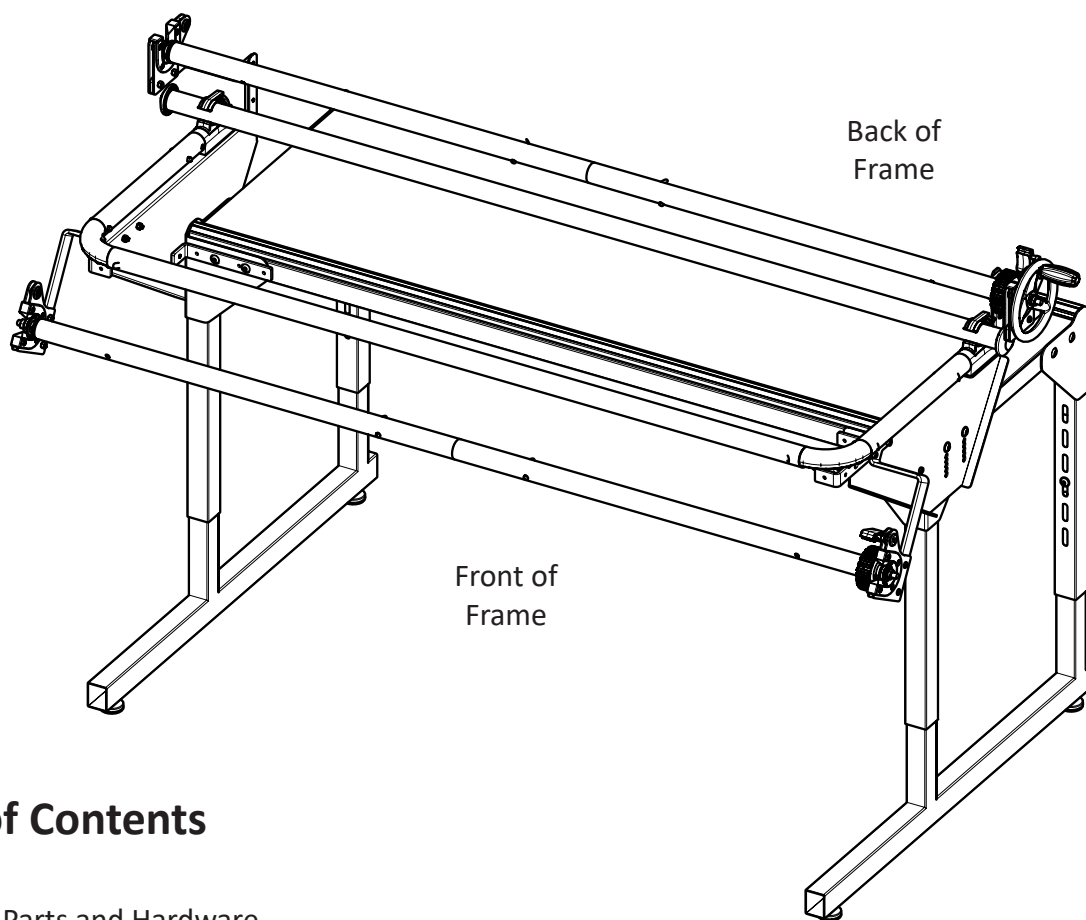


# 5-Foot Pole Upgrade Kit

## Assembly Instructions



## Table of Contents

- 2 Frame Parts and Hardware
- 6 Getting Started: New Frame or Updating an Existing Frame
- 7 Top and Bottom Bracket Assembly
- 8 Pole Bearing Assembly
- 9 Ratchet Stop Bottom Assembly
- 10 Ratchet Stop Top Assembly
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- 15 Pole to Frame Assembly and Pole Keepers
- 16 Velcro® Assembly
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## Introduction

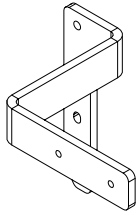
This 5-Foot Pole Upgrade Kit includes special brackets and poles which allow the quilt to be rolled and advanced to simplify quilting small quilts on your space-saving frame.

U.S. Patent #10920352

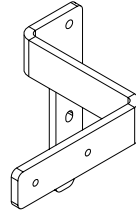
## What's Included:

### Parts and Hardware

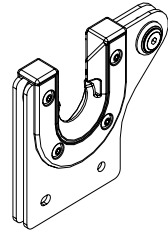
- 1 - Top Bracket Left
- 1 - Top Bracket Right
- 2 - Pole Bearing Assembly Unplugged
- 1 - Bracket Bottom Left QB
- 1 - Bracket Bottom Right QB
- 2 - Pole Bearing Assembly Plugged
- 1 - Ratchet Wheel Assembly Long
- 1 - Ratchet Wheel Assembly Short
- 2 - Pole End Assembly
- 1 - Hand-wheel Assembly
- 1 - Set of 2 Pole Keeper Cap
- 4 - Screw Thread End Cap
- 2 - Ratchet Stop Bushing
- 2 - Ratchet Stop Holder
- 2 - Ratchet Stop Mount
- 2 - Ratchet Stop
- 2 - Screw M6 X 48 SWH
- 4 - Screw M6 X 25
- 8 - Screw M6 X 20
- 4 - Screw M6 X 10
- 12 - Nut M6, Lock nut
- 2 - 4 1/2 Foot Leaders
- 2 - 4.5' Velcro® (1 set)
- 1 - Pole End Wrench (10mm)
- 1 - Hex Key L4mm
- 1 - Hex Key L5mm
- 1 - Open End Wrench 17/13mm
- 4 - Pole Section 34 inch
- 2 - Pole Coupler SMP with snap buttons



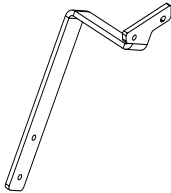
Top Bracket Left  
(1) QF00011-04



Top Bracket Right  
(1) QF00011-03



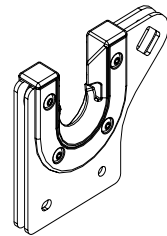
Pole Bearing Assy Plugged  
(2) QF00011-40



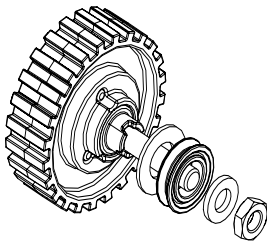
Bracket Bottom Left QB  
(1) QF00011-02



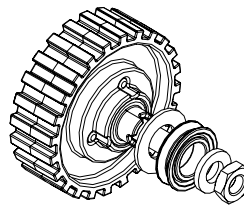
Bracket Bottom Right QB  
(1) QF00011-01



