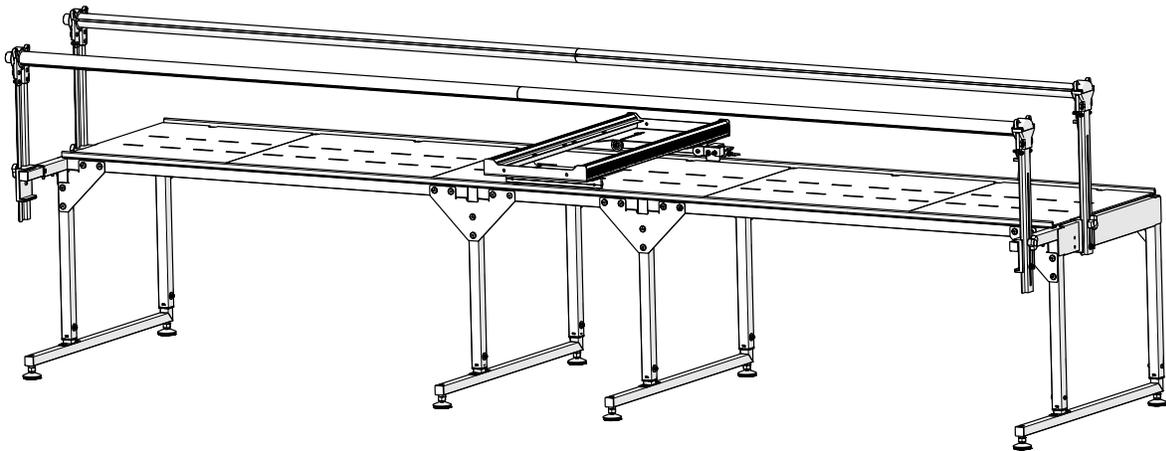


# Q-Zone Queen

## Frame Extension Installation





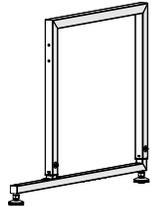
# Table of Contents

Table of Contents .....	3
Included Parts and Tools .....	4
<b>START HERE .....</b>	<b>6</b>
<b>Extend an Assembled Frame.....</b>	<b>7</b>
Task 1 - Prepare the Base Frame .....	8
Task 2 - Set the Middle Leg Height .....	10
Task 3 - Attach the Middle Leg Braces.....	13
Task 4 - Extend the Table.....	14
Task 5 - Install the Tracks .....	18
<b>Assemble a New Frame .....</b>	<b>27</b>
Welcome to Your Q-Zone Queen Frame.....	28
<b>Part One .....</b>	<b>30</b>
Task 1 - Set the Frame Height.....	31
Task 2 - Attach the Braces.....	35
Task 3 - Assemble the Frame Table.....	39
Task 4 - Install the Track and Table Supports.....	44
Task 5 - Install and Align the Tracks.....	49
Task 6 - Install the Single-Wheel Channel Lock.....	53
Task 7 - Install the Rail Holder Brackets .....	56
<b>Part Two .....</b>	<b>59</b>
Task 8 - Install the Dual-Wheel Channel Lock .....	60
<b>Part Three.....</b>	<b>63</b>
Task 9 - Install the Table Surfaces .....	64
Task 10 - Install the Rails.....	67
Task 11 - Adjust the Rails.....	72
Task 12 - Install the Bungee Clamps .....	74
Task 13 - Level the Frame .....	76
<b>Part Four.....</b>	<b>80</b>
Task 14 - Install the Cloth Leaders.....	81
Task 15 - Load the Fabric.....	84

# Included Parts and Tools

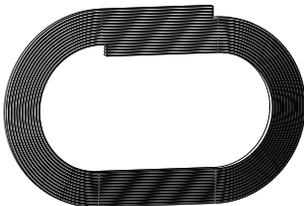
## Box A

**Middle Leg Assembly**



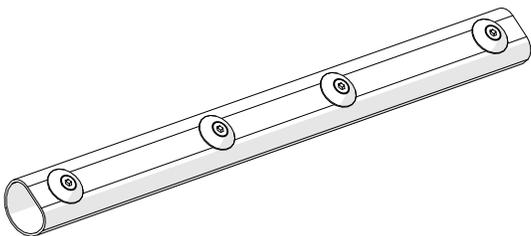
QZF-09-13059

**10-ft Plastic Track (x2)**



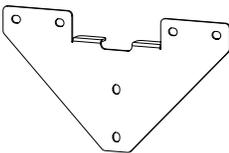
ACC-05-17436

**Rail Coupler (x2)**



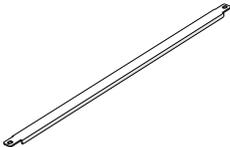
MET-04-10457

**Middle Leg Brace (x2)**



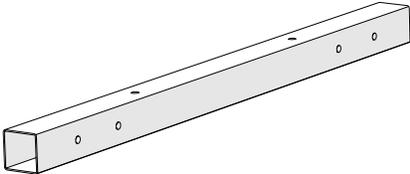
QZF-04-12060

**Table Support (x10)**



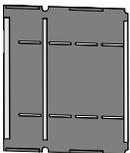
QZH-04-12222

**2-ft Cross Support Tube (x2)**



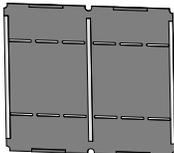
ACC-04-17438

**Plastic Table Surface 1**



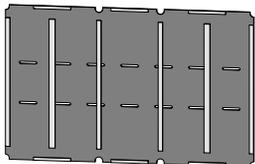
QZF-09-13072

**Plastic Table Surface 2 (x2)**



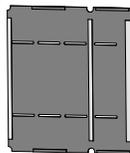
QZF-09-13070

**Plastic Table Surface Extension**



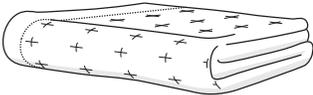
ACC-05-17437

**Plastic Table Surface 4**



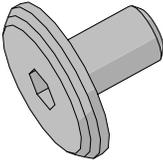
QZF-09-13069

**Cloth Leaders**



ACC-01-17211

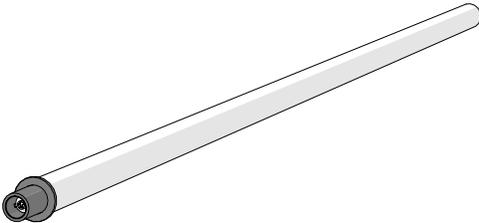
**Connector Bolt  
M6 x 10 mm (x16)**



HDW-03-10953

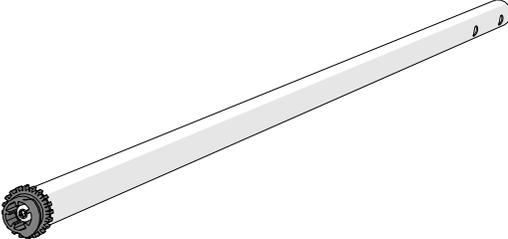
**Box B**

**2-Ft Extension  
Rolling Rail Assembly (x2)**



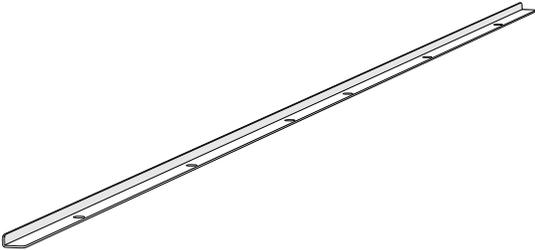
ACC-09-17456

**2-Ft Extension Ratcheting  
Rail Assembly (x2)**



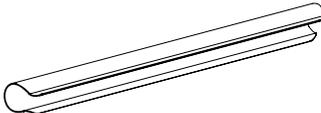
ACC-09-17457

**Track Support -  
Extension (x2)**



ACC-04-17435

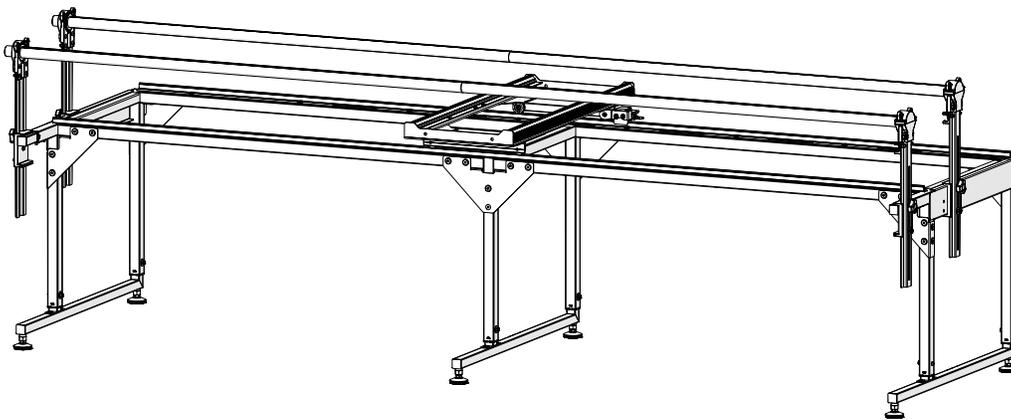
**1.5" Quilt Clip  
C-Clamp (x4)**



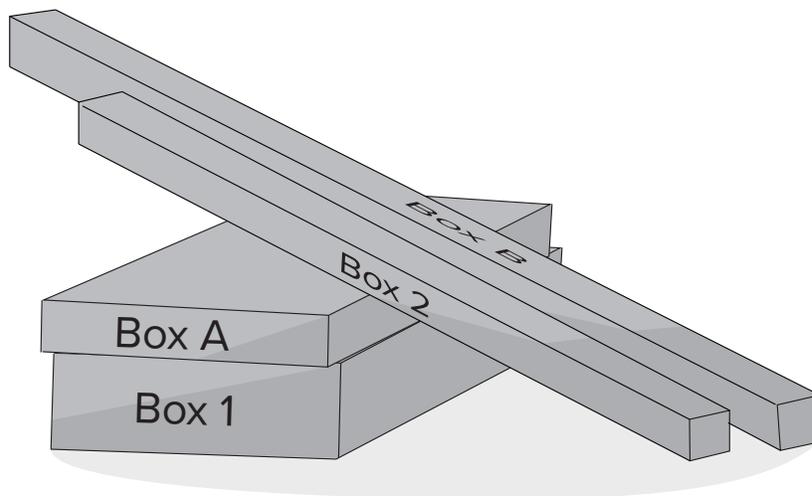
ACC-09-17586

**START HERE**

If your base frame is already set up,  
see "Extend an Assembled Frame" on  
page 7.



If your base frame is not set up yet,  
see "Assemble a New Frame" on  
page 27.

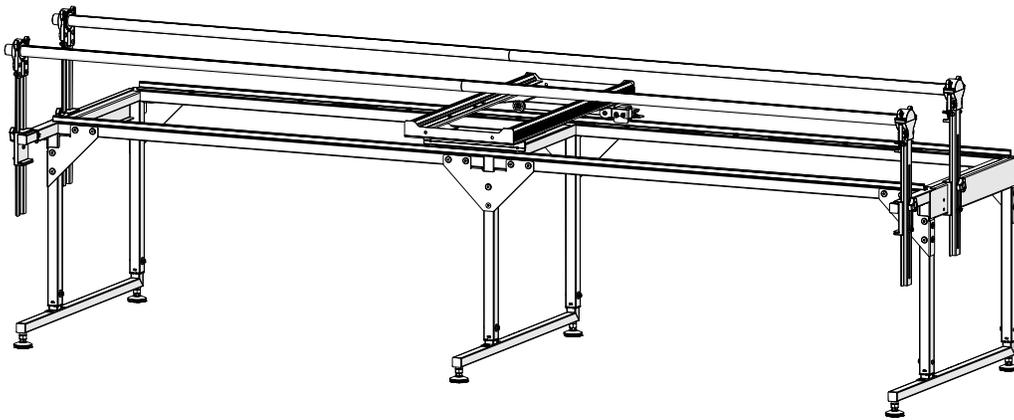


## Extend an Assembled Frame

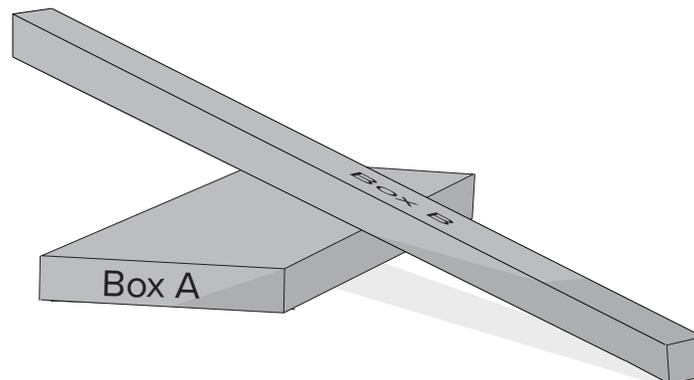
This section describes how to extending a frame that has already been set up. If you have not assembled your frame yet, go to page 27.

### You Will Need:

- Your assembled Q-Zone Queen frame.



- Boxes A and B of the Extension Kit.

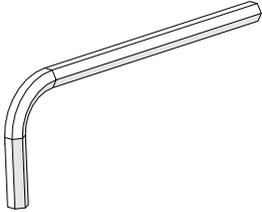


# Extend Assembled Frame

## Task 1 - Prepare the Base Frame

### Parts & Tools Needed:

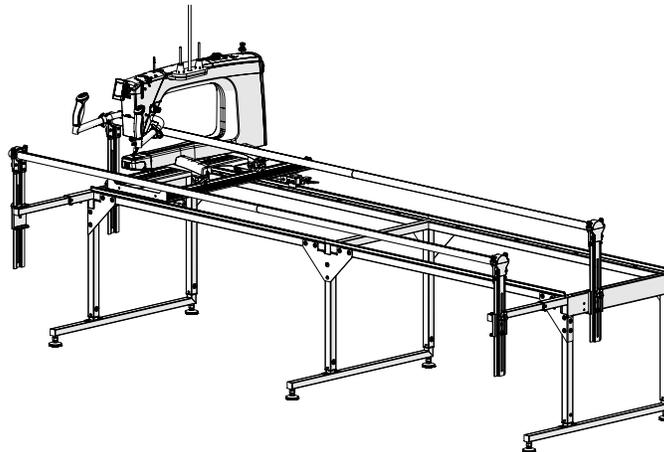
Allen Wrench  
4 mm



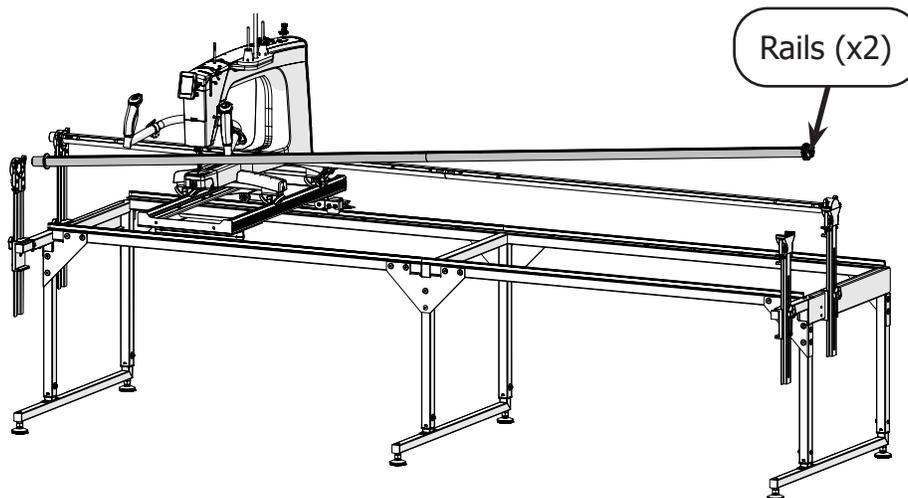
### Instructions

The base frame must be partially taken apart to install the 2-foot extension. Take the following steps to prepare the base frame:

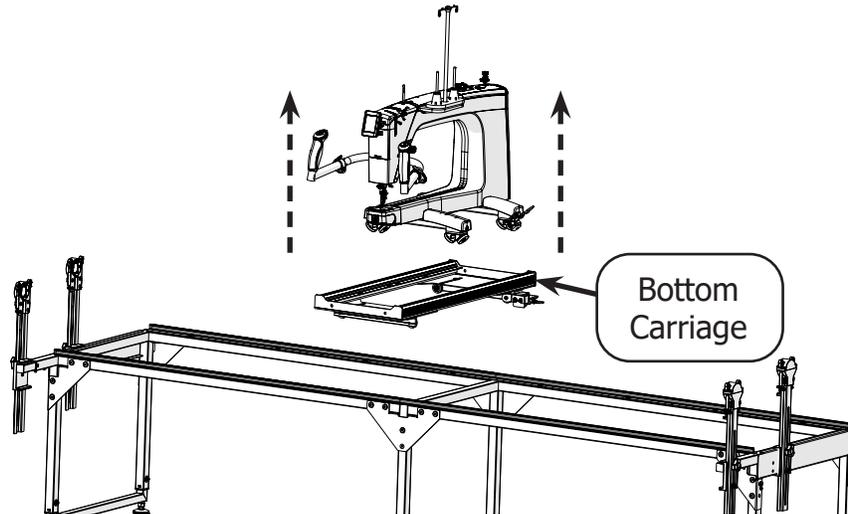
- 1 Remove any fabric and the cloth leaders from the frame. New cloth leaders are included in your extension kit; the old cloth leaders can be kept or discarded as desired.



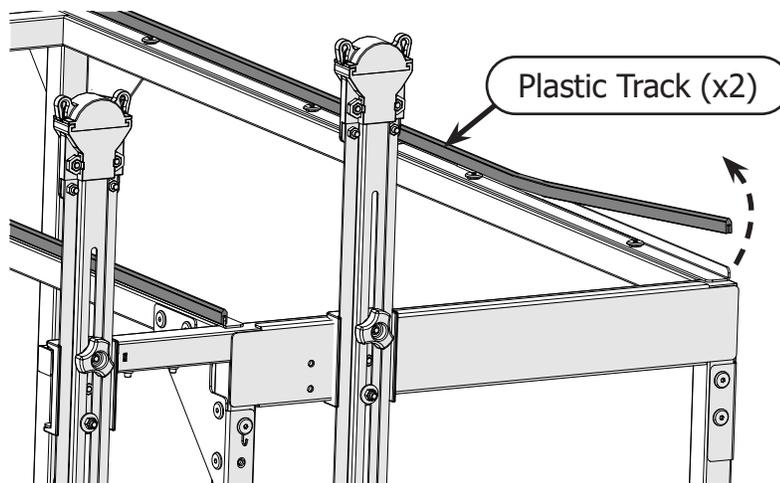
- 2 Uninstall the **rails**. These are not used in the final assembly and can be discarded.



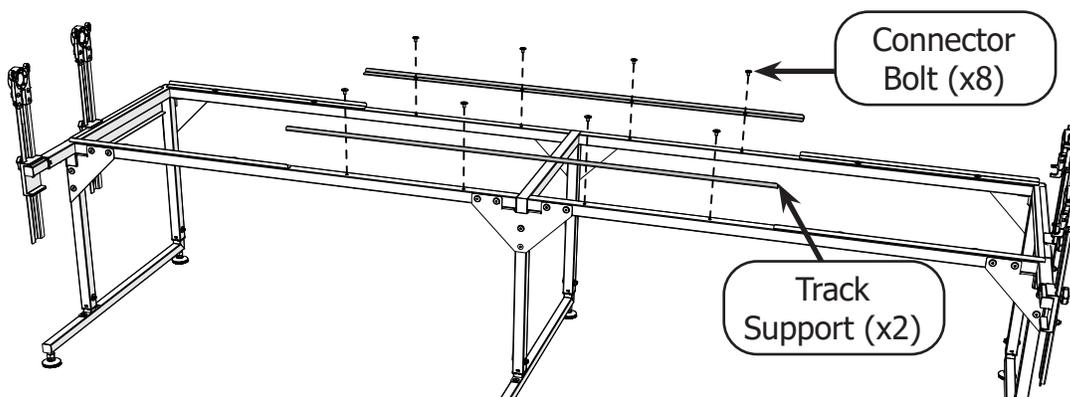
- 3 Remove the machine and **bottom carriage** from the frame and set these aside for later.



- 4 Pull the two **plastic tracks** off of the track supports. These plastic tracks do not fit on the extended frame and can be discarded.



- 5 Use a 4 mm Allen wrench to remove the **connector bolts** and middle **track supports** from the frame. Set the eight connector bolts aside for later. The track supports can be discarded.



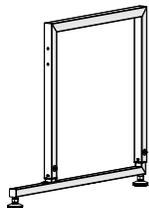
- 6 **Result:** The frame is prepared for the 2-foot extension.

# Extend Assembled Frame

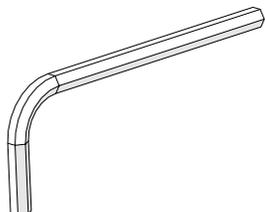
## Task 2 - Set the Middle Leg Height

### Parts & Tools Needed:

Middle Leg Assembly



Allen Wrench  
4 mm



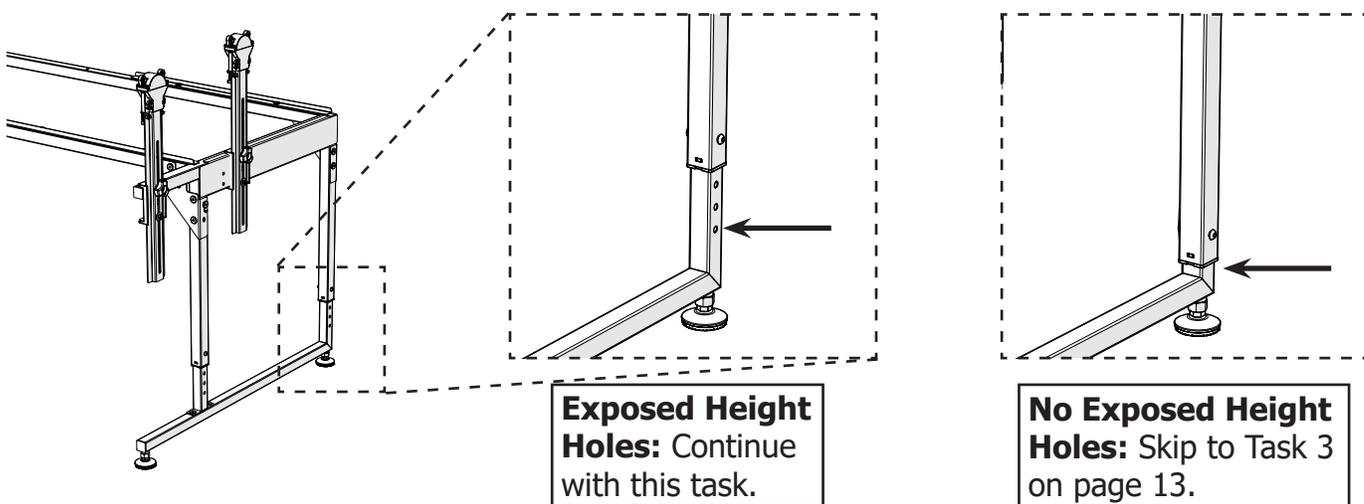
Open-End Wrench  
10 mm and 13 mm



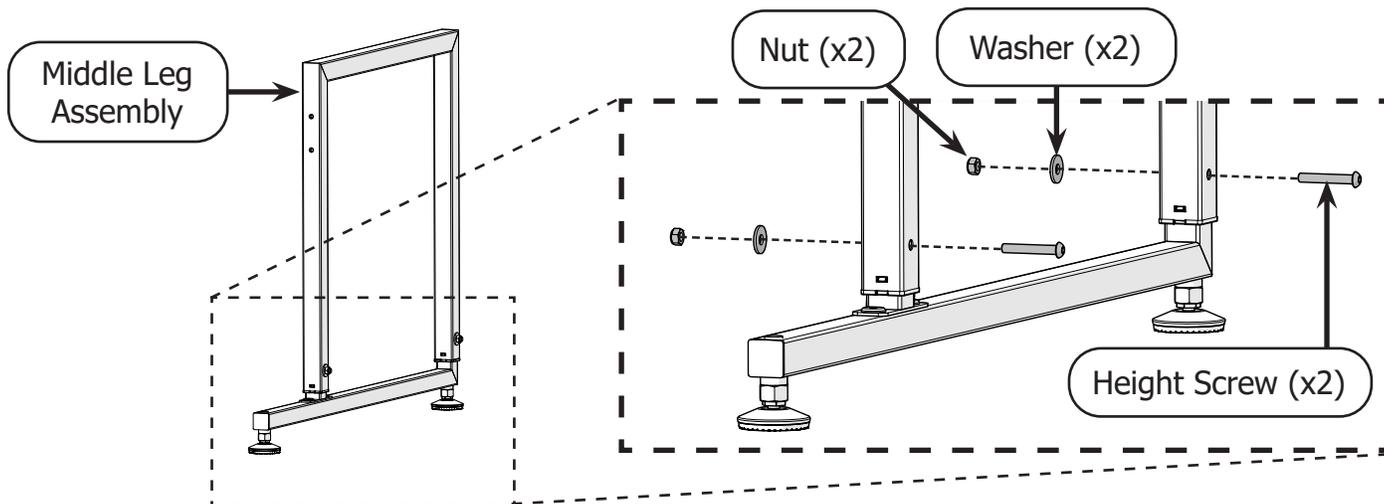
### Instructions

Take the following steps to set the height on the new middle leg:

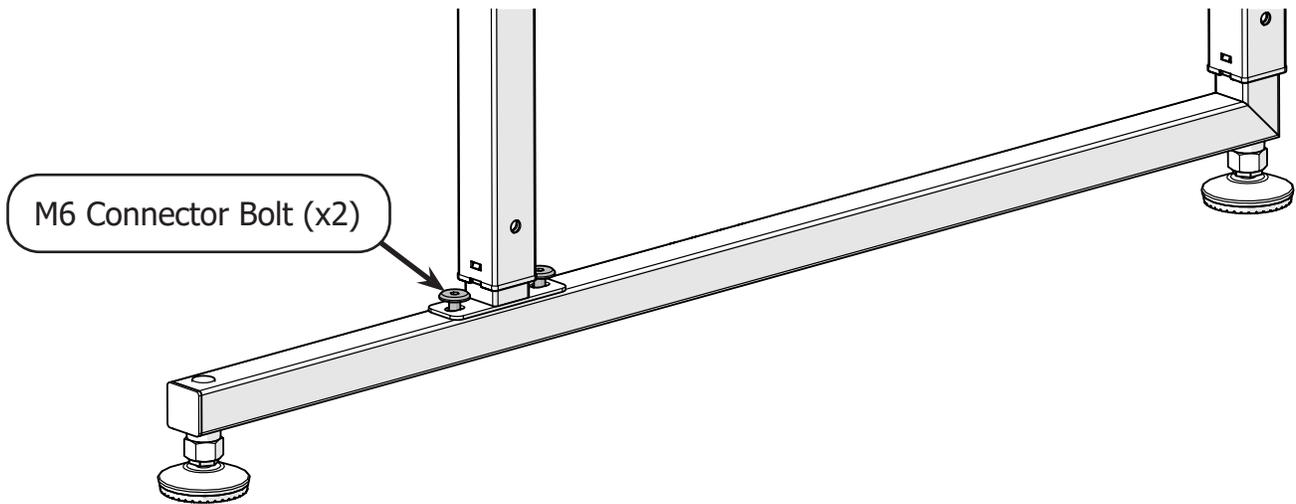
- 1 Check if there are exposed height holes on the legs of your frame. If there are, you must set the height on the middle leg to match. If there are not, skip to Task 3 on page 13.



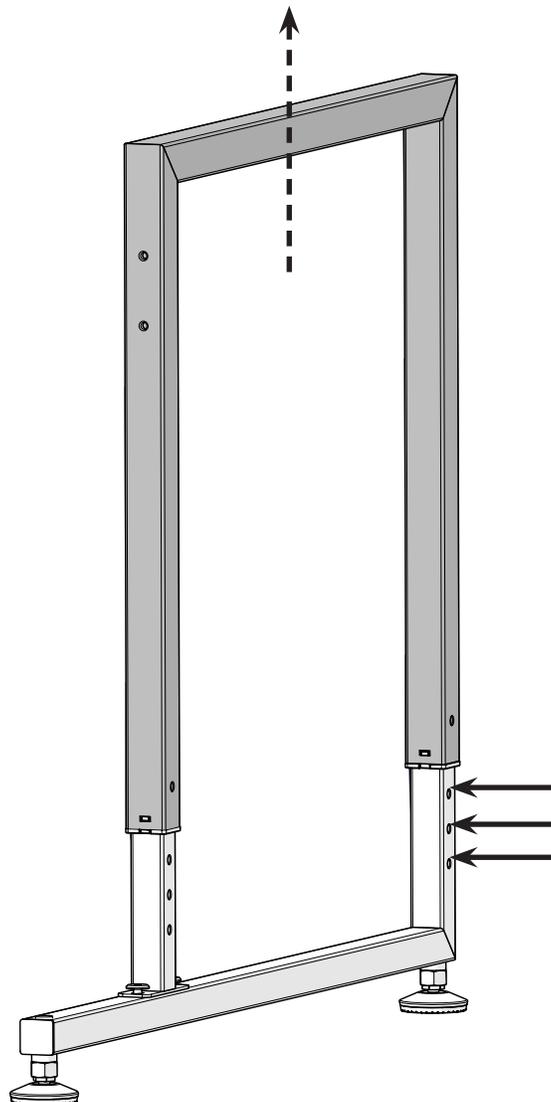
- 2 With the 4 mm Allen wrench and the 10 mm open-end wrench, remove the two sets of **height screws, washers, and nuts** from the new **middle leg assembly**.



- 3 Loosen, but do not remove, the two **M6 connector bolts** using the Allen wrench.



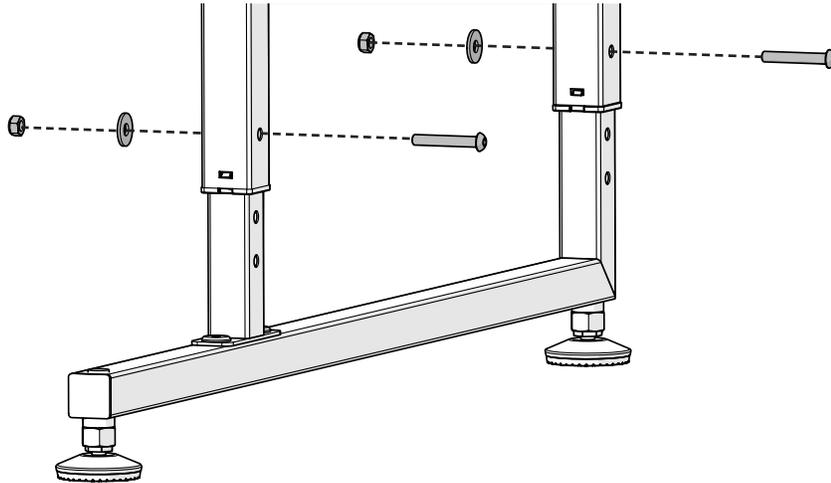
- 4 Lift the top of the leg so that it is set to the same height hole as the legs on your frame.



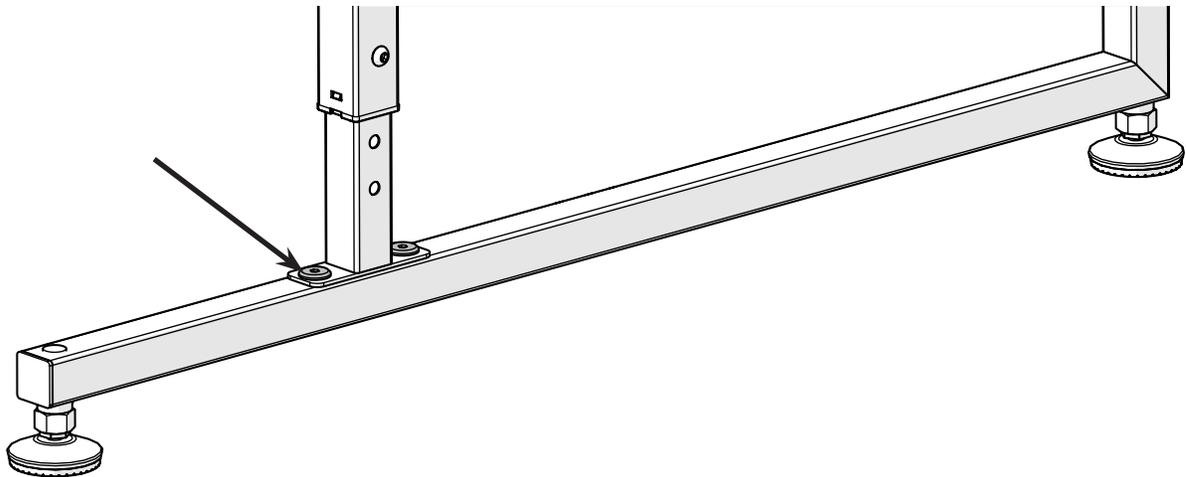
## Extend Assembled Frame

### Task 2 - Set the Middle Leg Height (continued)

- 5 Reinstall the height screws, washers, and nuts with the Allen wrench and 10 mm open-end wrench.



- 6 With the Allen wrench, tighten the connector bolts.

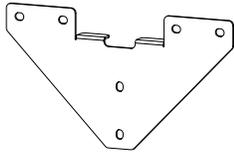


- 7 **Result:** The new middle leg is set to the same height as your assembled frame legs.

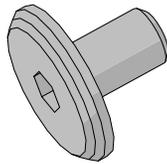
## Task 3 - Attach the Middle Leg Braces

### Parts & Tools Needed:

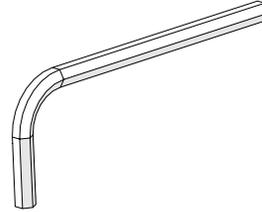
Middle  
Leg Brace (x2)



Connector Bolt  
M6 x 10 mm (x4)



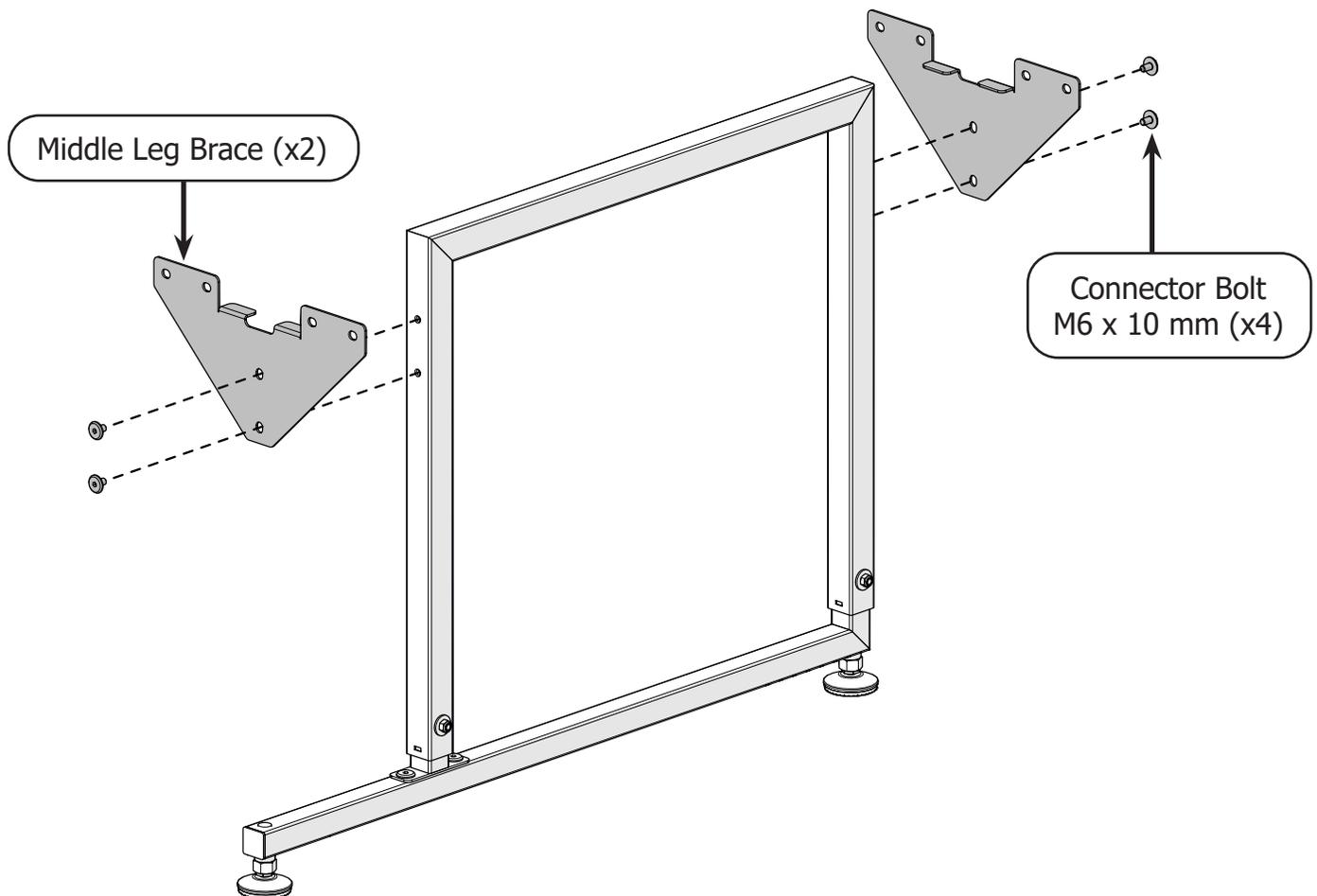
Allen Wrench  
4 mm



### Instructions

Take the following steps to extend the base frame table:

- 1 Loosely attach two **middle leg braces** to the middle leg assembly using four **M6 x 10 mm connector bolts** and the 4 mm Allen wrench. Do not fully tighten the connector bolts.



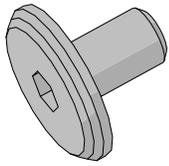
- 2 **Result:** The middle leg braces are loosely installed on the middle leg.

# Extend Assembled Frame

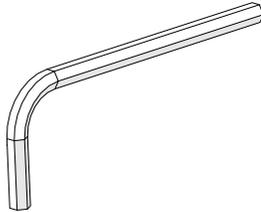
## Task 4 - Extend the Table

### Parts & Tools Needed:

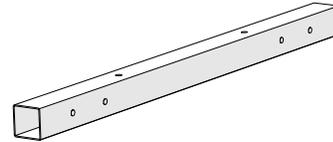
Connector Bolt  
M6 x 10 mm (x8)



Allen Wrench  
4 mm



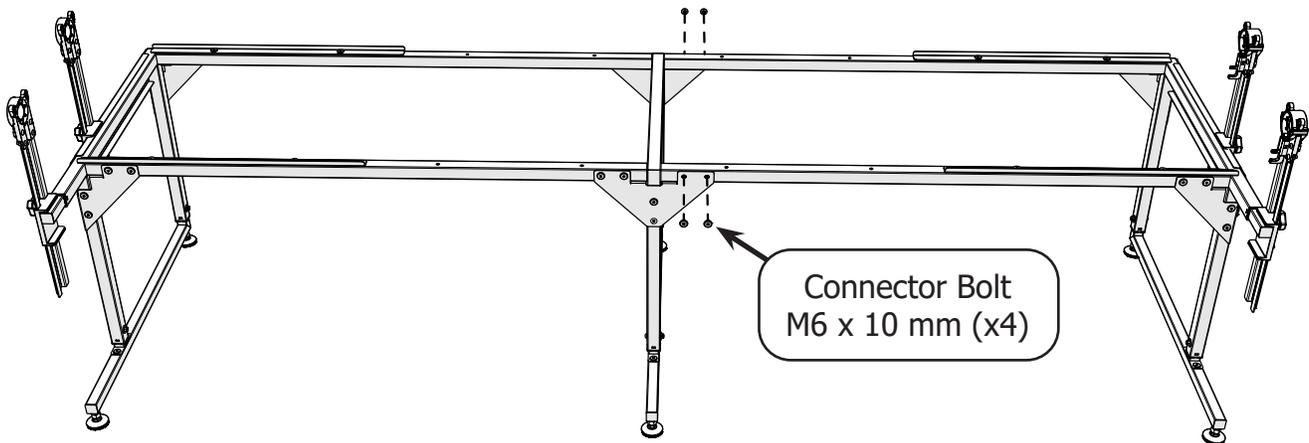
2-Ft Cross Support  
Tube (x2)



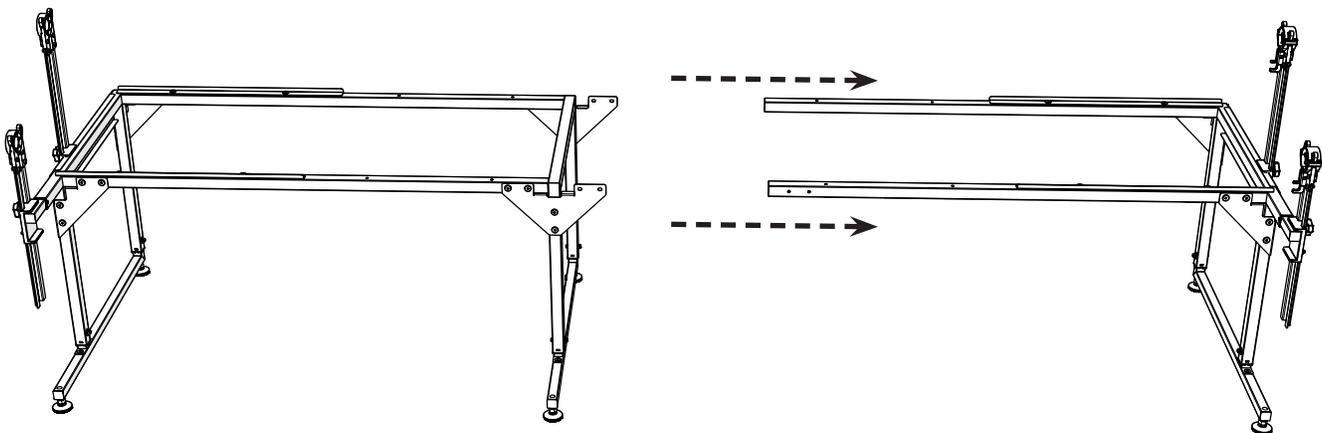
### Instructions

Take the following steps to extend the frame table:

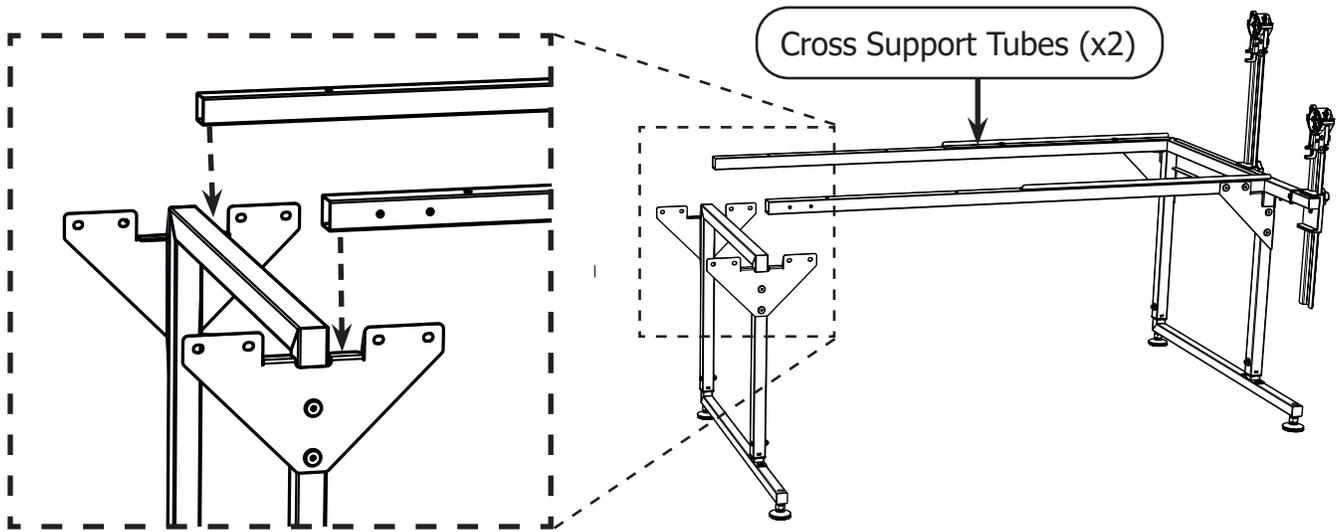
- 1 With the 4 mm Allen wrench, remove the four **M6 x 10 mm connector bolts** holding the right side of the frame to the middle braces.



