

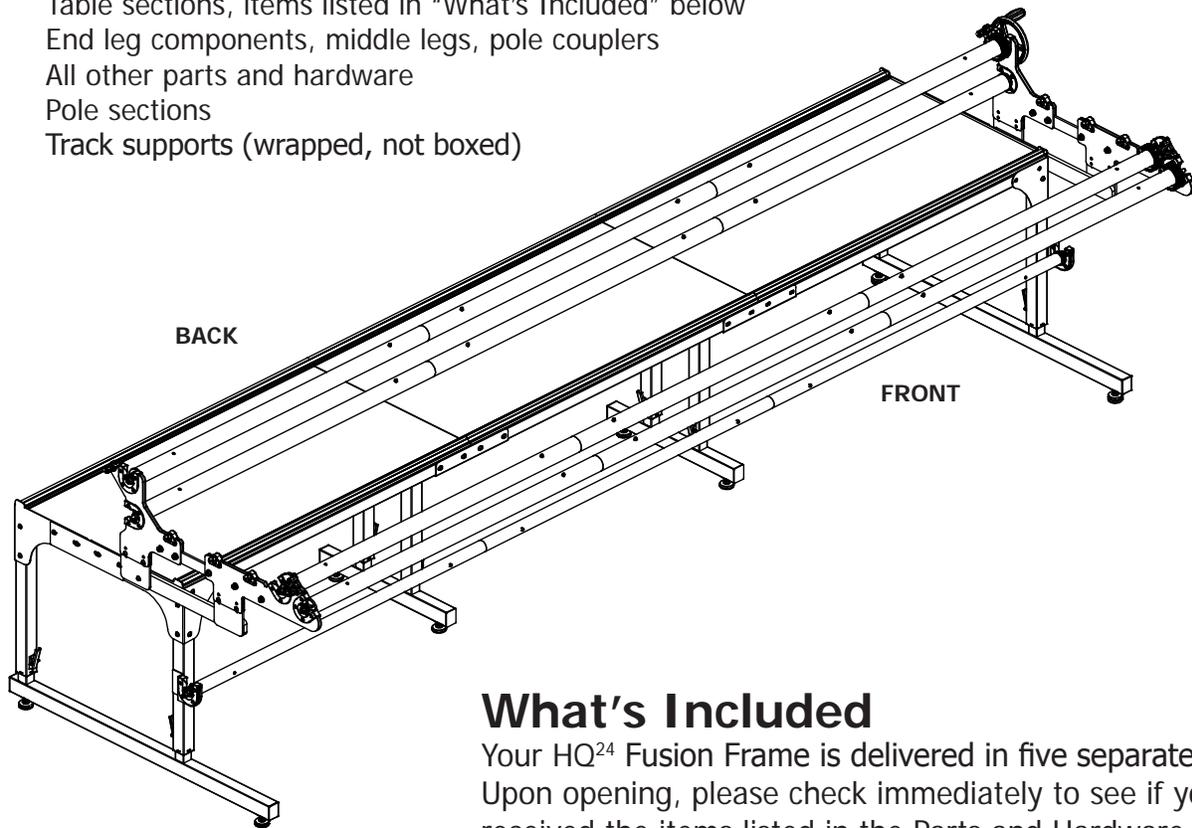


HQ²⁴ Fusion Frame

Assembly Instructions

HQ²⁴ Fusion Frame Box Contents

Box #	Parts (See pages 2 & 3 for descriptions and quantities)
1	Table sections, items listed in "What's Included" below
2	End leg components, middle legs, pole couplers
3	All other parts and hardware
4	Pole sections
5	Track supports (wrapped, not boxed)



What's Included

Your HQ²⁴ Fusion Frame is delivered in five 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 3 and 4. In addition, the following items will be found in Box 1:

1. This Manual
2. (3) HQ Marked Leaders
3. (3) Velcro® strips to attach leaders to poles

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

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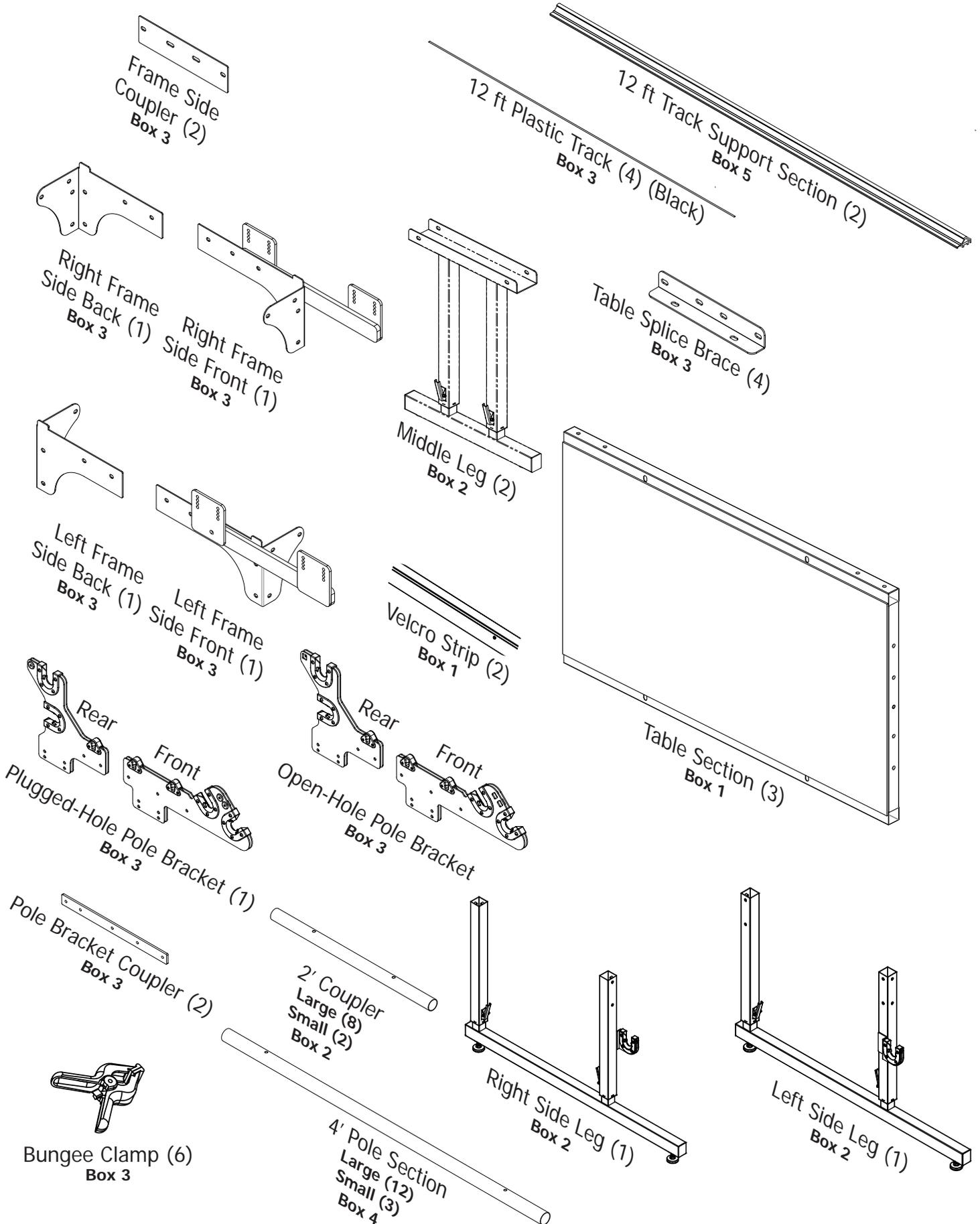
Visit <http://www.HandiQuilter.com>

HQ²⁴ Fusion Frame Assembly 1

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HQ²⁴ Fusion Frame Parts List

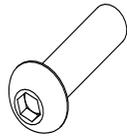


HQ²⁴ Fusion Frame Hardware List

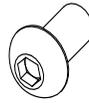
These parts found in Box #3



Rubber End Cap (10)



M8 x 25mm Socket Button Head Cap Screw (SBHCS) (18)



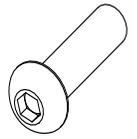
M8 x 16mm Socket Button Head Cap Screw (SBHCS) (64 total)



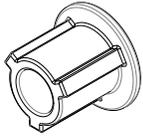
M8 Lock Nut (18)



M8 Flat Washer (18)



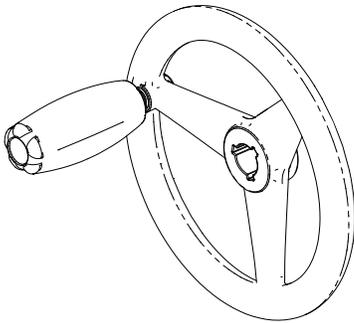
M8 x 35mm Socket Button Head Cap Screw (SBHCS) (2)



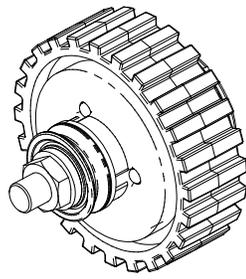
Hand Wheel Insert (1)
May be preassembled with Hand Wheel.