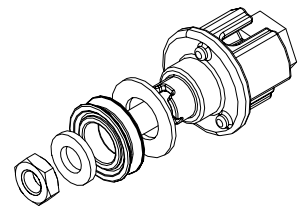
Pole Bearing Assy Unplugged  
(2) QF00011-50



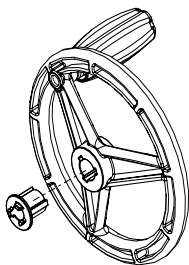
Ratchet Wheel Assy Long  
(1) QF09321



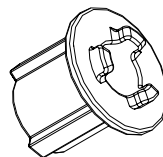
Ratchet Wheel Assy Short  
(1) QF09320



Pole End Assy  
(2) QF09326



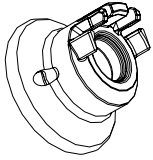
Hand-wheel Assy w/insert  
(1) QF09325



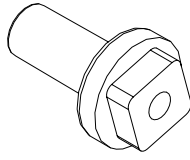
Hand Wheel Plug Insert  
Info only, to order insert use:  
(0) QF09318-713



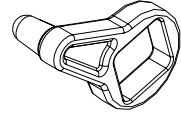
Screw Thread End Cap  
(4) QF09318-716



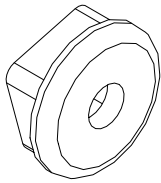
Set of 2 Pole Keeper Cap  
(1) QF05300-01



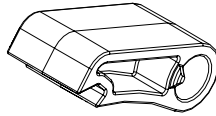
Ratchet Stop Bushing  
(2) QF09318-201



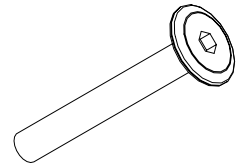
Ratchet Stop Holder  
(2) QF09318-205



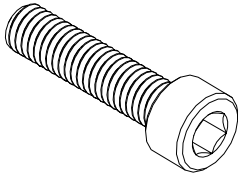
Ratchet Stop Mount  
(2) QF09318-202



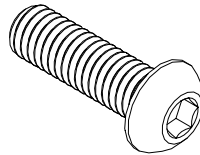
Ratchet Stop  
(2) QF09318-203



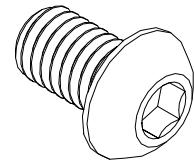
Screw M6 X 48 SWH  
(2) QF09318-204



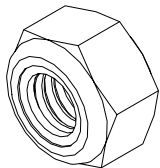
Screw M6 X 25  
(4) QM10447



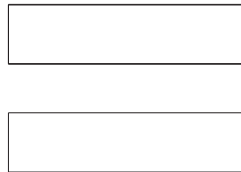
Screw M6 X 20  
(8) QM10443



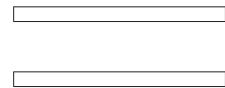
Screw M6 X 10  
(4) QM13300



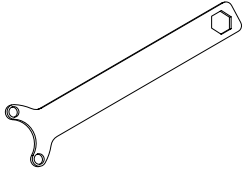
Nut M6, Locknut  
(12) HG01100-100



4 1/2 Foot Leaders  
(1) QF09561 set of 2



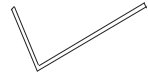
4.5' Velcro® Hook Tape  
(1) QF00662 set of 2



Wrench Pole Assy (10mm)  
(1) QF09318-12



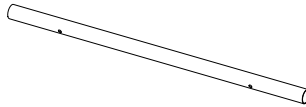
L Hex Key 4mm  
(1) QM10288



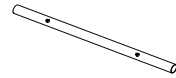
L Hex Key 5mm  
(1) QM10289



Open End Wrench 17/13mm  
(1) QF09318-114



Pole Section 34 Inch  
(4) QF09318-719



Pole Coupler  
(2) QF00007-702 coupler  
with  
(2) QF09318-714  
Snap Button/Locking Clip  
installed inside each

# Getting Started

## New Frame

1. Follow the frame assembly instructions until it discusses the front L-brackets for 16" and 18" machines.
2. Begin 5-Foot Pole Upgrade Kit assembly steps on page 7.
3. After completing the 5-Foot Pole Upgrade Kit assembly instructions, complete the frame instructions.

## Existing Frame

1. The screws in the frame front L-brackets will need to be removed and replaced with the longer screws and nuts to hold the front bracket assembly shown on the next page (page 7).
  - 🔄 **IMPORTANT:** It is recommended that you have a second person to help hold the front bracket and L-bracket while you replace the screws through the front bracket assembly into the L-Bracket.

# Top and Bottom Bracket Assembly

The vertical piece at the top rear of the existing frame side arm bracket is for the 5-Foot Pole Upgrade top bracket. It is pre-threaded for the M6 x 10 screws found in the 5-Foot Pole Upgrade hardware.

