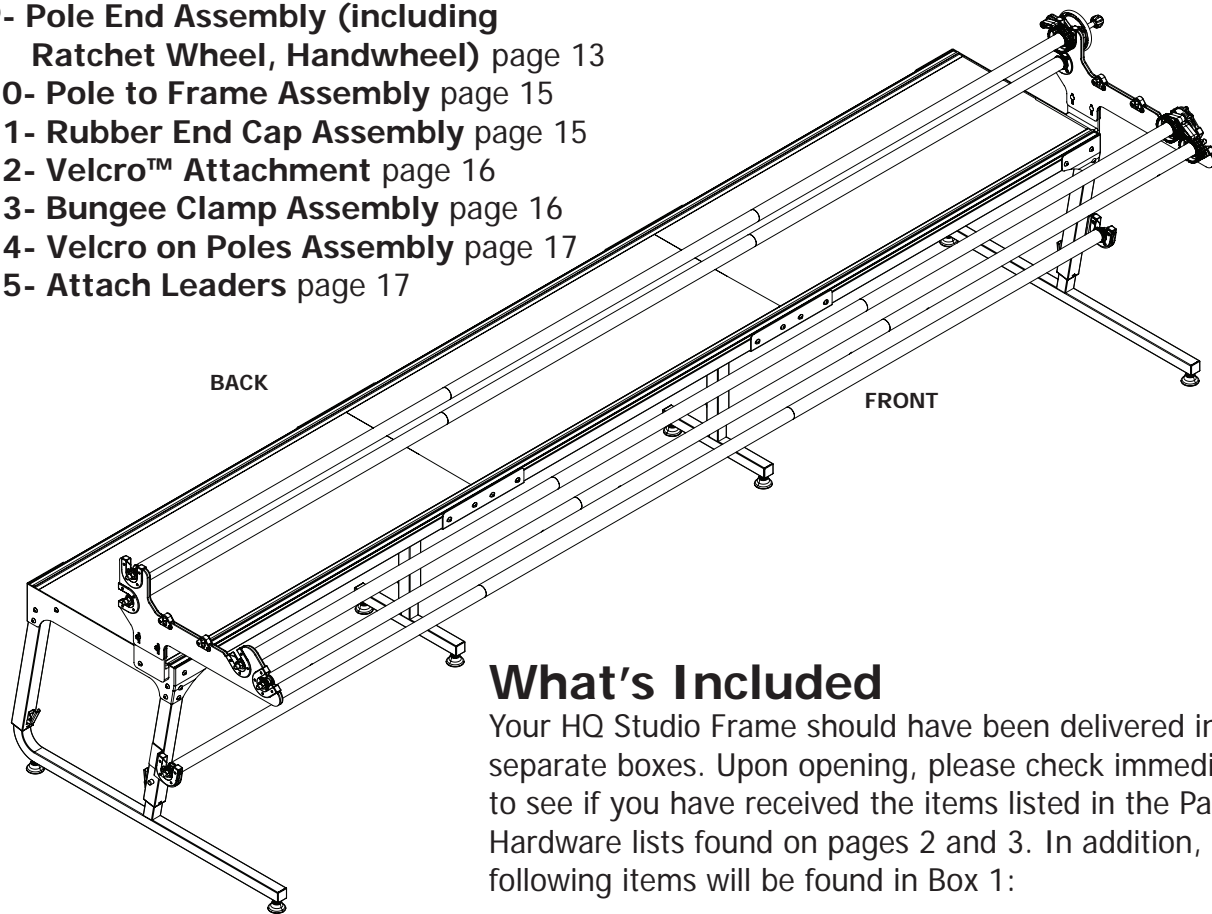


HQ Studio Frame for HQ¹⁸ Avanté

Assembly Instructions

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What's Included

Your HQ Studio Frame should have been delivered in three separate boxes. Upon opening, please check immediately to see if you have received the items listed in the Parts and Hardware lists found on pages 2 and 3. In addition, the following items will be found in Box 1:

1. HQ Studio Frame Assembly Instructions Manual
2. (3) Leaders
3. (3) Velcro™ strips to attach leaders to poles

Handi Quilter, Inc.
445 N 700 W
North Salt Lake, Utah 84054

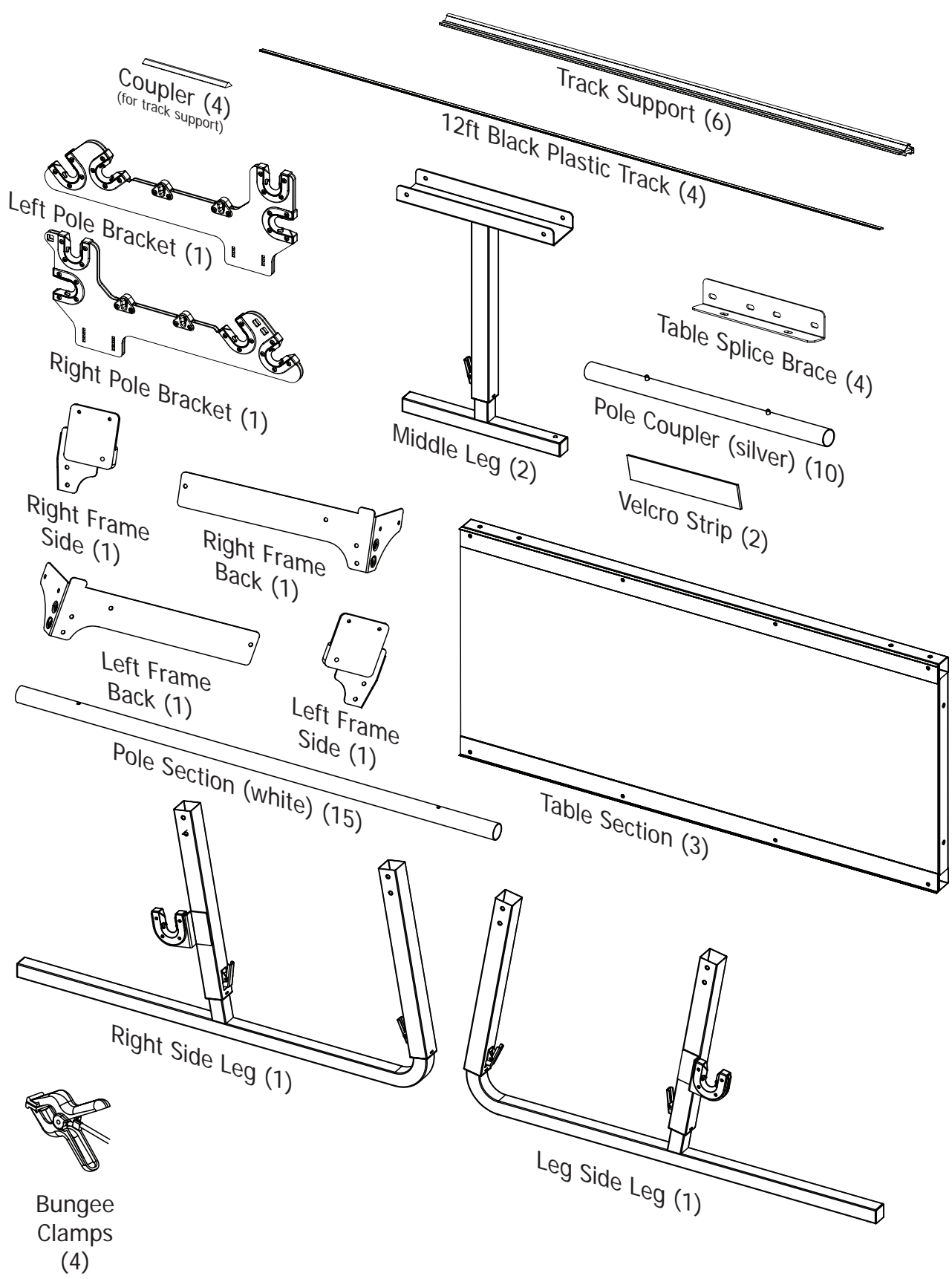
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Updated 07/02/10

