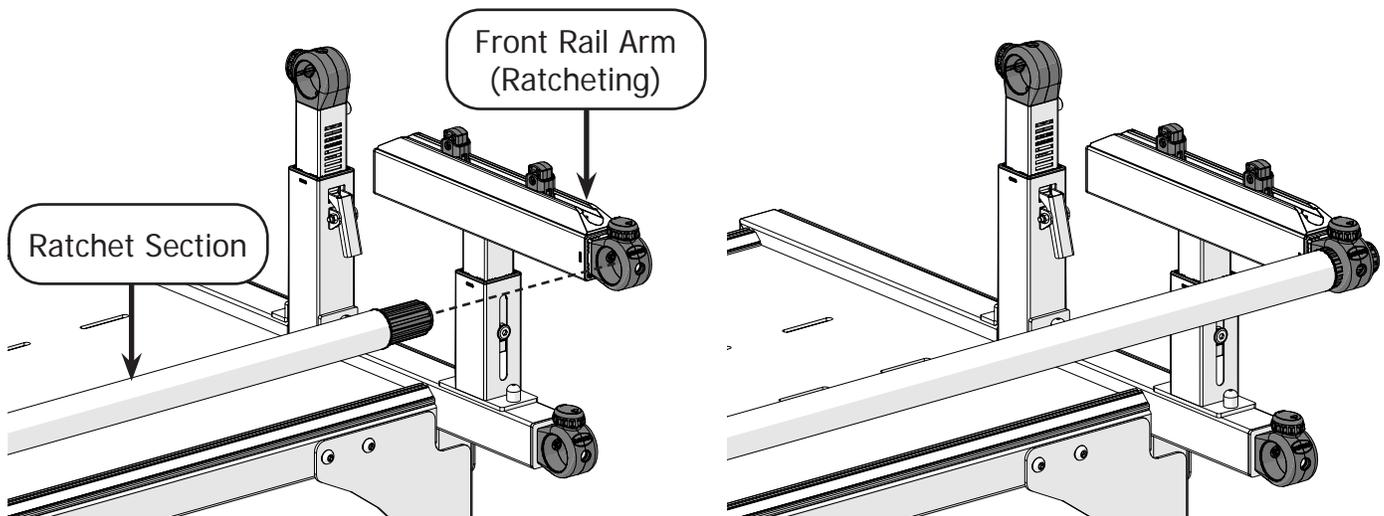
Crib Frame Assembly

Installing the Rails (Continued)

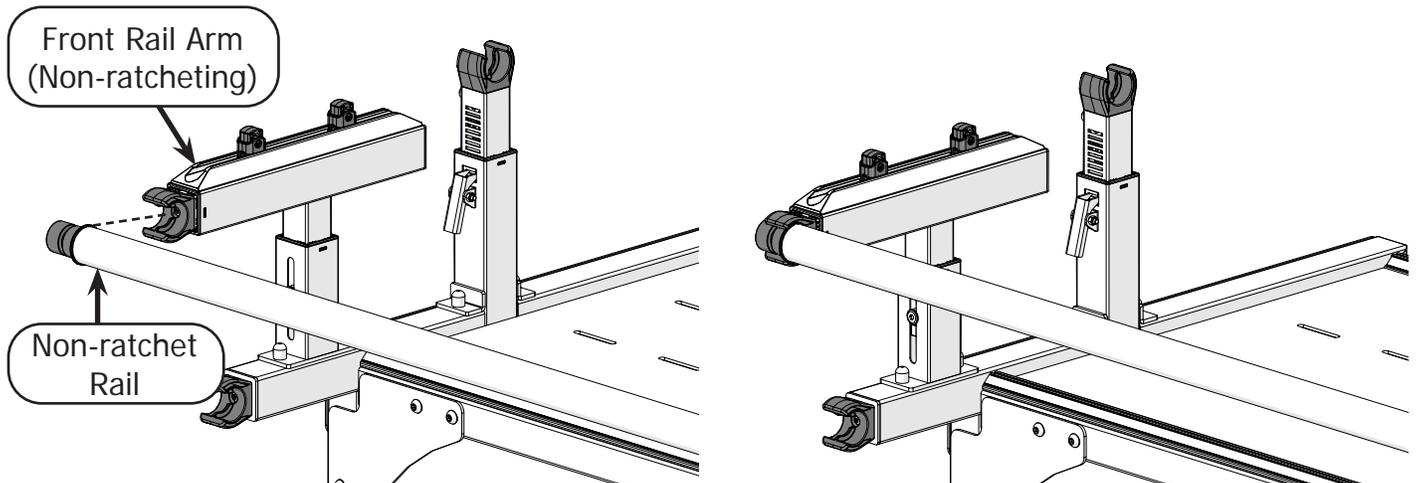
- 3 Use the 6 mm Allen wrench to screw the **non-ratchet rail ends** to the free ends of the **ratchet rails** and the **handwheel rail**.



- 4 Insert one of the rail's **ratchet rail** end into the **front rail arm (ratcheting side)**.

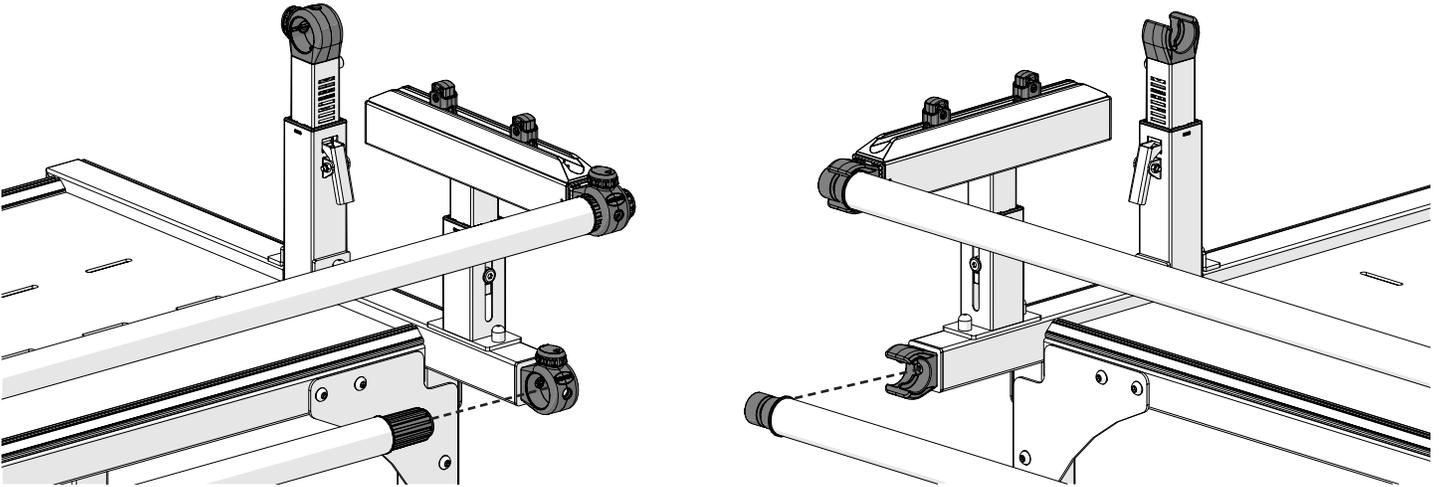


- 5 Press the other end of the rail (the **non-ratchet rail** side) into the **front rail arm (non-ratcheting side)**.

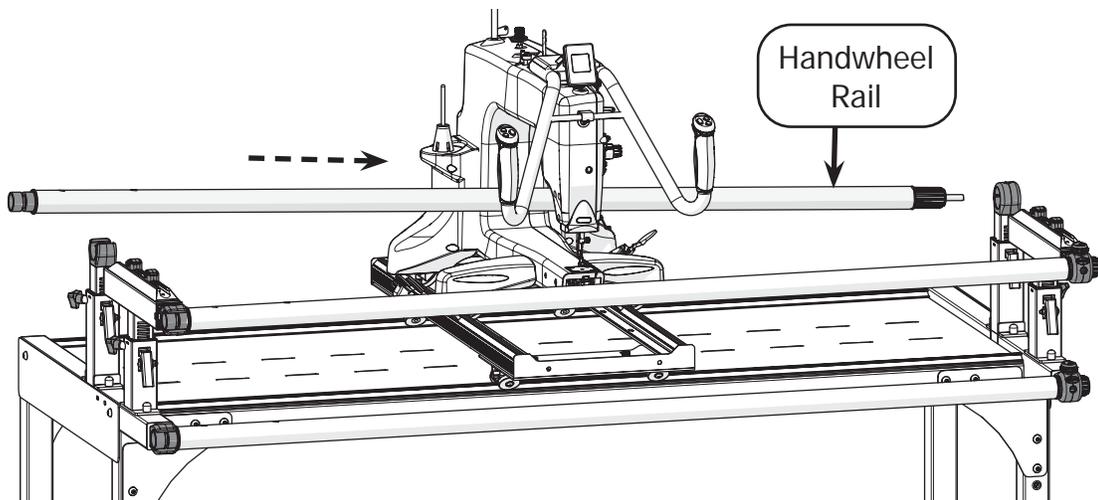


Installing the Rails (Continued)

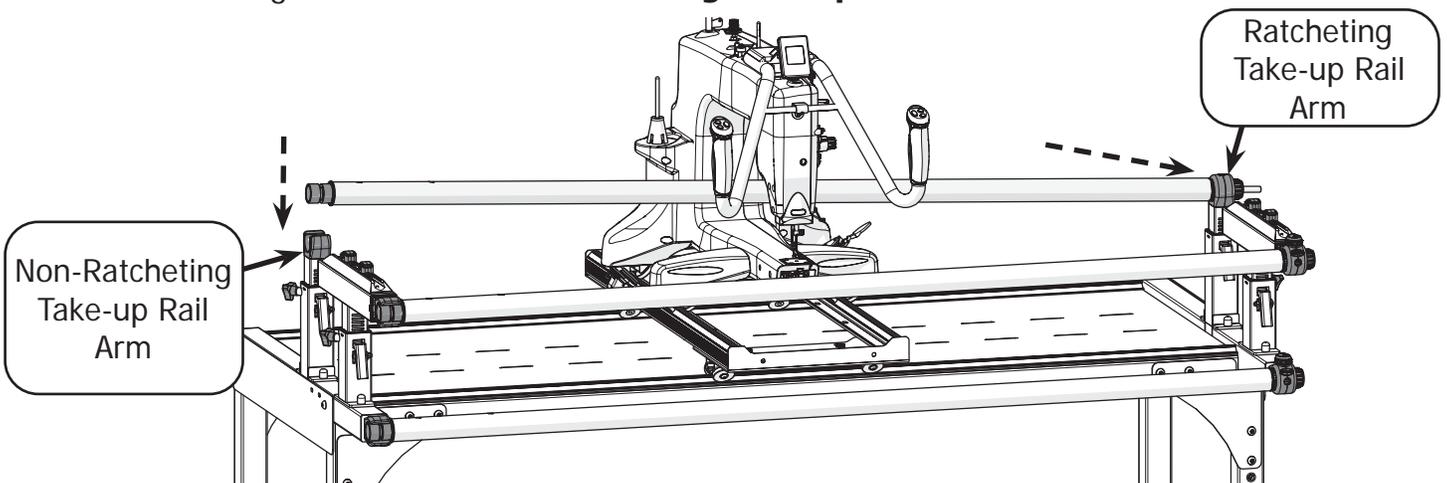
- 6 Repeat steps 4–5 for the bottom rail.