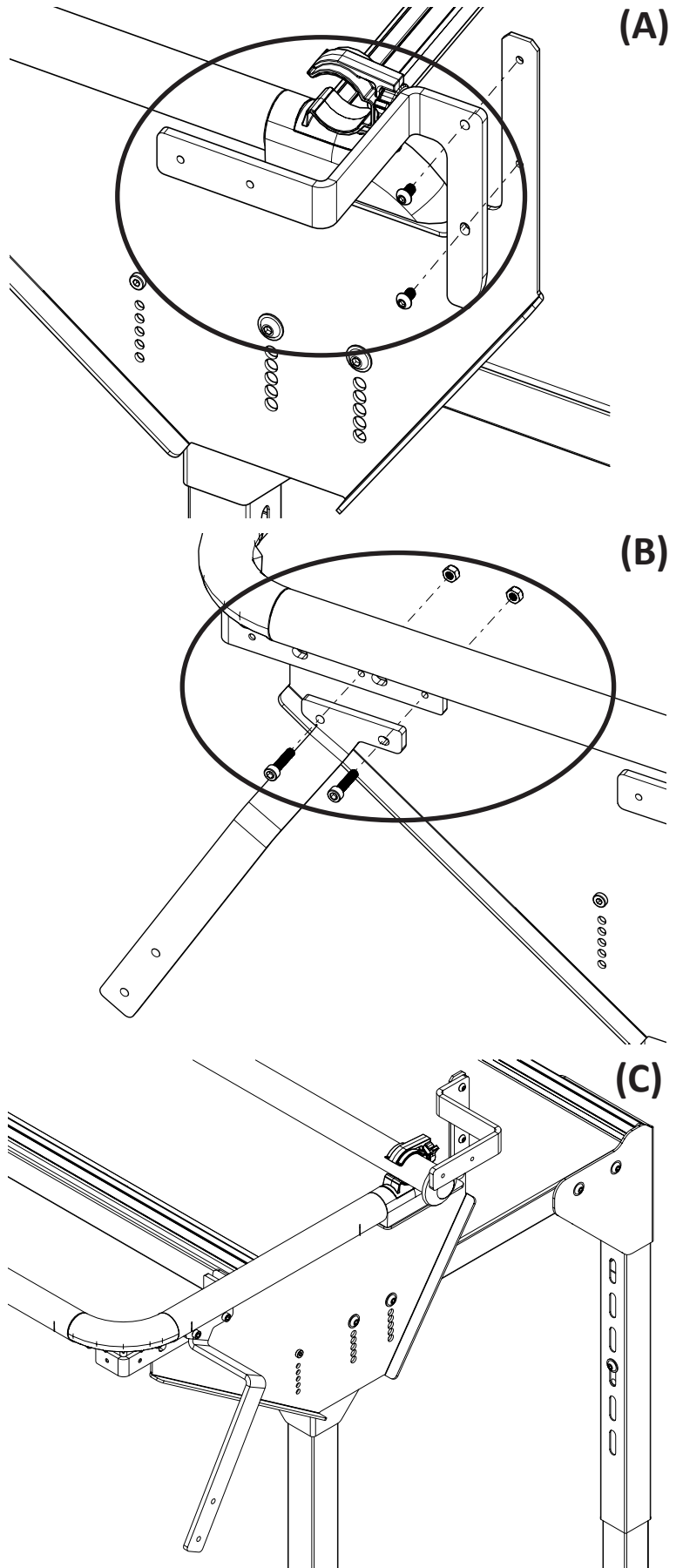
## Parts Needed

- 1 - Bracket Top Left
- 1 - Bracket Top Right
- 1 - Bracket Bottom Left
- 1 - Bracket Bottom Right
- 4 - Screw, M6 X 10
- 4 - Screw, M6 X 25
- 4 - Nut, M6 Locknut

## Tools Needed

- 4mm L Hex Key (provided)
- 5mm L Hex Key (provided)
- 10mm Wrench (provided)

1. Locate the top right bracket.
2. Align it with the side arm as shown in the image at the right **(A)**.
3. Start the screws into the pre-threaded holes and tighten the screws firmly with the provided 4mm L hex tool.
4. Locate the bottom right bracket.
5. Align the bracket as shown in the image at the right **(B)**.
6. Insert the screws through the bottom bracket and the side arm bracket.
7. Place a locknut onto both screws. The screw heads will be on the outside and the locknuts will be towards the inside of the frame **(C)**.
8. Tighten the nuts fully using the provided 5mm L hex key and the 10mm wrench.
9. Repeat steps 1-8 for the left side of the frame.



# Pole Bearing Assembly

These instructions show the hand-wheel and ratchet stops on the right side. They can be installed on either side, based on your preference.

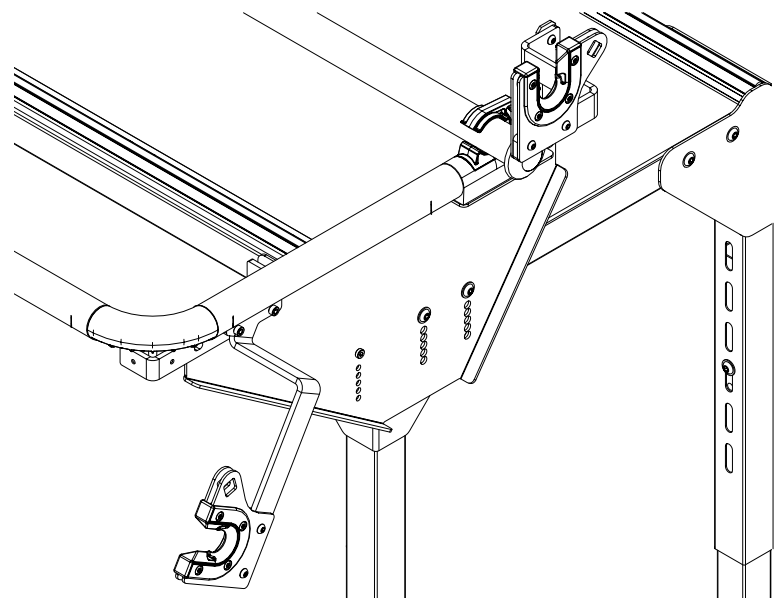
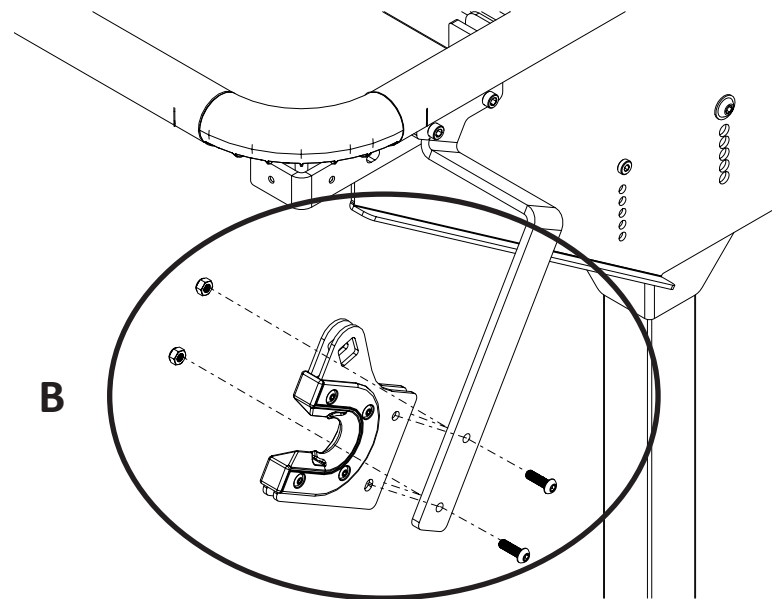
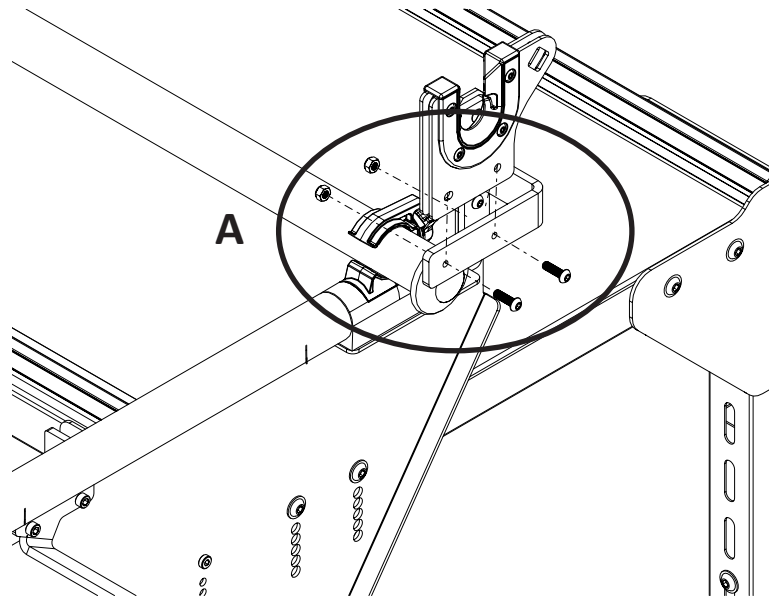
## Parts Needed

