

How to Install on the Pinnacle Frame

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Picture Contents Bag # 1-Motor bracket 2-Small clamps 2- M5 x 8mm screws 2-10-24 x 3/8" screws annia. 3- #10 flat washers. 1-Display bracket 5 2-8-32 x1/2" screws 4- M6 x 8mm screws 2- Poly disc OR 1- Display bracket 2-M3 x 8mm screws 10 Varies by machine 12 1-White belt *(12')* 14 1 - Black Belt (86")

Bag #	Contents	Picture
15	1- Carriage bracket 1-Y-bracket 1- Thumb screw 1-10-24 x 1/4" screw 1- Eyebolt 4- M5 K-lock nut 2- M5 x 12mm screw	
21	1-Idler bracket 2- Small clamps 2-10-24 x 1/2" screws 1- Shoulder screw 1- Plastic washer 1- Pulley 1- 10-24 K-lock nut	
26	5- Plastic Anchors 2- M5 x 12mm screws 2- M5 washers 10-5" Zip ties 5-10" Zip ties	400
28	1 - Motor Pulley Cover 2 - Nuts <i>(M5 K-Lock)</i>	

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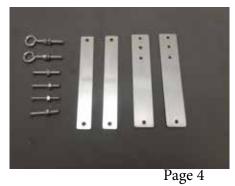
2- Quad-hole brackets

2- Dual hole brackets

2- Eyebolts

4- M5 x 35mm screws

8- M5 K-lock nuts



Mount the motor box bracket to the front of the carriage between the plastic cap and the the plastic carriage with the lip of the bracket facing down.

Loosen the screw on each clamp, attach the bracket to the lower lip on both sides of the carriage, and tighten the screws to hold the bracket in place.

Use washers to space as needed

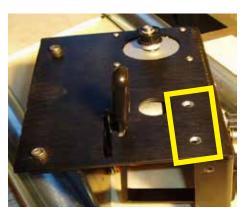






Take the Butler motor box, and line the two holes on the box with the two holes on the motor box mounting bracket.

Use 10-24 screws and one washer on each screw to fasten the motor box securely in place.





Attach the idler bracket in the same manner as the motor bracket on the rear of the carriage.

Make sure that the idler pulley is on the same side, and inline with the motor box pulley.







Installing the White X-Belt

Take a quad-hole bracket and a dual-hole bracket.

Mount the bracket so that it is inline with the motor box on the front of the frame.

Attach the brackets with the quad-hole bracket on the inside facing the motor box.

Use two $10-24 \times 1/4$ " screws to clamp the brackets to the frame as pictured.







Outside view

Attach the Eyebolt to the lowest hole on the inner bracket.

Leave one nut on the inside of the eyebolt and use the other nut to secure it to the bracket.

Repeat for the other side.



Attach the white belt between the two eyebolts.

Use the belt clamps to secure the belt to the eyebolts with the teeth facing up.

Leave some slack left in the line for the following step.

Note: Refer to Appendix A for help using the belt clamps.





Release the tension on the motor box, by unlocking the belt tension lever on the top of the motor box.

Loop the belt through the pulleys on the back of the motor box, by running over the first pulley, under the middle pulley and over the last pulley.

Re-engage the belt lock lever, and adjust the eyebolts as needed to remove excess slack in the belt.



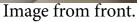


Installing the Black Y-Belt

Install the carriage bracket (bag 28) onto the carriage on the same side as the motor box and rear idler pulley.

Use the pre-existing holes on the carriage to mount the carriage bracket using the 10-32 screws.





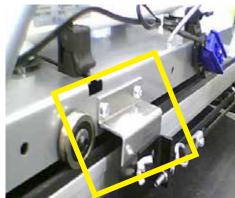


Image from rear.

Connect the eyebolt to the carriage bracket with the eye facing toward motor box.

Attach the belt using the provided clamps.

Run the belt around the pulley on the motor box with the teeth facing in.

Continue to run the belt back toward the rear idler pulley running the belt behind the carriage bracket.







