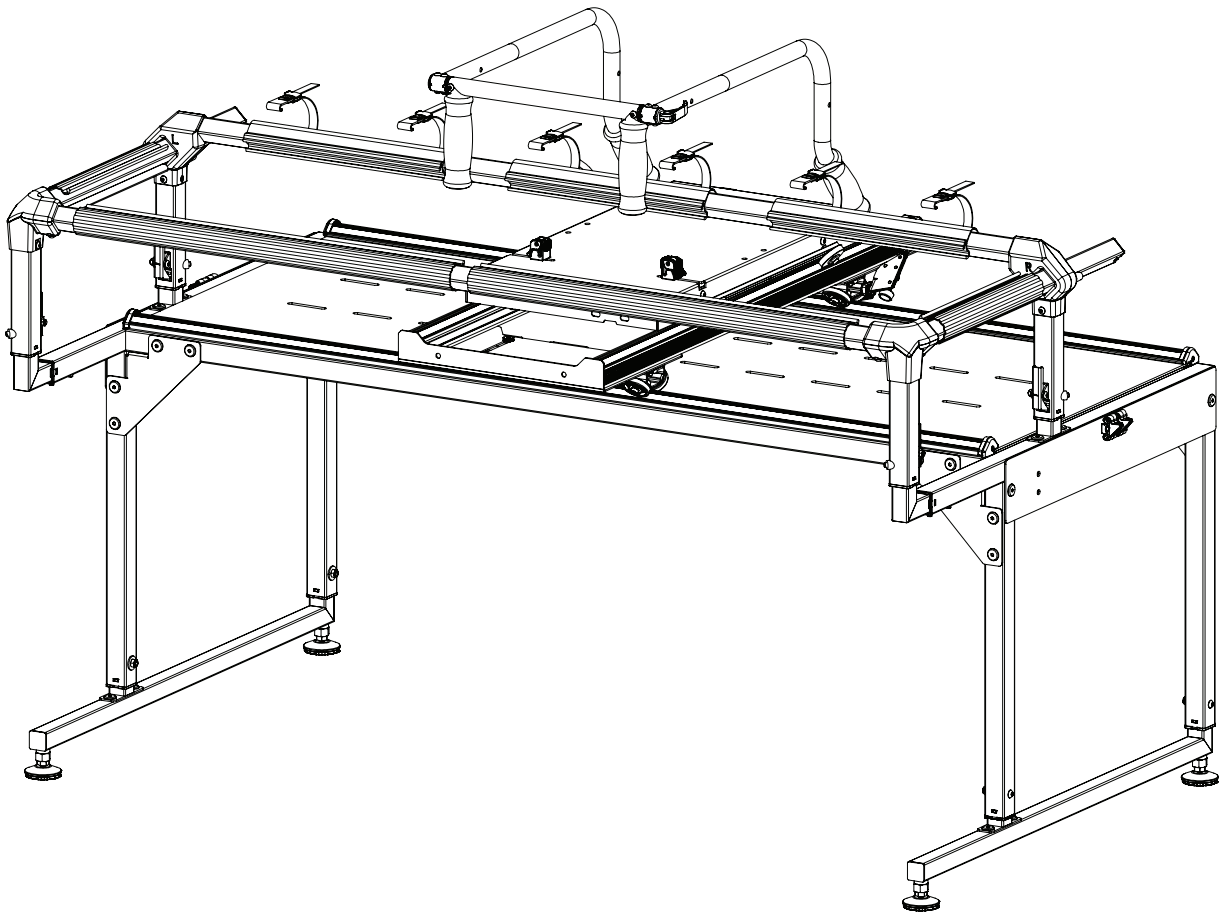


# Q-Zone

## Hoop-Frame **PRO**

### Assembly Instructions

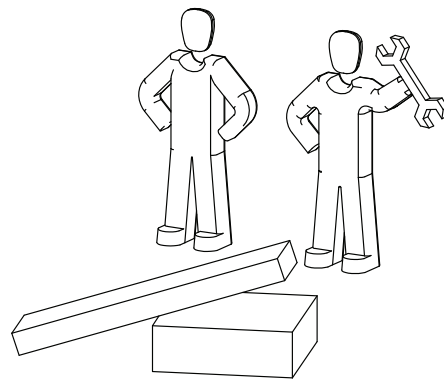
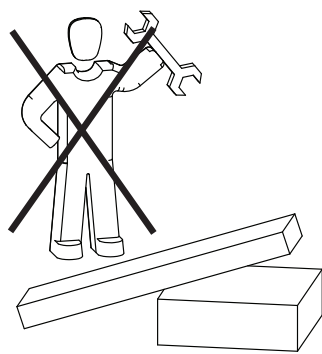


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Version 1.2  
US Patent 9476151

The *Grace*  
*Company*  
Fine Quilting Frames

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?



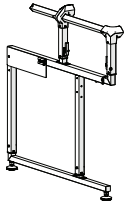
1-800-264-0644



# Part List

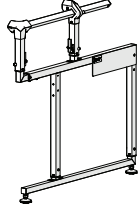
## Box 1

**Left Leg Assembly**



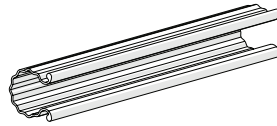
QZF-09-13037

**Right Leg Assembly**



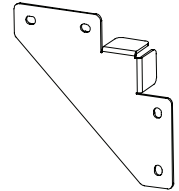
QZF-09-13038

**Side Fabric Clip (x2)**



QZH-05-12024

**Corner Brace (x4)**



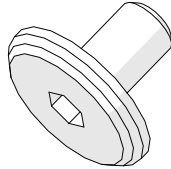
QZH-04-12031

**Bungee Mount (x4)**



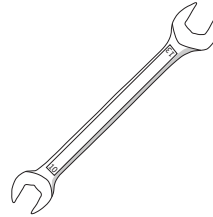
QZH-05-12054

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



HDW-03-10953

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



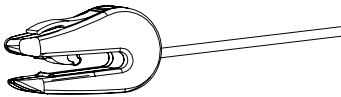
HDW-03-10743

**Open-End Wrench 14 mm & 17 mm**



HDW-03-12068

**Bungee Clamps (4 pack)**



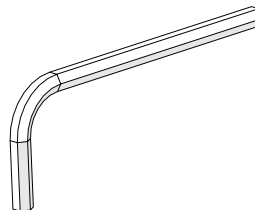
ACC-01-10261

**Allen Wrench 3 mm**



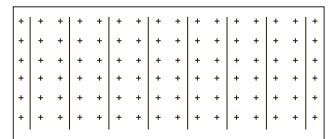
HDW-03-10166

**Allen Wrench 4 mm**



HDW-03-10167

**Hoop Frame Cloth Leader Set**



ACC-01-13370

# Parts List

## Box 2

**Back  
Long Rail**



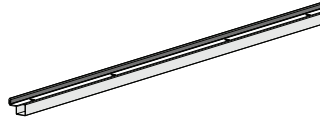
QZF-09-13040

**Front  
Long Rail**



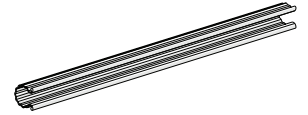
QZF-09-12030

**Table Support  
Assembly (x2)**



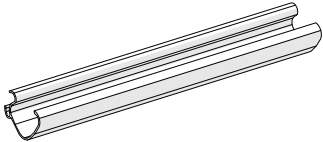
QXF-09-13055

**Front  
Fabric Clip (x2)**



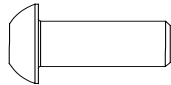
QZH-05-12025

**Back Rail Fabric  
Clip (x3)**



QZH-05-12023

**SBHCS  
M6 x 20 mm**

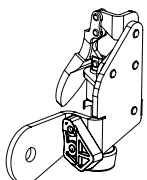


HDW-03-10088

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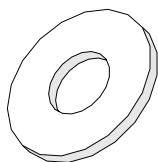
## Box 3

**Dual-Wheel  
Channel Lock**



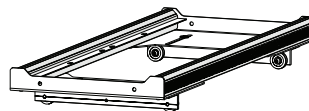
ACC-09-13057

**Channel Lock  
Washer**



CNT-04-11580

**G-Series 2 Bottom  
Carriage Assembly**



ACC-01-11950

**Single-Wheel  
Channel Lock**



QZH-09-14857

# Parts List

## Upgrade Box

**Table Support  
Assembly**



QZF-09-13609

**Dual Wheel  
Assembly**



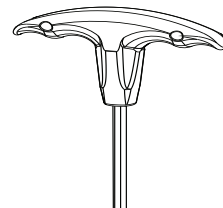
ACC-09-13477

**Dual Wheel  
Assembly with  
Rubber Spacer**



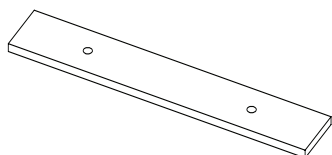
SMP-09-16367

**T-Handle Allen  
Wrench 4 mm**



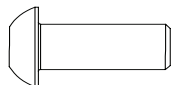
HDW-03-13114

**Dampening  
Aluminum Spacer**



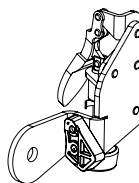
QZF-01-13612

**SBHCS  
M6 x 20 mm**



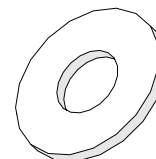
HDW-03-10088

**Dual-Wheel  
Channel Lock**



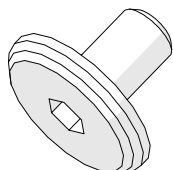
ACC-09-13057

**Channel Lock  
Washer**



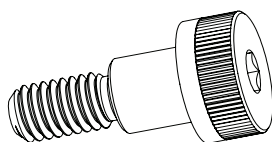
CNT-04-11580

**Connector Bolt  
M6 x 16 mm (x2)**



HDW-03-12351

**Shoulder  
Bolt**



HDW-03-12292

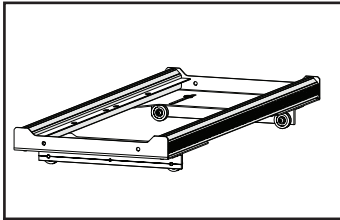
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**Note:** Not all included parts will be used in the final setup. Any parts remaining after assembly can be stored with the packaging for safe-keeping.

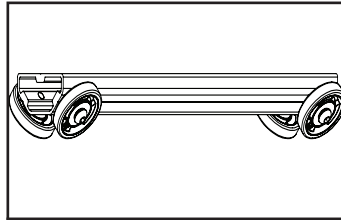
# Assembly

## Step 1 – Assemble the Bottom Carriage

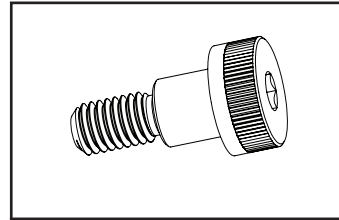
Parts Needed:



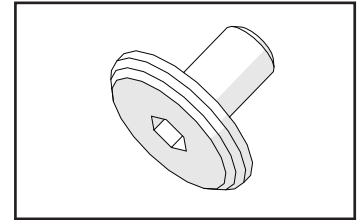
**G-Series 2 Bottom Carriage Assembly**



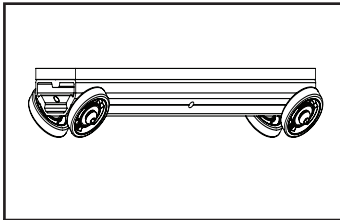
**Dual Wheel Assembly**



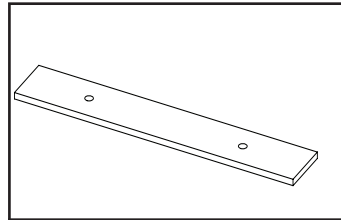
**Shoulder Bolt (x2)**



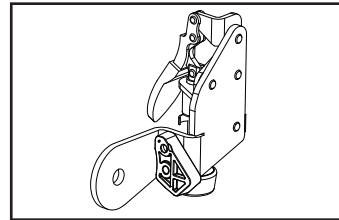
**M6 x 16mm Connector Bolt (x2)**



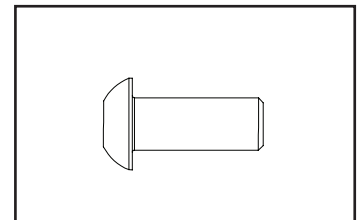
**Dual Wheel Assembly with Rubber Spacer**



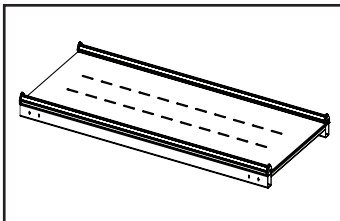
**Dampening Aluminum Spacer**



**Channel Lock**



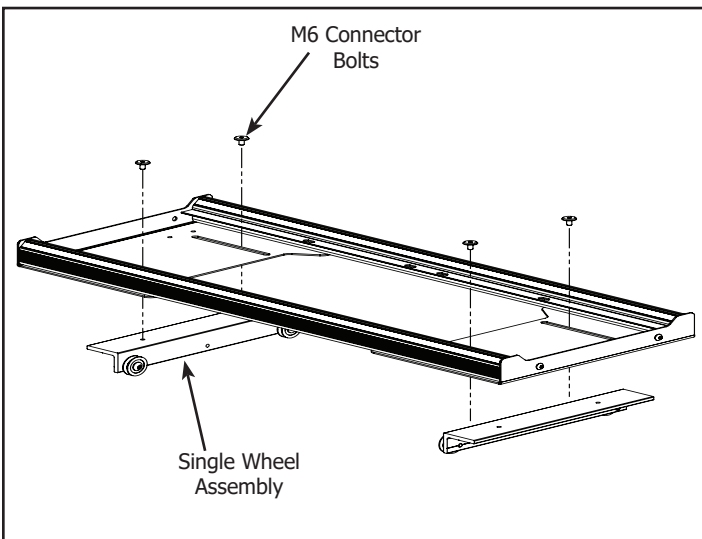
**M6 x 20mm SBHCS**



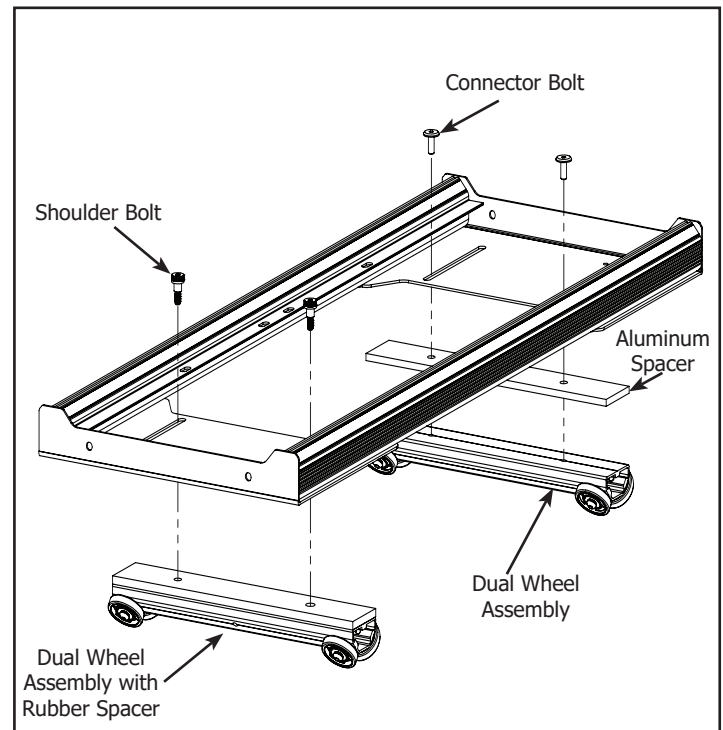
**Table Assembly**

### Tools Needed:

4mm T-Handle Allen wrench

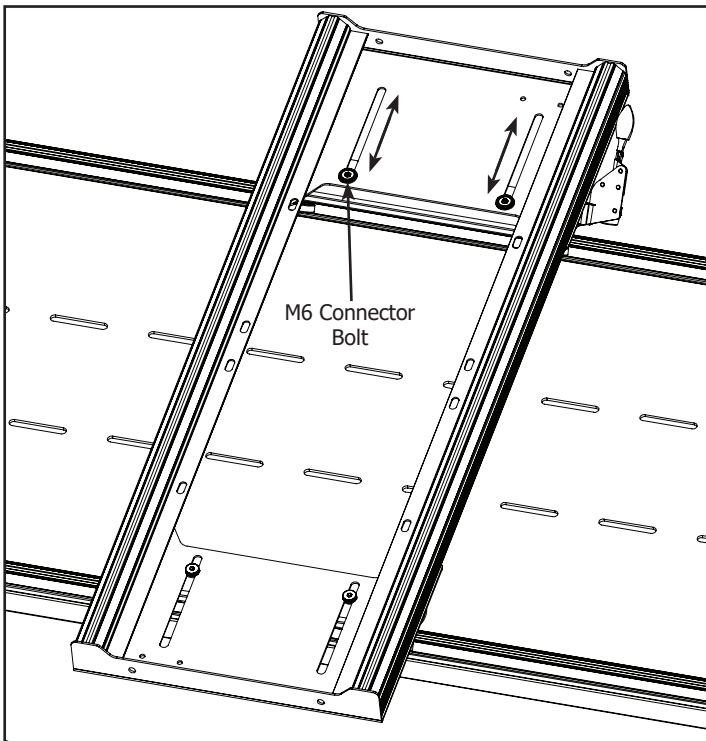


1-2 Remove the (4) M6 Connector Bolts to remove the Single Wheel Assemblies from the bottom of the Carriage.