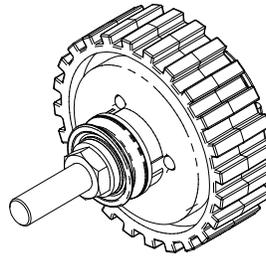
M6 x 12mm Connector Screw (12 total)



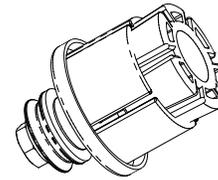
Hand Wheel (1)



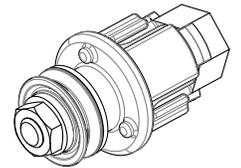
Short Bolt Ratchet Wheel Assembly (2)



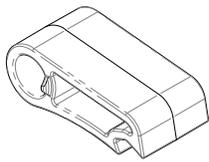
Long Bolt Ratchet Wheel Assembly (1)



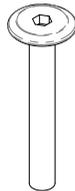
Large Pole End (5)



Small Pole End (2)



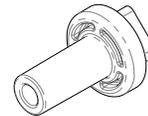
Ratchet Stop Latch (3)



M6 x 45mm Connector Screw (3)



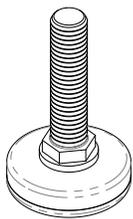
Ratchet-Stop Mount (3)



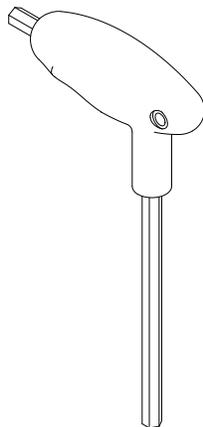
Ratchet-Stop Bushing (3)



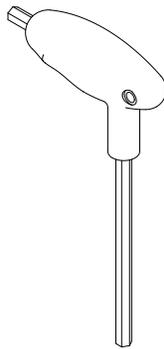
Ratchet-Stop Holder (3)



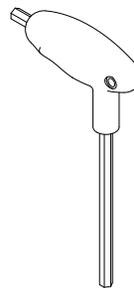
Leveling Foot (8)



5mm Allen Wrench (1)



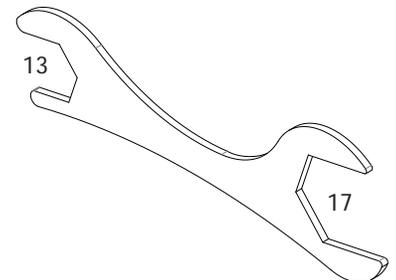
4mm Allen Wrench (1)



3mm Allen Wrench (1)



M10 Regular Nut (1) See Note page 18



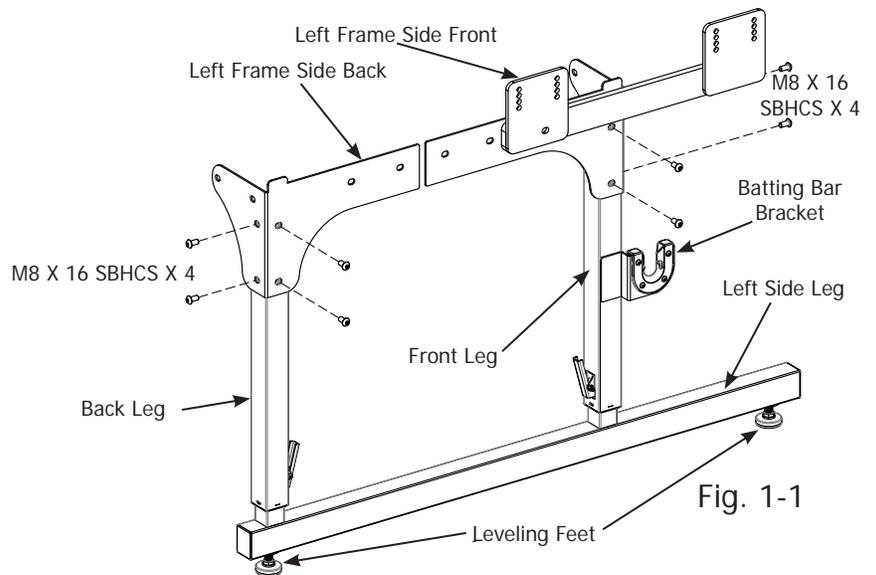
13/17 mm Wrench (1)

Step 1

Frame Side Assembly

Note: Assembly is easiest if all connections are finger-tightened first as instructed, while assembling the frame. Tighten with the wrench when instructed.

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



Step 1: Frame Side Assembly

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

This will facilitate height adjustment of the frame in **step 17**.

Remember that the batting storage pole bracket needs to be on the outside of the leg. (Fig. 1-1)

Parts needed

- 1-Right Side Leg
- 1-Left Side Leg
- 1-Right Frame Side Front
- 1-Left Frame Side Front
- 1-Right Frame Side Back
- 1-Left Frame Side Back
- 4-Leveling Foot
- 16-M8X16mm 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: Attach the left frame side back onto the side leg with two (2) M8x16mm SBHCS screws into the back of the back leg. Next install two (2) more M8 x 16mm SBHCS screws into the side of the back leg. Finger-tighten the screws only for now. You will tighten the screws with an Allen wrench later in **step 4-9**.

1-3: Attach the left frame side front onto the side leg using two (2) M8 x

16mm SBHCS screws into the front of the front leg. Next install two (2) more M8 x 16mm SBHCS screws into the side of the front leg. Finger-tighten the screws only for now. You will tighten the screws with an Allen wrench later in **step 4.9**.

1-4: Repeat **steps 1-1 through 1-3** to complete the right side leg.

Step 2 Table Assembly

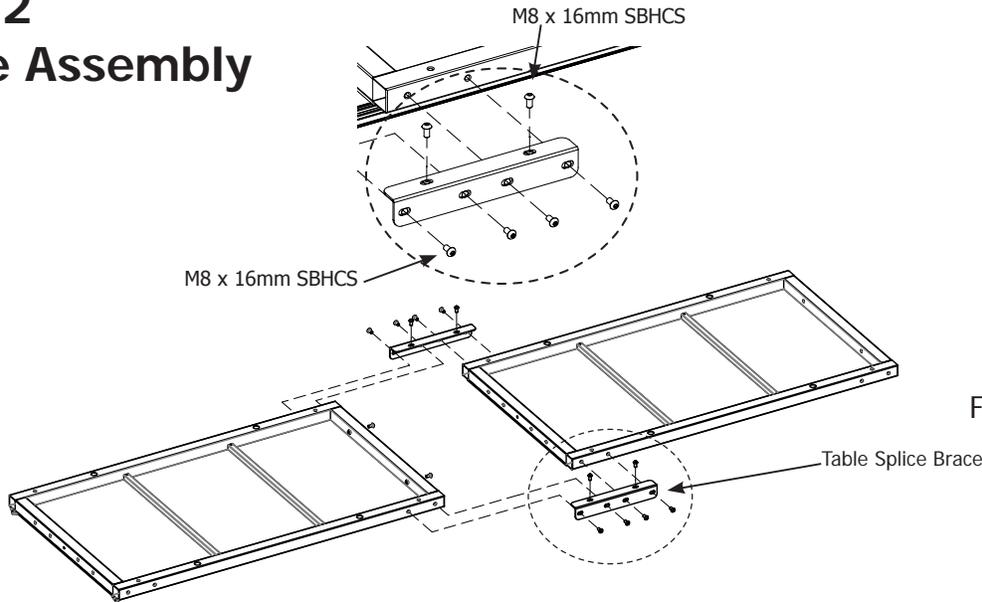


Fig. 2-1

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.

NOTE: Remember to finger-tighten all screws first. Once all are in place, then tighten using the 5mm Allen wrench (provided) as instructed.

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: First, lay two table sections upside-down on the floor, end to end, close 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) Fig 2-1.

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

2-3: To complete the 12' table assembly, assemble the third section by repeating steps 2-1 and 2-2 using the third table section.

2-4: Pull the table sections as close together as possible to remove gap. (This will facilitate assembly of the middle legs in **step 3**)

2-5: Using the 5mm Allen wrench, tighten the four side screws on each table splice brace, until the brace touches the side of the table frames and then loosen the screws 1/2 turn.

2-6: Tighten fully the two (2) top screws on each table splice brace, using the 5mm Allen wrench. Now, fully tighten the 4 screws on the side of each table splice brace with the 5mm Allen wrench. All 24 screws should now be tightened.