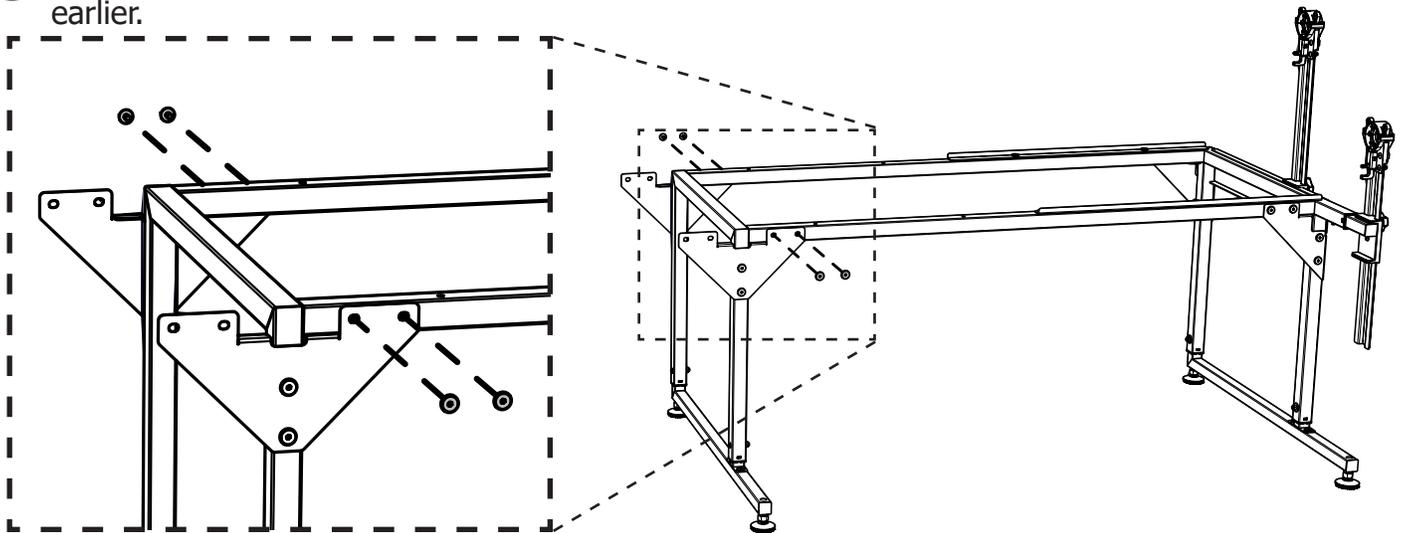
- 2 Carefully pull the right side of the frame away from the middle leg.



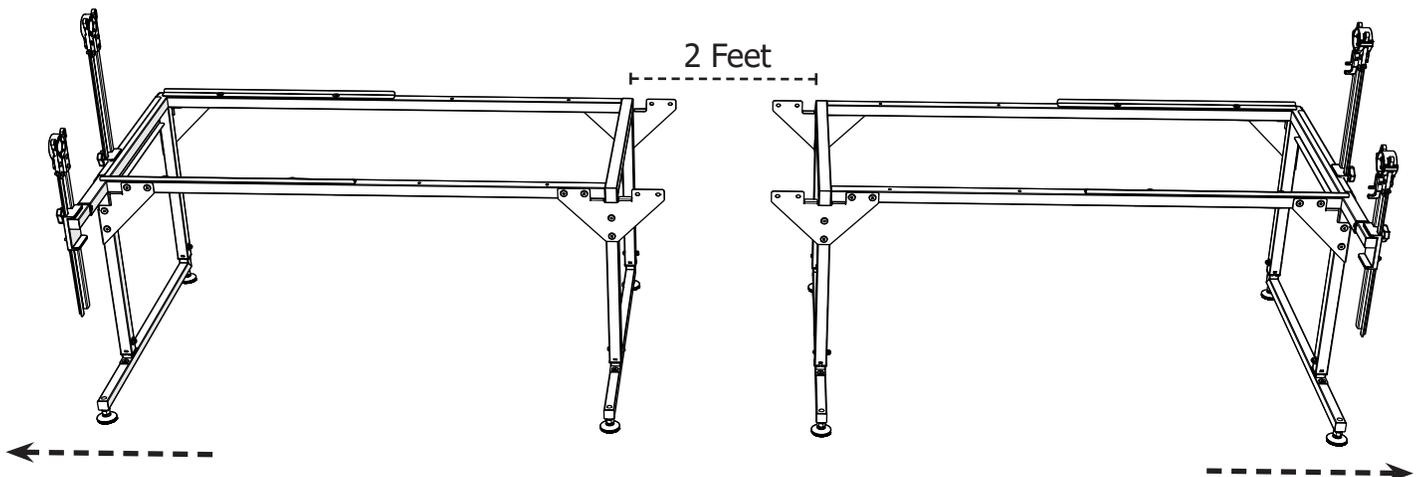
- 3 Place the free ends of the **cross support tubes** onto the new middle braces.



- 4 Loosely attach the cross support tubes with the four M6 x 10 mm connector bolts you removed earlier.



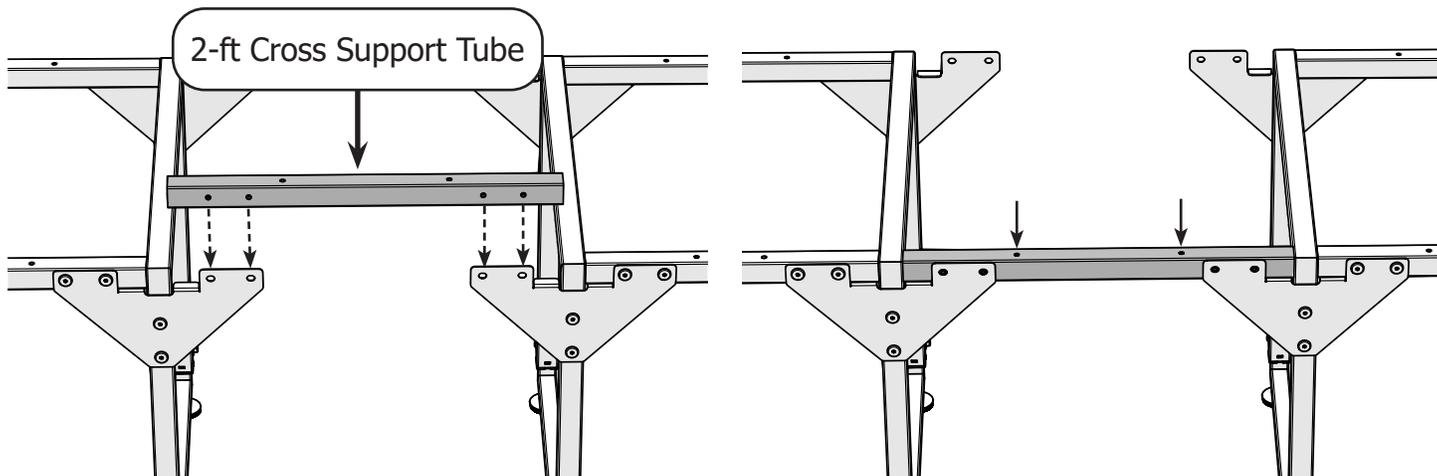
- 5 Position the middle legs so they are about **2 feet** apart.



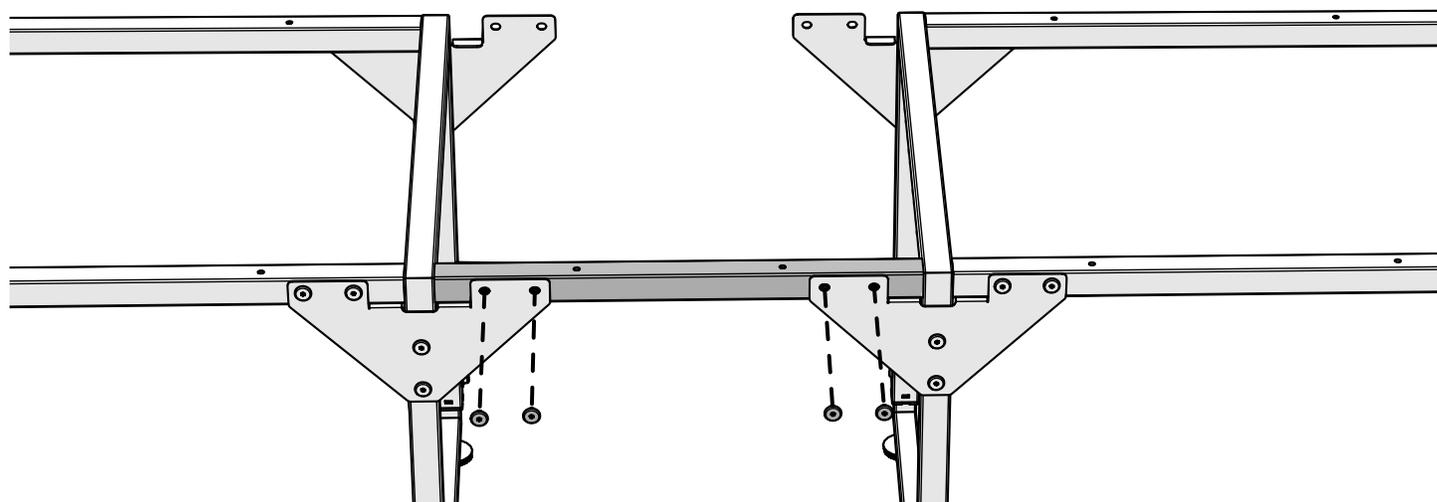
# Extend Assembled Frame

## Task 4 - Extend the Table (continued)

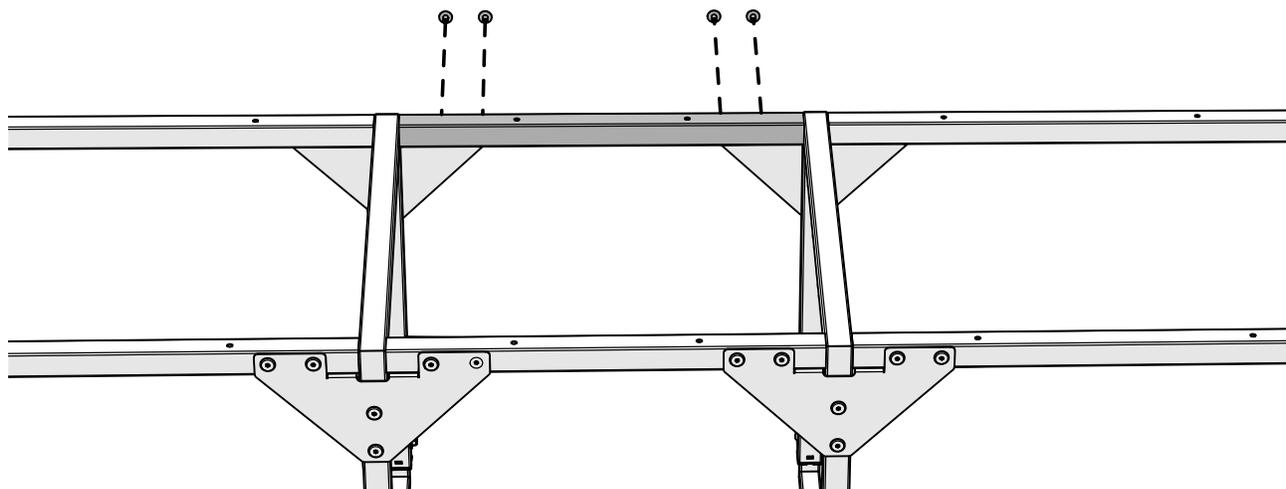
- 4 Place a **2-ft cross support tube** onto the front middle braces so the four screw holes in the tube align with the holes in the middle braces. Make sure the two other screw holes face up.



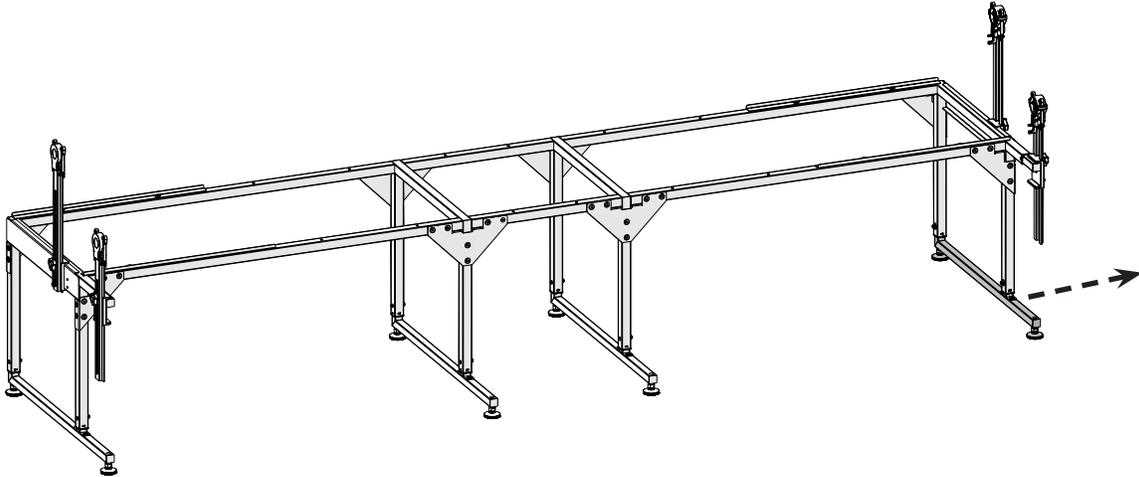
- 5 Loosely attach the cross support tube to the braces with four connector bolts.



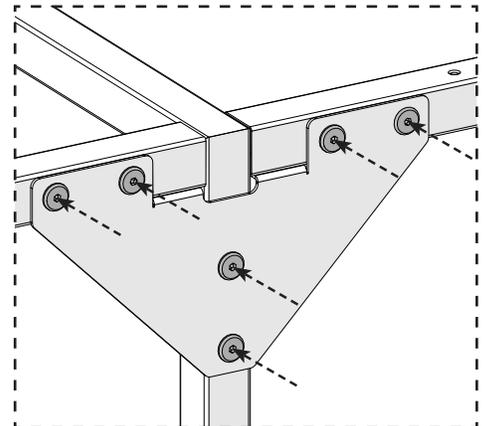
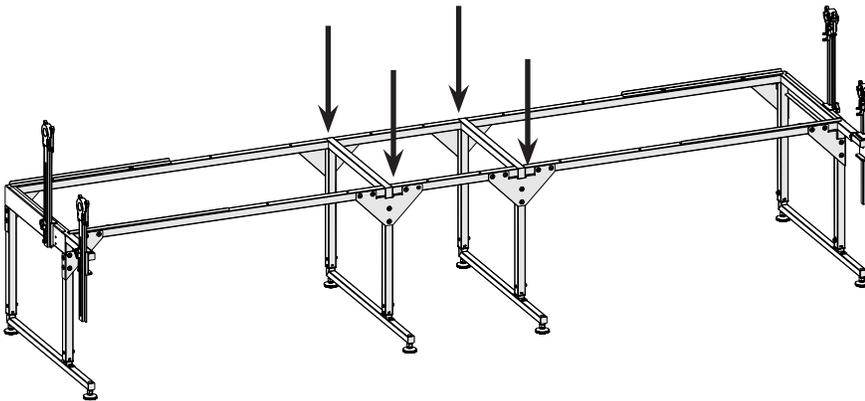
- 6 Repeat steps 4-5 to loosely attach the second 2 ft cross support tube to the middle braces on the back of the frame.



- 7 Pull the bottom of the right leg outward to square up the frame.



- 8 Use the 4 mm Allen wrench to tighten the sixteen connector bolts that you left loose task.



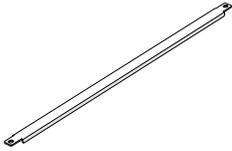
- 9 **Result:** The table is extended and all the cross support tubes are securely attached.

# Extend Assembled Frame

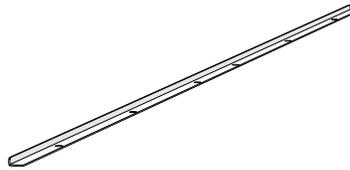
## Task 5 - Install the Tracks

### Parts & Tools Needed:

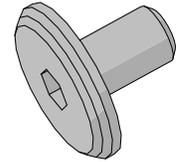
Table Support (x10)



Track Support -  
Extension (x2)

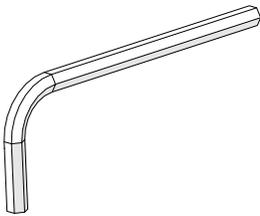


Connector Bolt  
M6 x 10 mm (x12)



(8 removed in Task 1)

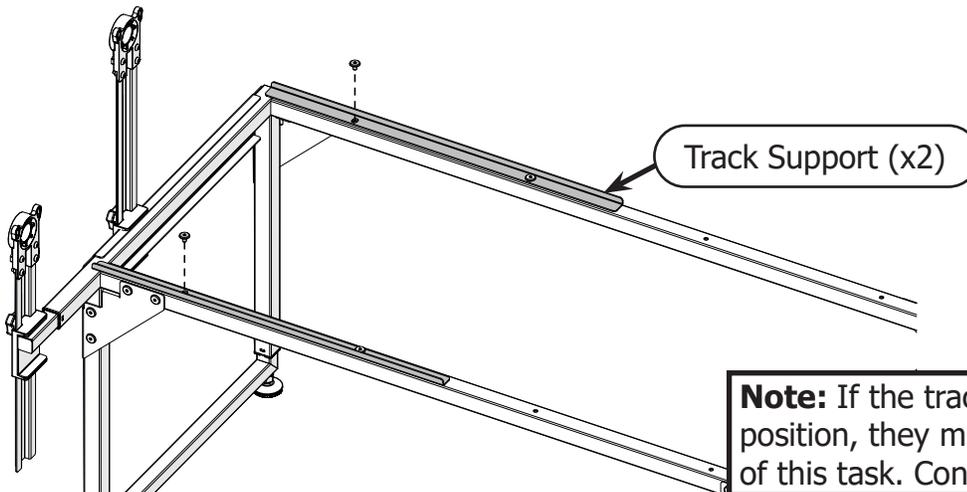
Allen Wrench  
4 mm



### Instructions

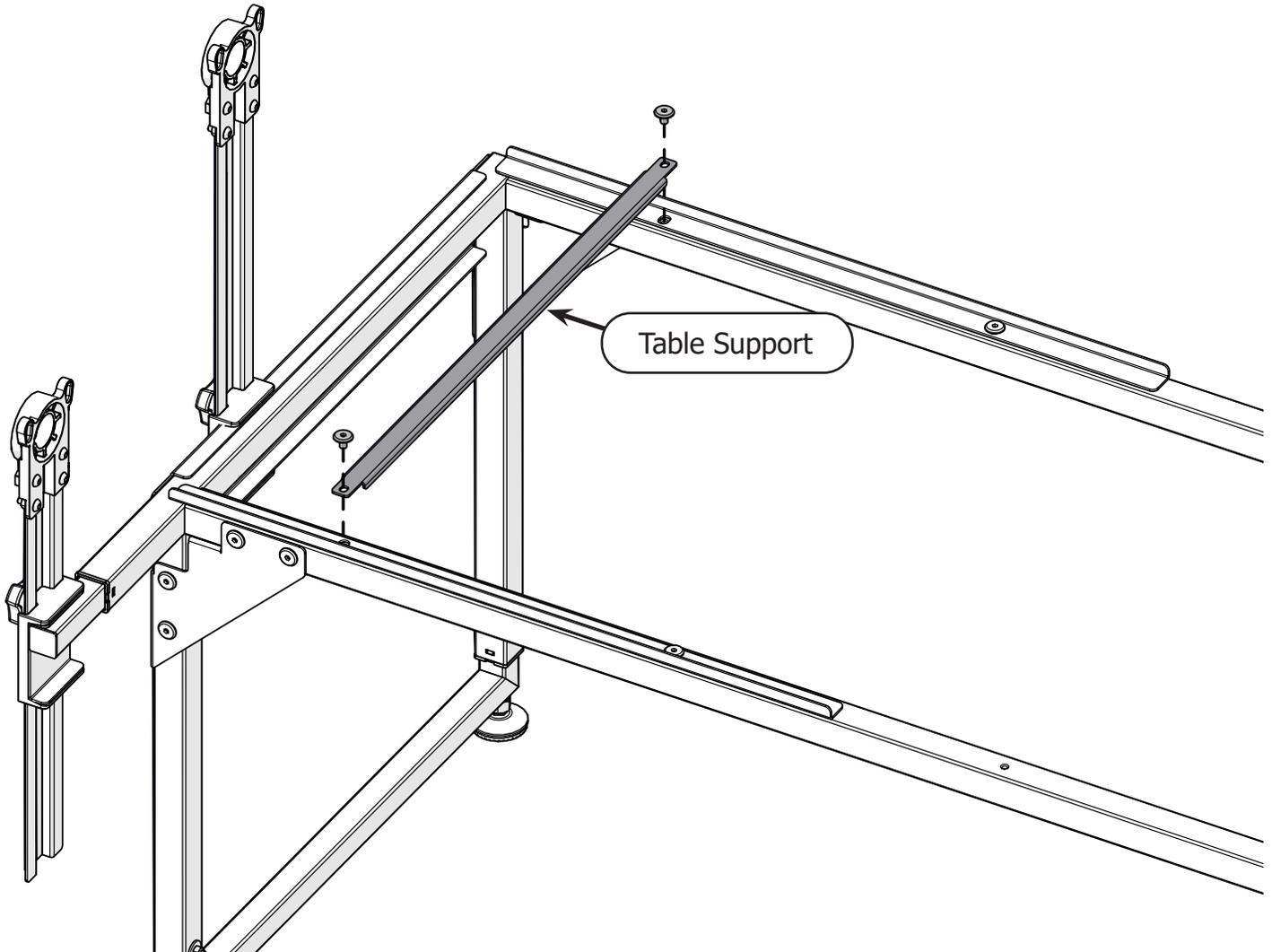
Take the following steps to install the 10 foot tracks:

- 1 With a 4 mm Allen wrench, unscrew the connector bolts on the end of each of the left **track supports**. Take care not to bump the supports or allow them to shift.

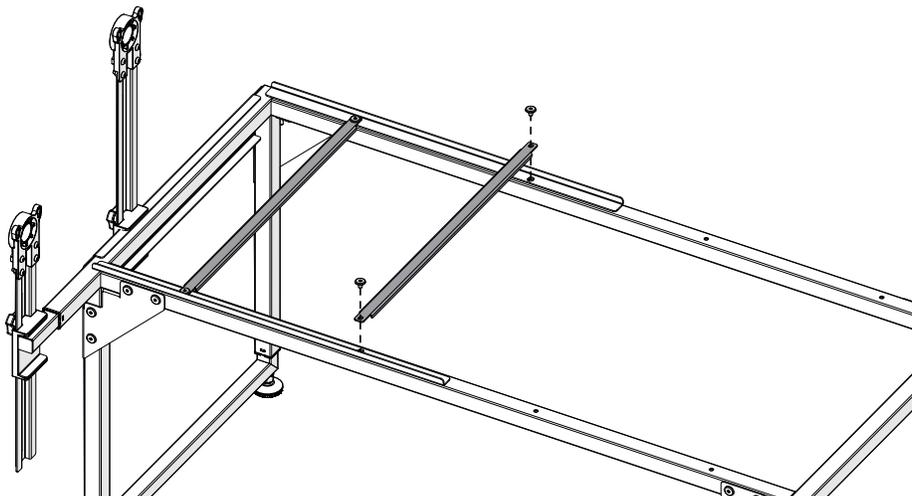


**Note:** If the track supports shift out of position, they must be realigned at the end of this task. Continue to step 2 for now.

- 2 Tightly attach a **table support** onto the frame with the connector bolts you removed. As before, be careful not to shift the track supports.



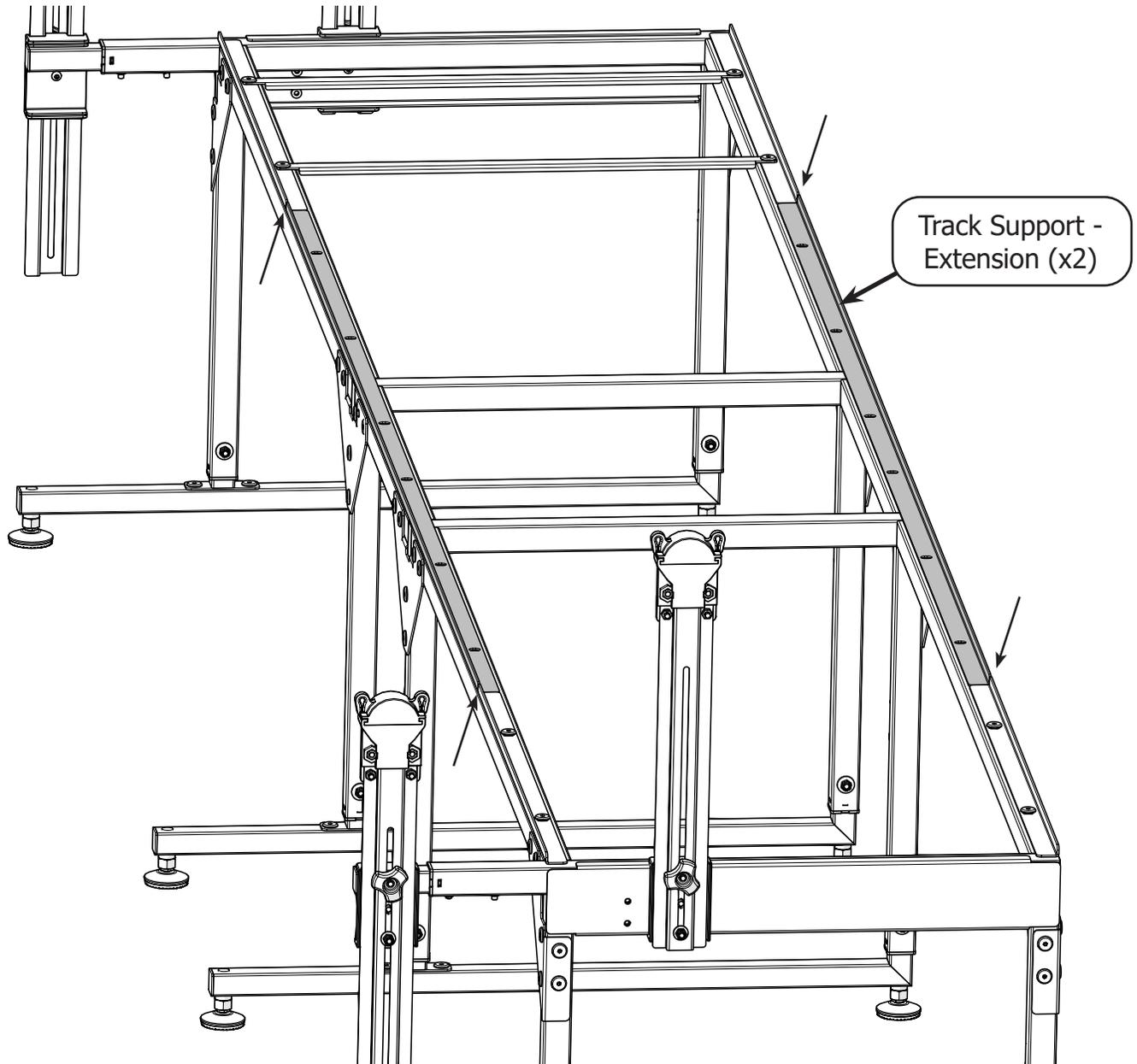
- 3 Repeat steps 1-2 with the remaining connector bolts on the left track supports.



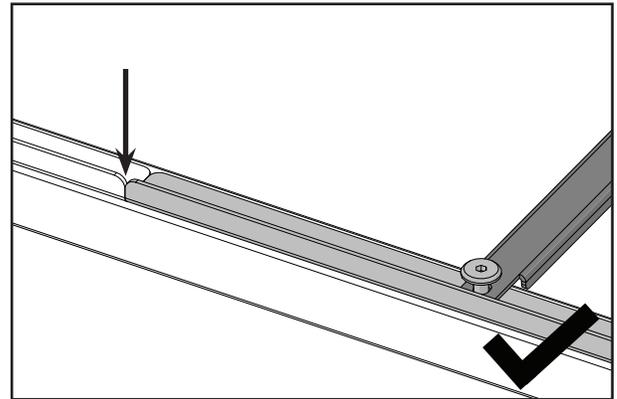
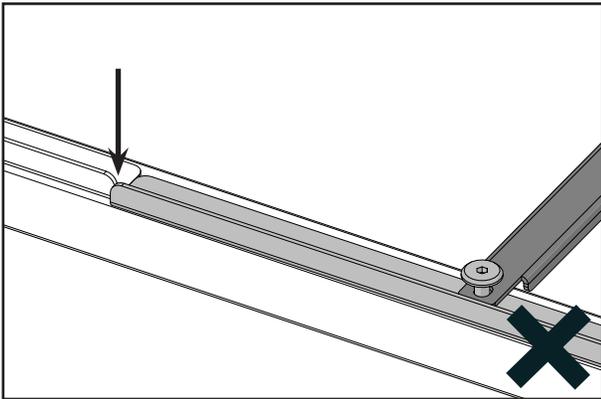
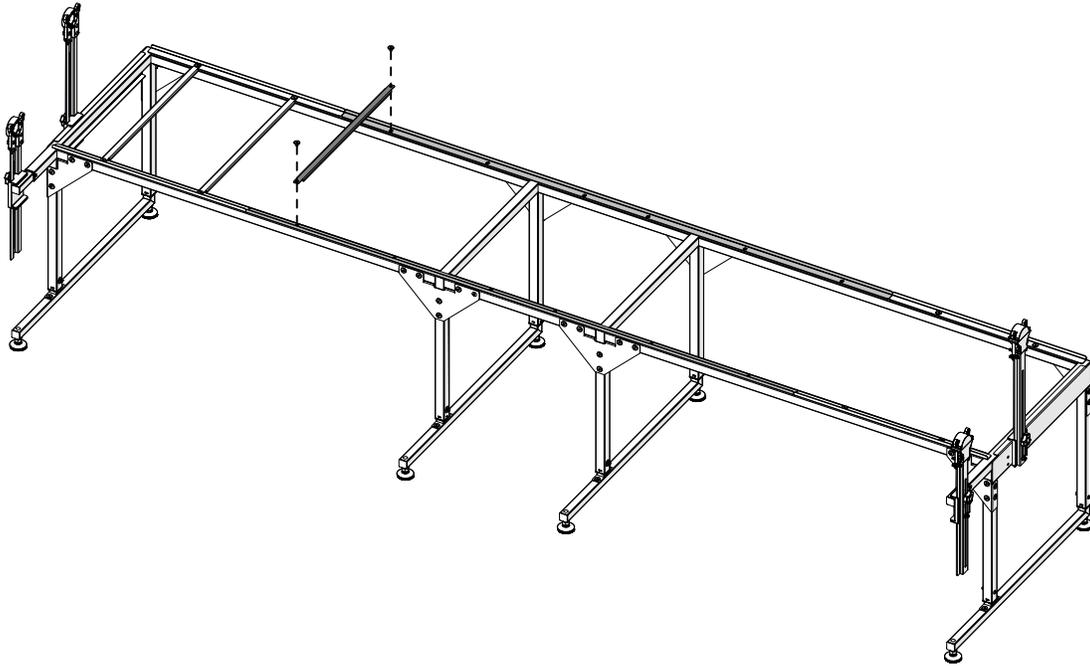
## Extend Assembled Frame

### Task 5 - Install the Tracks (continued)

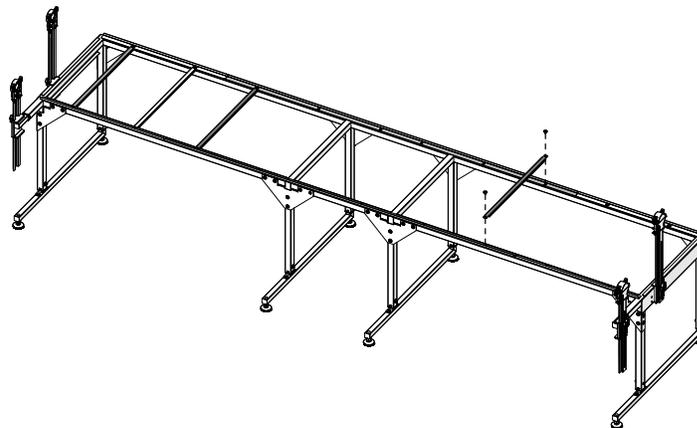
- 4 Place the **track support extensions** onto the middle of the frame. Align the vertical edges of the extended track supports with the vertical edges on the installed track supports.



- 5 Attach a table support tightly to the left end of the extended track support. As you tighten the connector bolt, make sure the track support vertical edges stay aligned.



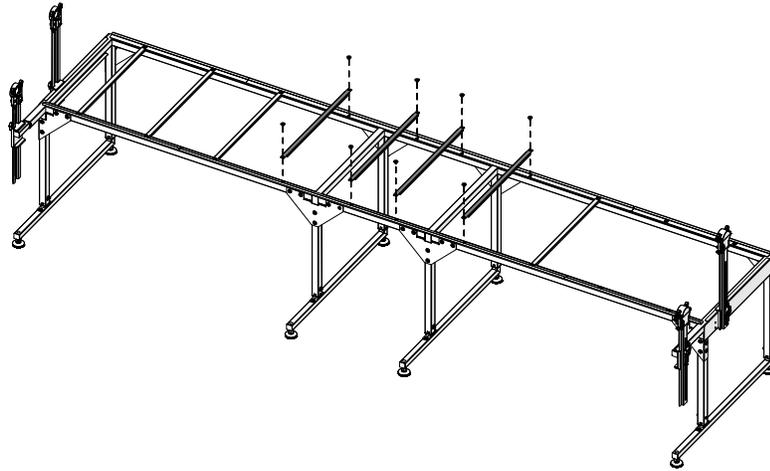
- 6 Repeat step 5 to attach a table support to the right end of the track supports, making sure the track support vertical edges stay aligned.



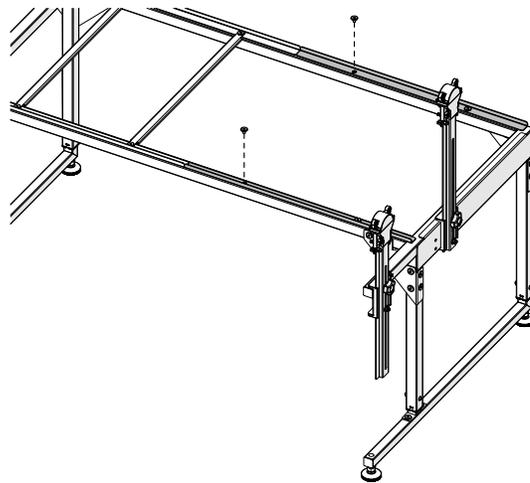
# Extend Assembled Frame

## Task 5 - Install the Tracks (continued)

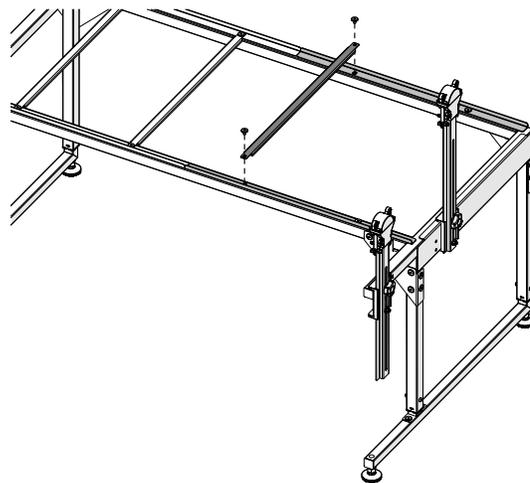
- 7 Tightly attach four more table supports onto the extended track supports.



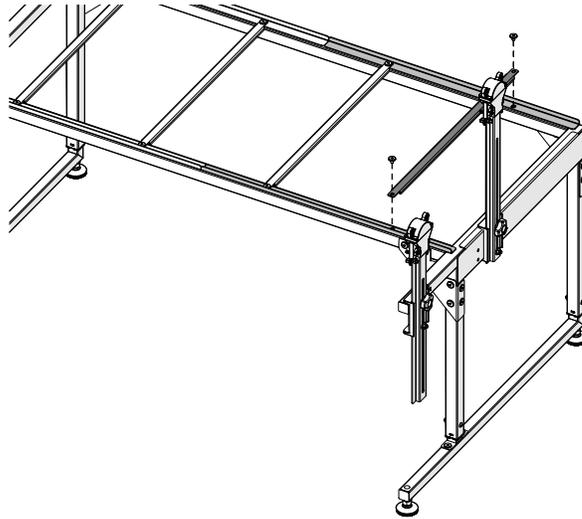
- 8 With a 4 mm Allen wrench, unscrew the connector bolts on the left end of each of the right track supports. Take care not to bump the supports or allow them to shift.



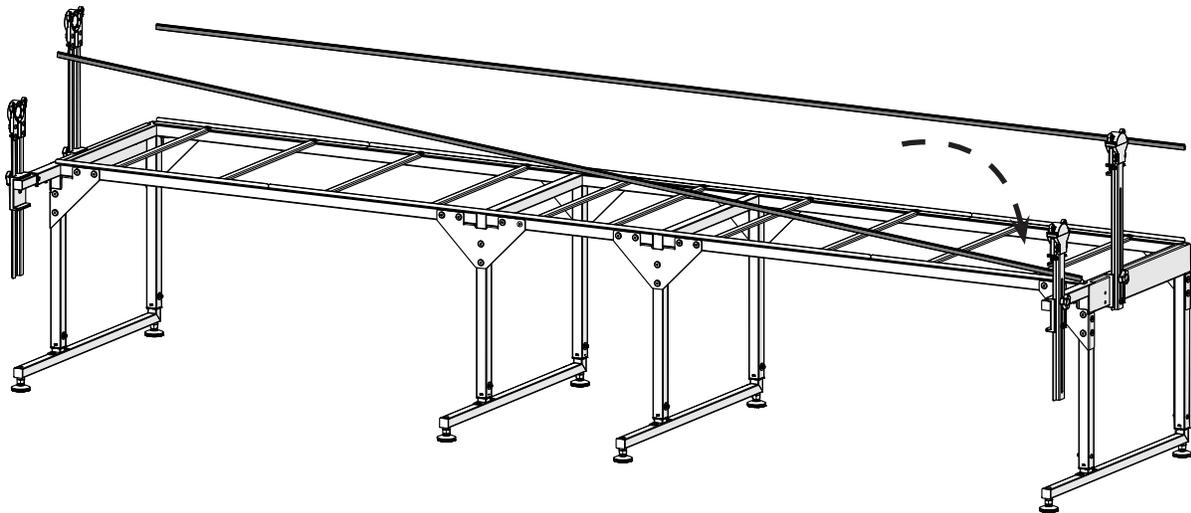
- 9 Tightly attach a table support onto the frame with the connector bolts you removed. As before, be careful not to shift the track supports.



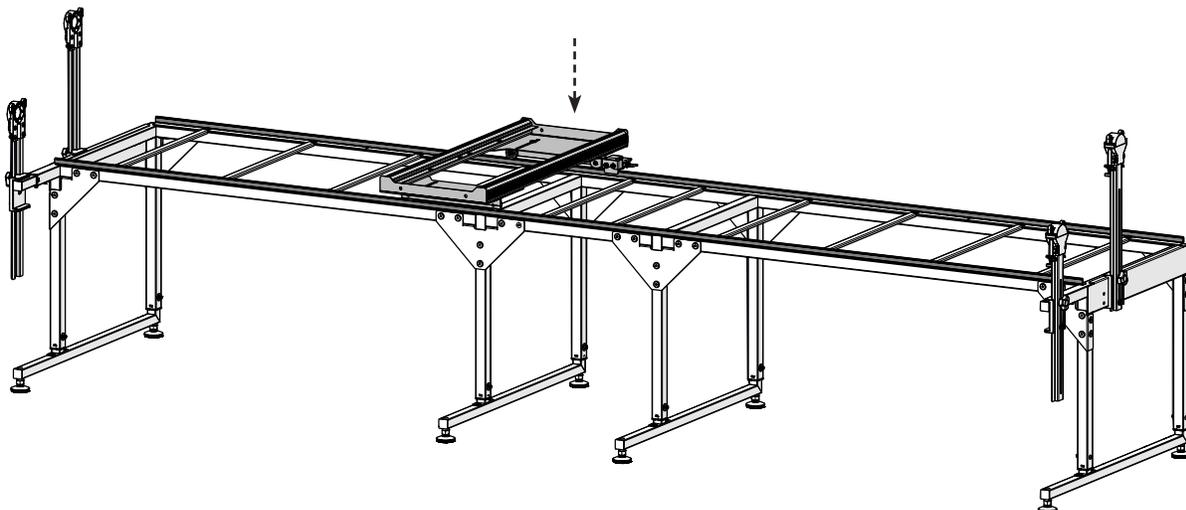
- 10 Repeat steps 8-9 on the remaining connector bolts on the right track supports.



- 11 Press the extended plastic tracks onto both the front and back track supports.



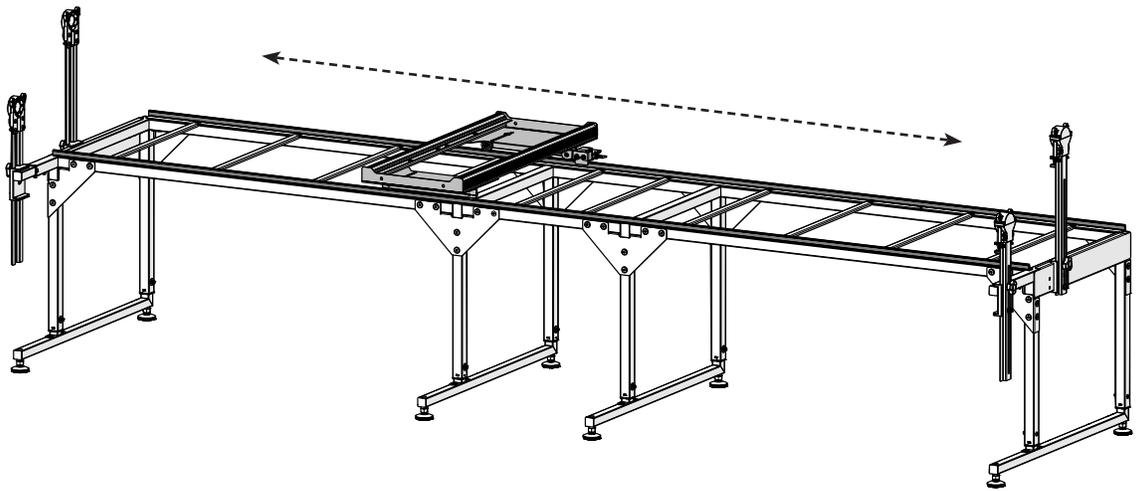
- 12 Place the bottom carriage back onto the frame tracks.



# Extend Assembled Frame

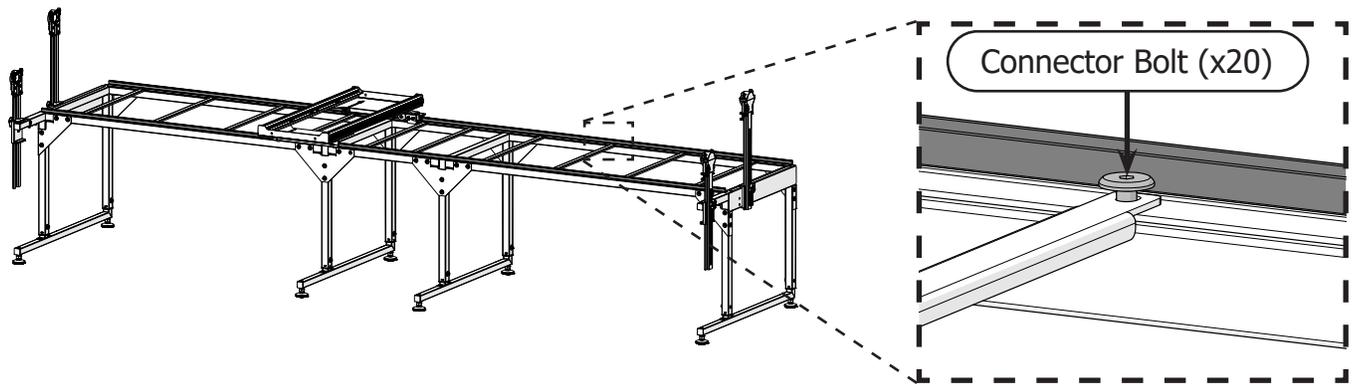
## Task 5 - Install the Tracks (continued)

13 Test the track alignment. All four bottom carriage wheels should ride the track smoothly over the full length of the frame.