7-1 Loosely install the Dual Wheel Assemblies as shown, leave the paper on the top of the Rubber Spacer.

**Note:** The Shoulder Bolts are used with the Rubber Spacer at the front of the Carriage.

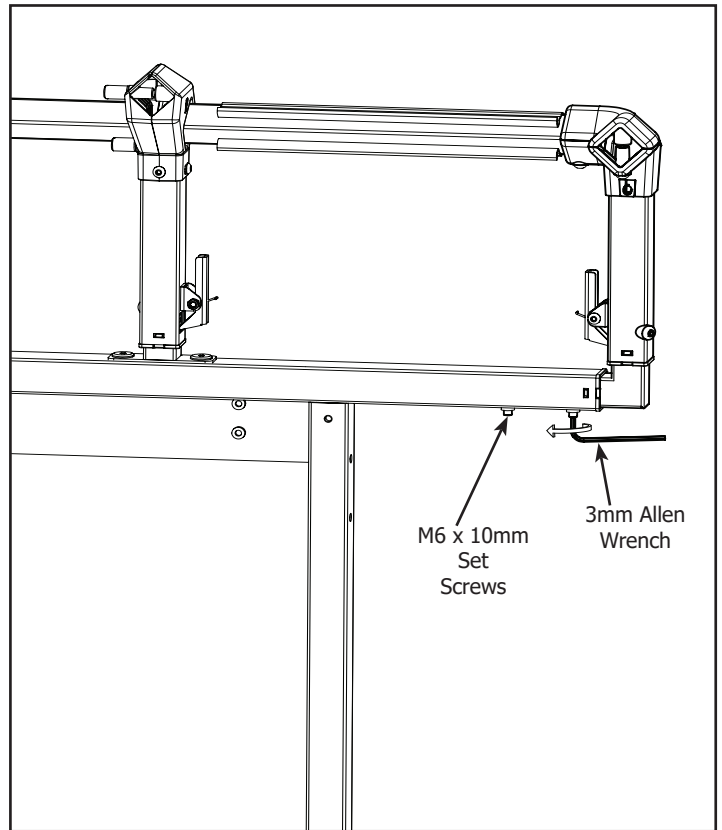
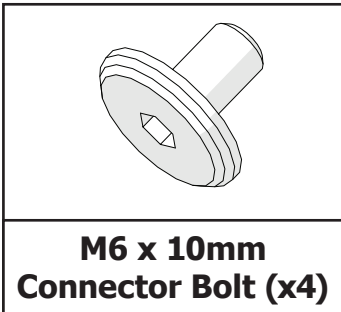
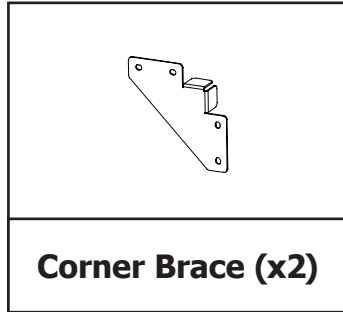
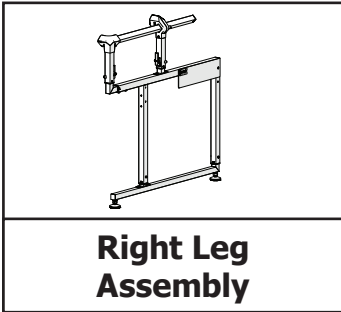


6-4 Adjust the position of the Wheel Assemblies to fit to the track. Roll the carriage from side to side as you tighten the (2) M6 Connector Bolts and two Shoulder Bolts.

# Assembly

## Step 2 – Right Leg Setup

Parts Needed:



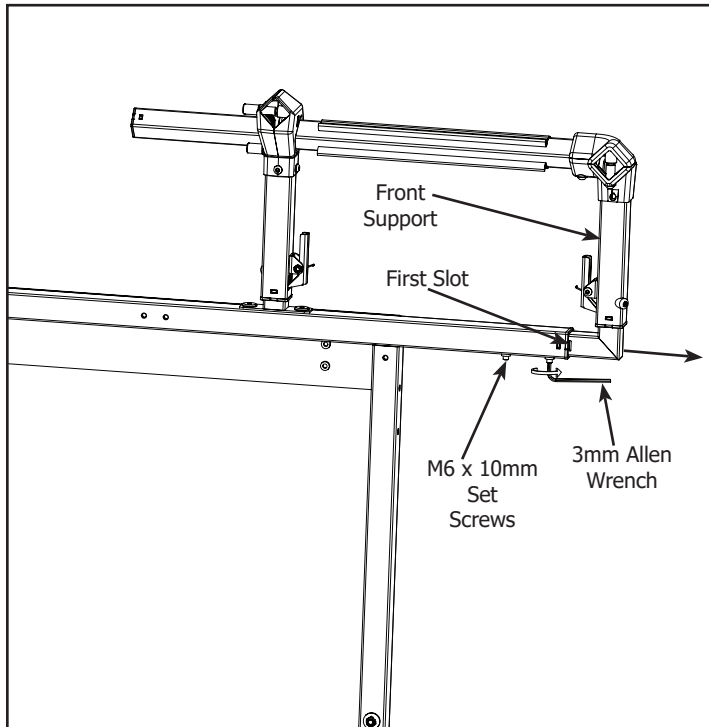
1-1 Loosen the (2) M6 x 10 Set Screws.

### Tools Needed:

3mm Allen Wrench

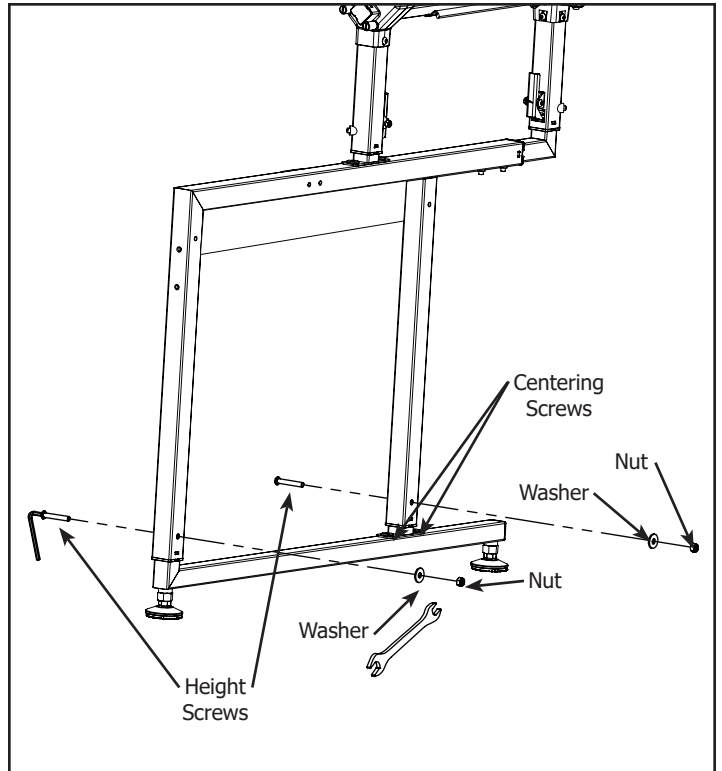
4mm Allen Wrench

10mm & 13mm Box End Wrench



1-2 Extend the Front Support forward until the first slot is visible for machines with a throat space under 16". Extend to second slot for machines 16" or over.

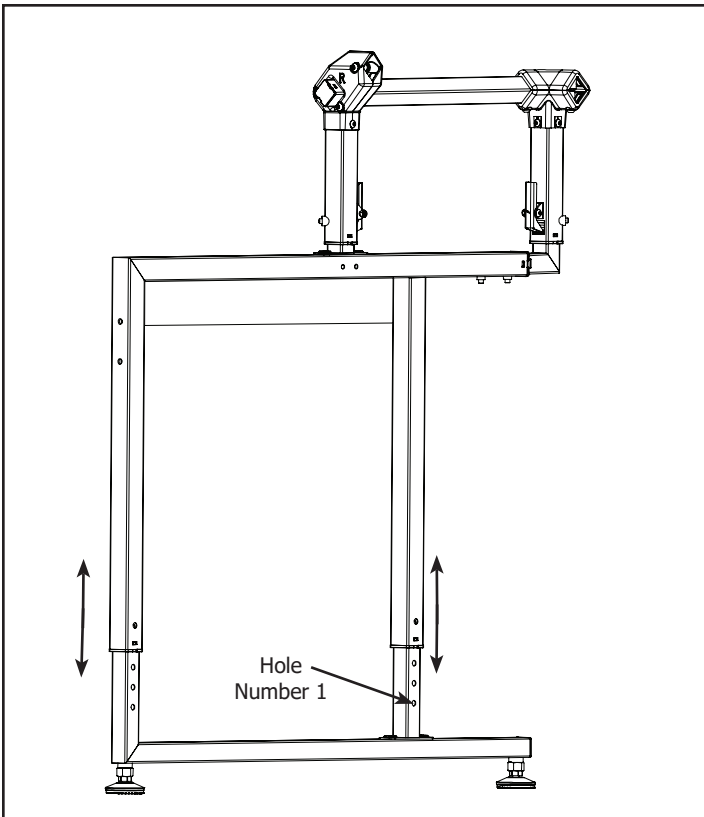
Re-tighten the (2) M6 x 10mm Set Screws.



1-3 Remove height screws and loosen centering screws.



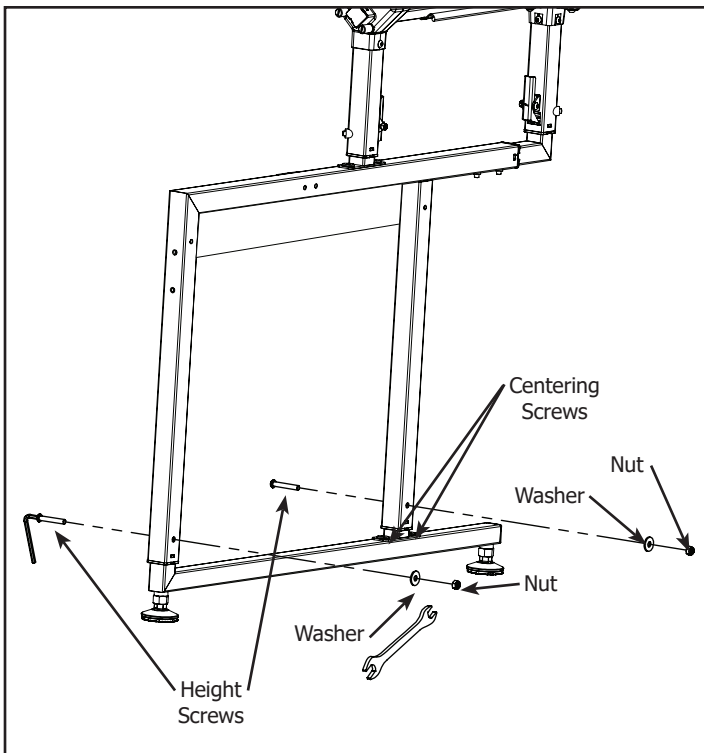
# Assembly



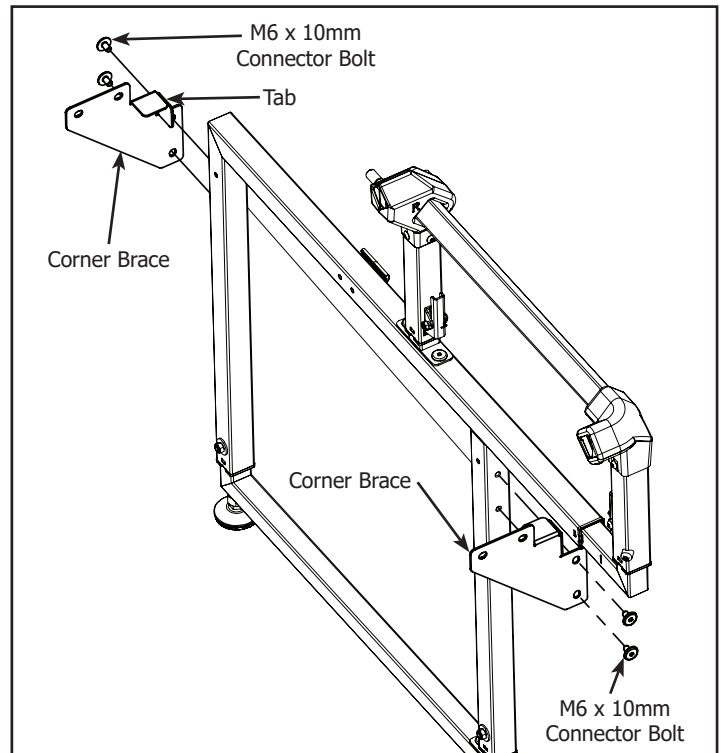
Hole Number	Floor to Top of Fabric
1	31 Inches
2	32 Inches
3	33 Inches
4	34 Inches
5	35 Inches
6	36 Inches
7	37 Inches
8	38 Inches
9	39 Inches
10	40 Inches

1-4 Adjust table height by sliding legs up or down using the chart to the right for your desired height.

**Note:** Height will vary slightly after adjusting Leveling Feet in Step 10-1.



1-5 Replace each height screw and tighten each centering screw.



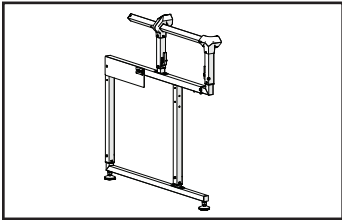
1-6 Install (2) Corner Braces with the tabs toward the inside of the leg using (4) M6 x 10mm Connector Bolts.