- 2 - QF00011-40
- 2 - QF00011-50
- 8 - Screw, M6 X 20
- 8 - Nut, M6 Locknut

## Tools Needed

- 5mm L Hex Key
- 10mm Wrench

1. Locate the **unplugged** pole bearing assemblies (QF00011-50).
2. Place the unplugged pole bearing assembly down over the right top bracket. The pole bearing assembly will straddle it. See image A.
3. Insert the two screws toward the center of the frame.
4. Place a locknut on each screw and fully tighten them with the 5mm L hex key, and the 10mm wrench (provided).
5. Repeat the process with the bottom right bracket. Use the second pole bearing assembly (QF00011-50). See image B).
6. Repeat the process for the top left bracket and bottom left bracket on the other end of the frame, using the **plugged** pole bearing assemblies (QF00011-40).





# Ratchet Stop Bottom Assembly

Shown at right is the bottom right bracket with exploded ratchet stop assembly, located at the front of the frame. Follow the steps in order of the sequence shown in the diagram.

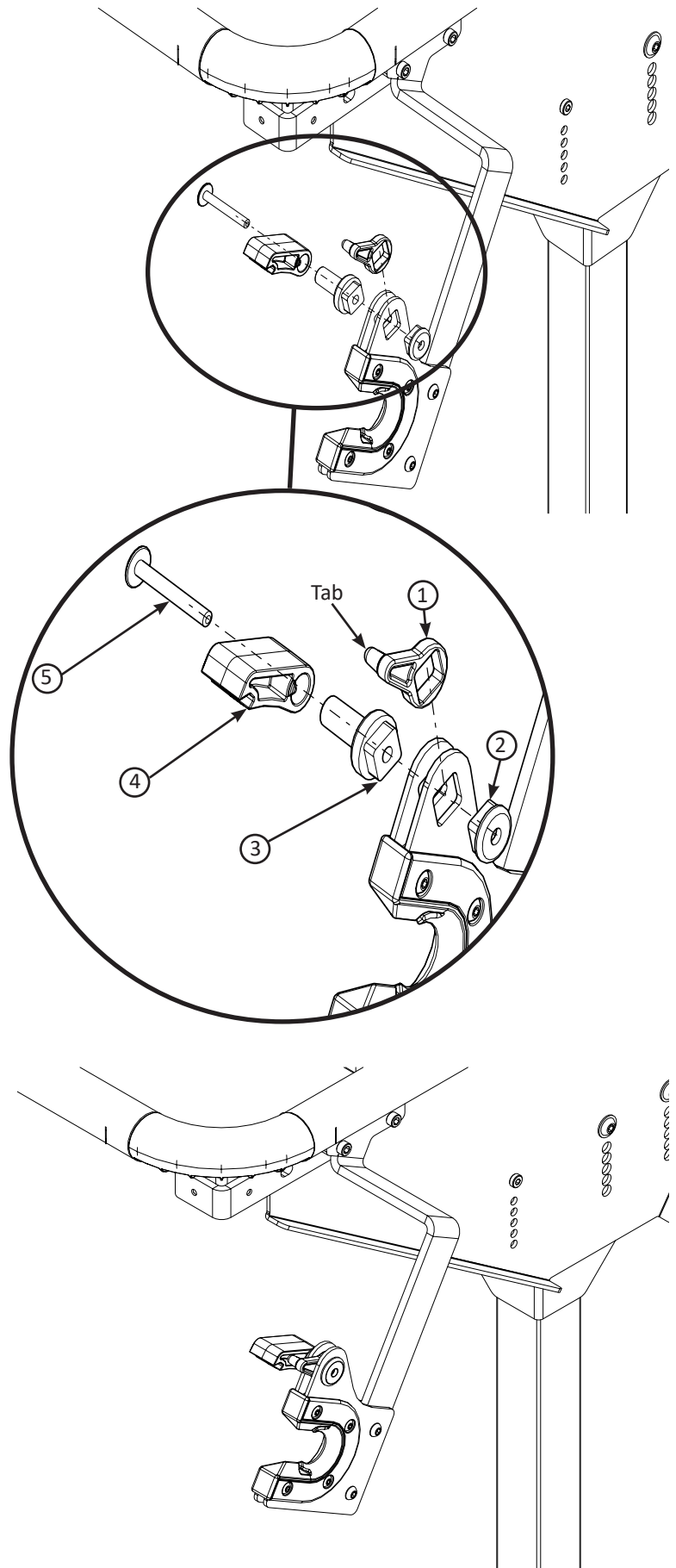
## Parts Needed

- 1 - Ratchet Stop Holder
- 1 - Ratchet Stop Mount
- 1 - Ratchet Stop Bushing
- 1 - Ratchet Stop
- 1 - Screw, M6 X48 SWH

## Tools Needed

4mm L Hex Key

1. Place the ratchet stop holder (1) between the two outside brackets with the tab located as shown.
2. Insert the square side of the ratchet stop mount (2) into the outside bracket. The screw will tighten into this mount later.
3. Place the square part of the ratchet stop bushing into the inside bracket.
4. Align the ratchet stop as shown in the image and slide it over the bushing (4).
5. Insert the M6 x 48 special large washer head screw through the bushing and assembly, then tighten fully with the 4mm hex tool provided.
6. The image at right shows the assembled bottom ratchet stop found at the front of the frame.



