

HQ Pole Upgrade Kit for HQ Adjustable Table and HQ QuilTable Assembly Instructions QF09775

The pole upgrade kit can be used with or without the QF09700 HQ Precision-Glide track upgrade kit.

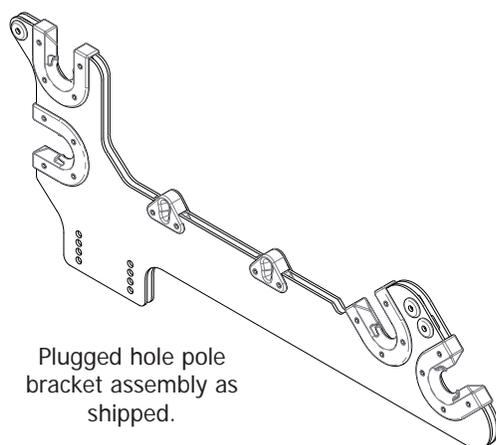
What's Included

Plugged hole Pole Bracket Assembly (1) includes: (4) rail bearing snap, (4) rail bearing snap covers, (2) bungee holder, (2) bungee holder cover, (2) bungee cover spacer, (3) drilled out ratchet stop mounts, (3) ratchet stop mounts, (3) Large washer head M6x 18mm screws, (20) M5x16mm SBHCS (**Fig. 1**)

Open hole Pole Bracket Assembly (1) includes: (4) rail bearing snap, (4) rail bearing snap covers, (2) bungee holder, (2) bungee holder cover, (2) bungee cover spacer, (20) M5x16mm SBHCS (**Fig. 2**)

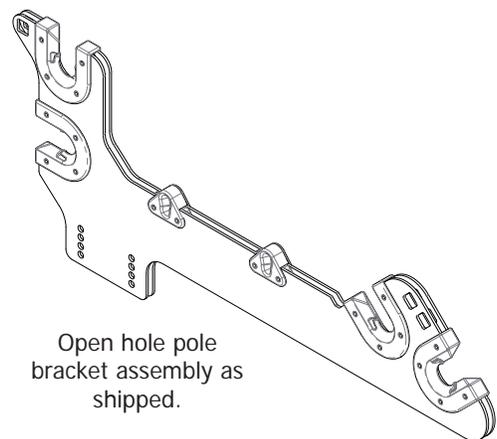
Not Included, but Required for Assembly

- 1- 7/16" wrench
- 1-drill
- 1-5/16" drill bit (May be needed if table does not have holes for base plates)
- 1-3/8" drill bit (Needed if bases are not drilled)



Plugged hole pole bracket assembly as shipped.

Fig. 1



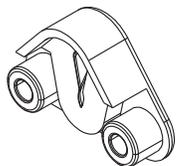
Open hole pole bracket assembly as shipped.

Fig. 2

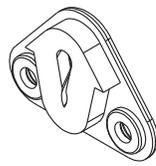
Handi Quilter, Inc.
445 N 700 W
North Salt Lake, Utah 84054

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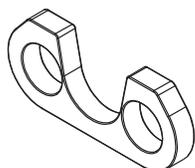
Parts List



Bungee Holder (4)
Part of pole bracket
assembly
QF09318-103



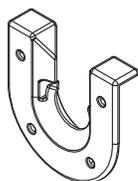
Bungee Holder Cover (4)
Part of pole bracket
assembly
QF09318-104



Bungee Cover Spacer (4)
Part of pole bracket
assembly
QF09318-109



Screw, M5x16 SBHCS
(40)
Part of pole bracket
assembly
QF09318-107



Rail Bearing Snap (8)
Part of pole bracket
assembly
QF09318-105



Rail Bearing Snap
Cover (8)
Part of pole bracket
assembly
QF09318-106



Ratchet Stop Mount (6)
(3) Part of plugged hole
pole bracket assembly (3)
for open hole pole bracket
assembly
QF09318-202



Ratchet Stop Mount, Drilled Out (3)
Part of plugged hole pole bracket
assembly
QF09318-222

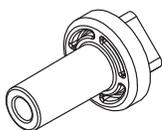


Screw, M6x18mm w/large
washer head (3)
Part of plugged hole pole
bracket assembly
QF09318-206

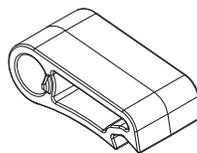


Screw, M6x48mm with
washer head (3)
QF09318-204

Parts List



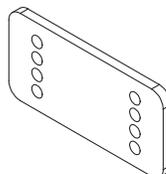
Ratchet-Stop
Bushings
(3)
QF09318-201



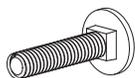
Ratchet Stop
(3)
QF09318-203



Ratchet-Stop
Holder
(3)
QF09318-205



Shim, Pole Bracket (2)
QF09775-550



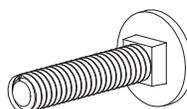
Carriage Bolt, 1/4"-20x1.25" (4)
QF09775-551



Nylon Lock Nut, 1/4-20 (4)
QF09775-552



Washer, 1/4 (4)
QF09775-553



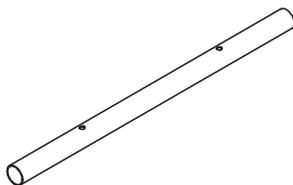
Carriage Bolt, 5/16-18x1.75" (4)
QF09775-554



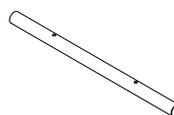
Nylon Lock Nut 5/16-18 (4)
QF09775-555



Washer, Large x 5/16 (4)
QF09775-556

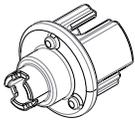


Pole - approx. 5' long (8)
QF09775-701

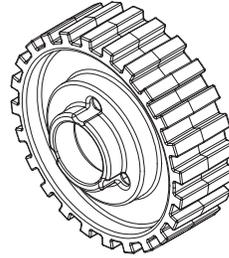


Pole Coupler w/two snap buttons (4)
QF09318-702 / QF09318-714

Parts List



Outside Pole End (8)
QF09318-703



Ratchet Wheel (3)
QF09318-704



V-Groove Bearing (8)
QF09318-705



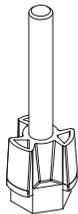
Large Washer for Pole End (16)
QF09318-706



