How to Attach Butler Robotics Handi Quilter Clamp Frame

In order to accommodate all machine types we use universal parts bags, not all parts will be used in every installation.
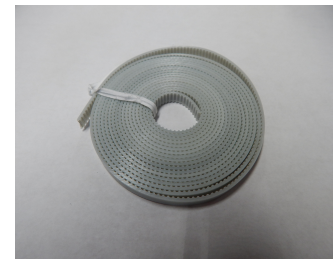
Bag #	Contents	Picture
Cables	Vary by machine	
X1	1-White belt (15')	
Y1	1 - Black Belt (86")	
Z1	1 0 - Plastic Anchors 2- Screws (M5 x 12mm) 2- Washers (M5) 5- 10" Zip ties 10- 5" Zip ties	
Z3	1 - Motor Pulley Cover 2 - Nuts (M5 K-Lock)	

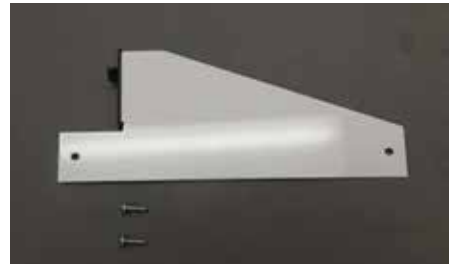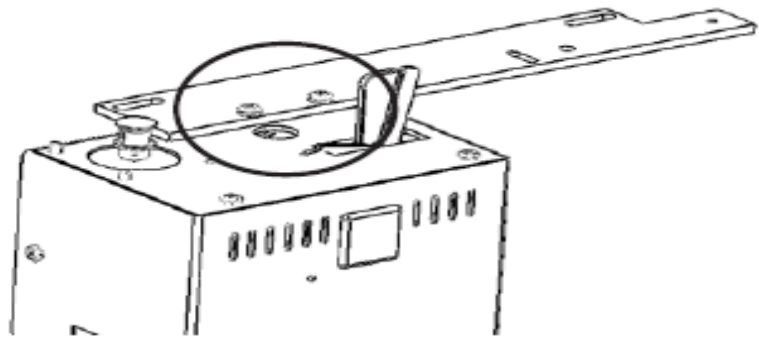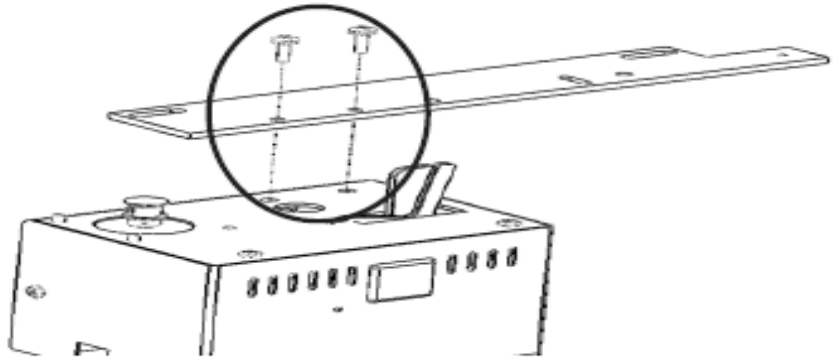| Bag #	Contents	Picture
D5	1- Display Bracket 2- Remote bases 4- Pan head screws (M6 x 8 mm) 4- Hex nuts (M6) 2- Pan head screws (8-32 x 1/2") 2- White poly discs 1- Bracket extender 3- Socket head screws (M6 x 50 mm) 3- Spacers (1/4" x 1/2" x1/4")	
I12	1- Front idler bracket 2- Lock nuts (1/4"-20) 2- Machine screws (1/4"-20 x 1") 1- Pulley assembly	
Y13	1-Carriage bracket 1- Y-bracket 1- Pan head screw (10-24 x 1/4") 1- Wingnut screw (10-24 x 1/4") 2- Panhead screws (10-24 x 1/2")	
X8	2- X-bracket bases 2- X-brackets 2- Eyebolts (M5 x 40mm) 4- Lock nuts (M5) 2- Pan head screws (10-24 x 1/2") 2- Hex nuts (10-24) 2- Fender washer (10-24 x 5/8")	
M8	1- Motor box bracket 2- Lock nuts (1/4"-20) 2- Screws (1/4"-20 x 1")	