# Ratchet Stop Top Assembly

Shown to the right is the top right bracket with exploded ratchet stop assembly, which is located at the rear of the frame. Follow steps in order of the sequence shown in the diagram.

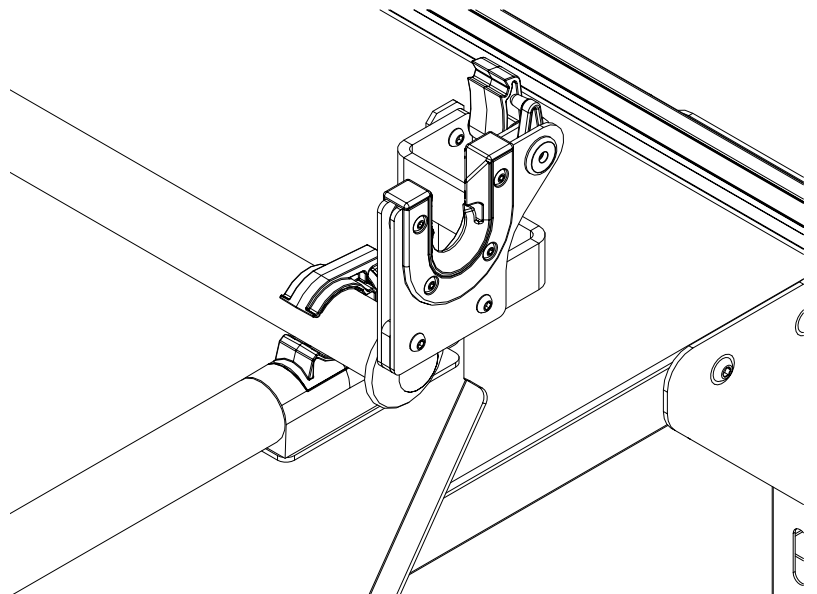
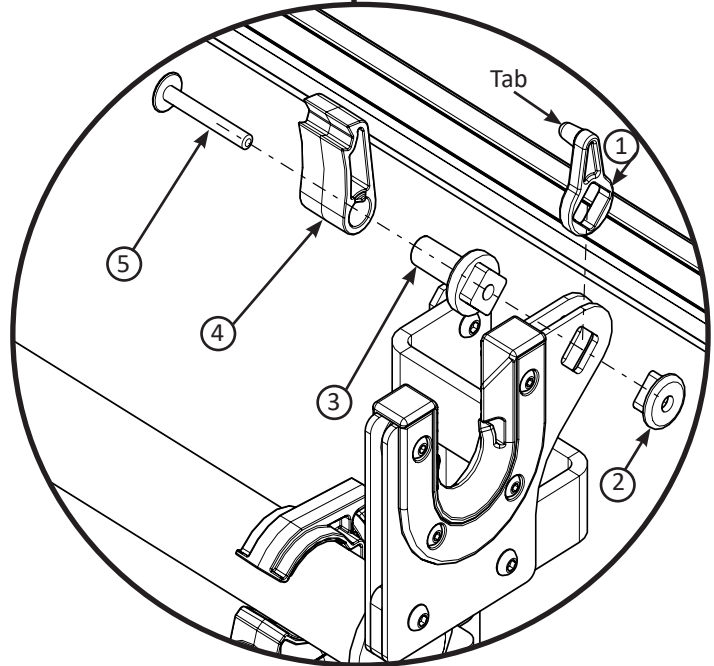
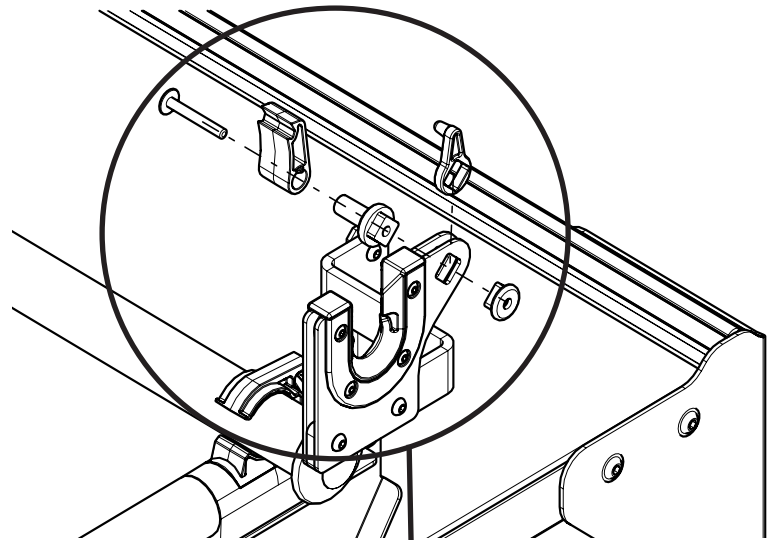
## Parts Needed

- 1 - Ratchet Stop Holder
- 1 - Ratchet Stop Mount
- 1 - Ratchet Stop Bushing
- 1 - Ratchet Stop
- 1 - Screw, M6 X48 SWH

## Tools Needed

4mm L Hex Key

1. Place the ratchet stop holder in between the two outside brackets with the tab located as shown.
2. Place the ratchet stop mount into the outside bracket with the square side into the bracket and the round side out. The screw will tighten into this mount later.
3. Place the square part of the ratchet stop bushing into the inside bracket.
4. Align the ratchet stop as shown in the image and slide it over the bushing.
5. Insert the M6 x 48 special large washer head screw through the bushing and assembly and tighten fully with the 4mm hex tool provided.
6. The bottom image shows the assembled top ratchet stop at the rear of the frame.



# Pole End Assembly

Two poles will be assembled, one top pole assembly with ratchet and hand-wheel and one bottom pole assembly with ratchet. Both poles have a pole end assembly on one end.