Small Washer for pole end (8)
QF09318-707



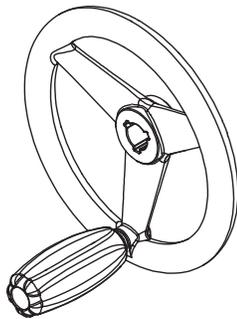
Lock Nut, M10x1.5 for pole end (8)
QF09318-708



Inside Pole End, Long Bolt (1)
QF09318-709



Inside Pole End, short Bolt (7)
QF09318-710



Hand Wheel Assembly (1)

QF09325

Handwheel QF09318-711
Knob QF09318-712
Bolt QF09318-715



Hand Wheel Insert
(1)
QF09318-713

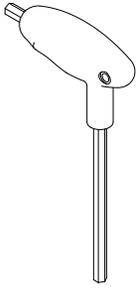
Parts List



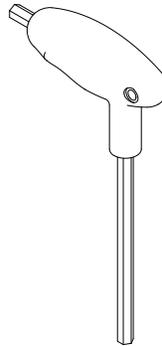
Regular M10 x1.5 nut assembly tool (1)
QF09318-717



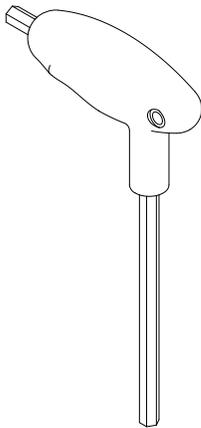
Rubber Thread Caps for pole ends (8)
QF09318-716



3mm Allen
Wrench
(1)
QF09318-111



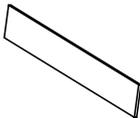
4mm Allen
Wrench
(1)
QF09318-112



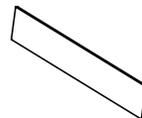
5mm Allen
Wrench
(1)
QF09318-113



17/13/16mm Wrench (1)
QF09318-114



8" Velcro for old side clamps (2)



10" Velcro for poles (3)

Step 1: Frame Preparation

Parts needed

None

Tools Required

7/16" wrench (Not Provided)

1-1: Remove the poles from the frame and set them aside in a safe place. The poles will be replaced with new larger poles from the pole upgrade kit.

1-2: Using a 7/16" wrench (not provided), remove the two carriage bolts from each pole bracket and set the old pole brackets aside. The pole brackets will be replaced with new side arm pole brackets that fit the new larger poles from the upgrade kit, however both table mount bases will be reused, **Fig. 1-1**. The new pole brackets mount to the table mount bases.

1-3: The table mount bases may be clamped to the table in the appropriate spot, however it is recommended that they be bolted down to the HQ Adjustable Table or the HQ QuilTable to make them more secure, once proper positioning has been determined.

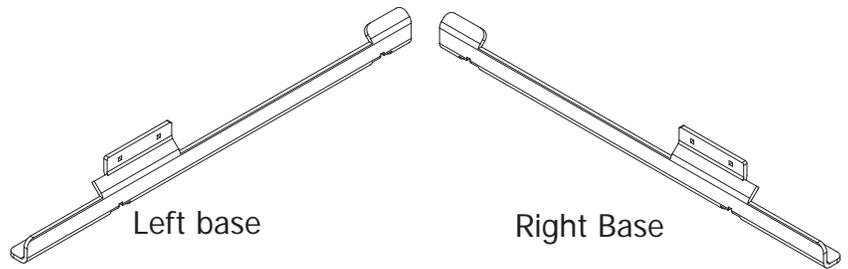


Fig. 1-1: Table mount bases, to be re-used from HQ Portable Professional Frame.