Step 3 Attaching Middle Leg To Table

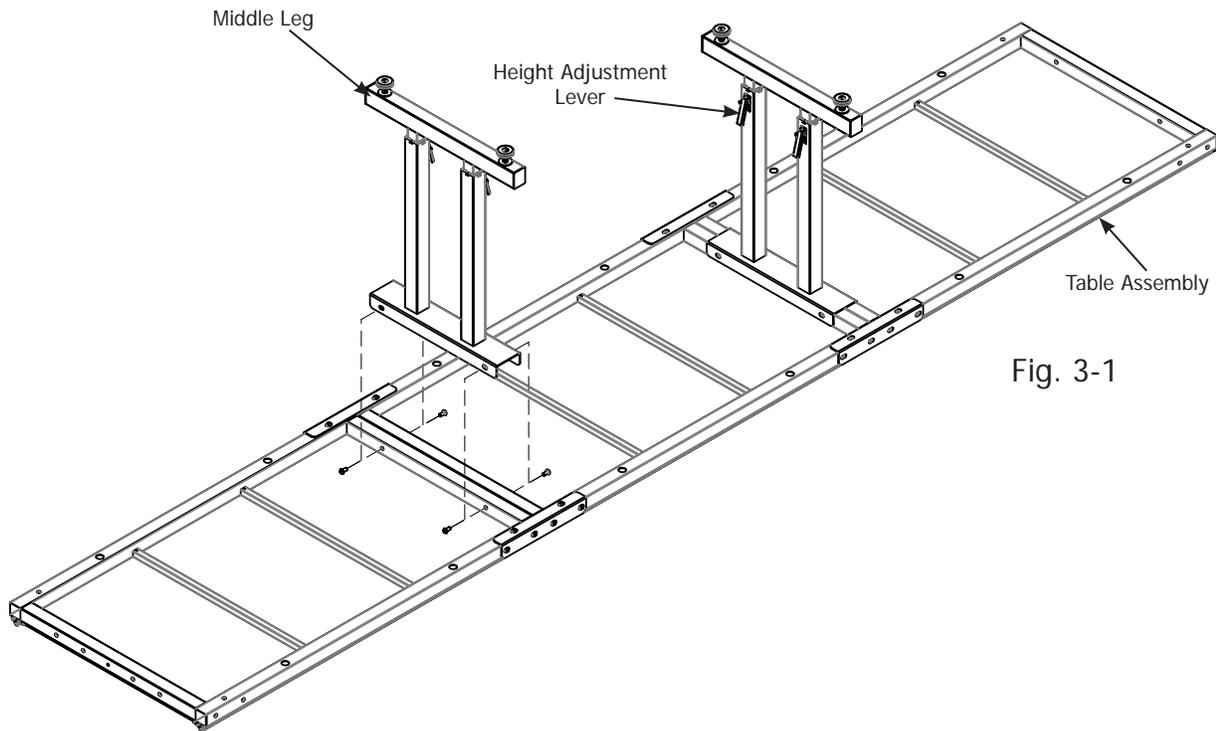


Fig. 3-1

Note: If instructions were carefully followed in Section 2, there should be minimal gap between the table sections where the sections meet. The middle leg/s should slide over the two table section end tubes easily. Check to ensure that all table splice brace screws are tightened before tightening the four middle leg screws.

Step 3: Attaching Middle Leg To Table

Parts needed

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

Tools Required

- 5mm Allen Wrench (Provided)

3-1: Install two (2) leveling feet into the middle leg.

3-2: Place the middle leg assembly over the joined table sections, making sure the height adjustment levers are facing into the center of the frame as shown in Fig 3-1.

3-3: Attach the middle leg using four (4) M8 x 16mm SBHCS.

3-4: While pushing down on the leg, fully tighten the four (4) screws. All middle leg screws should now be fully tightened.

3-5: Repeat steps 3-1 through 3-4 to attach the remaining middle leg. Be sure middle legs are set at the lowest settings.

This will facilitate height adjustment of the frame in **step 17**.

Step 4 Attaching Frame Sides to Table

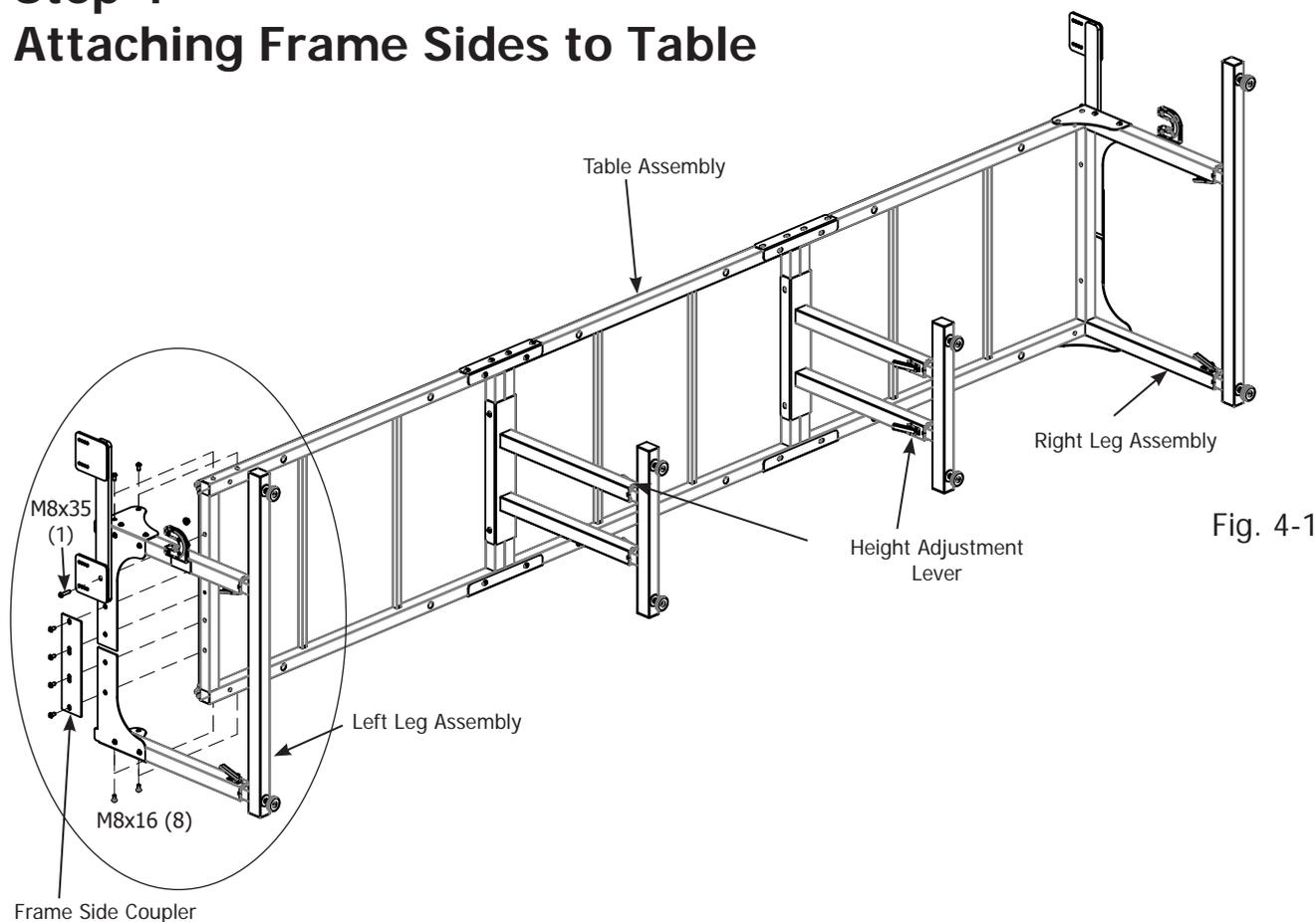


Fig. 4-1

 **Note:** Finger-tighten screws only until all screws are in place. They will be tightened after the table is up-righted once again. See **step 4-9**.

Step 4: Attaching Frame Sides to Table

Parts needed

- 1-Table Assembly
- 1-Right Leg Assembly
- 1-Left Leg Assembly
- 2- Frame Side Couplers
- 2- M8 x 35mm SBHCS
- 16- M8 x 16mm SBHCS

Tools Required

- 5mm Allen wrench (provided)
- Spirit level (not provided)

4-1: In preparation for attaching the left and right leg assemblies to the table, turn the table on its side, as shown in Fig. 4-1.



Note:

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

This will facilitate height adjustment of the frame in **step 17**.

4-2: Slide the left leg assembly under the table assembly.

4-3: Starting at the top left corner, screw two (2) M8 x 16mm SBHCS down through the top corner Left Frame Side Front piece into the table as shown in Fig 4-2, finger-tighten only.

4-4: Align the Frame Side Coupler to the holes in the Left Frame Side Front and the Left Frame Side Back and screw four (4) screws through the Coupler, the Frame Side and into the Table section as shown in Fig 4-2.

4-5: Repeat **steps 4-2** through **4-4** for the Right Leg Assembly.

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

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

4-8: Screw a long M8 x 35mm SBHCS through the thick metal plates and into the remaining hole on each end of the frame. (Fig. 4-2)

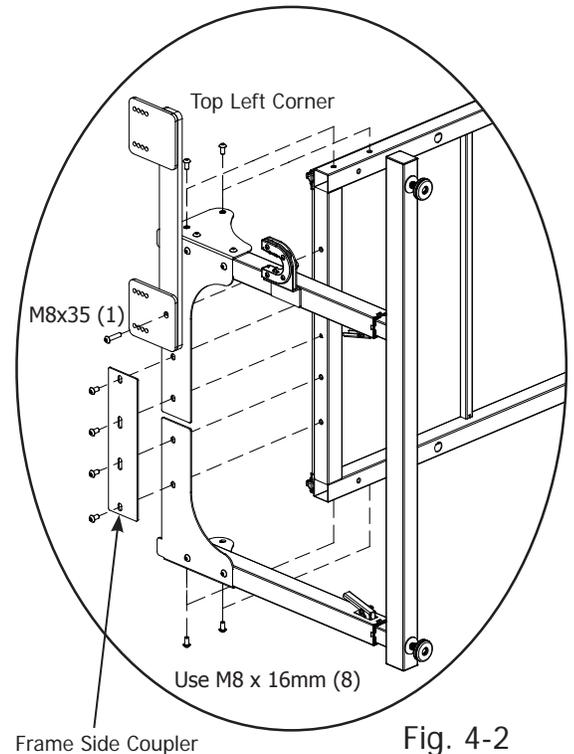
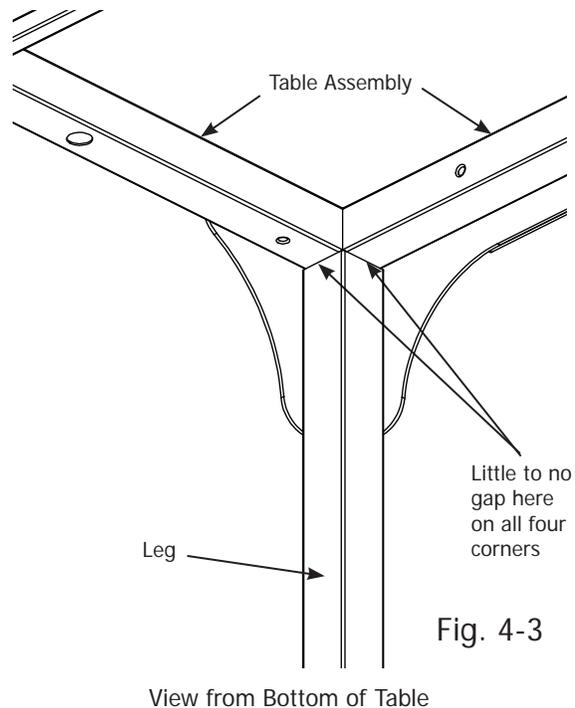