2 Loop the belt around the rear idler pulley, and run it back to the carriage bracket.

Attach the belt to the carriage bracket by looping the belt through the slot on the left side, and securing the belt clamp.

Use the eyebolt to tighten the belt as needed.

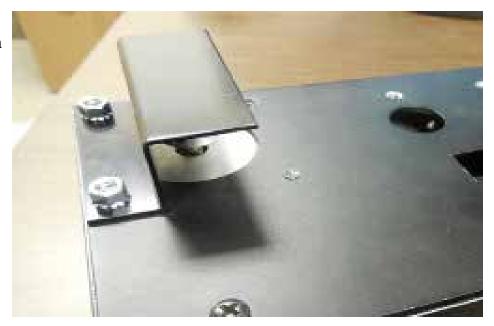
Note: The belt may rub against the carriage bracket. This is not a problem, and will not interfere with machine opperation.



4 Optional

The motor box pulley can be attached cover if desired.

Place the cover over the raised screws on the motor box, and use the M5 nuts to secure the cover.

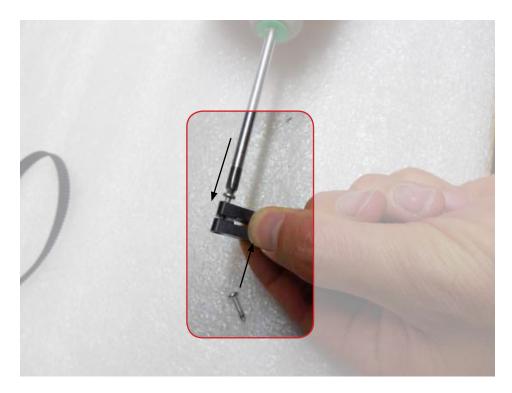


Appendix A - How to use Belt Clamps

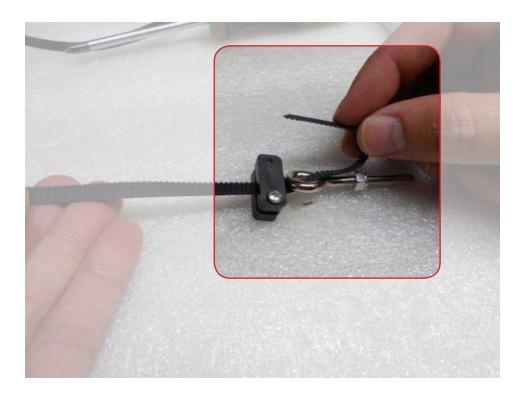
A belt clamp consists of two clamps and two screws.



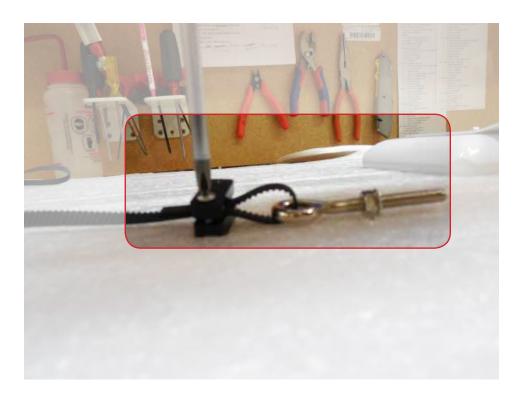
Using a Phillips screwdriver, insert each screw on opposite sides of the clamps and tighten halfway.



Thread the belt between the clamps, loop it around and reinsert it between the clamps.



Align the belt teeth, then finish tightening the clamps.



Appendix B- Additional help

Installing cables

Please refer to the Connecting Robot to Quilt Machine instruction set for help installing cables.

Power on the robotics

Use the power switch located on the side of the motor box with the ports to power the motor box off and on.

Disengage belts for free motion

In order to use free motion with the butler connected the belts will need to be disengaged.

To disengage the x-belt, move the locking lever away from the edge of the motorbox.

To disengage the y-belt, loosen the wingnut on the carriage bracket.

You can now use free motion quilting.