Step 2 Ratchet Stop Assembly

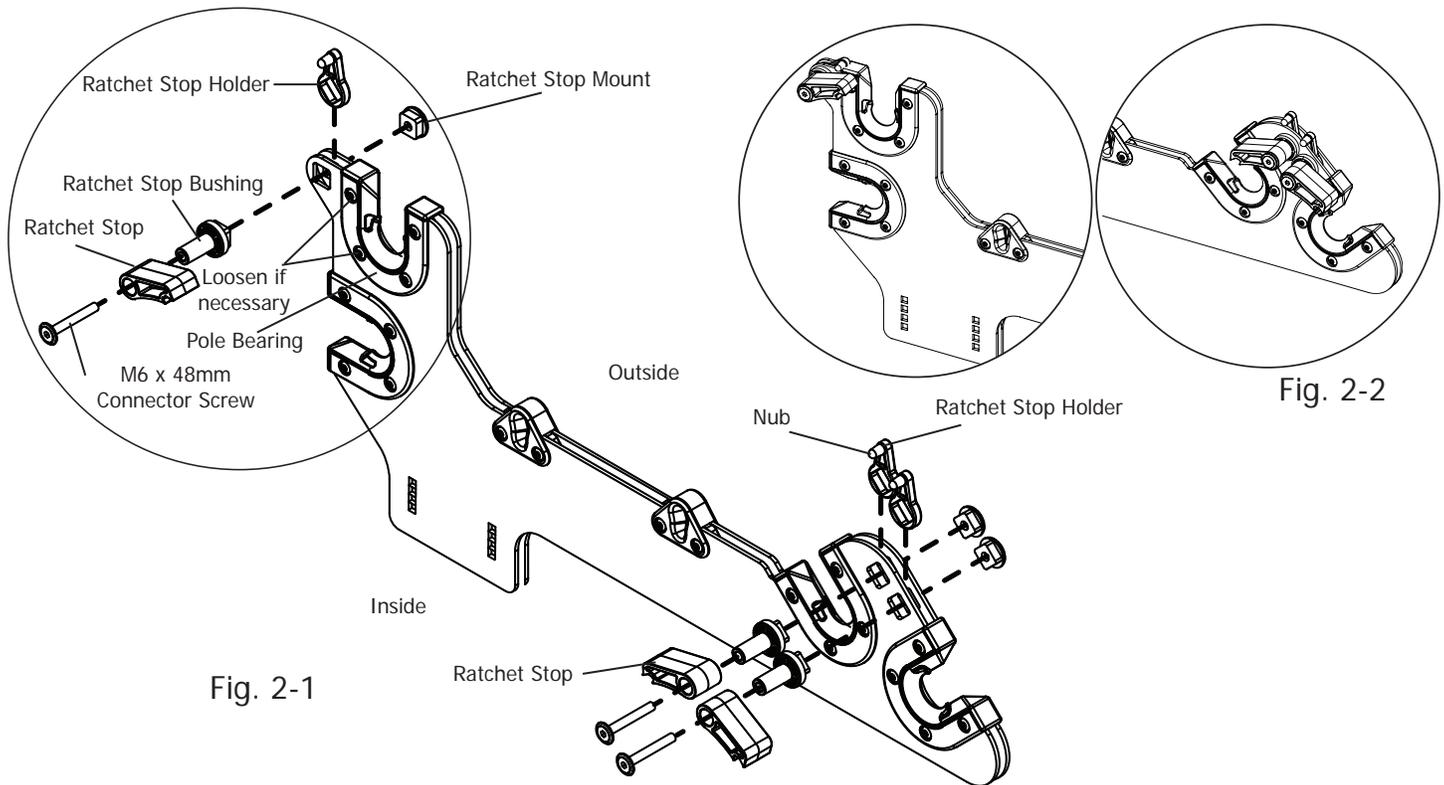


Fig. 2-1

Fig. 2-2

Step 2: Ratchet Stop Assembly

Parts needed

- 1- Open-hole Pole Bracket
- 3- M6 x 48mm Connector Screw
- 3- Ratchet-Stop
- 3- Ratchet-Stop Bushing
- 3- Ratchet-Stop Mount
- 3- Ratchet-Stop Holder

Tools Required

4mm Allen Wrench (Provided)

2-1: Decide whether you want the ratchets and hand wheel to be on the left or the right side of the frame. The following instructions show how to assemble the frame with the hand wheel on the right side of the frame, which is the most common setup. If you prefer the hand wheel to be on the left side of the frame, see "Left Side Option" on page 8.

2-2: Identify the open-hole pole bracket and the plugged-hole pole bracket. The plugged hole pole bracket can be used "as-is" on either the left or right side, depending on the decision made about which side the hand wheel will be on. Set the plugged hole pole bracket aside at this time.

The ratchet stops and ratchet-stop holder will be assembled into the open-hole pole bracket, but the orientation of the stops and holders will vary, depending upon whether the pole bracket is used on the right or the left side of the table. The instructions that follow assume that the open pole bracket (and hand wheel) will be used on the right side of the table.

2-3: Place one ratchet-stop holder between the two metal pieces at the back of the open-hole pole bracket, with the stop nub facing inside, as shown in **Fig. 2-1**.

If the ratchet stop holder will not fit, loosen the two pole-bearing screws nearest the square hole. Slide in the ratchet stop holder and re-tighten when finished.

2-4: Following the parts order in the circled detail in **Fig. 2.1**, thread one M6 x 48mm connector screw through a ratchet stop, ratchet stop bushing, pole bracket (with ratchet stop holder inserted) and finally into the ratchet-stop mount. Pay close attention to the orientation of the ratchet stop. Tighten with the 4mm Allen tool until the ratchet stop holder nub holds the ratchet stop, see **Fig 2-2** circle detail.

2-5: In same manner, attach the remaining ratchet stops and ratchet stop holders to the front of the pole bracket, paying attention to the orientation of the ratchet stops (**Figs. 2-1 and 2-2**) to create the right pole bracket.

Left Side Option

If assembling with the hand wheel and ratchets on the left side, remember that the ratchet stops and the ratchet stop holder nubs go to the inside of the pole bracket when it is attached to the table. Keeping this in mind, follow **Steps 2-2 through 2-5** to assemble the left pole bracket, reversing the direction of the ratchet stop, ratchet stop bushing, ratchet stop holder and ratchet-stop mount shown in **Fig. 2-2**.

Step 3: Attach Pole Brackets to Table Mount Bases

Parts Needed

- 1-Table
- 1-Open-hole Pole Bracket w/Ratchet Stops Assembly
- 1-Plugged-hole Pole Bracket Assembly
- 2-Shim, for Pole Bracket Assembly
- 4- $\frac{1}{4}$ "-20 x 1.25" Carriage Bolt
- 4- $\frac{1}{4}$ "-20 Nylon Lock Nut
- 4- $\frac{1}{4}$ " Washer

Tools Required

- $\frac{7}{16}$ " wrench (Not Provided)

3-1: Slide the shim between the opening in the plugged-hole pole bracket and align the 8 shim holes with the 8 pole bracket holes **Fig 3-1**. Next place the bracket on the outside of the pole bracket base on the left frame side front. Attach the plugged-hole pole bracket to the frame using (2) $\frac{1}{4}$ "-20 x 1.25" carriage bolts. Thread the carriage bolts through the table mount base and then the bottom hole in the pole bracket from inside to outside as shown in **Fig. 3-3**. The nuts will be on the outside. This will set the pole bracket at its highest position. On the end of each bolt, slide a flat washer followed by a lock nut as shown in **Fig. 3-3**.

3-2: Visually level the pole bracket assembly and fully tighten the two carriage bolts with a $\frac{7}{16}$ " wrench not provided.

3-3: Repeat **Step 3-1** and **Step 3-2** to attach the open-hole pole bracket w/ratchet stops assembly, making sure the ratchet stops are on the inside of the frame.