Attach the Motor Box Bracket (Bag M8)

1 Attach the front carriage bracket to black motor box using the provided M5 x 12mm screws.
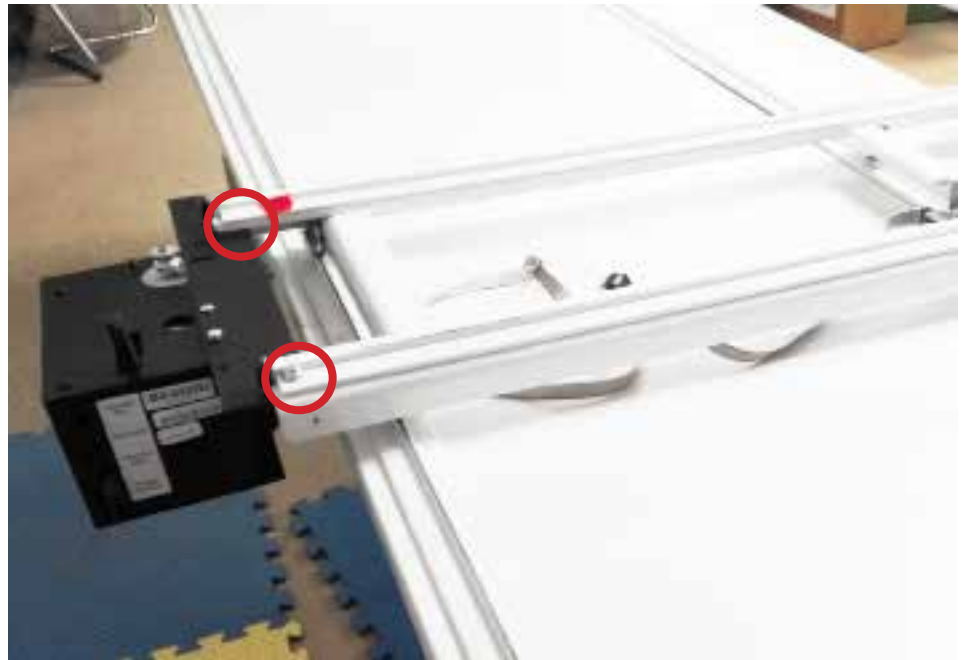

2 Line the motor box bracket with the vertical rails of the carriage at the back of the frame.

Mark and drill the two points.

3   Line up the motor box bracket with the two holes on the carriage, and secure by inserting the provided 10-24 x 1" screws and lock nuts.

Make sure the pully is on the left.

Attach the Front Idler Bracket (Bag I12)

1   Like the motor box bracket, line the motor box bracket with the vertical rails of the carriage at the back of the frame.

Mark and drill the two points.