## Parts Needed


- 2 - Pole Rear
- 1 - Ratchet Wheel Assembly Long
- 1 - Ratchet Wheel Assembly Short
- 1 - Hand-Wheel Assembly
- 2 - Pole End Assembly

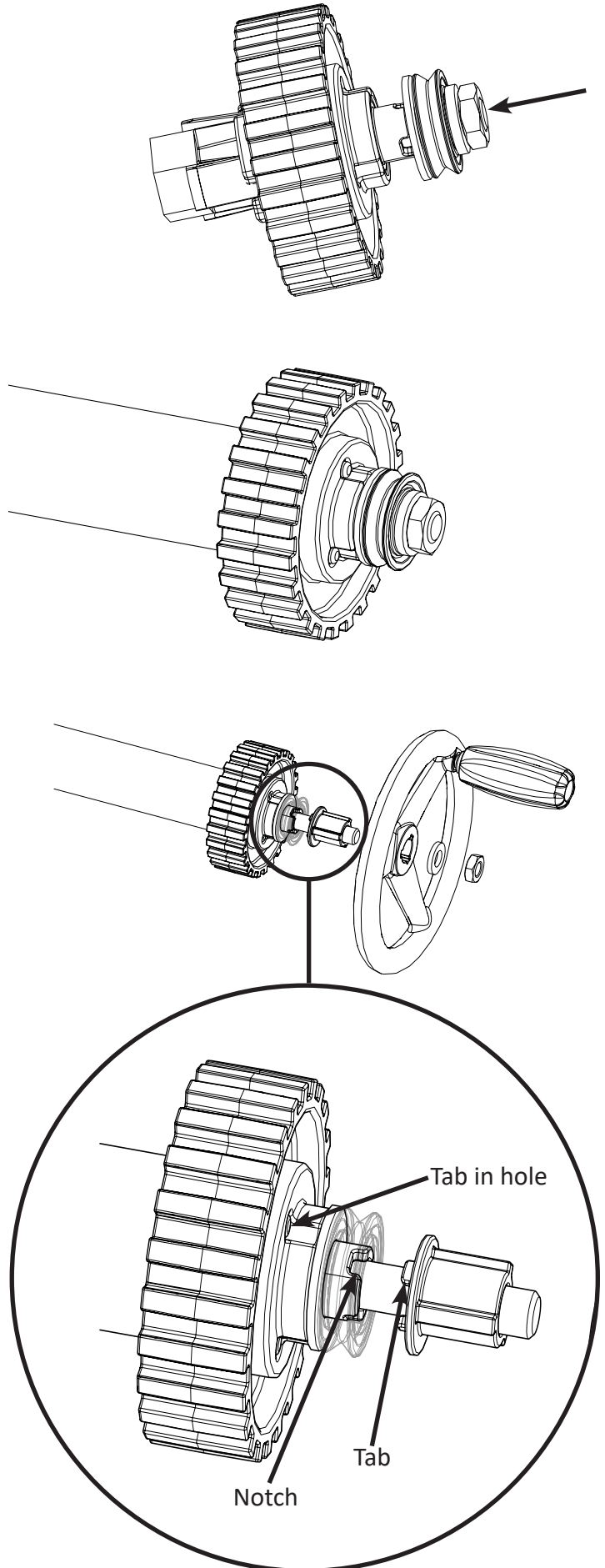
## Tools Needed

- 1 - Pole Assembly Wrench
- 1 - 17mm Wrench

## Top Pole with Hand-Wheel and Ratchet Wheel:


1. Loosen the nut on the ratchet wheel long bolt assembly, but do not remove it. Push the bolt towards the back of the ratchet wheel to loosen the wedge. This will allow the assembly to be inserted freely into the pole end.
2. Place the assembly into the pole end until the metal pole touches inside the small lip on the ratchet wheel assembly.
3. Remove the nut and small outside washer.
4. Place the hand-wheel with hand wheel plug bushing, the small washer, and the locknut onto the long bolt.
5. Align the three protruding tabs on the hand-wheel plug bushing with the three hand-wheel notches on the inside pole wedge.


 **NOTE:** The ratchet wheel has three holes for the tabs on the outside pole end and the hand-wheel plug bushing has three tabs that go into three notches on the outside pole end to keep them from slipping.



## Pole End Assembly *continued*

6. While holding the pole end ratchet firmly, tighten the locknut with the 17mm wrench.

 **NOTE:** The nut will appear to be all the way tight when it is only about half way tightened. Continue tightening until it will tighten no further. There should be a minimum of 3/8" to 1/2" of exposed threads beyond the locknut.

 **IMPORTANT:** If the nut is not fully tightened the hand-wheel will slip and damage the hand-wheel plug insert.

7. Cover the exposed threads by sliding a rubber screw thread end cap over them.

### Bottom Pole with Ratchet Wheel:

8. Loosen the nut on the ratchet wheel short bolt assembly, but do not remove it. Push the bolt towards the back of the ratchet wheel to loosen the wedge. This will allow the assembly to be inserted freely into the pole end.

9. Place the assembly into the pole end until the metal pole touches inside the small lip on the ratchet wheel assembly.

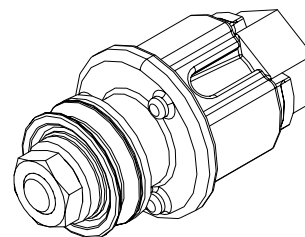
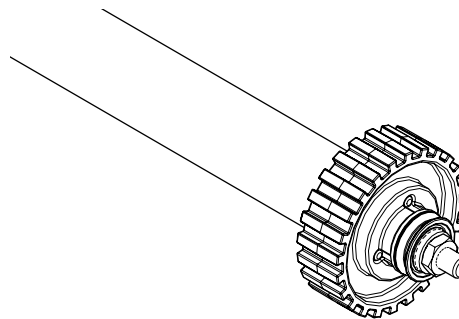
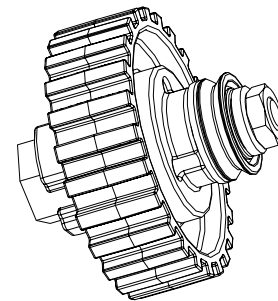
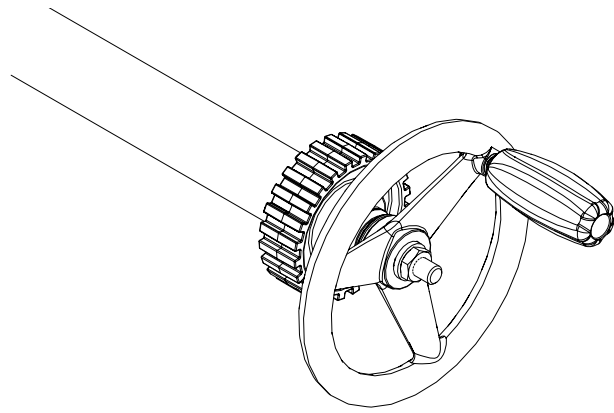
10. Align the three tabs on the outside pole end with the three holes on the ratchet wheel.