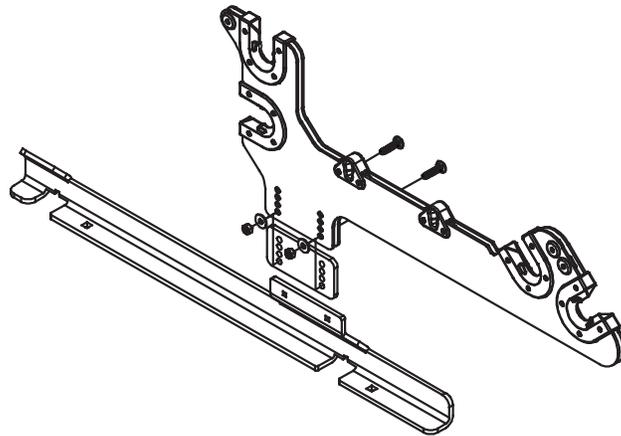


Figure 3-1

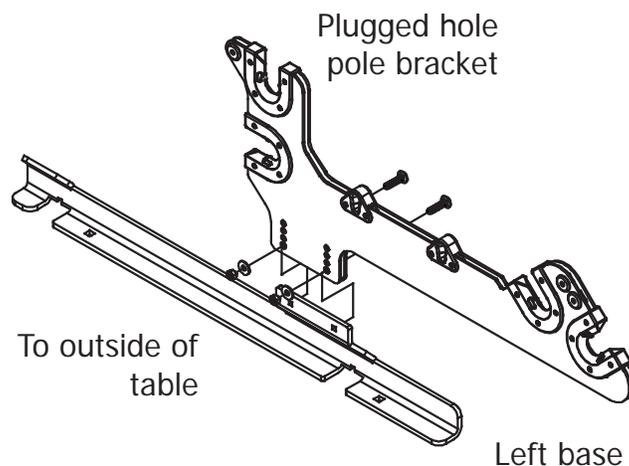


Figure 3-2

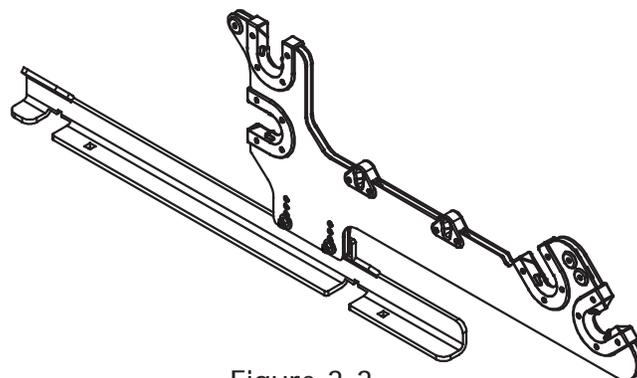


Figure 3-3

Step 4: Pole Coupler Assembly

Parts Needed

8- Pole Section
4- Pole Coupler

Tools Required

None

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

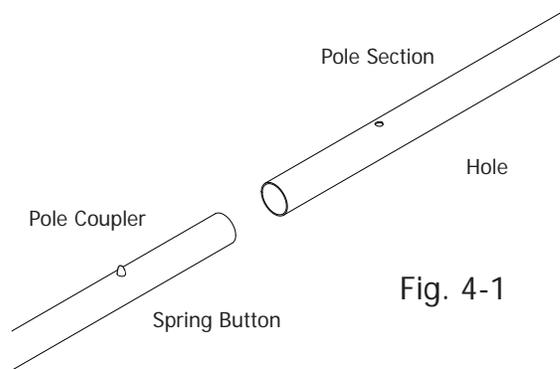


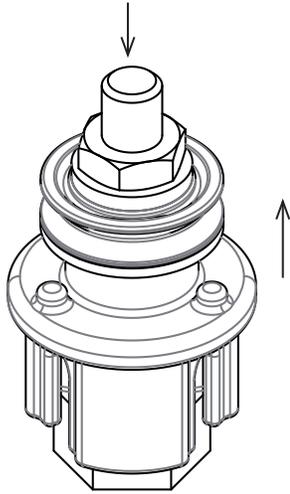
Fig. 4-1

4-1: Join two 5-foot pole sections together by inserting a pole coupler into the end of one pole section as shown in **Fig. 4-1**, 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 5-foot section to the first.

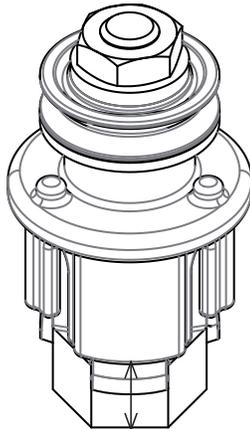
4-2: Using the remaining couplers and pole sections, repeat **Step 4-1** to complete 3 more pole assemblies for a total of 4 pole assemblies.

Step 5: Pole End Assembly

Loosen nut then push



Pole End
Fig. 5-1



Wedge
Slides Out

Fig. 5-2

Parts needed

- 4-Pole Assembly
- 5-Pole ends
- 2-Short-Bolt Ratchet-Wheel Assembly
- 1-Long-Bolt Ratchet-Wheel Assembly
- 1-Hand-Wheel Assembly

Tools Required

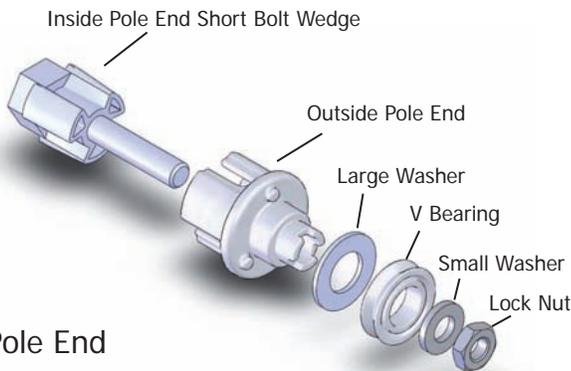
- 13/17mm Wrench (Provided)

5-1: Check one pole end to ensure that it matches **Fig. 5-1** and **5-3**.