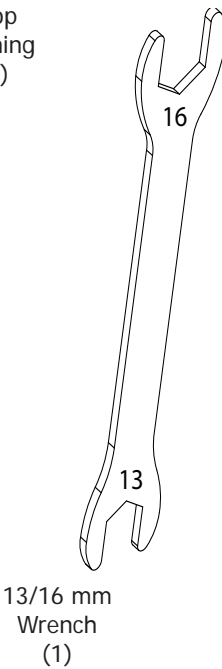
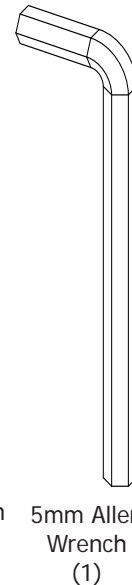
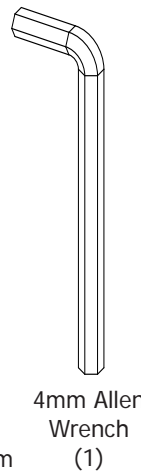
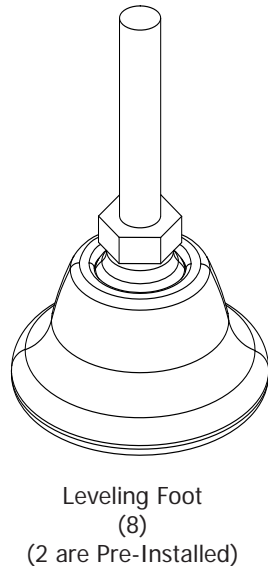
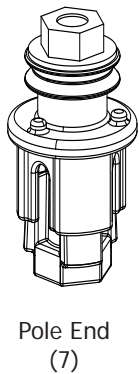
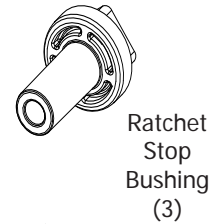
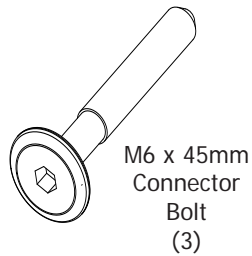
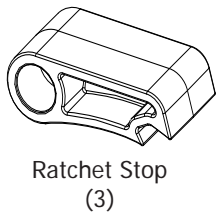
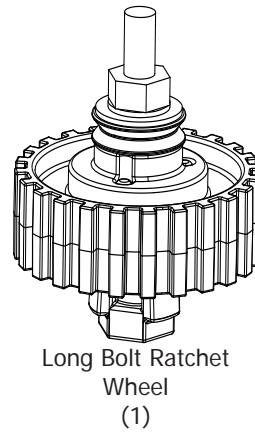
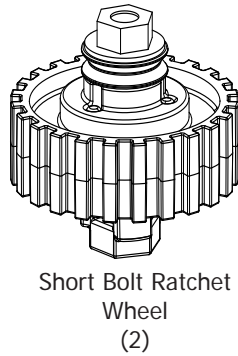
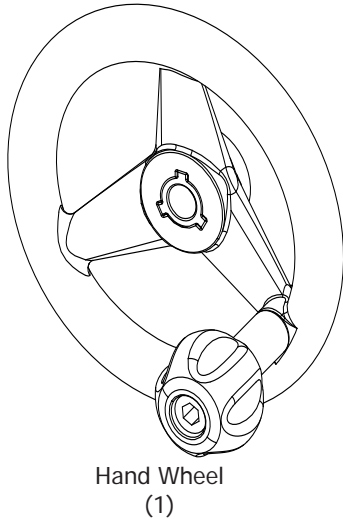
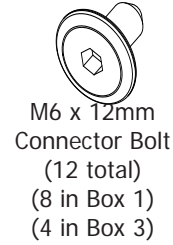
Visit <http://www.HQComputerizedQuilting.com>

If you find you are missing any items, please contact Handi Quilter immediately at 1-877-697-8458 or 1-801-292-7988 or by emailing sales@handiquilter.com.

HQ Studio Frame Parts List



HQ Studio Frame Hardware List



Step 1

Frame Side Assembly



Note:

Assembly is easiest if you first finger-tighten all connections while assembling the frame. Once the entire frame is assembled, go back to tighten with the wrench.

Why is this important? If you tighten as you go, you may have trouble getting all the parts to align properly.

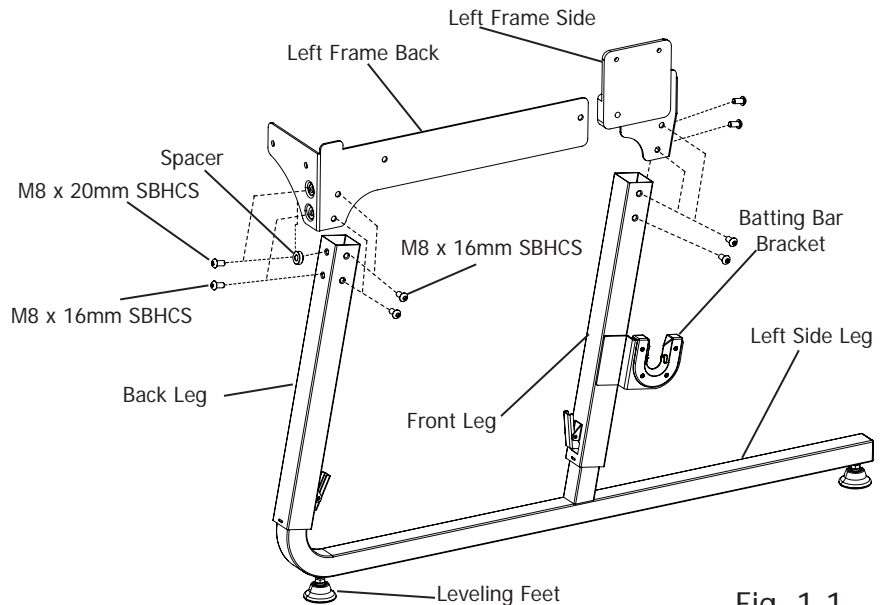


Fig. 1-1



Step 1: Frame Side Assembly

Note: Make sure both height-adjustable legs are at their shortest setting before proceeding.

Remember that the batting bar bracket needs to be on the outside of the leg.

Parts needed

- 1- Right and Left Side Leg
- 1- Right and Left Frame Side
- 1- Right and Left Frame Back
- 2- Spacers
- 4- Leveling Feet
- 14- M8 x 16mm SBHCS
- 2- M8 x 20mm SBHCS

Tools Required

5mm Allen Wrench (Provided)

1-1: Screw two (2) leveling feet into the bottom of the left side leg, as shown in Fig. 1-1.

1-2: Slide one (1) M8 x 20mm SBHCS through the top back hole of the left frame Back. Then slide a spacer onto the end of the screw.

1-3: Attach the frame back onto the side leg, **finger tighten** the screw (M8 x 16mm SBHCS) into the top hole of the back leg. Install a second screw into the bottom hole and **finger tighten**. You will tighten all the bolts with the allen wrench later.

1-4: Thread two (2) more screws into

the side of the back leg. Then attach the frame side with two (2) more screws into the side of the front leg.

1-5: Thread two (2) screws through the left frame side and into the front of the left side leg. Now tighten all eight (8) screws with the provided allen wrench.

1-6: Follow **Steps 1-1 through 1-5** to complete the right side leg.

Step 2 Table Assembly

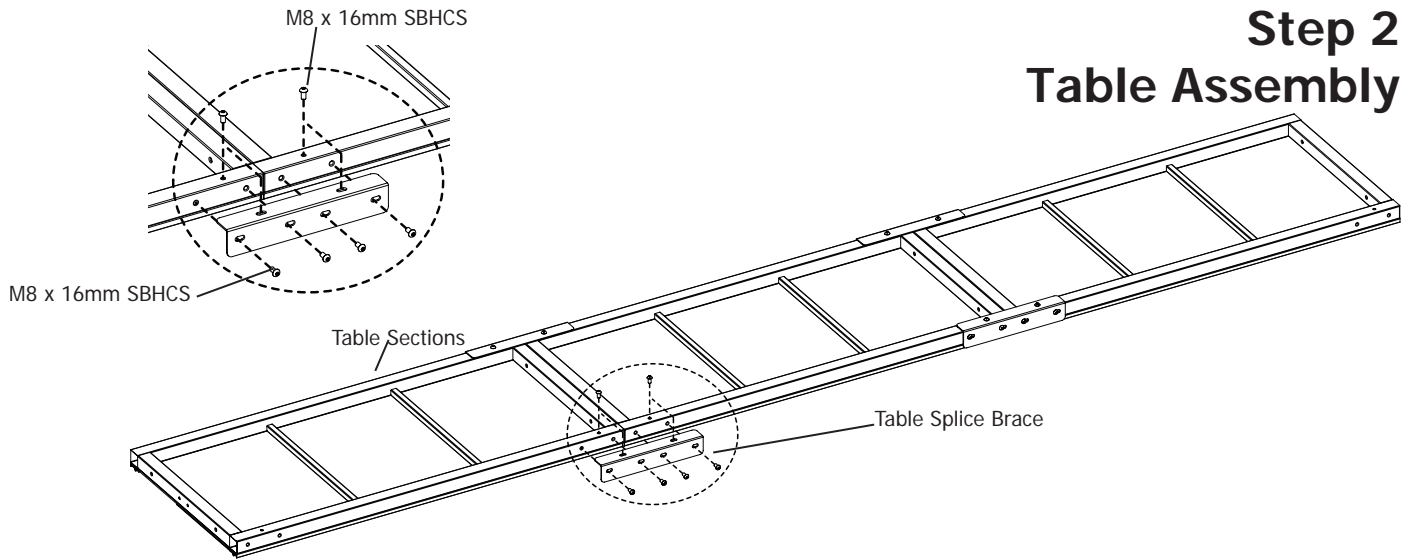




Fig. 2-1

 **Note:** Skip **Steps 2 and 3** if you are only setting the frame up at four feet (4').

 **NOTE:** Remember to finger tighten all screws first. Once all are in place, then tighten using the 13/16mm wrench (provided).