**Note:** Leave M6 x 10mm Connector Bolts loose so that you may align the adjoining parts.

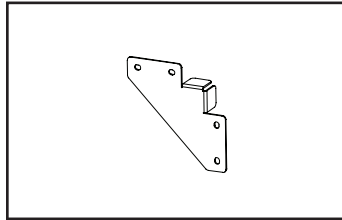
# Assembly

## Step 3 – Left Leg Setup

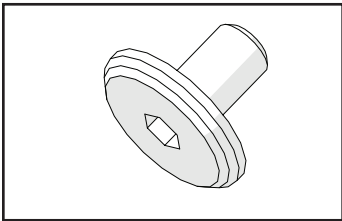
Parts Needed:



**Left Leg Assembly**



**Corner Brace (x2)**



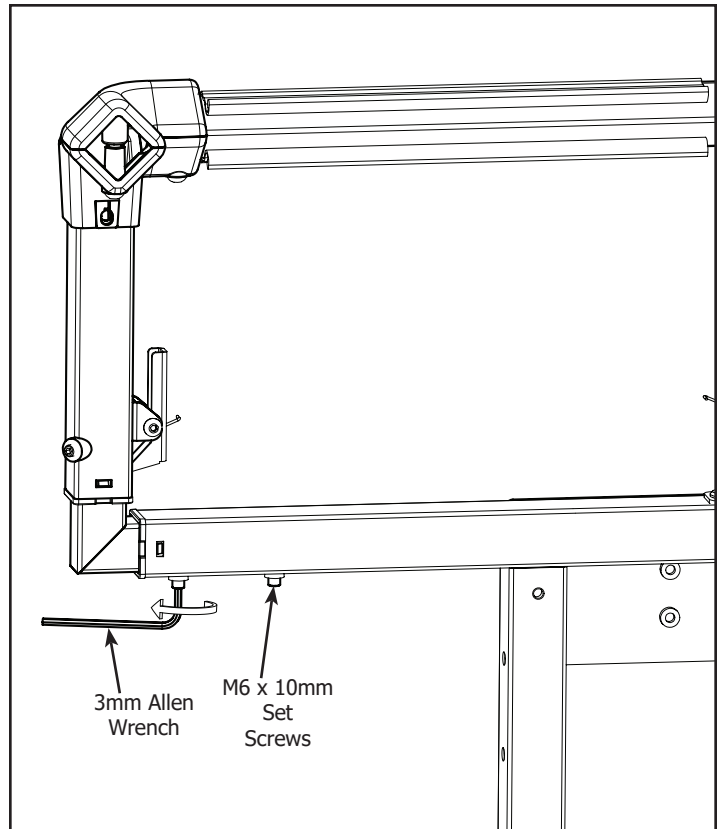
**M6 x 10mm  
Connector Bolt (x4)**

### Tools Needed:

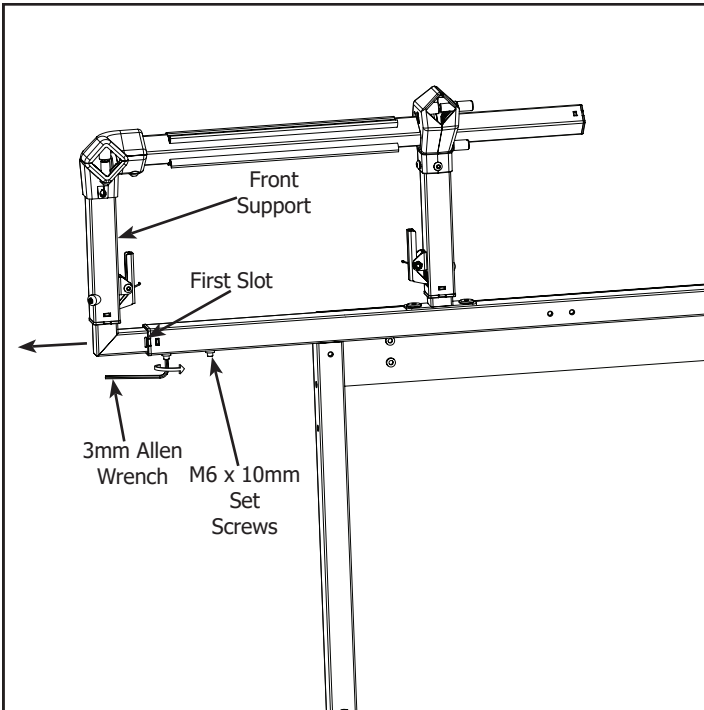
3mm Allen Wrench

4mm Allen Wrench

10mm & 13mm Box End Wrench

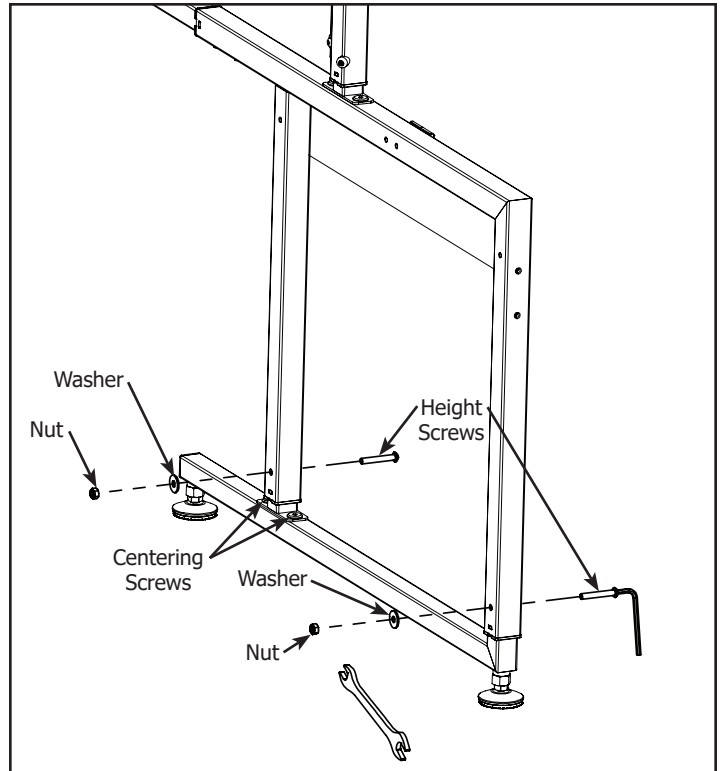


2-1 Loosen the (2) M6 x 10 Set Screws.



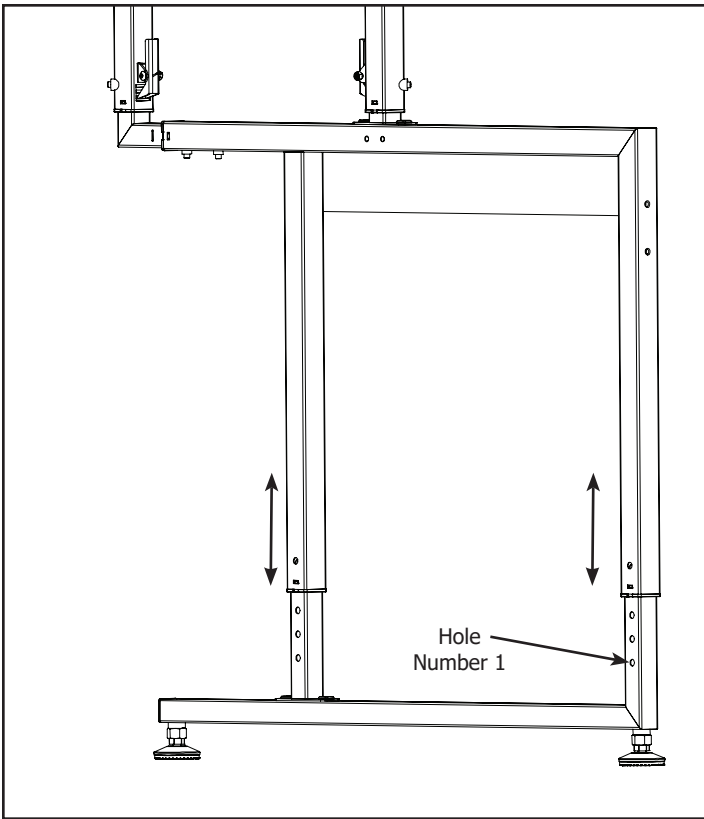
1-2 Extend the Front Support forward until the first slot is visible for machines with a throat space under 16". Extend to second slot for machines 16" or over.

Re-tighten the (2) M6 x 10mm Set Screws.



2-3 Remove height screws and loosen centering screws.

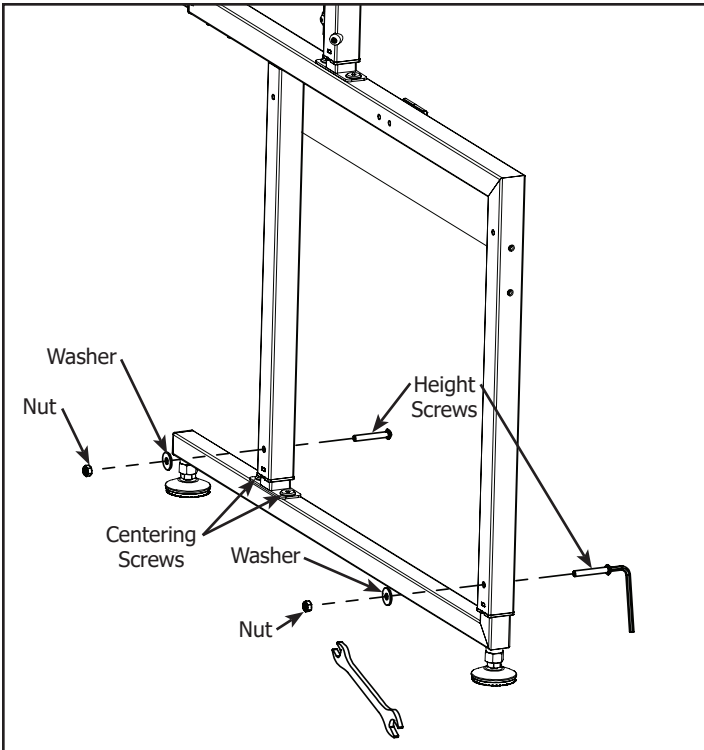
# Assembly



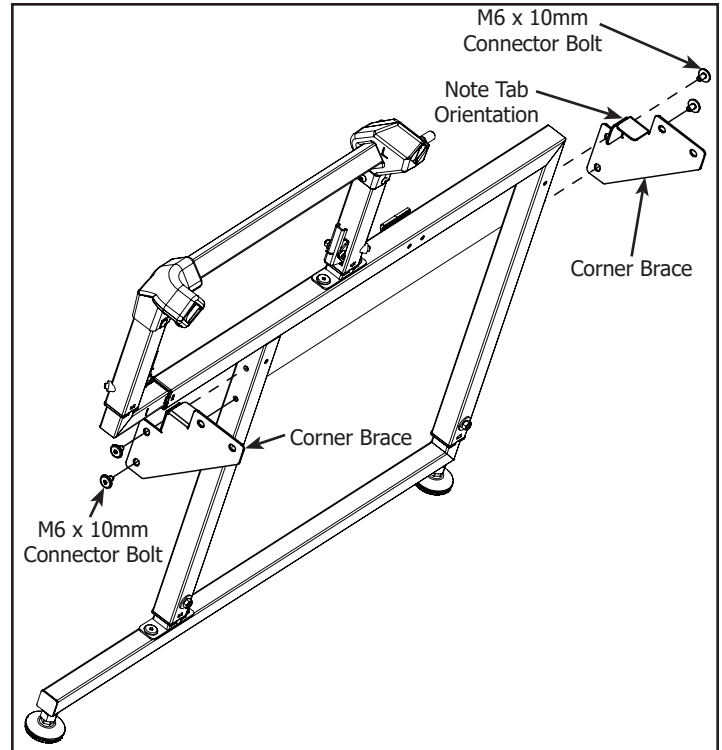
Hole Number	Floor to Top of Fabric
1	31 Inches
2	32 Inches
3	33 Inches
4	34 Inches
5	35 Inches
6	36 Inches
7	37 Inches
8	38 Inches
9	39 Inches
10	40 Inches

2-4 Adjust table height by sliding legs up or down using the chart to the right for your desired height. Set to same height as other leg.

**Note:** Height will vary slightly after adjusting Leveling Feet in Step 10-1.



2-5 Replace each height screw and tighten each centering screw.



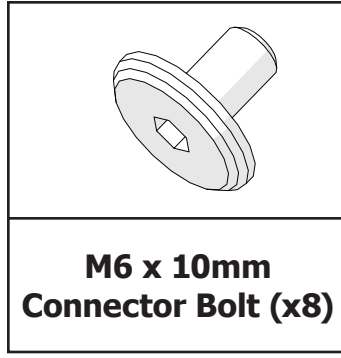
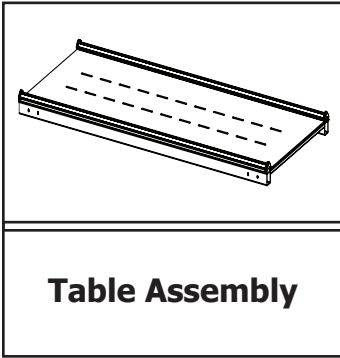
2-6 Install (2) Corner Braces with the tabs toward the inside of the leg using (4) M6 x 10mm Connector Bolts.

**Note:** Leave M6 x 10mm Connector Bolts loose so that you may align the adjoining parts.

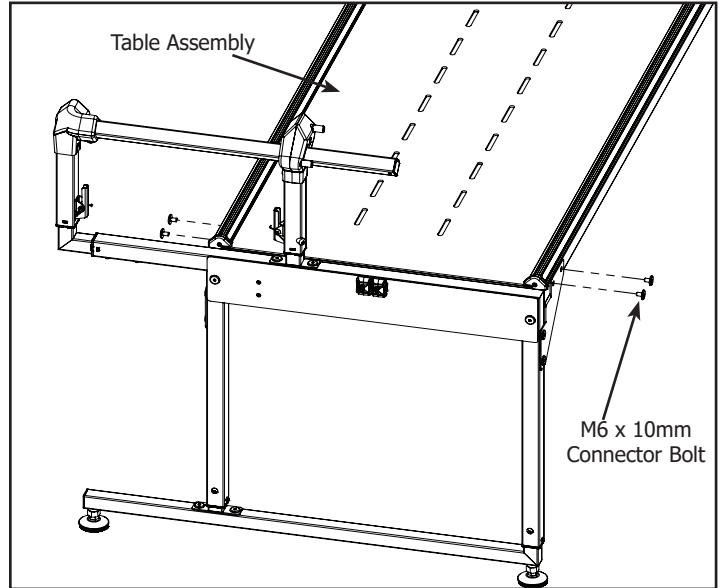
# Assembly

## Step 4 – Frame Cross Support Installation

Parts Needed:

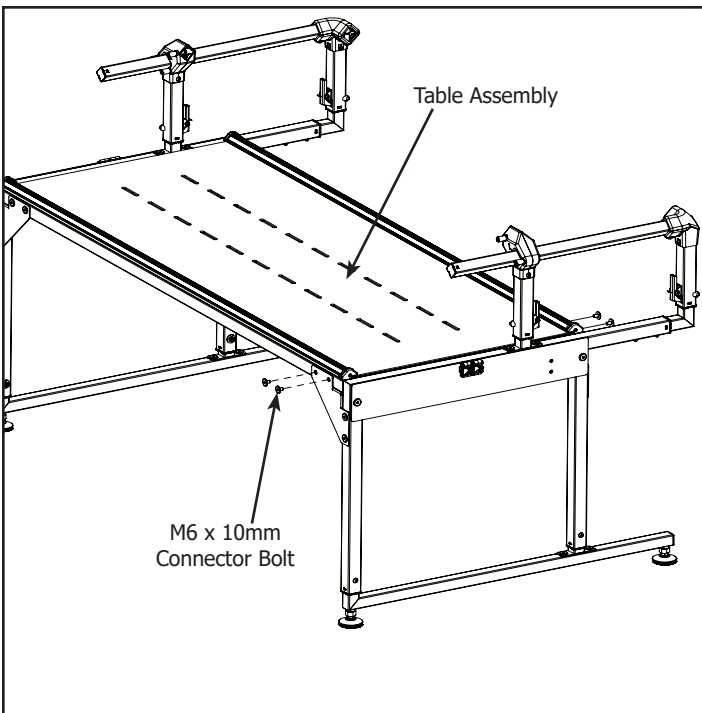


**Tools Needed:**  
4mm Allen Wrench



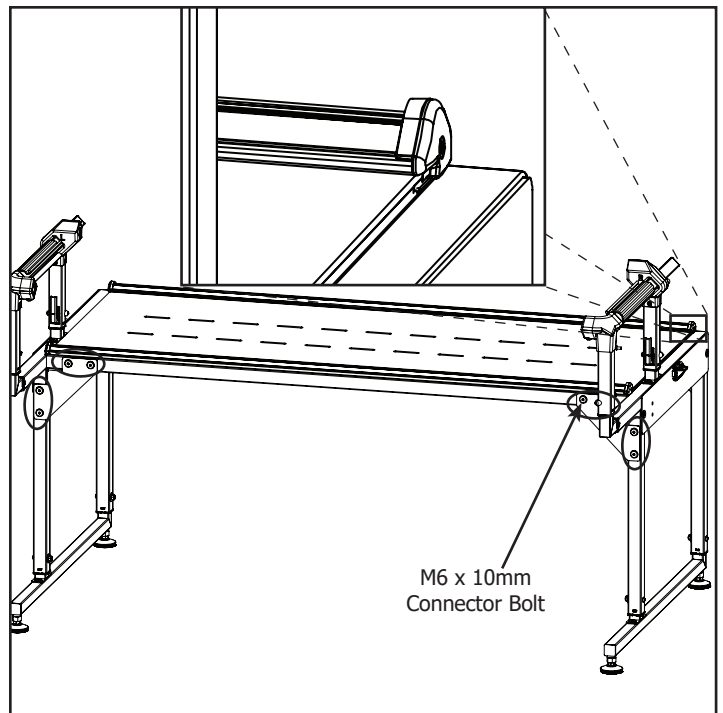
3-1 Install the Table Assembly to the Right Leg using (4) M6 x 10mm Connector Bolts by angling the Table Assembly toward the ground.