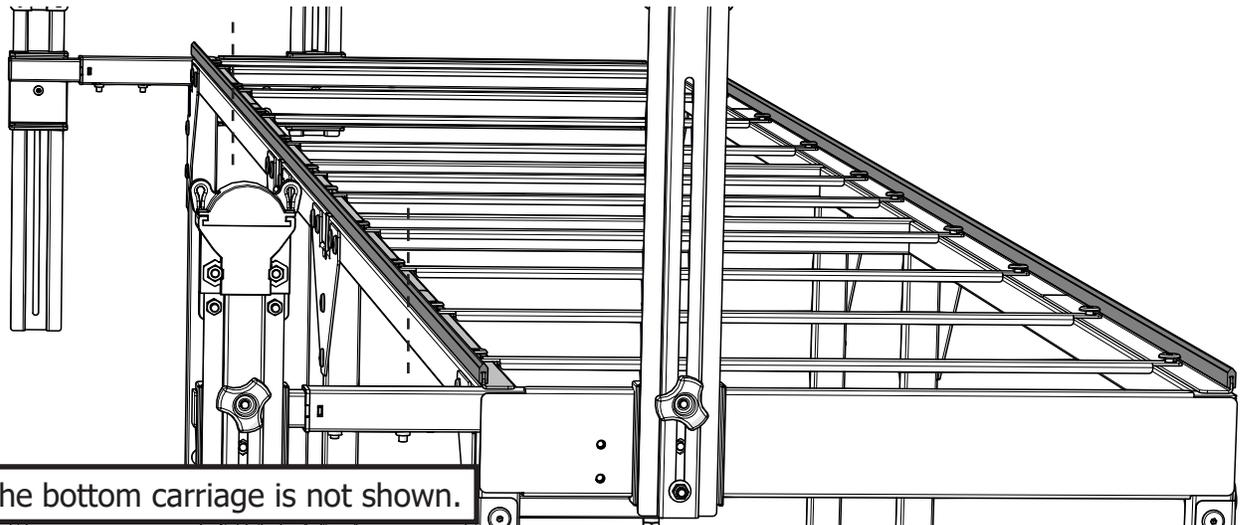


14 If the carriage ran off the tracks, the tracks must be realigned. Take the following steps. If your carriage did not run off the tracks, skip to "Task 9 - Install the Table Surfaces" on page 64.

a Loosen the twenty connector bolts attaching the track supports to the frame.

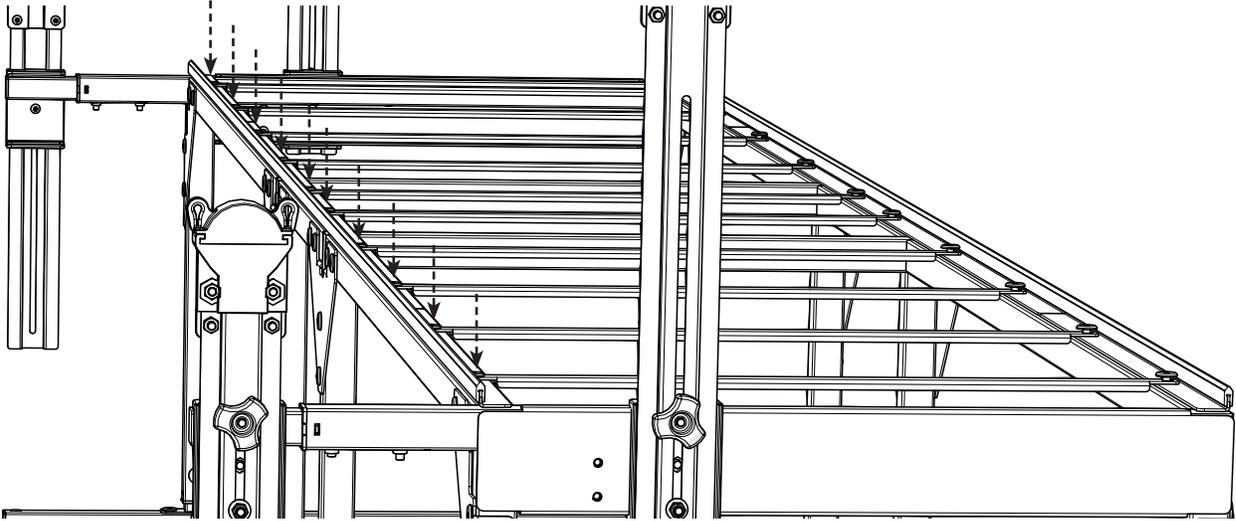


b Align the front track supports so they are flush with the front of the frame.

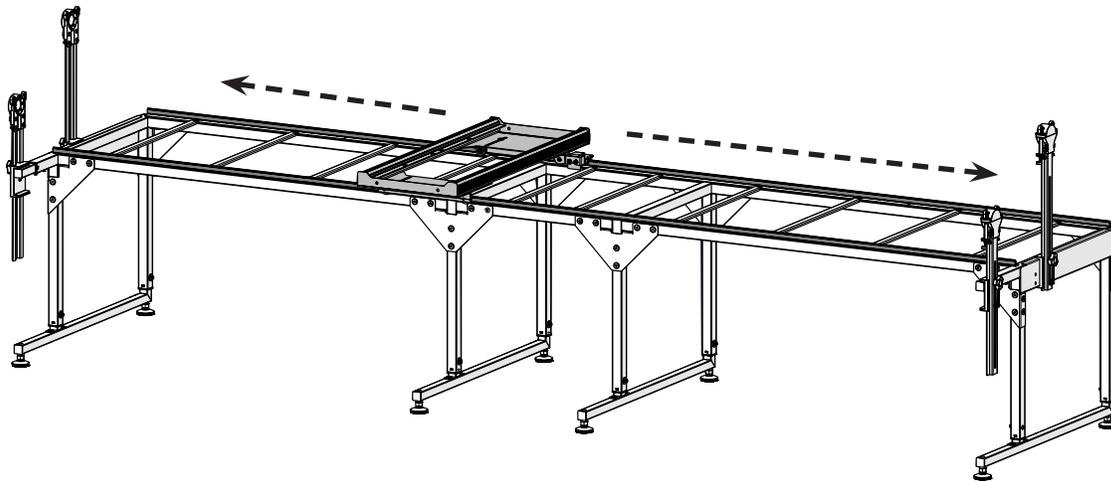


**Note:** The bottom carriage is not shown.

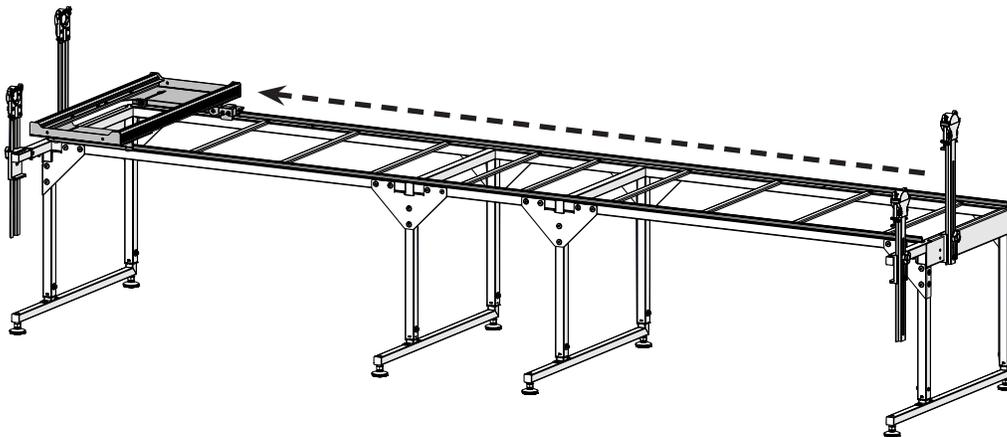
- c Hold the front track supports in position and tighten the front connector bolts.



- d Press down firmly on the bottom carriage and slide it across the frame a few times. This will align the loose track supports in the back.



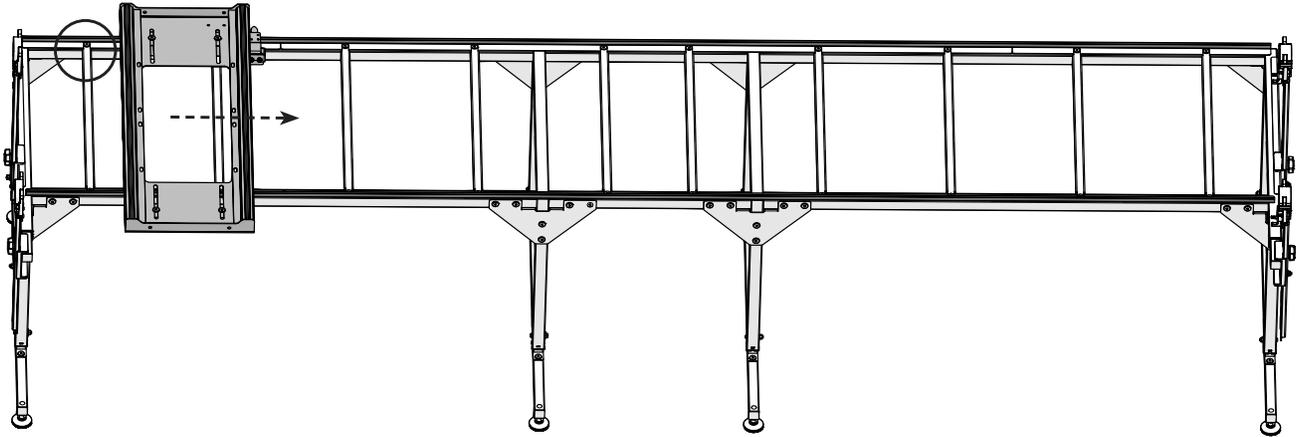
- e Push the bottom carriage to the left side of the frame.



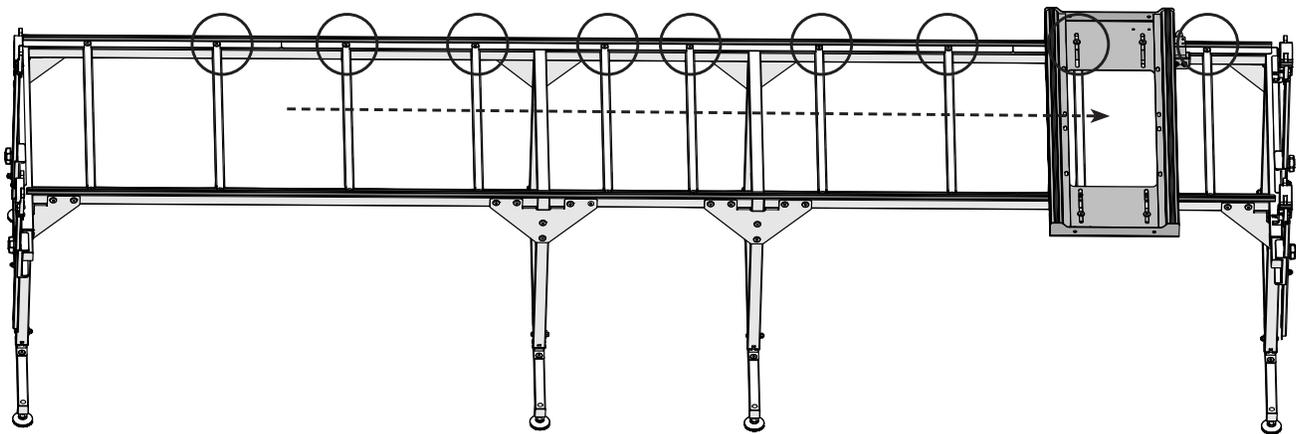
## Extend Assembled Frame

### Task 5 - Install the Tracks (continued)

- f Slowly and firmly begin pushing the carriage to the other side of the frame. As you pass over each of the rear M6 connector bolts, tighten it with the 4 mm Allen wrench.



**Note:** Tighten the last connector bolt when the bottom carriage is just in front of it.



- 15 **Result:** The tracks are installed and aligned so the carriage can travel smoothly across the frame.

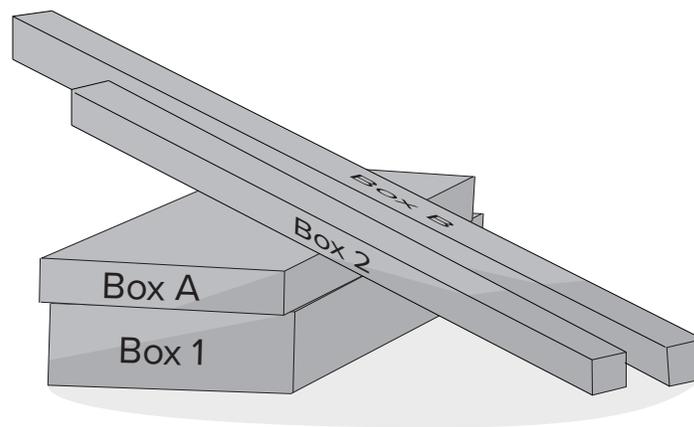
Continue to "Task 9 - Install the Table Surfaces" on page 64 to finish assembling your frame.

## Assemble a New Frame

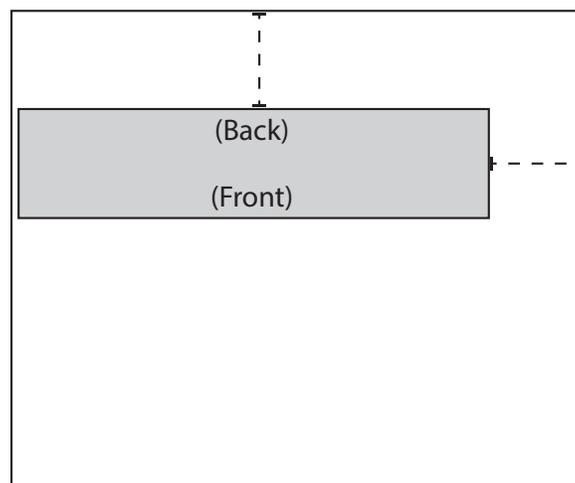
This section describes how to set up your 10-foot Q-Zone Queen from scratch. These instructions provides a more streamlined experience than setting up the base frame and extending the frame afterward.

### You Will Need:

- Boxes 1 and 2 of your Q-Zone Queen frame.
- Boxes A and B of the Extension Kit.



Assemble your frame in the same room you intend to use for quilting. If possible, leave enough space around the back and right side of the frame so that you can move comfortably around it.



# Assemble a New Frame

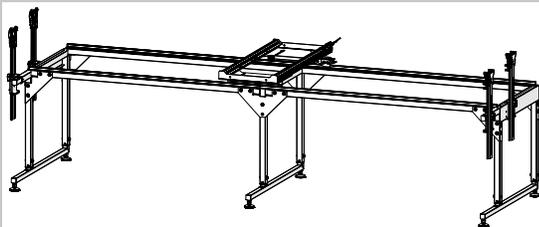
## Welcome to Your Q-Zone Queen Frame

We are pleased to introduce you to the newest part of your quilting setup. This frame has been especially designed to help quilters like you have the tools available to create quality projects.

This manual is broken into four sections (or parts). Notifications at the end each of each section will direct you to switch to your machine manual or QuiltMotion manual for instructions on assembling those products. This creates a streamlined process of building a complete quilting setup in the most efficient way. Use the following flowchart to guide you in navigating multiple manuals. If you are not using one of the products in the flowchart, just move to the next item in the chart.

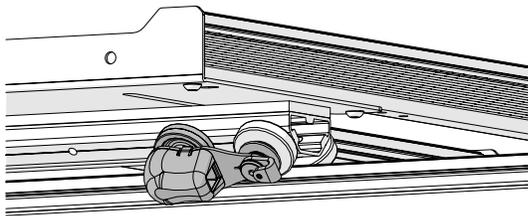
Thank you again for choosing us to help your quilting projects. We look forward to working with you.

- Grace Company



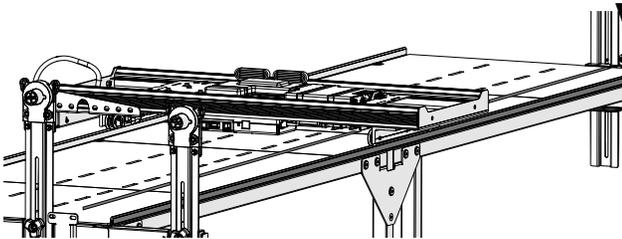
### **Start Here: Frame Manual: Part One**

- Assemble the frame's legs, table, and sides.
- Install the channel lock onto the bottom carriage.
- Align your tracks.



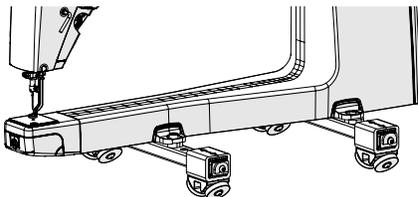
### **Quilting Machine Manual: Part One**

- Install the lower encoder onto the bottom carriage.



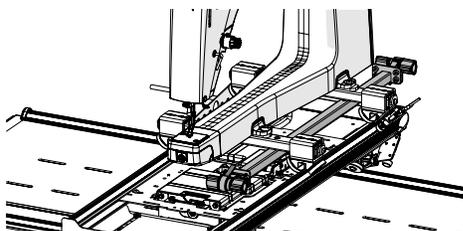
### **QuiltMotion Manual: Part One**

- Prepare the bottom carriage.
- Install the long belt across the frame.



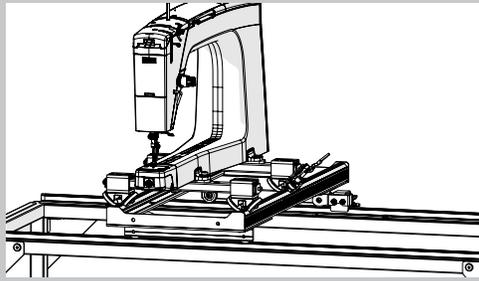
### **Quilting Machine Manual: Part Two**

- Install your machine's wheels.
- Align your wheels.



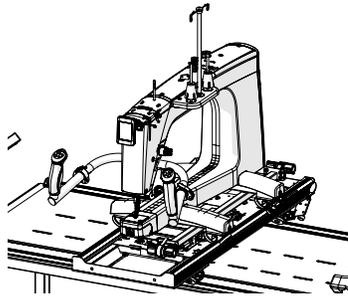
### **QuiltMotion Manual: Part Two**

- Install the short belt.
- Tension the short belt.



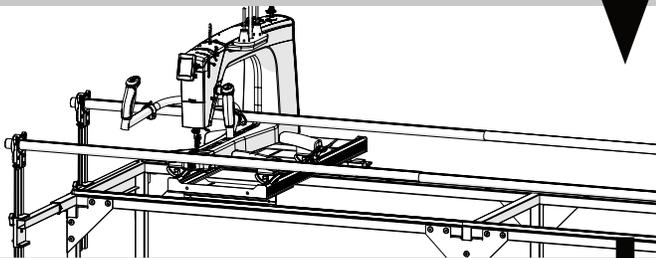
## Frame Manual: Part Two

- Install the channel lock on the machine or top plate.
- Prepare the top plate and home sewing machine.
- Place the machine or top plate on the frame.



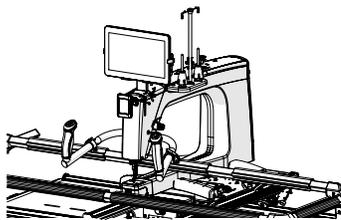
## Quilting Machine Manual: Part Three

- Install the wheel covers, display, handles, thread mast.
- Install the upper encoder.



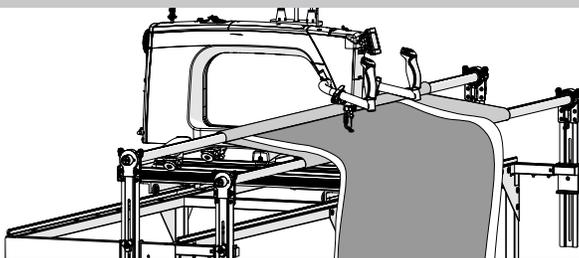
## Frame Manual: Part Three

- Install the rails and fabric bungees.
- Position and adjust the rails.
- Adjust the carriage stop.
- Level the frame.



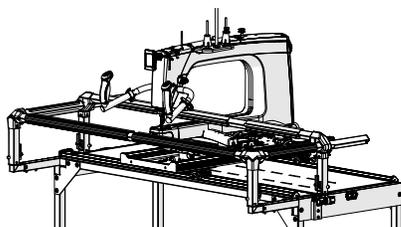
## QuiltMotion Manual: Part Three

- Install the tablet bracket.
- Plug in QuiltMotion.



## Frame Manual: Part Four

- Install the velcro tape
- Install the cloth leaders
- Attach the fabric



## Quilting Machine Manual: Part Four

- Use the quilting modes and settings in the display.
- Maintain the machine and perform repairs.

# Part One

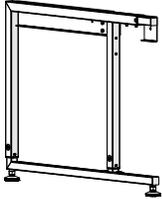
## **Progress Checkpoint**

Complete Part One of these instructions before assembling your quilting machine or any accessories. The beginning of each Part will contain a progress checkpoint, helping make sure you accomplish all of the tasks necessary to complete your quilting setup in the most convenient order.

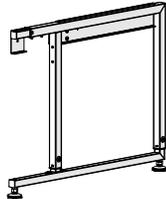
## Task 1 - Set the Frame Height

### Parts & Tools Needed:

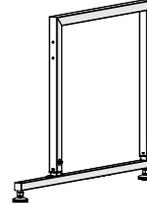
Right Leg Assembly



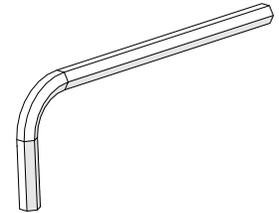
Left Leg Assembly



Middle Leg Assembly (x2)



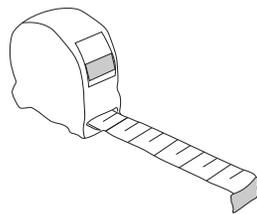
Allen Wrench  
4 mm



Open-End Wrench  
10 mm and 13 mm



Tape Measure

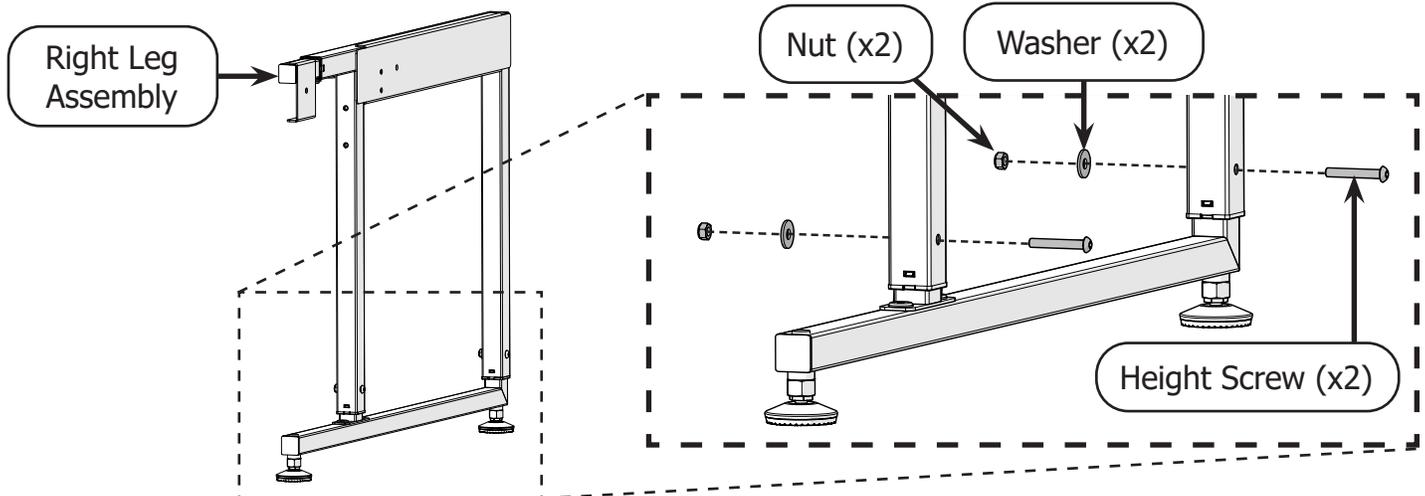


(not included)

### Instructions

The following steps determine how far the quilting machine handles are from the ground when the frame is fully assembled. For comfortable prolonged use, it is best for the handles to be at around elbow height. Take the following steps to set your frame height:

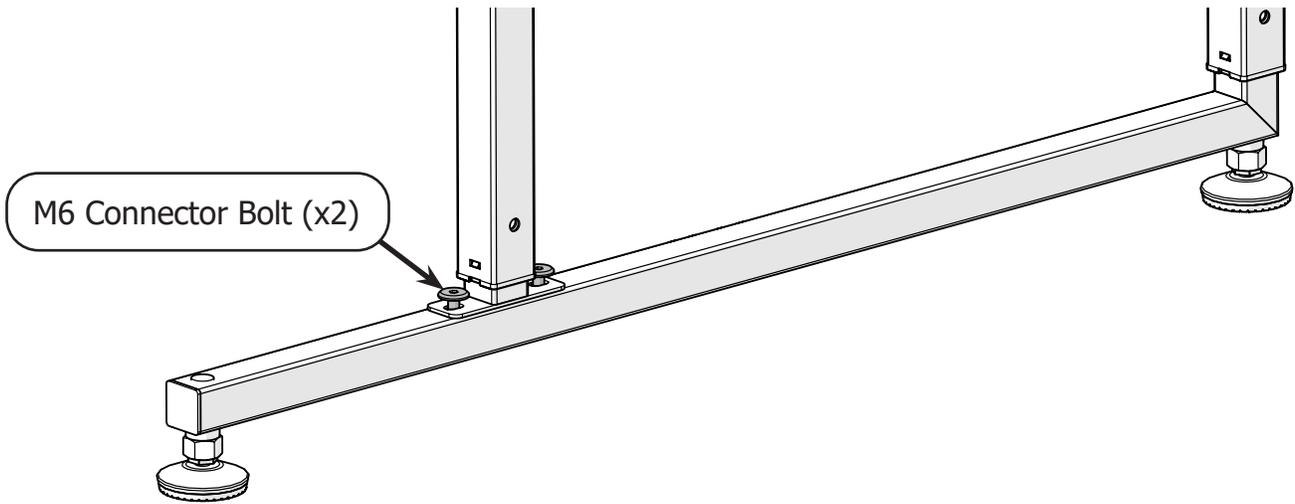
- 1 Begin with the **right leg assembly**. With the 4 mm Allen wrench and the 10 mm open-end wrench, remove the two sets of **height screws, washers, and nuts**.



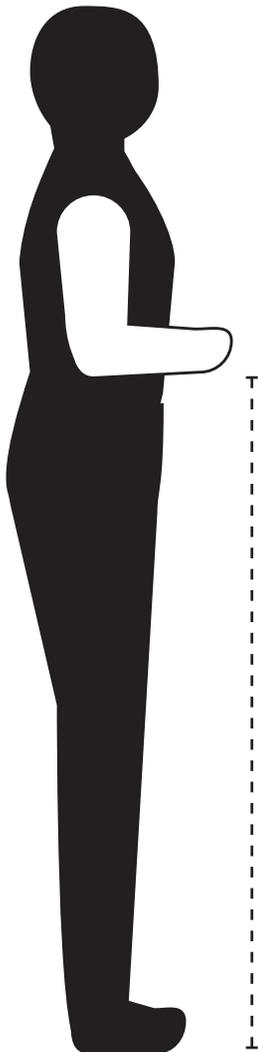
# Assemble a New Frame (Part One)

## Task 1 - Set the Frame Height (continued)

- 2 Loosen, but do not remove, the two **M6 connector bolts** using the Allen wrench.



- 3 Hold your arm with your elbow at a 90 degree angle. Measure the distance from your elbow to the floor with a tape measure and find the hole that corresponds to your measurement in the chart below.

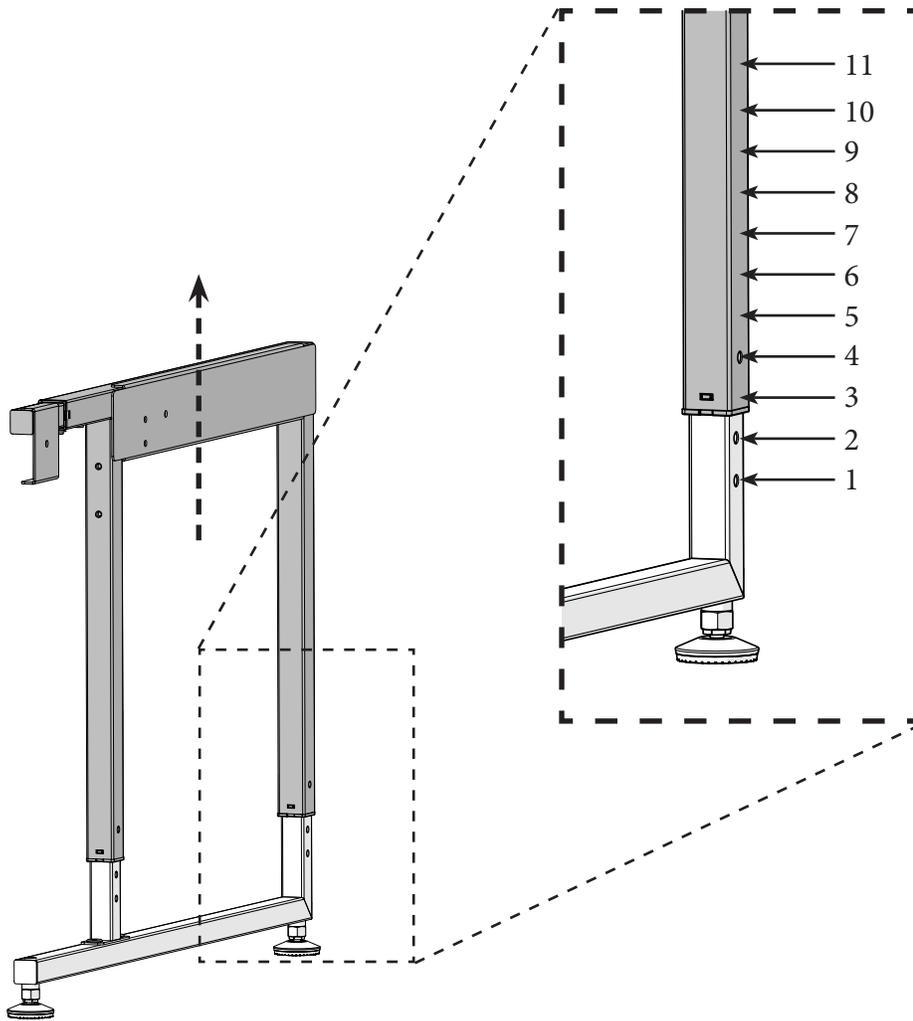


Hole Number	Elbow to Floor
1	37.5 Inches
2	38.5 Inches
3	39.5 Inches
4	40.5 Inches
5	41.5 Inches
6	42.5 Inches
7	43.5 Inches
8	44.5 Inches
9	45.5 Inches
10	46.5 Inches
11	47.5 Inches

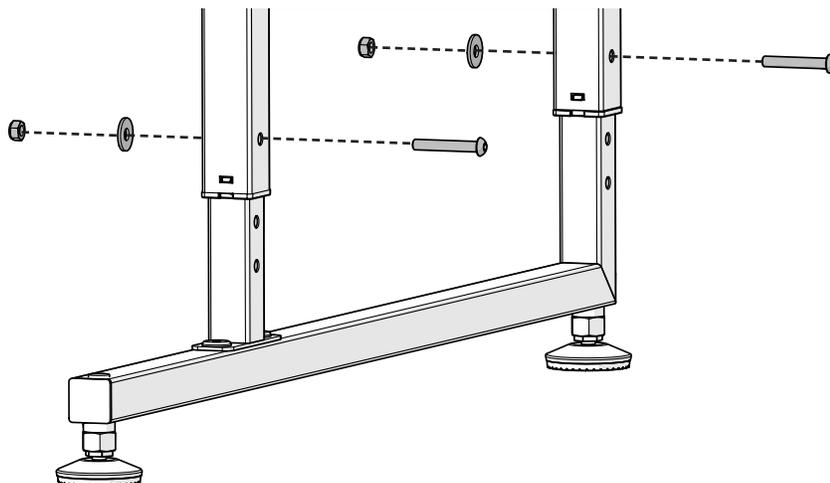
# Assemble a New Frame (Part One)

## Task 1 - Set the Frame Height (continued)

- 4 Lift the the top of the leg to align its height hole with the height hole in the lower leg that you chose.



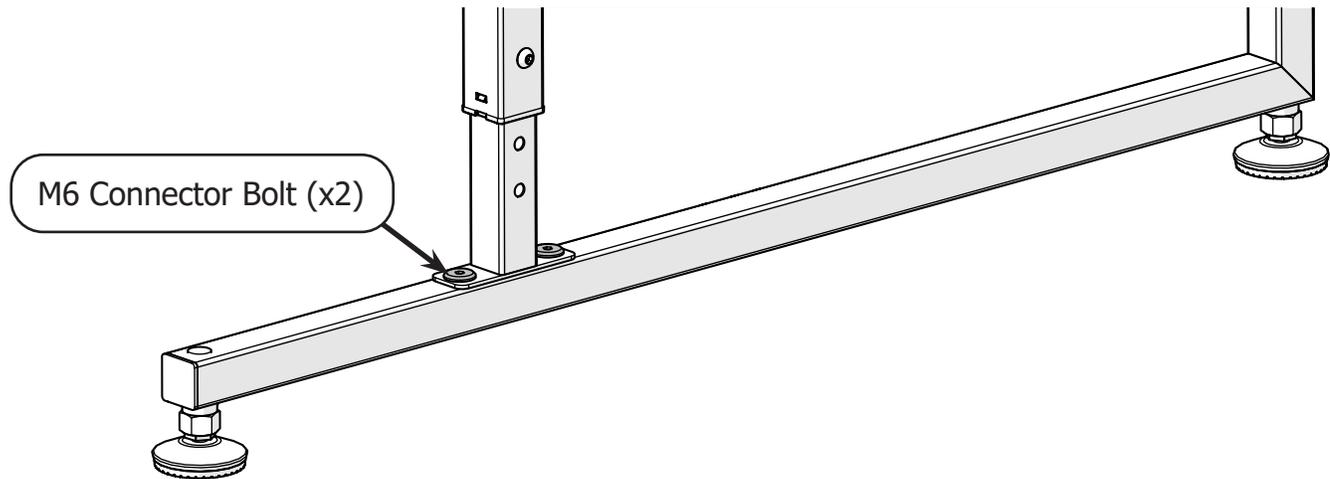
- 5 Reinstall the height screws through the selected height holes. Cap the screws with the washers, and nuts and tighten with the Allen wrench and 10 mm open-end wrench.



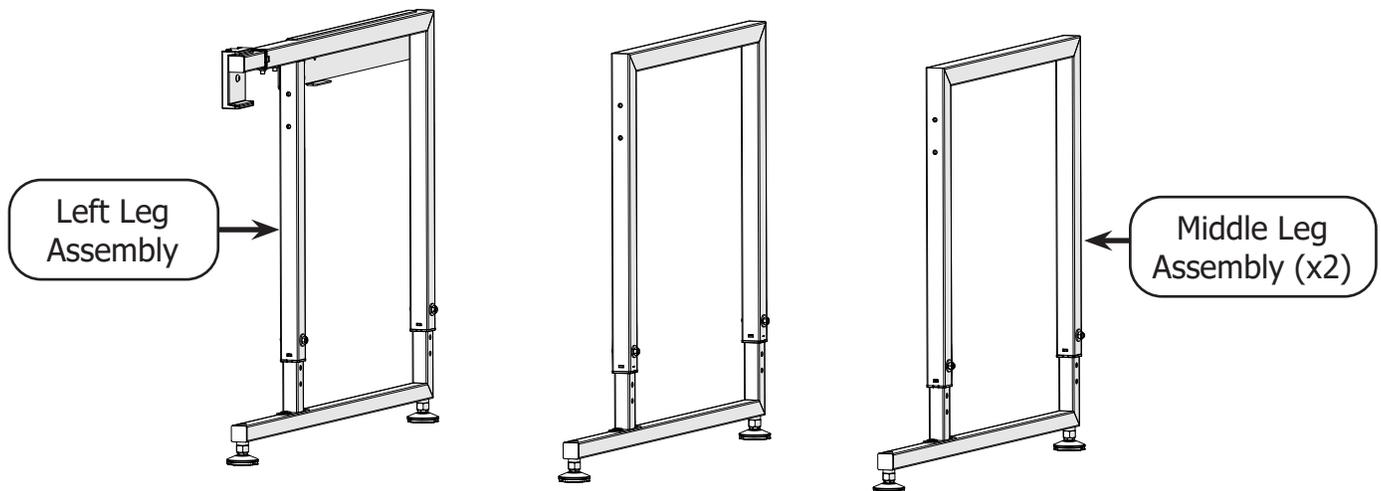
# Assemble a New Frame (Part One)

## Task 1 - Set the Frame Height (continued)

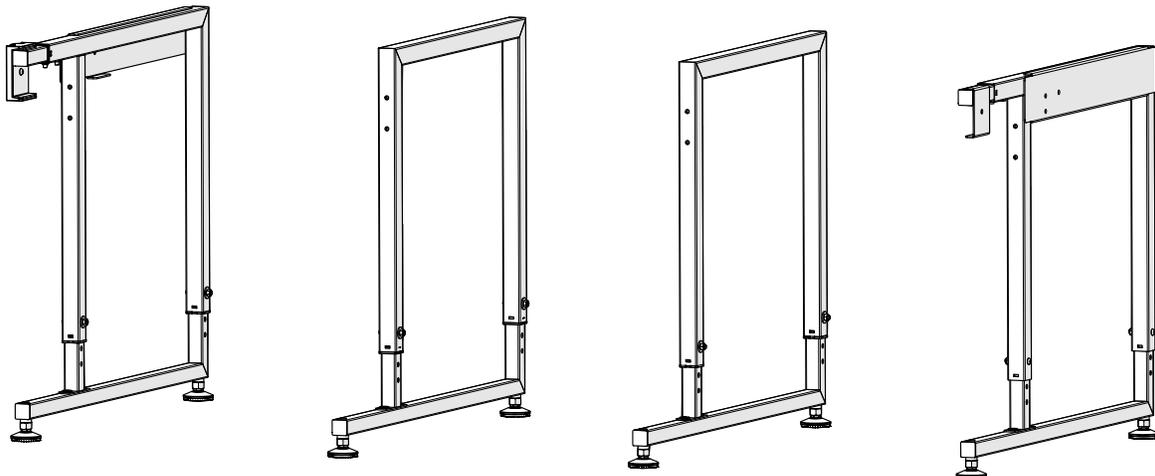
- 6 Tighten the **M6 connector bolts** with the Allen wrench.



- 7 Repeat these steps (skipping step 3) to set the height on the **middle leg assemblies** and the **left leg assembly**. All four leg assemblies must be set to the same height.



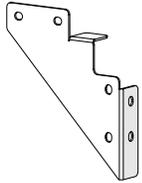
- 8 **Result:** The frame height is set to promote comfortable quilting.



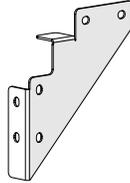
## Task 2 - Attach the Braces

### Parts & Tools Needed:

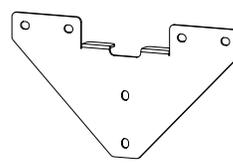
Corner Brace -  
A Side (x2)



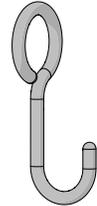
Corner Brace -  
B Side (x2)



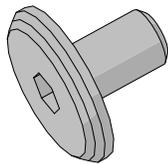
Middle  
Leg Brace (x4)



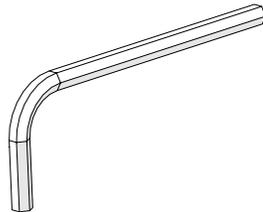
Reference Card  
Hook



Connector Bolt  
M6 x 10 mm (x24)



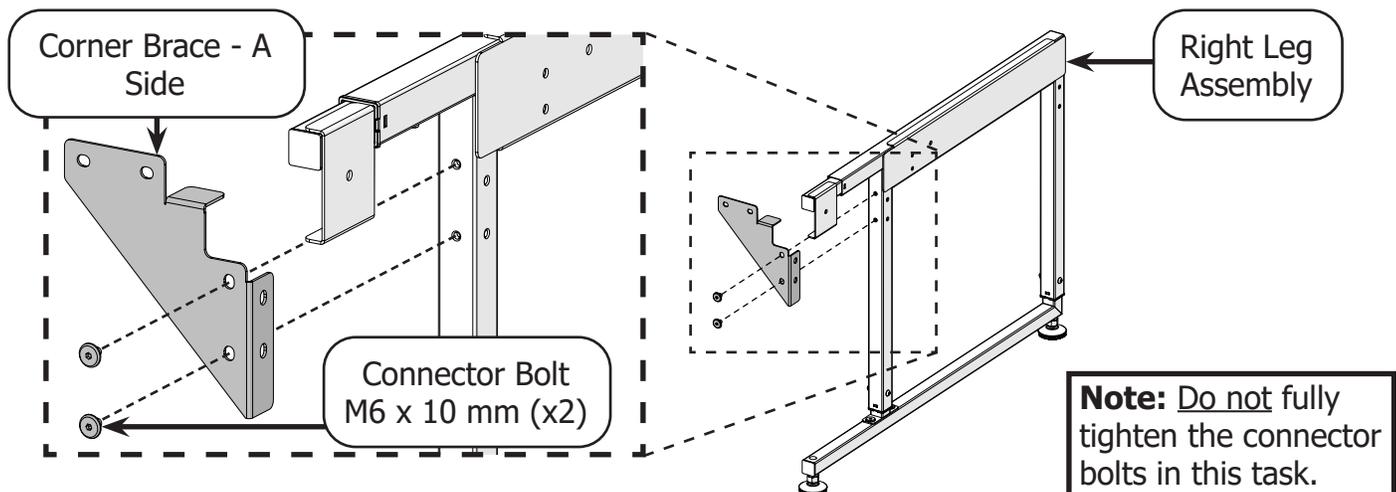
Allen Wrench  
4 mm



### Instructions

The corner braces will support the frame table. Take the following steps to install the corner braces to the frame legs:

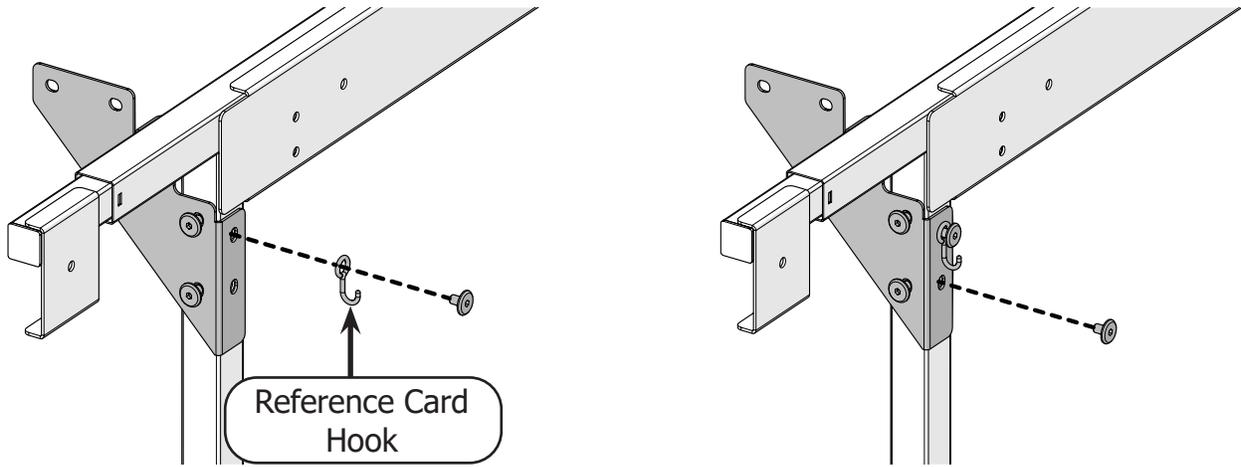
- 1 Begin with the **right leg assembly**. Use the 4 mm Allen wrench and two **M6 x 10 mm connector bolts** to loosely attach a **corner brace - A side** to the front of the leg.