Step 2: Table Assembly

Parts needed

- 3- Table Sections
- 4- Table Splice Brace
- 24- M8 x 16mm SBHCS

Tools Required


5mm Allen Wrench (Provided)


2-1: IMPORTANT! Before you proceed with this step, remove all of the clear plastic stickers that are placed over the screw holes in all three table sections (inside and outside).

2-2: First, lay two table sections upside-down on the floor, next to each other. Join the sections together by placing a table splice brace onto the sections, as shown in Fig. 2-1, lining up the holes in the brace with those in the sections. Make sure the flange portion of the brace is on top (as shown).

2-3: Place four (4) M8 x 16mm SBHCS through the side of each table splice brace and **finger tighten** them into the table sections.

2-4: **Finger tighten** the two (2) SBHCS through the top of each table splice (as shown).

 **NOTE:** If you are setting your frame up at twelve feet (12'), assemble the third section by repeating **Steps 2-1 thru 2-4** by using the last table section.

 **NOTE:** For this step, a carpeted surface is recommended for the protection of your floor and frame.

If you are working on a hard surface (such as tile, hardwoods or concrete), cover the surface with a blanket or rug.

Step 3 Middle Leg Assembly

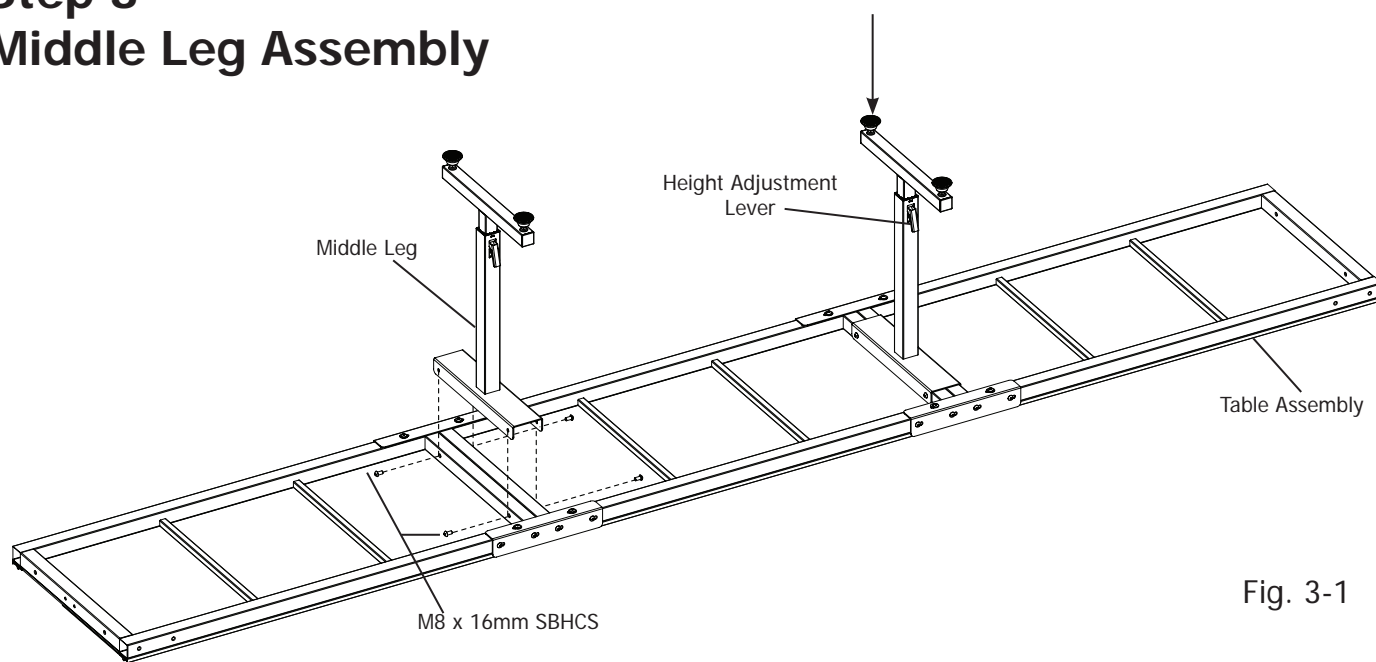


Fig. 3-1

Step 3: Middle Leg Assembly



Note: You may find it helpful to use a rubber mallet to coax the middle leg assemblies into place.
(Not Provided)

Parts needed

- 1- Table Assembly
- 2- Middle Legs
- 4- Leveling Feet
- 8- M8 x 16mm SBHCS

Tools Required

5mm Allen Wrench (Provided)

3-1: Place the middle leg, with the preinstalled leveling feet, over the joined table sections, as shown in Fig. 3-1.

3-2: Attach the middle leg using four (4) M8 x 16mm SBHCS and **finger-tighten** only.



Note: If you are setting your frame up at twelve feet (12') you will repeat **Steps 3-1 and 3-3** to attach the other middle leg, but you will need to install the remaining two (2) leveling feet to the other middle leg.

When assembling the second middle leg, be sure the height adjustment levers are facing the back of the table.

Step 4 End Leg Assembly

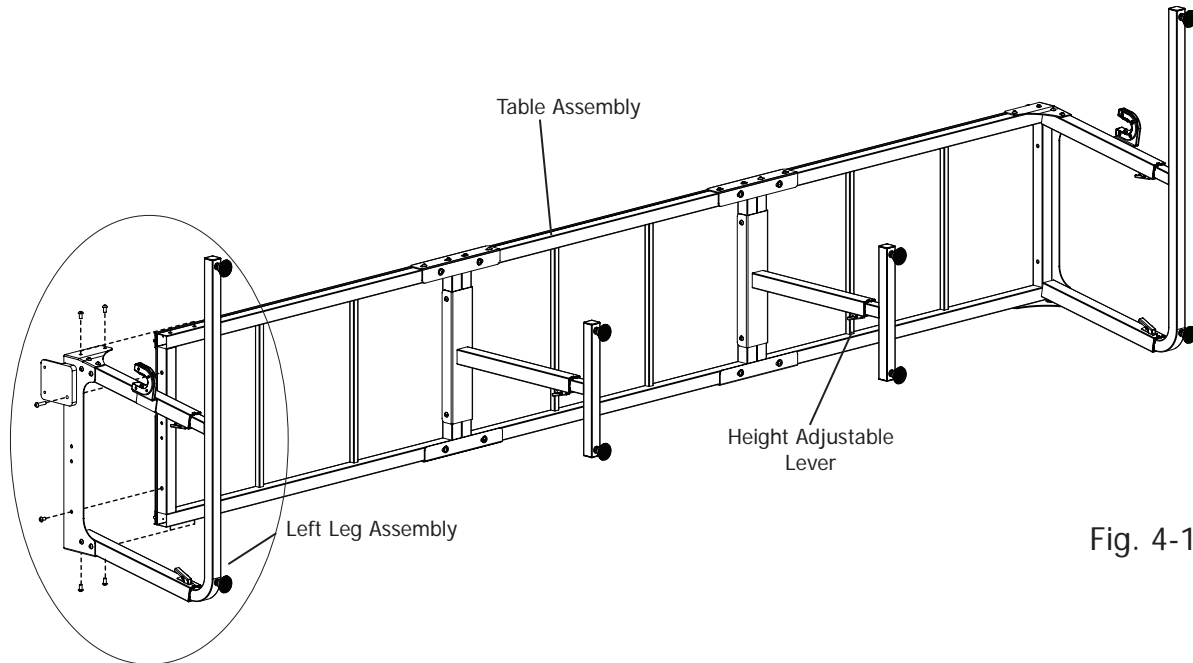


Fig. 4-1

Step 4: End Leg Assembly

Parts needed

- 1- Table Assembly
- 1- Right Leg Assembly
- 1- Left Leg Assembly
- 2- M8 x 35mm SBHCS
- 10- M8 x 16mm SBHCS

Tools Required

5mm Allen Wrench (Provided)

4-1: In preparation for attaching your left and right leg assemblies to your frame, turn the frame on its side so the height adjustable levers are towards the ground, as shown in Fig 4-1.