11. Tighten the locknut fully until it has 3/8" to 1/2" threads exposed and it will not tighten any more.

12. Cover the exposed threads by sliding a rubber screw thread end cap over them.

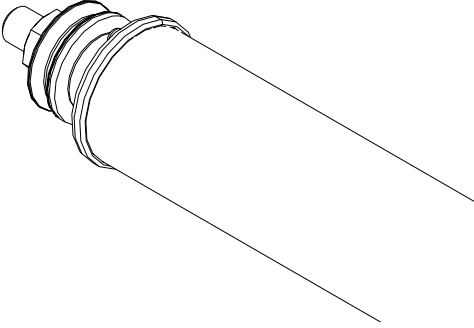
### Pole End Assembly:

13. Repeat the loosening, inserting and tightening processes for the two simple pole end assemblies (one on each pole) and cover the threads with a screw thread end cap.



**Pole End Assembly *continued***

**Pole end**



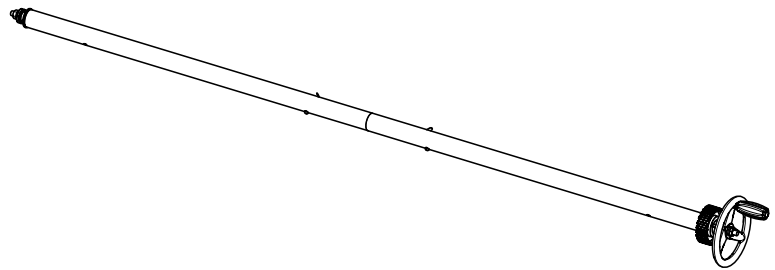
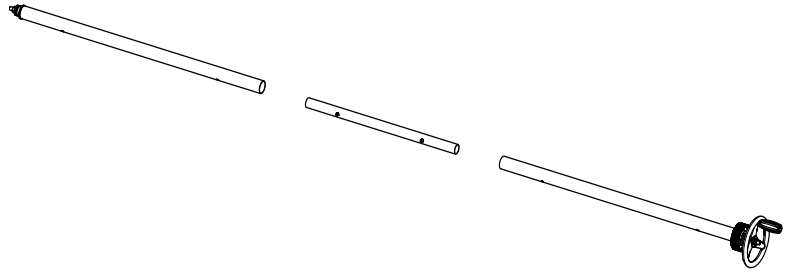
# Pole Coupler Assembly

## Handwheel with ratchet pole (top rear)

1. Place the the handwheel with ratchet pole onto the pole coupler while aligning the locator hole with the snap button. Slide the two together until the snap button locks into the locator hole.

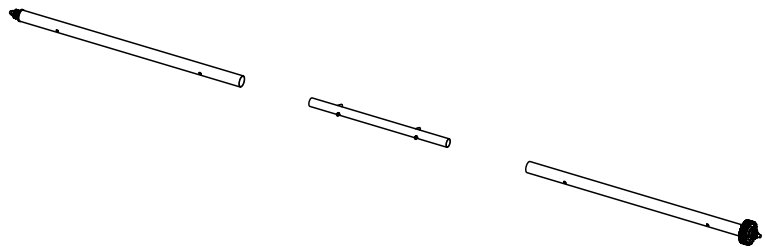
△ **CAUTION:** Be careful not to pinch you hands while pushing the poles together on the pole coupler!

2. Repeat the process with a regular pole end onto the other end of the coupler to complete the hand wheel with ratchet pole.

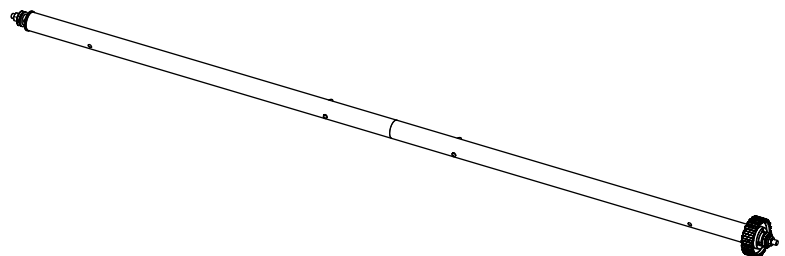


## Ratchet Pole (bottom front)

3. Place the ratchet pole onto the pole coupler while aligning the locator hole with the snap button. Slide the two together until the snap button locks into the locator hole.