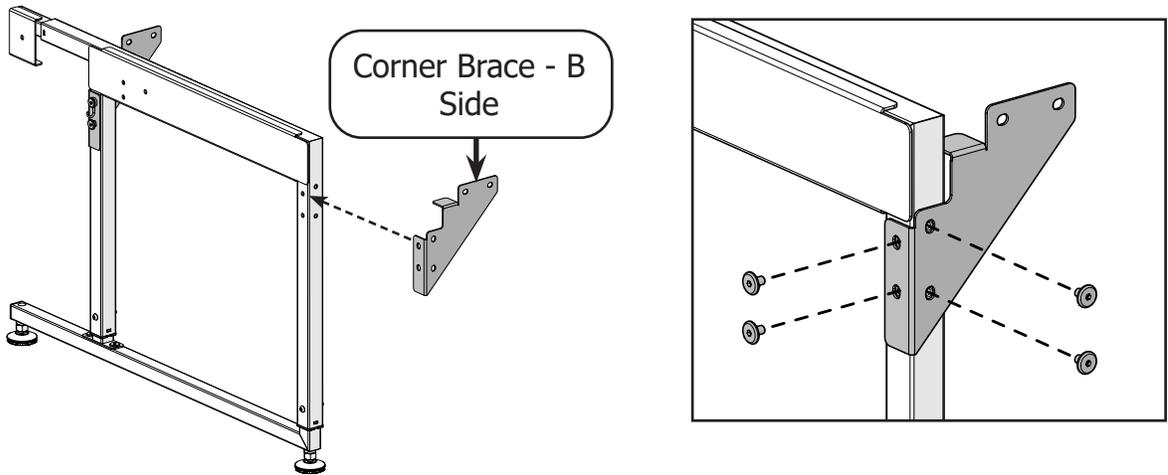
# Assemble a New Frame (Part One)

## Task 2 - Attach the Braces (continued)

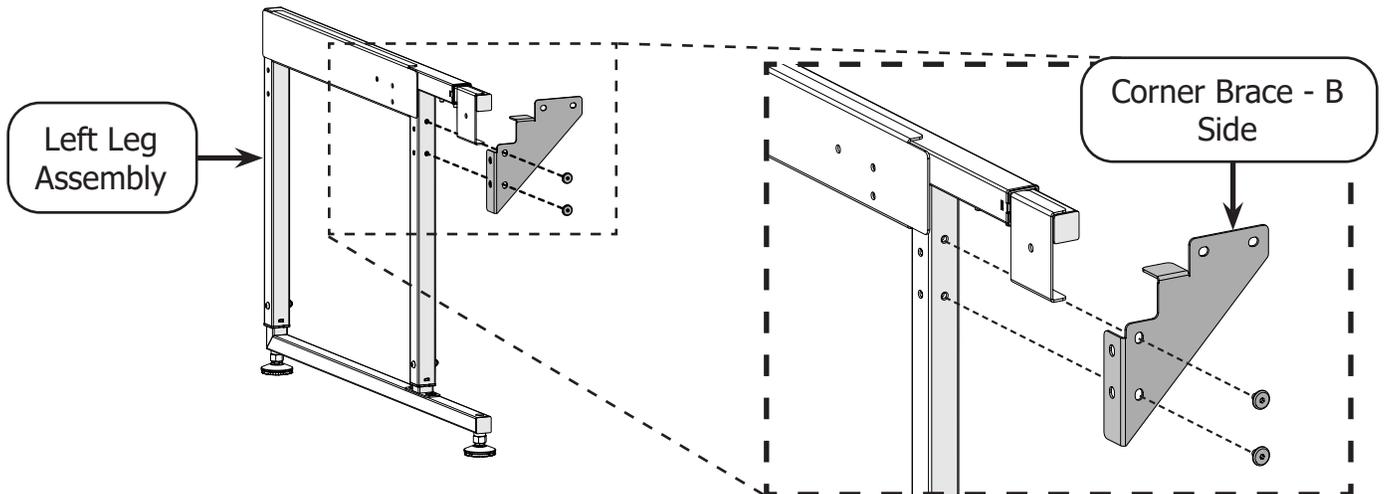
- 2 Loosely connect the **reference card hook** to the side of the corner bracket with a connector bolt. Then attach a second connector bolt to the side of the brace.



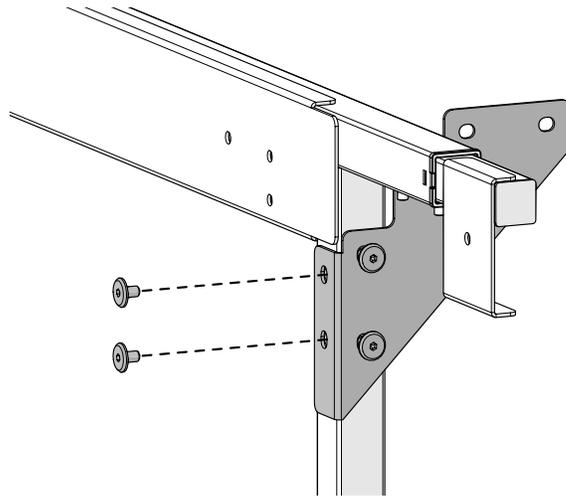
- 3 Loosely attach a **corner brace - B side** to the other side of the right leg with four connector bolts.



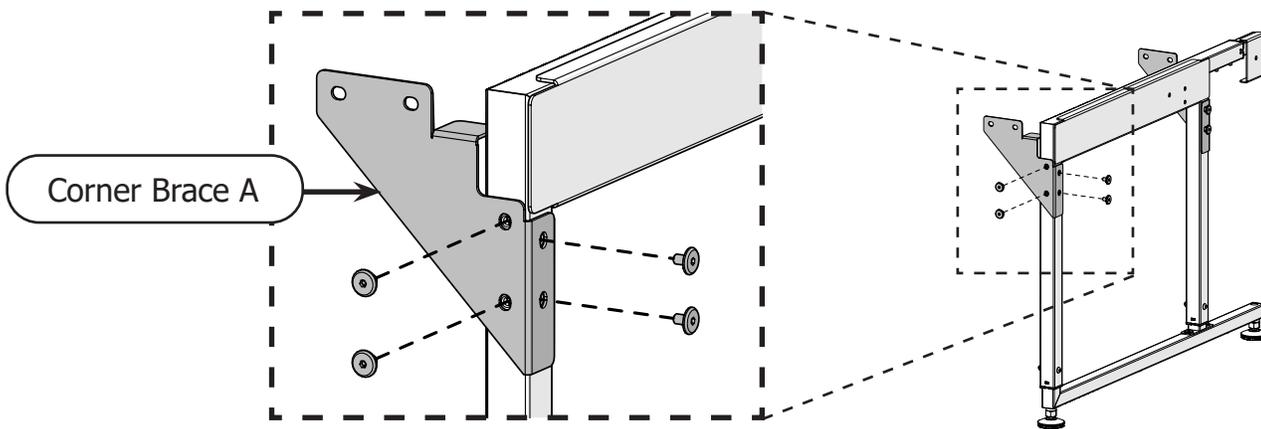
- 4 Use two connector bolts to loosely attach a **corner brace - B side** to the front of the **left leg assembly**.



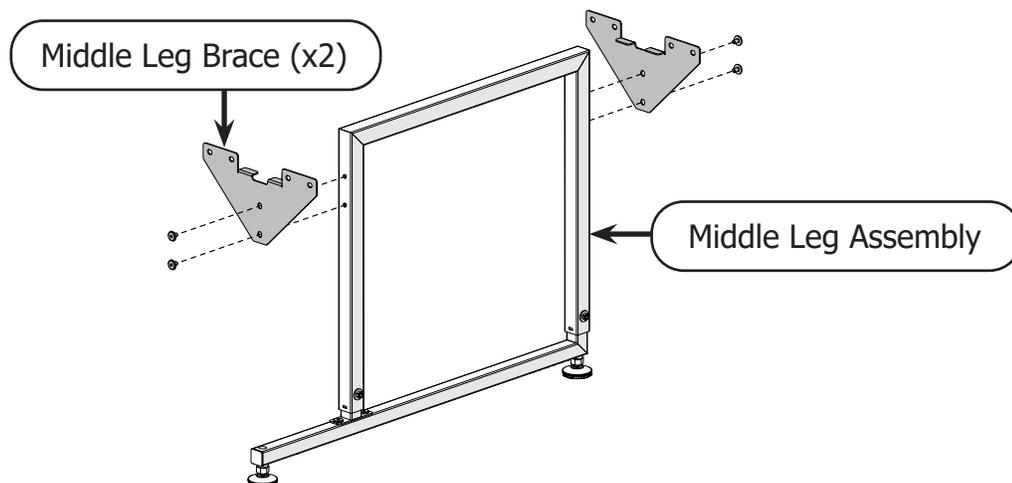
- 5 Loosely screw two more connector bolts into the brace holes on the side of the leg.



- 6 Loosely attach a **corner brace - A side** to the other side of the left leg with four connector bolts.



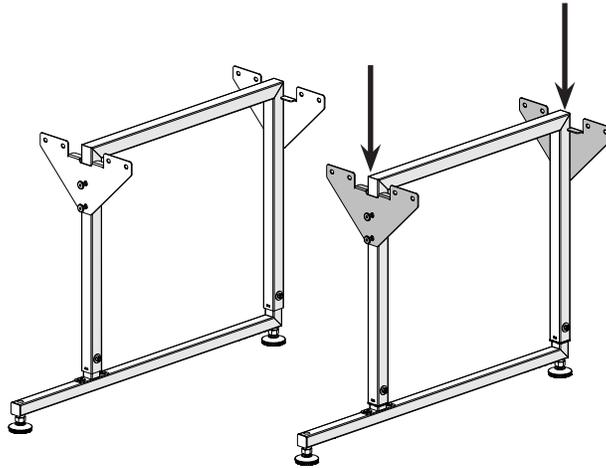
- 7 Loosely attach two **middle leg braces** to a **middle leg assembly** using four connector bolts.



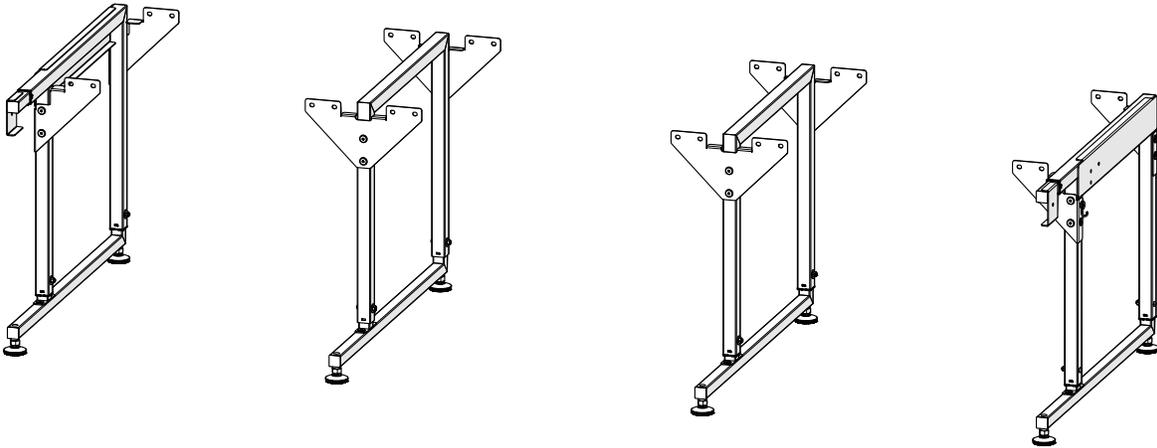
## Assemble a New Frame (Part One)

### Task 2 - Attach the Braces (continued)

- 8 Repeat step 7 with the remaining middle leg assembly and middle leg braces.



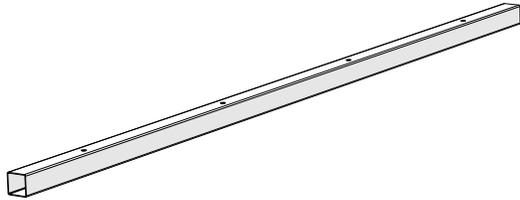
- 9 **Result:** The frame braces are loosely installed on all the legs. Do not tighten the connector bolts yet.



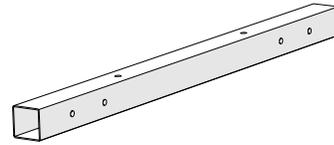
## Task 3 - Assemble the Frame Table

### Parts & Tools Needed:

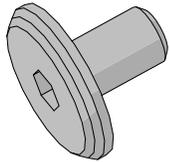
Frame Cross Support Tube (x4)



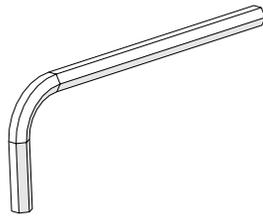
2-Ft Cross Support Tube (x2)



Connector Bolt  
M6 x 10 mm (x24)



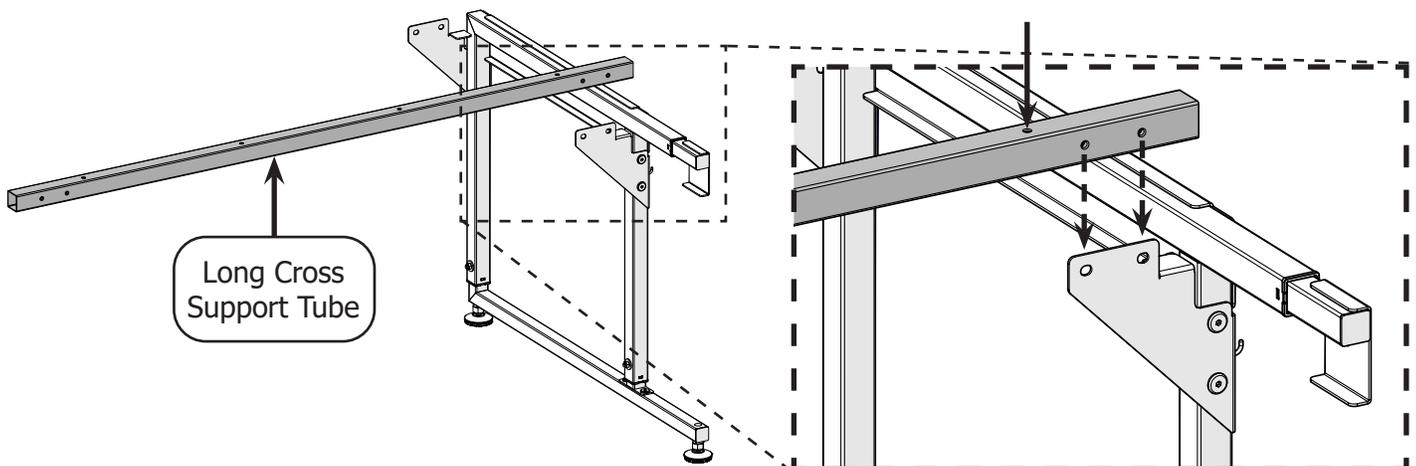
Allen Wrench  
4 mm



### Instructions

Take the following steps to assemble the frame table:

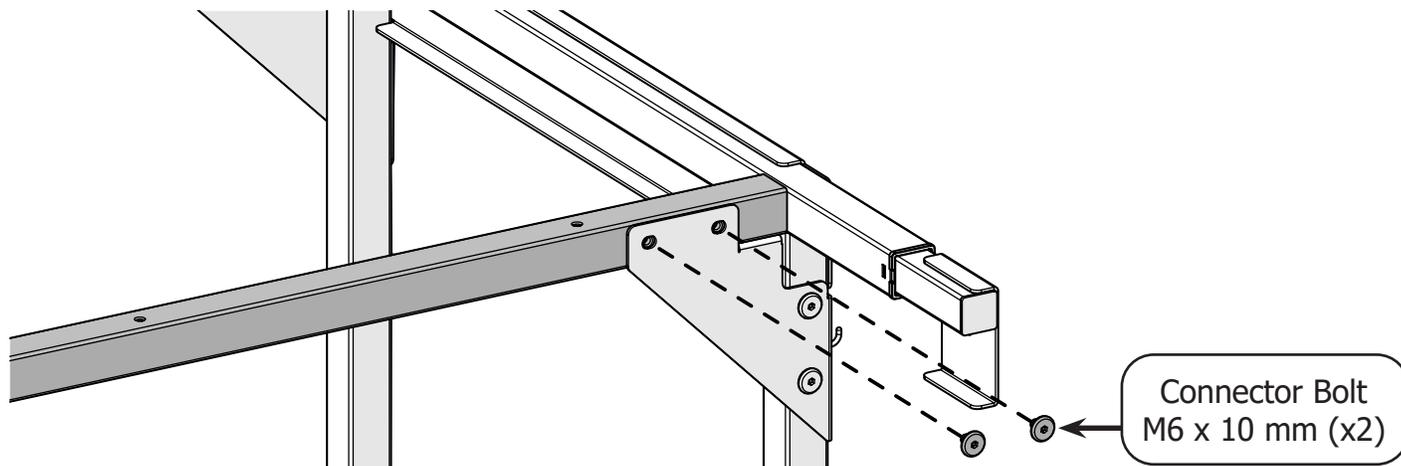
- 1 Align the screw holes in the end of a **long cross support tube** with those on the front corner brace on the right leg. The other screw holes should be facing up.



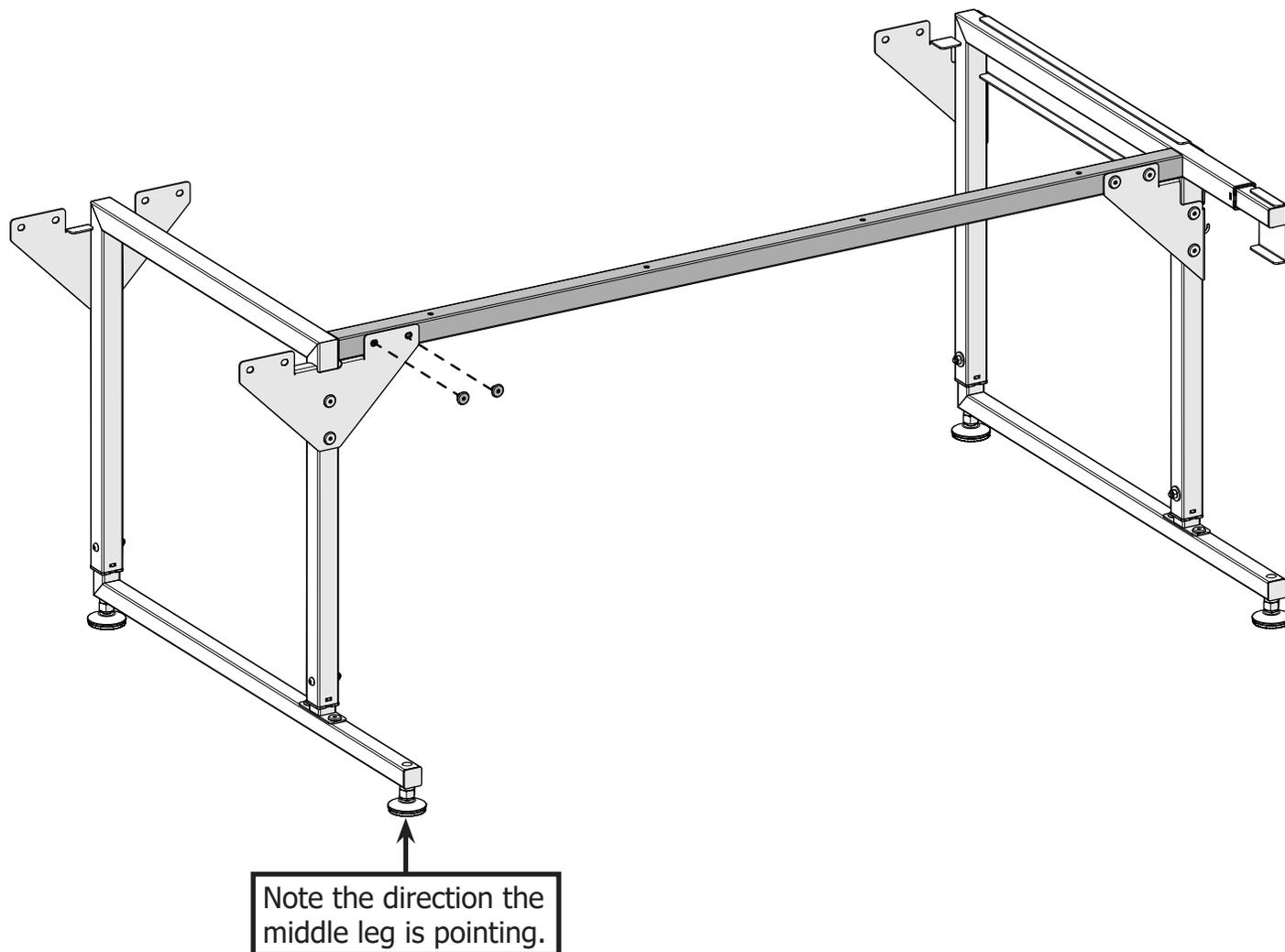
## Assemble a New Frame (Part One)

### Task 3 - Assemble the Frame Table (continued)

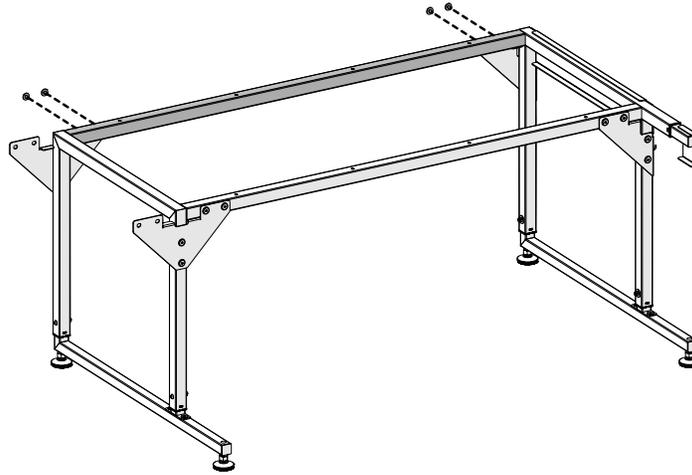
- 2 Loosely connect the cross support tube to the corner brace with two **M6 x 10 mm connector bolts** and the 4 mm Allen wrench. Again, do not fully tighten any connector bolts until instructed.



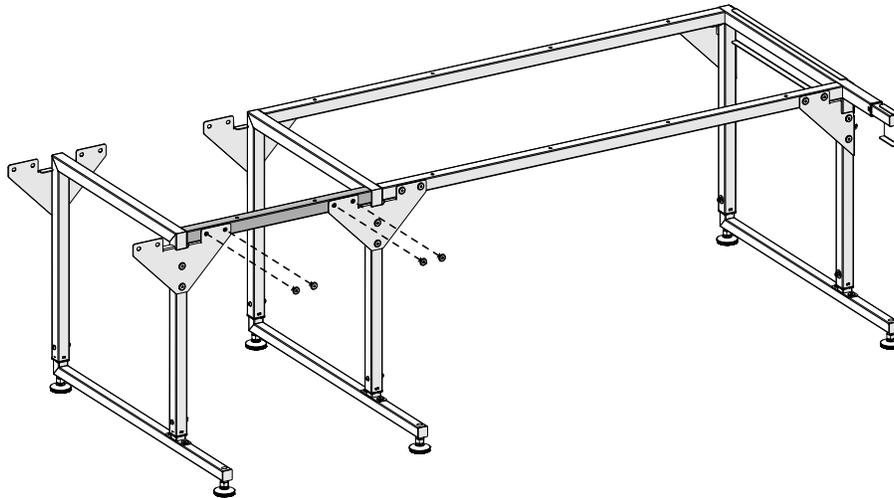
- 3 Loosely attach the other end of the cross support tube to the front brace on a middle leg assembly. Use two connector bolts.



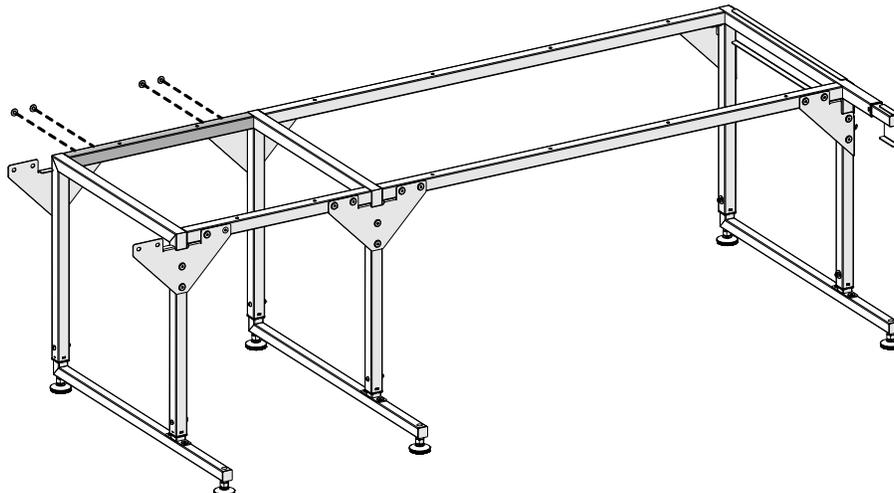
- 4 Repeat steps 1-3 with another cross support tube on the back of the frame.



- 5 Loosely attach one of the 2-ft cross support tubes to the braces on the front of the frame and on the remaining middle legs. Use four connector bolts.



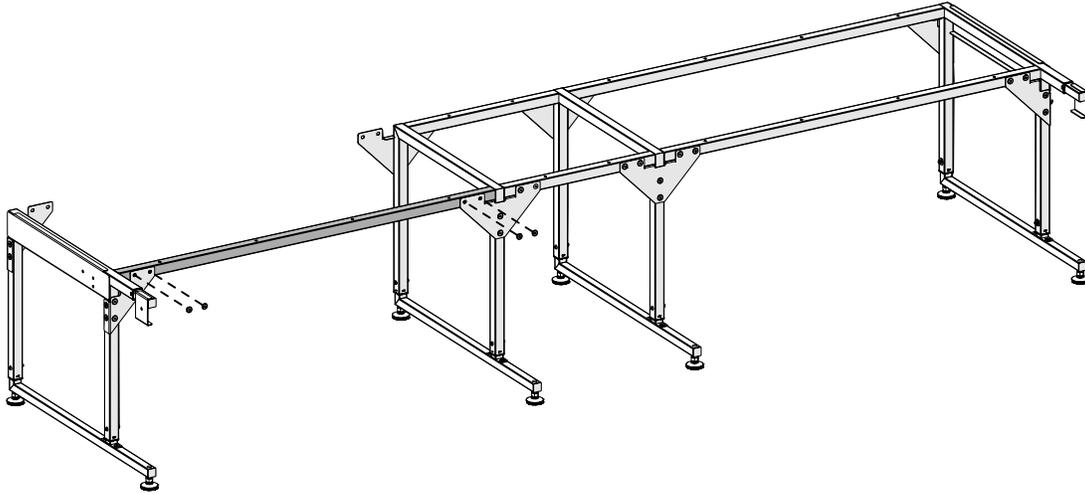
- 6 Loosely attach the second 2-ft cross support tube to the back of the frame with four connector bolts.



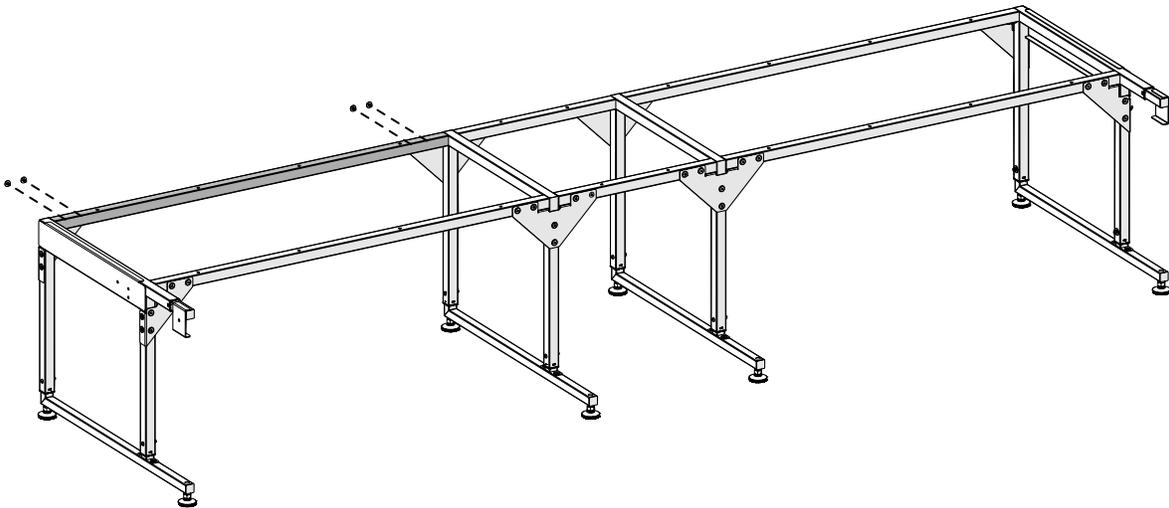
## Assemble a New Frame (Part One)

### Task 3 - Assemble the Frame Table (continued)

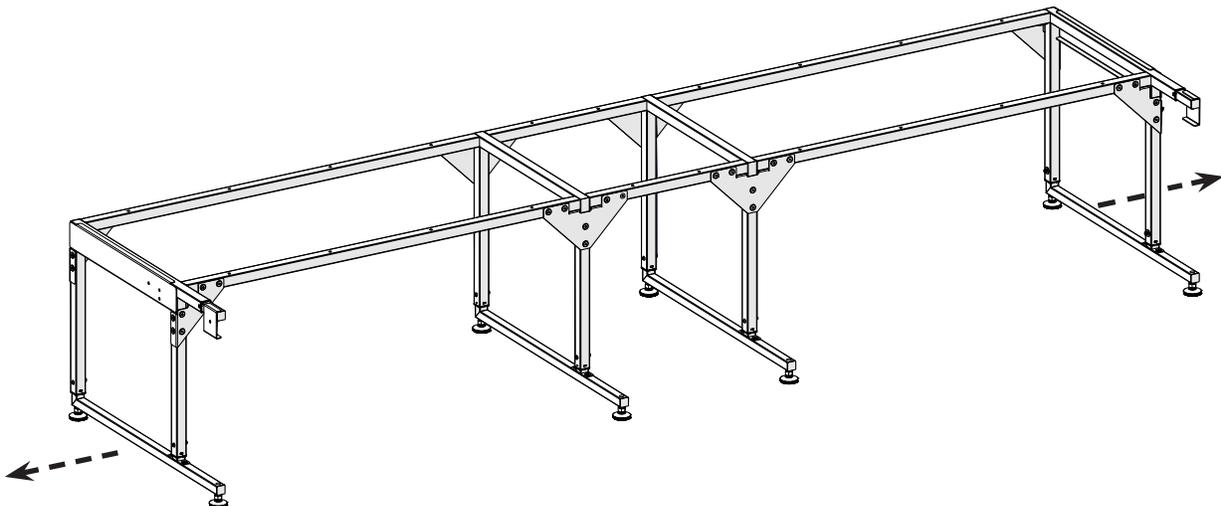
- 7 Loosely attach a long cross support tube to the front of the frame and left leg.



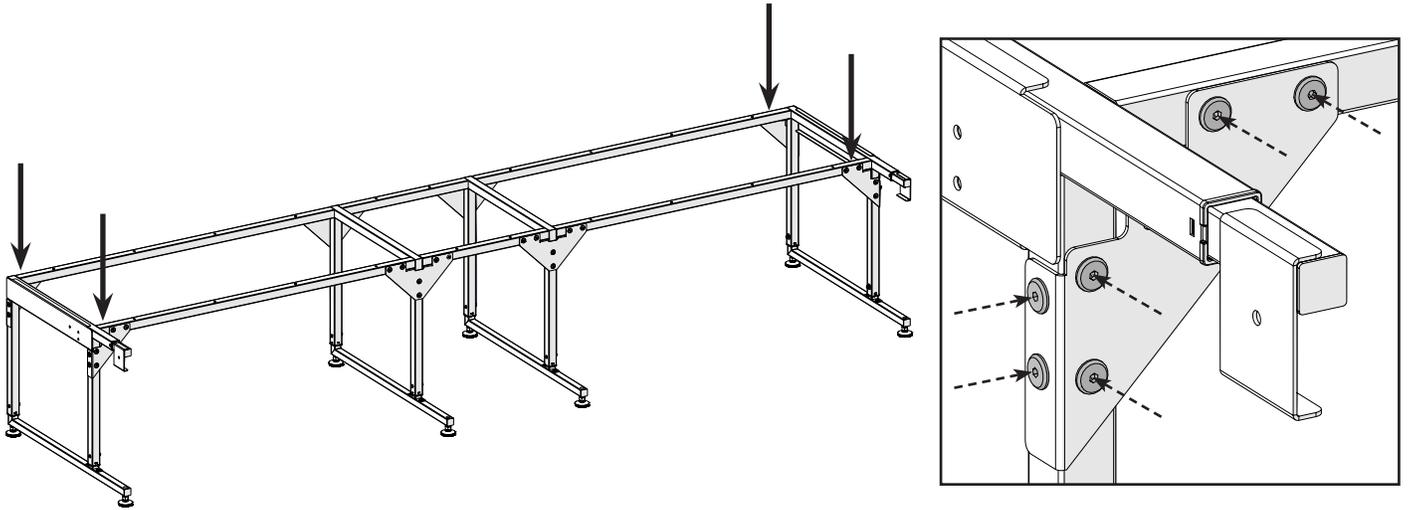
- 8 Loosely attach the final cross support tube to the back of the frame.



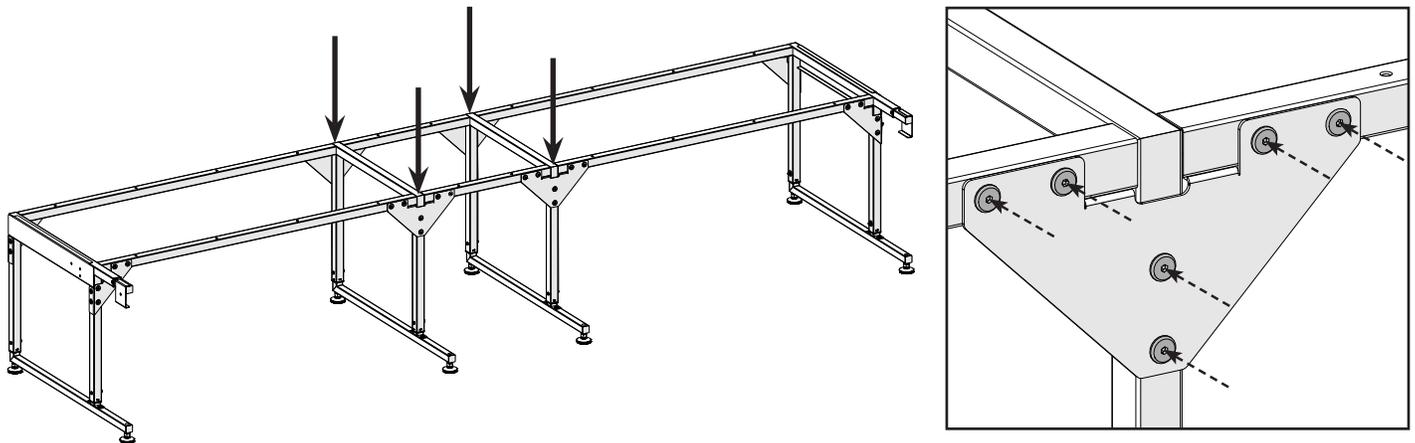
- 9 Pull the bottom of left and right legs outward to square up the frame.



- 10 With the 4 mm Allen wrench, tighten the six connector bolts on each of the corner braces.



- 11 Tighten the six connector bolts on the four middle braces.



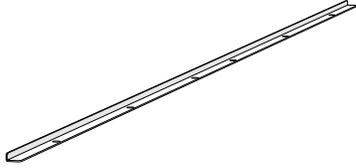
- 12 **Result:** The cross support tubes and braces are securely attached to the legs, creating the structure of the frame.

# Assemble a New Frame (Part One)

## Task 4 - Install the Track and Table Supports

### Parts & Tools Needed:

Track Support -  
Extension (x2)



Short Track  
Support (x4)

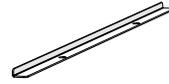
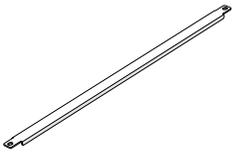
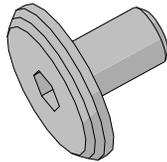


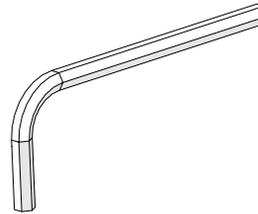
Table Support (x10)



Connector Bolt  
M6 x 10 mm (x20)



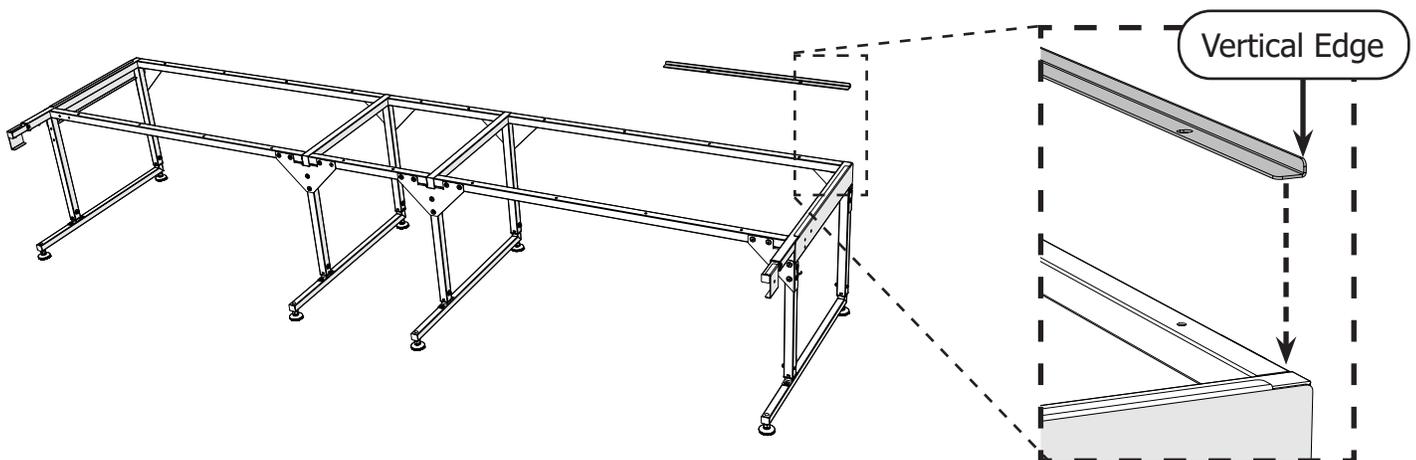
Allen Wrench  
4 mm



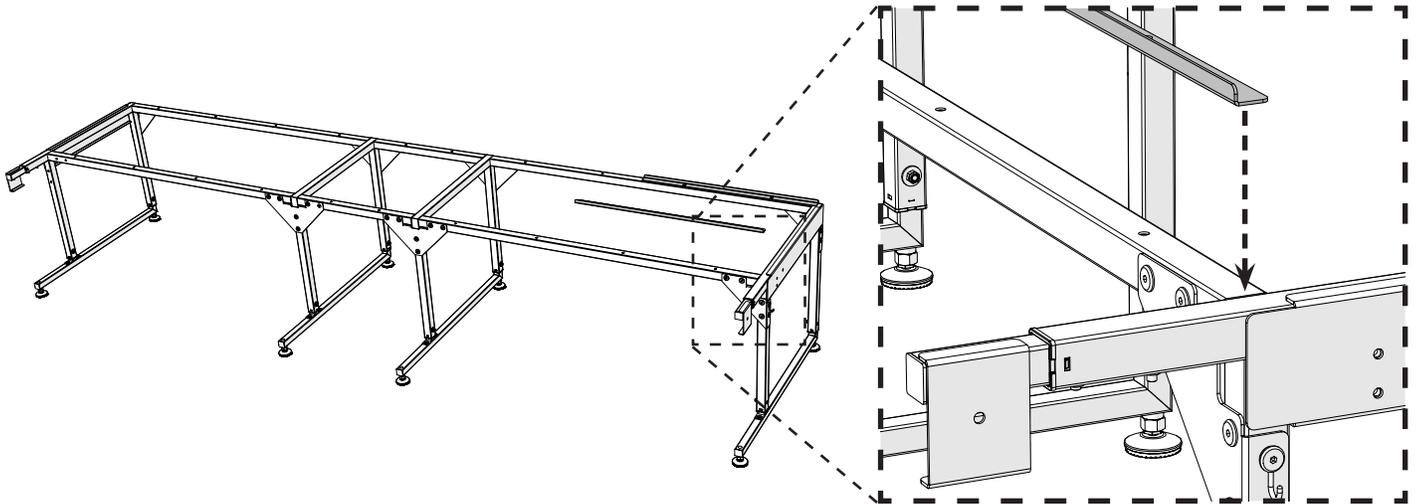
### Instructions

Take the following steps to install and align the frame tracks:

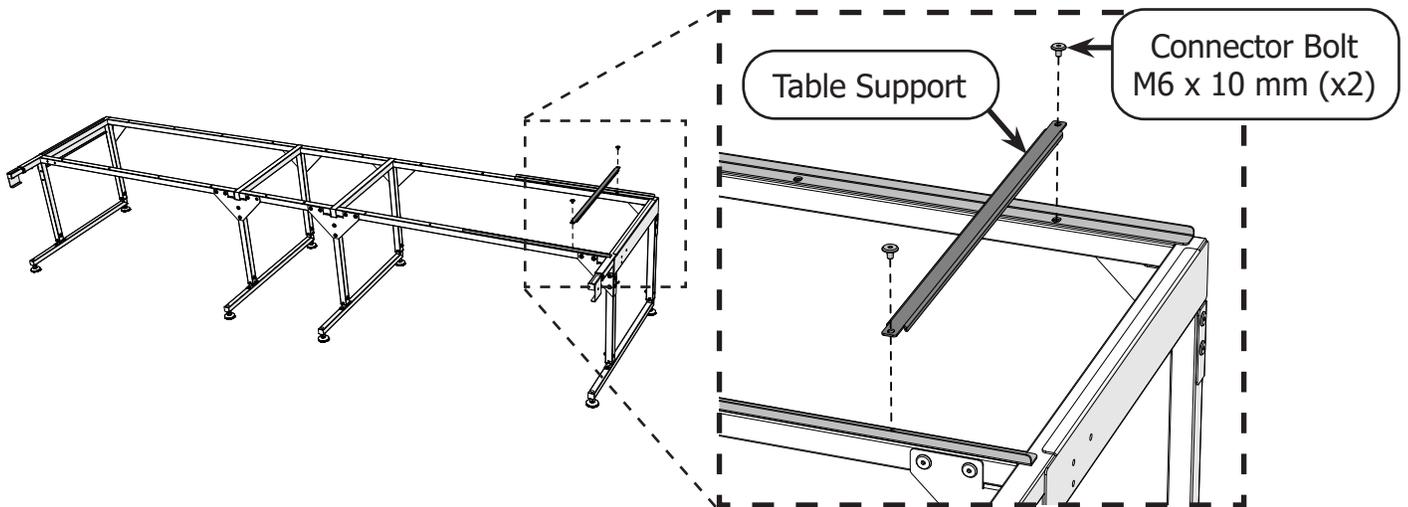
- 1 Place a **short track support** on the back right corner of the frame. Make sure the track support's **vertical edge** is towards the back of the frame.



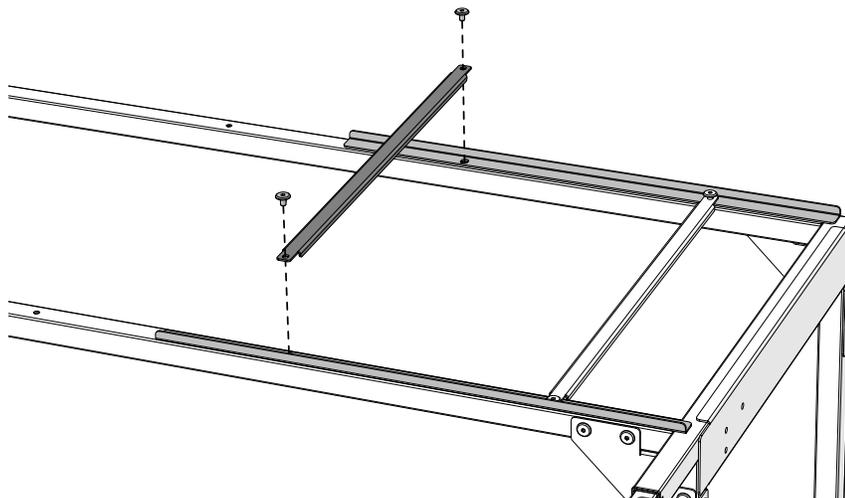
- 2 Place a short track support on the front right corner of the frame. This time, position the vertical edge toward the front.



- 3 Use two **M6 x 10 mm connector bolts** to attach the **table support** and track supports to the frame. Do not tighten the connector bolts yet.