4-2: Slide the left leg assembly under the table assembly, as shown in Fig. 4-2.

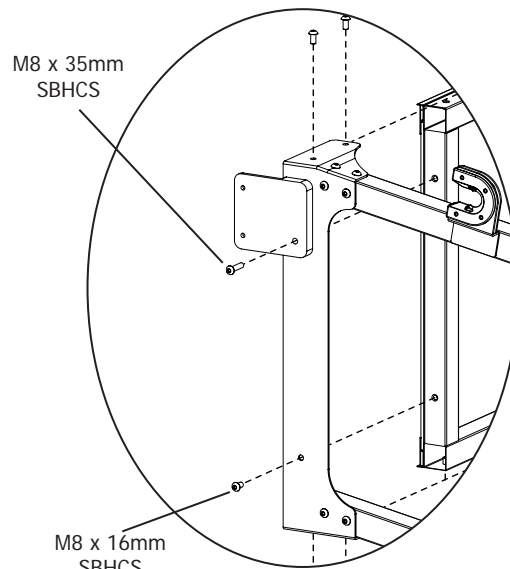


Fig. 4-2

Note: With the assistance of a second person, slightly tilting the frame more than 90 degrees will make it easier to attach the leg assembly to the table.

Step 4 End Leg Assembly (continued)



Note:

Make sure both height adjustable legs are at their shortest setting before proceeding with **Step 4-6**.

Step 4: End Leg Assembly (continued)

4-3: Screw one (1) M8 x 35mm SBHCS through the top hole on the side of the left frame side, and one (1) M8 x 16mm SBHCS through the bottom hole, as shown in Fig 4-2, **finger-tighten** only.

4-4: Thread two (2) M8 x 16mm SBHCS through the top side of the left frame side, as shown in Fig 4-2.

4-5: Complete **Step 4-2 through 4-4** for the right side.

4-6: With the help of a second person, rotate your frame so it is standing in the upright position.

4-7: Attach two (2) M8 x 16mm SBHCS through the back side of your left and right leg assemblies, and **finger-tighten** only.

4-8: Next, ensure that the table surfaces are level by applying the appropriate pressure or support to the table sections, while a second person tightens the four screws of each splice, using the M5 allen wrench. (Shown in Fig. 4-3.) Tighten both splices on the same joint first, and then proceed in the same manner to the second and third joints (if applicable).

4-9: Now tighten all eight (8) screws attaching the middle legs to the frame.

4-10: Finally, tighten all of the screws that attach the frame ends/leg assemblies to the table sections.

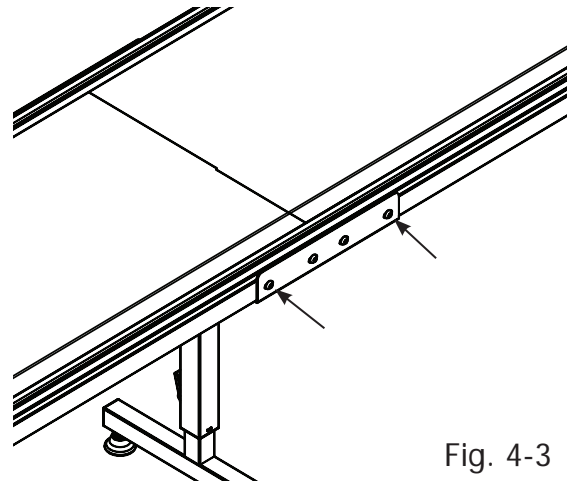
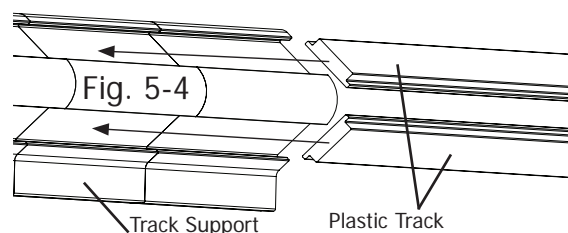
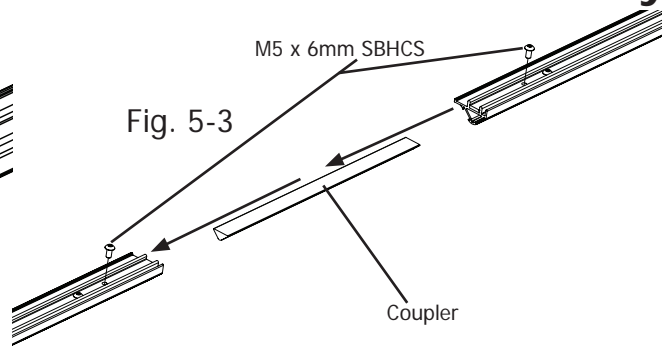
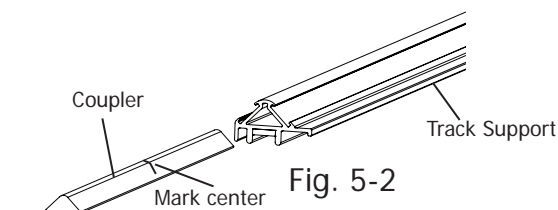
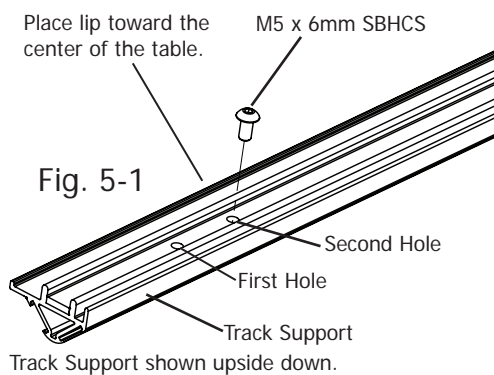


Fig. 4-3

Step 5 Precision-Glide Track Assembly

NOTE: If you choose to set up your frame at the 4' or 8' length, carefully cut the plastic tracks insert to the desired length. Custom cut track can also be ordered from Handi Quilter at an additional cost.



Step 5: Track Assembly

Parts needed

- 1- Frame Assembly
- 6- 4 foot Track Support
- 4- Coupler (for Track Support)
- 16- M5 x 6mm SBHCS
- 12- M6 x 12mm Connector Bolt

5-1: Lay three track support sections on the table, with the wider lip of the sections facing toward the center of the table (Figure 5-1).

5-2: Check inside the ends of the track supports for burrs or debris and remove all foreign matter from the inside.

5-3: Measure the length of each coupler to find the center. Mark with a pencil or permanent marker (Figure 5-2).

5-4: Insert the marked coupler into one (1) end track support up to the marked center. You may need to gently rock the track support to seat the coupler. Thread an M5 X 6mm SBHCS into hole one and lightly tighten as shown in Fig. 5-3. Insert the remaining end of the coupler into one end of the center track support. Hold the two (2) adjoining track supports tightly

together and thread an M5 X 6mm SBHCS into hole 1 of the center track support and lightly tighten as shown in Fig. 5-3. Thread an M5 X 6mm SBHCS into the second hole on each track support and lightly tighten.