5-2: Loosen the nut on the pole end until it nearly reaches the end of the bolt.

5-3: 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 (**Figs. 5-1 and 5-2**). This makes the outside diameter of the pole end narrower and ready to be inserted into the end of the pole assembly.

5-4: Repeat **Steps 5-1** through **5-3** to prepare the remaining 4 pole ends for insertion.



Pole End

Fig. 5-3

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

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

 **NOTE:** If you have difficulty holding the pole end while tightening it, a regular 10mm nut is included as an assembly aid tool for tightening the pole end more quickly and easily. Once the pole end is in the pole tightly, remove the nut tool and replace it with a lock nut.

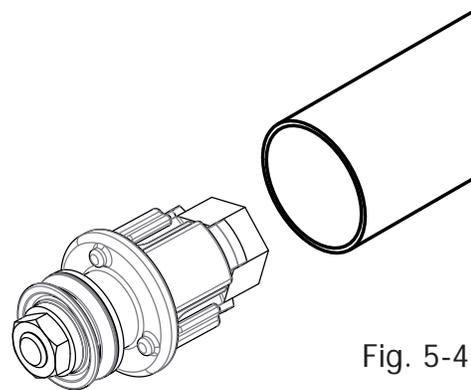


Fig. 5-4

5-6: Completely tighten the nut, using the 17mm end of the wrench, while holding the pole end assembly tightly into the open end of the pole. This will expand the outer pole end, ensuring a tight fit in the pole.

5-7: Repeat **Steps 5-5** and **5-6** to add one pole end to the remaining three 10-foot pole assemblies.

5-8: Repeat **Steps 5-5** and **5-6** to add remaining pole end to the open end of one more 10-foot pole assemblies (See bottom pole in **Fig. 5-5**)

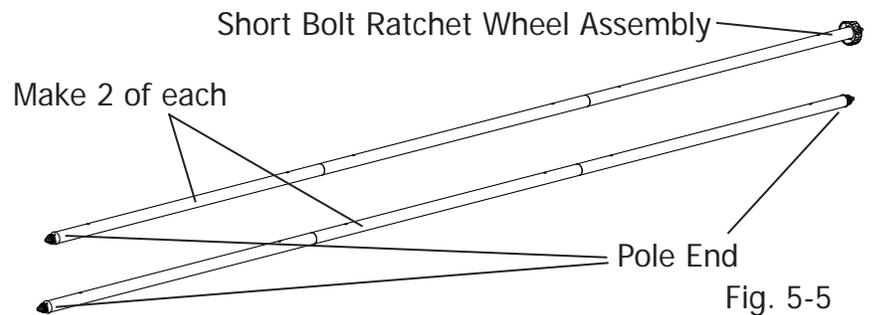


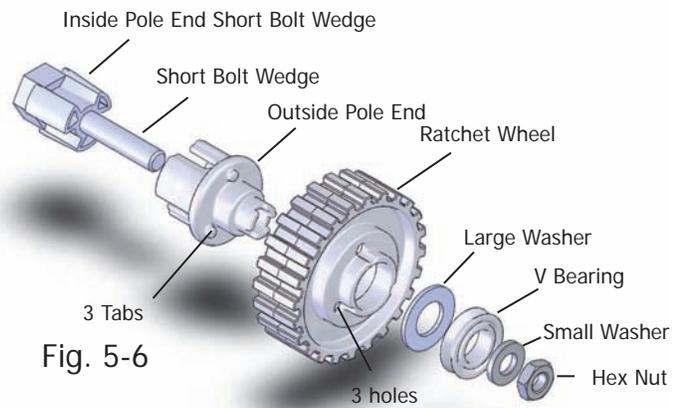
Fig. 5-5

Short-Bolt Ratchet-Wheel Assembly

5-9: Check the short-bolt ratchet-wheel assembly to ensure that it matches **Fig. 5-6**.

5-10: Loosen the nut at the end of the short-bolt ratchet-wheel assembly until it reaches the end of the bolt.

5-11: 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 5-3**). This makes the outside diameter of the outside pole end narrower and ready to be inserted into the pole end assembly.

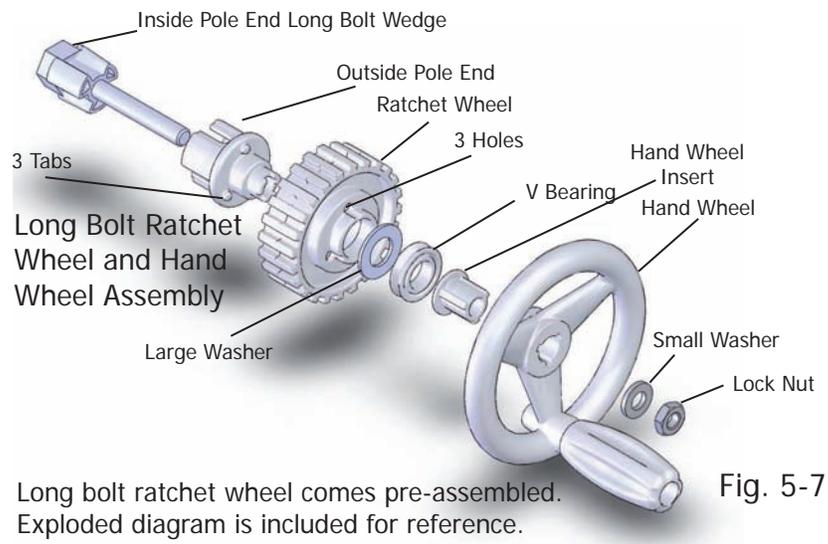


Hand-Wheel Assembly

5-12: Check the long-bolt ratchet-wheel assembly to ensure that it matches **Fig. 5-7**.

5-13: Add the hand-wheel assembly to the long-bolt ratchet-wheel assembly as shown in **Fig. 5-7**, aligning the three tabs on the hand-wheel insert with the three notches on the outside pole end. If the three tabs are not properly aligned, the hand-wheel will spin freely, independent of the pole. The goal is to have the three tabs engaged, so turning the hand-wheel will turn the pole.

