




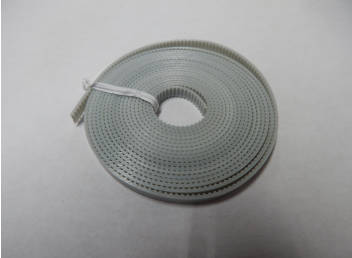

Quilt
EZ

BUTLER
QUILTING ROBOT

How to Install on the
Gracie Frame

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Bag #	Contents	Picture
M3	1-Motor bracket 2-Small clamps 2- M5 x 8mm screws 2-10-24 x 3/8" screws 3- #10 flat washers. 1- 5/16" drill bit	
D1	1-Display bracket 2- 8-32 x1/2" screws 4- M6 x 8mm screws 2- Poly disc	
Integrated systems do NOT need this bracket (ESP, KQ SE, TL SE, Perfect Stitch etc)		
Cables	Varies by machine	
C2 & C3		
X1	1-White belt (15')	
Y1	1 - Black Belt (86")	

Bag

Contents

Picture

Y2

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



I1

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



Z1

10 - Plastic Anchors
2- M5 x 12mm screws
2- M5 washers
10- 5" Zip ties
5- 10" Zip ties



Z3

1 - Motor Pulley Cover
2 - Nuts (M5 K-Lock)



X2

2- Quad-hole brackets
2- Dual hole brackets
2- Eyebolts
4- M5 x 35mm screws
8- M5 K-lock nuts



Installing the Motor Box and Rear Idler Pulley

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

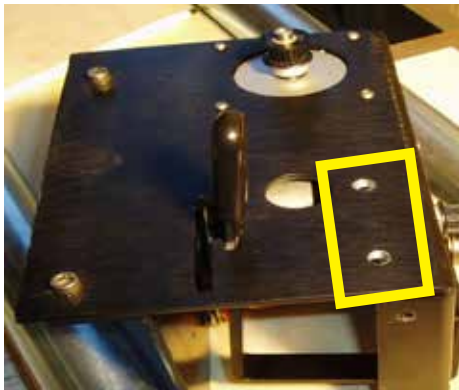


Loosen the screw on each clamp, attach the bracket to the lower lip on both sides of the carriage, and tighten the screws to hold the bracket in place.

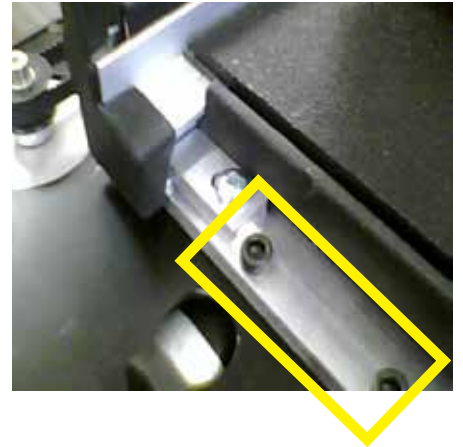


Use washers to space as needed

2 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.



3 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

There are two ways to mount the white x-belt to the frame. The belt can be mounted directly into the wood frame, or it can be mounted to the bracket provided in bag 29. To determine which assembly to use, pull the carriage to either side of the frame. Determine where the pulley on the back of the motor box is in regards to the frame.

1

Option 1

If the pulley is inline with the frame, drill a hole with an 5/16 in. drill bit.

Position this hole so that it is directly in line with the pulley.

Repeat for other side

Option 2

If the pulley is outside of the frame use the bracket in bag 29. Only use the brackets with the three holes as pictured.

Line one of the holes on the bracket with the pulley, and screw the bracket to the wood frame.

Repeat for the other side



Make sure you drill the hole directly in line with the motor box pulley



Drill a hole to mount the bracket once it is inline with the motor box pulley.

2 Insert the eyebolts with the eye facing each other on the inside of the carriage as pictured.

Use the belt clamps to secure the belt to the eyebolts with the teeth facing up. Leave some slack in the line for the following step.

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



3 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

- 1 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 front.