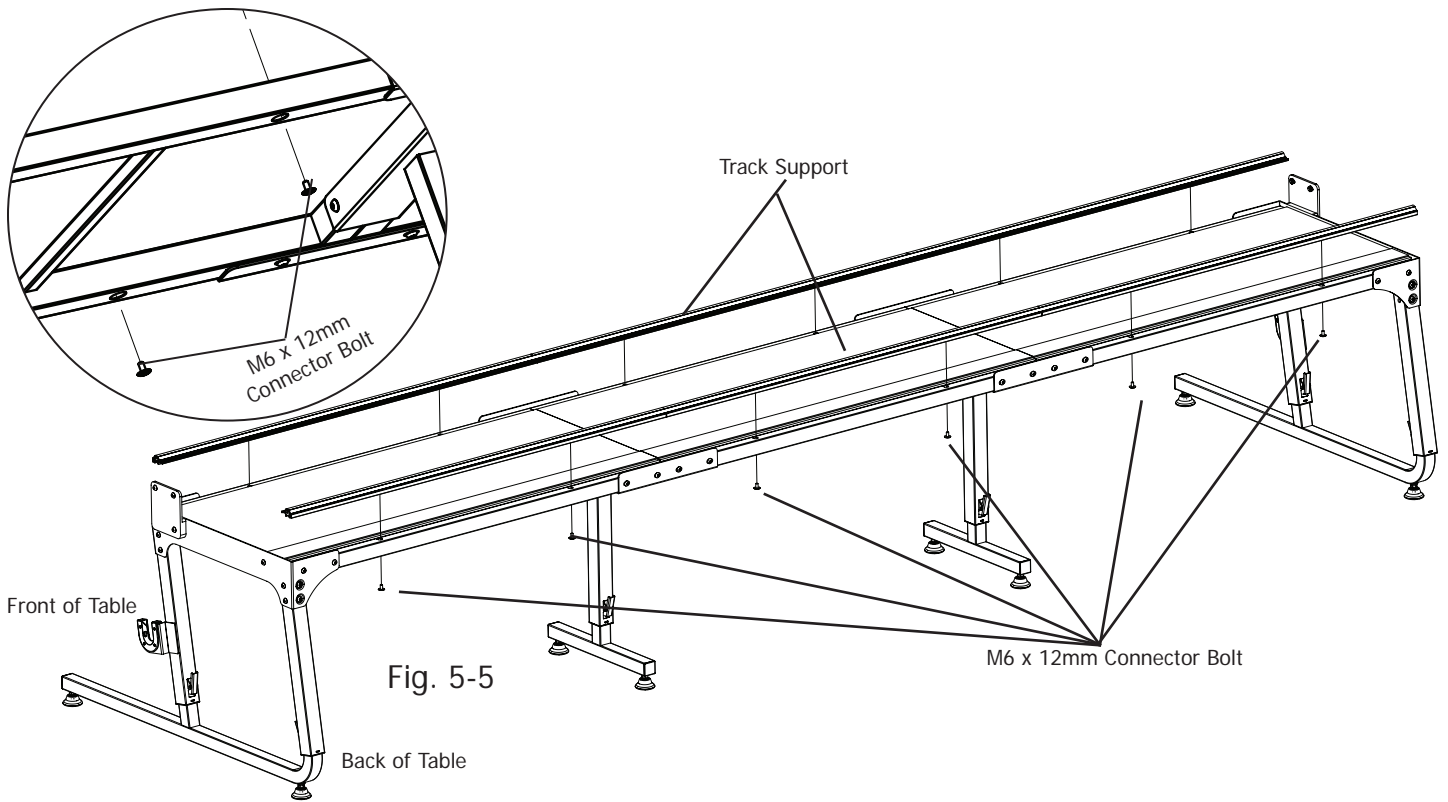
The track support surfaces must be perfectly aligned, otherwise the quilter will feel a bump and quilt stitches will be adversely affected (see note at left).

5-5: Repeat Step 5-4 to connect the second end track support to the remaining end of the center track support to assemble one (1) aluminum track support. Once alignment is assured, tighten all screws firmly.

5-6: Insert two (2) plastic tracks completely into either side of the aluminum track supports. (The tracks should slide into the track supports easily. If a plastic track binds slightly, try backing the track out a little, then try pushing it further. If the plastic binds badly check the track supports for debris, burrs, or misalignment.

5-7: Repeat Steps 5-1 through 5-6 to make second track.

Note: The aluminum track support sections are cut from single sections of extruded aluminum and should align when placed end to end. However, if all directions in Step 5-4 are followed and track supports still do not align properly, try swapping track support sections, so that different ends are joining.



5-8: Attach Tracks. Secure one assembled track to the back of the quilting frame. Line up the track support by holding it tightly against the plastic tabletop as you secure it to the frame, placing six (6) M6 x 12mm connector bolts, as shown in Fig. 5-5. **Do not tighten bolts at this time.** They need to be loose to accommodate adjustments in Step 5-9. In same manner, attach the remaining track support to the front of the frame using six (6) M6 x 12mm connector bolts.

5-9: Align Tracks. Place the carriage on the tracks at one end of the table. Roll back and forth along the length of the table, establishing the distance between the two tracks. Move both tracks in tandem to the back of the table as far as possible. (Slots in the tables allow this movement.) Tighten the bolts in the BACK track only.

5-10: Place the machine onto the carriage and again, roll it the entire length of the frame, working the tracks into the wheels as you go. Check the carriage, to verify that it rolls smoothly

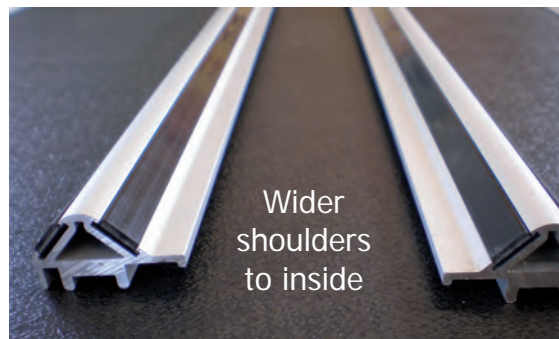


Fig. 5-6

and that both ends of the carriage are engaging the tracks. If you find a section of track where the carriage rocks back and forth, loosen the track support screws, and adjust the front track until the carriage rolls smoothly, then retighten the screws.

5-11: Finally, fully tighten the front track to the table.

NOTE: The extrusions have a wider shoulder on one edge of the track. This shoulder is to be placed toward the inside of the table. (Fig. 5.6)

Step 6 Ratchet Stop Assembly

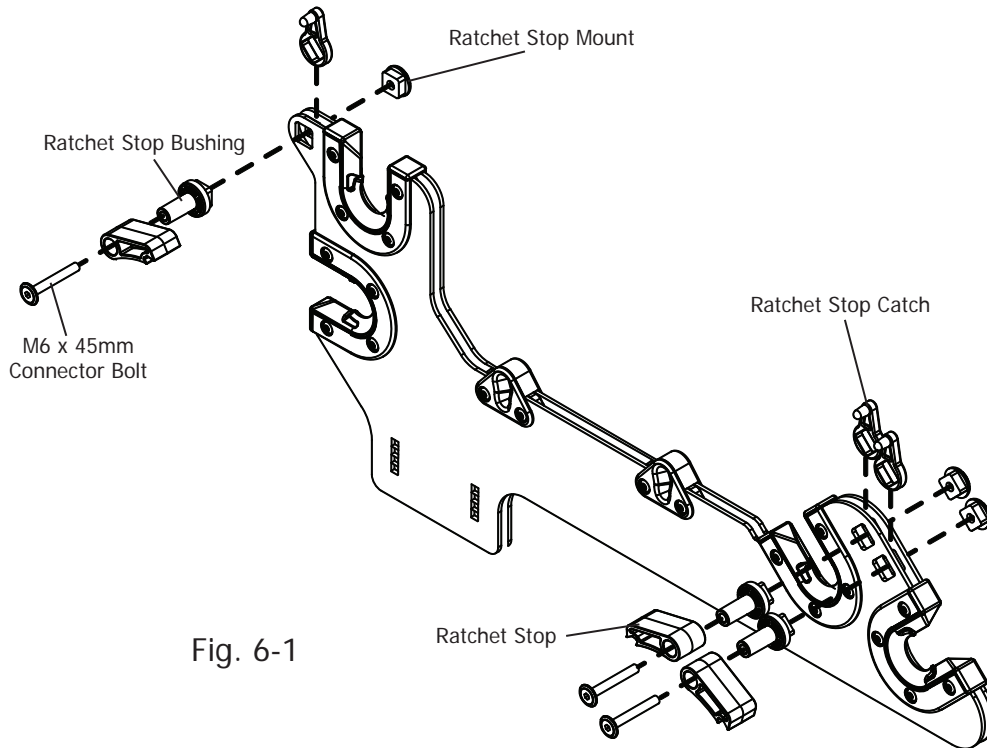


Fig. 6-1

Step 6: Ratchet Stop Assembly

Parts needed

- 1- Table Assembly
- 1- Right Pole Bracket
- 3- M6 x 45mm Connector Bolt
- 3- Ratchet Stop
- 3- Ratchet Stop Bushing

Tools Required

4mm Allen Wrench (Provided)

6-1: Cut the zip tie fastening your ratchet stop mount to your right pole bracket (you may need to hold the mount until you complete the remaining steps).