2   Attach the rear idler pulley bracket to the carriage with the provided 10-24 x 1" screws.

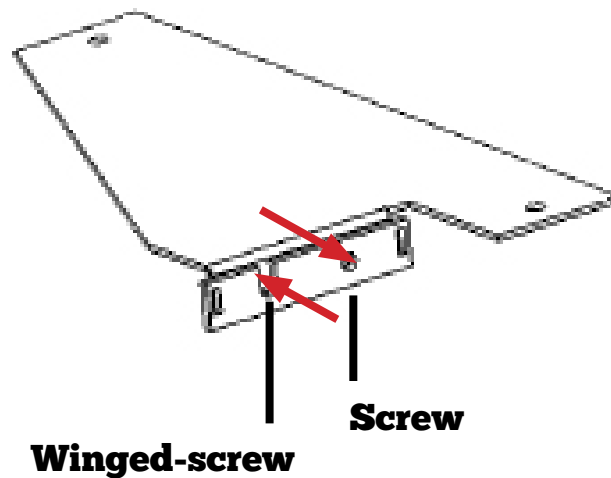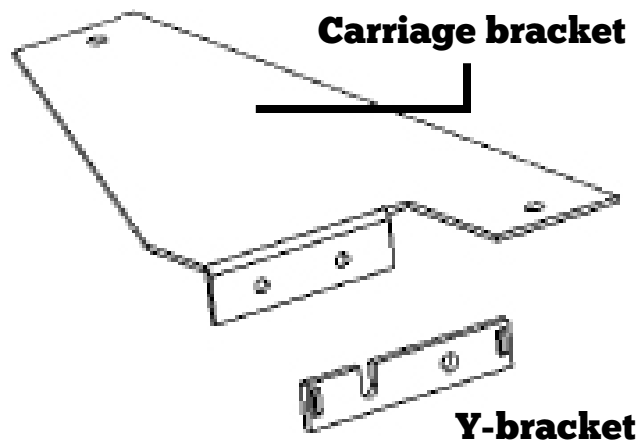Make sure the pulley is on the right so that it is in line with the pulley on the motor box.

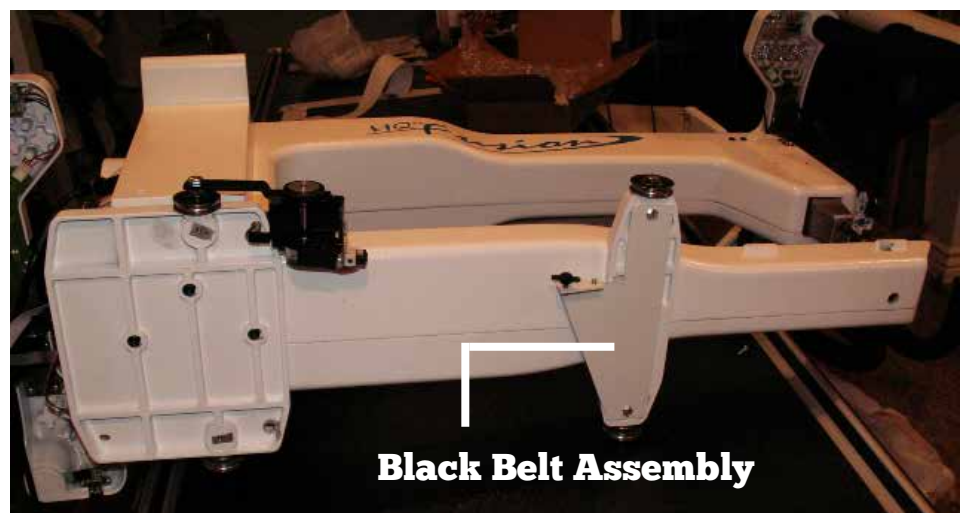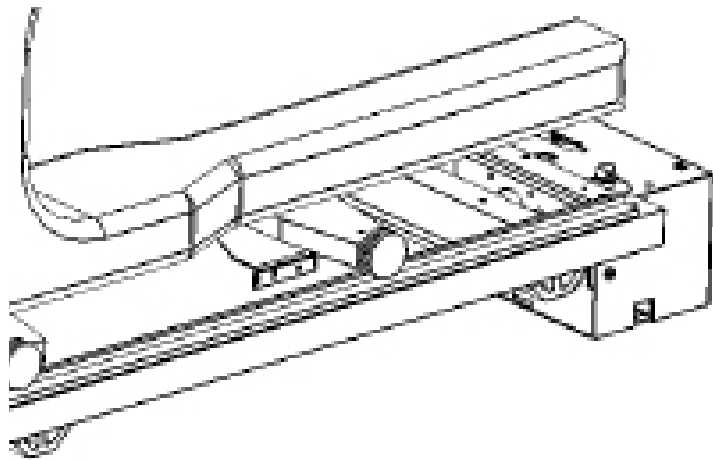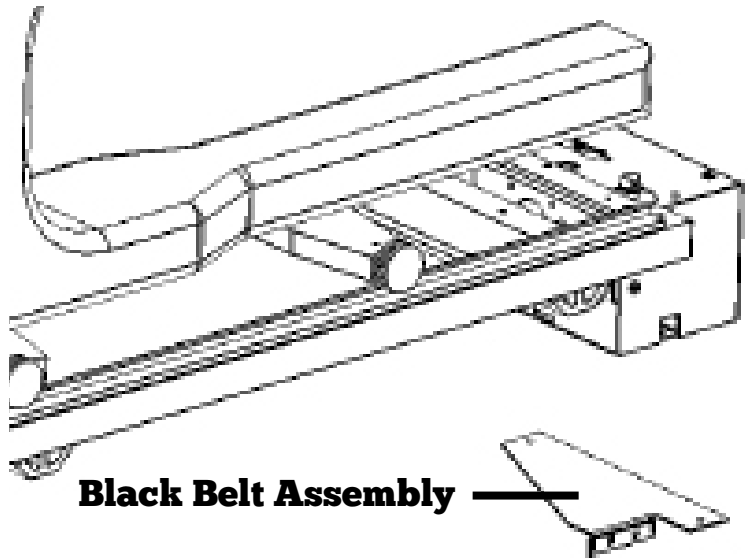# Install Black Belt (Bag Y1 and Bag Y13)