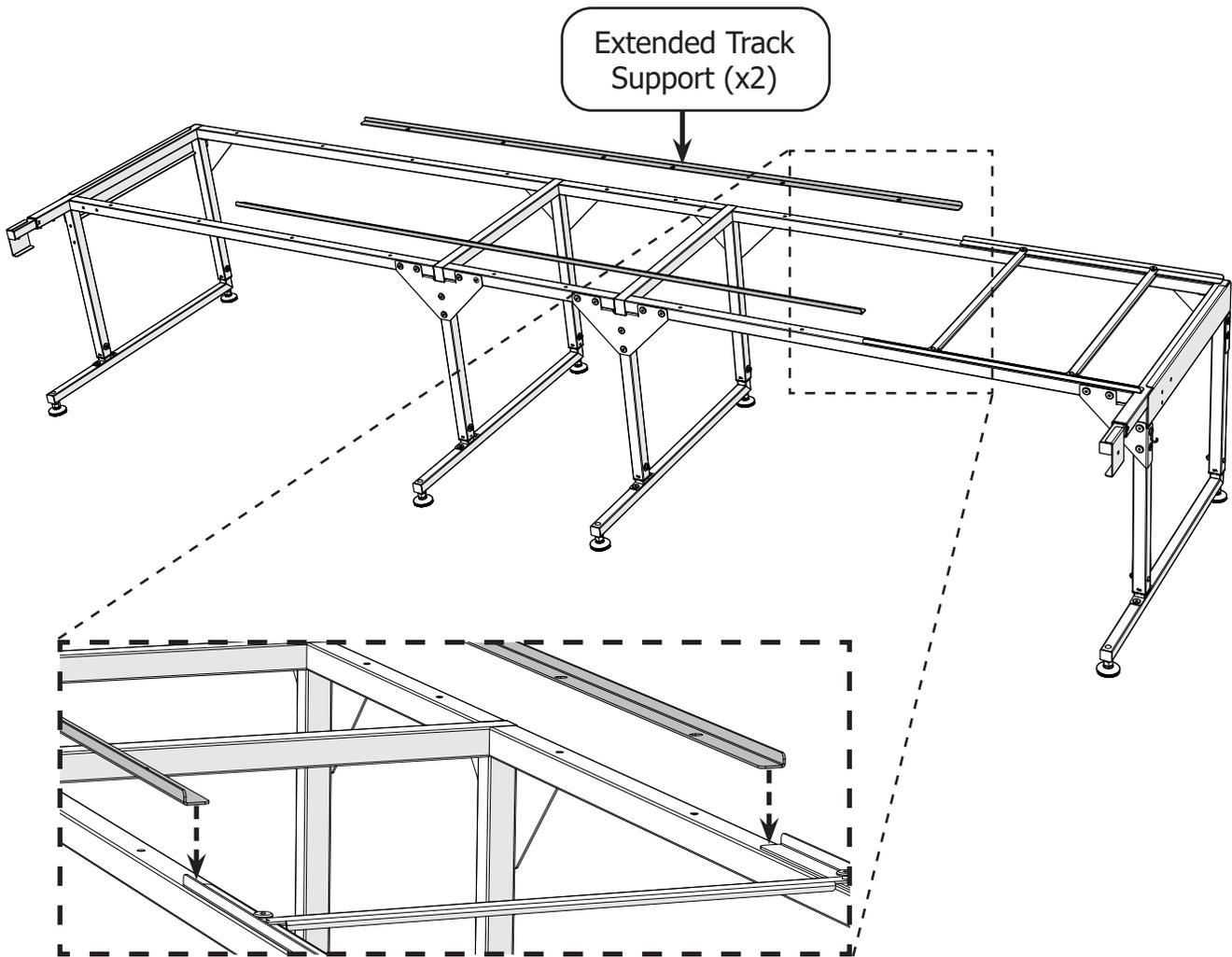
- 4 Loosely attach a second table support to the frame with two M6 x 10 mm connector bolts.



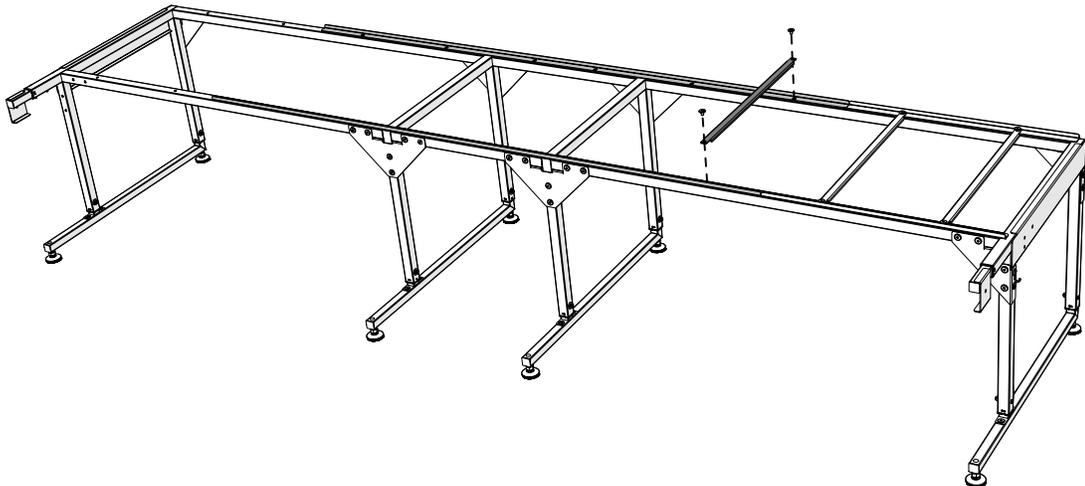
## Assemble a New Frame (Part One)

### Task 4 - Install the Track and Table Supports (continued)

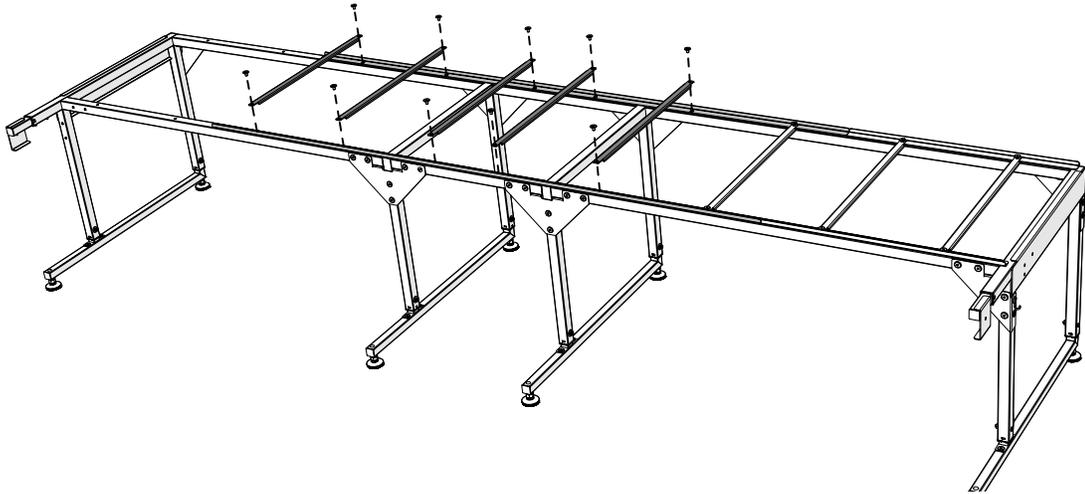
- 5 Place both **extended track supports** onto the frame, one at the front and one at the back. The vertical edges of both should be away from the center of the frame.



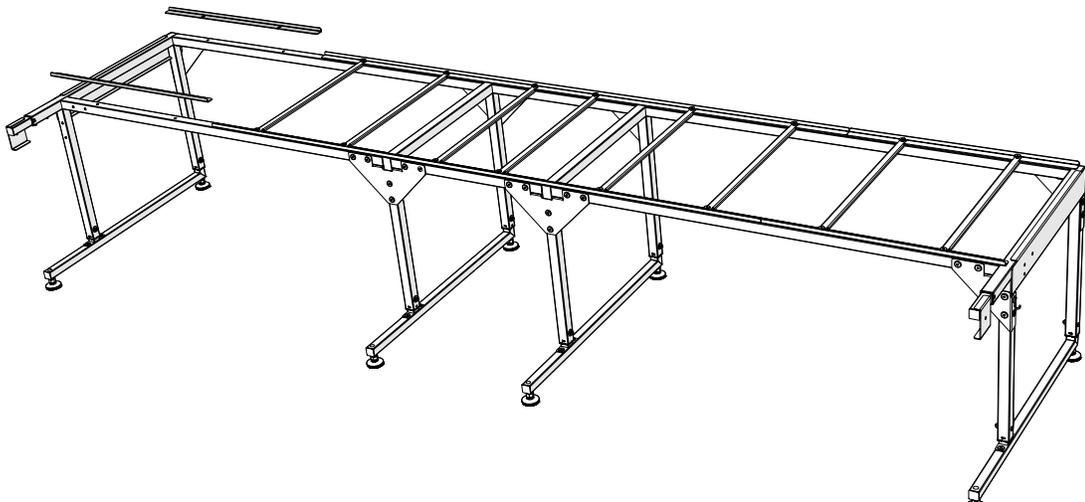
- 6 Loosely attach another table support to the frame with two M6 x 10 mm connector bolt.



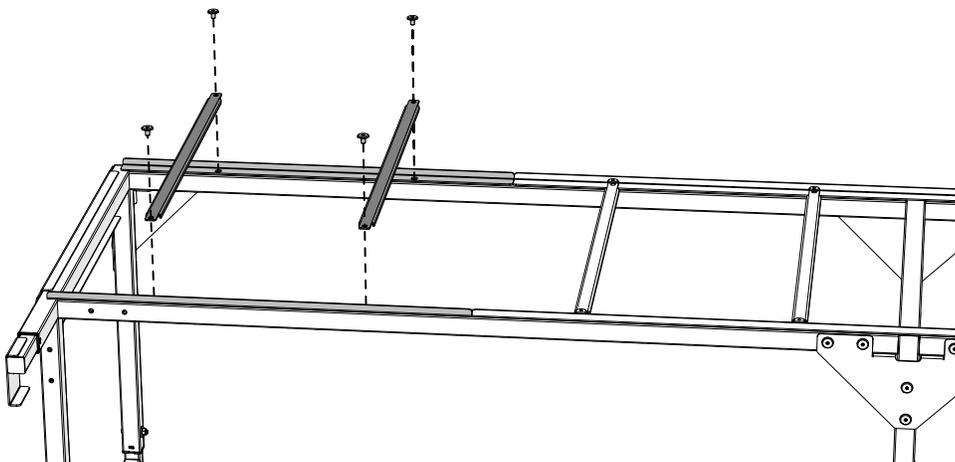
- 7 Repeat step 3 to loosely install five more table supports onto the frame with ten M6 x 10 mm connector bolts.



- 8 Repeat steps 1–2 to place the remaining two short track supports.



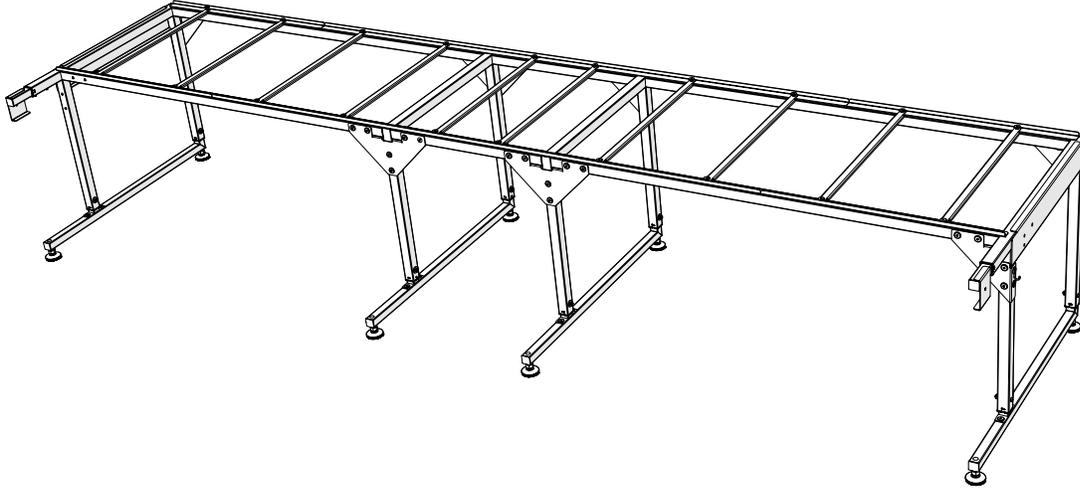
- 9 Repeat step 3 to place the remaining two table supports.



## Assemble a New Frame (Part One)

### Task 4 - Install the Track and Table Supports (continued)

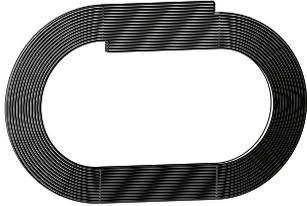
10 **Results:** The track and table supports are loosely installed.



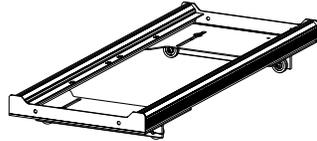
## Task 5 - Install and Align the Tracks

### Parts & Tools Needed:

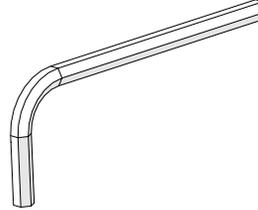
10-ft Plastic Track (x2)



Bottom Carriage



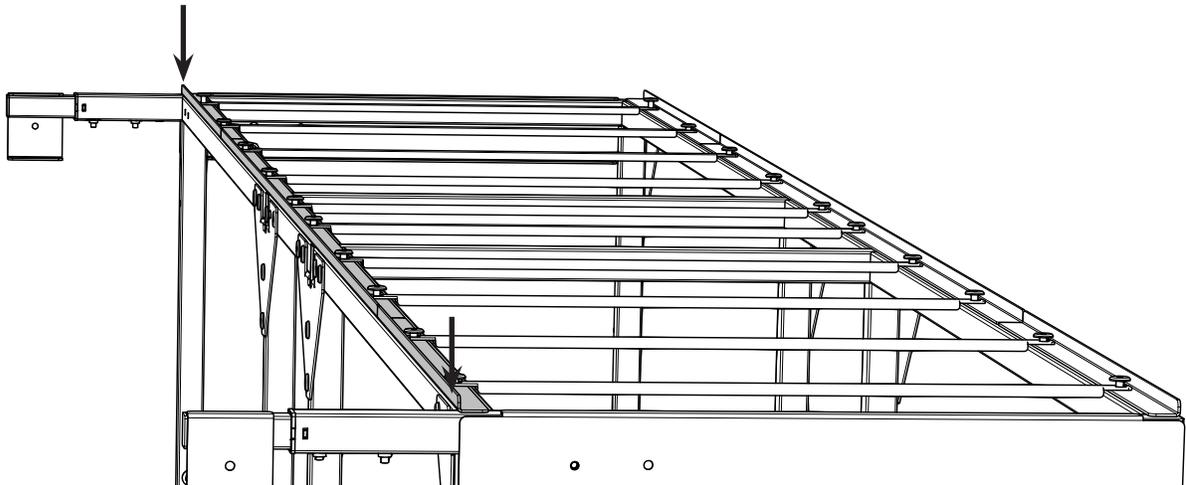
Allen Wrench  
4 mm



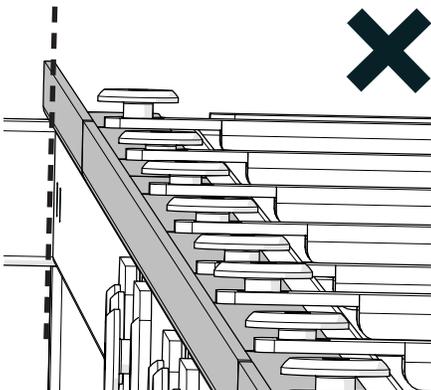
### Instructions

Aligning the tracks ensures the machine moves smoothly across the frame. Take the following steps:

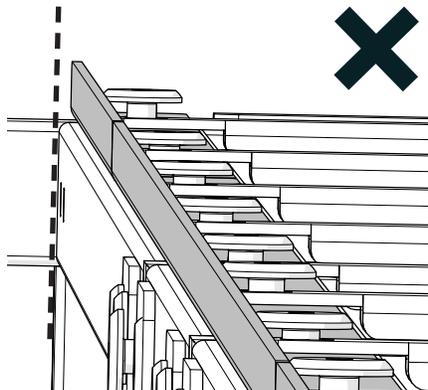
- 1 Align the front track supports so the vertical edges are flush with the cross support tubes.



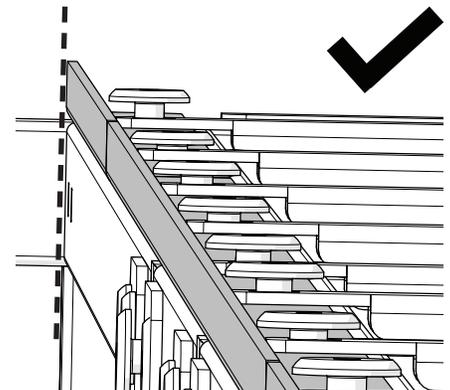
Track supports are too far forward.



Track supports are too far back.



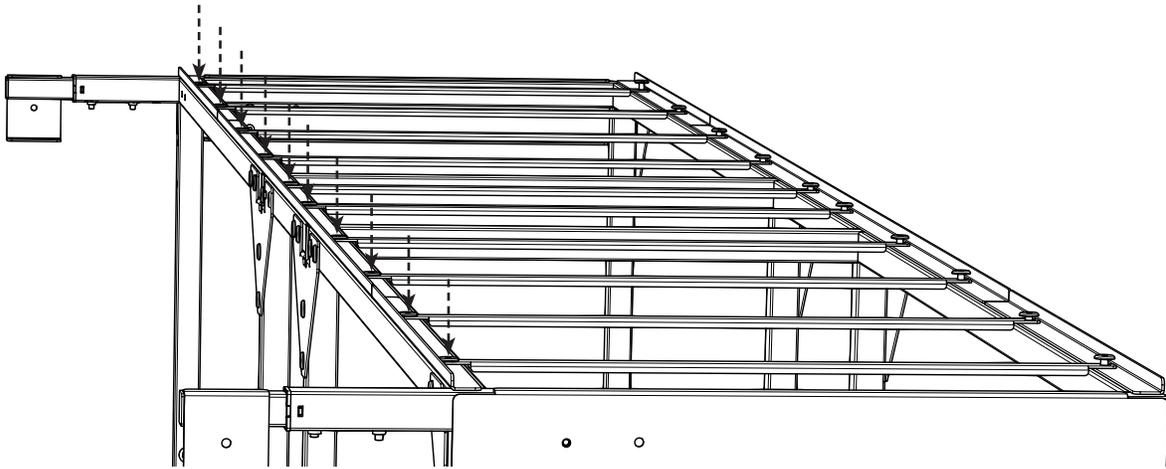
Track supports are flush with the cross support tubes.



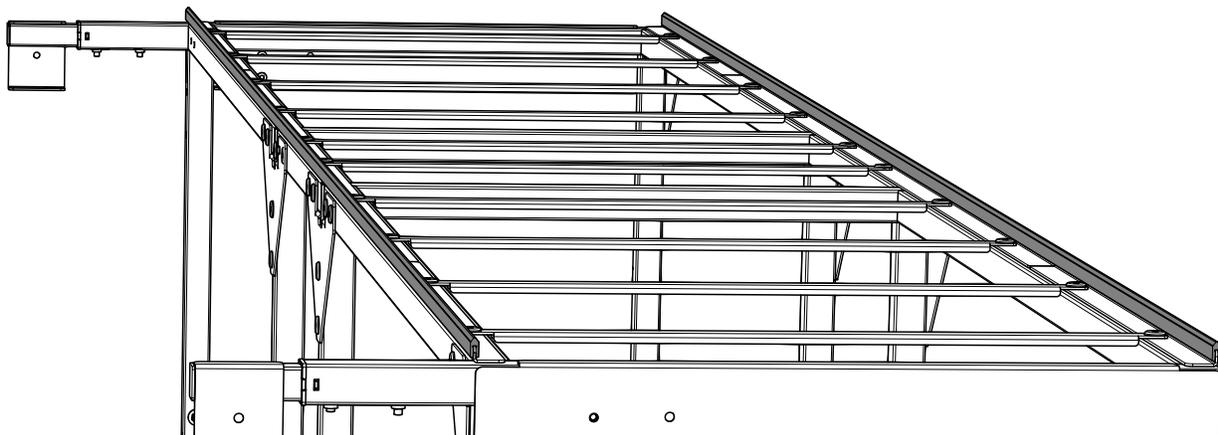
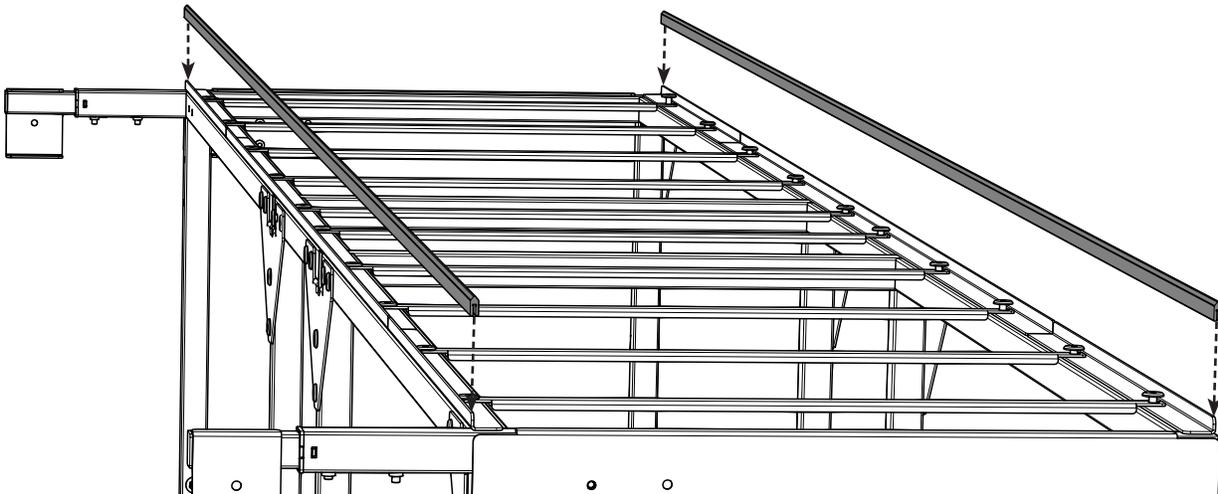
## Assemble a New Frame (Part One)

### Task 5 - Install and Align the Tracks (continued)

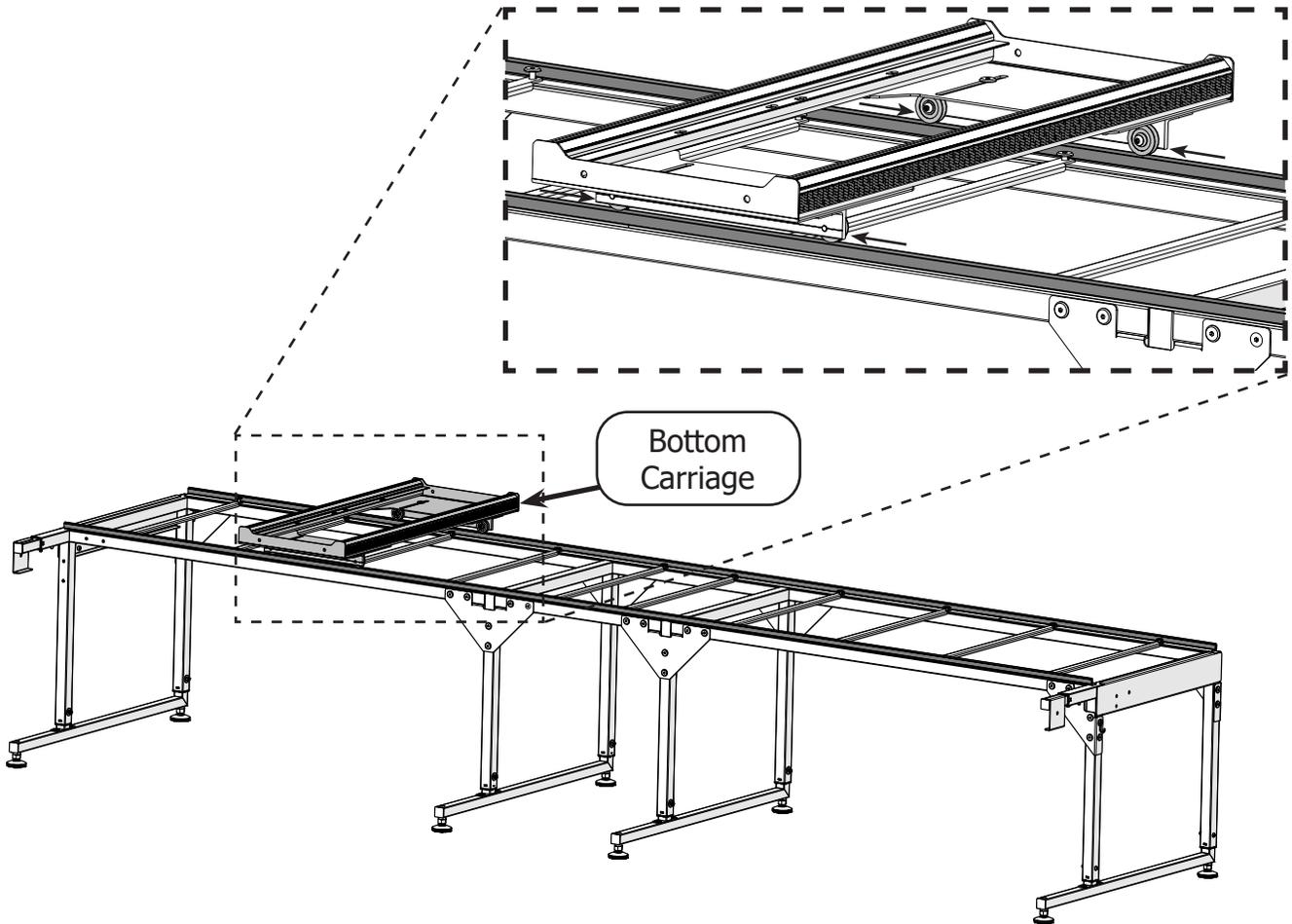
- 2 Hold the front track supports in position and use the 4 mm Allen wrench to tighten the ten M6 x 10 mm connector holding the supports to the frame.



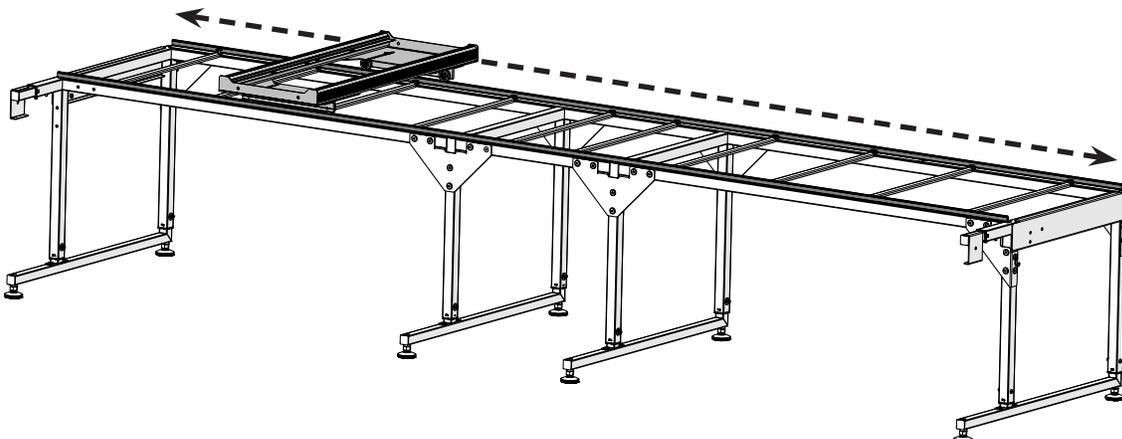
- 3 Press the two plastic tracks onto the vertical edge of the front and back track supports.



- 4 Place the bottom carriage onto the frame so that the wheels are on the track. Remember, the track supports on the back of the frame are still loose, so you can adjust the position of the tracks to meet up with the carriage wheels if needed.



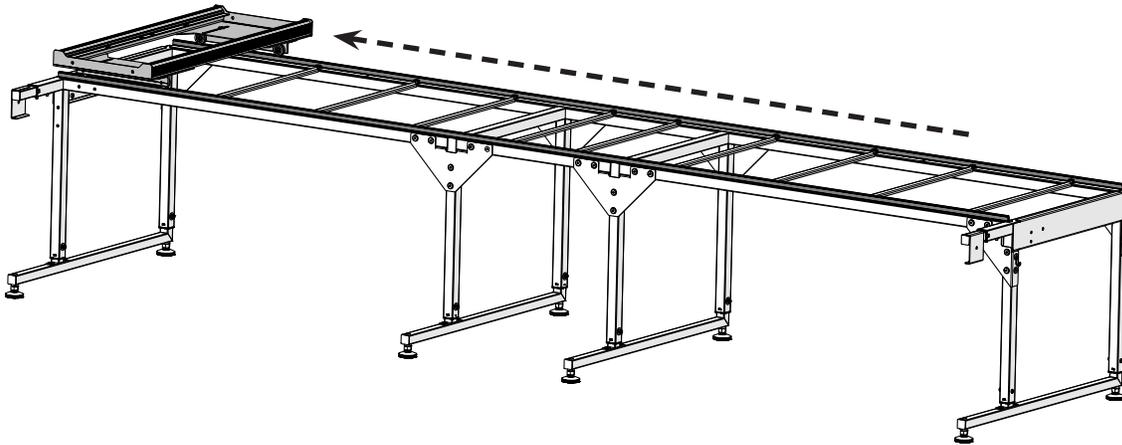
- 5 Press down firmly on the bottom carriage and slide it across the frame a few times. This will align the loose track supports in the back.



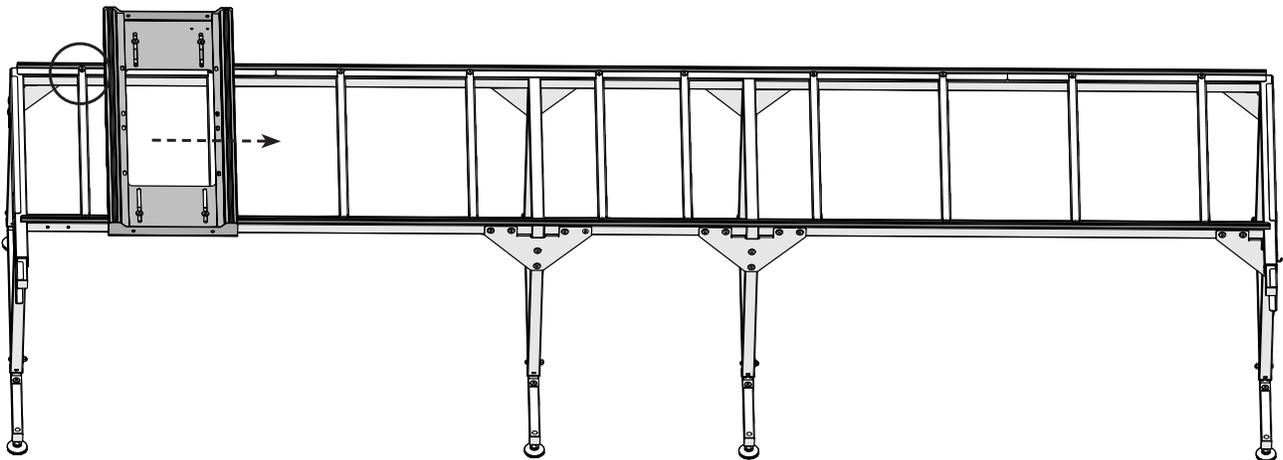
# Assemble a New Frame (Part One)

## Task 5 - Install and Align the Tracks (continued)

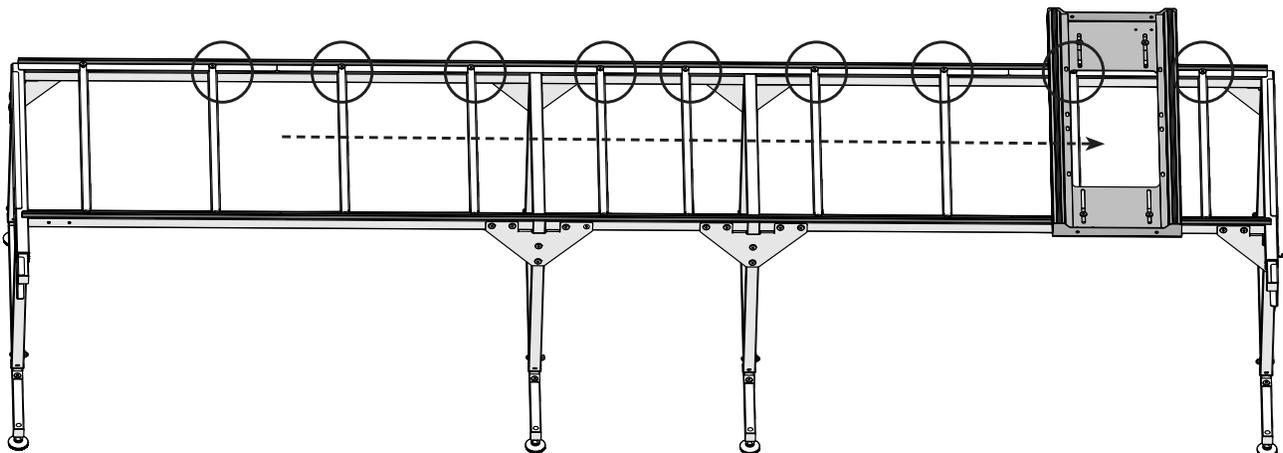
6 Push the bottom carriage all the way to the left side of the frame.



7 Slowly and firmly begin pushing the carriage to the other side of the frame. As you pass over each of the rear **M6 connector bolts**, tighten it with the 4 mm Allen wrench.



**Note:** Tighten the last connector bolt when the bottom carriage is just in front of it.

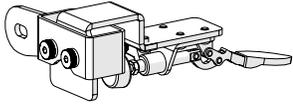


8 **Result:** The bottom carriage can ride the tracks smoothly and without derailing.

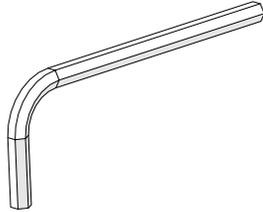
## Task 6 - Install the Single-Wheel Channel Lock

### Parts & Tools Needed:

Single Wheel  
Channel Lock



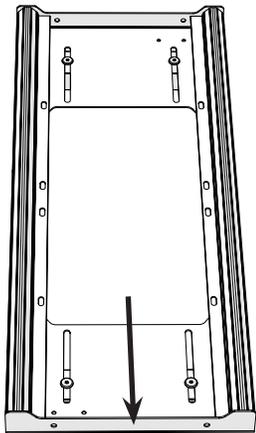
Allen Wrench  
4 mm



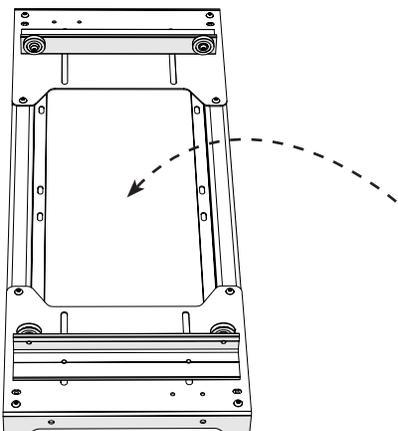
### Instructions

Closing the channel lock prevents the bottom carriage from moving. Take the following steps to install the channel lock onto the bottom carriage:

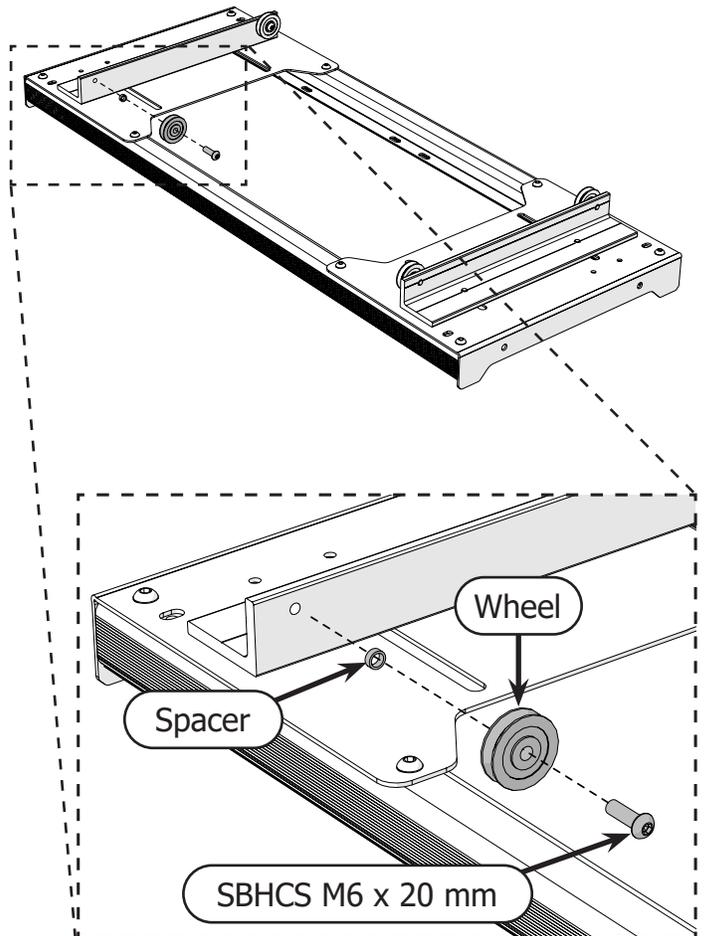
- 1 Choose a side of your bottom carriage to be the front. It may help to label it.



- 2 Flip your carriage upside down, with the front toward you.



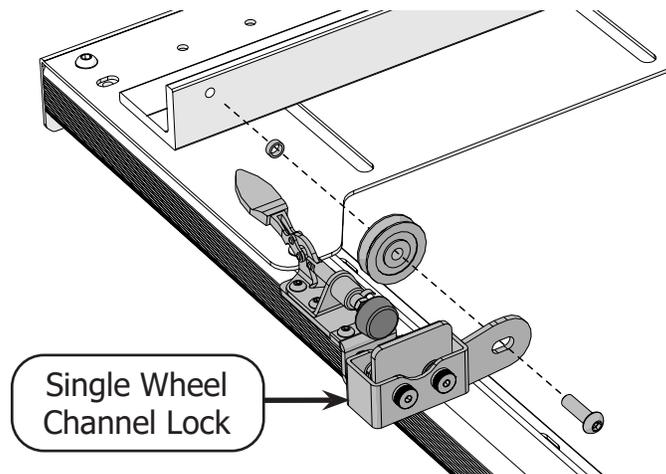
- 3 Use the 4 mm Allen wrench to remove the left-rear **M6 x 20 mm SBHCS**, **wheel**, and **spacer** from the carriage.



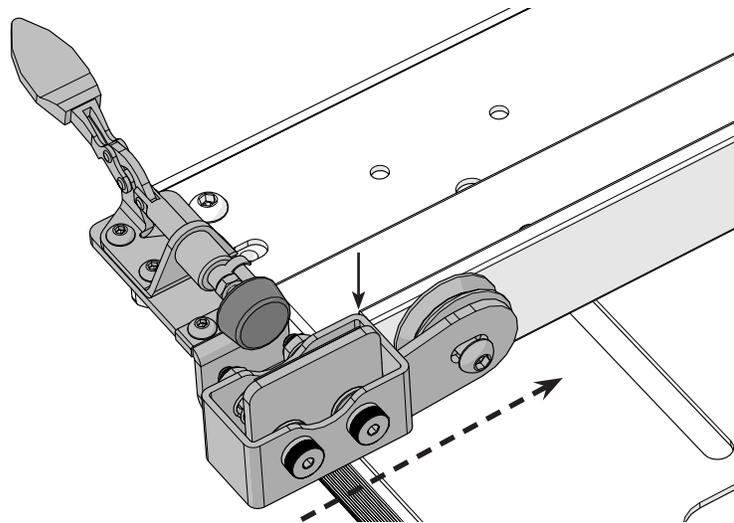
## Assemble a New Frame (Part One)

### Task 6 - Install the Single-Wheel Channel Lock (continued)

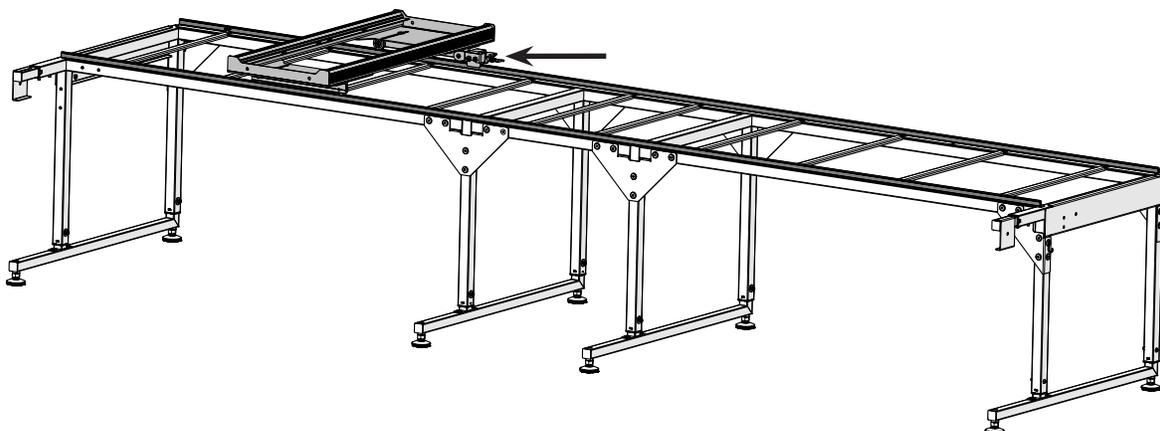
- 4 Loosely attach the **single wheel channel lock**, wheel, and spacer to the bottom carriage using the M6 x 20 mm SBHCS you just removed.



- 5 Press the channel lock against the wheel extrusion so it is square. Then fully tighten the screw.

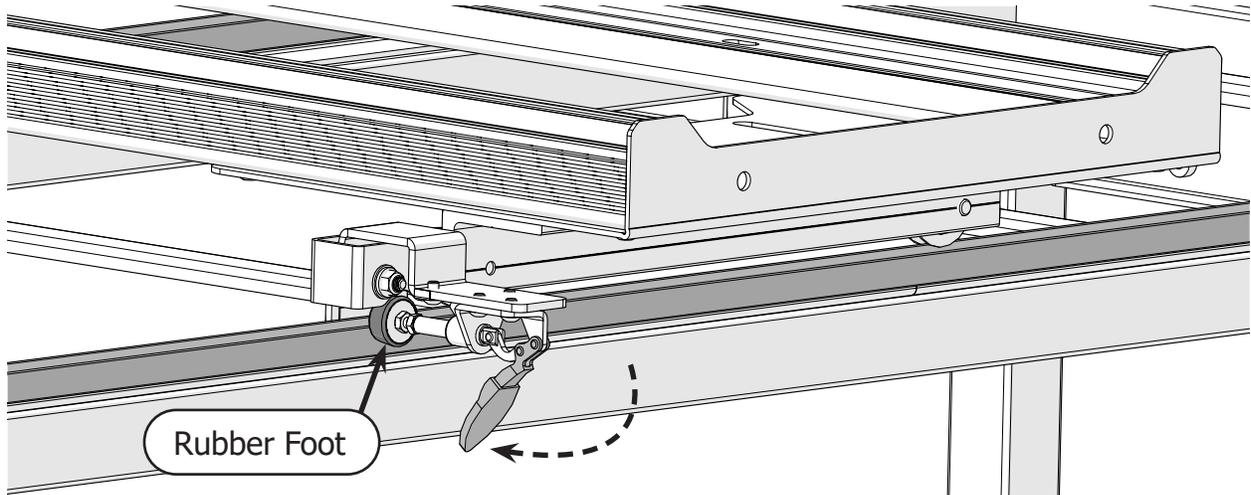


- 6 Place the bottom carriage back onto the frame so that the channel lock is toward the back. It should be on the right side of the bottom carriage.

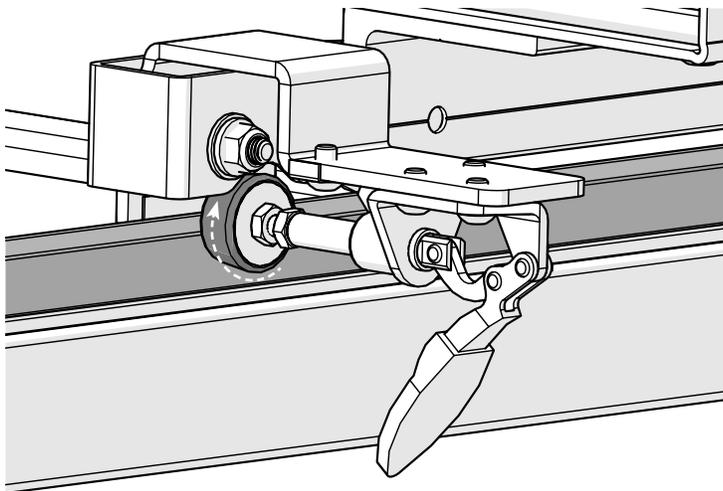


## Task 6 - Install the Single-Wheel Channel Lock (continued)

- 7 Close the channel lock handle and test it out. The **rubber foot** should press firmly against the frame tracks and prevent the carriage from moving.