6-2: Place the ratchet stop bushing into the right pole bracket on the side opposite the ratchet stop mount.

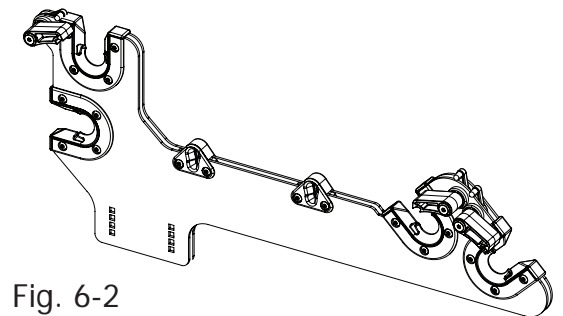


Fig. 6-2

6-3: Place a ratchet stop onto the ratchet stop bushing, noting the proper direction of the stop.

6-4: With the ratchet stop catch inserted into the ratchet stop, place an M6 x 45mm connector bolt into the stop and thread in, using the 4mm allen wrench (provided). Tighten the bolt just enough to hold the stop against the stop catch, but leave it loose enough for the stop to freely fall when not held by the catch.

Steps 7 & 8

Pole Bracket Assembly

Pole Coupler Assembly

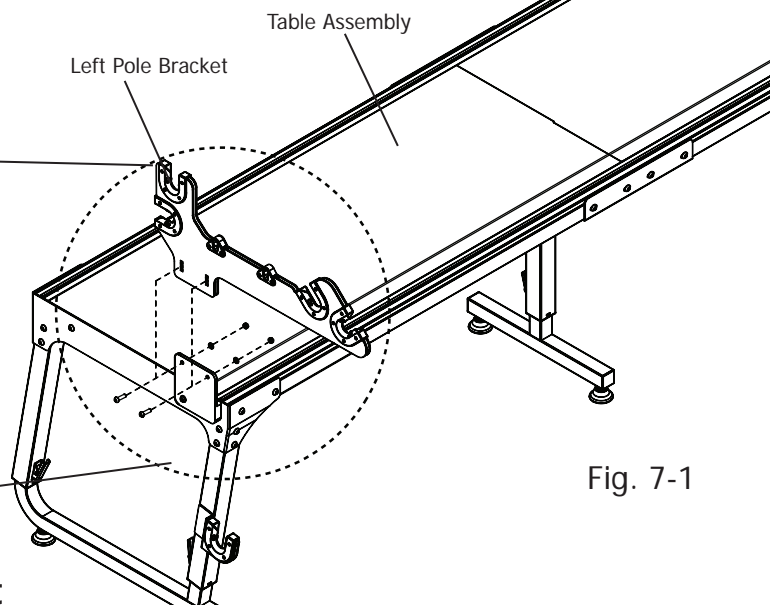
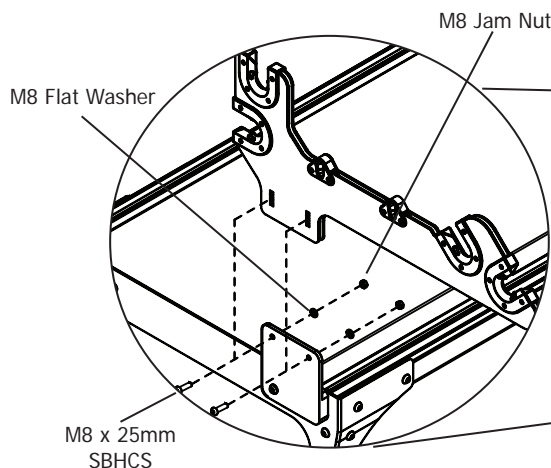


Fig. 7-1



NOTE:

If you are assembling a four foot (4') frame, you may skip **Step 8** and proceed to **Step 9**.

Step 7: Pole Bracket Assembly

Parts needed

- 1- Table Assembly
- 1- Right & Left Pole Bracket
- 4- M8 x 25mm SBHCS
- 4- M8 Flat Washer
- 4- M8 Jam Nut

Tools Required

- 13/16 mm Wrench (Provided)

7-1: Attach the left pole bracket to the frame using two (2) M8 x 25mm SBHCS. Thread the screws through the second hole from the bottom of the pole bracket. On the end of each screw, slide a flat washer followed by jam nut, as shown on in Fig. 7-1.

7-2: Repeat **step 7-1** to attach the right pole bracket, making sure the black plastic ratchet levers are on the inside of the frame.



NOTE:

Your frame comes with 15 pole sections, which enable you to create 5 completed pole assemblies (the 4-foot size uses five pole sections, 8-foot uses 10 pole sections and 5 couplers, and the 12-foot uses all 15 pole sections and all 10 couplers).

Step 8: Pole Coupler Assembly

Parts needed

- 10- Pole Couplers (smaller diameter, silver-colored poles, approximately 24" in length, with a snap button on each end)
- 7- Pole Ends Assemblies
- 3- Ratchet Wheel Ends Assemblies
- 5- Pole Segments

8-1: To join two (or three) pole sections together, attach a pole

coupler by sliding it inside the pole, depressing the spring button as it slides in. Continue sliding until the spring button pops out of the hole in the pole. Repeat this step for five sets of poles. Fig. 8-1.

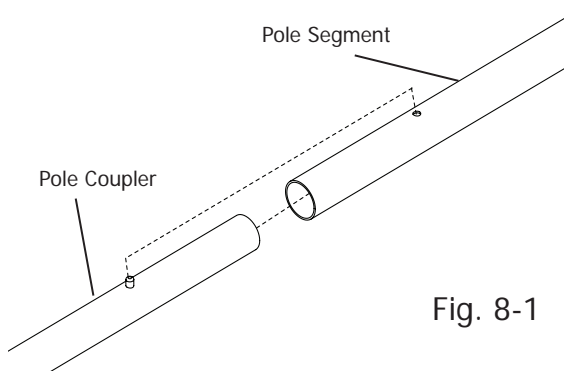


Fig. 8-1

Step 9

Pole End Assembly (including Ratchet Wheel, Handwheel)

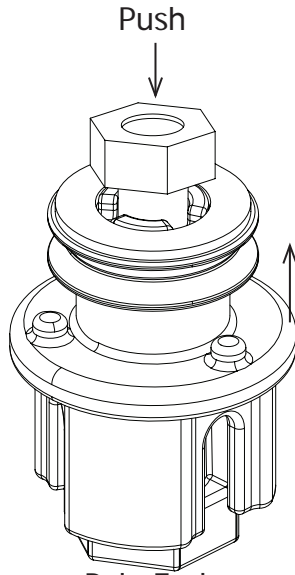


Fig. 9-1

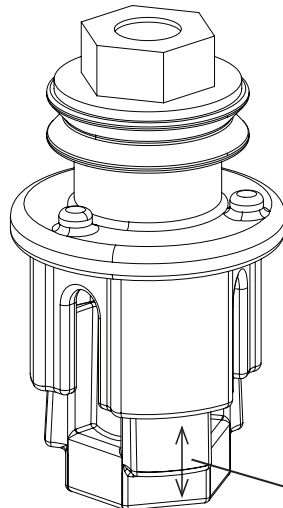
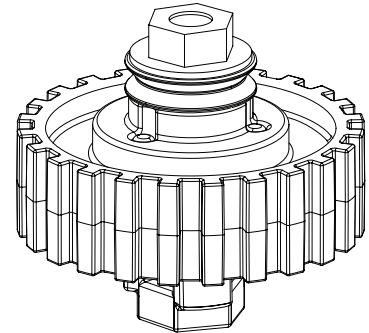


Fig. 9-2

NOTE: if the bolt pushes out, leaving the plastic piece inside, you will need to gently pry the plastic piece out, using a flat-bladed screwdriver.



Short Bolt Ratchet Wheel Fig. 9-3

Step 9: Pole End Assembly

NOTE: You will assemble five poles.

1. All five poles will have at least one pole end.
2. Two will have a pole ends on each end.
3. Two will have one pole end and one short bolt ratchet wheels on each end.
4. One will have a pole end on one end and the long bolt ratchet wheel and the handwheel on the other end.

Parts needed

- 5- Pole Assemblies
- 7- Pole Ends
- 2- Short Bolt Ratchet Wheel Assemblies
- 1- Long Bolt Ratchet Wheel Assemblies
- 1- Handwheel

Tools Required

- 13/16 mm Wrench (Provided)

9-1: You will assemble **one Pole End** to one end of **each** of your five pole assemblies.