1 Attach the two black belt brackets together using the provided winged screw and screw.

If the bracket is pres-installed continue to step 2.

Carriage bracket

Y-bracket

Insert the winged-screw from the front and the normal screw from the back.

Screw

Winged-screw

2 Install black belt assembly to the underside of the front carriage wheels.

Black Belt Assembly ———

Black Belt Assembly

3 Use the belt clamps to attach one side of the black belt to the Y-bracket. Make sure the teeth face away from the carriage.
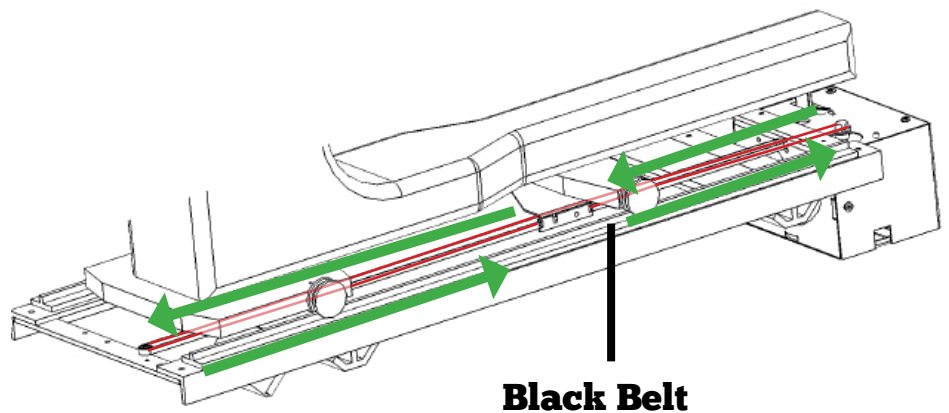
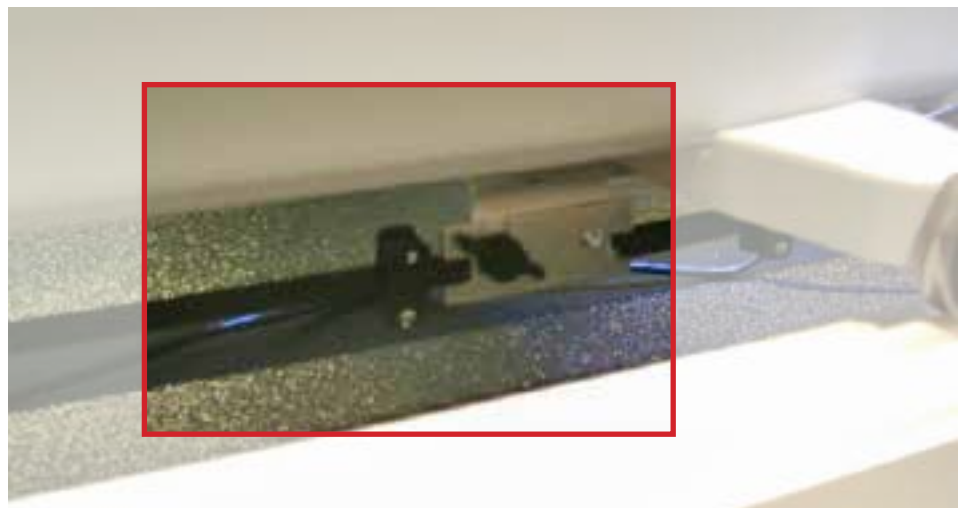*See Appendix A for help with belt clamps.*