5-14: Repeat **Step 5-11** to prepare the long-bolt ratchet-wheel and hand-wheel for insertion.



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

Fig. 5-7

Ratchet-Wheel and Hand-Wheel Insertion

5-15: Insert one short-bolt ratchet-wheel assembly into the open end of a pole assembly as shown in **Fig. 5-8**. Check that the pole end is inserted completely into the pole assembly.

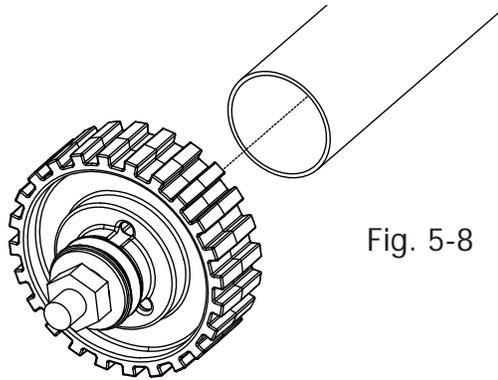


Fig. 5-8

5-16: Completely tighten the nut, using the 17mm end of the wrench, while holding the short-bolt ratchet-wheel assembly tightly into the open end of the pole. This will expand the outer pole end, ensuring a tight fit in the pole. Make sure the 3 tabs on the outside pole end align with the 3 holes in the ratchet-wheel, see **Fig. 5-7**.

This completes the backing pole **Fig. 5-9**.

5-17: Repeat **Steps 5-15** and **5-16** to complete the quilt-top pole **Fig. 5-9**. Set both poles aside.

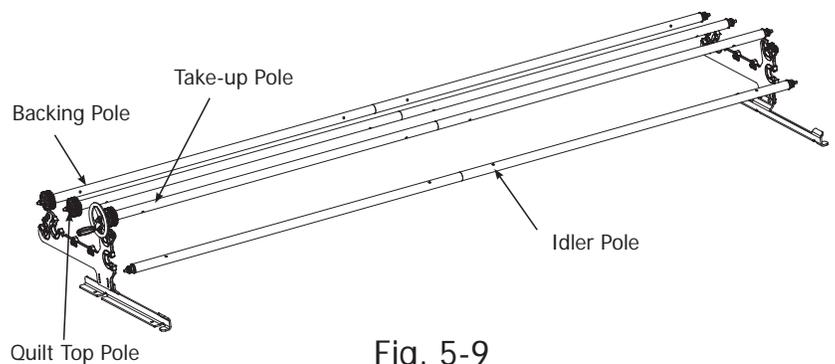


Fig. 5-9

5-18: In same manner, slide the long-bolt ratchet-wheel and hand-wheel assembly into the open end of the remaining pole assembly and while holding the complete assembly tightly into the open end of the pole tighten the nut, using the 17mm end of the wrench. Check to be sure the hand-wheel engages the ratchet-wheel assembly and does not spin loosely and that the 3 tabs of the outside pole end align with the 3 holes in the ratchet-wheel. This completes the take-up pole **Fig. 5-9**.

Step 6: Pole to Frame Assembly

Parts Needed

- 1-Frame Assembly
- 1-Idler Pole
- 1-Quilt Top Pole
- 2-Backing Pole
- 3-Take-Up Pole

6-1: Place the poles on the frame, as shown in **Fig. 6-1**. Pole end V-bearing will snap into the bearing snap plastic fingers **Fig. 6-2**.