- 7 Insert the **handwheel rail** through the throat of the machine, handwheel side first.



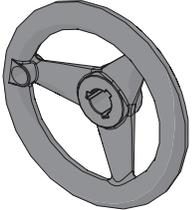
- 8 Place the ratcheting side of the rail into the **ratcheting take-up rail arm**, and then press the non-ratcheting side into the **non-ratcheting take-up rail arm**.



Step 9 - Assembling the Handwheel

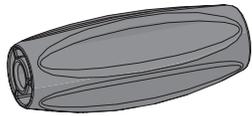
Parts & Tools Needed:

Handwheel



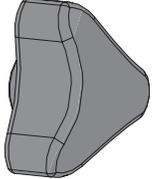
(Box 1: Inner Box)

Handwheel Knob



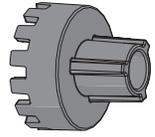
(Box 1: Inner Box)

Triangular Knob



(Box 1: Inner Box)

Handwheel Coupler



(Box 1: Inner Box)

Shoulder Bolt M8



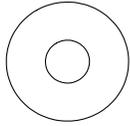
(Box 1: Inner Box)

Allen Wrench 6 mm



(Box 1: Inner Box)

M10 Washer

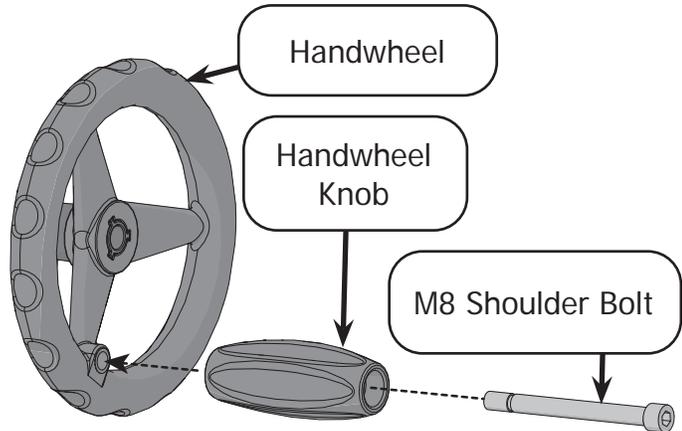


(Box 1: Inner Box)

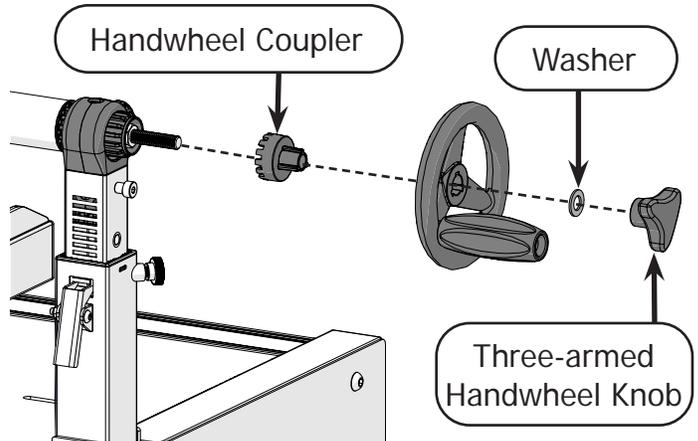
Instructions

The handwheel allows you to easily roll your quilt up as you sew.

- 1 Use the **M8 shoulder bolt** and 6 mm Allen wrench to attach the **handwheel knob** to the **handwheel**.



- 2 Screw the **handwheel coupler**, handwheel, **washer**, and **three-armed handwheel knob** to the handwheel rail.



Step 10 - Installing the Bungee Clamps

Parts & Tools Needed:

Bungee Clamp (x4)

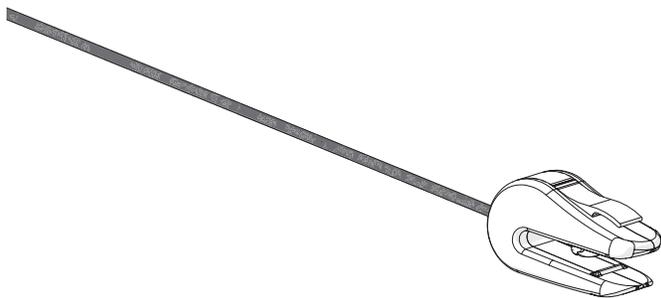
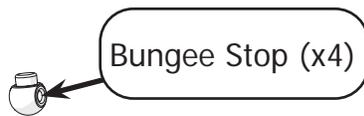


(Box 1: Inner Box)

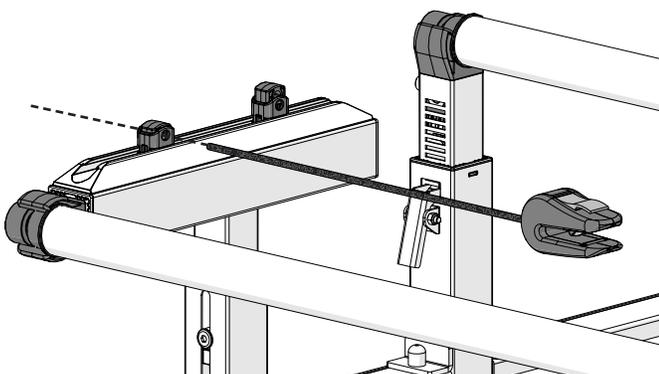
Instructions

The bungee clamps hold the edges of the quilt up and provide additional tension to the quilt surface. Take the following steps:

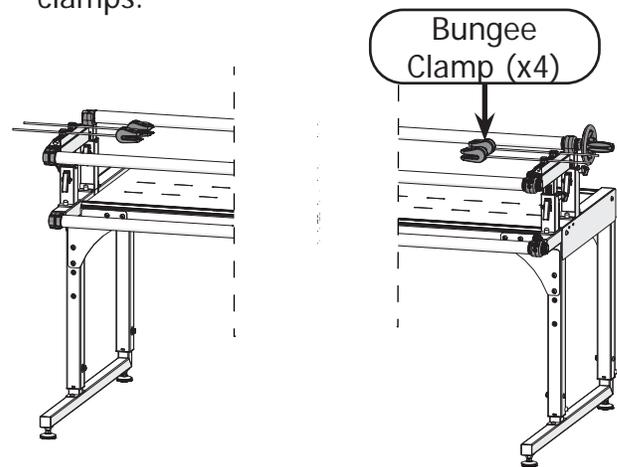
- 1 **Note:** Your bungee clamps may have come with **bungee stops**. These will not be used.



- 2 Press down the bungee stop in the front rail arm and thread the bungee cable through. Release to tighten.



- 3 Repeat step 2 to install all four bungee clamps.



Step 11 - Setting the Rail Distances

Parts & Tools Needed:

**T-Handle Allen
Wrench 4 mm**

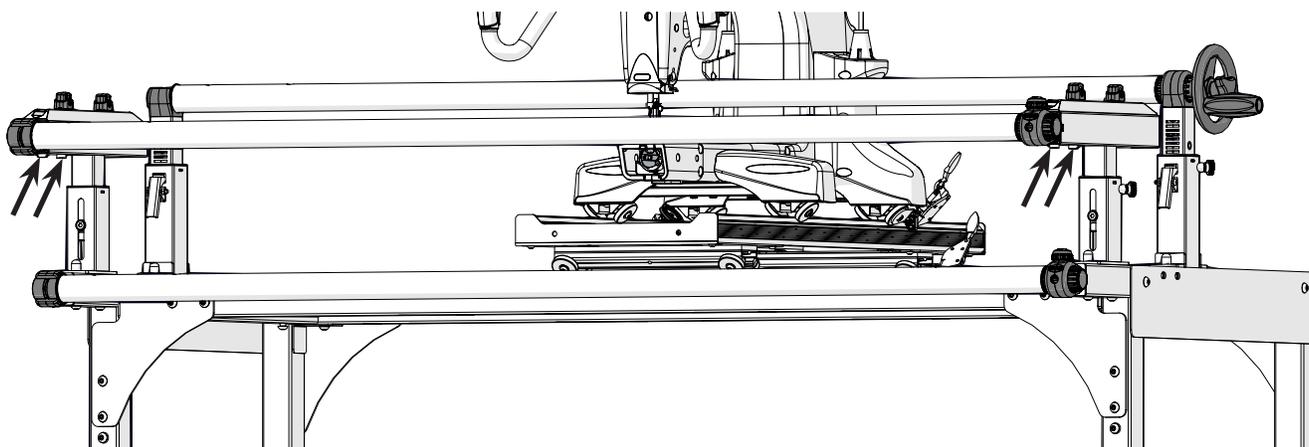
Allen Wrench 5 mm



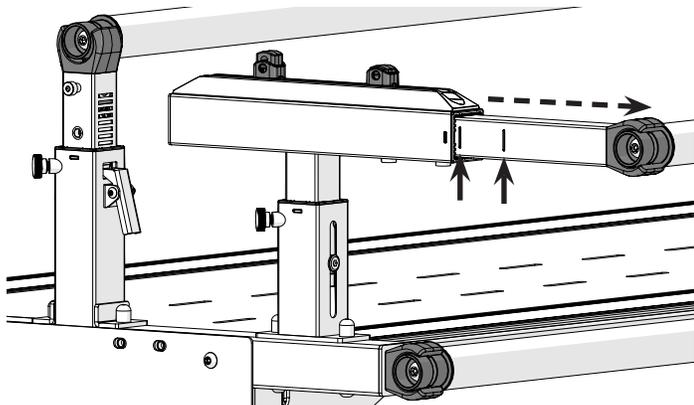
Instructions

The placement of the rails in relation to the machine is crucial for proper quilt alignment and quality sewing. For customers using the idler or batting accessory rails, please refer to the instructions that came with your accessories on how to configure your rails. For the standard setup, please take the following steps:

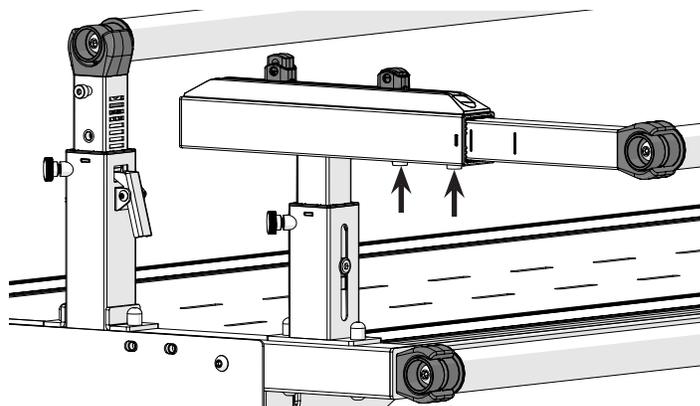
- 1 If the throat of your machine is greater than 15", you will need to extend your front rail to accommodate the machine. Use the 4 mm Allen wrench to loosen the set screws on both front rail arms.