4 Loop the belt around the motor pulley with the teeth facing in.

The uninterrupted length of the belt will run farther from the carriage.

Then loop the belt around the rear idler pulley.

Black Belt

5 Attach the other end of the belt to the Y-bracket using another belt clamp.

Install White Belt on Handi Quilter Fusion Frame (Bag X1 and Bag X8)

1 Drill a hole directly into the table to mount the X-bracket base at the back of the table..

Make sure there is enough room to attach the X-bracket.
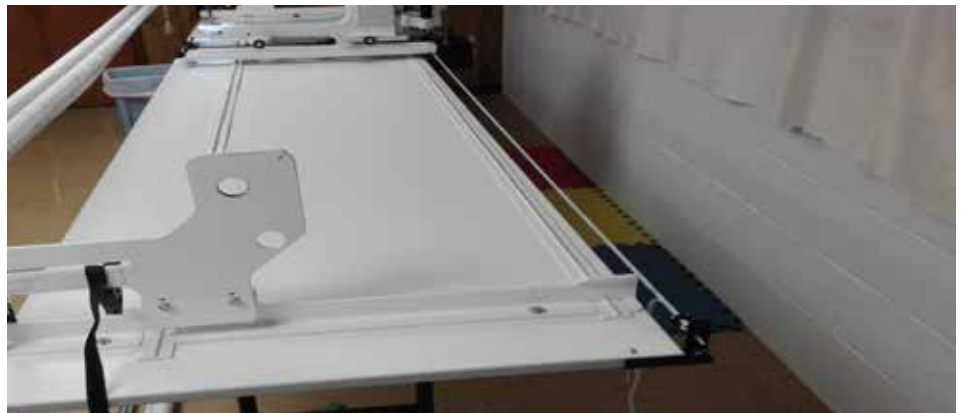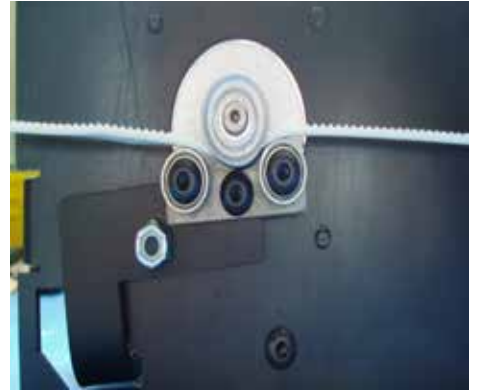
Repeat for both sides.

2 Use a belt clamp to secure the belt to each of the eyebolts.

3 Release the belt lock lever and run the belt as shown with the teeth facing up.

Then reengage the lock lever.