**Note:** Leave bolts loose so that you may align the adjoining parts.



3-2 Install the Table Assembly to the Left Leg using (4) M6 x 10mm Connector Bolts by resting the Table Assembly on the Brace Tabs.

**Note:** Leave bolts loose so that you may align the adjoining parts.



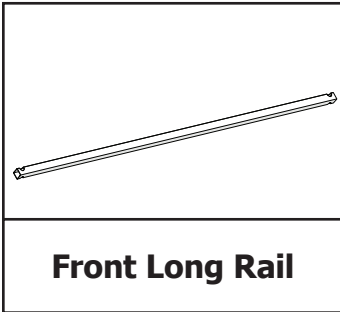
3-3 Press the Right and Left Legs tight against the Table Assembly and tighten the (16) M6 x 10mm Connector Bolts.

**Note:** Make sure that the Table Assembly is flush with the top of both Right and Left Legs.

# Assembly

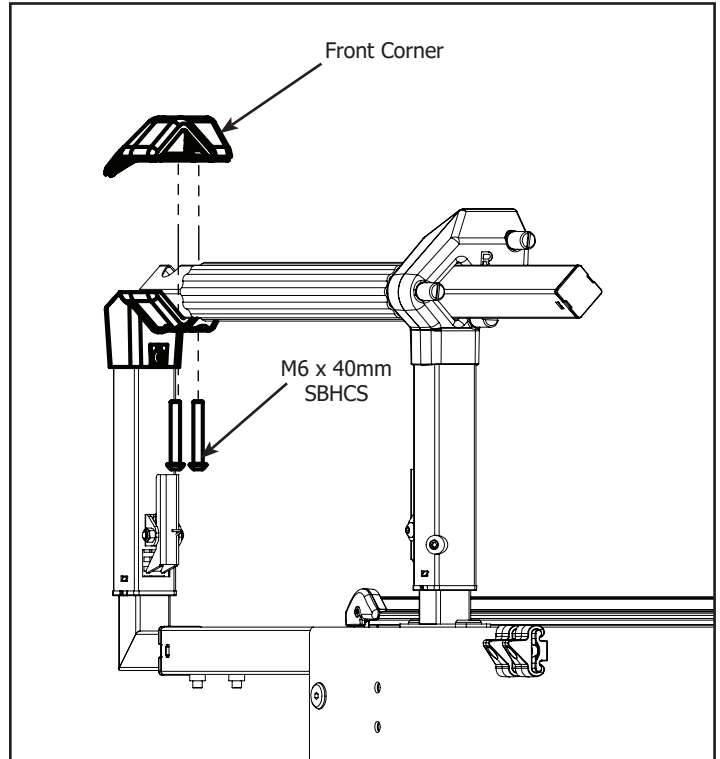
## Step 5 - Front Long Rail Installation

Parts Needed:

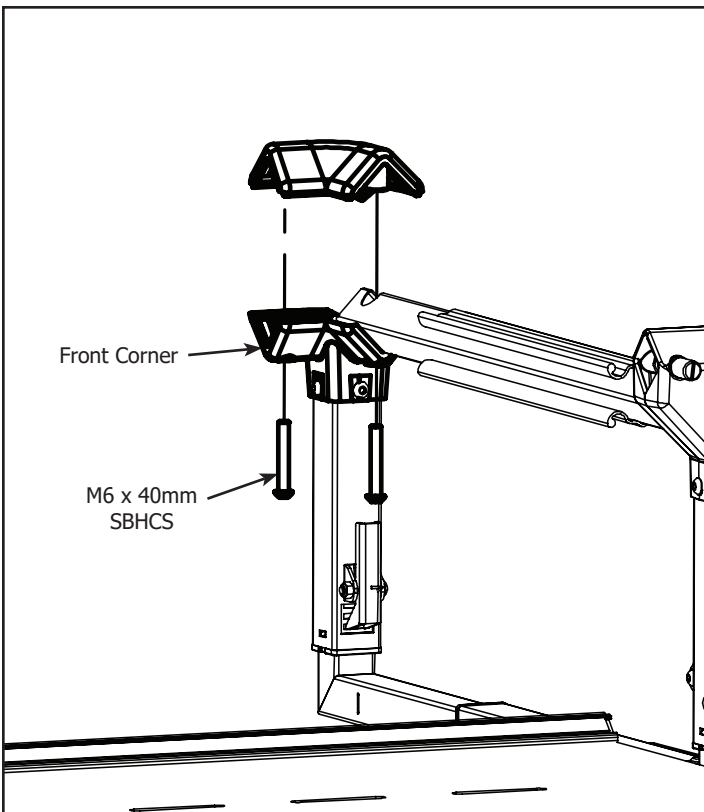


Tools Needed:

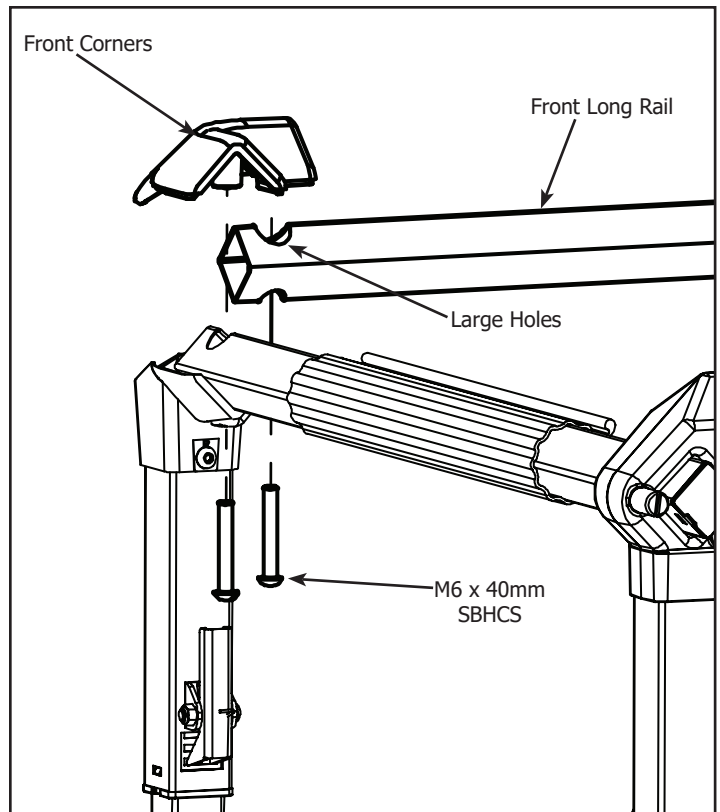
4mm Allen Wrench



4-1 Remove the (2) M6 x 40mm SBHCS from the Right Front Corner.



4-2 Remove the (2) M6 x 40mm SBHCS from the Left Front Corner.

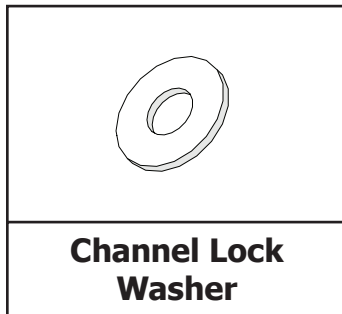
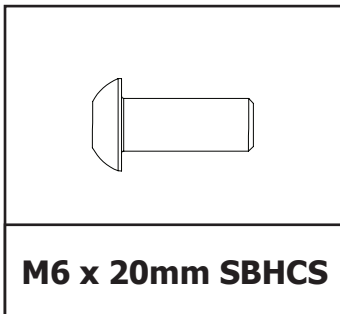
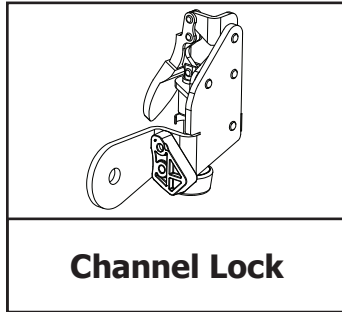
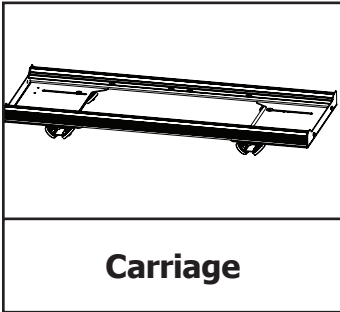


4-3 Install the Front Long Rail with the larger holes up. Reinstall the Front Corners using the (4) M6 x 40mm SBHCS removed in previous steps.

# Assembly

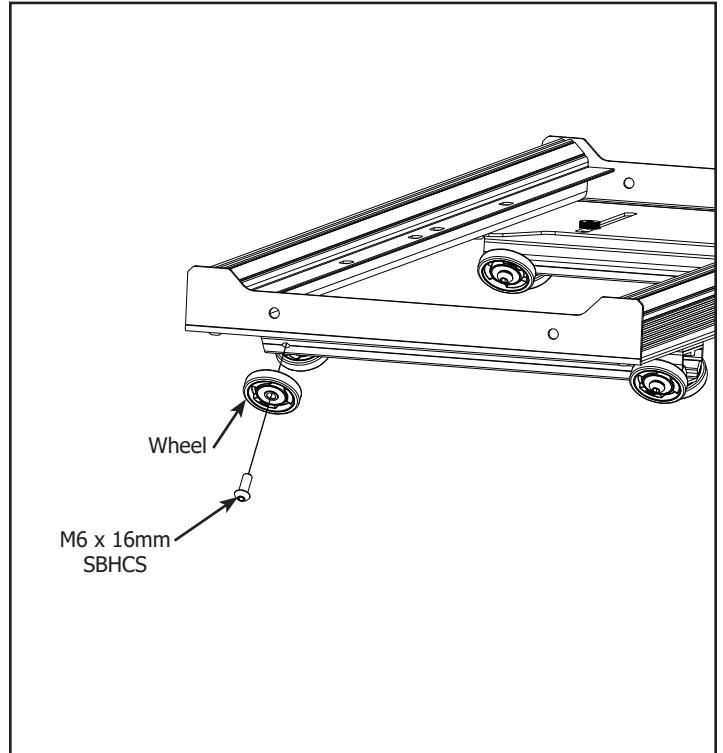
## Step 6 - Carriage Assembly

Parts Needed:

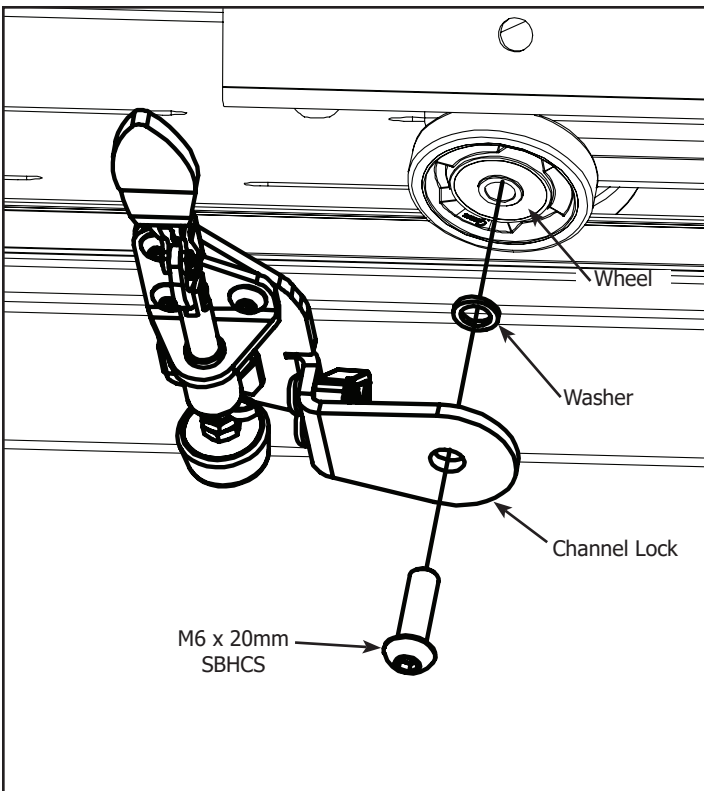


### Tools Needed:

4mm Allen Wrench



5-1 Remove the right rear M6 x 16mm SBHCS and Wheel from the Carriage.



5-2 Install the Channel Lock with (1) M6 x 20mm SBHCS making sure the washer is between the Wheel and the Channel Lock.

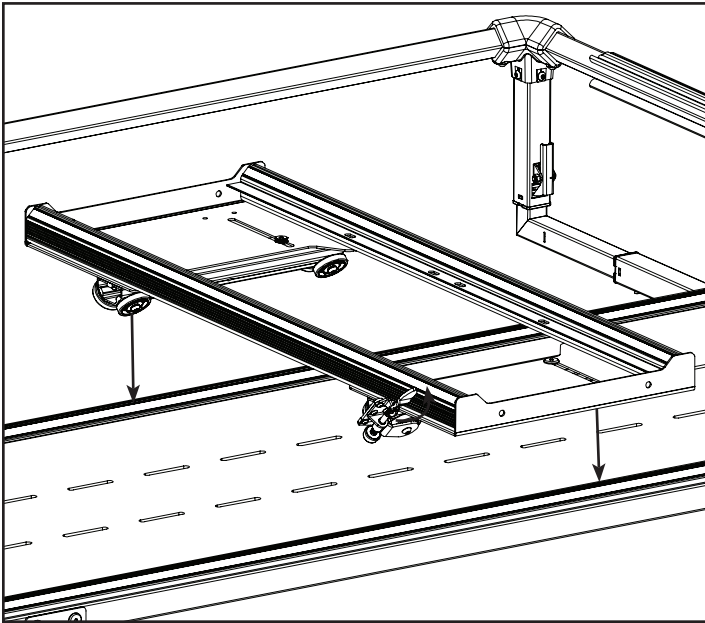
**Note:** See step 10 for Channel Lock adjustments.