Fig. 4-2

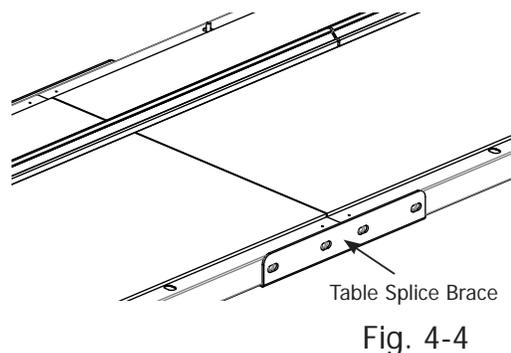
Step 4

Attaching Frame Sides to Table (continued)

4-9: Next, ensure that the table assembly is down on top of the left and right leg assemblies, at all four corners, by applying the appropriate pressure or support, (there should be little to no gap between the bottom of the table assembly and the top of each leg) (Fig 4-3). Now using the 5mm Allen wrench, fully tighten the four screws at each corner to the table assembly and the long screw through the heavy metal piece (nine screws per end). Also tighten the four screws at each frame side to each leg at this time (eight more screws per end). If necessary have a second person help check and hold this while tightening the screws.



4-10: Make sure the end and middle legs are set to the same height. Using a spirit level, check and adjust the frame top to be level in the place where it will be used, both front to back and side to side, by adjusting the leveling feet. Double-check the table top frame to ensure it is flat at each splice brace and not sagging or high at the joints (Fig 4-4). If no spirit level is available, check the table with the machine on the carriage and the Precision-Glide tracks after they are installed in Step 5 and adjust appropriately. When the table is level, the machine should stay where you put it and not roll forward, back or side-to-side.



Step 5 Precision-Glide Track Assembly

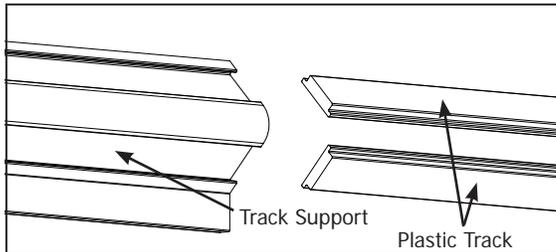


Fig. 5-1

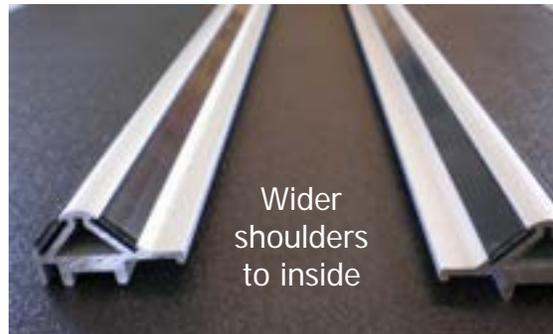


Fig. 5-2

 **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 over the edge of the black plastic tabletop. (Fig. 5-2 & Fig. 5-3)

Step 5: Precision-Glide Track Assembly

Parts needed

2- 12' Precision Glide Track Support
4- 12' Plastic Tracks
12-M6 x 12mm SBHCS track support hold-down screws

Tools Required

4mm Allen wrench (Provided)

5-1: Insert a 12' plastic track completely into each side of the aluminum track support. The plastic tracks should slide into the track support easily. If a plastic track binds slightly, try backing it out a little, then try pushing it further. If the plastic track binds badly check the track support for debris, burrs, or damage. (Fig. 5-1)

5-2: Repeat step 5-1 for the second track assembly.

5-3: 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, using six (6) M6 x 12mm connector screws, with wide shoulders to the inside as shown in Fig. 5-2 & Fig. 5-3. **Do not tighten screws at this time.** They need to be loose to accommodate adjustments in Step 5-6.

5-4: In same manner, attach the remaining track support to the front of the frame using six (6) M6 x 12mm connector screws.

5-5: 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, taking care to check that the wheels are engaging the track on both the front and the back of the carriage. Move both tracks in tandem to the back of table as far as possible. (Slots in the tables allow this movement.) Double-check that the back track is straight along the back edge of the table. Fully tighten the screws in the BACK track only for now.