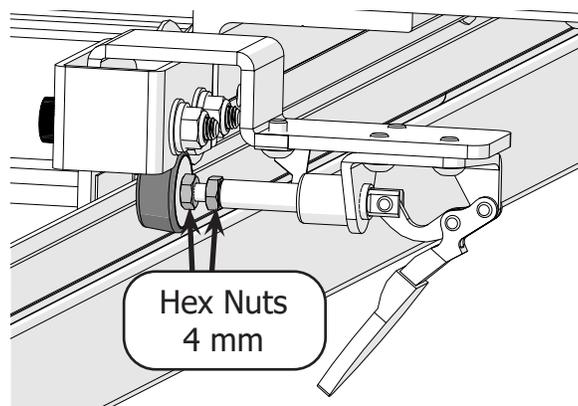


- 8 If the rubber foot doesn't fully reach the track or its grip on the track seems loose, twist the rubber foot clockwise to extend it.



**Note:** If twisted too far, the channel lock handle will start to open, and eventually the foot will fall out. Reverse the direction you're twisting until the handle is pointing down, but the foot still reaches the track.

- 9 **Optional step:** Prevent the channel lock from loosening over time by using 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.



- 10 **Result:** The channel lock is installed on the back-right wheel of the bottom carriage.

# Assemble a New Frame (Part One)

## Task 7 - Install the Rail Holder Brackets

### Parts & Tools Needed:

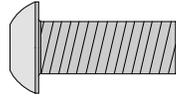
Left Rail Holder  
Bracket (x2)



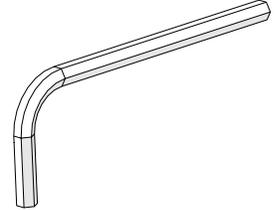
Right Rail Holder  
Bracket (x2)



SBHCS  
M6 x 16 mm (x4)



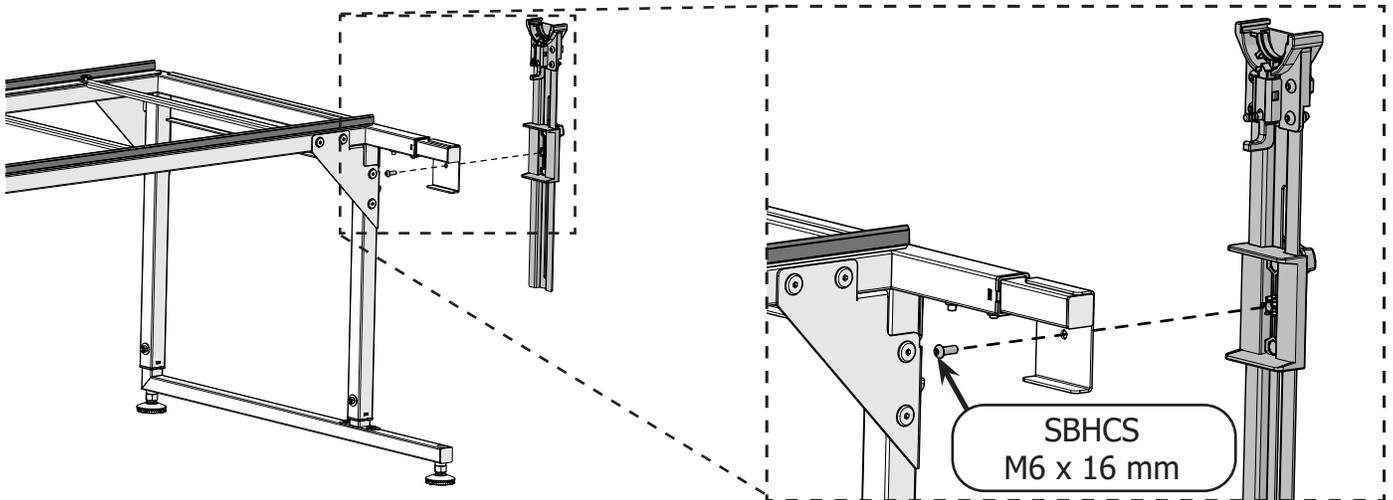
Allen Wrench  
4 mm



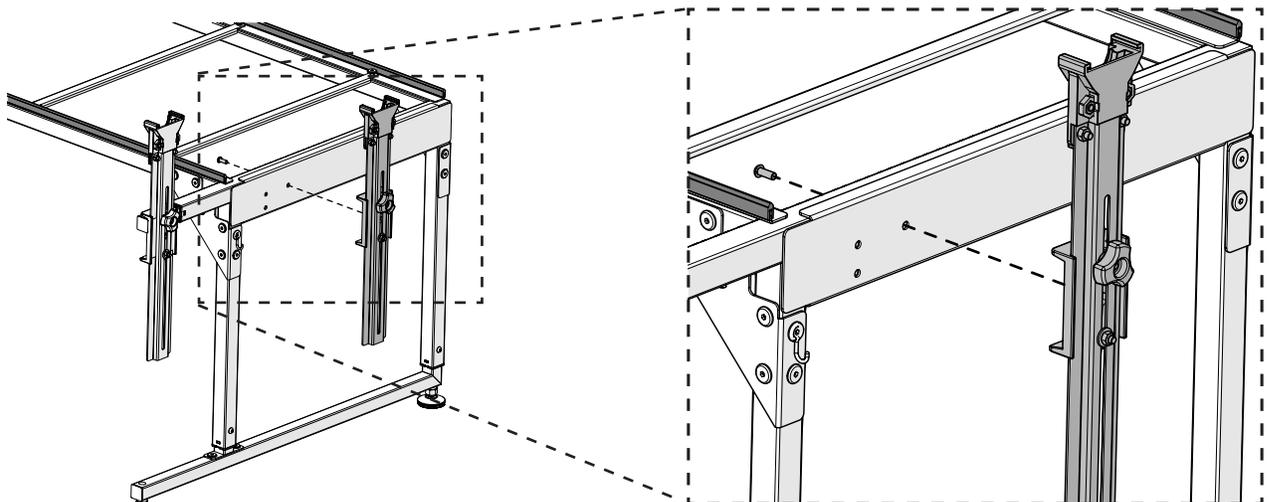
### Instructions

The rail holder brackets hold and position the rails. Take the following steps:

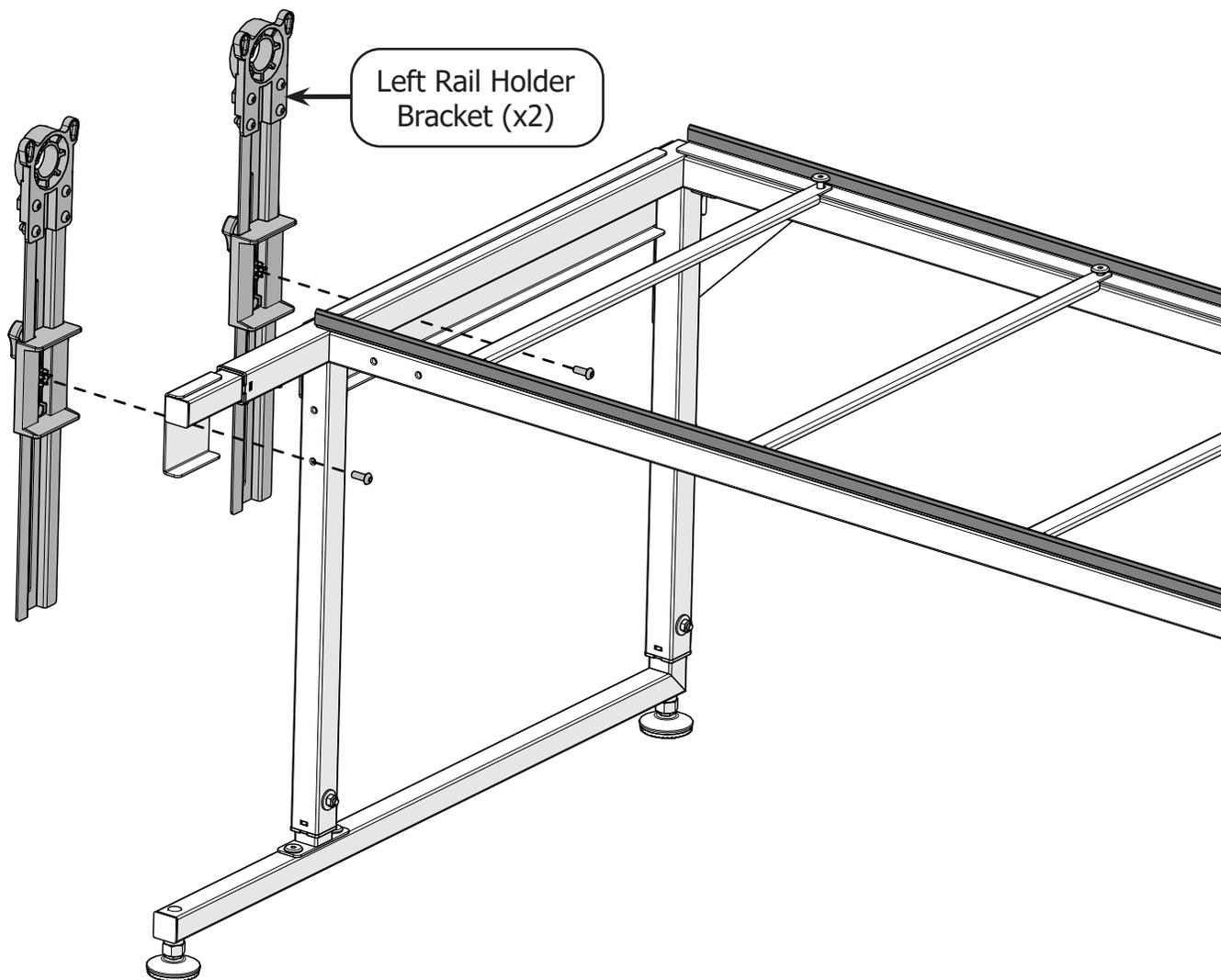
- 1 Attach a right rail holder bracket to the arm on the right side of the frame with an **M6 x 16 mm SBHCS** and the 4 mm Allen wrench.



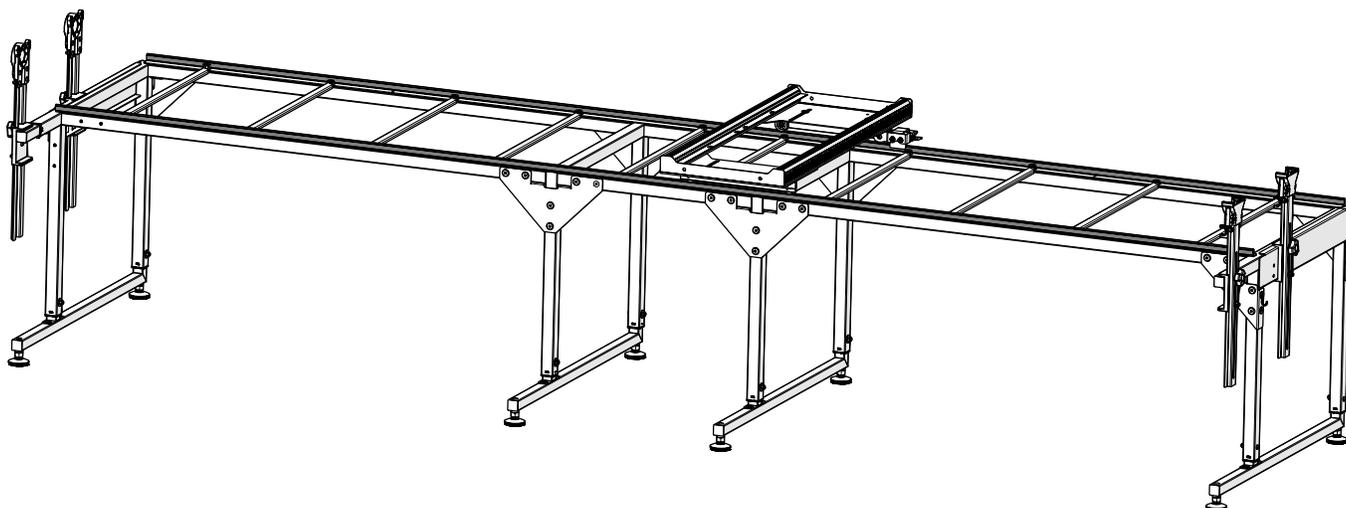
- 2 Attach the other right rail holder bracket to the right side of the frame.



- 3 Use the 4 mm Allen wrench and two M6 x 16 mm SBHCS to attach the two **left rail holder brackets** to the left side of the frame.



- 4 **Result:** The rail holders are attached to the frame.



Congratulations! You have completed Part One of instructions for the 10-Foot Q-Zone Queen Frame.

If you are also installing a new Q'nique quilting machine, turn to Part One of your machine manual now.

If you are going to be using a top plate with a domestic sewing machine, turn to your top plate manual and follow the instructions to fully assemble the top plate.

If you are not installing a new machine or top plate, but are installing QuiltMotion, turn to Part One of your QuiltMotion manual before moving on to Part Two of this manual.

If you are not installing a Q'nique machine or QuiltMotion at this time, continue to Part Two of this manual.

# Part Two

## **Progress Checkpoint**

Machine Manual

Have you completed Part One and Part Two?

QuiltMotion Manual

Have you completed Part One and Part Two?

Top Plate Manual

Have you assembled your top plate and installed the dual-wheel channel lock? If not, do so now. If you have completed these instructions, skip to Part Three of this manual on page 63.

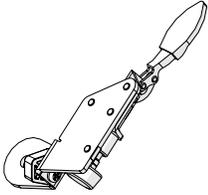
If not, see your Machine manual, QuiltMotion manual, or top plate manual for instructions on completing these steps before beginning Queen Assembly Part Two of your machine manual on the next page.

# Assemble a New Frame (Part Two)

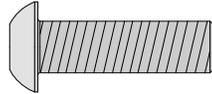
## Task 8 - Install the Dual-Wheel Channel Lock

### Parts & Tools Needed:

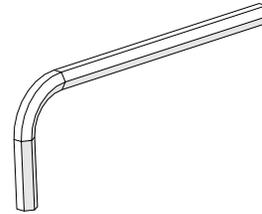
Dual-Wheel Channel Lock



SBHCS  
M6 x 20 mm



Allen Wrench  
4 mm



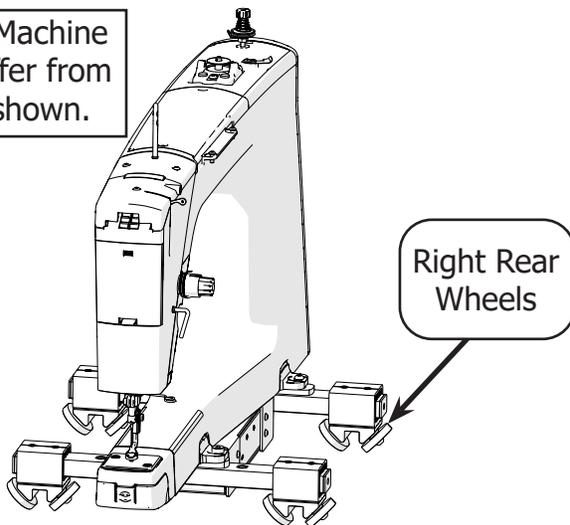
**If using a top plate**, follow your top plate instructions for installing the channel lock and skip to Part Three on page 63.

### Instructions

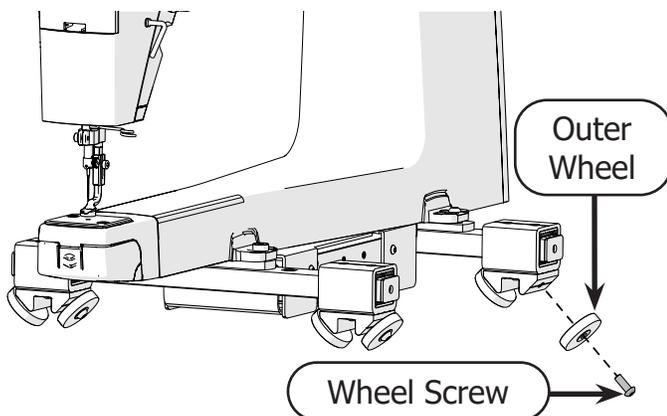
Channel locks restrict the movement of the machine or bottom carriage along one axis, so that it is easy to create a straight line. The machine channel lock stops the movement of the machine along the front-to-back axis to assist with making horizontal lines.

- 1 Locate the machine's **right rear wheels**.

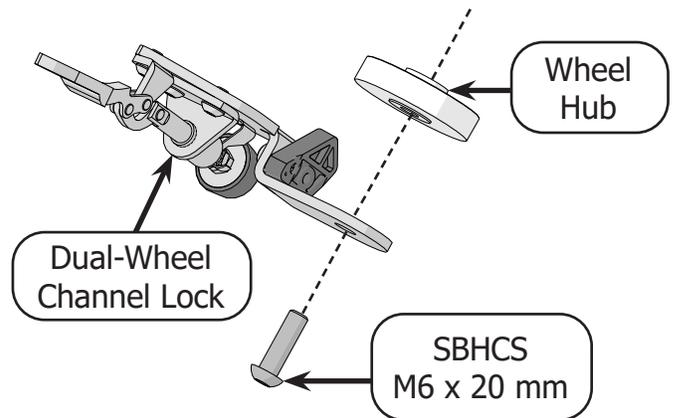
**Note:** Machine may differ from model shown.



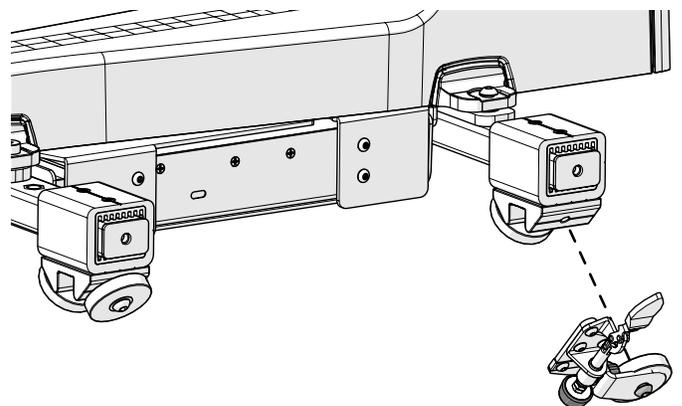
- 2 Use a 4 mm Allen wrench to remove the **outside wheel** and **wheel screw**. The wheel screw will not be needed again and can be stored with the packaging materials.



- 3 Place the **dual-wheel channel lock** onto the **M6 x 20 mm SBHCS**. Follow it with the wheel, with the **wheel hub** facing away from the channel lock.

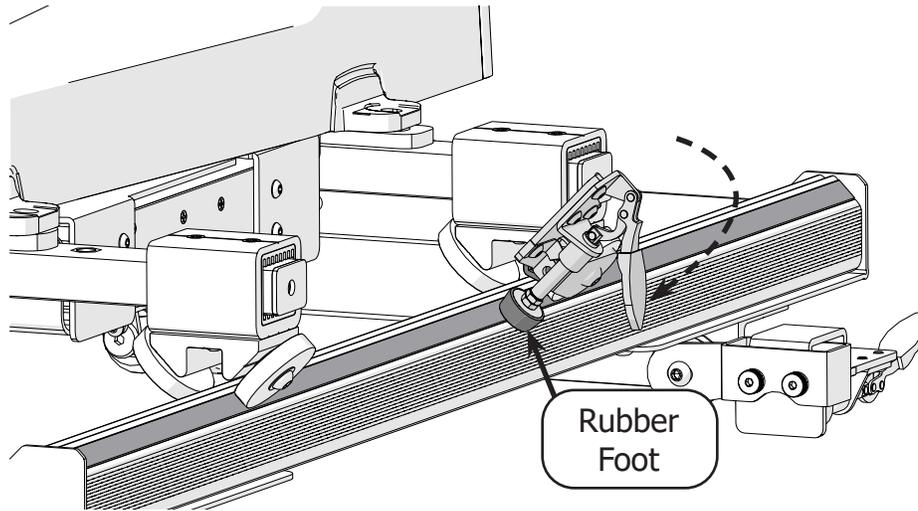


- 4 Screw the channel lock and wheel onto the machine so the channel lock body is toward the front of the machine. Use a 4 mm Allen wrench to attach.

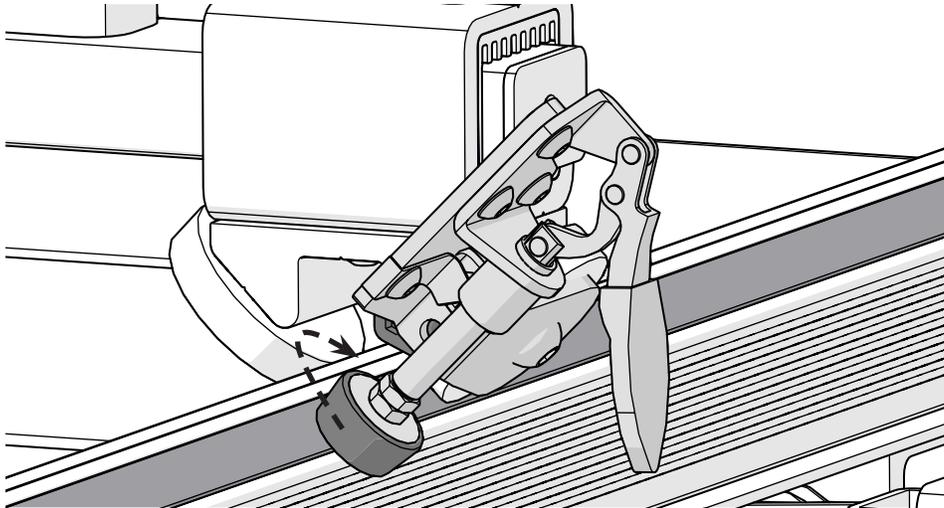


## Task 8 - Install the Dual-Wheel Channel Lock (continued)

- 5 Close the channel lock handle and test it out. The **rubber foot** should press firmly against the bottom carriage tracks and prevent the machine from moving front-to-back on the carriage.

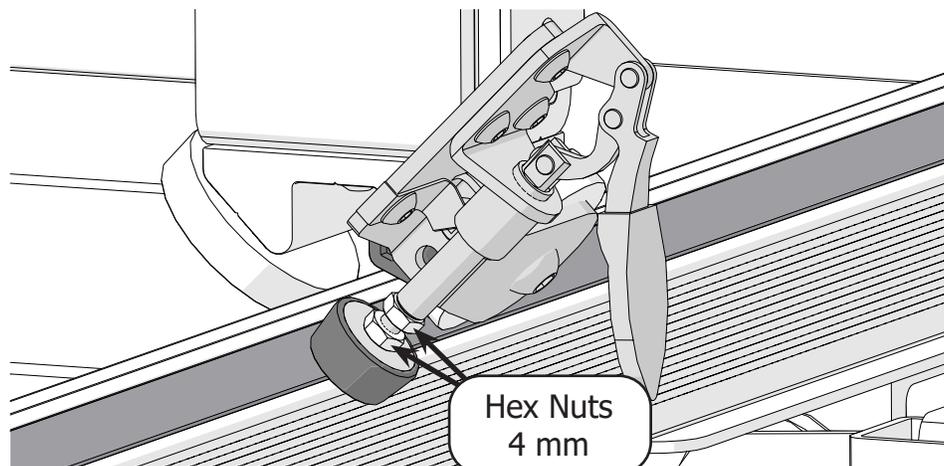


- 6 If the channel lock doesn't fully reach the track, or its grip on the track seems loose, twist the rubber foot clockwise to extend it.



**Note:** If twisted too far, the handle will start to open, and eventually the foot will fall out. Reverse the direction you're twisting until the handle is pointing down, but the foot still reaches the track.

- 7 **Optional step:** Prevent the channel lock from loosening over time by using 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.



Congratulations! You have completed Part Two of the instructions for the 10-Foot Q-Zone Queen Frame.

If you are also installing a new Q'nique quilting machine, turn to Part Three of your machine manual before moving on to Part Three of this manual.

If you are not installing a Q'nique machine at this time, continue to Part Three of this manual.

# Part Three

## **Progress Checkpoint**

Machine Manual Part Three

Have you:

- Installed the wheel covers (on applicable models), handlebars, display, thread mast, upper encoder, and power cable?

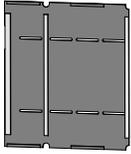
If not, see your Machine manual for instructions on completing these steps before beginning Part Three of your machine manual on the next page.

## Assemble a New Frame (Part Three)

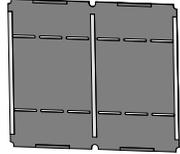
### Task 9 - Install the Table Surfaces

#### Parts & Tools Needed:

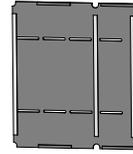
Plastic Table Surface 1



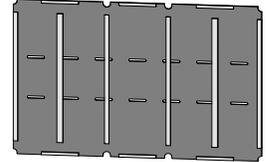
Plastic Table Surface 2 (x2)



Plastic Table Surface 4



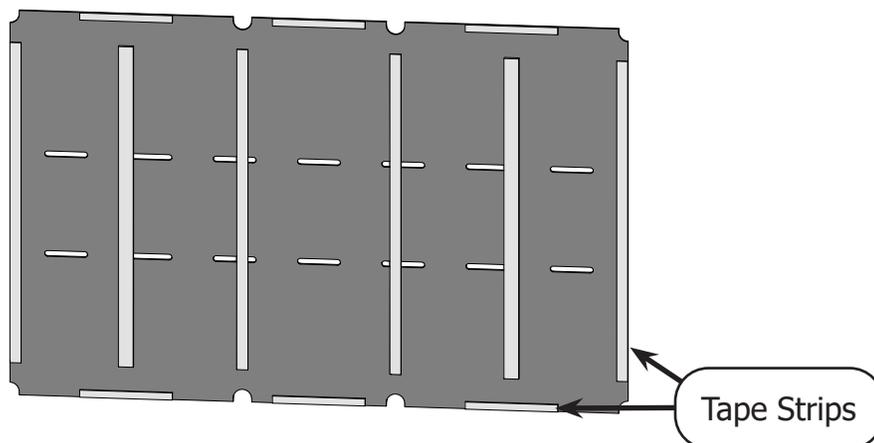
Plastic Table Surface Extension



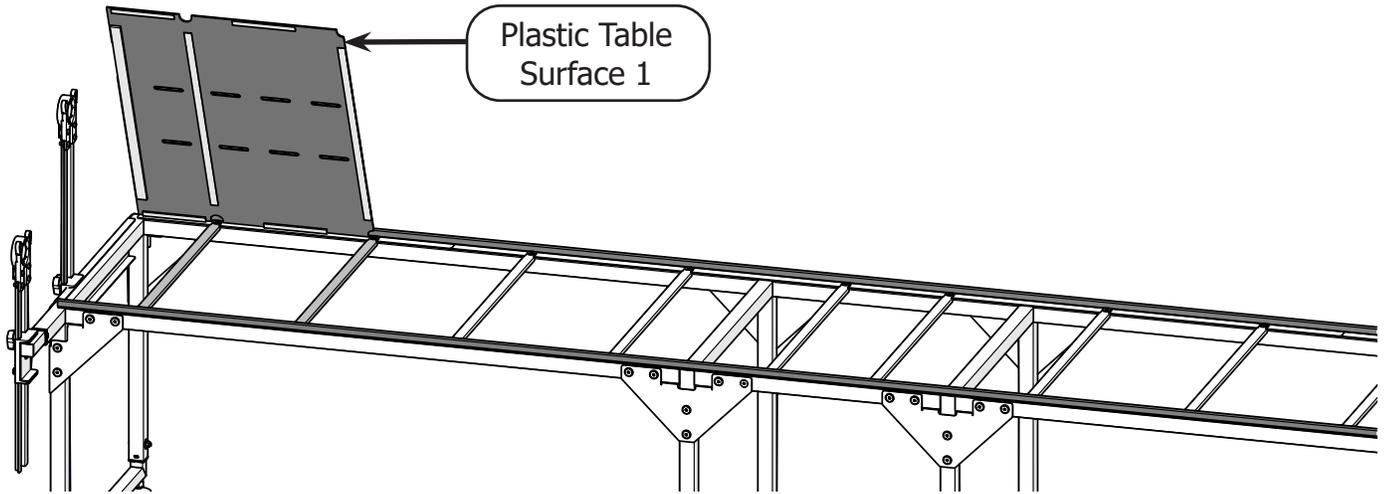
#### Instructions

The table surfaces are a platform for Pattern Perfect and other accessories. Take the following steps to install the table surfaces:

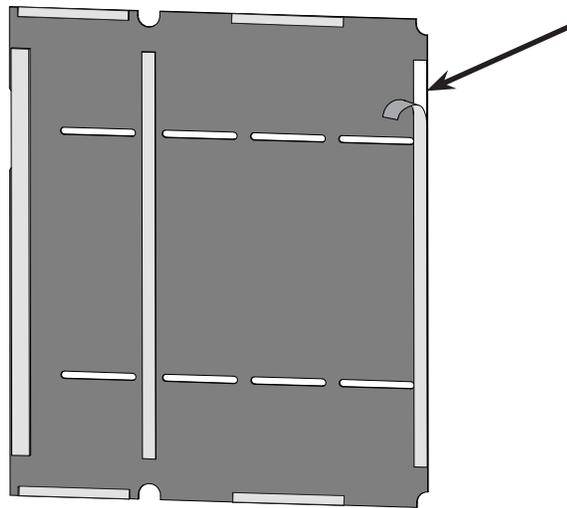
Each plastic table surface has **strips of tape** that will secure it to the frame. These strips must be aligned with the cross support tubes and the table supports.



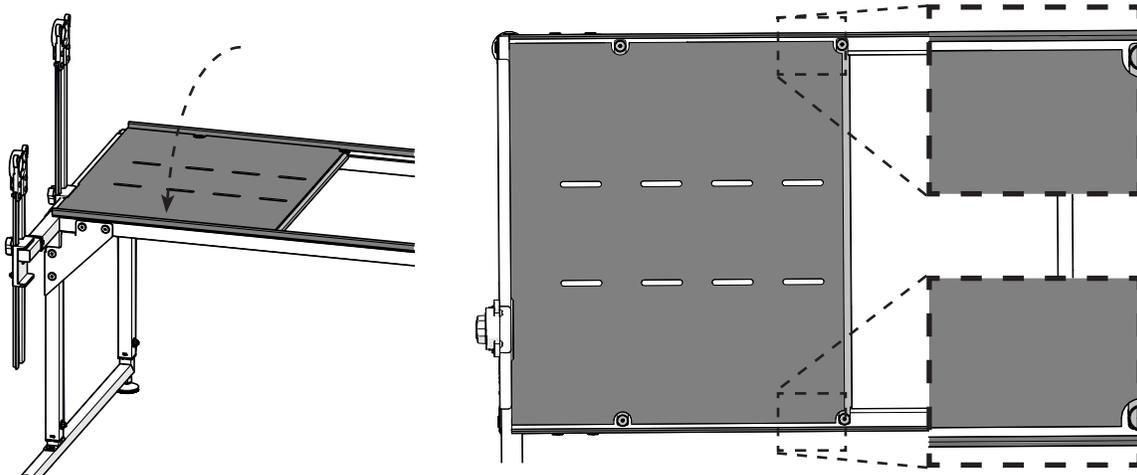
- 1 Position the **plastic table surface 1** onto the left side of the frame so that the long strips of tape align with the table supports and the top of the left leg.



- 2 Peel the film backing off each strip of tape.



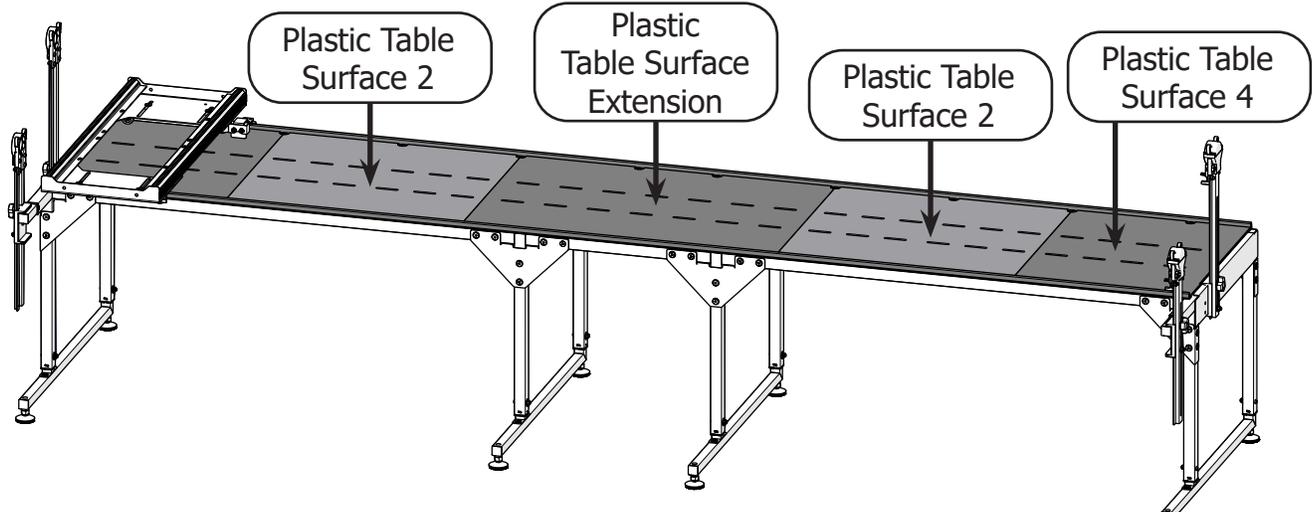
- 3 Carefully lower the table surface down onto the frame. Make sure the tape aligns with the supports and the table surface is centered between the two tracks.



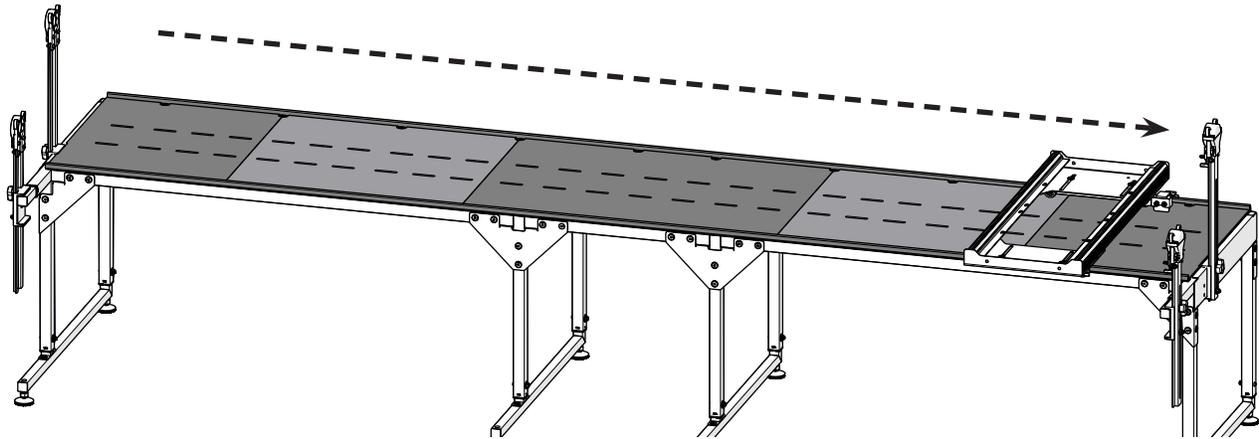
## Assemble a New Frame (Part Three)

### Task 9 - Install the Table Surface (continued)

- 4 Repeat steps 1–3 to install the remaining plastic table surfaces according to the following image.



- 5 Test the spacing between the tracks and the table surfaces by rolling your bottom carriage across the frame. If the carriage wheels catch on the table surfaces, peel them up and reposition them to be more centered between the tracks.

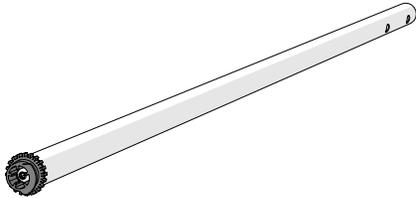


- 6 **Result:** The plastic table surfaces are installed and do not interfere with the movement of the bottom carriage.

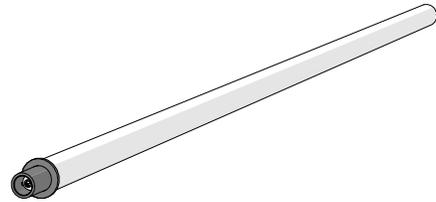
## Task 10 - Install the Rails

### Parts & Tools Needed:

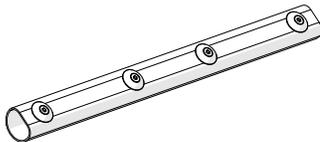
2-Ft Extension Ratcheting Rail Assembly (x2)



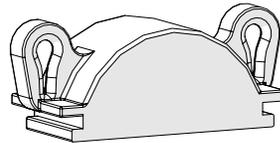
2-Ft Extension Rolling Rail Assembly (x2)



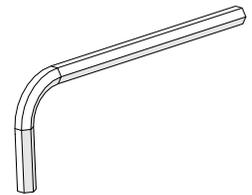
Rail Coupler (x2)



Ratchet Cap (x2)



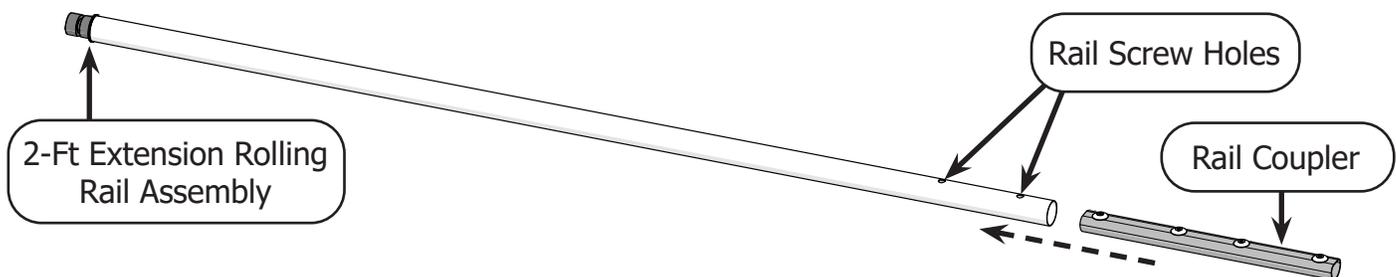
Allen Wrench  
3 mm



### Instructions

Take the following steps to install the rails:

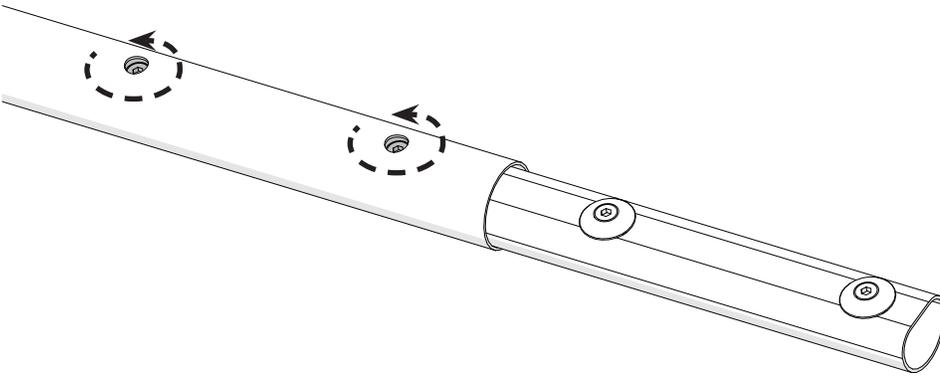
- 1 Insert a **rail coupler** into the open end of a **2-ft extension rolling rail assembly**. Align two of the screws on the coupler with the **holes** in the rail.



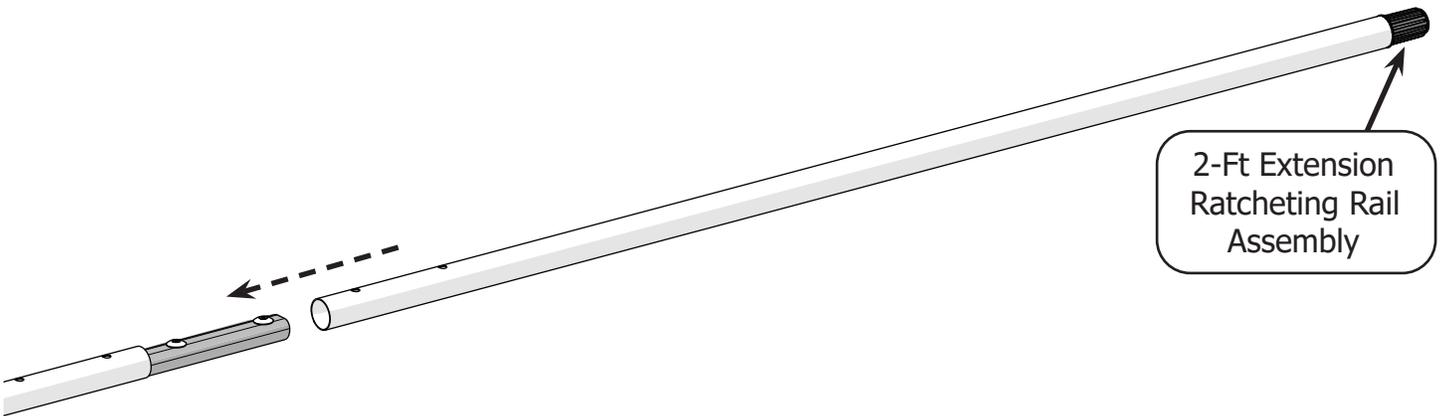
## Assemble a New Frame (Part Three)

### Task 10 - Install the Rails (continued)

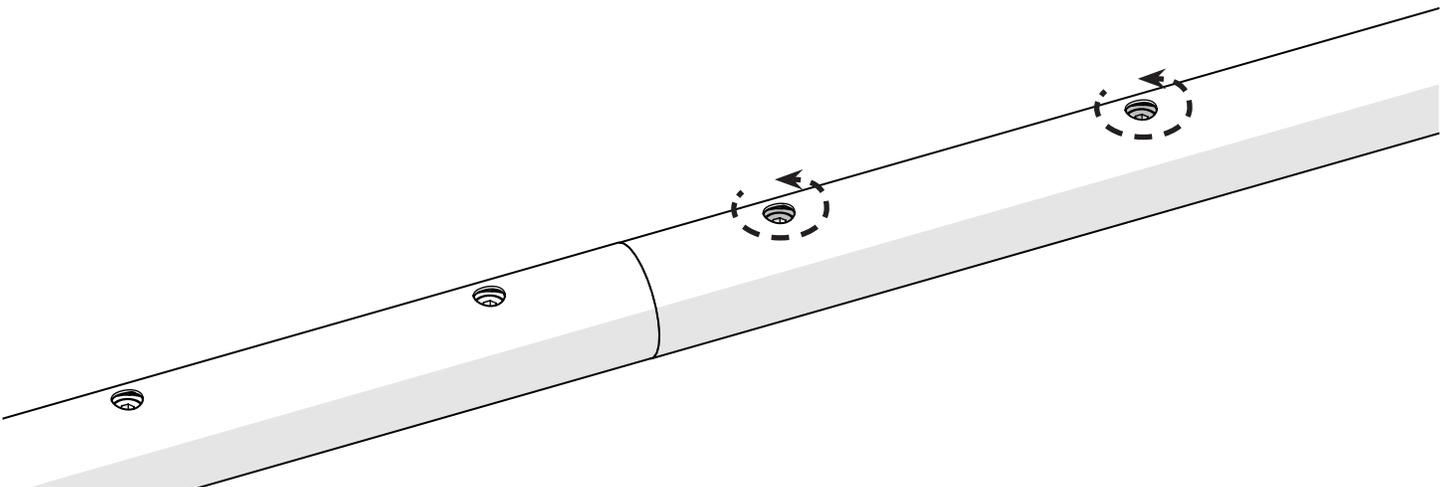
- 2 Use the 4 mm Allen wrench to loosen (turn counter-clockwise) the coupler screws inside the rail until they press firmly against the rail.



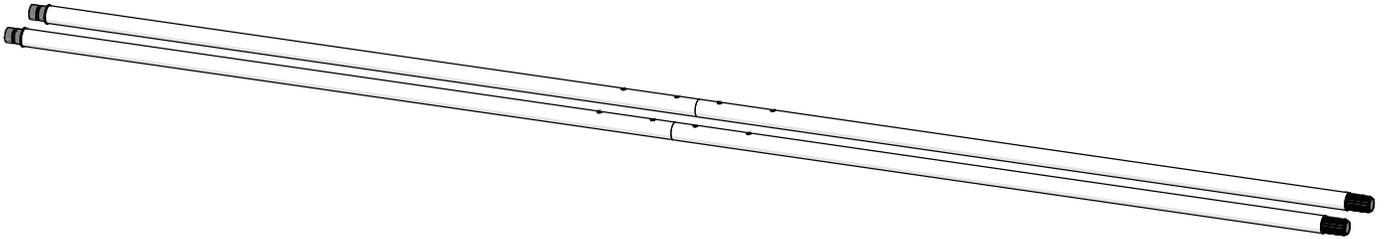
- 3 Slide a **2-ft extension ratcheting rail assembly** onto the other side of the rail coupler so the holes and screws align.