# Assembly

## Step 7 - Carriage Installation

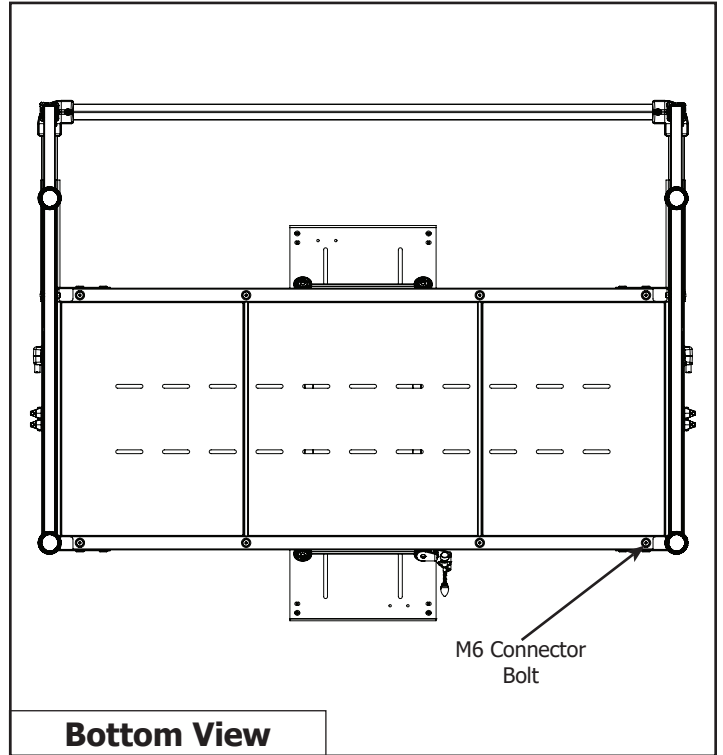
### Tools Needed:

4mm Allen Wrench

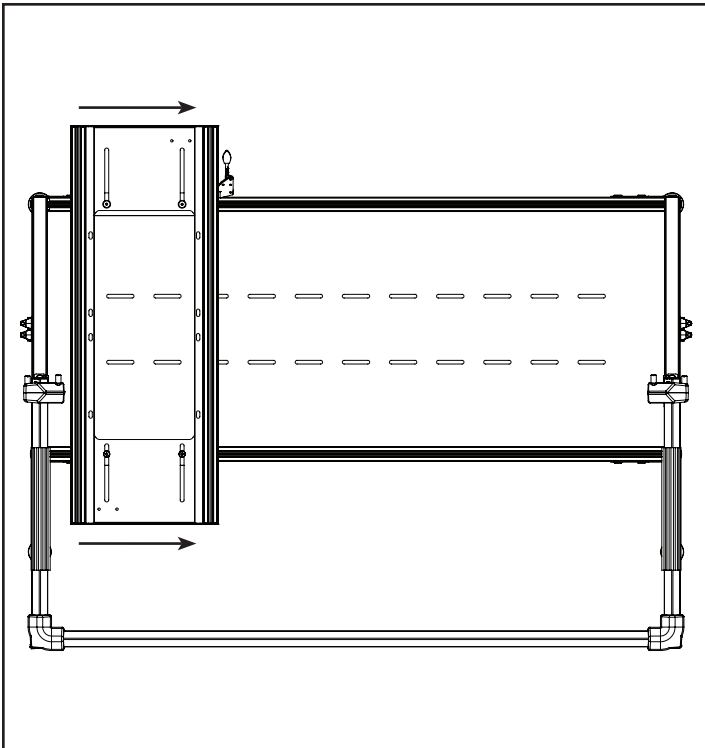


6-1 Place the Carriage onto the Track.

**Note:** Make sure the Channel Lock is in the open position.



6-2 Loosen the (4) M6 Connector Bolts on the underside of the table to loosen the back Track Assembly.

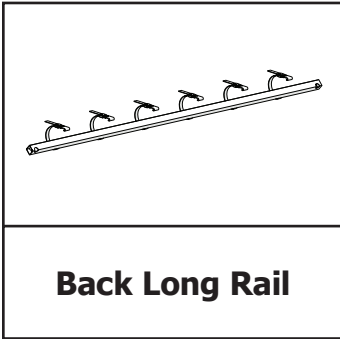


6-3 Slowly move the Carriage from one end of the Track to the other, tightening each of the (4) M6 Connector Bolts as you go.

# Assembly

## Step 8 - Back Long Rail Installation

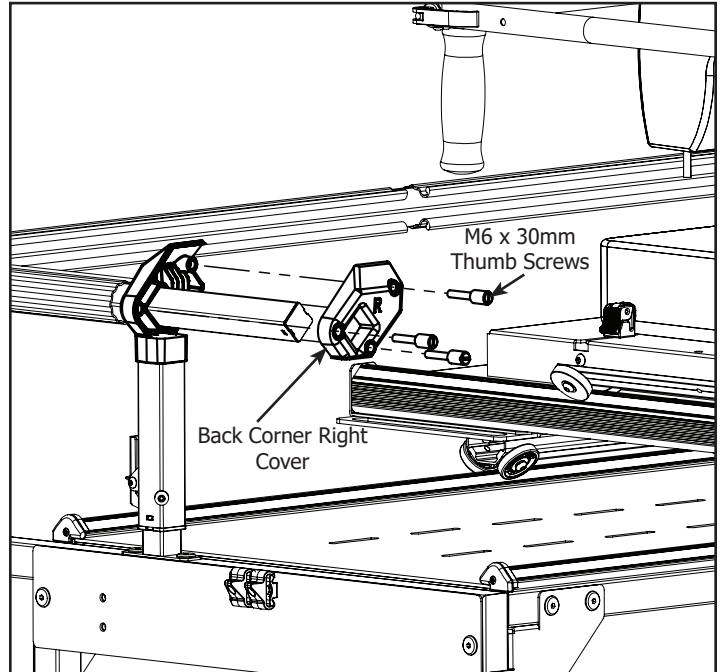
Parts Needed:



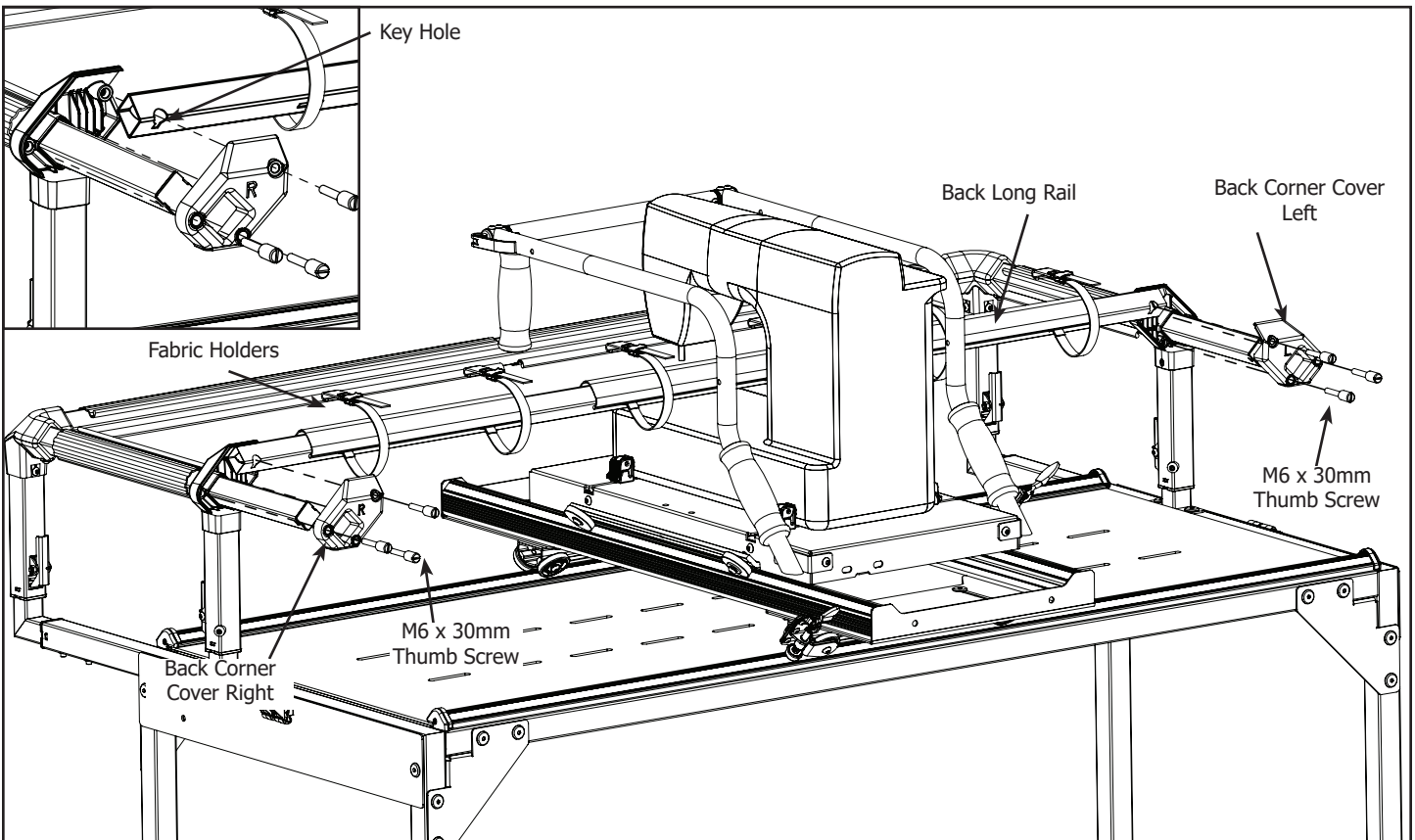
Tools Needed:

4mm Allen Wrench

**STOP:** Follow quilting machine manual for instructions on preparing and installing the machine before continuing. If using a top plate and home sewing machine, see page 17.



7-1 Remove the (6) M6 x 30mm Thumb Screws from the right and left Back Corner Covers and remove the Back Corner Covers.



7-2 Install the Back Long Rail through the throat of your machine and reinstall the Back Corner Right and Left Covers using (6) M6 x 30mm Thumb Screws removed in the previous step.

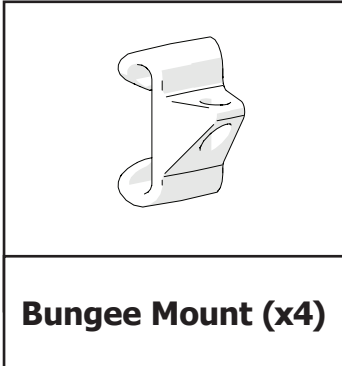
**Note:** The Key Hole and Fabric Holder on Back Long Rail needs to be oriented as shown above.



# Setup

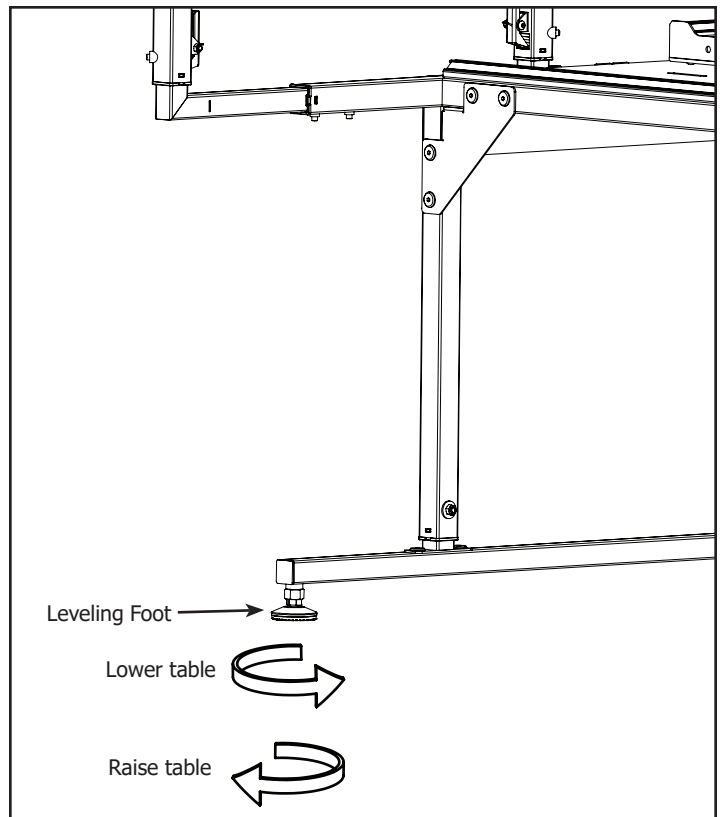
## Step 9 - Basic Setup

### Parts Needed:

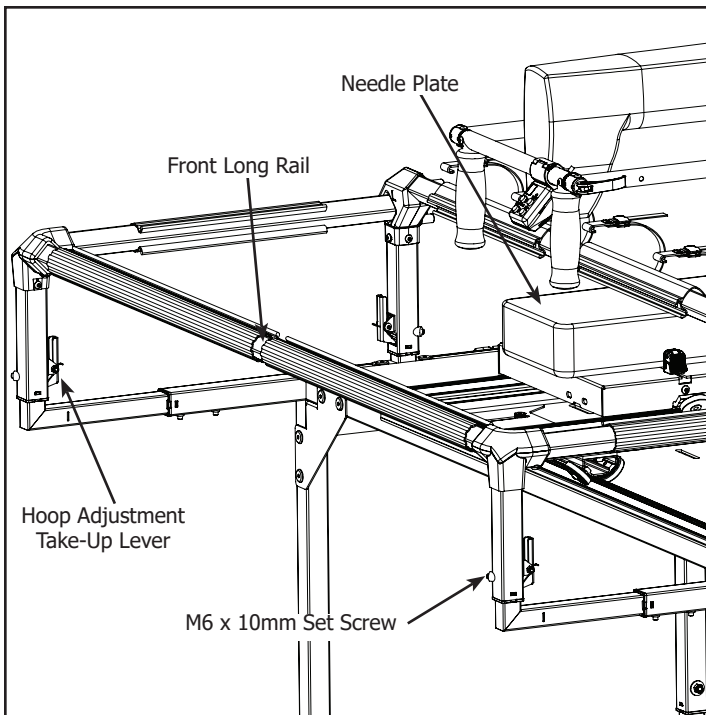


### Tools Needed:

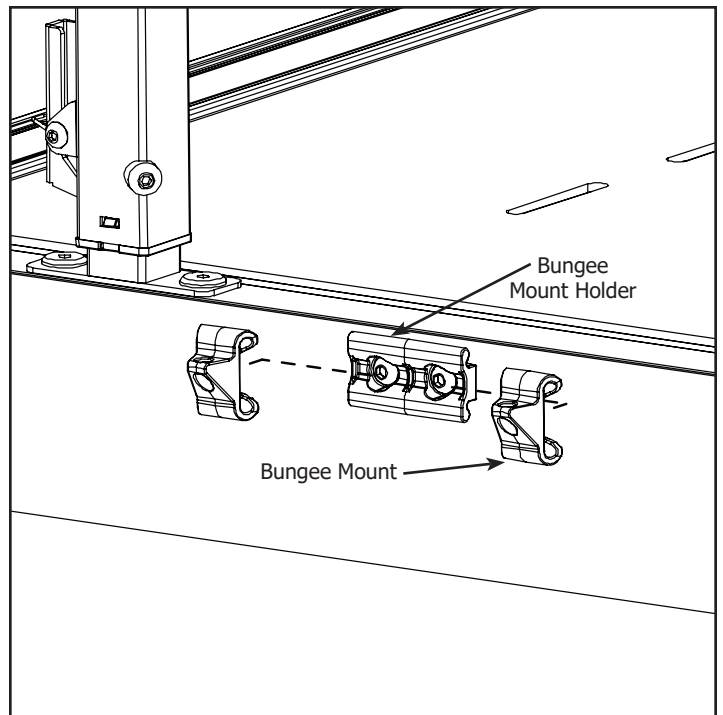
- 3mm Allen Wrench
- 10mm/13mm Box End Wrench
- 14mm/17mm Box End Wrench



8-1 Adjust the Leveling Feet to level the frame and make sure it is stable. Adjust so the Carriage and Machine do not move on their own.