- 2 Extend the arm out to the first notch for machines with a throat of up to 19" in length. Extend to the second notch for machines with up to a 21" throat length.

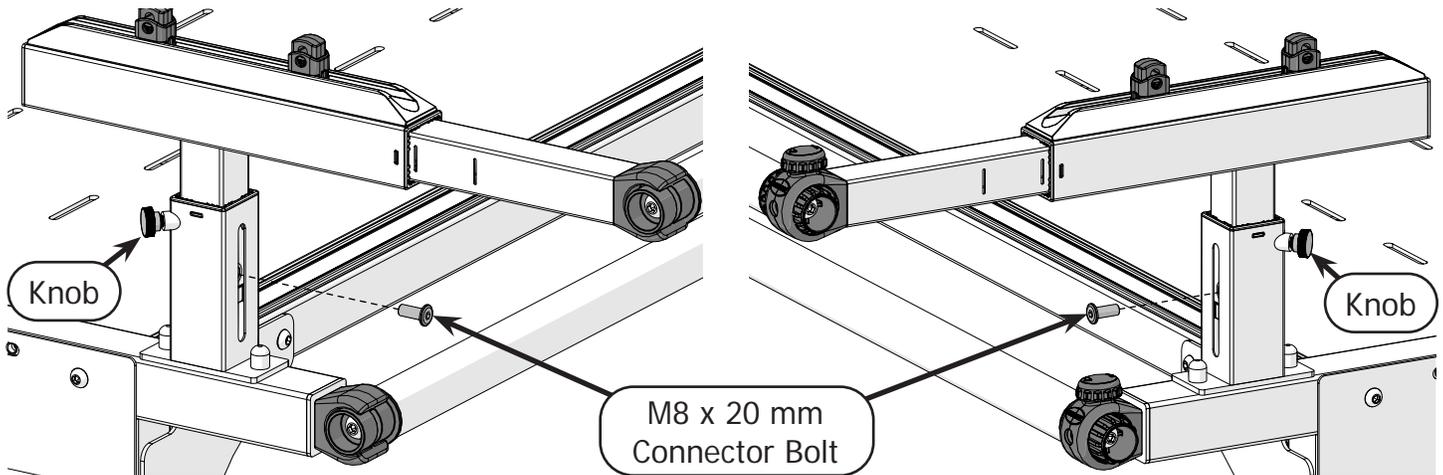


- 3 Re-tighten the set screws on both front rail arms with the 4 mm Allen wrench.

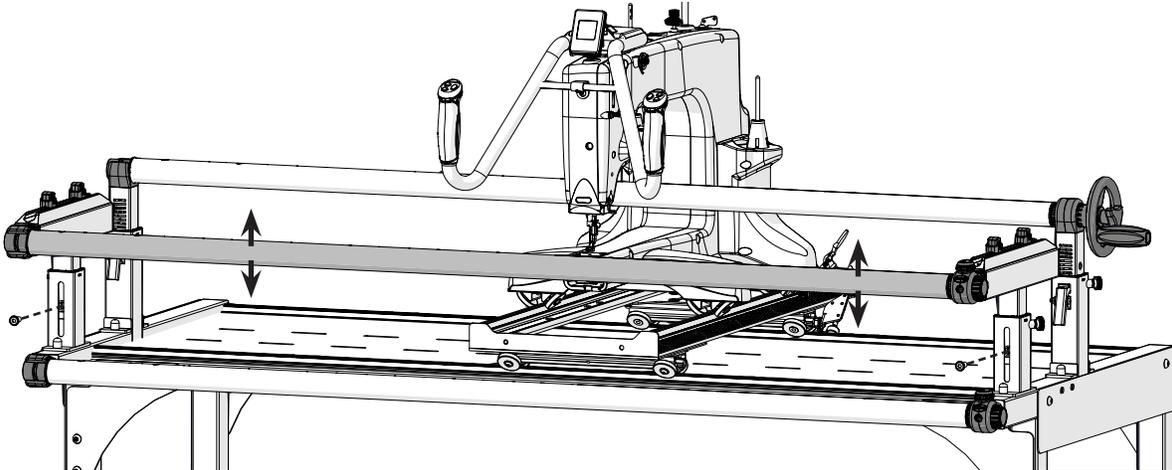


Setting the Rail Distances (Continued)

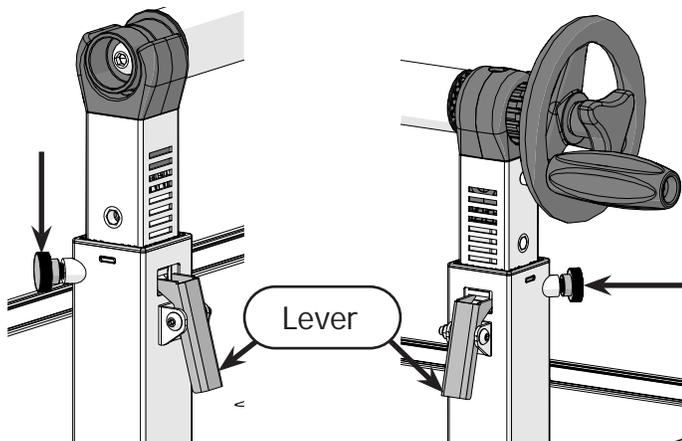
- 4 To set the front rail height, turn the **knobs** on the necks of both front rail arms, and remove the **M8 x 20 mm connector bolts** from the rail arms with the 5 mm Allen wrench.



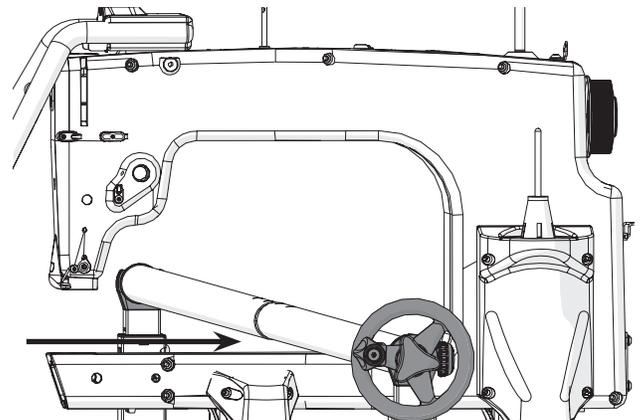
- 5 Press in the **levers** to raise or lower the front rail. Set the top of the rail so it is level with the machine's needle plate. When the height is set, re-tighten the height knobs.



- 6 Loosen the knobs on both take-up rail arms. Press in on the **levers** to set the rail height.



- 7 Set the take-up rail so there is just enough space to slide a finger between it and the machine. Re-tighten the knobs.



Step 12 - Installing the Velcro Tape

Parts & Tools Needed:

Velcro Tape (x2)



Found in Leader Cloth Set (Box 4)



Scissors (not included)



Tape Measure (not included)

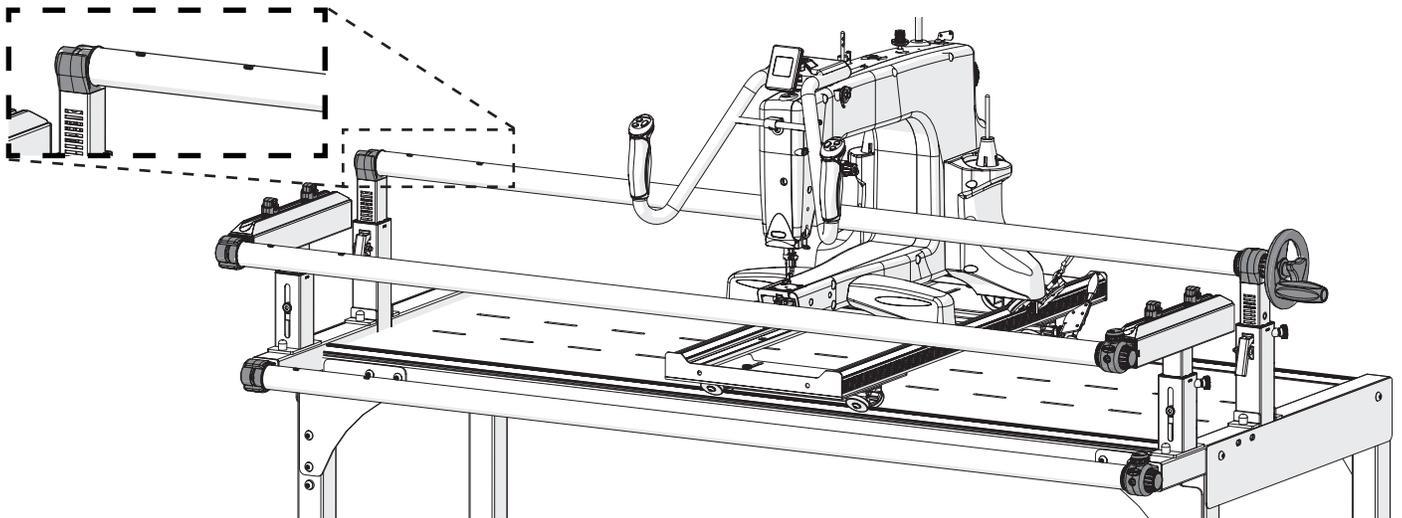


Marker (not included)

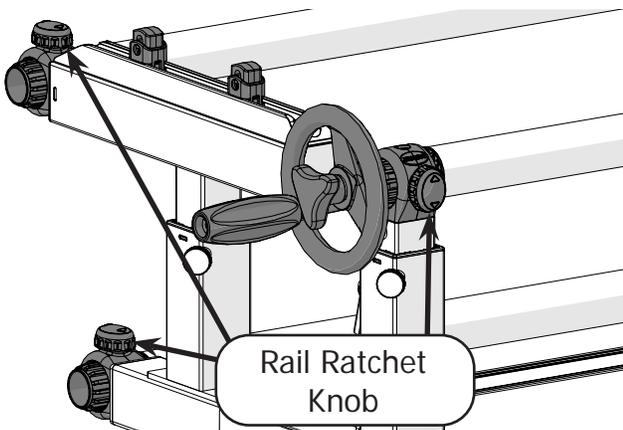
Instructions

Velcro strips are used to attach the leader cloth to your frame. The leader cloths help align the quilt and maximize the are of the quilt surface that the machine will be able to reach.