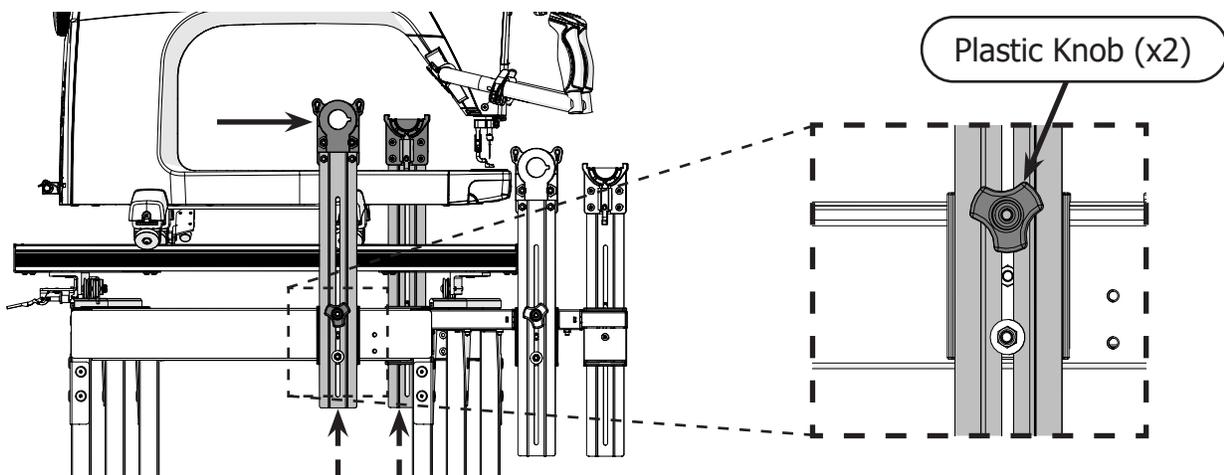
- 4 Loosen the screws with the 4 mm Allen wrench until they press firmly against the inside of the rail.



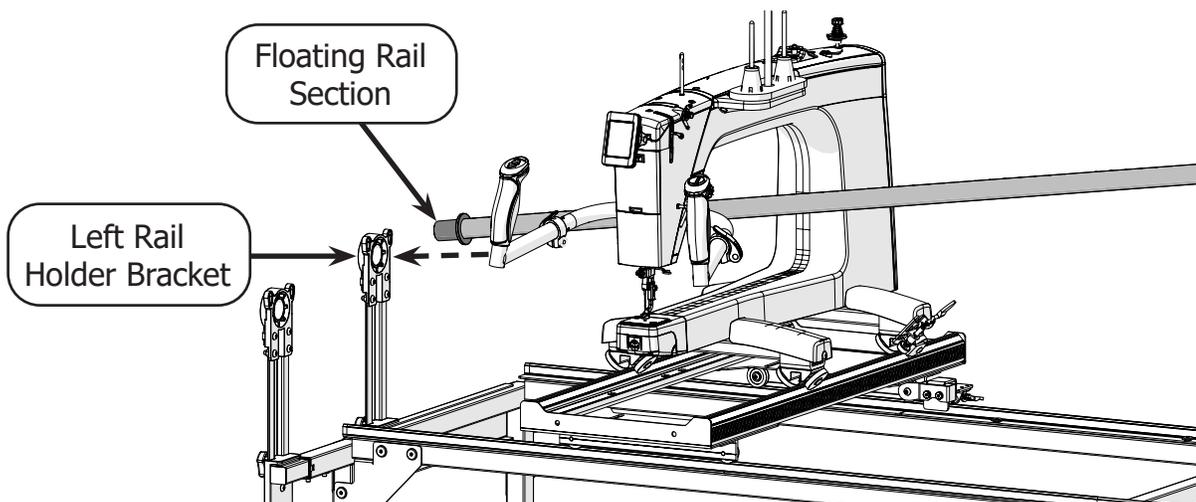
- 5 Repeat steps 1-4 for the other rail.



- 6 Loosen the **plastic knob** on both of the rear bracket holders. Slide both brackets up so the dark plastic is above the bed of the machine. Then retighten the knobs.



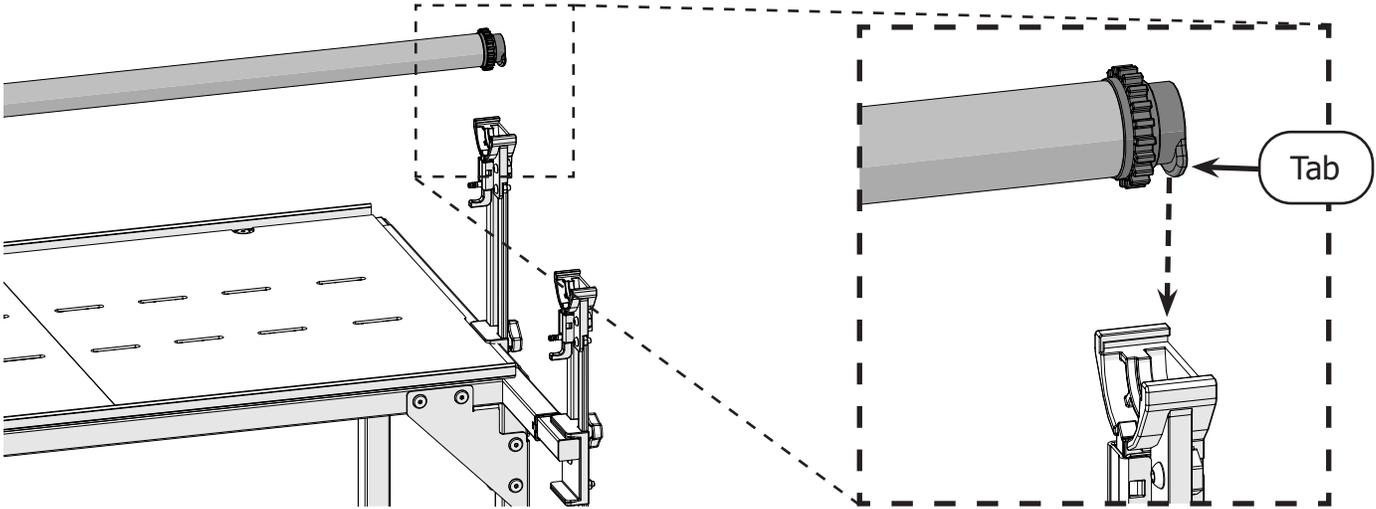
- 7 Slide one of the rails through the machine's throat and insert the end of the **floating rail section** into the hole in the rear **left rail holder bracket**.



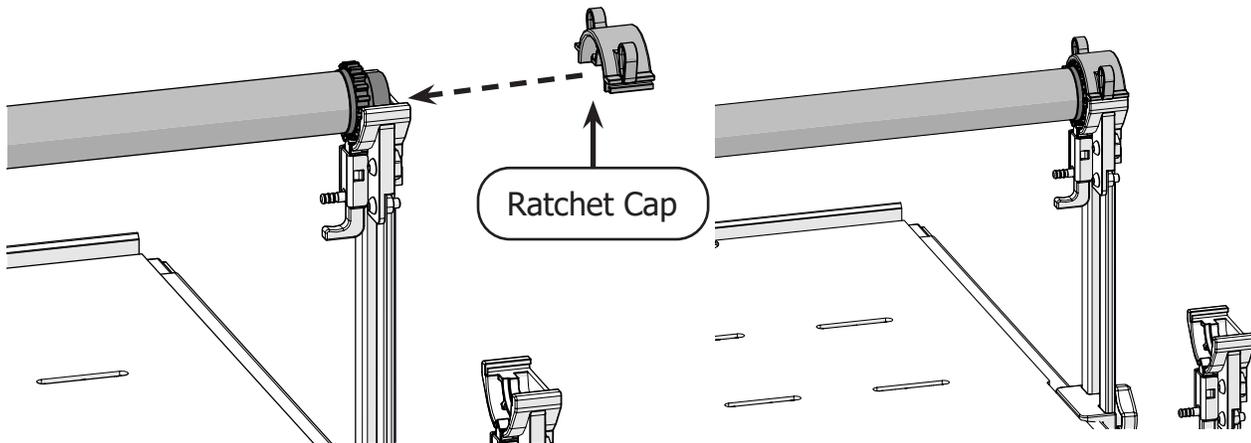
## Assemble a New Frame (Part Three)

### Task 10 - Install the Rails (continued)

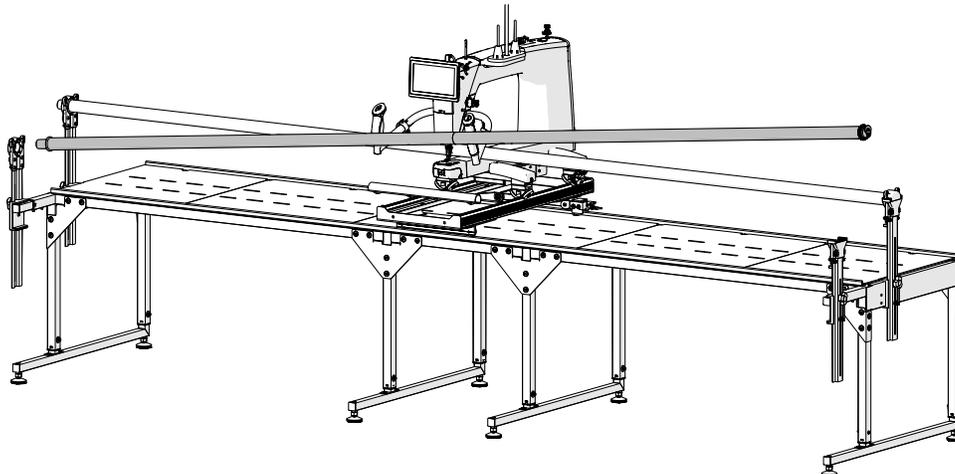
- 8 Place the other end the rail into the rear **right rail holder bracket**. The rail **tab** should point downward.



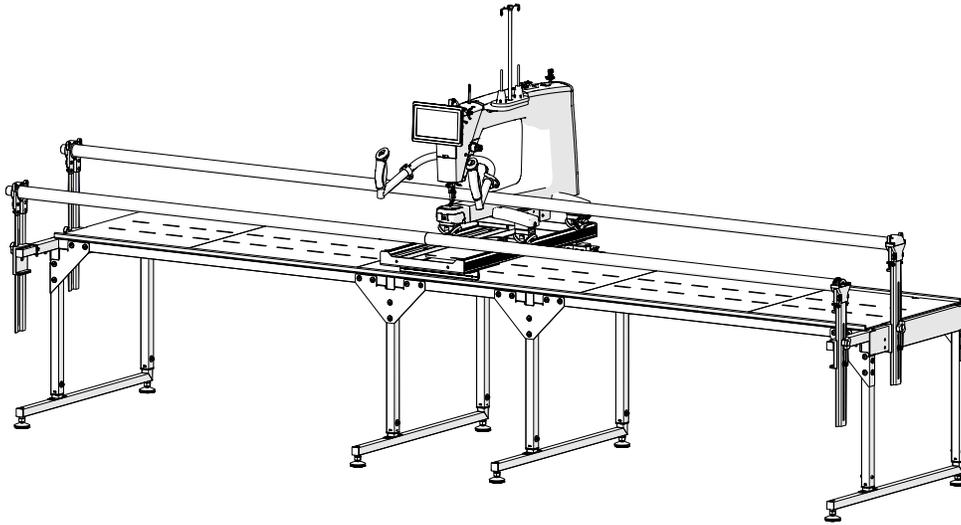
- 9 Slide the **ratchet cap** onto the top of the bracket.



- 10 Repeat steps 7–9 to install the remaining rail into the front rail holder brackets, but do not pass the rail through the throat of the machine.



**11 Result:** The rails are installed on the frame.

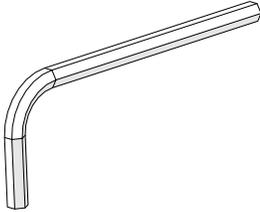


# Assemble a New Frame (Part Three)

## Task 11 - Adjust the Rails

### Parts & Tools Needed:

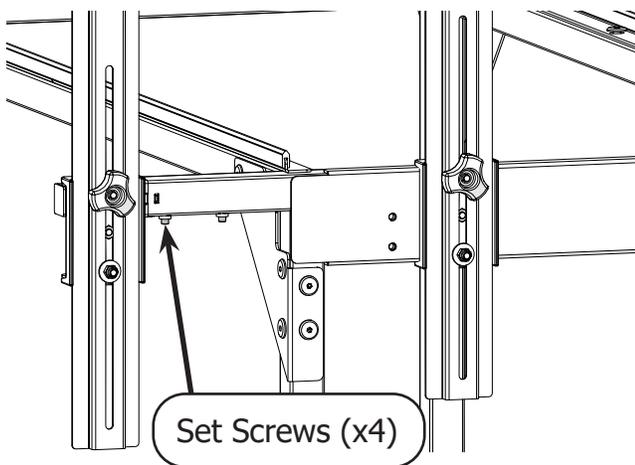
Allen Wrench  
4 mm



### Instructions

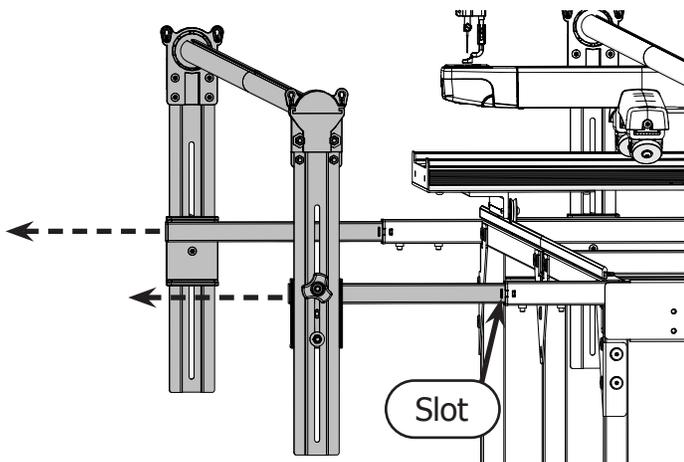
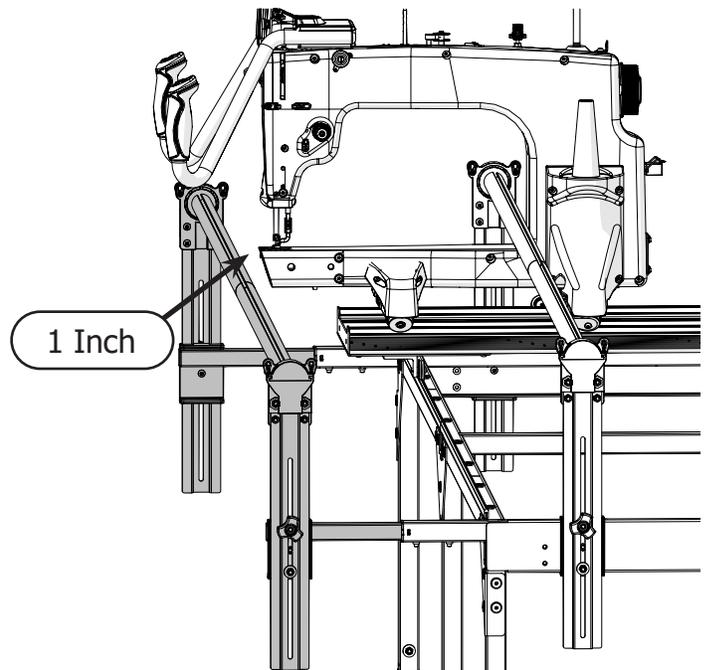
Take the following steps to adjust the rails to more efficiently work with your machine:

- 1 Use the 4 mm Allen wrench to loosen, but not remove, the four **set screws** in the right and left extension arm.



**Note:** If your machine has a throat length of less than 16 inches, move the machine as far forward as you can and then adjust the quilt-backing rail until it is 1 inch from the front of the machine. Tighten the set screws.

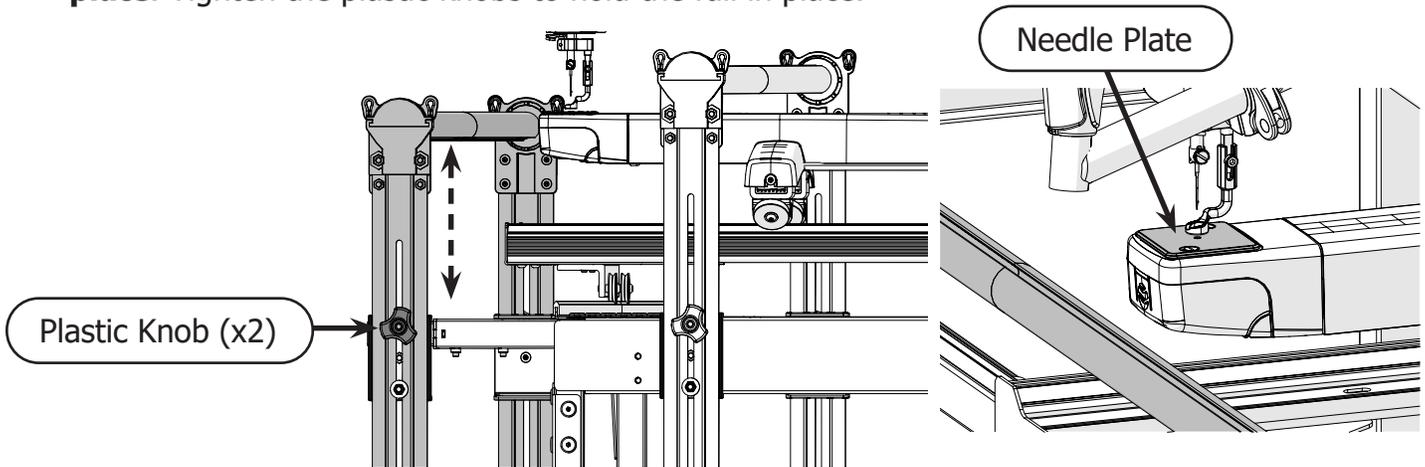
- 2 Pull on the brackets to extend the quilt-backing rail until you see the **slot** on the extension arms. Tighten the set screws.



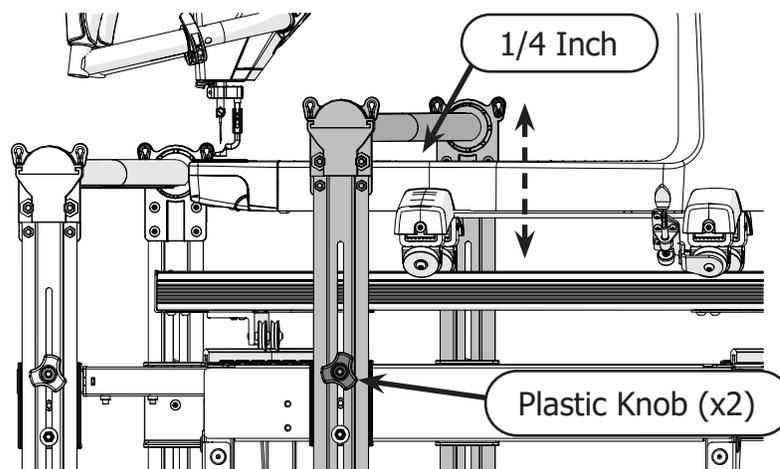
## Assemble a New Frame (Part Three)

### Task 11 - Adjust the Rails (continued)

- 3 Adjust the height of the quilt-backing rail by loosening the **plastic knobs** on both front rail holder brackets. Position the rail so that the top of the rail is even with the machine's **needle plate**. Tighten the plastic knobs to hold the rail in place.



- 4 Adjust the height of the take up rail by loosening the **plastic knobs** on both rear rail holder brackets. Position the rail so that it is approximately **1/4 inch** above the throat of the machine. Tighten the plastic knobs to hold the rail in place.



## Task 12 - Install the Bungee Clamps

### Parts & Tools Needed:

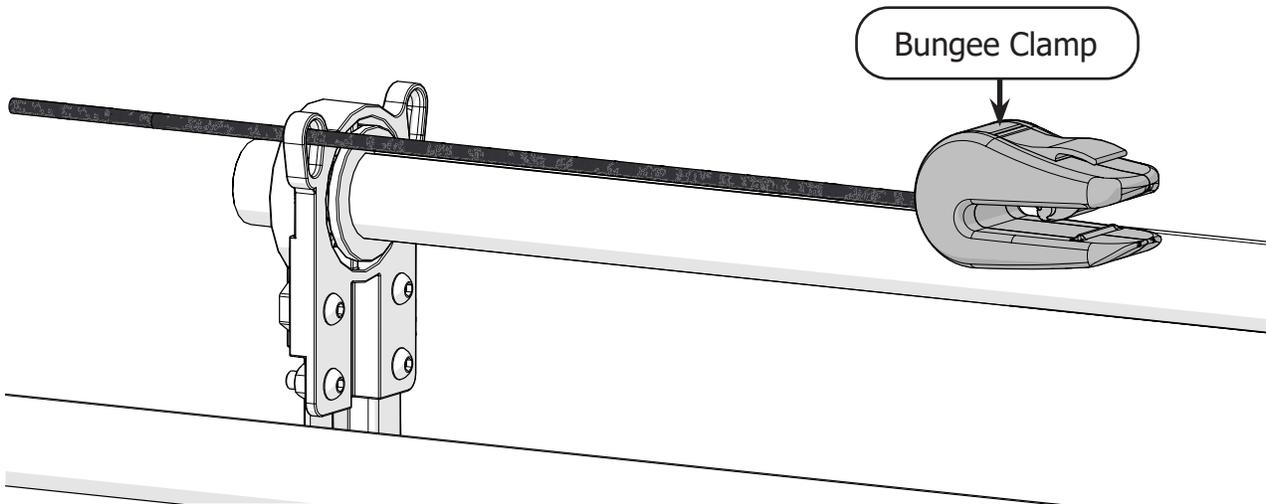
Bungee Clamp  
Accessory (x4)



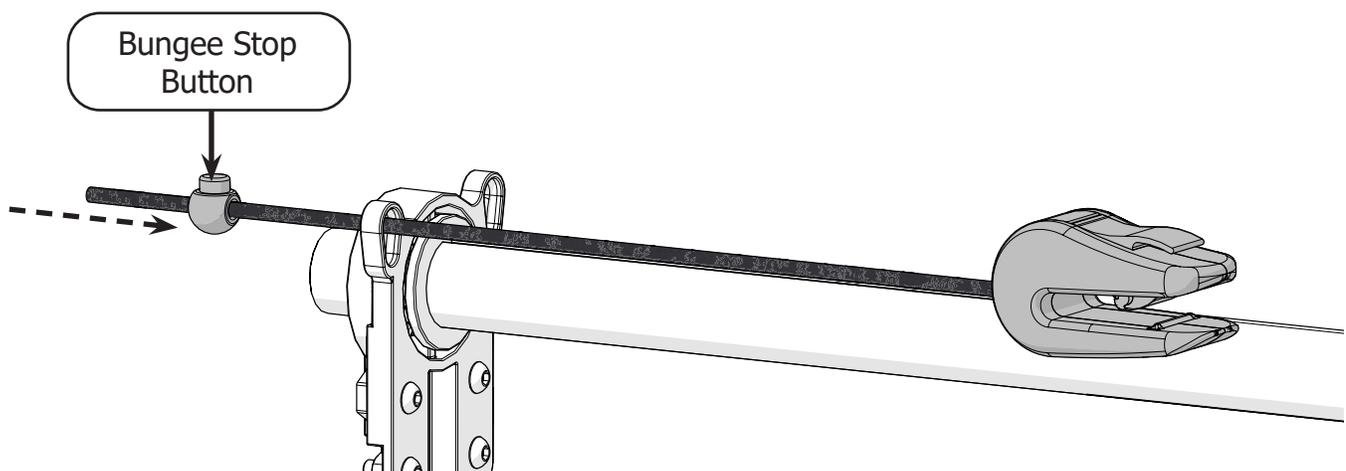
### Instructions

The bungee clamps help secure and tension the fabric on the frame. Take the following steps to install the bungee clamps:

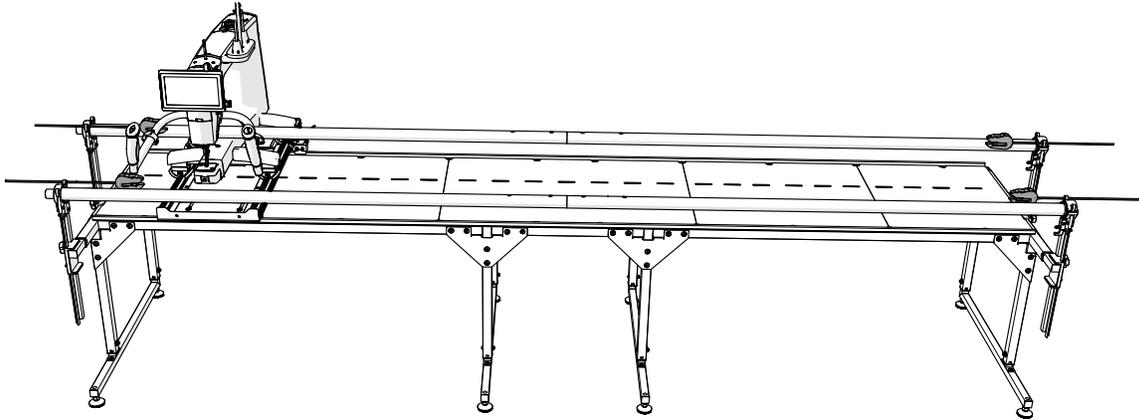
- 1 Thread the **bungee clamp** cord through the one of the holes in a rail cap.



- 2 Press in the **bungee stop button** and thread the bungee clamp cord through the stop. Then release the stop.



- 3 Repeat steps 1–2 to install one bungee clamp onto each rail cap.



- 4 **Result:** The bungee clamps are installed onto the frame.

See page 90 for instructions on using the bungee clamps.

## Assemble a New Frame (Part Three)

### Task 13 - Level the Frame

#### Parts & Tools Needed:

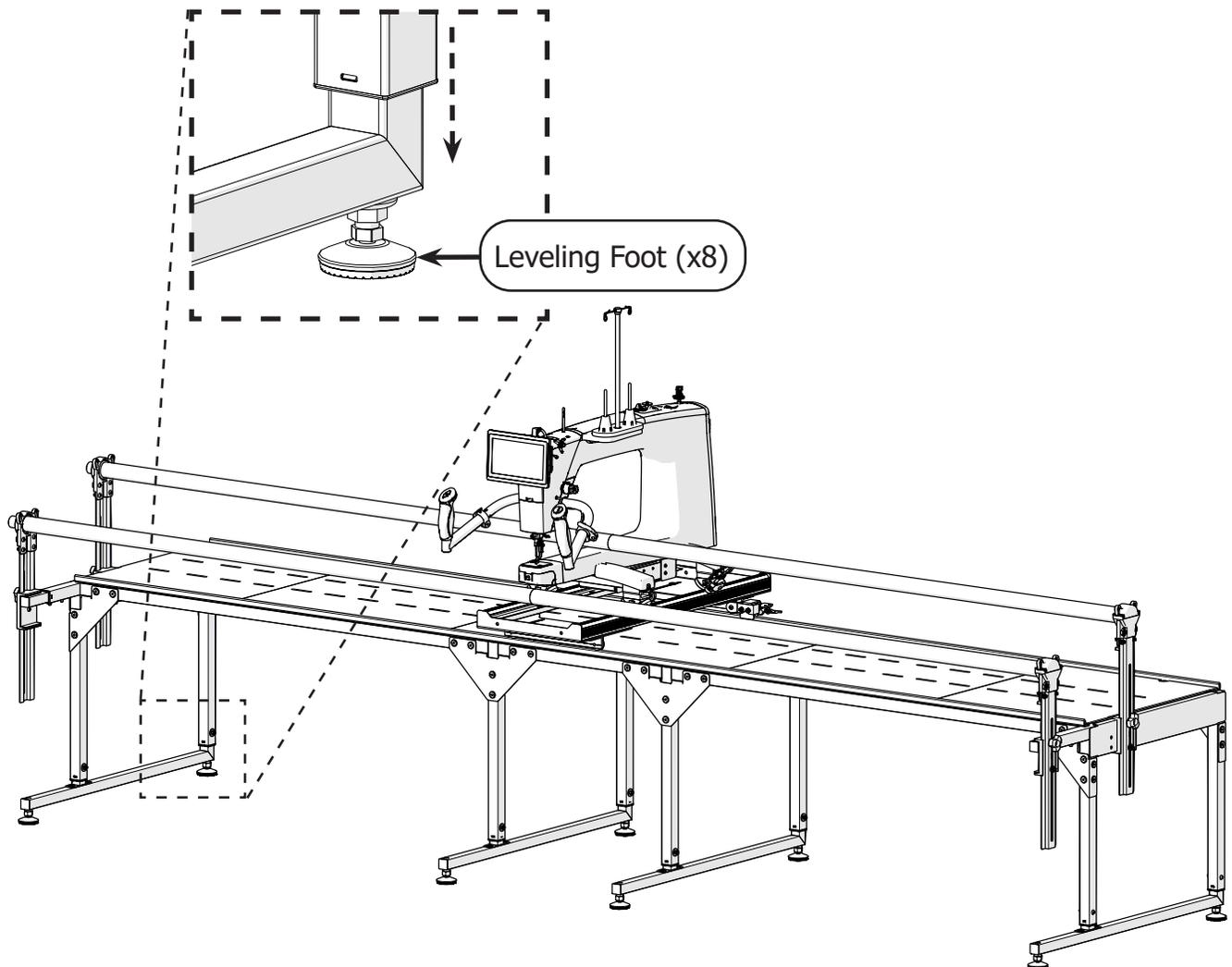
Open End Wrench  
14 mm and 17 mm



#### Instructions

Take the following steps to adjust the frame's feet to make sure the frame is level and smooth:

- 1 Follow the leveling adjustment steps on the next page to lower the frame as far as it can go on all eight leveling feet.

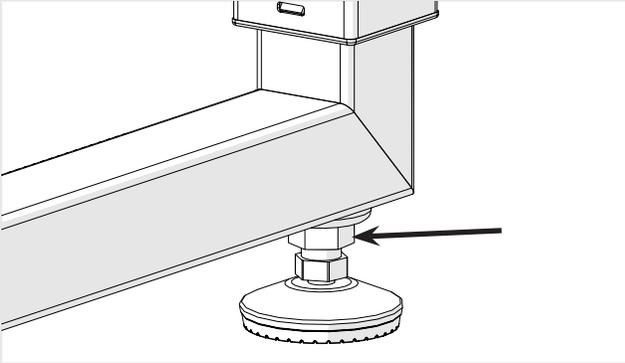


## Assemble a New Frame (Part Three)

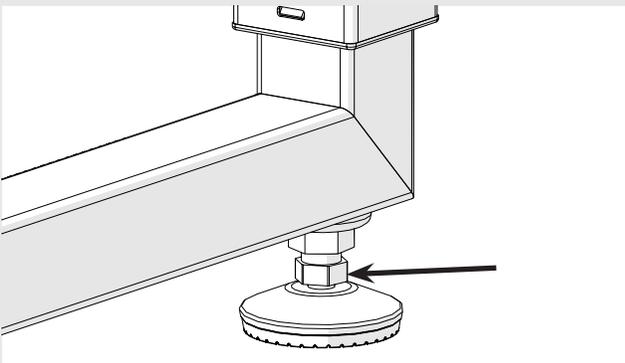
### Task 13 - Level the Frame (continued)

#### Leveling Foot Adjustment

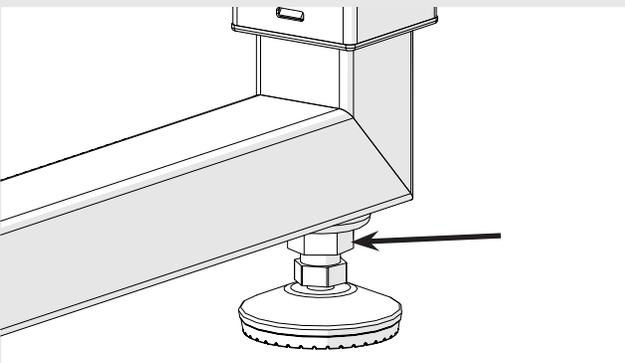
- a Loosen the top nut on the leveling foot with the 17 mm Open-end wrench.



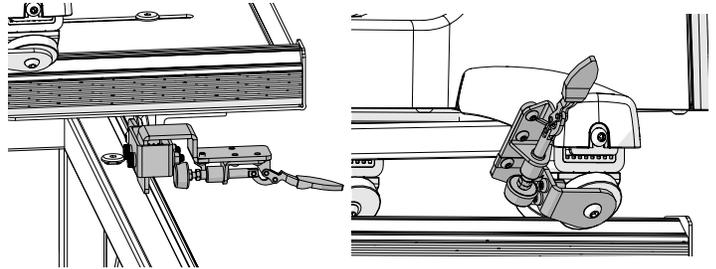
- b Turn the bottom nut with the 14 mm Open-end wrench until the desired height is set. Turn counter-clockwise to lower the frame. Turn clockwise to raise the frame.



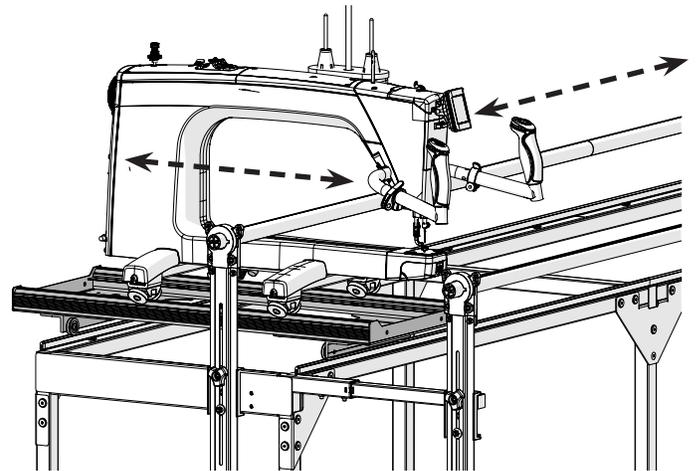
- c Tighten the top nut with the 17 mm Open-end wrench until it is firm against the frame leg.



- 2 After lowering the frame, make sure both channel locks are open so the machine and bottom carriage can roll freely.



- 3 Move the machine to the left side of the frame and place the machine in the middle of the bottom carriage. Let go of the machine to see if it rolls and in which direction.



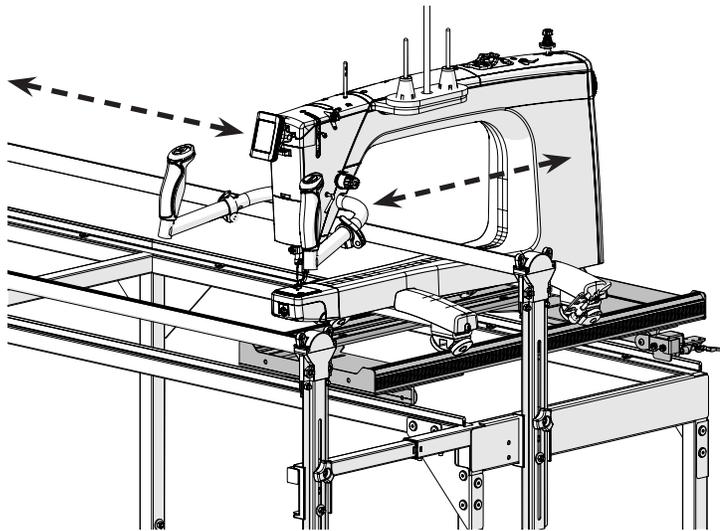
- If the machine rolls towards the middle of the frame, raise the feet on the left middle leg.
- If it rolls forward, raise the front foot.
- If it rolls backward, raise the rear foot.

**Note:** Due to the weight of the machine, some slight movement is normal. The goal is to prevent the machine from rolling across the frame.

## Assemble a New Frame (Part Three)

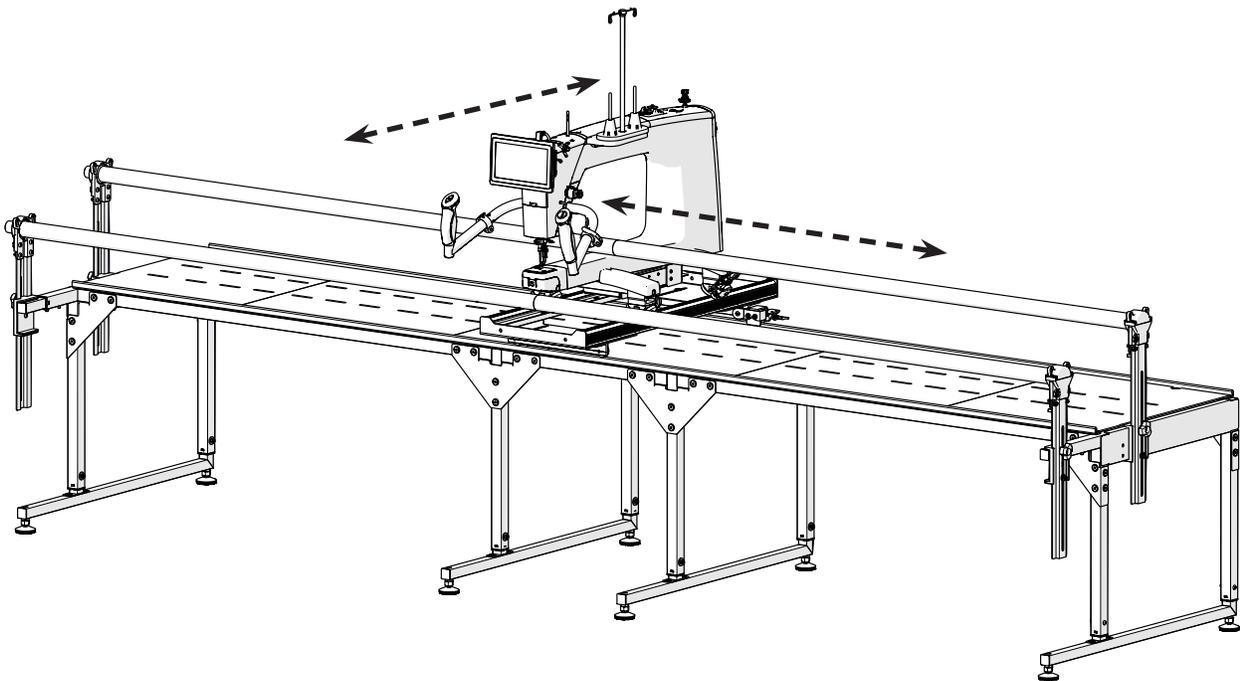
### Task 13 - Level the Frame (continued)

- 4 Repeat the process with machine on the right side of the frame.



- If the machine rolls towards the middle of the frame, raise the feet on the right middle leg.
- If it rolls forward, raise the front foot.
- If it rolls backward, raise the rear foot.

- 5 Repeat the process again, putting the machine between the two middle legs. If the machine begins to roll toward either side of the frame, raise all the feet on that side.



- 6 If you raised any feet in step 5, repeat steps 2–5.

- 7 **Result:** The machine and carriage can smoothly cross the frame.

Congratulations! You have completed Part Three assembly instructions for the 10-Foot Q-Zone Queen frame.

If you are also installing QuiltMotion, turn to Part Three of your QuiltMotion manual.

If you are not installing QuiltMotion at this time, continue to Part Four of this manual on page 80.

# Part Four

## **Progress Checkpoint**

QuiltMotion Manual

Have you:

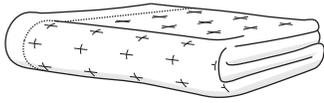
- Completed Part Three?

If not, see your QuiltMotion manual for instructions on completing those steps before beginning Part Four of your machine manual on the next page.

## Task 14 - Install the Cloth Leaders

### Parts & Tools Needed:

Precision Cloth Leader Set

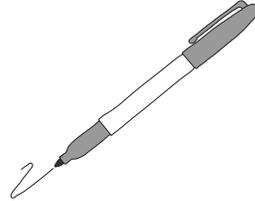


Velcro Tape (x2)



(Found in Precision Cloth Leader Set)

Permanent Marker

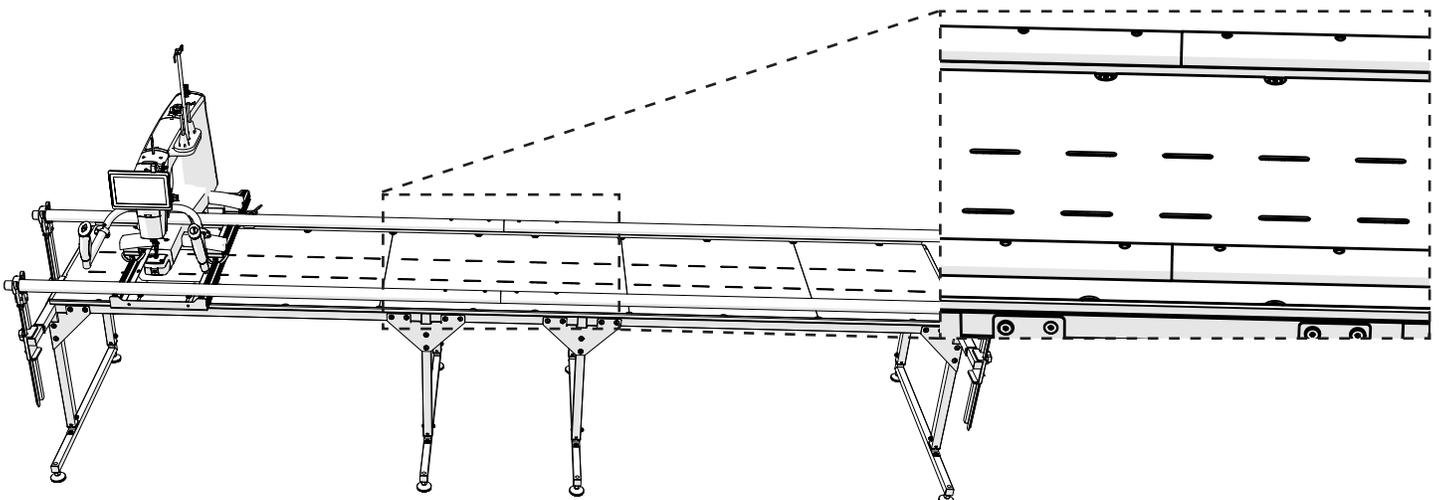


(not included)

### Instructions

The cloth leaders allow you to load fabric onto your frame. Take the following steps to install the cloth leaders:

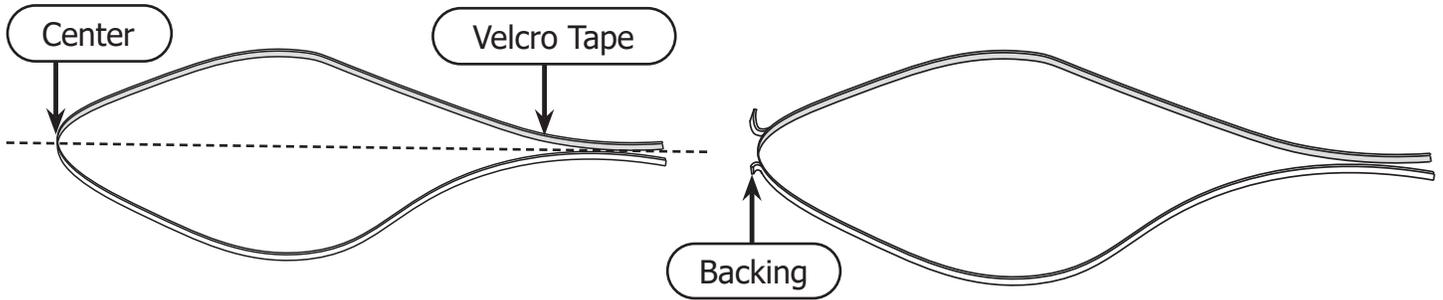
- 1 Turn both rails so the holes point upward.