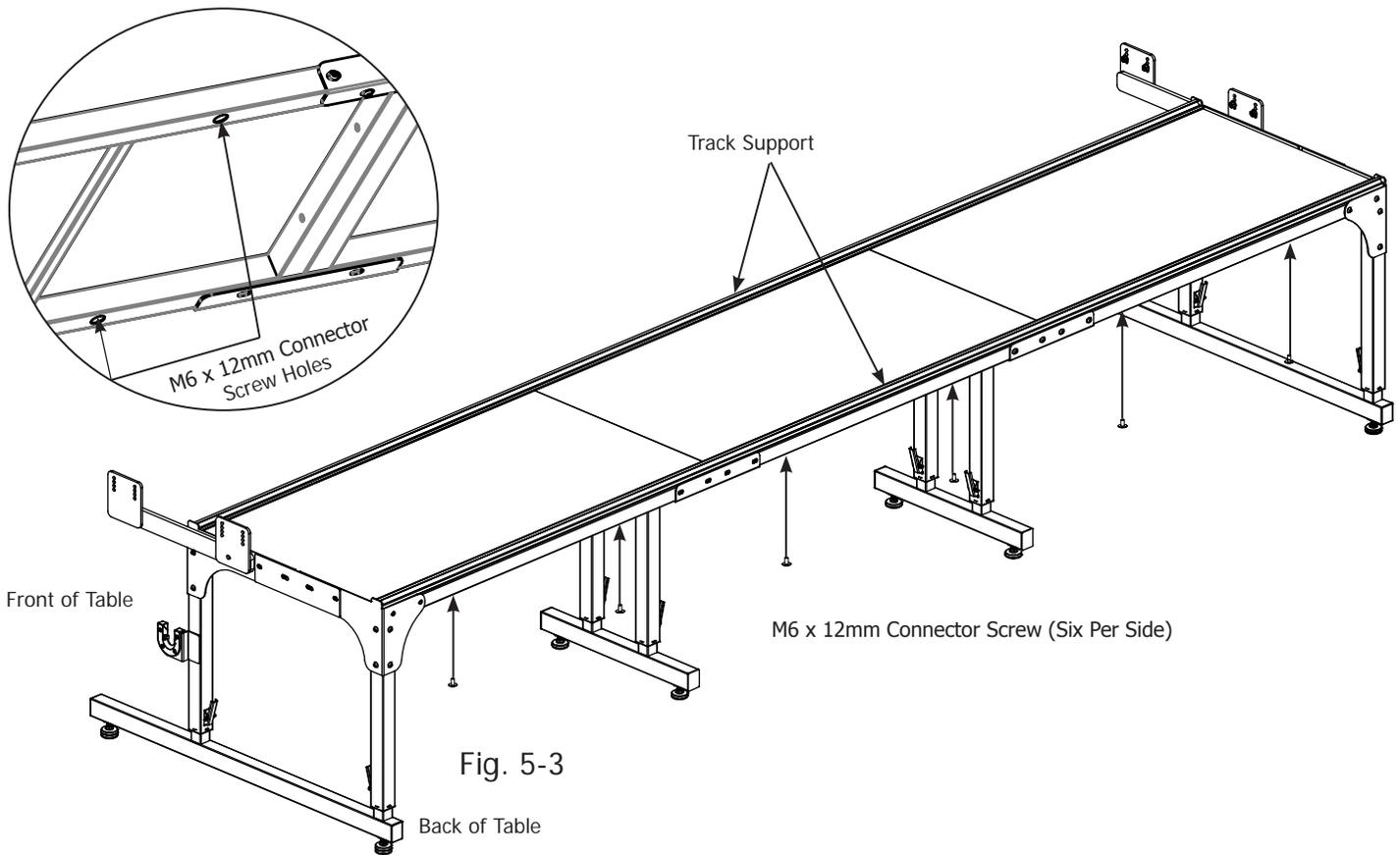


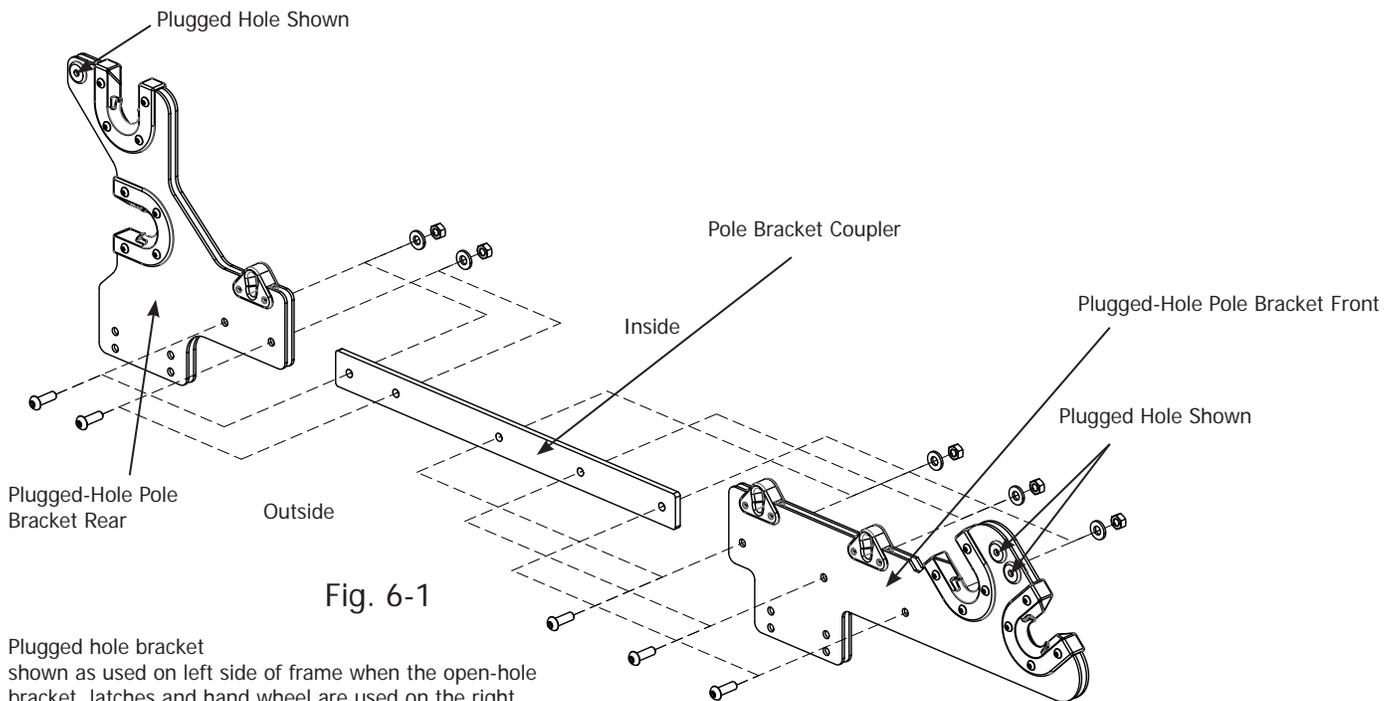
Fig. 5-3

5-6: 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. Lightly tighten the front track support screws as you move down the table. Check the carriage to verify that it rolls smoothly 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 when moved all the way forward or back, loosen the front track support screws, and adjust the front track until the carriage rolls smoothly and does not rock, then re-tighten the front track screws.

5-7: Finally, fully tighten the front track to the table.

Step 6 Pole Bracket Assembly



Step 6: Pole Bracket Assembly

Parts needed

- 1-Open-Hole Pole Bracket Front
- 1-Open-Hole Pole Bracket Rear
- 1-Plugged-Hole Pole Bracket Front
- 1-Plugged-Hole Pole Bracket Rear
- 2-Pole Bracket Coupler
- 10-M8 x 25mm SBHCS
- 10-M8 washers
- 10-M8 lock nut

Tools Required

5mm Allen wrench and 13mm wrench

NOTE: You will find it best to tighten the screws in this step after mounting the pole bracket assemblies onto the frame mounts in **step 7-2**.

6-1: Decide whether you want the ratchet stop latches and hand wheel

to be on the left or the right side of the frame (see Note below). This will determine which direction the screws will be assembled through the open-hole pole bracket assembly and the plugged-hole pole bracket assembly. The open-hole pole bracket assembly is used for the hand wheel and latch side of the frame.

6-2: Identify the open-hole pole bracket front and rear pieces and the plugged-hole pole bracket front and rear pieces.



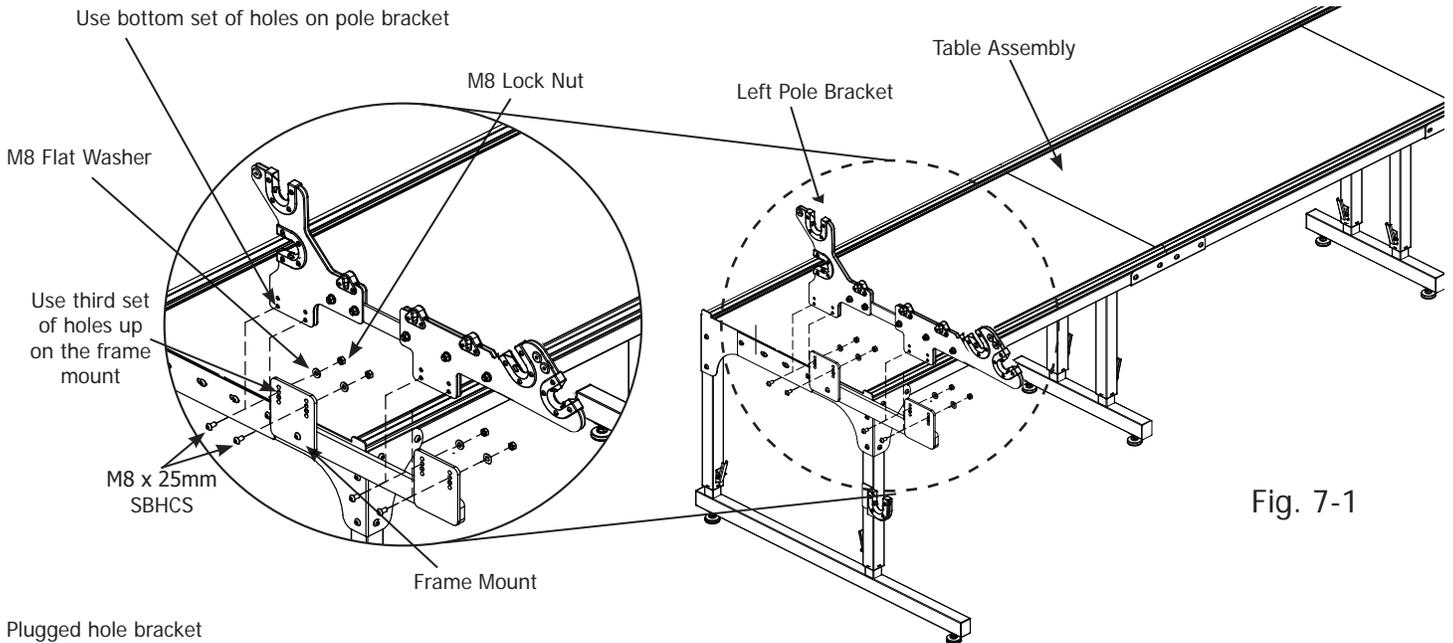
NOTE: Left-Side Hand Wheel option: If you prefer the hand wheel and ratchet stop latches on the left side of the frame, you will need to assemble the open-hole pole bracket assembly with the screws going left to right with the nuts on the inside of the pole bracket when it is positioned on the left side of the frame.

6-3: Assemble the plugged-hole pole bracket front, the pole bracket coupler, and the plugged-hole pole bracket rear using five (5) M8 x 25mm SBHCS with five (5) M8 washers and five (5) M8 lock nuts (as shown in Fig. 6-1 on previous page). Figure 6-1 shows the plugged-hole pole bracket assembly as it would appear on the left side of the frame.

The screw heads should be on the outside and the washers and nuts should be on the inside when completed and held into position on the frame. Finger-tighten the screws for now. They will be tightened later in **step 7-2**.

6-4: To assemble the open-hole pole bracket repeat **step 7-3**. The screw heads should be on the outside and the washers and nuts should be on the inside when completed and held into position on the frame. Finger-tighten the screws for now, they will be tightened later in **step 7-2**.

Step 7 Pole Bracket to Frame Assembly



Plugged hole bracket
show on left side of frame.

Step 7: Pole Bracket to Frame Assembly

Parts needed

- 1-Table
- 1-Plugged-Hole Pole Bracket Assembly
- 1-Open-Hole Pole Bracket Assembly
- 8-M8 x 25mm SBHCS
- 8-M8 Flat Washers
- 8-M8 Lock Nut

Tools Required

- 5mm Allen wrench
- 13/17mm wrench

7-1: Identify which end of the frame receives the hand wheel. The open-hole pole bracket assembly will be placed on that end. Slide the plugged-hole pole bracket assembly down over the two metal frame mounts on the remaining end of the table. The pole bracket should straddle the two frame mounts.

Attach the plugged-hole pole bracket assembly to the frame using four (4) M8 x 25mm SBHCS. Thread the screws through the bottom set of screw holes on the pole bracket assembly and into the third set of holes from the bottom of the frame mount. The screws should be threaded from the outside of the frame to the inside of the frame. On the end of each screw, slide a flat washer followed by a lock nut (as shown in Fig. 7-1).

7-2: Fully tighten the four (4) screws with the 13/17mm wrench and the 5mm Allen wrench provided. Next, fully tighten the five (5) screws on the plugged-hole pole bracket assembly that were finger-tightened on from **step 6-3**.