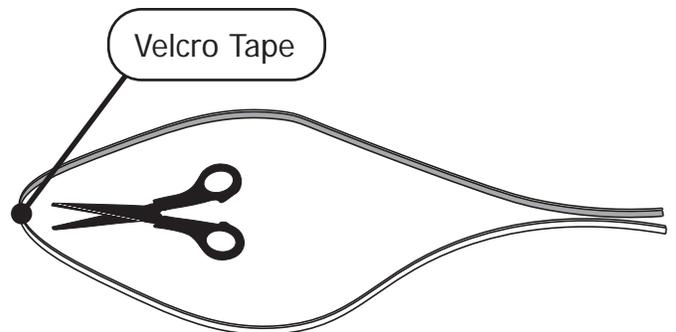
- 1 Turn all three rails so the holes on the rails face up.



- 2 To help keep the rails in place, twist each **rail ratchet knob** to activate the one-way ratchet.

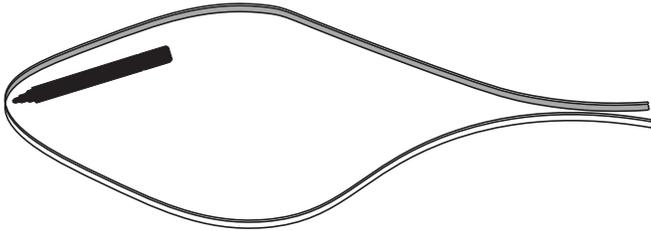


- 3 **On two pieces of Velcro tape:** Fold the Velcro tape in half to find and cut the Velcro into two pieces at the center.

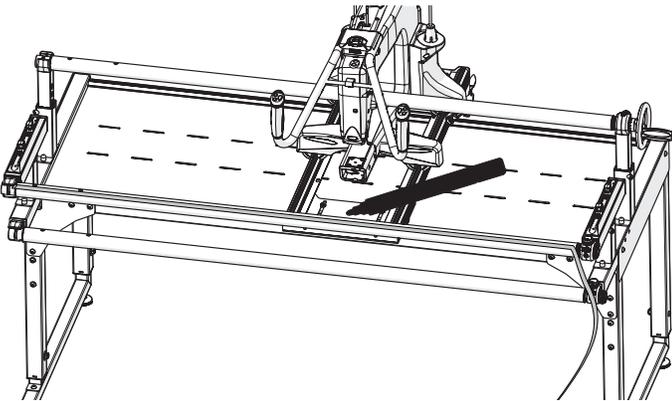


Installing the Velcro Tape (Continued)

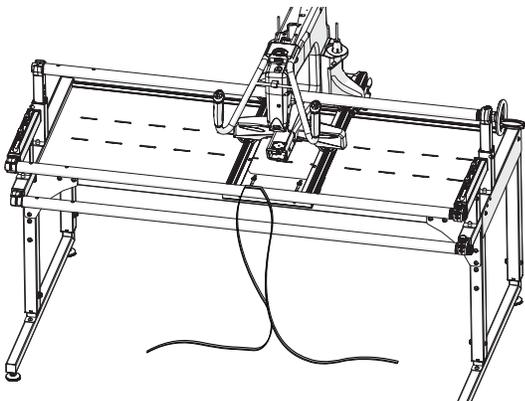
- 4 On three halves of cut Velcro tape:** Fold the Velcro tape in half again and mark out the center with your marker.



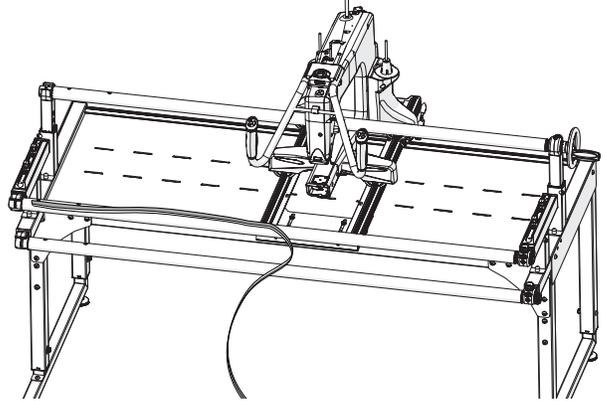
- 5 On all three rails:** Lay a tape measure flat across the rail, aligning it with the holes on the top. Find and mark the center point.



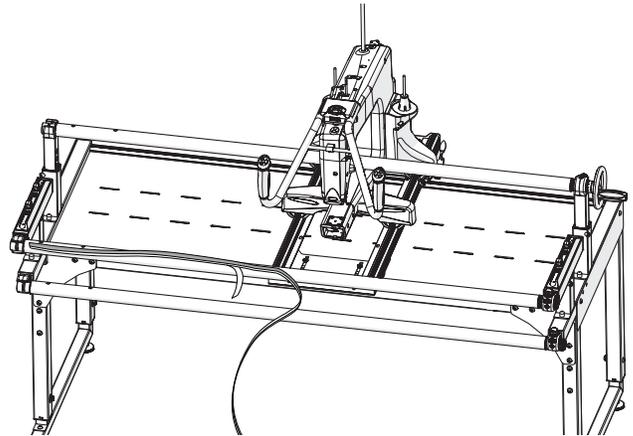
- 6 Peel away a portion of the backing from the center of the Velcro tape, and attach the center of the tape to the center of the rail.**



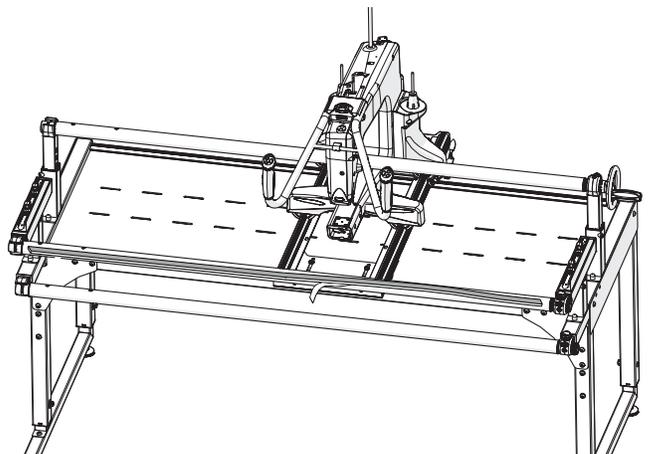
- 7 Peel off some of the backing from the end of the tape. Use the holes on the rail to keep the tape straight, and attach it to the end of the rail.**



- 8 Start from the center and carefully peel away the backing of the tape, flattening as you go.**

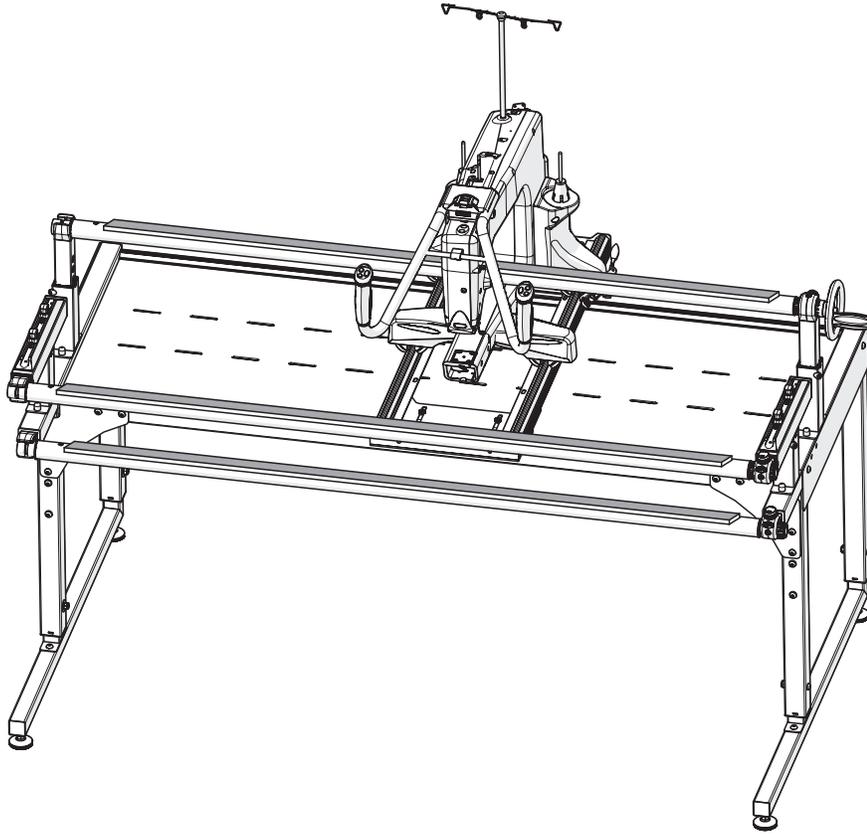


- 9 Now do the same for the other side of the rail.**



Installing the Velcro Tape (Continued)

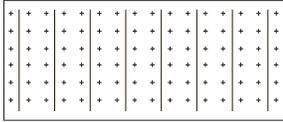
- 10 Repeat steps 6–9 for the other two rails.



Step 13 - Installing Leader Cloth

Parts & Tools Needed:

Leader Cloth Set



Scissors or Rotary Cutter (not included)



Tape Measure (not included)

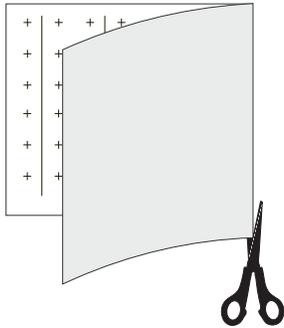


Marker (not included)

Instructions

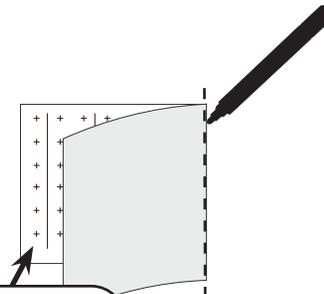
The leader cloths attach the quilt to the frame while maximizing the quilt surface that the machine can reach.

- 1 **On all three leader cloths:** Fold the cloth in half and cut along the fold.