Install Display (Bag D5)

1 Remove the 3 screws holding the handle to the machine.

Then line up the display bracket with the three holes.

Note: If the machine is not a Handi Quilter Fusion you do not have to use the bracket extender or the spacers.

2 Use the three
 M6 x 45mm bolts to
attach the display to
the machine.

3 Refer the to Android
Installation Guide to
install the tablet onto
the display bracket.

4 For standard displays, use the provided screws to attach the display to the bracket.
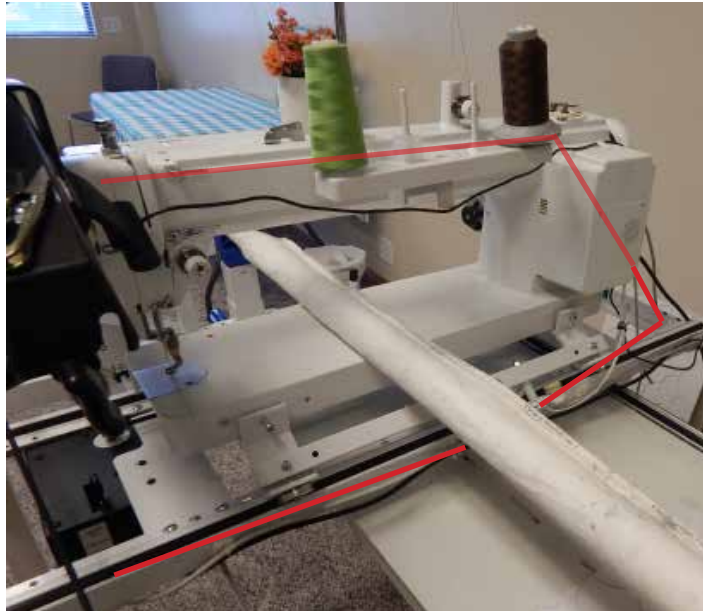

Connect Cables

1 Attach one end of the network cable to the Remote port on the Motor box.

2 Run the cable around the back of the machine up to the display.

*Image not representative of machine type.

3 Connect the other end of the display cable into the display.

Android cables will plug into the RJ45 network connection on the hub on the back of the tablet.

Standard displays will plug into the slot on the bottom of the display.

4   Plug the phone style RJ12 side of the handlebar cable into the handlebar port on the motor box.

Follow the display cable around the back of the machine.

5   Use the anchors and zip-ties from bag Z1 to secure the cables to the carriage and the machine in such a way that they will not be in the way of moving parts.

*Image not representative of frame type.
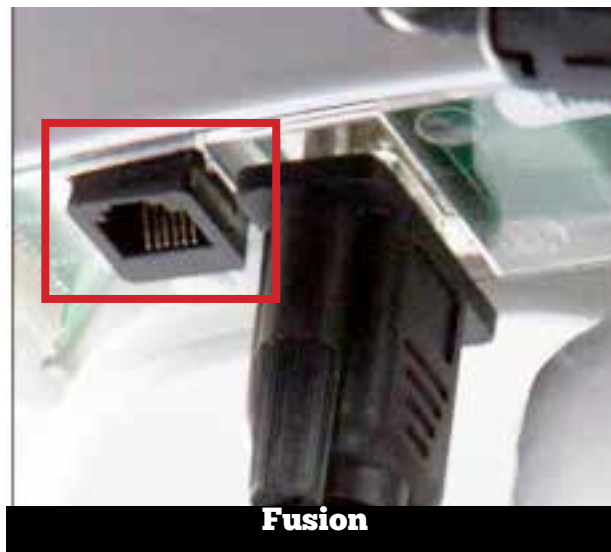
6   Avante or Baby Lock:
Remove the handlebar
wires from the
machine.

Plug the handlebar
wires from the machine
into the provided
handlebar cable
adapter.

Plug the adapter with
the handlebar wires
into the machine.