9-2: Holding onto the ratchet wheel, (or in the case of the pole end, the outer plastic piece) push the end of the bolt toward the bolt head, until the plastic pieces expand out (the inside piece will slide out, as shown in Fig. 9-2). Sometimes the bolt slides out, leaving the plastic piece inside. In this case, you will need to pry the plastic out, using a flat-bladed screwdriver.

9-3: Repeat **Step 9-2** for all **Ratchet Wheel** assemblies (Fig. 9-3) and pole ends (Fig. 9-1).

9-4: Fit one of the pole ends into the end of a pole section, as shown in Fig. 9-4, with the nut and bolt end facing away from the pole.

9-5: Completely tighten the nut using the 13/16 mm wrench.

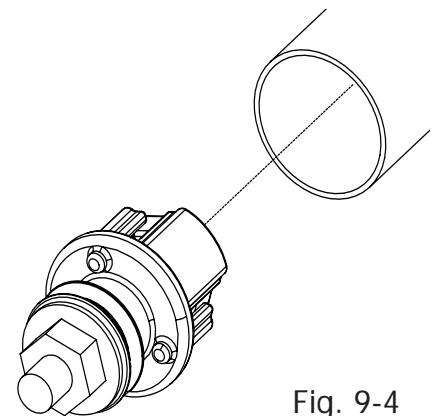


Fig. 9-4

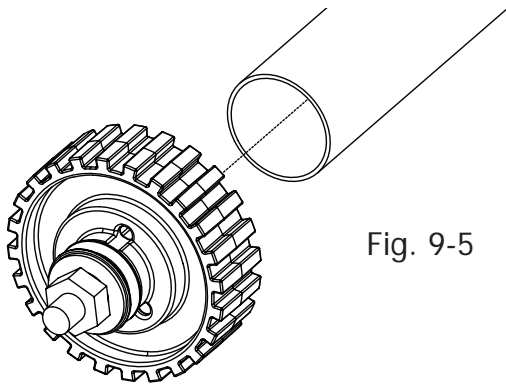


Fig. 9-5

9-6: Follow **Steps 9-4 and 9-5** for the remaining 4 pole ends and pole assemblies.

9-7: Now attach remaining pole ends (2) and short bolt ratchet wheel assemblies (2) to the opposite ends of four pole assemblies. To attach your ratchet assemblies, follow **Steps 9-4 and 9-5** and see Fig. 9-5. Proceed until your completed poles look like Fig. 9-6 above. Two poles will have a Pole End on each end. Two poles will have one Pole End and one Short Bolt Ratchet Wheel on each end.

Handwheel Assembly

9-8: Next assemble your long bolt ratchet wheel assembly by removing the nut and small and large washers off the end of the long bolt ratchet assembly bolt, but discard the small washer.

9-9: Slide the handwheel onto the bolt followed by the washer and slightly tighten the nut.

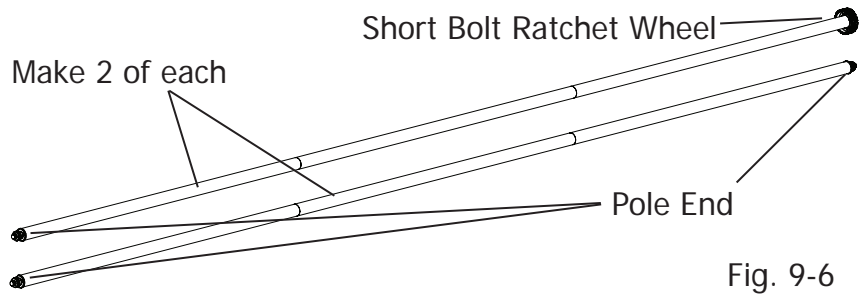


Fig. 9-6

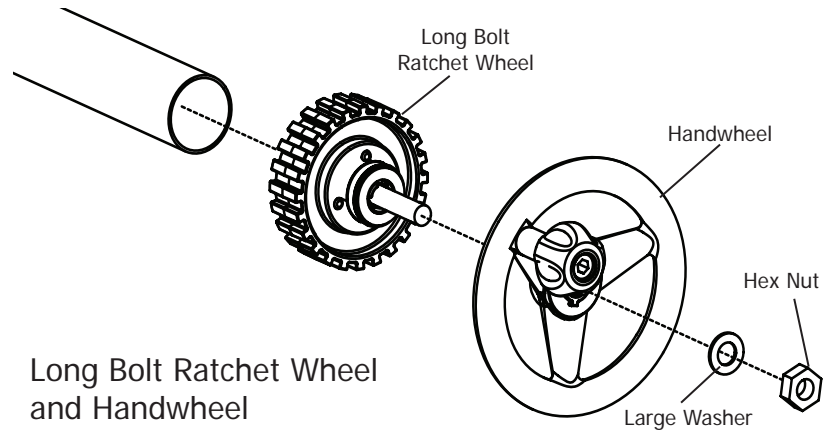


Fig. 9-7

9-10: Holding onto the ratchet wheel, push the end of the bolt with the nut toward the bolt head, until the plastic pieces expand out (as you did in **Step 9-2**).

9-11: Slide the long bolt ratchet wheel assembly into the remaining pole assembly, as shown in Fig. 9-7. The pole will look like Fig. 9-8 below.

9-12: Tighten the nut on the end of the long bolt ratchet wheel using the 13/16 mm wrench.