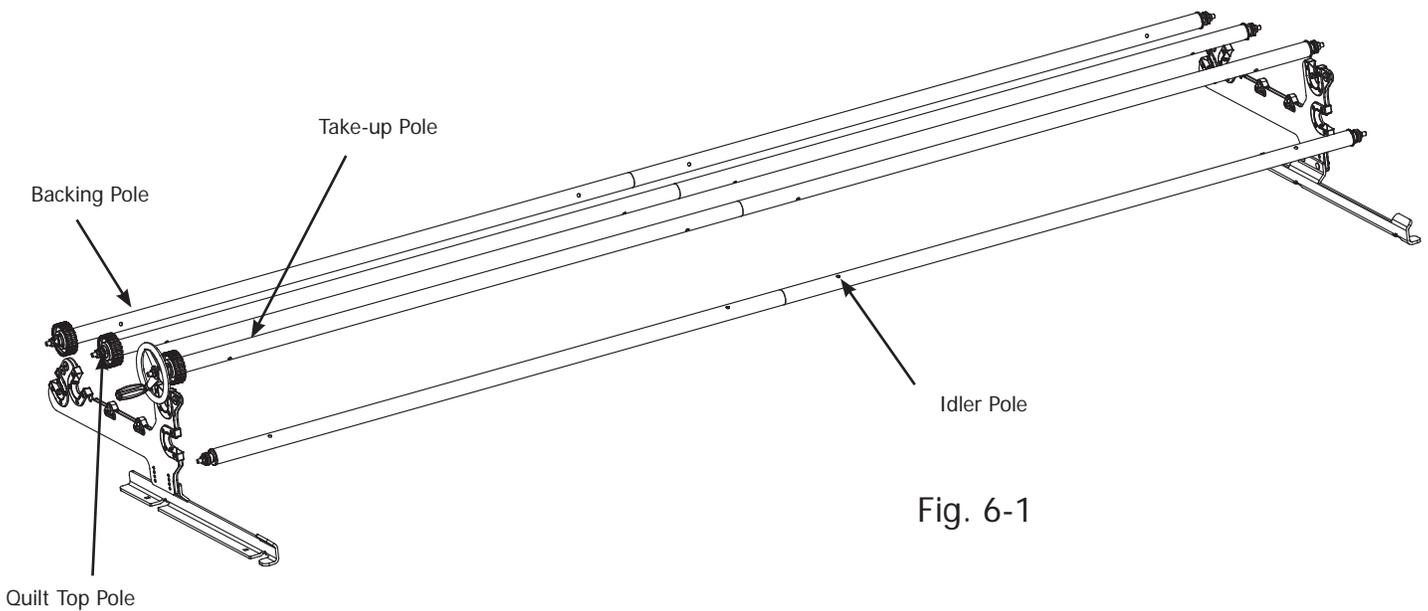


Fig. 6-1

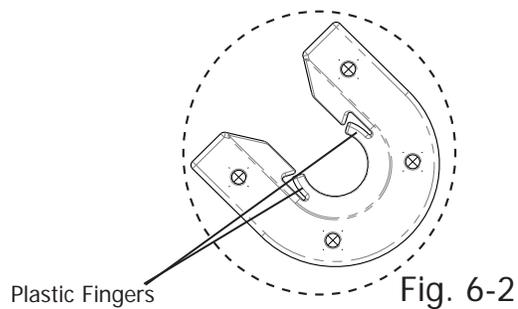


Fig. 6-2

Step 7: Rubber End Cap Assembly

Parts Needed

4-Pole assembly

8-Rubber End Caps

7-1: Slide one (1) rubber end cap onto the end of each bolt sticking out of the pole ends, as shown in **Fig. 7-1**. If the poles are assembled correctly there should be approximately $\frac{1}{4}$ " - $\frac{3}{8}$ " of metal threads showing.

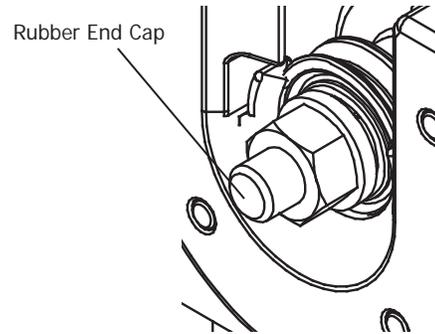


Fig. 7-1

Steps 8 & 9

Optional Velcro® Attachment Bungee Clamp Assembly

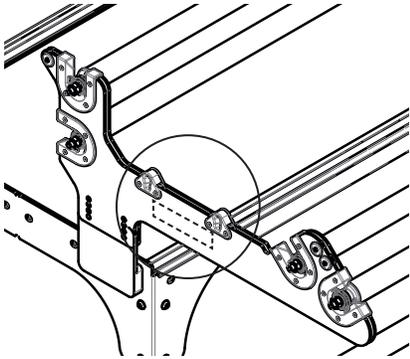


Fig. 8-1

Step 8: Optional Velcro® Attachment Assembly

Parts needed

- 1- Frame Assembly
- 2- Velcro Strip

8-1: 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. 8-1**)

8-2: Follow **Step 8-1** 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 use with other types of clamps.

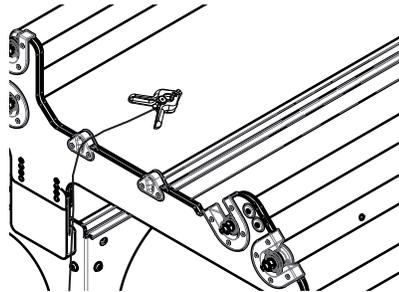


Fig. 9-1

Step 9: Bungee Clamp Assembly

Parts needed

- 1- Frame Assembly
- 4- Bungee Clamps

9-1: 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. 9-1**)

9-2: Follow **Step 9-1** for the other three bungee clamps.

Steps 10 & 11

Velcro® on Pole Assemblies

Attach Leaders



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.

Step 10: Velcro on Pole Assemblies

Parts needed

- 1- Quilt Top Pole
- 1- Backing Pole
- 1- Take-up Pole
- 3- 10 foot Velcro Strips

Tools Required

- Measuring tape or Ruler (Not Provided)
- Scissors (Not Provided)

10-1: Prepare to attach the Velcro to the quilt top pole, backing pole, and take-up pole, 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 buttons, not between them.)

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.

Step 11: Attach Leaders

11-1: Place leaders on poles, matching Velcro strips, taking care to center leaders.



NOTE: Sturdy marked canvas leaders are available from your local HQ Rep or find them in the product section on HandiQuilter.com.

Step 12

Bolting Pole Bracket Bases to Table

Step 12: Bolting Pole Bracket Bases to Table

Parts needed

1-Table Assembly
4-5/16"-18 x 1 3/4" carriage bolt
4-5/16" flat washer
4-5/16"-18 lock nuts

Tools Required

1-5/16" drill bit (Not Provided)
1-3/8" drill bit (Needed if bases are not drilled, Not Provided)
1-Drill (Not Provided)

12-1: Check the pole bracket bases to confirm they have two mounting holes on each base. If they do not have two mounting holes, they will have to be drilled in the bases. See **Step 12-7** for where to drill these holes.

12-2: Put all the poles into the Pole Brackets as shown in **Fig. 6-1**. This will set the distance between the two pole bracket assemblies.

Note: it is critical that the width be correct between the two pole bracket assembly bases before they are fixed to the table top.

12-3: Ideally the side arm bases and the pole upgrade kit will be centered on the table front to back and left to right.

12-4: Clamp the base at the front and back with the bar clamps that came with the original Pro Frame.

12-5: Ensure that the Pole Upgrade Assembly is square, centered, aligned with the table and that the pole brackets are straight up and 90 degrees to the table top.

12-6: If the bases have holes, then with the bases clamped in place you are ready to drill through the table top using a 5/16" drill bit (Not Provided) using the existing holes in the bases as a template where to drill.

Note: If you have the HQ QuilTable it should already have holes in the table for the pole bracket bases.