Avante

Reinsert into side
port on machine

Avante

Fusion:
Plug the remaining end
into the micro handle
port on the underside
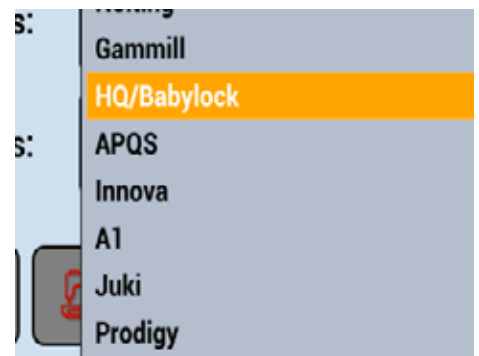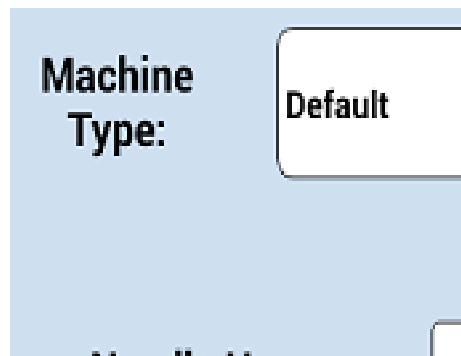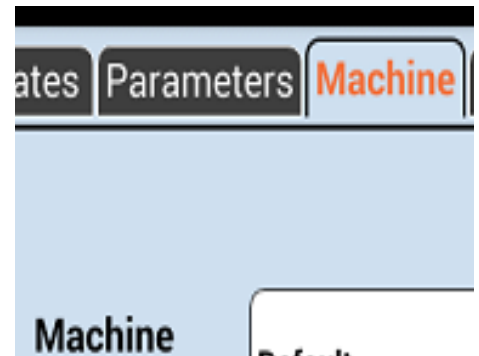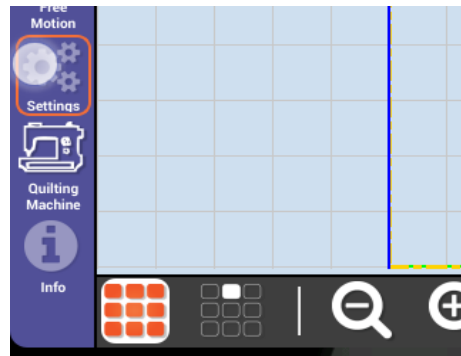of your handle bars.

Fusion

Set Machine Type

Standard Display

1 Power on the display, go to Settings > Machine and set the machine type to HQ/Babylock.

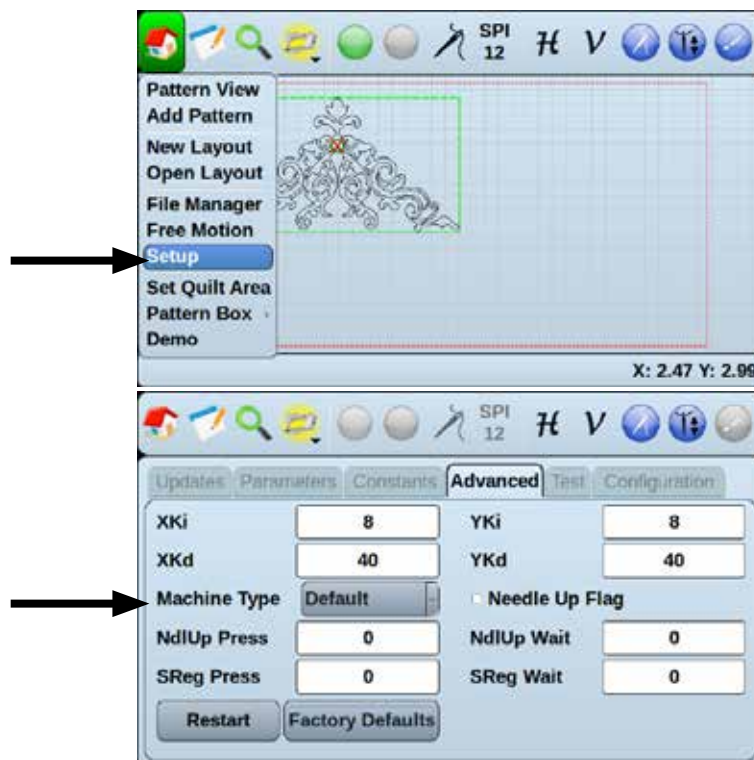*Some older HQ machines may need to be set to Juki.*