7-3: Repeat **step 7-1** and **step 7-2** to attach the open-hole pole bracket assembly.

Step 8 Ratchet Stop Assembly

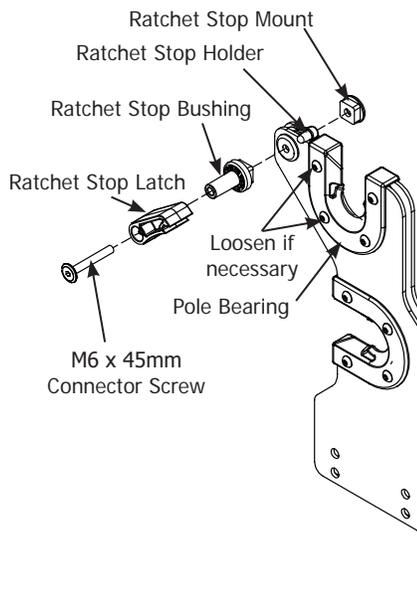
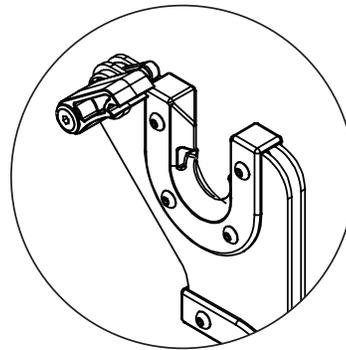
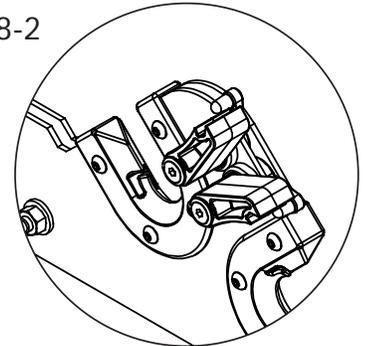


Fig. 8-1

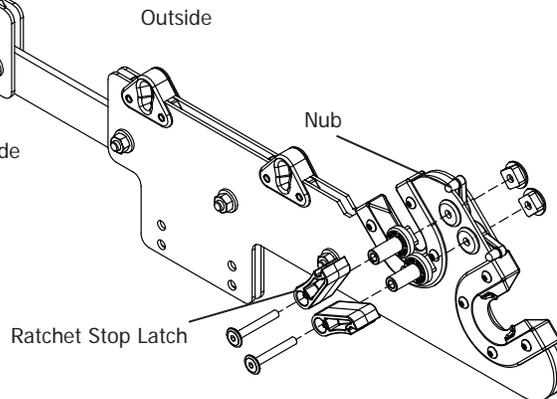
Shown with ratchet stop latches assembled on right pole bracket for handwheel on right side.



Assembled Ratchet Stop Shown



Assembled Ratchet Stop Holders Shown



NOTE: If setting frame up with hand wheel on the left side of frame, reverse position (switch sides) of pole brackets. The ratchet stop latch assemblies will also need to be switched back to the inside.

Step 8: Ratchet Stop Assembly

Parts needed

- 1-Open-Hole Pole Bracket Assembly
- 3-M6 x 45mm Connector Screw
- 3-Ratchet-Stop Latch
- 3-Ratchet-Stop Bushing
- 3-Ratchet-Stop Holder
- 3-Ratchet-Stop Mount

Tools Required

- 4mm Allen wrench (Provided)

8-1: Place one ratchet-stop holder between the two metal pieces at the back of the open-hole pole bracket assembly, with the stop nub facing inside, as shown in Fig. 8-1. If the ratchet-stop holder will not fit, loosen the two bearing screws nearest the square hole. Slide in the ratchet-stop

holder and re-tighten the bearing screws when finished.

8-2: Following the parts order in Fig. 8-1, thread one M6 x 45mm connector screw through a ratchet-stop latch, ratchet-stop bushing, pole bracket (with ratchet-stop holder inserted) and finally into the ratchet-stop mount. Pay close attention to orientation of the ratchet-stop. Tighten with the 4mm Allen wrench until the ratchet-stop holder nub holds the ratchet-stop. (see Fig. 8-2).

8-3: In same manner, attach the remaining ratchet-stop latches and ratchet-stop holders to the front of the open-hole pole bracket assembly, paying attention to the orientation of the ratchet-stop latches (Figs. 8-1 and 8-2).

Step 9 Pole Assembly

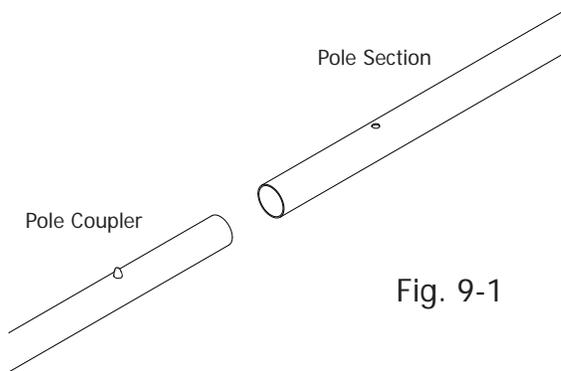


Fig. 9-1

Step 9: Pole Assembly

Parts needed

- 12-Large Pole Sections
- 8-Large Pole Couplers
- 3-Small Pole Sections
- 2-Small Pole Couplers



IMPORTANT: Be careful when assembling poles to not pinch your hands between pole parts while sliding them together.

9-1: Join two (2) 4-foot large pole sections together by inserting a large pole coupler into the end of one pole section (as shown in Fig. 9-1), depressing the spring button as it slides in. Continue sliding until the spring button pops out of the hole in the pole section. Repeat to add the second 4-foot pole section to the first.

9-2: In same manner, add a third 4-foot pole section and coupler to section completed in **step 9-1** to complete one 12-foot pole assembly.

9-3: Using the remaining large pole couplers and large pole sections,

repeat **steps 9-1** and **9-2** to complete 3 more large pole assemblies for a total of 4 large pole assemblies.

9-4: Using the two (2) small pole couplers and three (3) small pole sections repeat **steps 9-1** and **9-2** to complete the small pole assembly. The small pole assembly is the batting storage pole.

Step 10

Adding the Pole Ends

Pole End Assembly

Step 10: Adding the Pole Ends

Parts needed

- 4-Large Poles
- 1-Small Poles
- 5-Large Pole End
- 2-Small Pole End
- 2-Short-Bolt Ratchet Wheel Assembly
- 1-Long-Bolt Ratchet Wheel Assembly

Tools Required

- 13/17mm wrench (Provided)
- 10 mm nut (Provided)

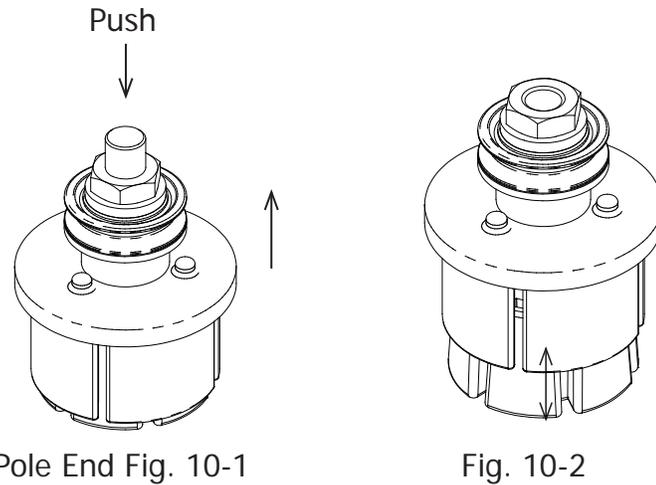
 **NOTE:** A single regular 10mm nut is provided as a tool to aid with pole end assembly if needed. This nut can be used to tighten the pole ends into the poles, then be removed and replaced with a lock nut.

Prepare Pole End For Insertion

10-1: Check one pole end to ensure that it matches Figs. 10-1 and 10-3.

10-2: Loosen the nut on the pole end until it nearly reaches the end of the bolt.

10-3: Holding onto the outside pole end, push the nut end of the bolt towards the opposite end of the assembly, until the inside pole end short bolt wedge slides out (Fig. 10-2). This makes the outside diameter of the pole end narrower and ready to be inserted into the end of the pole assembly.



10-4: Repeat **steps 10-1** through **10-3** to prepare the 5 large pole ends and the 2 small pole ends for insertion.

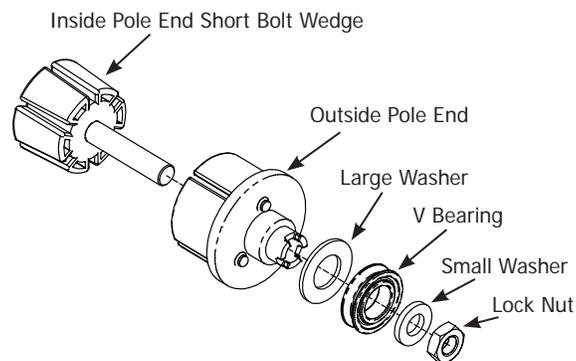


Fig. 10-3

Pole End assembly comes pre-assembled. Exploded diagram is for reference only.