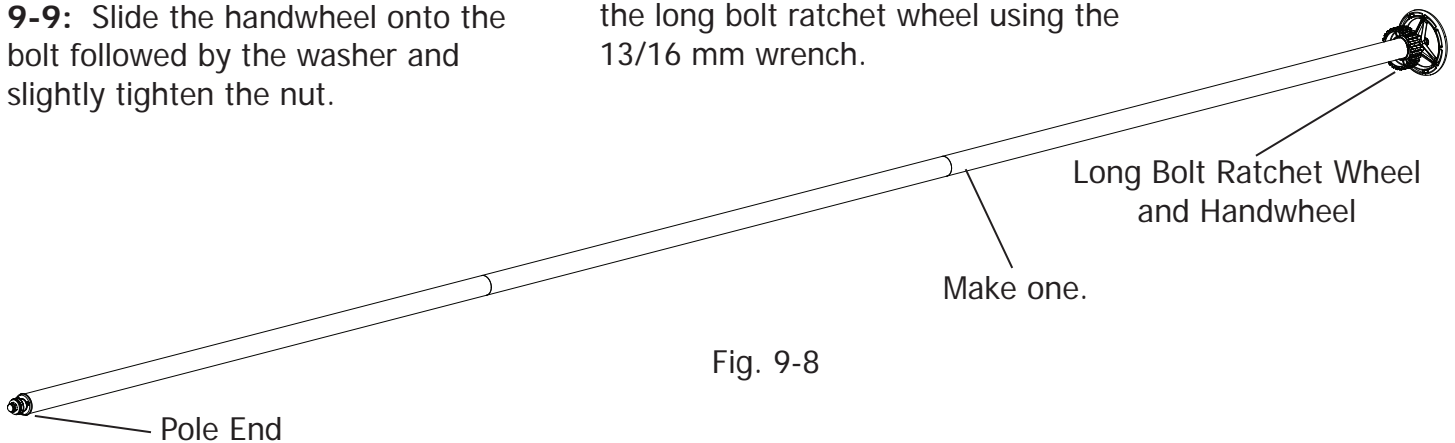


Fig. 9-8

Steps 10 & 11

Pole to Frame Assembly

Rubber End Cap Assembly

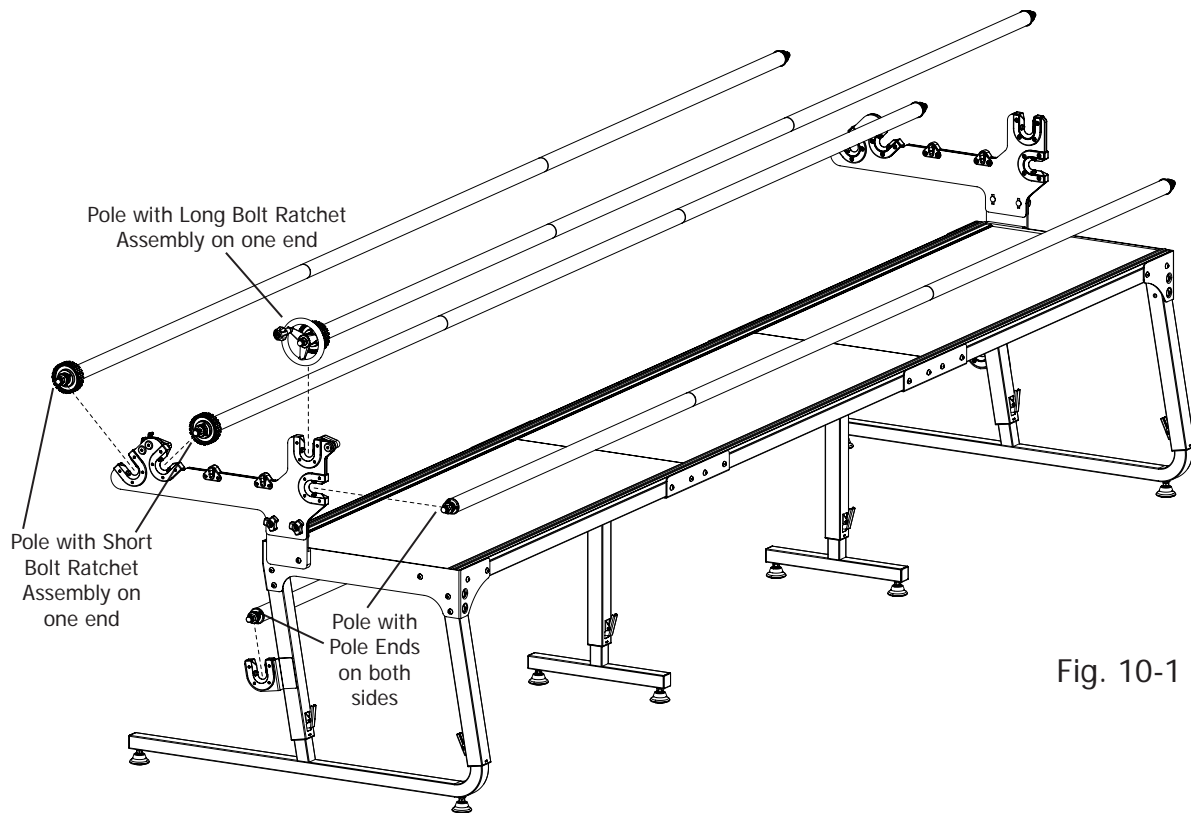



Fig. 10-1

Step 10: Pole to Frame Assembly

Parts needed

- 1- Frame Assembly
- 5- Pole Assemblies

10-1: Place the poles on the frame, as shown in Fig. 10-1.

 **Note:** The poles will snap past the plastic fingers, which are shown in Fig. 10-2.

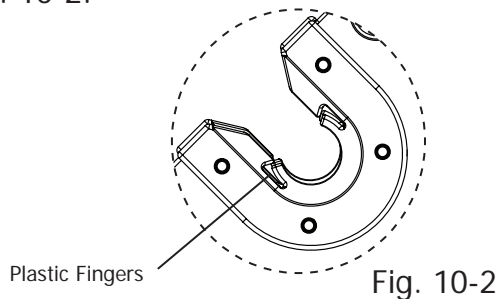


Fig. 10-2

Step 11: Rubber End Cap Assembly

Parts needed

- 1- Frame Assembly
- 10- Rubber End Caps

11-1: Slide one (1) rubber end cap onto the end of each bolt, as shown in Fig 11-1, sticking out of your pole ends, short bolt ratchet assemblies and your long bolt ratchet assembly.

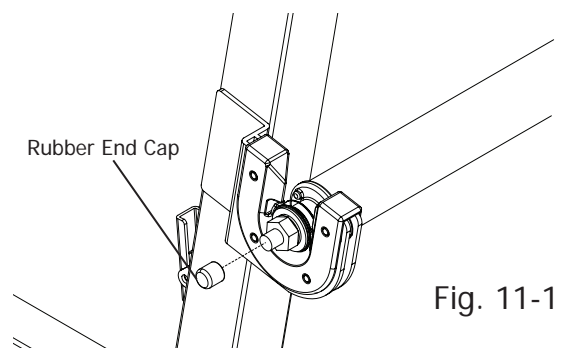


Fig. 11-1

Steps 12 & 13

Optional Velcro™ Attachment Bungee Clamp Assembly

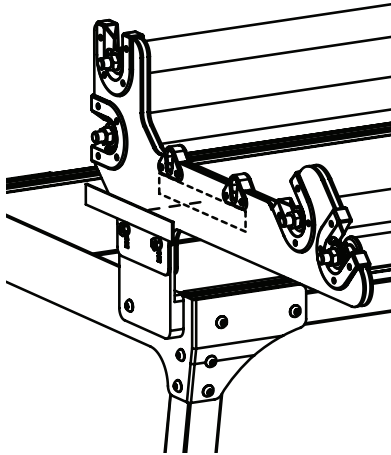


Fig. 12-1

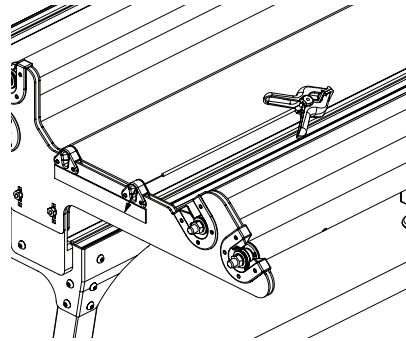


Fig. 13-1


Step 12: Optional Velcro™ Attachment Assembly

Parts needed

- 1- Frame Assembly
- 2- Velcro™ Strip

12-1: Start from one side of the Velcro™ strip and remove about 1/2 of the protective paper and then place the sticky side right below the bungee clamps and press the Velcro™ firmly to the frame. Remove the remainder of the protective paper and press the Velcro™ down.

12-2: Follow **Step 12-1** for the other velcro strip.

 **Note:** Handi Quilter has provided the Velcro™ strips for use with clamps that have Velcro™-style straps such as those provided with the HQ Pro-Frame. Only Bungee-style clamps have been provided with the HQ Studio Frame, but the Velcro™ strips have been provided for your convenience.

Step 13: Bungee Clamp Assembly

Parts needed

- 1- Frame Assembly
- 4- Bungee Clamps

13-1: Thread the bungee cord through the bungee slot and then pull the cord in a downward movement to lock the bungee clamp in place.

13-2: Follow **Step 13-1** for the other three bungee clamps.

Steps 14 & 15

Velcro™ on Poles Assembly

Attach Leaders

Step 14: Velcro™ on Poles Assembly

Parts needed

3- Poles with Ratchets
3- 12 foot Velcro Strips

Tools Required

Measuring tape or ruler
Scissors

14-1: Prepare to attach the Velcro™ to the poles by measuring in 6" from each end of the frame. Peel the backing off the Velcro™ and apply to all three rollers with ratchets starting at the 6" mark and ending at the opposite 6" mark.

Once the Velcro™ has been adhered from one end of the poles to the other, it can be clipped where the poles meet in the middle.

Step 15: Attach Leaders

Parts needed

1- Frame Assembly with Velcro™ applied to Poles
3 -Leaders



NOTE: The leaders provided with the HQ Studio Frame are sized for the 12' frame. If you are setting your frame up permanently at the 8' or 4' length, you may cut the leaders to fit.

15-1: Measure the leaders to fit the length of the Velcro™ on the poles and cut to fit.

Attach the leaders to the Velcro™ on the first and second poles so they hang to the center between the poles.

Attach the rear leader so it falls to the back of the pole.

15-2: Your HQ Studio Frame is now completely set up. Refer to the DVD that came with your HQ quilting machine for instructions on loading the quilt on the frame.



NOTE:

Take care to stick the Velcro™ on straight. This step will determine how well your quilts load in the future. Use the Spring Coupler Snap Buttons as a guide when aligning the Velcro™ for best results. Attach Velcro from button to button, cutting and restarting as you go.

Step 15

Attach Leaders

Step 15: Attach Leaders

Parts needed

- 1- Frame Assembly with Velcro™ applied to Poles
- 3 -Leaders



NOTE: The leaders provided with the HQ Studio Frame are sized for the 12' frame. If you are setting your frame up permanently at the 8' or 4' length, you may cut the leaders to fit.

15-1: Measure the leaders to fit the length of the Velcro™ on the poles and cut to fit.

Attach the leaders to the Velcro™ on the first and second poles so they hang to the center between the poles.

Attach the rear leader so it falls to the back of the pole.

15-2: Your HQ Studio Frame is now completely set up. Refer to the DVD that came with your HQ Sixteen for instructions on loading the quilt on the frame.



NOTE:

Take care to stick the Velcro™ on straight. This step will determine how well your quilts load in the future. Use the Spring Coupler Snap Buttons as a guide when aligning the Velcro™ for best results. Attach Velcro from button to button, cutting and restarting as you go.