Standard Display

1 Power on the display, go to Setup > Advanced and set the machine type to HQ.

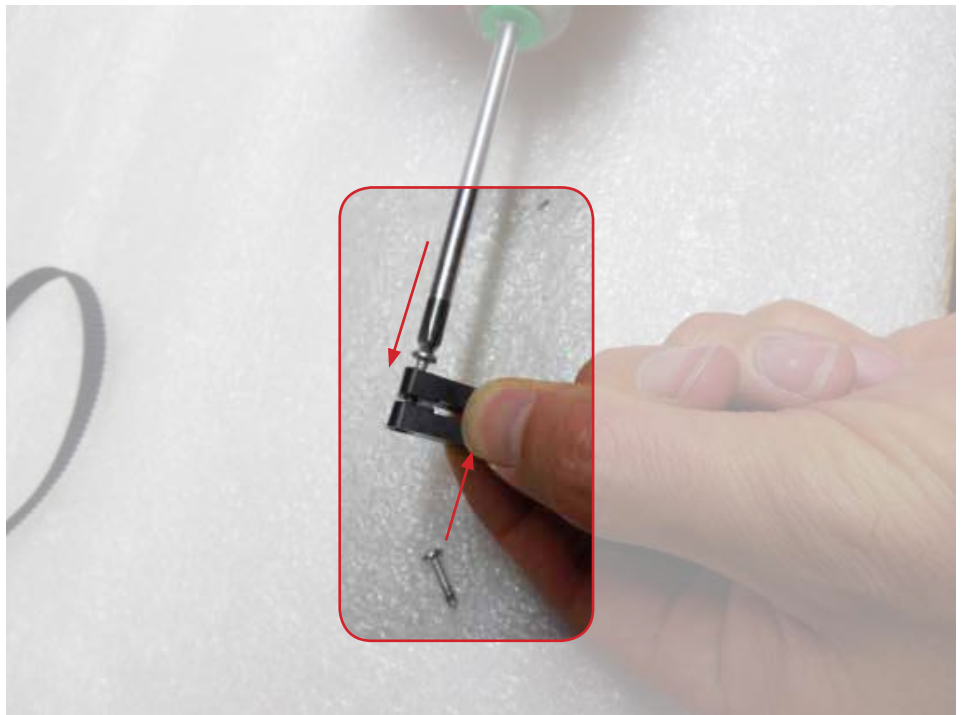*Some older HQ machines may need to be set to Juki.*

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.
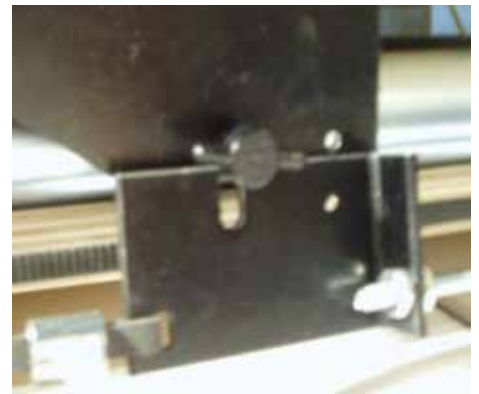
Power on the robotics

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 motor box.

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

You can now use free motion quilting.

Still need help?

Visit quilt-ez.com to learn how to
contact us and find additional help
material.