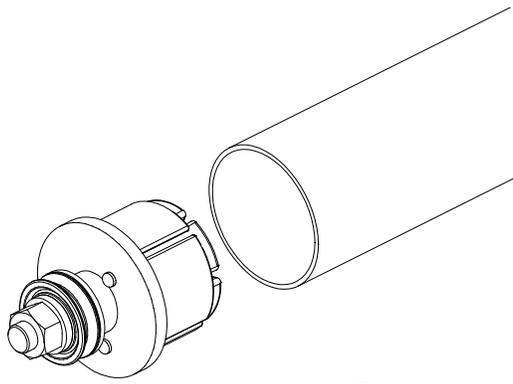


Fig. 10-4

10-5: Slide one pole end into the end of one large 12-foot pole assembly, as shown in Fig. 10-4. Check that the pole end is inserted completely into the pole assembly.

10-6: While holding pole end assembly tightly into the pole, completely tighten the nut, using the 13/17mm wrench. This will expand the outer pole end, ensuring a tight fit in the pole.

10-7: Repeat **steps 10-5** and **10-6** to add one large pole end to the remaining three (3) large 12-foot poles.

10-8: Repeat **steps 10-5** and **10-6** to add final remaining large pole end to the open end of one large 12-foot pole. Attach the two small pole ends to both ends of the small 12-foot pole assembly.

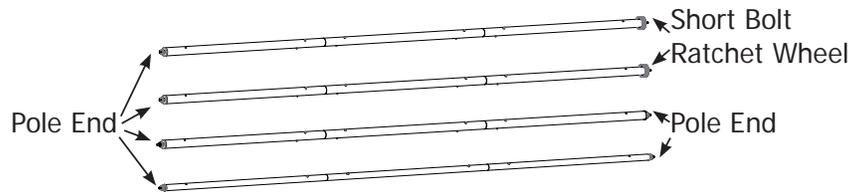


Fig. 10-5

Set the large 12-foot pole assembly aside for use as the idler pole and the small 12-foot pole assembly aside for use as the batting storage pole. (See bottom pole in Fig. 10-5.)

Prepare Short-Bolt Ratchet-Wheel for Insertion

10-9: Check the short-bolt ratchet-wheel assembly to ensure that it matches Fig. 10-6.

10-10: Loosen the nut at the end of the short-bolt ratchet-wheel assembly until it nearly reaches the end of the bolt.

10-11: Holding onto the outside pole end, push the nut end of the bolt towards the opposite end of the assembly until the inside pole-end short-bolt wedge slides out (in similar fashion to **step 10-3**). This makes the outside diameter of the outside pole end narrower and ready to be inserted into the end of a pole assembly.

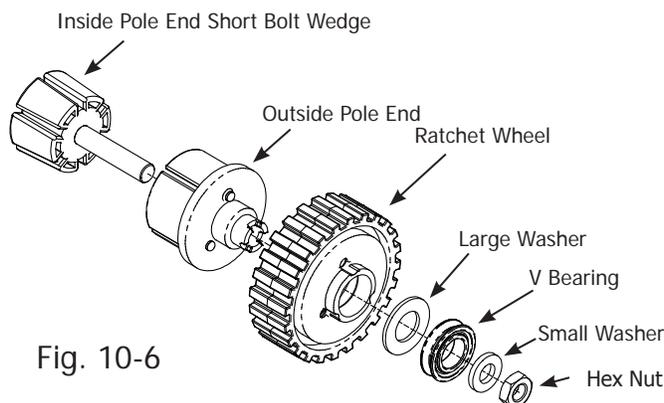


Fig. 10-6

Short-bolt ratchet assembly comes pre-assembled. Exploded diagram is for reference only.

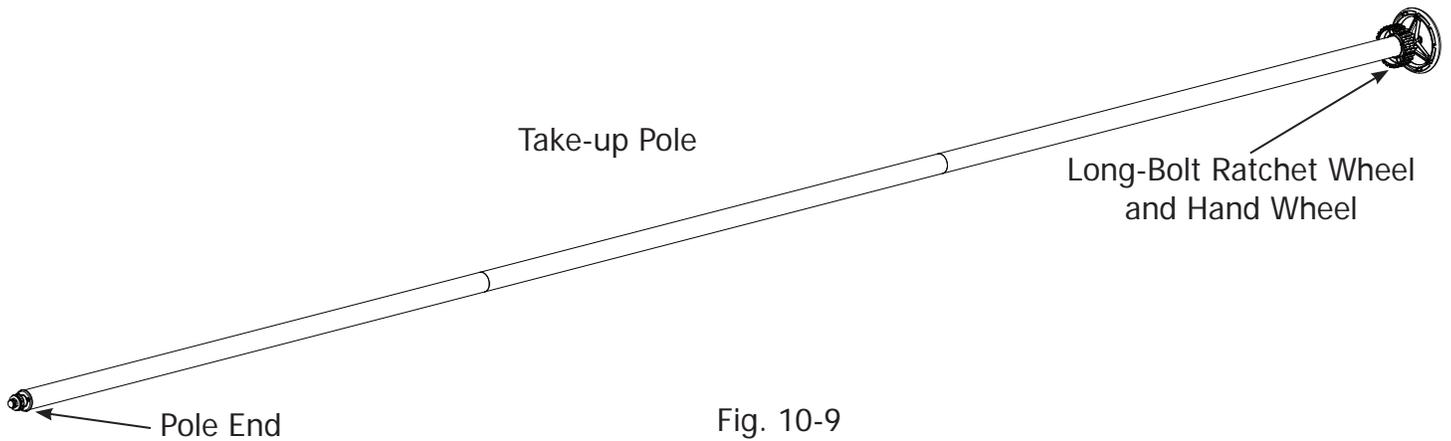


Fig. 10-9

Hand Wheel Assembly

10-12: Check the long-bolt ratchet-wheel assembly to ensure that it matches Fig. 10-7.

10-13: Add the hand wheel assembly to the long-bolt ratchet-wheel assembly as shown in Fig. 10-7, aligning the three tabs on the hand-wheel insert with the three notches on the outside pole end.

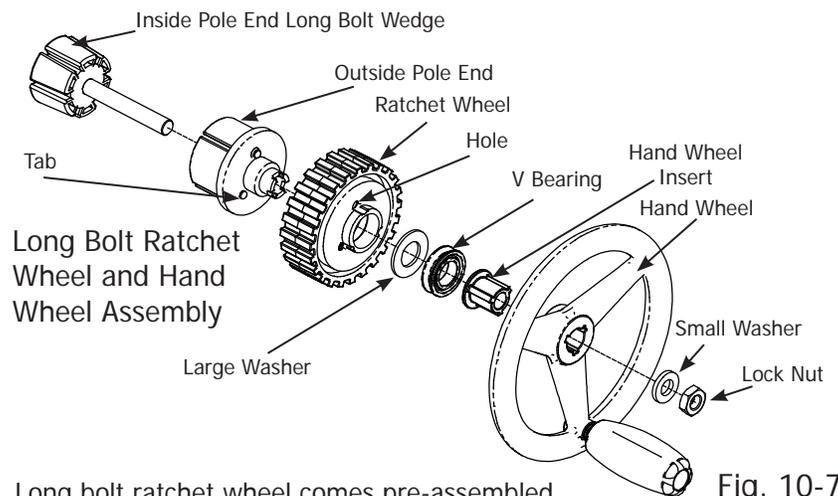
10-14: Repeat **step 10-11** to prepare the long-bolt ratchet wheel and hand wheel assembly for insertion.

Ratchet Wheel and Hand Wheel Insertion

10-15: Insert one short-bolt ratchet wheel assembly into the open end of a pole assembly as shown in Fig. 10-8.

10-16: Completely tighten the nut, using the 13/17 mm wrench. This will expand the outer pole end, ensuring a tight fit in the pole. This completes the backing pole.

10-17: Repeat **steps 10-14** and **10-15** to complete the quilt-top pole. Set both poles aside.



Long bolt ratchet wheel comes pre-assembled. Exploded diagram is included for reference.

Fig. 10-7

10-18 : In same manner, slide the long-bolt ratchet wheel and hand wheel assembly into the open end of the remaining pole assembly and tighten the nut, using the 13/17 mm wrench. Check to be sure the hand wheel engages the ratchet wheel assembly and does not spin loosely shown in Fig 10-7. This completes the take-up pole show in Fig. 10-9.