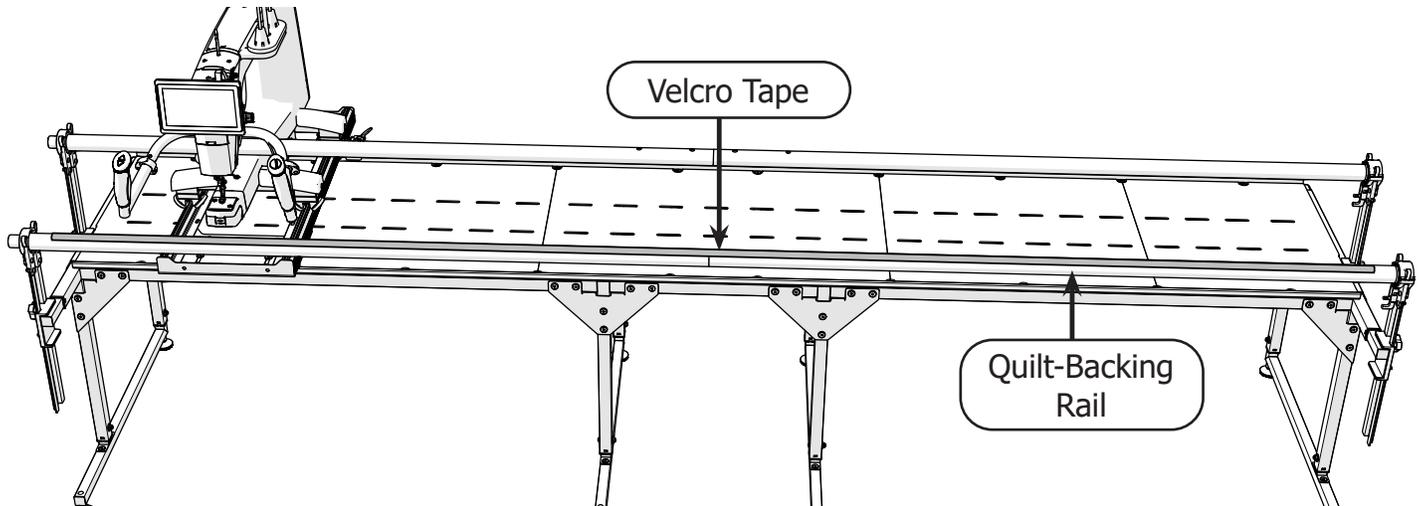
## Assemble a New Frame (Part Four)

### Task 14 - Install the Cloth Leaders (continued)

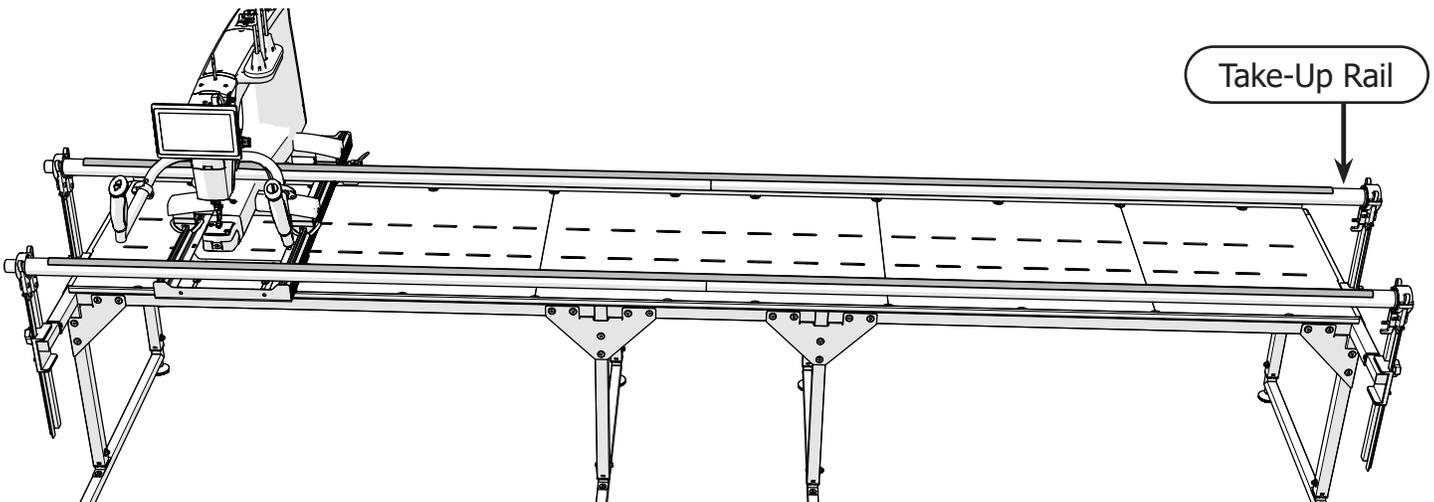
- 2 Unroll one of the **Velcro tape** rolls and fold it in half to find the **center**. Peel back an inch or two of **backing** from the center to expose the adhesive side of the tape.



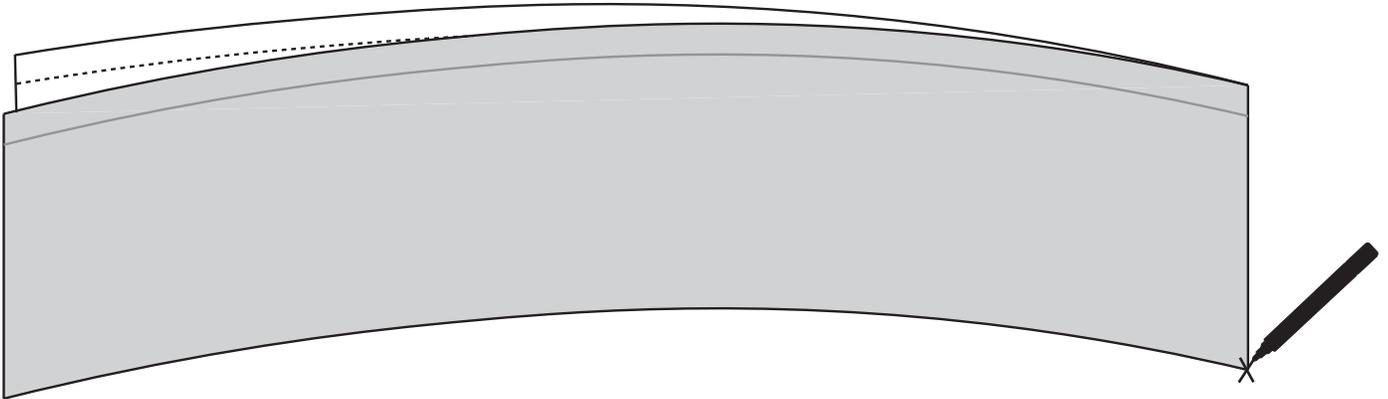
- 3 Stick the center of the Velcro tape over the **quilt-top rail** holes. Work from the center out and slowly spread the Velcro tape across the top of the quilt-backing rail.



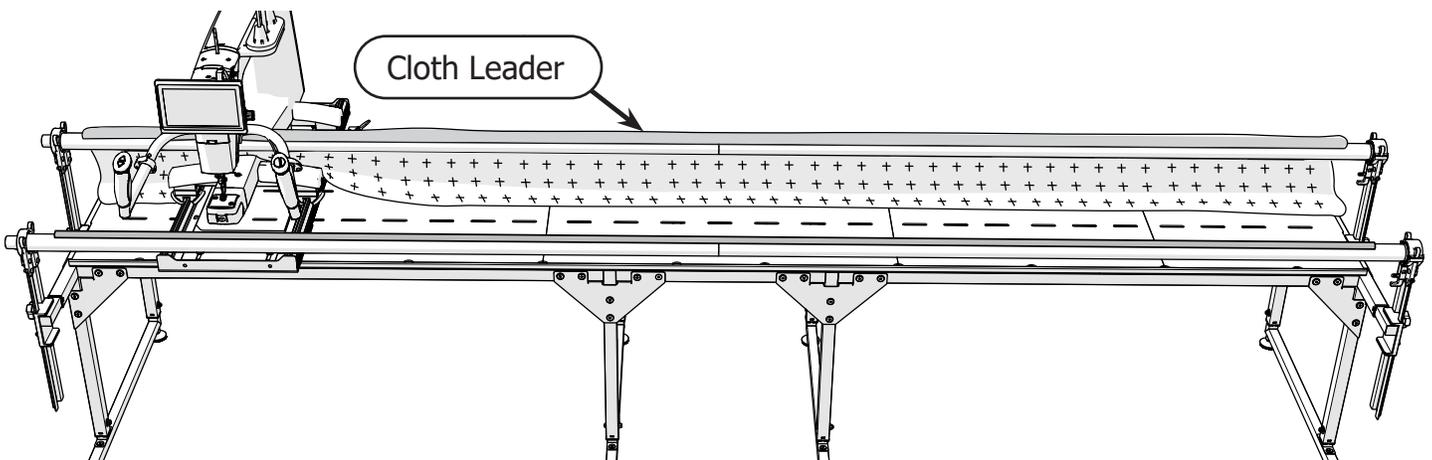
- 4 Repeat steps 2–3 to install the Velcro tape onto the take-up rail.



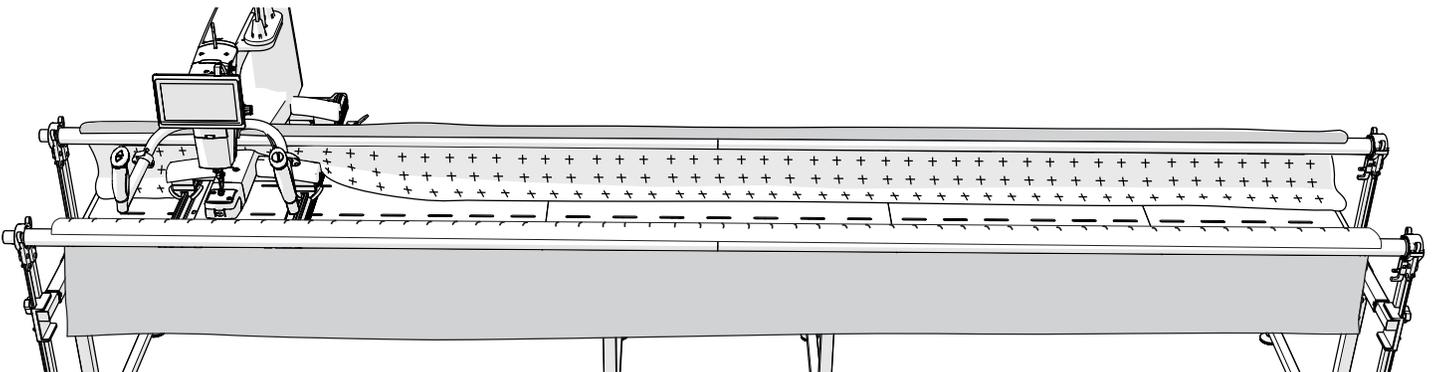
- 5 Fold each cloth leader in half width-wise and mark the center on the bottom edge. Mark inside and outside the crease using permanent marker; these marks will be used each time fabric is loaded onto the frame.



- 6 Attach one **cloth leader** to the Velcro on the take-up rail so the cloth drapes around the back of the rail. When attaching, start at the center of the rail and work your way outward one side at a time.



- 7 Attach the other cloth leader to the quilt-backing rail so the cloth drapes around the back of the rail. When attaching, start at the center of the rail and work your way outward.



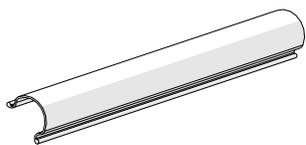
- 8 **Result:** The cloth leaders are installed and fabric can now be loaded onto the frame for quilting.

# Assemble a New Frame (Part Four)

## Task 15 - Load the Fabric

### Parts & Tools Needed:

Quilt Clip C-Clamp (x3)



Quilt Backing



(not included)

Quilt Top



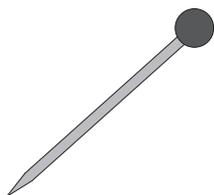
(not included)

Batting



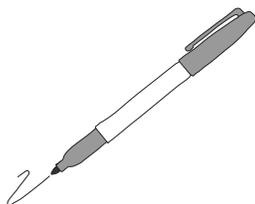
(not included)

Pins



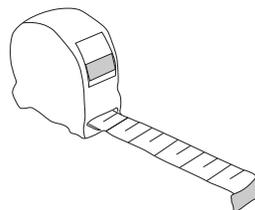
(not included)

Fabric Marker,  
Pen, or Chalk



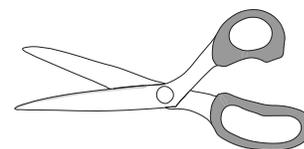
(not included)

Tape Measure



(not included)

Scissors or  
Rotary Cutter

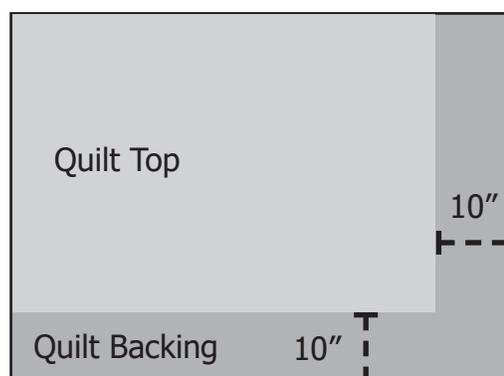
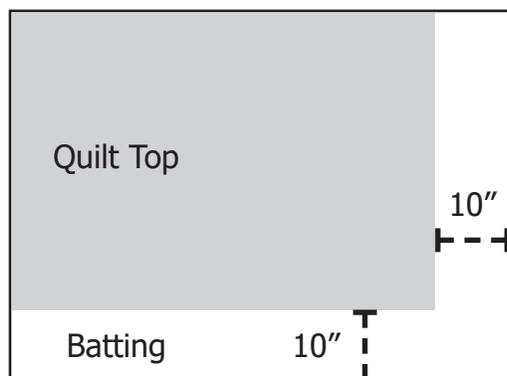


(not included)

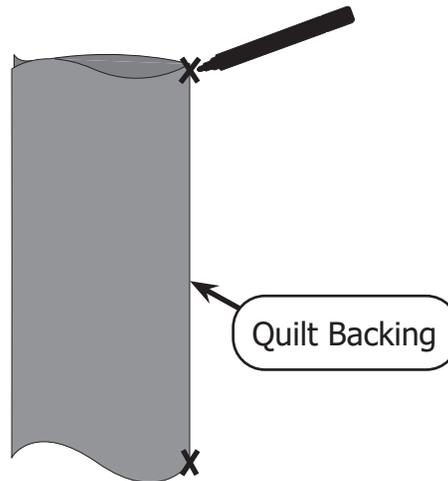
### Instructions

Take the following steps to prepare your fabric and load it onto your frame:

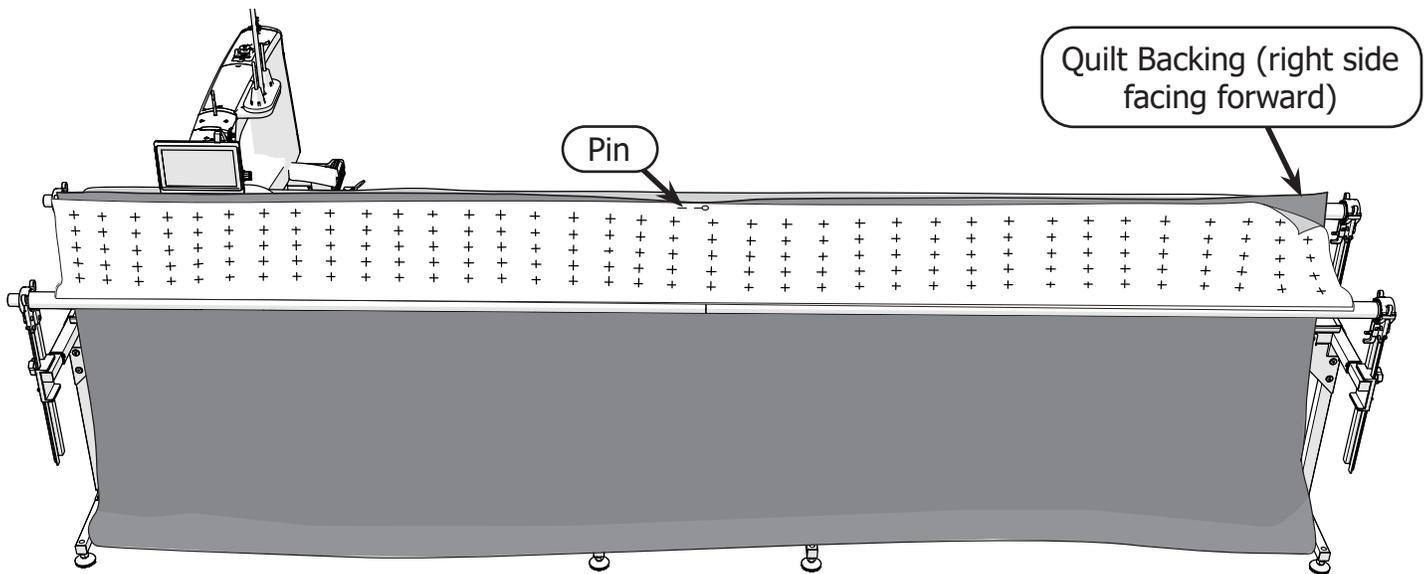
- 1 Measure and cut the pieces that you will use for your "quilt sandwich."  
Cut the backing and batting to be 10 inches longer and wider than your quilt top.



- 2 Fold your **quilt backing** in half to find the center. Mark the center on the top and bottom.



- 3 **Pin** the bottom center mark of your backing to the center mark of the quilt-backing cloth leader (on the front rail). Pin so the **right side of your backing** faces the wrong side of the cloth leader.



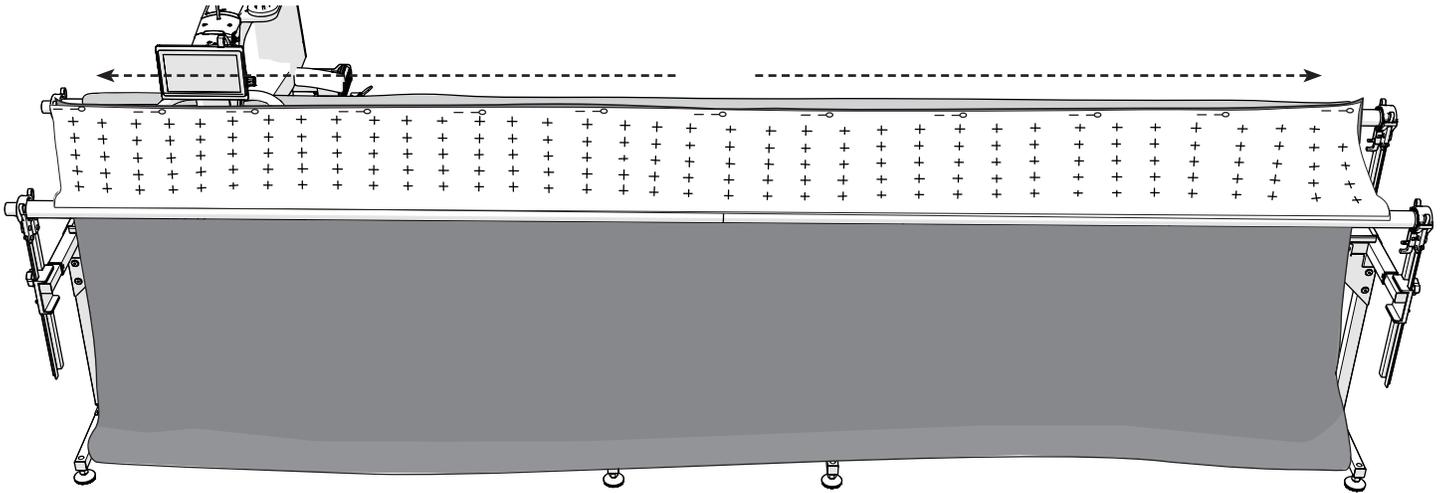
**Right Side/Wrong Side:** Some fabrics have a front side that has a print or other qualities that the back side does not have, or may look washed out on the back. The front of the fabric is called the "right side." The side that looks washed out or doesn't have the print/texture is called the "wrong side."

The "right side" of your quilt top will be the side you want to show on the outside of the quilt. This is usually the side without seams.

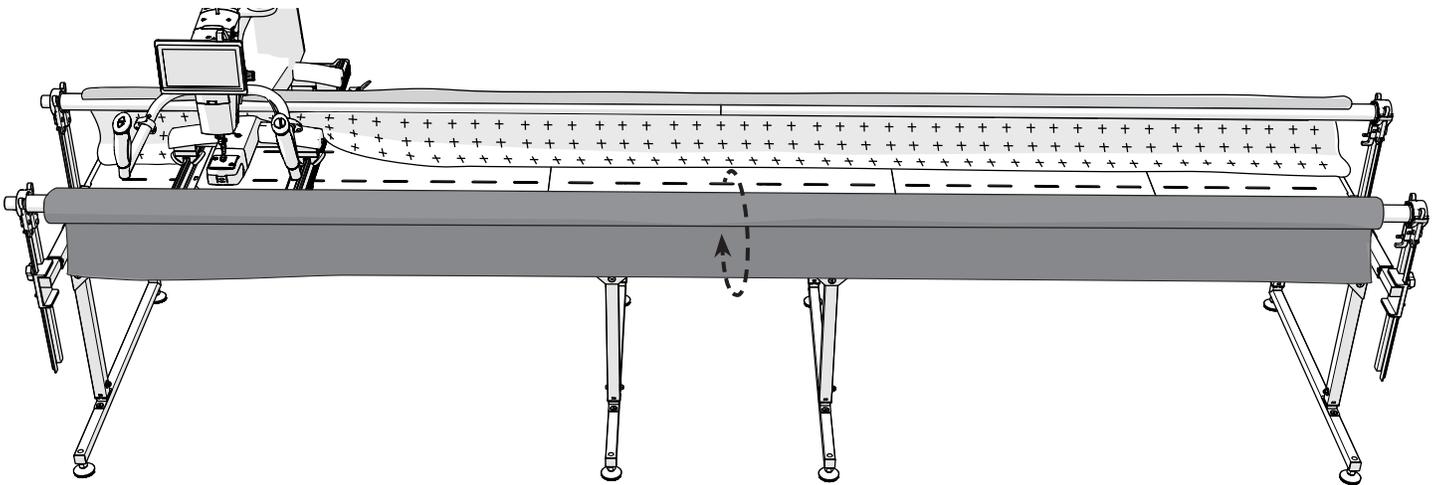
## Assemble a New Frame (Part Four)

### Task 15 - Load the Fabric (continued)

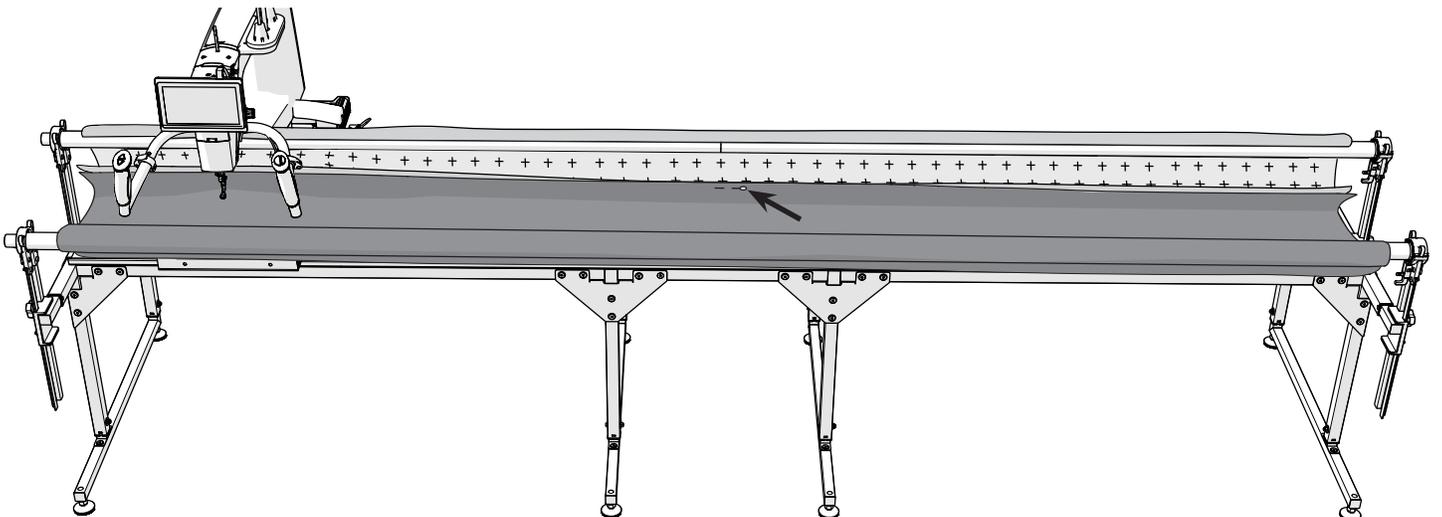
- 4 Pin the edges together from the center out.



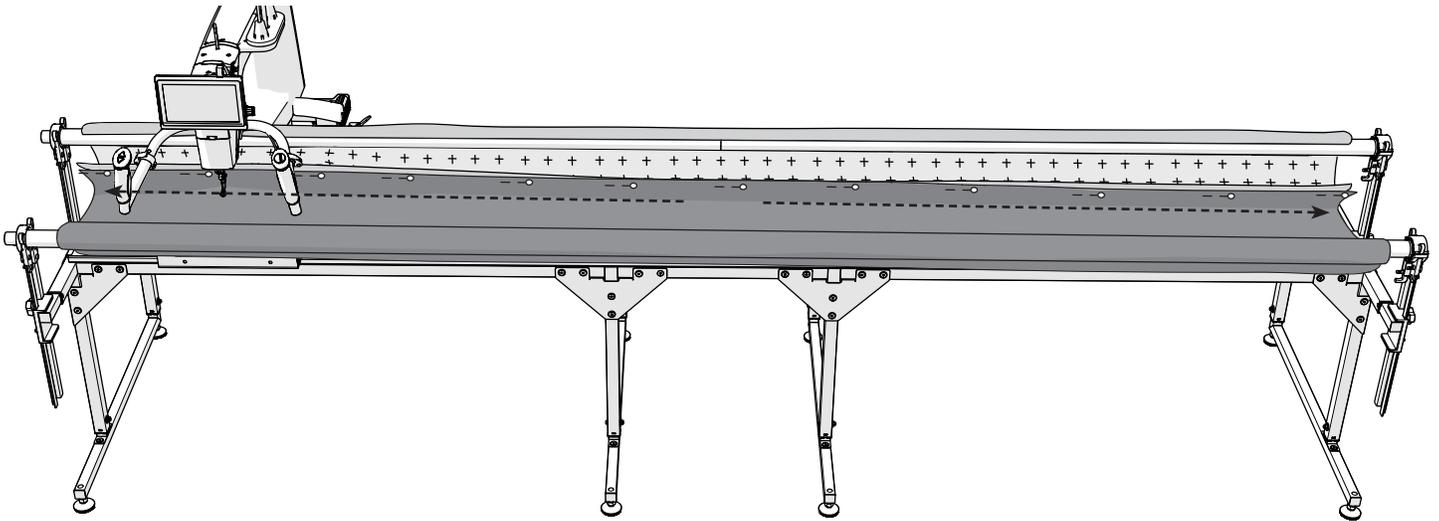
- 5 Roll the quilt-backing rail forward and down until there's only 1–2 feet of backing dangling under the rail.



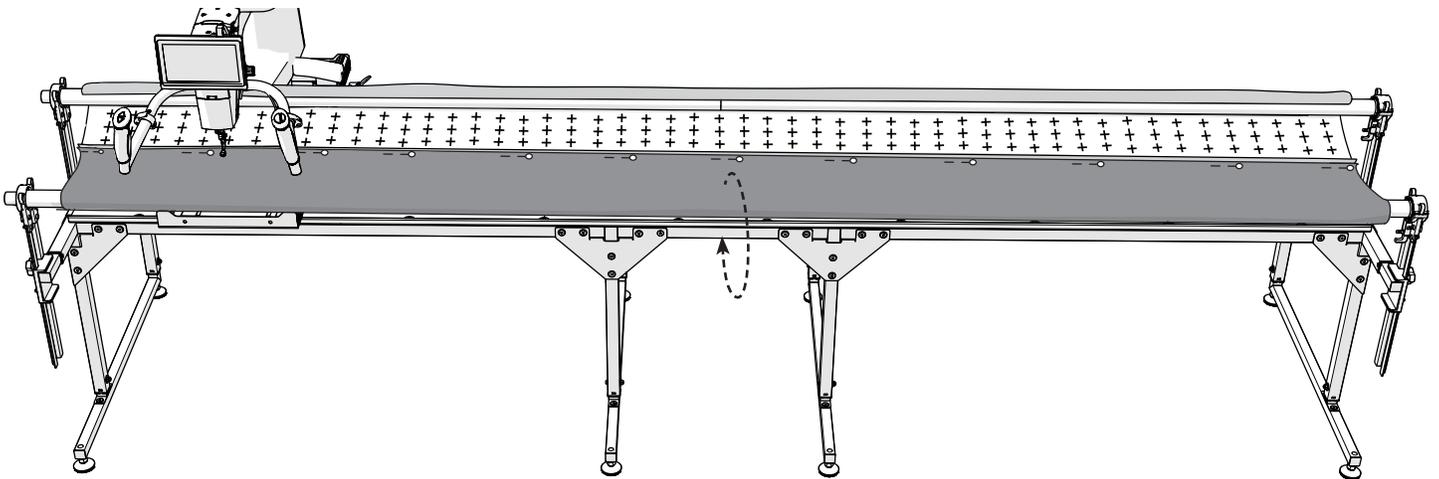
- 6 Pin the top center mark of your backing to the center mark on the take-up rail cloth leader.



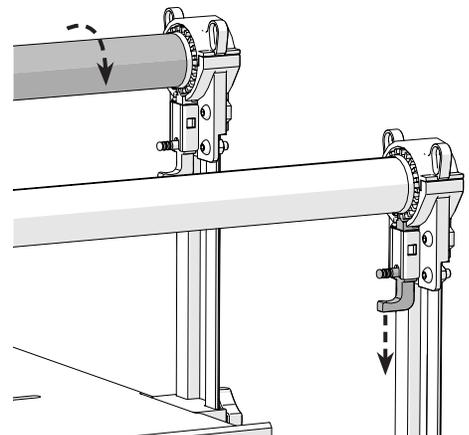
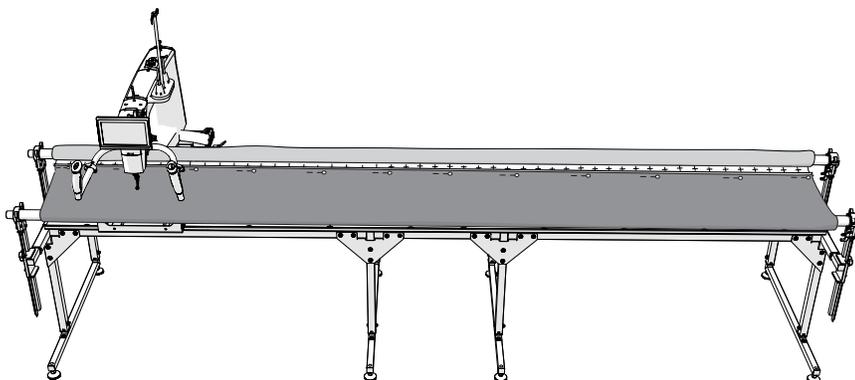
- 7 Pin the edges together from the center out.



- 8 Roll the quilt-backing rail forward and down until the quilt backing is smooth and free of creases.

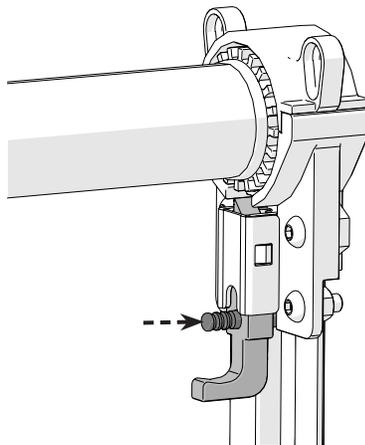


- 9 Pull the ratchet lever on the quilt-backing (front) rail down and hold it in place. Rotate the take-up rail forward and down to roll up all but a few inches of the cloth leader.

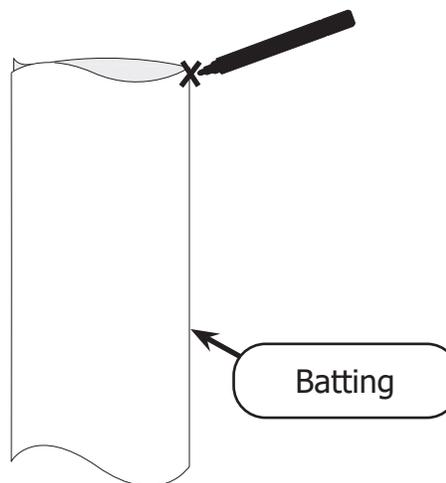


## Assemble a New Frame (Part Four)

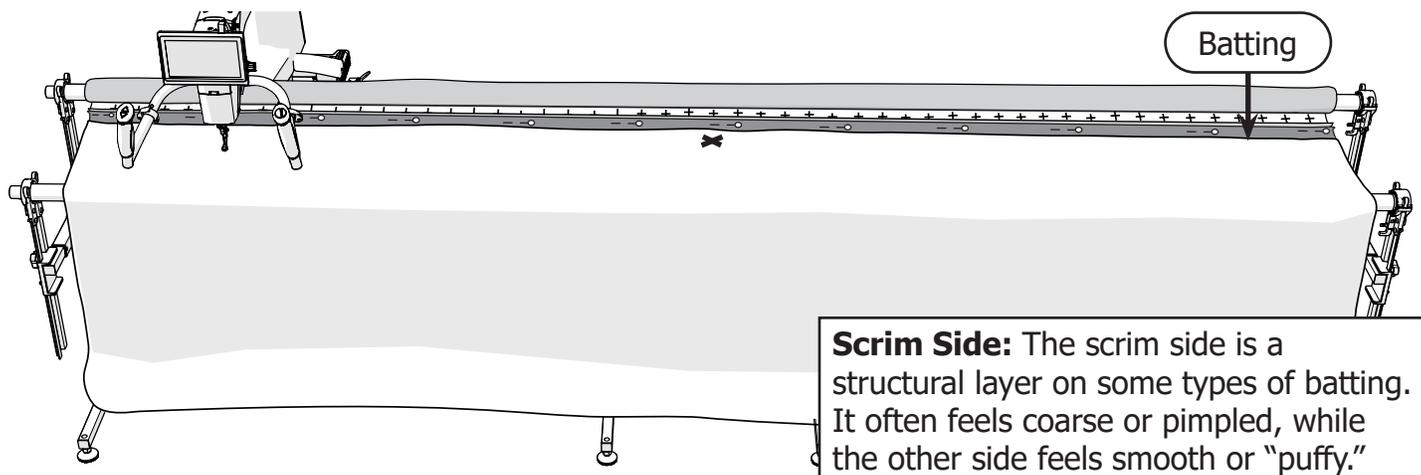
**Tip:** Press in on the pin to hold the lever down.



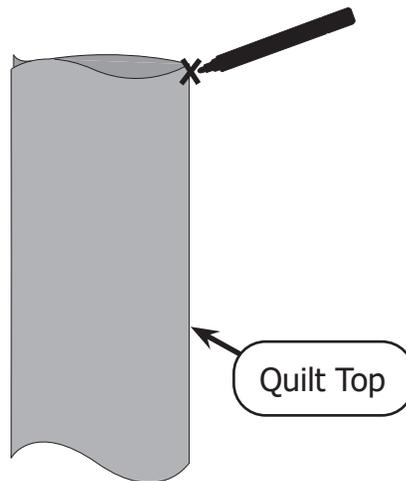
- 10 Fold your **batting** in half to find the center. Mark the center on the top.



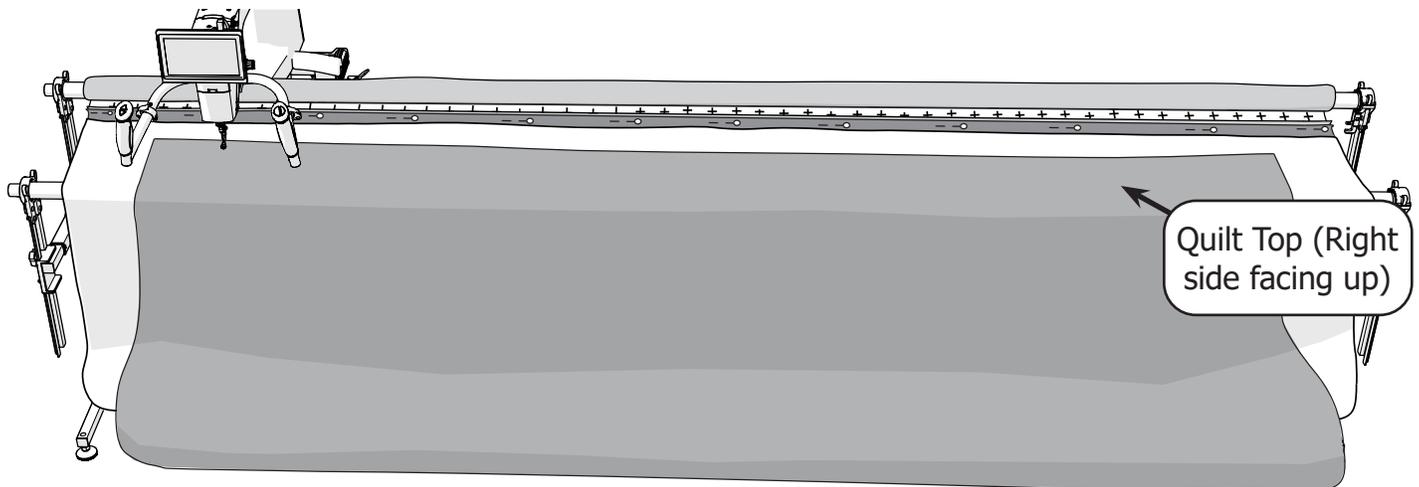
- 11 Match up the center mark on the batting with the center mark on the backing. Place your batting over the quilt backing, with the scrim side facing down. Smooth out any wrinkles.



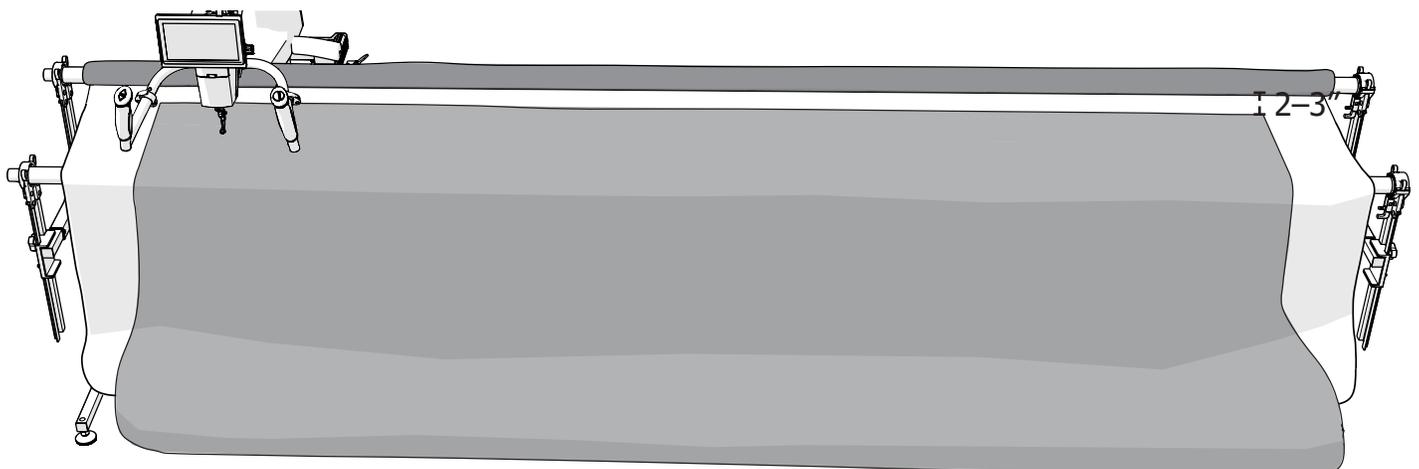
- 12 Fold your quilt top in half and mark the center on the top edge.



- 13 Place your quilt top over the batting, with the center mark 5 inches below the backing center mark. It is important the backing and batting extend out from the quilt top on all sides.



- 14 Repeat step 9 to move the fabric but this time position the quilt top so its top edge is 2–3 inches from the take-up rail (the back rail).

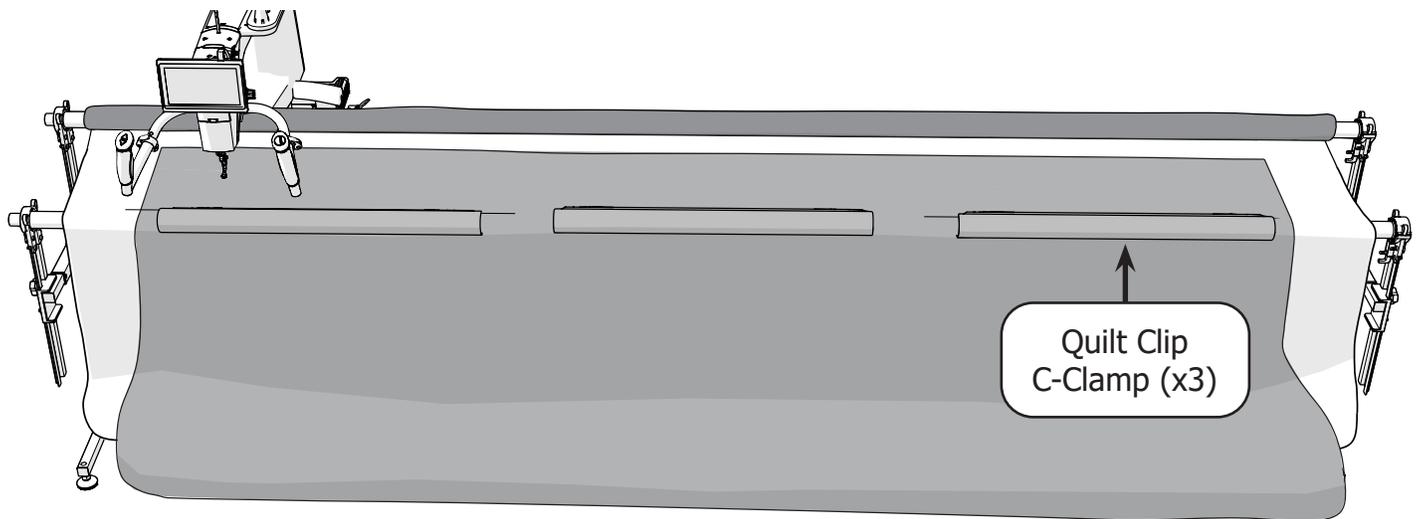


## Assemble a New Frame (Part Four)

### Task 15 - Load the Fabric (continued)

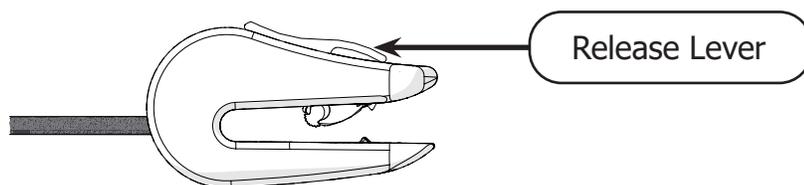
**Note:** Positioning the quilt top 2–3 inches from the take-up rail ensures the machine's needle can reach all the quilt top edges within the frame. If the quilt top edge is too close to the take-up rail, the needle can not reach it. Keep this in mind whenever you roll your quilt to a new section.

- 14 Press the **quilt clip C-clamps** over the fabric, onto the front rail to secure the fabric.

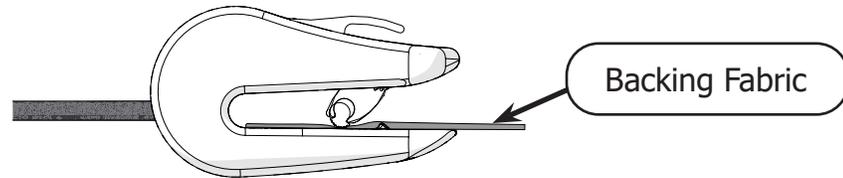


- 17 Use the bungee clamps you installed on the rail caps to stabilize the sides of the quilt.

- a Press the **release lever** on the bungee clamp to open it.

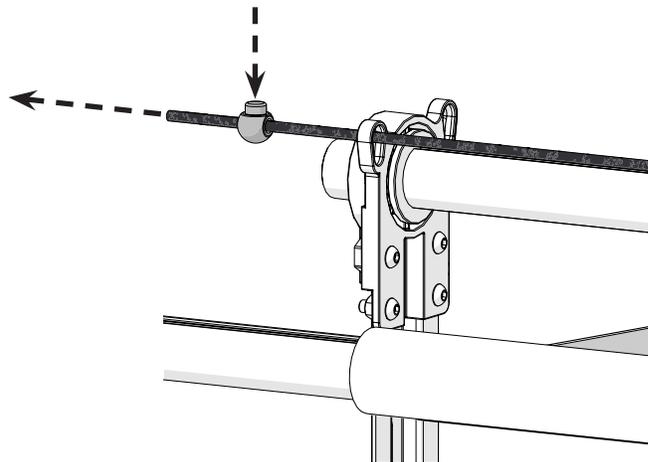


- b Slide the clamp over the **backing fabric** and batting and let go of the release lever to close the clamp.



**Tip:** If the batting starts to tear or pull apart, flip the bungee clamp upside down so the release lever is on the bottom. The bungee tooth will dig into the quilt backing instead of the batting.

- c Adjust how tightly the bungee holds the fabric by pressing down on the bungee stop and pulling the bungee cable tight. Then release the stop.



- d Repeat steps a – c with the three other bungee clamps.

*Grace*  
COMPANY

[www.graceframe.com](http://www.graceframe.com)

1-801-485-6688