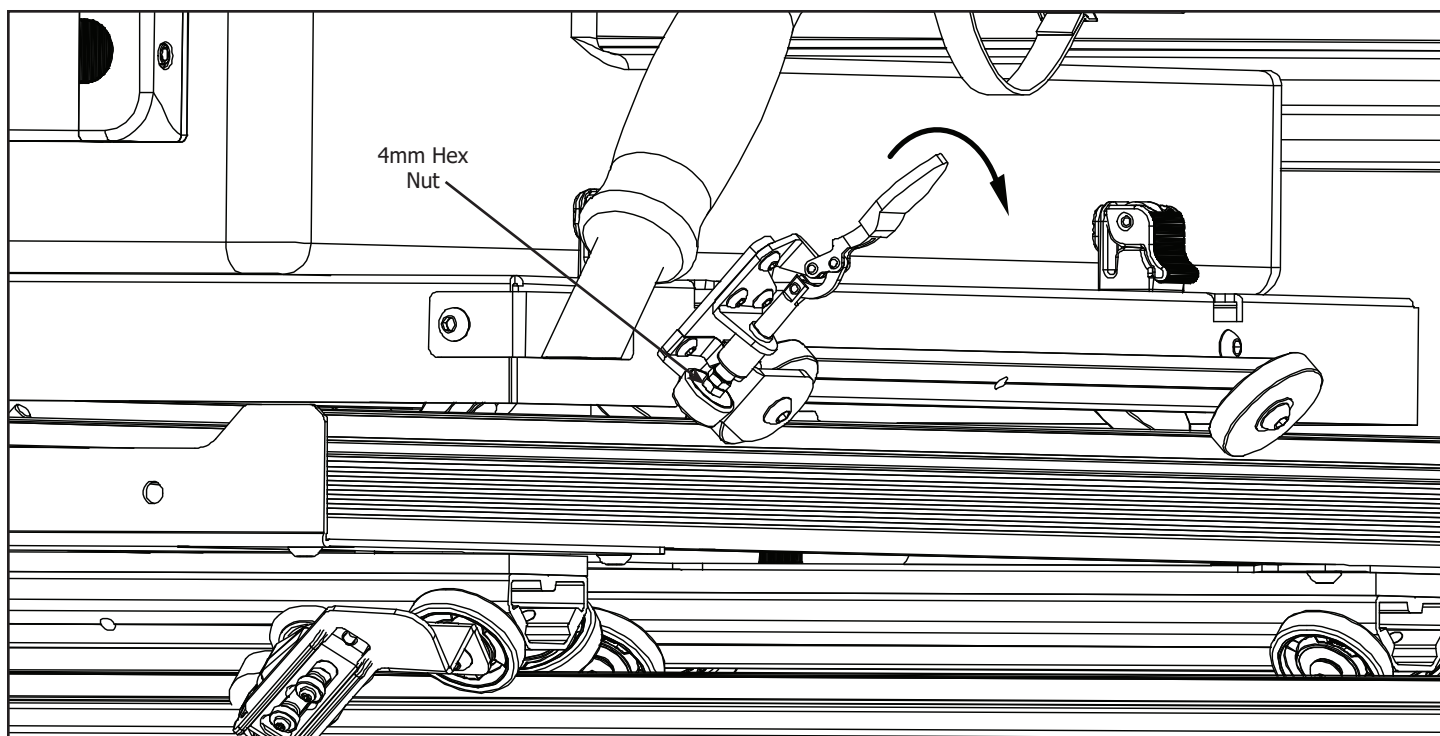


8-2 Adjust the Hoop so the top of the Front Long Rail and the Sewing Machine Needle Plate are level by loosening the M6 x 10mm Set Screws, pushing in on the Hoop Adjustment Take-Up Levers and raise or lower the Hoop. Tighten the M6 Set Screws when finished.



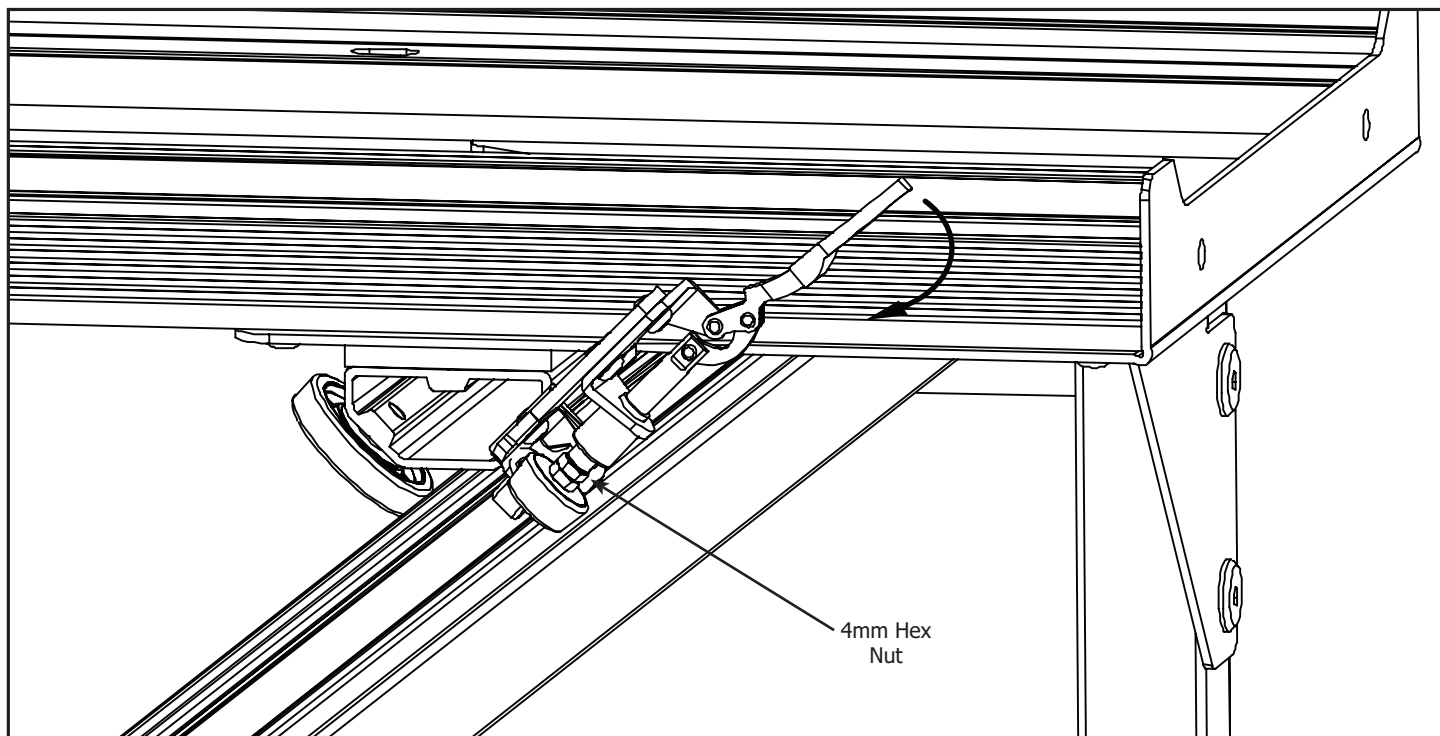
8-3 Slide the Bungee Mounts onto the Bungee Mount Holders.

## Setup



8-4 Rotate the Channel Lock handle down. To adjust the Channel Lock, loosen the 4mm upper Hex Nut. Twist the Rubber Foot clockwise until it is snug against the track. Turn the 4mm upper Hex Nut counterclockwise until it is snug against the Channel Lock barrel.

**Note:** Channel Locks are used to lock the Top Plate or the Carriage to assist in straight line stitching.



8-5 Rotate the Channel Lock handle down. To adjust the Channel Lock, loosen the 4mm upper Hex Nut. Twist the Rubber Foot clockwise until it is snug against the track. Turn the 4mm upper Hex Nut counterclockwise until it is snug against the Channel Lock barrel.

**Note:** Channel Locks are used to lock the Top Plate or the Carriage to assist in straight line stitching.

# Fabric Setup

## Step 10 - Fabric Setup

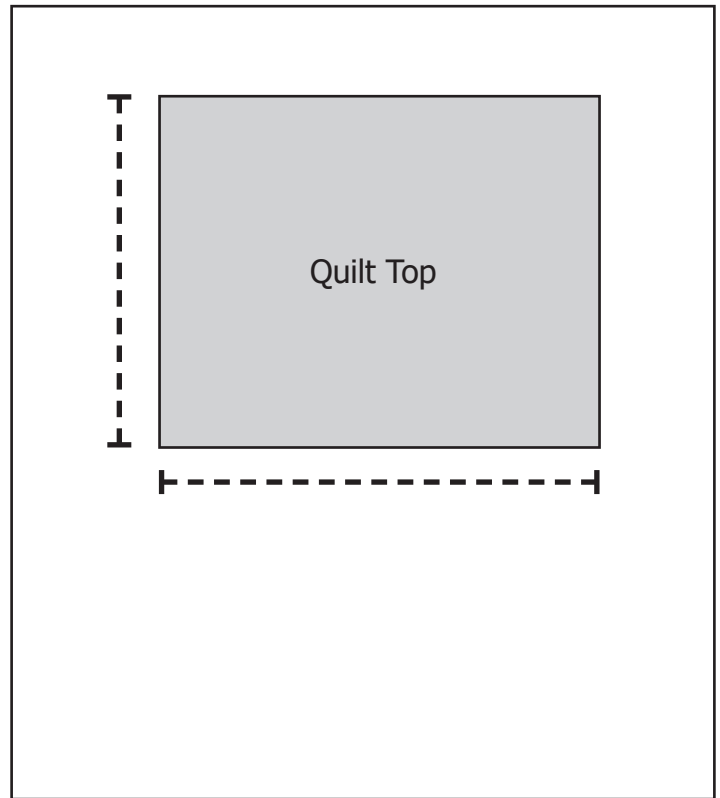
### Tools Needed:

Pins (not included)

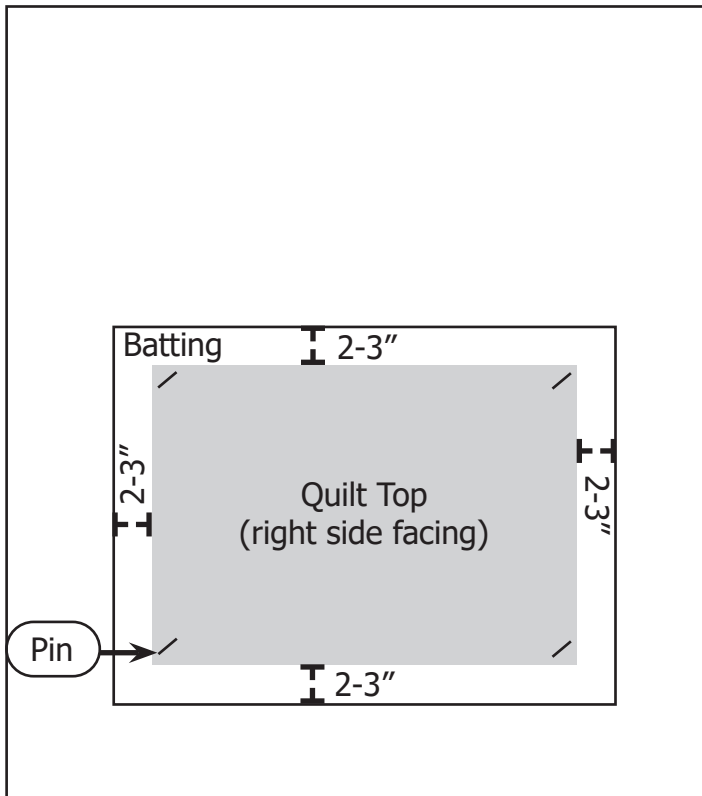
Fabric (not included)

Tape Measure (not included)

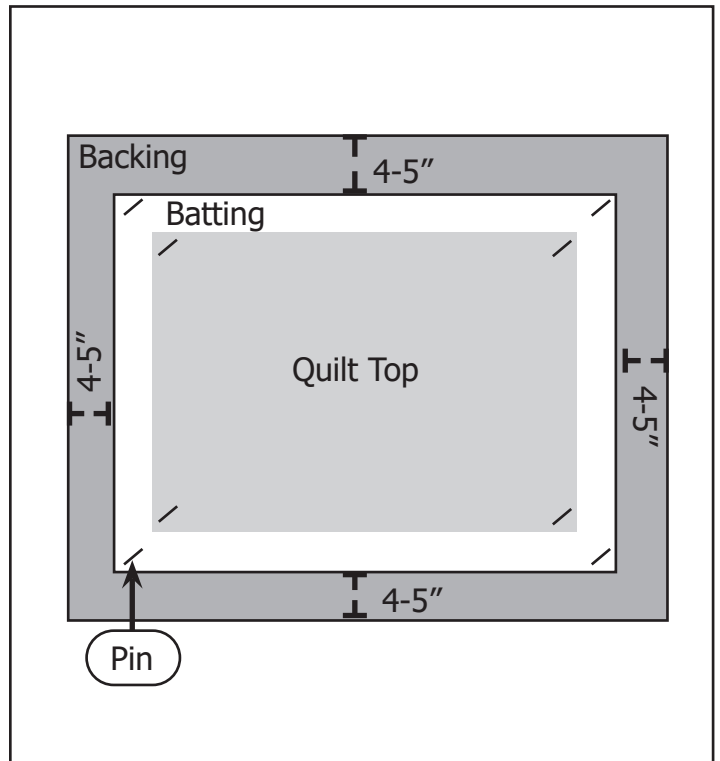
Fabric Cutting Tools (not included)



9-1 Measure the length and width of your quilt top.



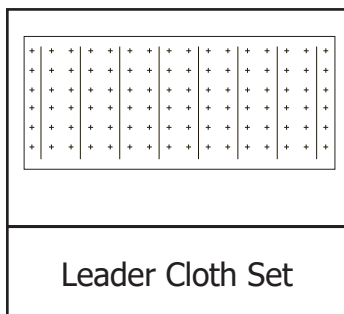
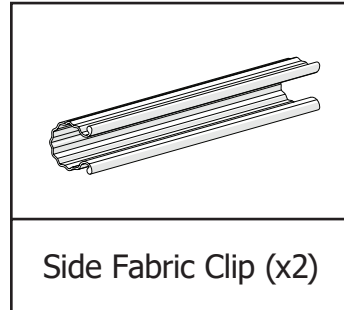
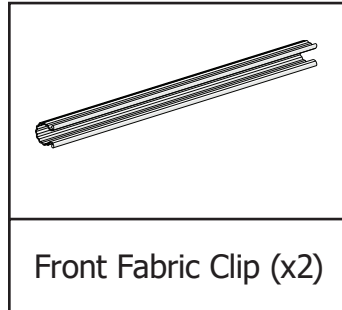
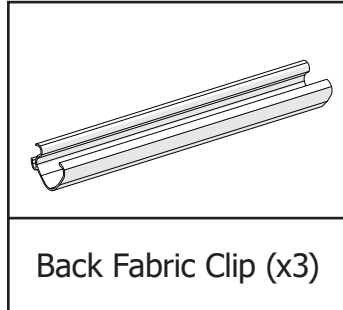
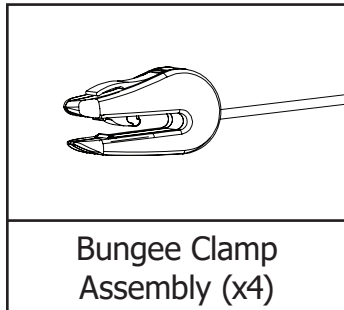
9-2 Cut your quilt batting so that it is 2-3 inches larger than the quilt top on all sides. **Pin** the quilt top right side up to the batting.



9-3 Cut your quilt backing so that the sides extend 4-5\" out from the batting. **Pin** the backing to the quilt with the right side facing down, away from the batting.

## Step 11 - Fabric Installation

Parts Needed:



**10-1** Find the center on your Back Rail Cloth Leader and Front Rail Cloth Leader and mark it. Find the center on your Backing on both the top and bottom edges. Lay the quilt sandwich with the quilt-top face down on a clean surface.