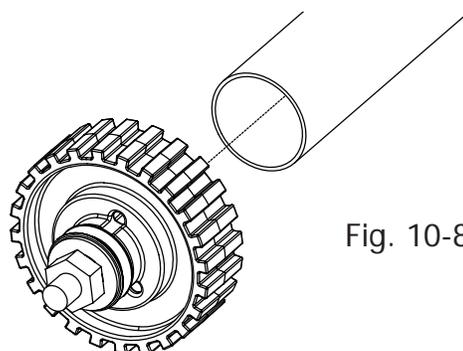


Fig. 10-8

Steps 11 & 12

Pole to Frame Assembly

Rubber End Cap Assembly

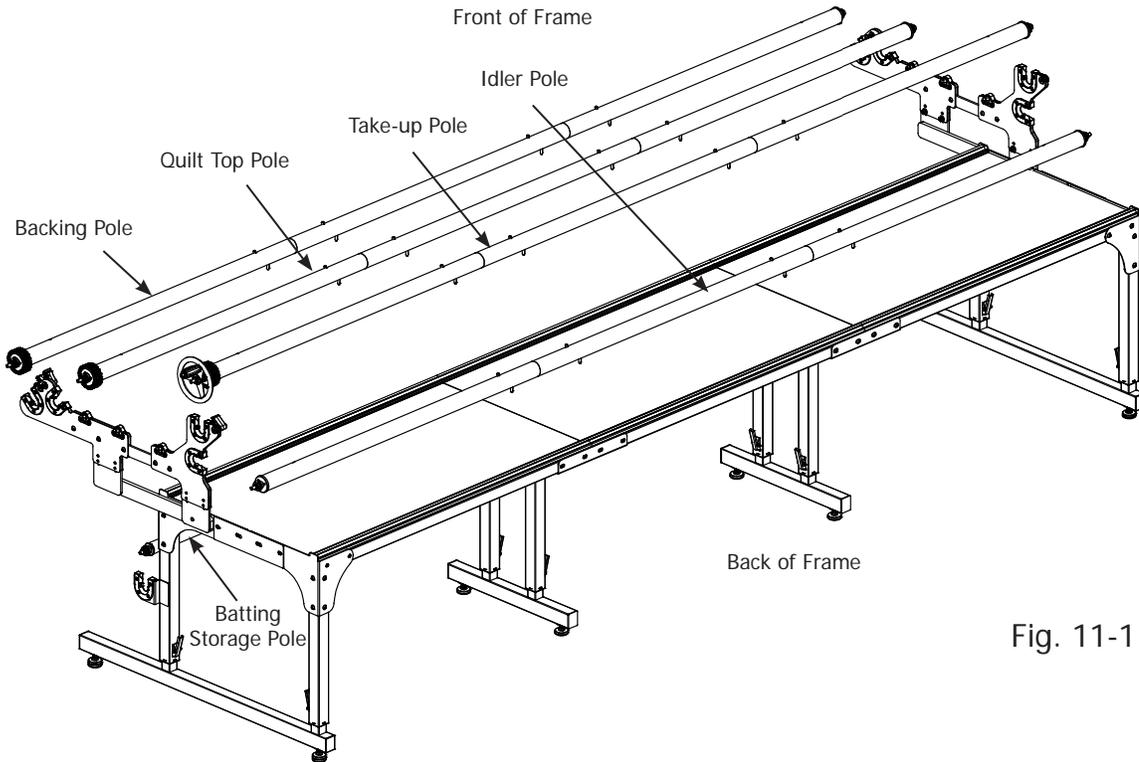


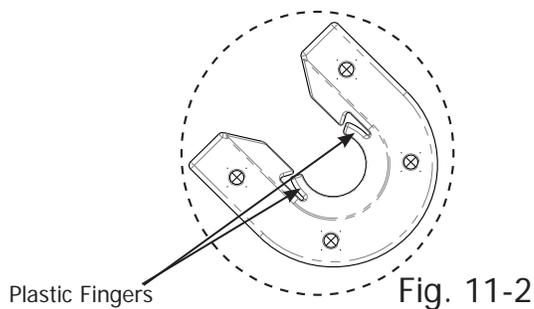
Fig. 11-1

Step 11: Pole to Frame Assembly

Parts needed

- 1- Frame Assembly
- 1- Batting Storage Pole
- 1- Idler Pole
- 1- Quilt Top Pole
- 1- Backing Pole
- 1- Take-up Pole

11-1: Place the poles on the frame, as shown in Fig. 11-1.



Note: The poles will snap past the plastic fingers, which are shown at left in Fig. 11-2.

Step 12: Rubber End Cap Assembly

Parts needed

- 1- Frame Assembly
- 10- Rubber End Caps

12-1: Slide one (1) rubber end cap onto the end of each bolt sticking out of the pole ends, as shown in Fig. 12-1. If the poles are assembled properly, there should be approximately 3/8"-1/2" of metal threads showing beyond the ends of each pole.

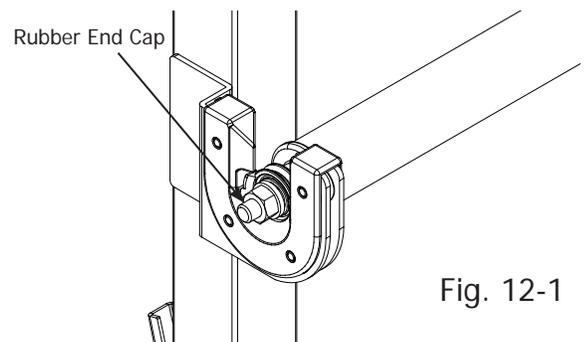


Fig. 12-1

Steps 13 & 14

Optional Velcro® Attachment Bungee Clamp Assembly

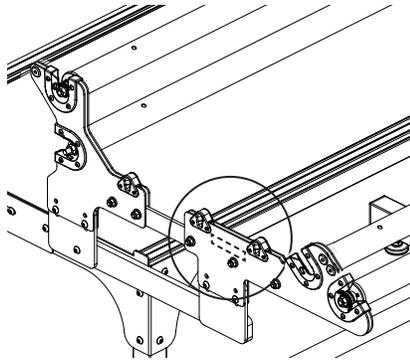


Fig. 13-1

Step 13: Optional Velcro® Attachment Assembly

Parts needed

- 1- Frame Assembly
- 2- 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 use with other types of clamps.

13-1: 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. (Fig. 13-1)

13-2: Follow **step 13-1** for the other velcro strip.

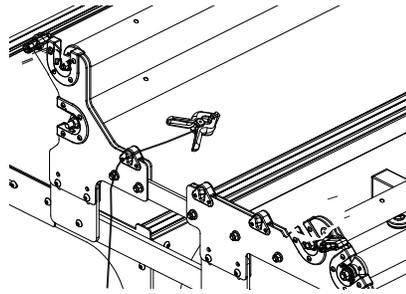


Fig. 14-1

Step 14: Bungee Clamp Assembly

Parts needed

- 1- Frame Assembly
- 6- Bungee Clamps

14-1: Thread the bungee cord from the inside of the frame through the bungee slot and then pull the cord in a downward movement to lock the bungee clamp in place. (Fig. 14-1)

14-2: Follow **step 14-1** for the other five (5) bungee clamps.

Steps 15 & 16

Velcro® on Pole Assemblies

Attach Leaders

Step 15: Velcro on Pole Assemblies

Parts needed

- 1- Quilt Top Pole
- 1- Backing Pole
- 1- Take-up Pole
- 3- 11.5 foot Velcro Strips

Tools Required

Measuring tape or ruler (Not Provided)
Scissors (Not Provided)

15-1: Prepare to attach the Velcro to the quilt top pole, backing pole, and take-up pole (see Fig. 10-1), by measuring in 3" from each end of the pole. Peel the backing off the Velcro as you go and apply to all three poles, starting at the 3" mark and ending at the opposite 3" mark.

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. (Note: Attach the Velcro next to the snap button, not between.)

Once the Velcro has been adhered from one end of the poles to the other, it can be clipped where the poles meet at each pole coupler, if poles need to be disassembled on the future.

Step 16: Attach Leaders

Parts needed

- 1- Frame Assembly with Velcro applied to poles
- 3 - HQ Leaders

16-1: Mark the center of the leaders on both the Velcro and the hemmed edge. Mark the center of the quilt top pole, backing pole and take-up pole with a permanent marker.

16-2: Beginning in the center, align the marks and attach the leaders to the Velcro on backing pole and the quilt top pole so the marked sides of the leaders hang to the center between the poles.

Beginning in the center, align the marks and attach the remaining leader so it falls to the back of the take-up pole.

Optional Accessory



The HQ Super Leader is a 27" x 11½ ft leader that can be purchased to use on the take-up pole. The extra width makes loading from the front easier. Available from your HQ Rep or order at www.HandiQuilter.com

Step 17

Adjusting HQ²⁴ Fusion Frame Height

Step 17: Adjusting Frame



NOTE: It is easier to raise the frame height than to lower the frame, because the legs will ratchet up when lifted. To lower the frame, a second person will be needed to release the two latches on each leg while the other lifts the frame. This is why the frame was assembled at the lowest height setting.

17-1: The frame can be all the way down with no slots showing on the legs or raised in increments up to where nine sets of slots are showing. Most quilters will have three to six sets of slots showing when the height is set comfortably for them.

17-2: Adjust the frame height so that when standing at the front of the machine with your hands on the front handle bars, your elbows are bent at a 90 degree angle. It is recommended that you raise the frame one or two slots at a time until you reach your desired height setting as described in **steps 17-3** and **17-4**.

17-3: Place a foot on the side leg bottom tube and lift the end of the frame up until the latches click once or twice, making sure both latches are fully engaged and in the same height slot. The end of the latch levers will be about 1.5" away from the leg when engaged properly and much closer if not fully engaged.

17-4: Repeat **step 17-3** on the other end of the frame and then lower the two middle legs to the same slot, ensuring that the latches are fully engaged into the same slot on both side legs and the two middle legs. You may need a second person to lift the middle of the table to engage the latches fully on the middle legs.

17-5: Finally double-check to make sure the frame is level. The slots on the legs are for rough height adjustment and the levelers on each leg are for fine height adjustment and leveling of the frame. See **step 4-10**, if needed, for leveling review.

17-6: Your HQ Studio Frame is now complete. Refer to the DVD that came with your HQ quilting machine for instructions on loading the quilt on the frame. To learn how to quilt, check out the Longarm Basics DVD series from Quilter's Academy (www.theQuiltersAcademy.com).

Optional Accessory



Heavy-duty casters are available for the HQ²⁴ Fusion Frame (new straight-leg style only, check with your HQ Rep or HQ Customer Relations (877-697-8458) to be sure.)

Order from your HQ Rep or directly at www.HandiQuilter.com