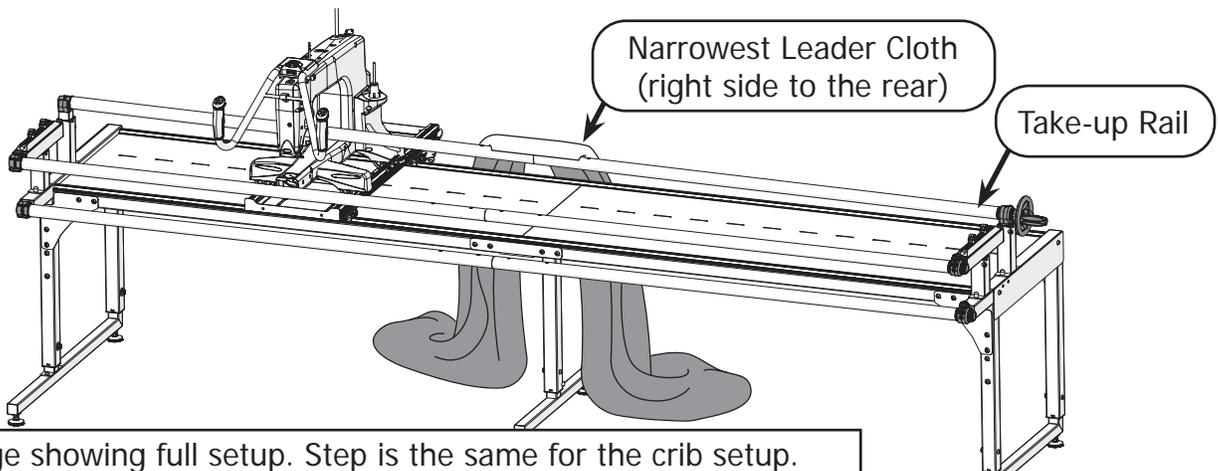
Note: After cutting leader cloths it will not be possible to use the full setup for the frame without purchasing new leader cloths.

- 2 Take one of the halves of the **narrowest leader cloth** and fold it in half again. Mark the center point on the front and back of the cloth.



Narrowest Leader Cloth

- 3 Place the center of the **narrowest leader cloth** onto the center of the **take-up rail**, right side facing away from the frame.

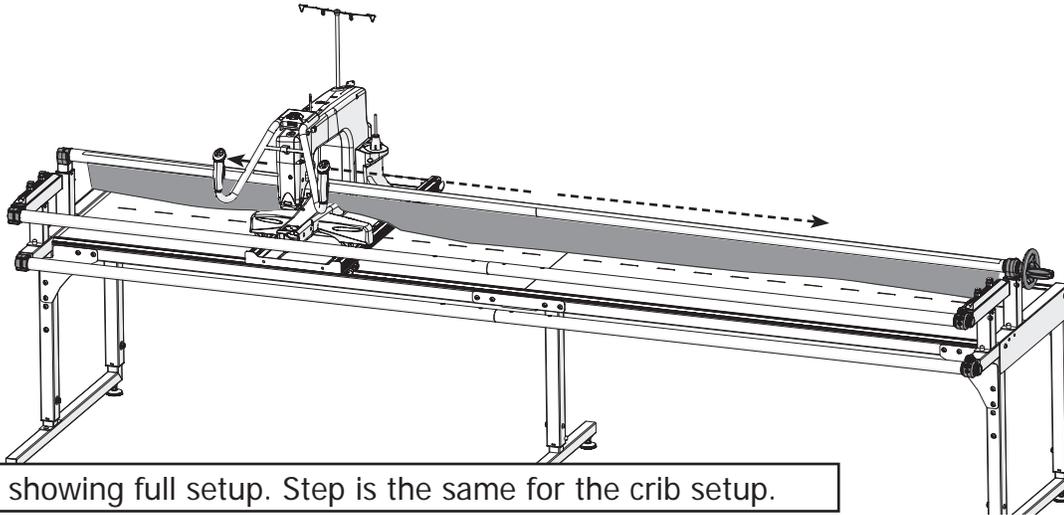


Note: Image showing full setup. Step is the same for the crib setup.

Crib Frame Assembly

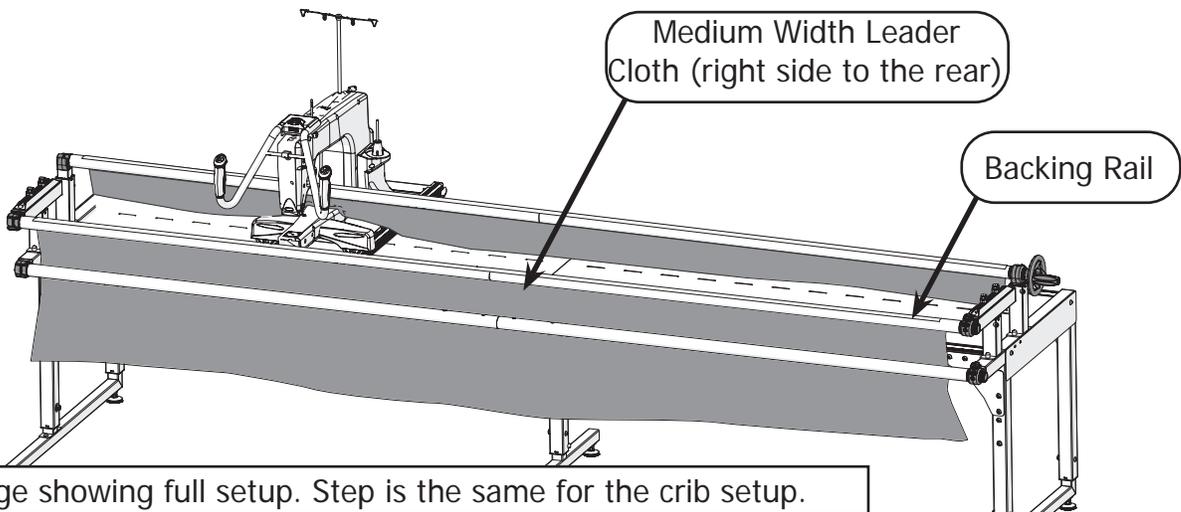
Installing the Leader Cloth (Continued)

- 4 Moving from the center outward, spread the top edge of the leader cloth across the Velcro.



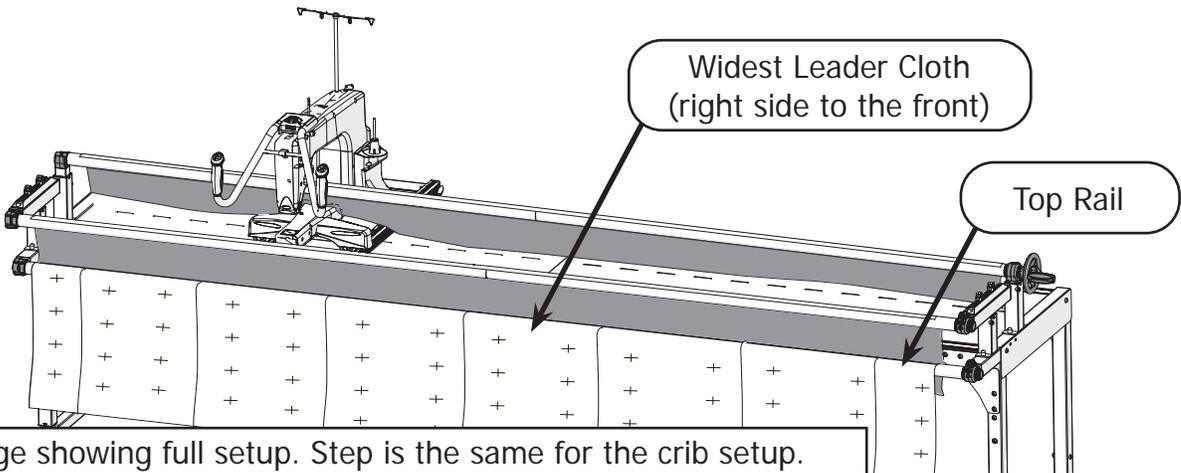
Note: Image showing full setup. Step is the same for the crib setup.

- 5 Repeat steps 2–4 for the **medium width leader cloth** on the **backing rail**.



Note: Image showing full setup. Step is the same for the crib setup.

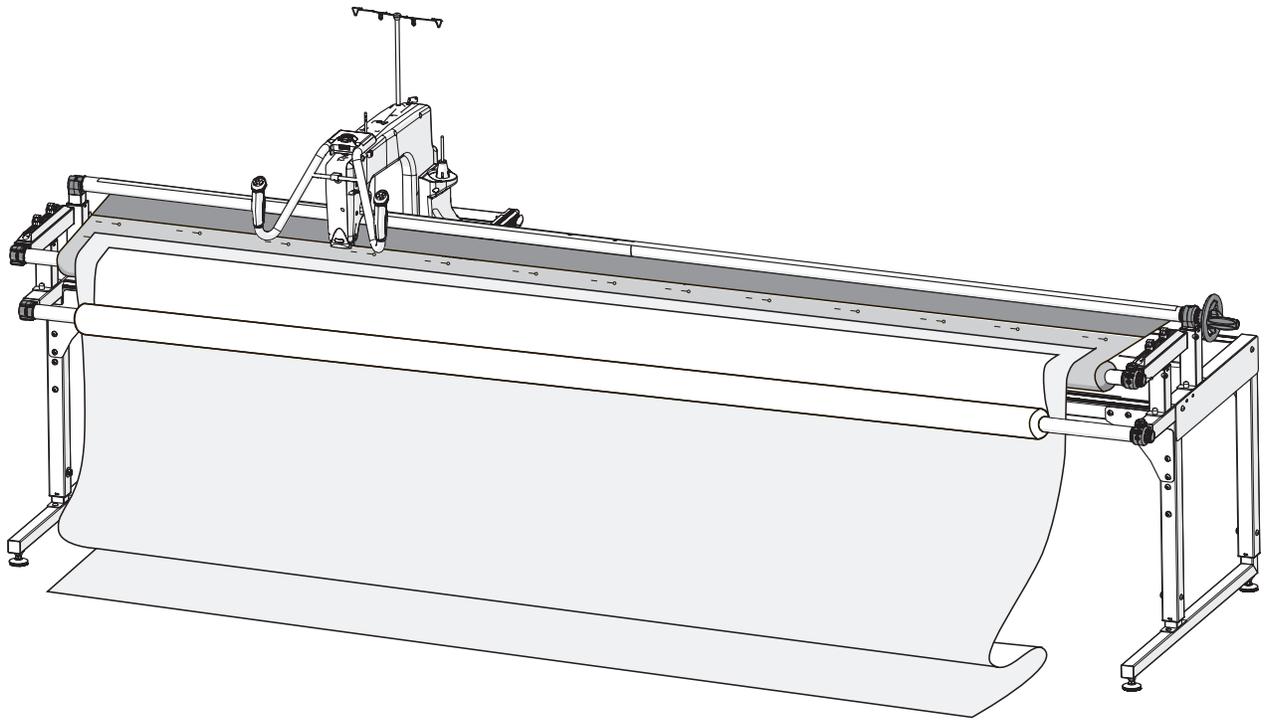
- 6 For half of the **widest leader cloth**, repeat steps 2–4, but drape the leader cloth over the front of the **top rail**, right side facing the front.



Note: Image showing full setup. Step is the same for the crib setup.

Using Your Frame

This section describes how to attach fabric and how to use the channel locks.