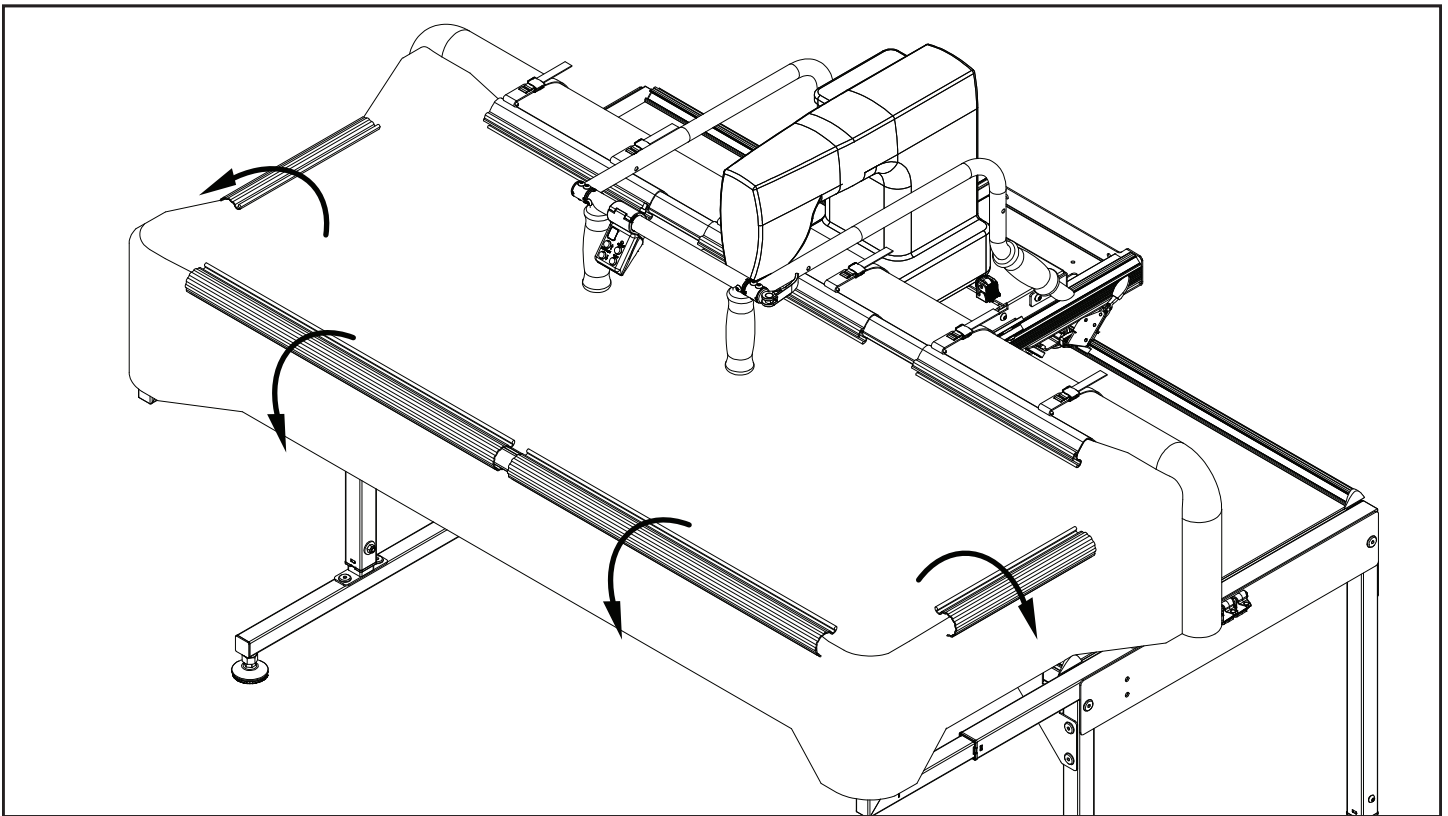
**10-2** Match the center of each Cloth Leader with each center mark on the Backing and pin or baste from the center out to the end of the leader on both sides. Be sure there are no gaps between the pins.

**10-3** Roll up your quilt sandwich starting from the bottom, leaving about a foot unrolled.

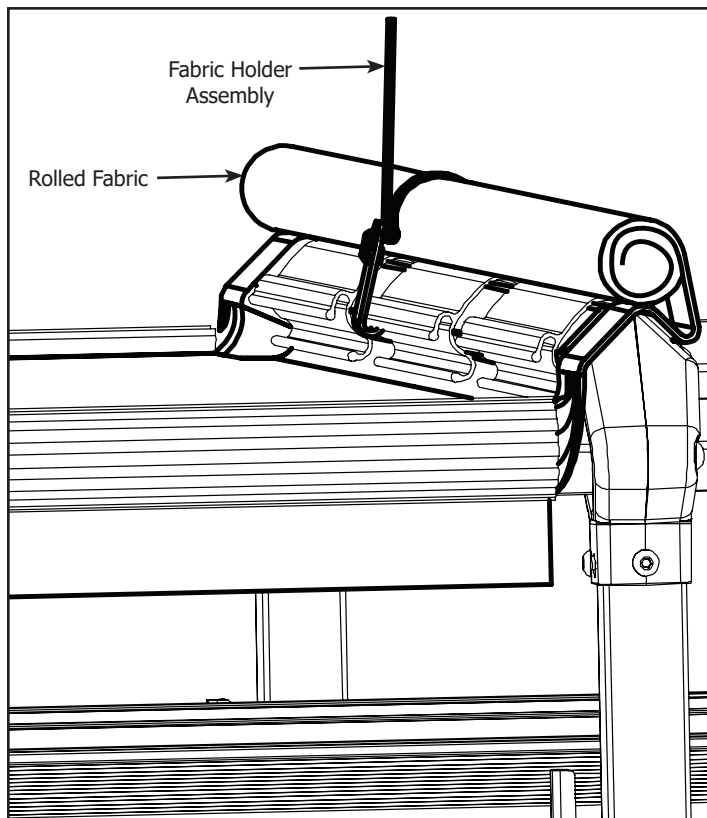
**10-4** Carry the quilt to the machine and slide the unrolled portion under the needle and hopping foot, and over the top of the back rail in the throat of the machine.

**10-5** Use the machine to assist with fabric positioning and alignment. Roll the sewing machine on the carriage as far back as you can. Then position the fabric so that the Quilt Top edge is approximately 1 inch away from the needle. While gliding the sewing machine across the frame check that the Quilt Top continues to be 1 inch away from the needle.

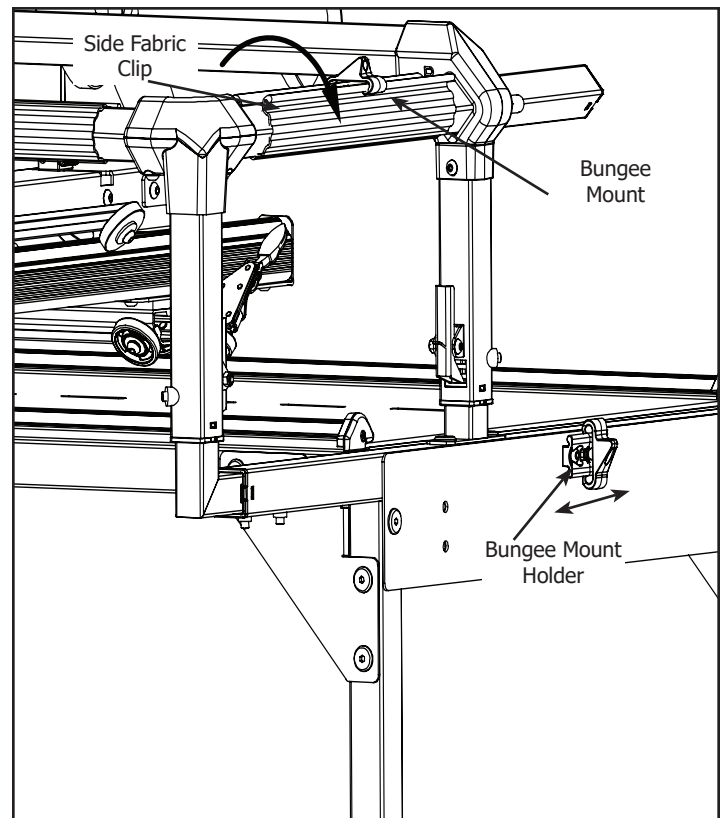
# Fabric Setup



10-6 Install the (3) Fabric Clip. Pull Fabric snug and install the (2) Front Fabric Clips and (2) Side Fabric Clips. Rotate the Fabric Clips clockwise to tighten the fabric.

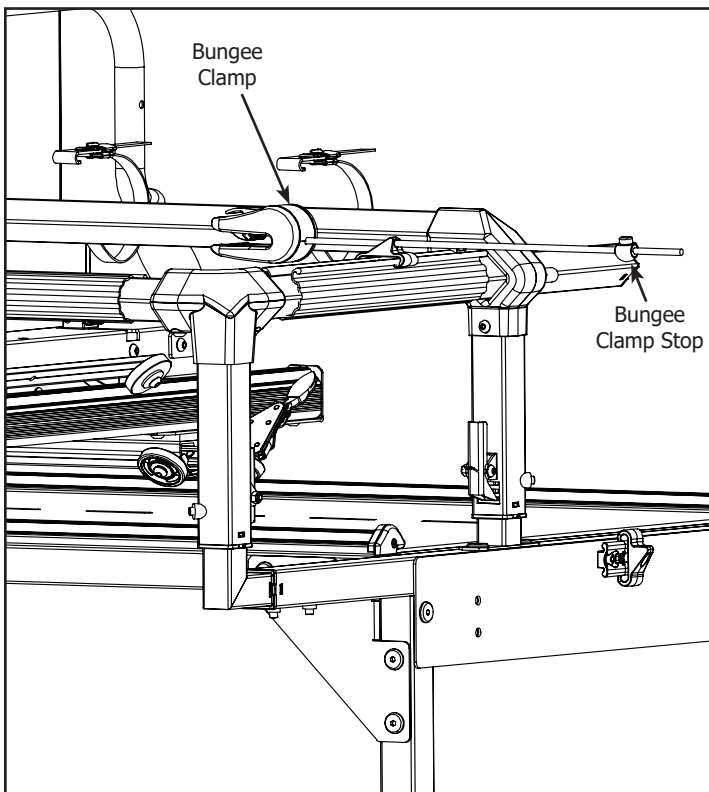


10-7 As you move your material, roll the finished area and secure with the Fabric Holder Assembly.



10-8 Slide the Bungee Mount off the Bungee Mount Holder and onto the Side Fabric Clip with the vertical face to the outside of the frame.

## Fabric Setup



10-9 Insert the Bungee Clamp Cord through the Bungee Mount and the Bungee Stop.

**Note:** See Bungee Clamp instructions for attaching to fabric.

# Care and Use

## Quilting Tips:

- Be Careful not to sew too close to the edge, to prevent hitting the Bungee Clamps, or running off the edge of the quilt. Also, if you are using side leaders, avoid accidentally stitching the leader to your quilt.
- If your quilt will fit onto your frame length-wise attach your quilt's fabric to the rails along it's length. You will have to roll the quilt less often, since your work surface will be as large as possible. Also, the quilt will not be as large under the arm of the machine when you get to the end.
- Make sure to turn off your sewing machine any time you leave your quilting room.

## Rails:

- Keeping the fabric on the Take-Up Rail, just slightly above the bed of the sewing machine, yields the best results. If the fabric is too high off the bed, thread and needle breakage may occur. If it is pressing down on the bed of the machine it will be difficult to roll the sewing machine on the frame.
- When rolling the quilt, pull the batting a little to each side to make sure that it is not bunching. After rolling and tightening all the rails, check under the quilt to see that the back is smooth.

## Stitch Regulating:

- If the machine only appears to be stitch regulating in one direction, make sure the encoder cords are plugged in tightly on both ends. Make sure the encoder O-rings are contacting the track and rolling when the machine is moving on the carriage.

## Bungee Clamps:

- If it is necessary to use the bungee clamps over the batting on your quilt, turn the bungee clamps upside down so the rubber grip in the clamp is gripping against the bottom fabric instead of the batting. Having the rubber grip clamp against the batting is less effective than having it clamp against the fabric.

## Fabric Issues:

- Do not over tighten the fabric on the quilting frame. Stretching the fabric will result in a quilt that does not lay flat when it is finished.

## Frame Cleaning:

- Regularly clean the wheels and track of your carriage and frame. Lint from the batting will build up quickly causing the carriage not to roll as smoothly and eventually damage the track.

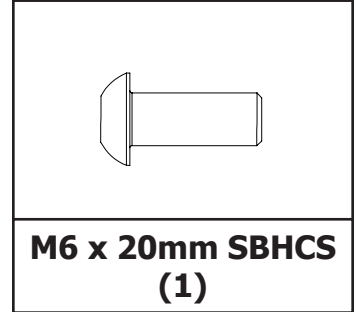
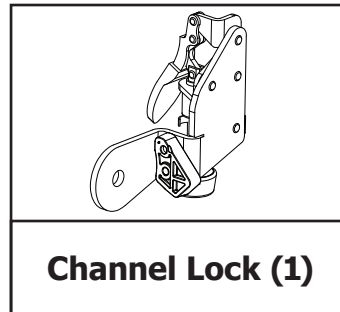
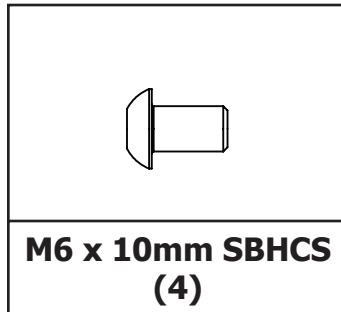
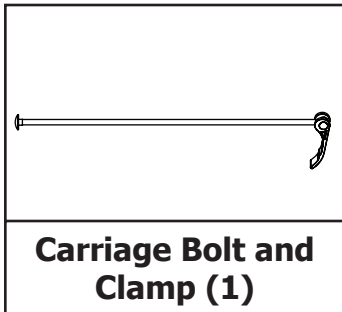
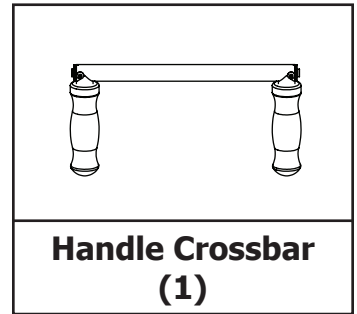
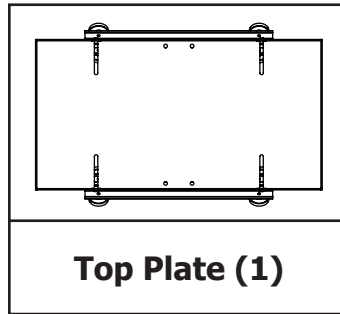
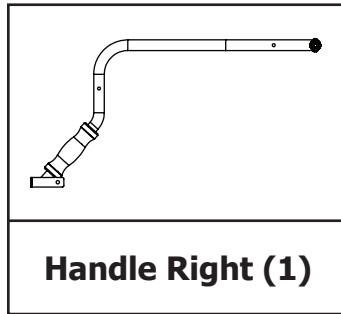
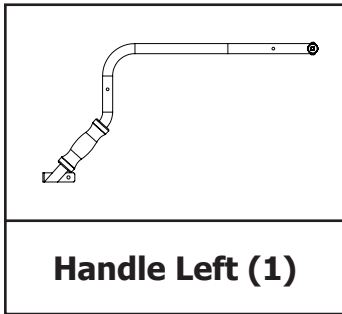
## Rolling Issues:

- Check the alignment on the carriage and the track so the carriages both roll smoothly. It is not necessary to make all the wheels touch as long as the carriage rolls smoothly. To readjust the carriage or track follow steps described in step 6.