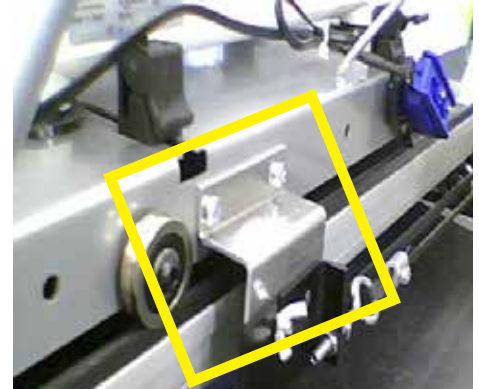


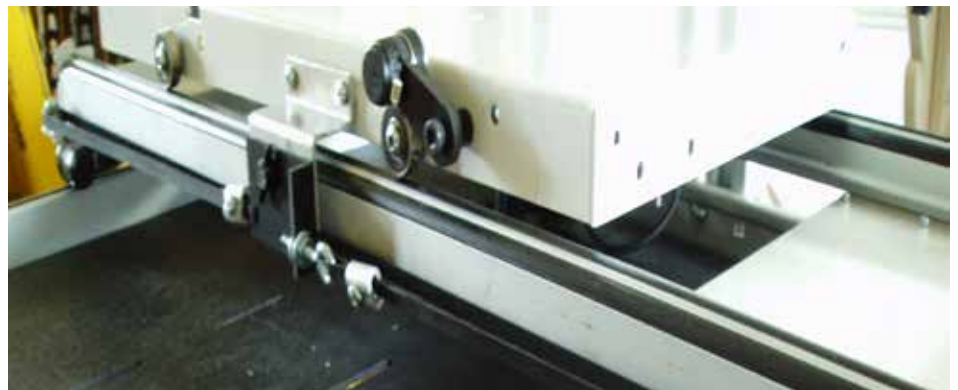
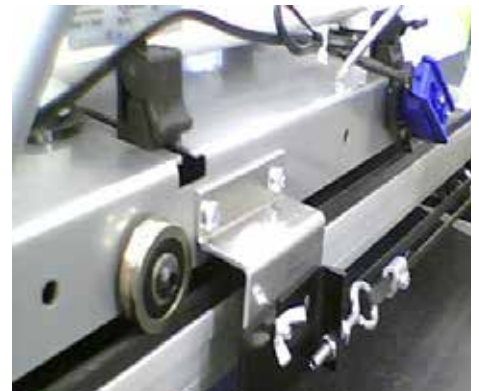
Image from rear.

- 2 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.



3 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 operation.

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.

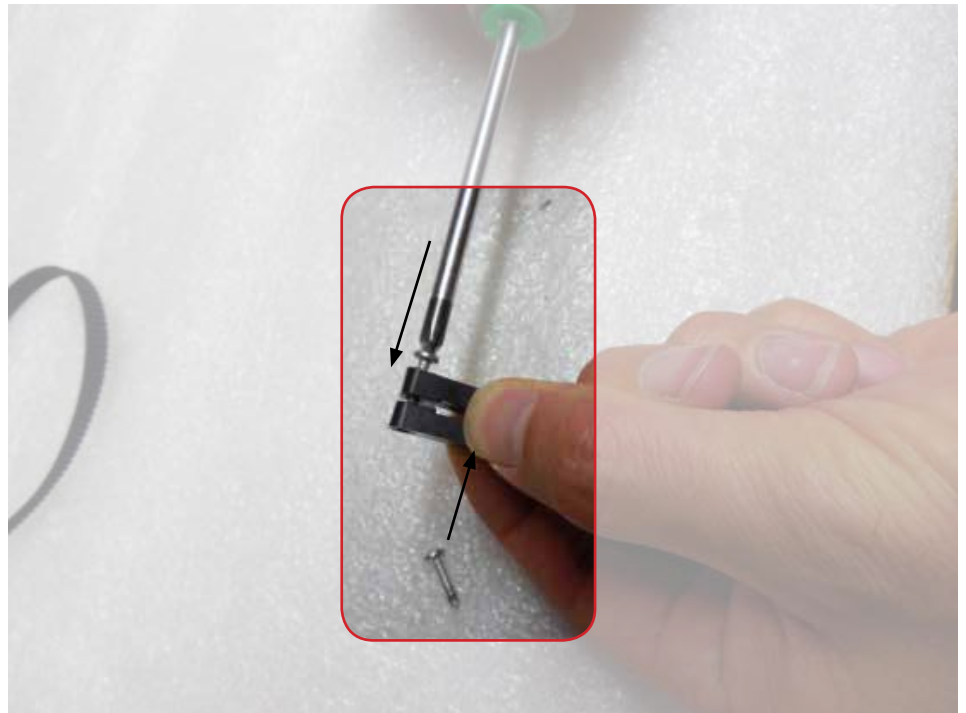


Appendix A - How to use Belt Clamps

A belt clamp consists of two clamps and two screws.



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



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



- 3 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.

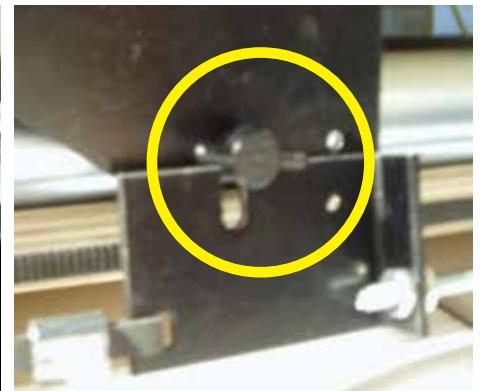
Power on the robotics

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.

Quilt
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The image features the word "Quilt" in a large, orange, serif font. The letter "Q" is significantly larger than the other letters. A black needle with a white thread is shown passing through the center of the "Q". Below the "Q", there is a cursive flourish in a light grey or blue color. To the right of the "Q", the word "Quilt" is written in a smaller, orange, serif font. Below "Quilt", the letters "EZ" are written in a large, orange, serif font.