Sizing the Quilt Backing and Batting

Parts & Tools Needed:

Pins (not included)

Fabric (not included)

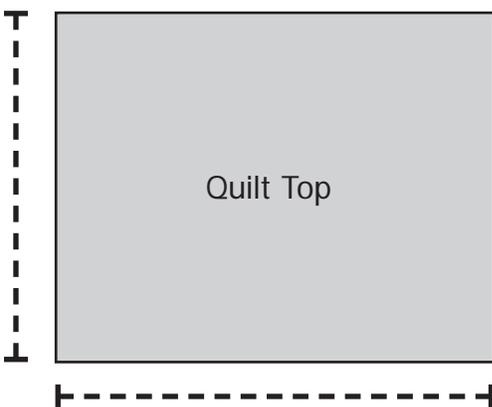


Tape Measure (not included)

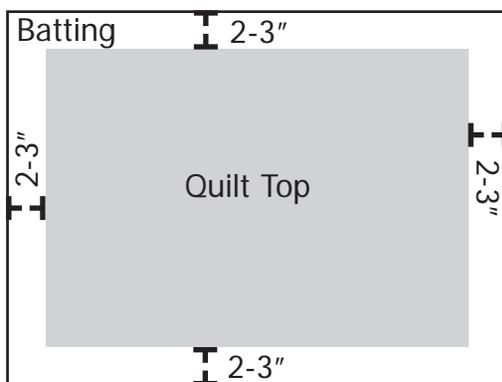
Instructions

The quilt backing and batting must be properly sized for neat quilting.

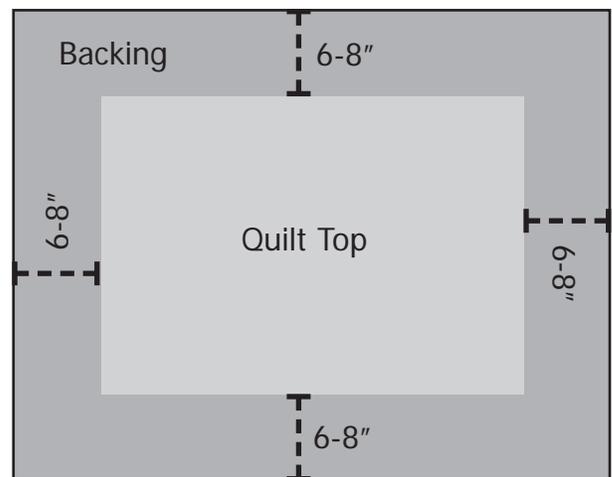
- 1 Measure the length and width of your quilt top.



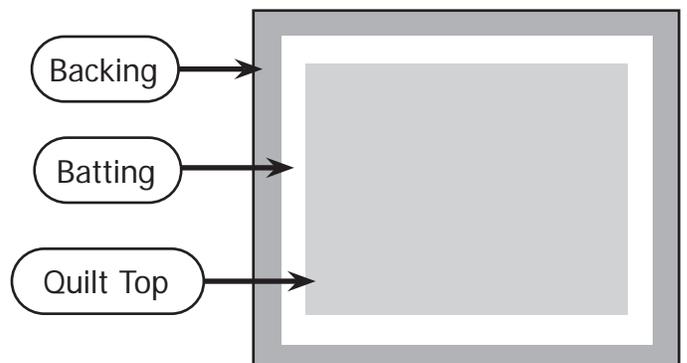
- 2 Cut your quilt batting so that it is 2-3 inches larger than the quilt top on all sides.



- 3 Cut your quilt backing so it is 6-8 inches larger than the quilt top.



- 4 Write down the lengths and width of the batting and backing so that when you place your quilt, you can make sure it is centered and arranged as shown below.



Attaching the Fabric

Parts & Tools Needed:

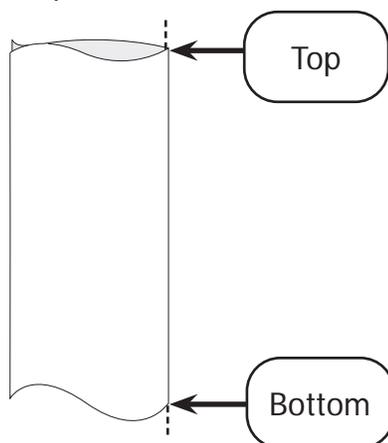
Pins (not included)

Fabric (not included)

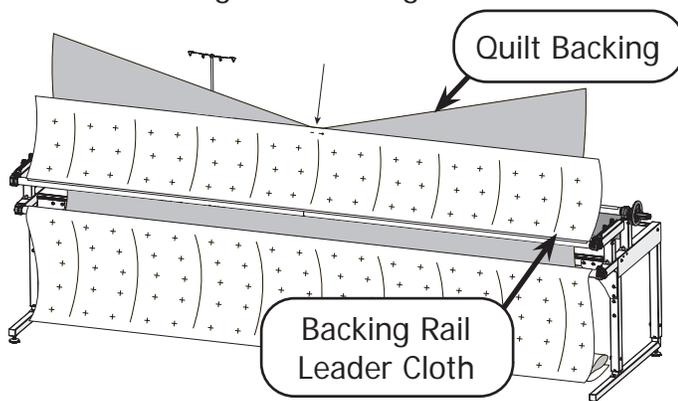
Instructions

Take the following steps to properly mount your quilt on the frame:

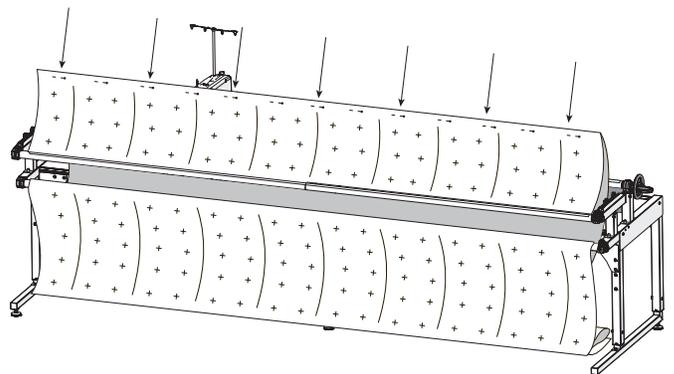
- 1 Fold your quilt's backing in half to find the center. Place a pin to mark the **top** and **bottom** center points.



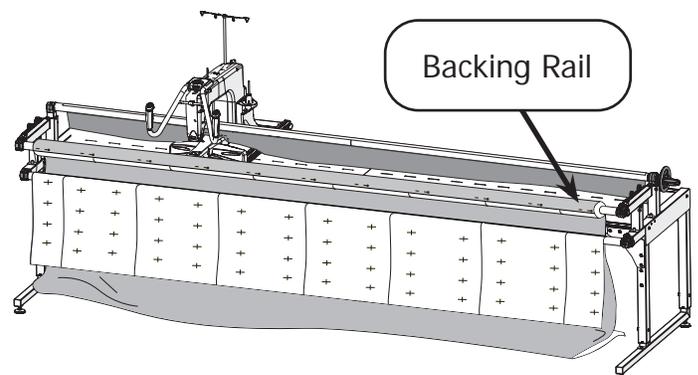
- 2 Pin the bottom center-point of your **quilt backing** to the center-point at the bottom of the **leader cloth** on the **backing rail**, with the right side facing the front.



- 3 Work from the center out and pin the edges of the quilt backing and leader cloth together.



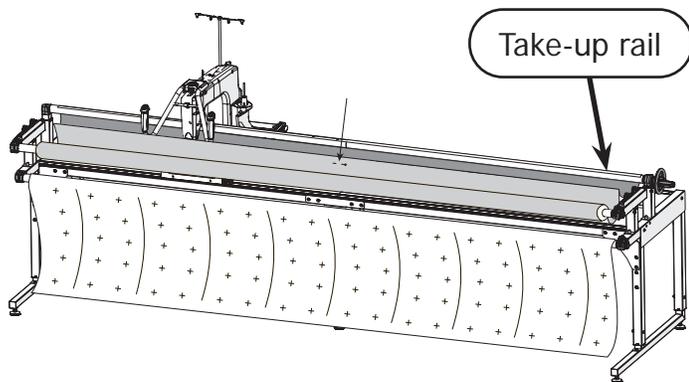
- 4 Roll the **backing rail** until the leader cloth is no longer visible. Take your time to smooth out the wrinkles and keep the backing straight.



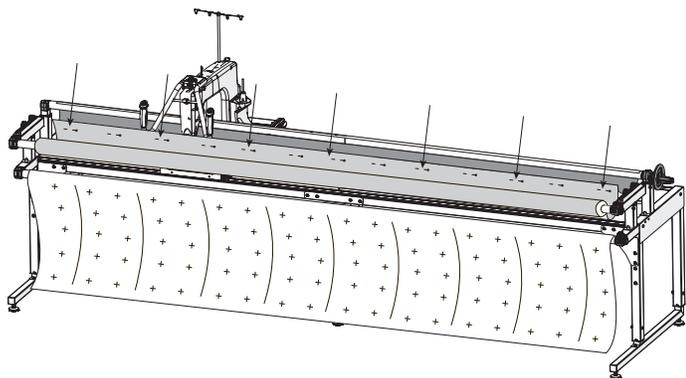
Using Your Frame

Attaching the Fabric (Continued)

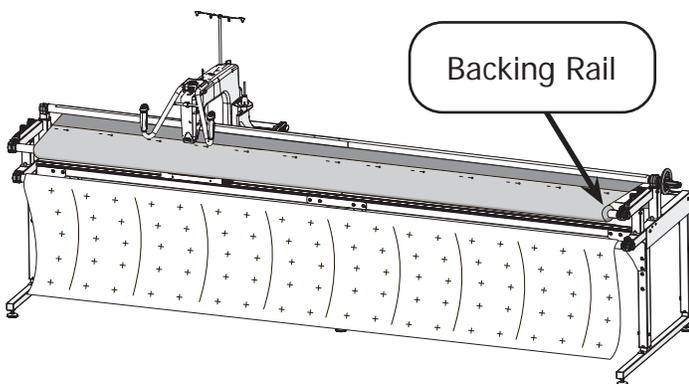
- 5 Pin the top center-point of your quilt backing to the center-point on the **take-up rail** leader cloth.



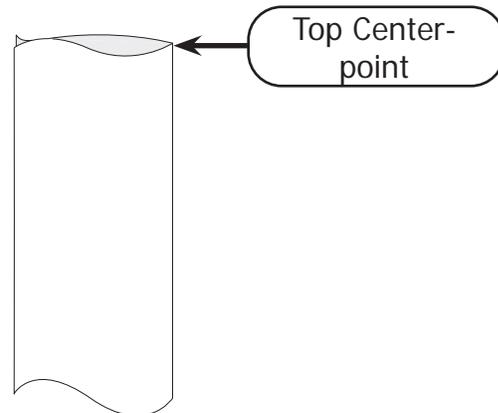
- 6 Work from the center out and pin the edges of the quilt backing and leader cloth together.