# Assembly

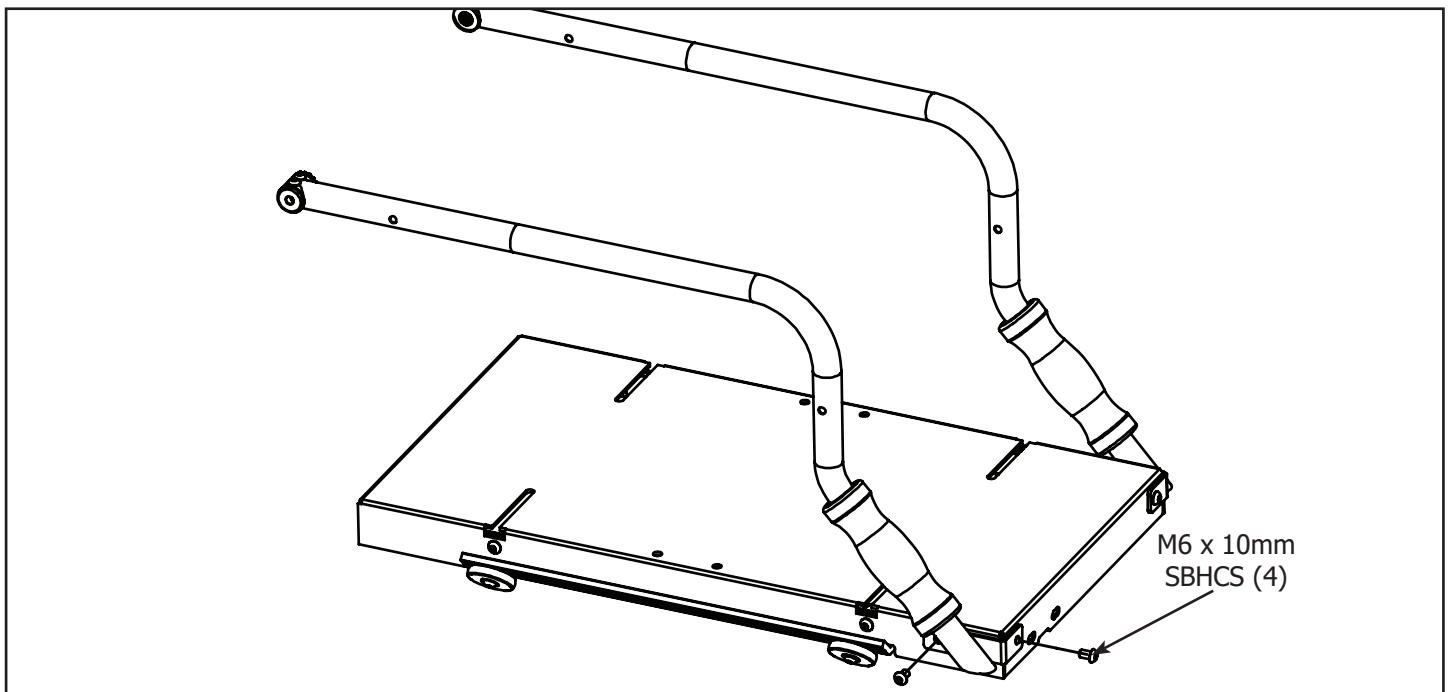
## Top Plate Assembly - Optional Accessory

Parts Needed:



### Tools Needed:

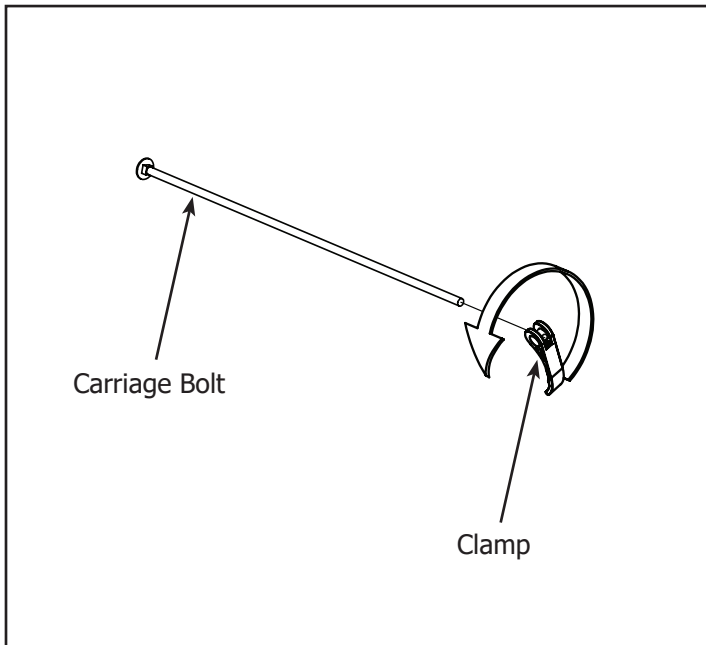
4mm Allen Wrench



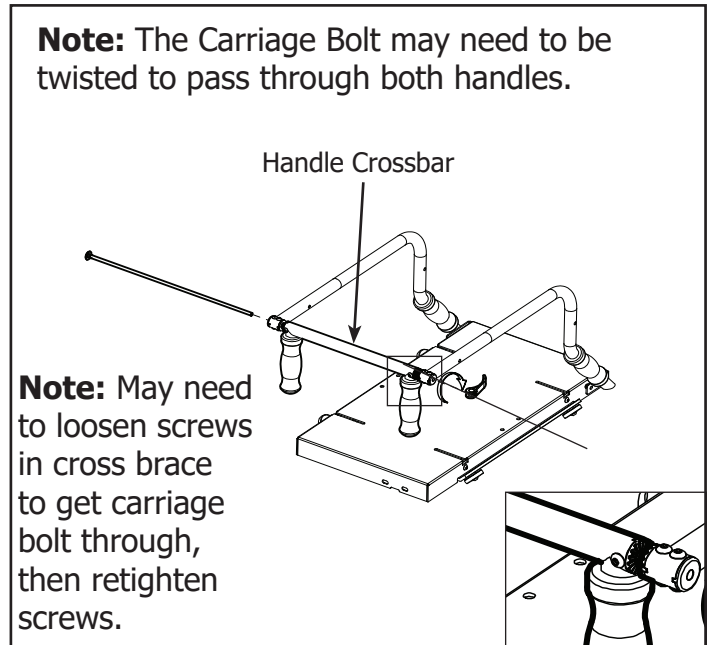
1 Attach Handles using (4) M6 x 10mm SBHCS.



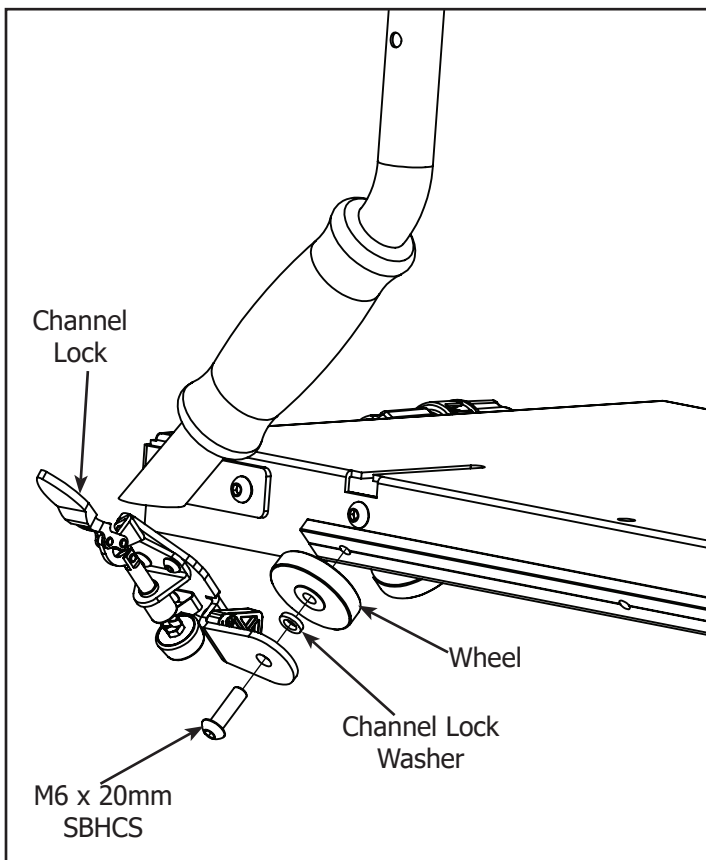
# Assembly



2 Un-thread Clamp from Carriage Bolt.



3 Assemble Cross Brace with the Handle Crossbar, Carriage Bolt, and Clamp.

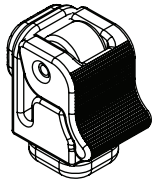


4 Remove the left rear M6 x 20mm SBHCS from the Top Plate and install the Channel Lock as shown above.

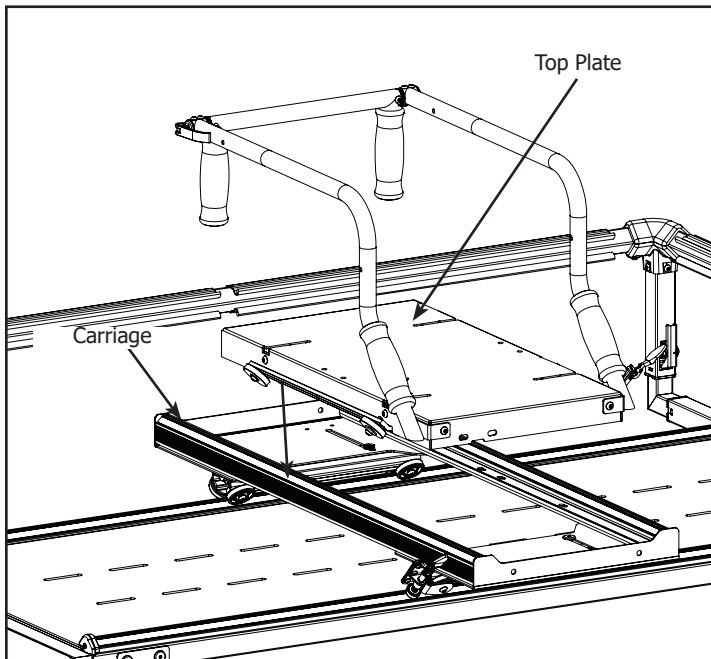
# Assembly

## Top Plate & Machine Installation - Optional Accessory

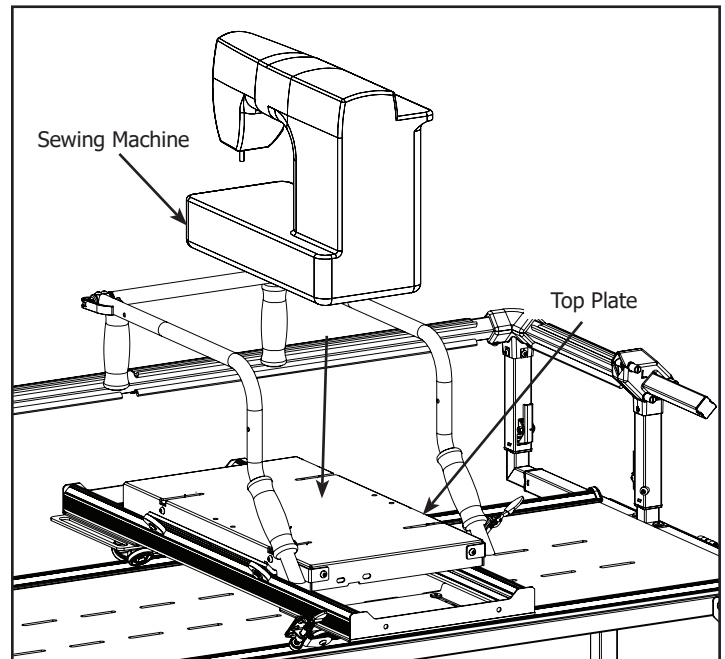
Parts Needed:



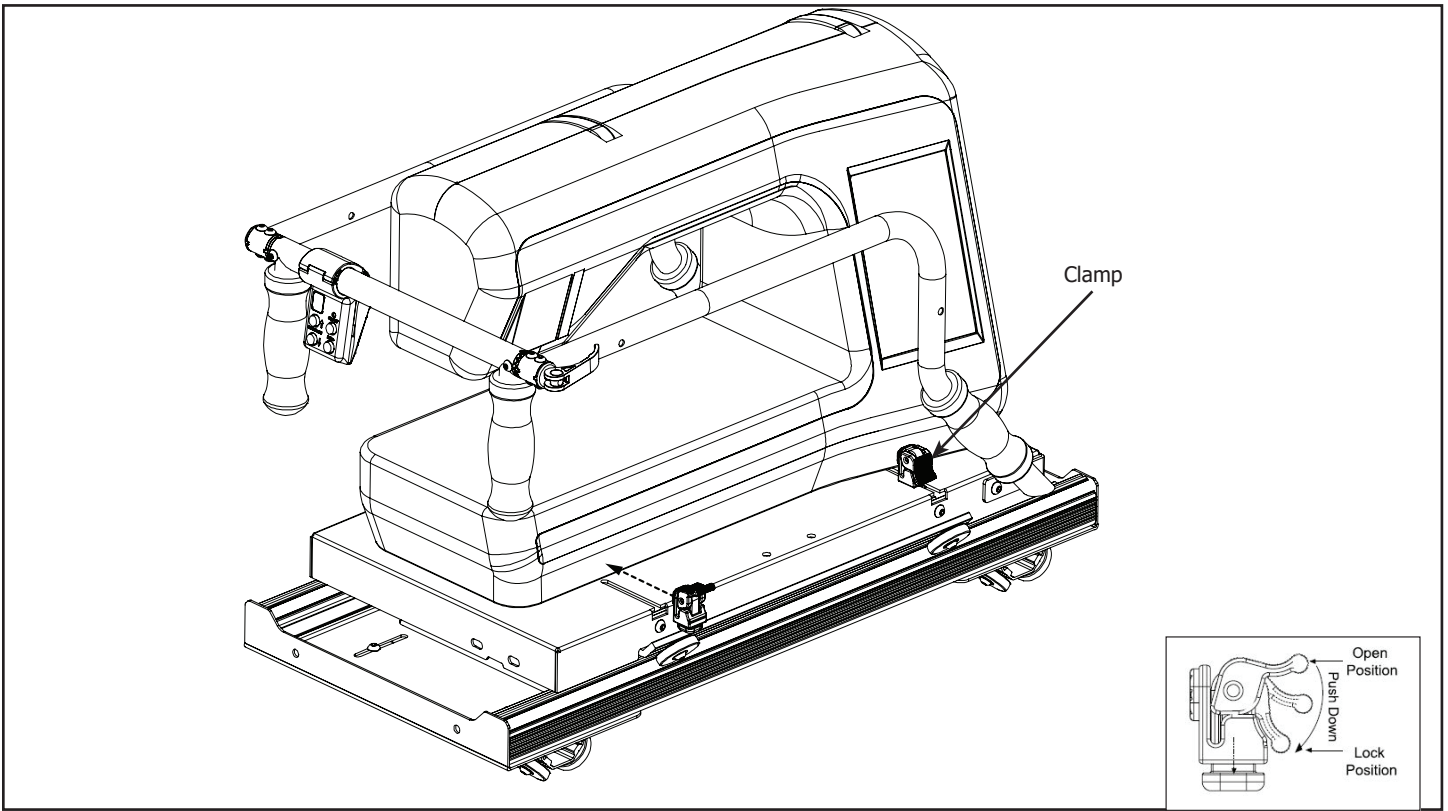
**Sewing Machine  
Clamp (4)**



1 Place the Top Plate on the Carriage



2 Place the Sewing Machine onto the Top Plate.



3 Center Machine on Top Plate from side to side and make the back of the throat of Sewing Machine line up with the vertical part of the handles. Slide each Clamp into the grooves on the Top Plate and lock against Machine.

**Note:** Some Larger machines do not require Clamps.



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