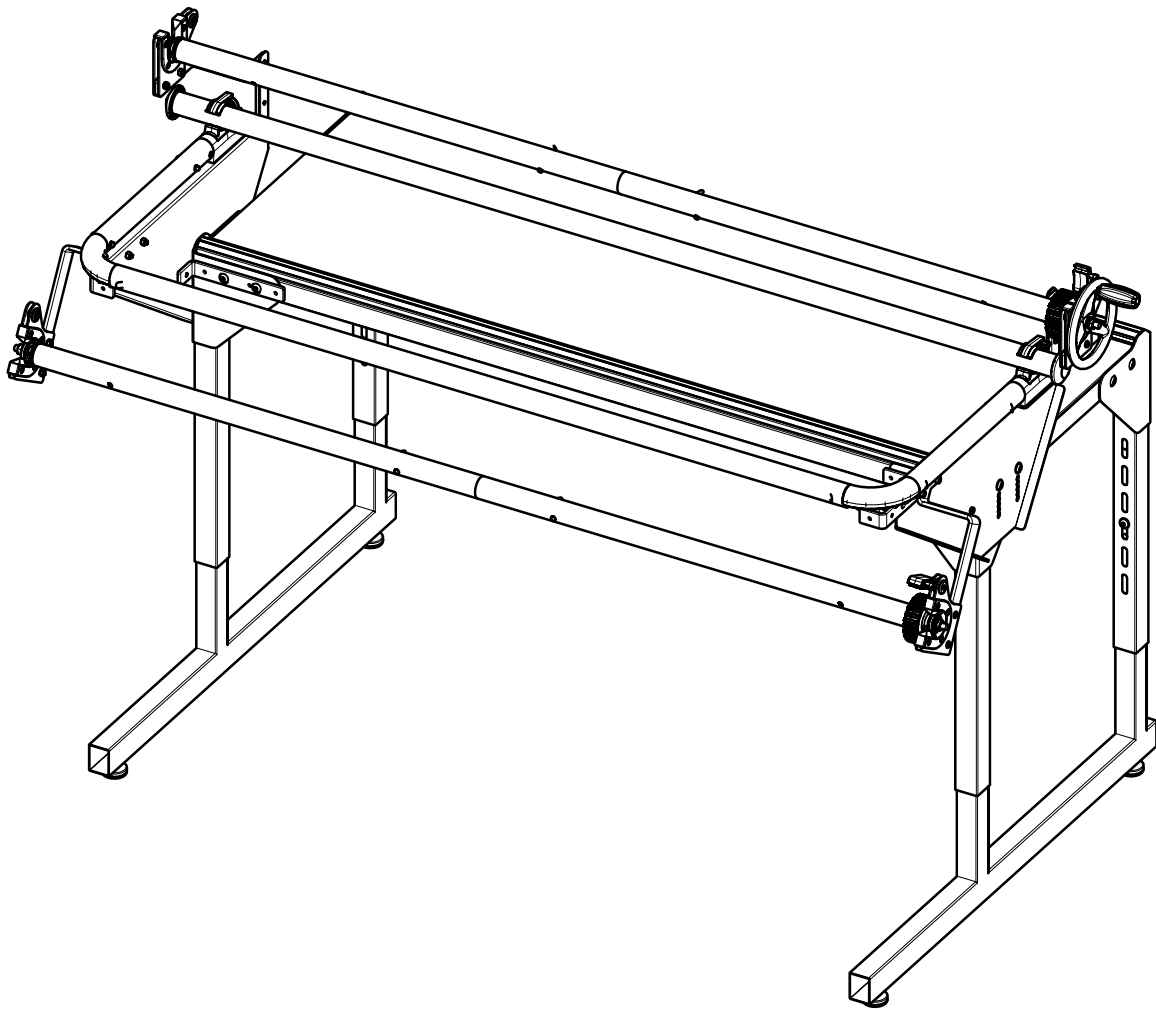
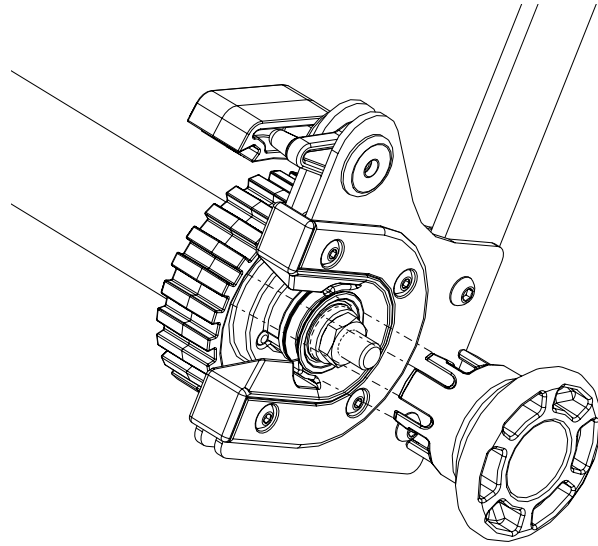
4. Repeat the process with a regular pole end onto the other end of the coupler to complete the ratchet pole.



## Pole to Frame Assembly and Pole Keepers

A set of pole keepers are provided for the bottom front pole.

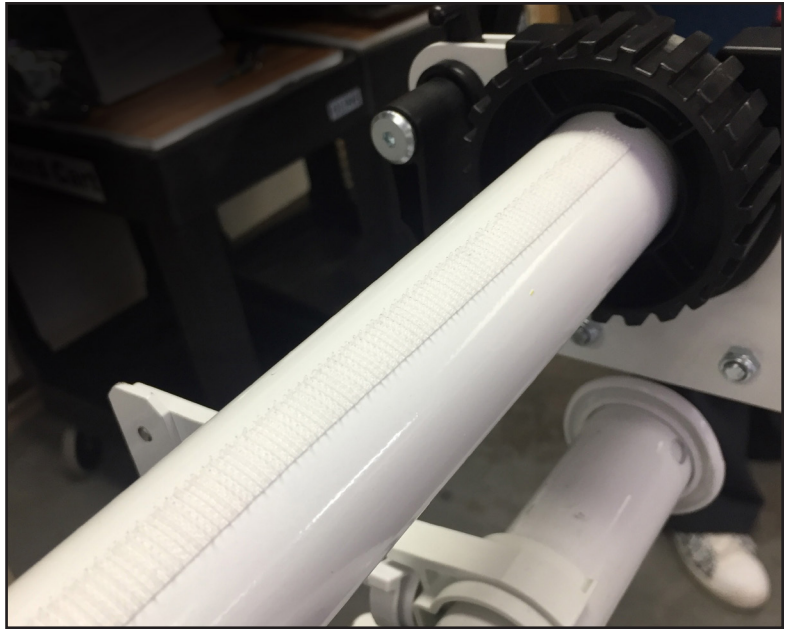
1. After you have assembled the poles, place them on the frame as shown in the image below.
2. Place the pole keeper with the wide part over the wide opening as shown in the detailed image.



## Velcro® Assembly

The two poles with ratchet wheels will need to have one piece of hook Velcro tape installed straight across them from end to end. Two pieces of hook Velcro 4.5' long are provided. It is important that this be installed straight on the pole to make it possible for you to load the quilt straight.

1. Check how the Velcro fits across the pole. Make small marks to help you to start the Velcro at the right place and keep it straight.
2. Peel the backing from the Velcro a small amount at a time as you place it across the pole, keeping the Velcro straight.





## Leader Assembly

Apply the Velcro edge of the leaders to the hook Velcro adhered to the poles.

The quilt backing is then pinned to the leaders.

Refer to the images at the right to aid in wrapping the leaders and quilt backing around the poles in the correct manner. With the ratchets engaged, the poles will only turn in the correct direction.