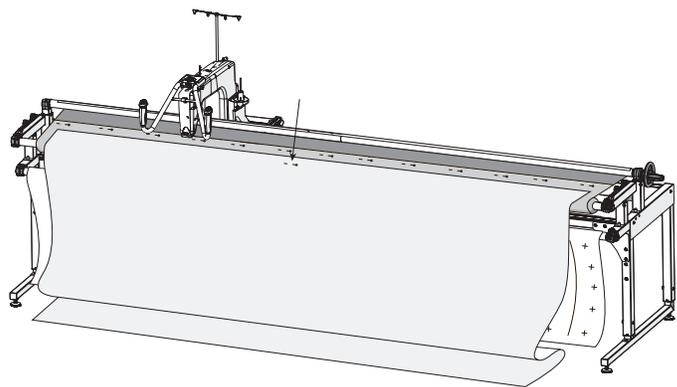
- 7 Roll the **backing rail** until the quilt backing is smooth and free of creases.



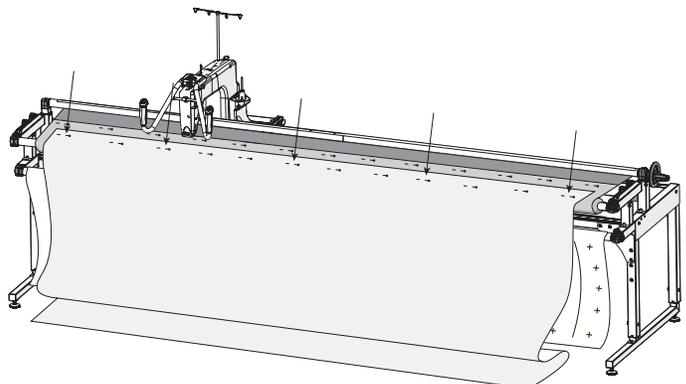
- 8 Fold your batting to locate the **top center-point**. Place a pin to mark it.



- 9 Pin the top center of your batting 4-5" below to the top center of the quilt backing.

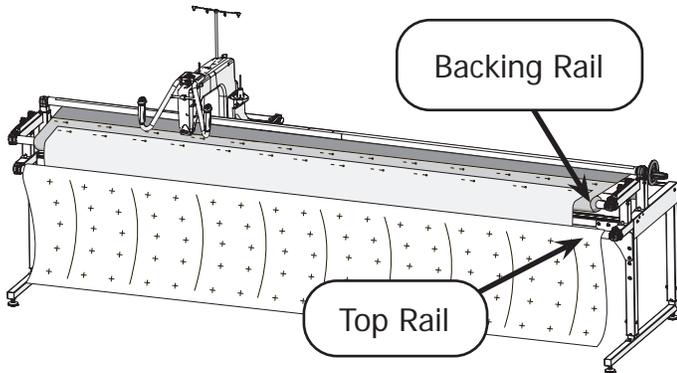


- 10 Working from the center out, pin the batting across the top edge of the quilt backing.

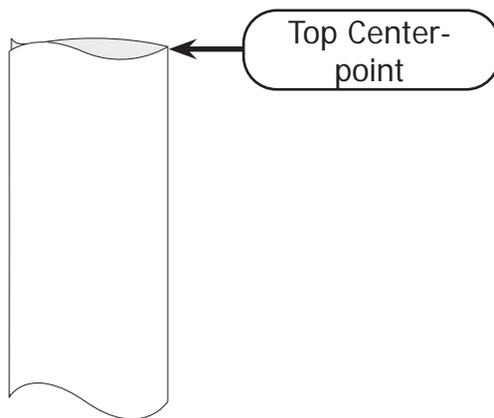


Attaching the Fabric (Continued)

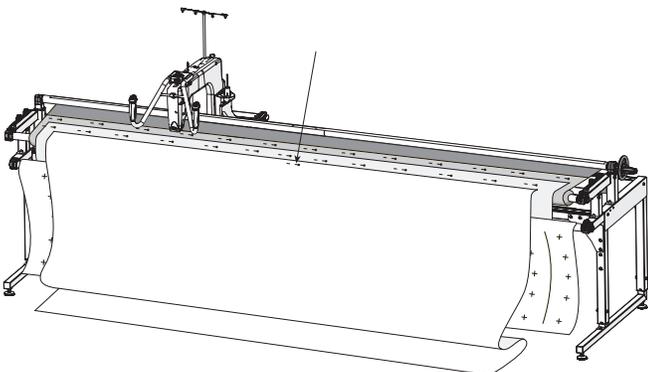
- 11 Drape the bottom of the batting between the **backing** and **top rails**.



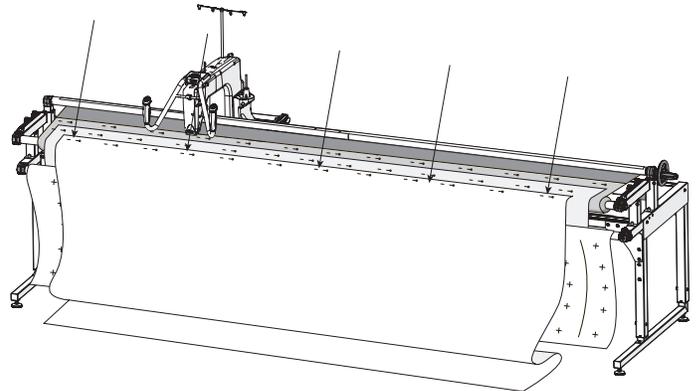
- 12 Fold your quilt top to locate the **top center-point**. Place a pin to mark it.



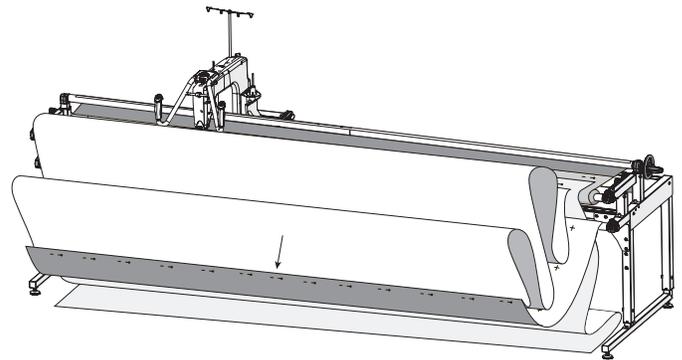
- 13 Pin the center of your quilt top 2-3" below the top center of the batting. The right side of your quilt should face up.



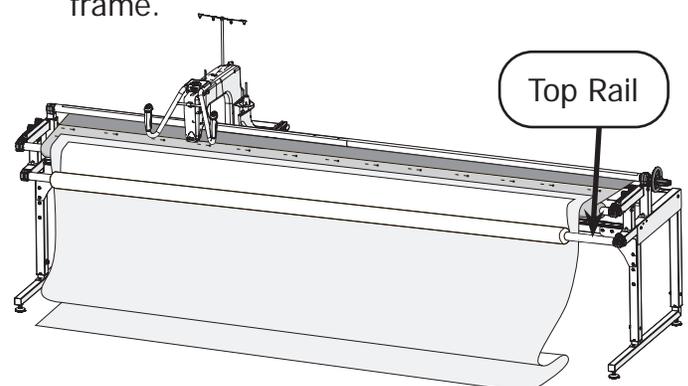
- 14 Pin down the top of the quilt from the center out.



- 15 Pin the bottom of the quilt top to the bottom of the final leader cloth. Start from the center and work outward.



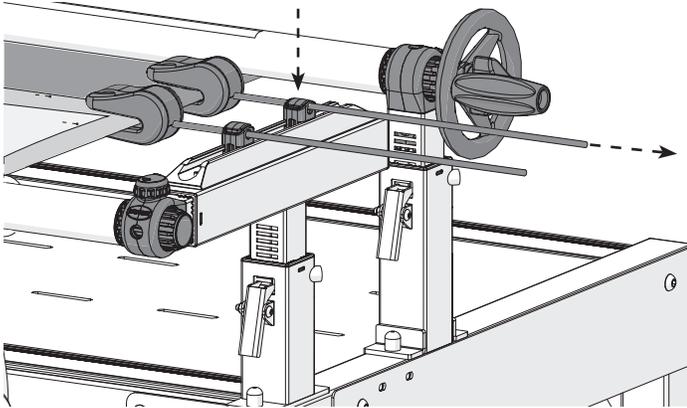
- 16 Roll the **top rail** until the quilt top is smooth and free of creases. Do not pull too tight: excess tension will cause fabric to bunch around stitches when removed from frame.



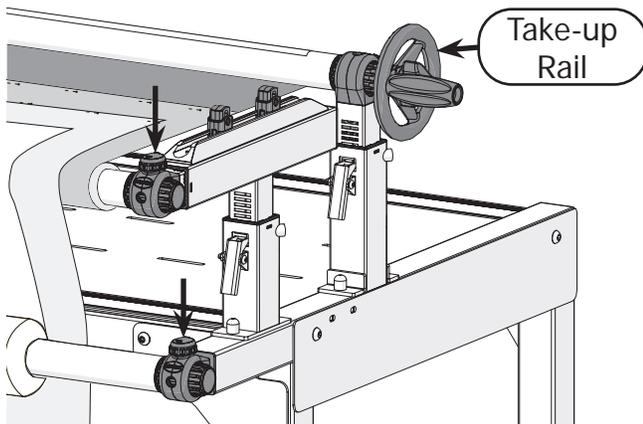
Using Your Frame

Attaching the Fabric (Continued)

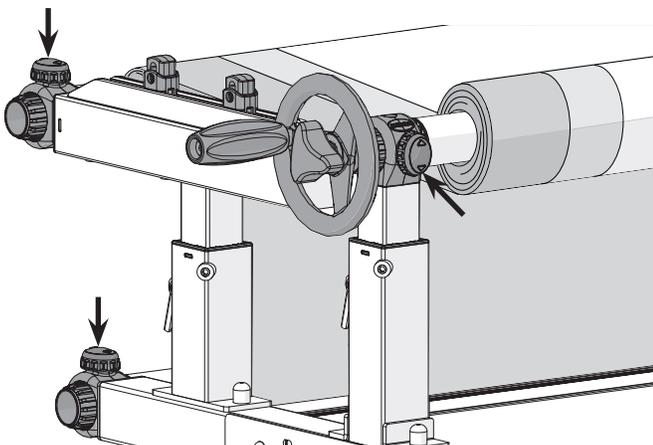
- 17 To hold up the edges of the quilt, slide the fabric into the bungee clamps. Tension by pressing down on the bungee stops and pulling the bungee tail.



- 18 Roll up your quilt as you go. Turn the top knobs on the front rails to release the quilt tension. Then ratchet up the **take-up rail**.



- 19 To return to a place you've already quilted and rolled up, loosen knobs on all the rails. Then roll up the fabric on two front rails.