12-7: If the bases do not have holes, you will need to drill holes in 5" in from the rear of the base and 4.5" in from the front of the base (the holes should then be 20" apart). The holes should be centered left to right on the base bottom material that mounts to the table. Use a 3/8" drill bit to drill two holes on each base (Not Provided) **Figs. 12-1 and 12-2.**

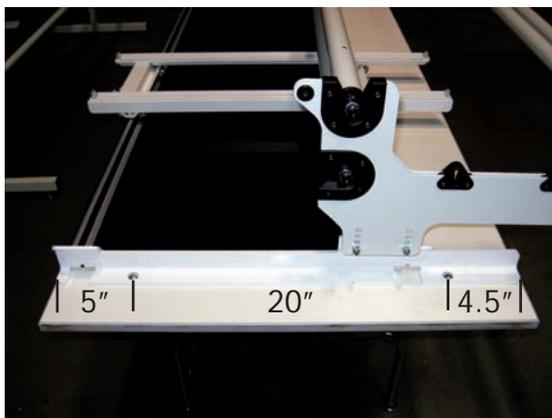


Fig. 12-1



Fig. 12-2

Figs. 12-3 to 12-7 are final assembly photos provided for reference.

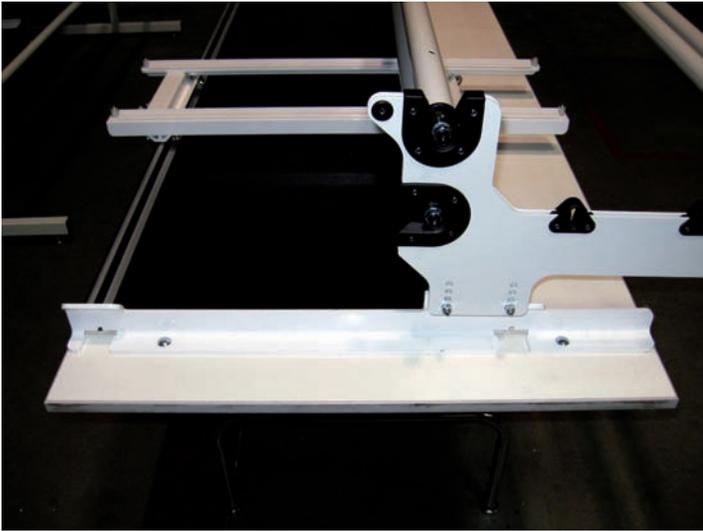
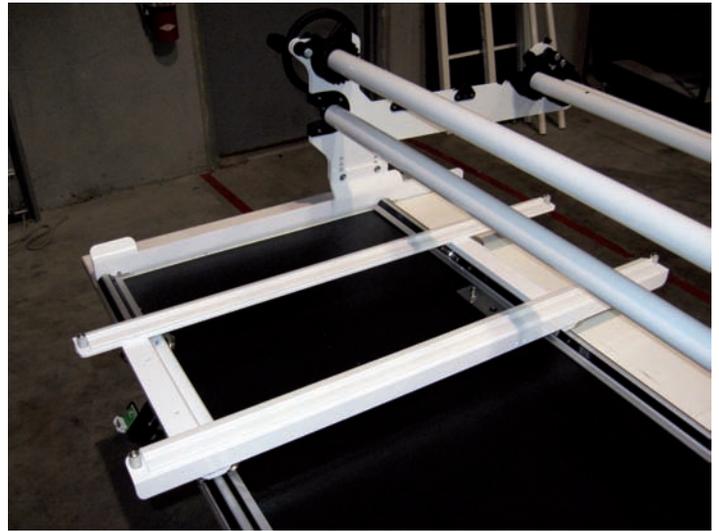


Fig 12-3



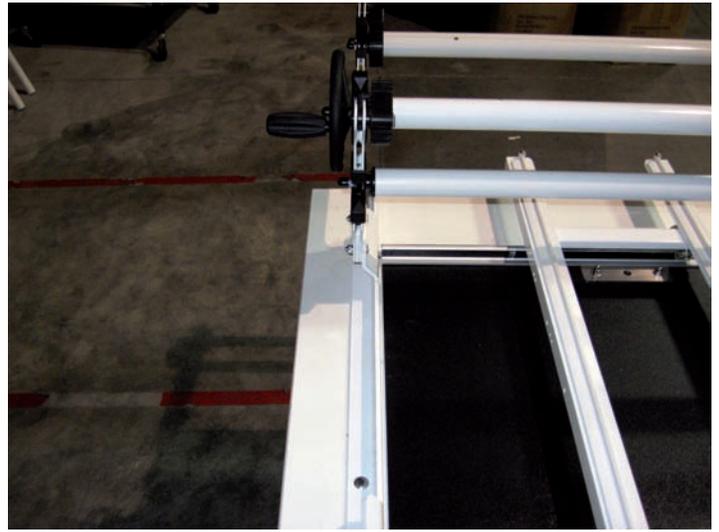
Carriage encoder goes to rear of table

Fig 12-4



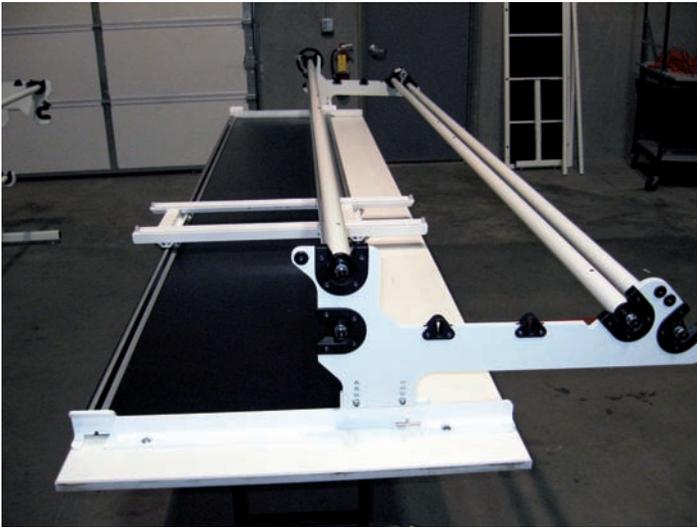
Left end front of table

Fig 12-5



Right end of table as seen from rear

Fig 12-6



Completed table with pole upgrade kit
Fig 12-7