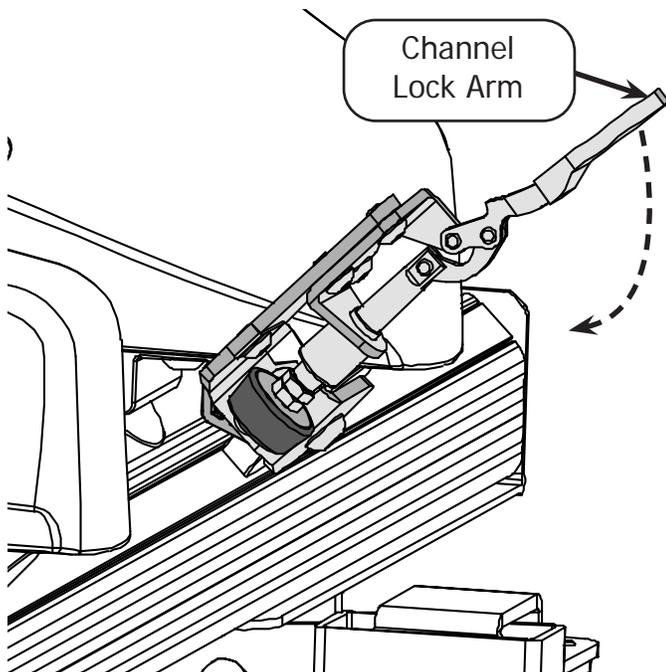


Using the Channel Locks

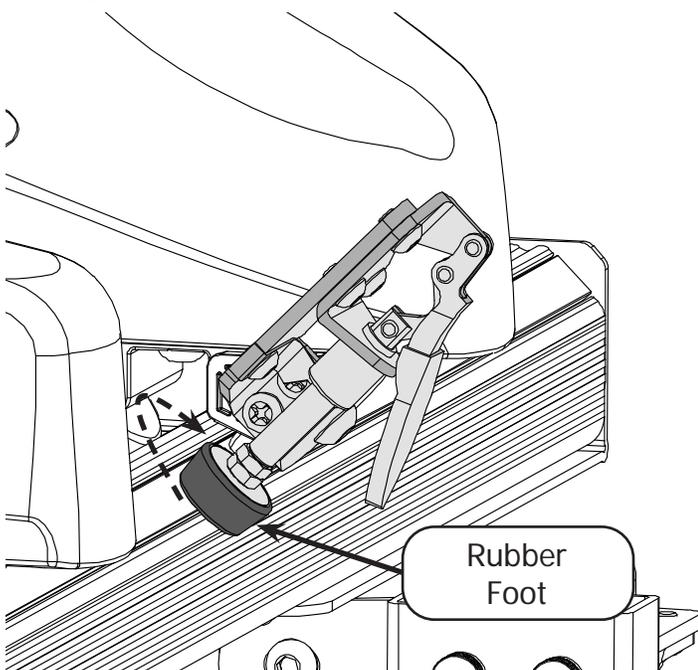
Instructions

The channel locks assist with stitching in a straight line by inhibiting the movement of the bottom carriage or machine.

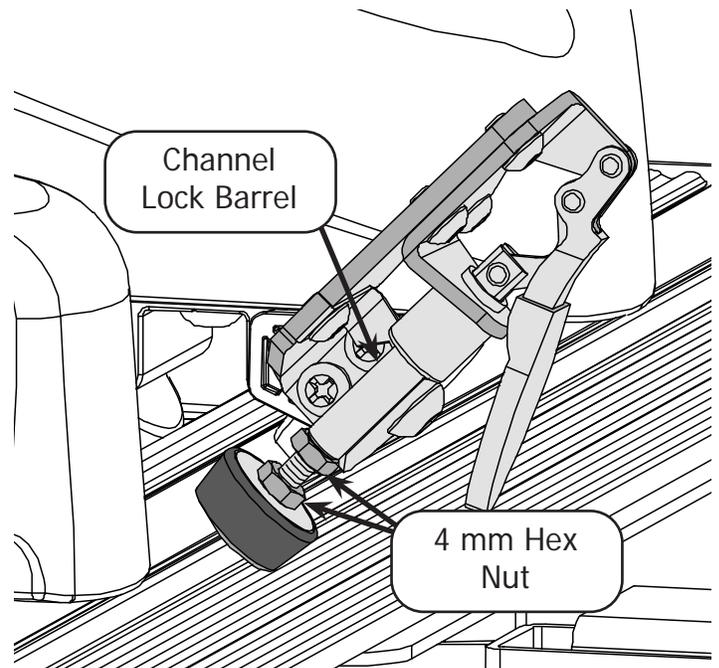
- 1 On both channel locks:** Flip down the arm on the machine channel lock to close the channel lock.



- 2 On both channel locks:** If the rubber foot doesn't reach the track, twist it to extend it until it does.



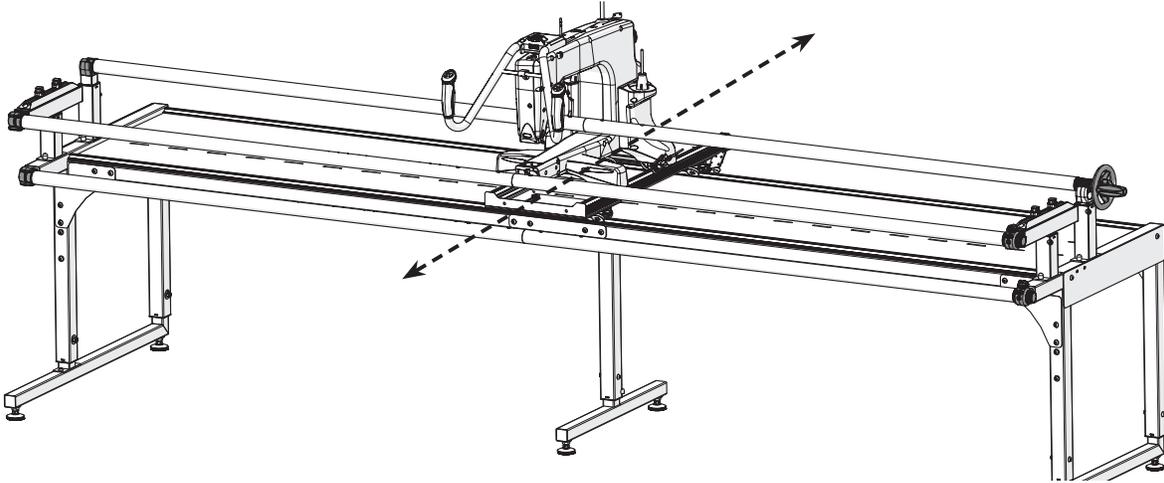
- 3 On both channel locks:** To prevent the rubber foot from loosening over time, use needle nose pliers or a wrench to tighten the bottom **4 mm hex nut** against the rubber foot. Tighten the other hex nut against the **channel lock barrel**.



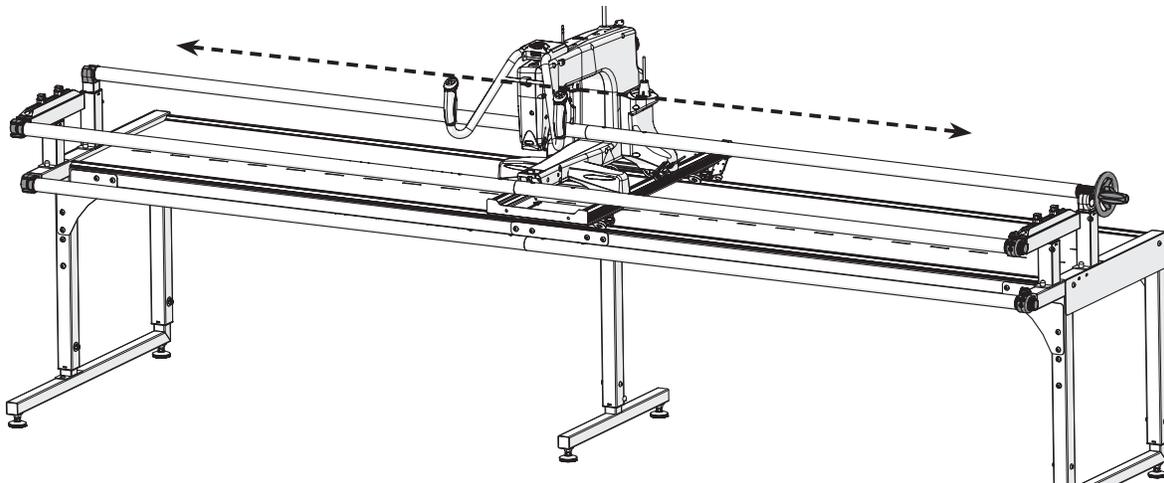
Using Your Frame

Using the Channel Locks(Continued)

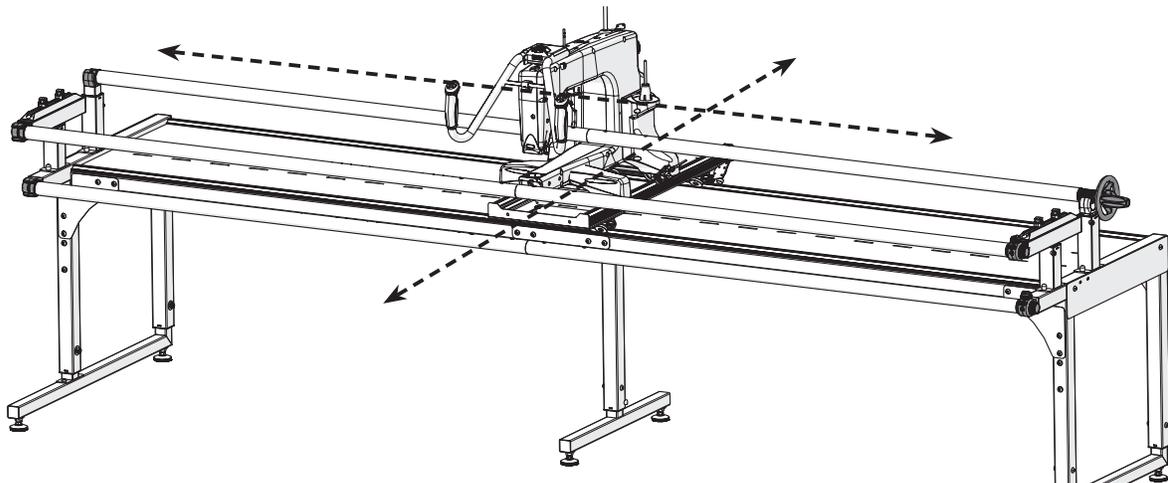
- 4 To move the machine back and forth on the bottom carriage and create a straight vertical line, close only the bottom carriage channel lock.



- 5 To move the machine across the frame and create a straight horizontal line, close only the channel lock on the machine.



- 6 Open both channel locks to resume unrestricted quilting.



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

