Quilt EZ

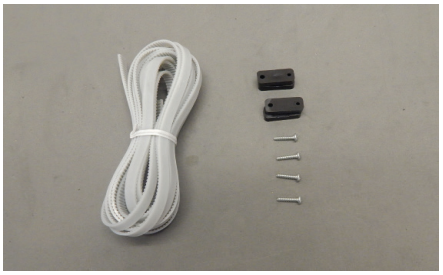
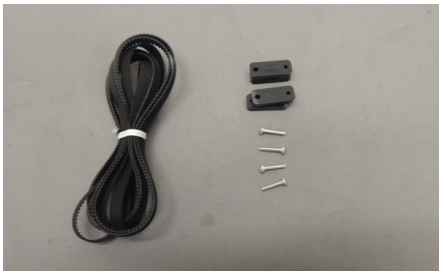
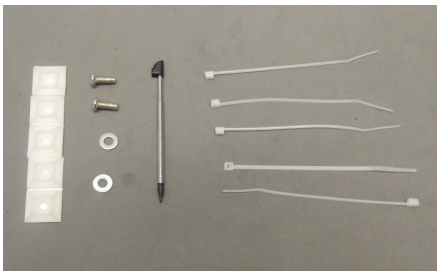
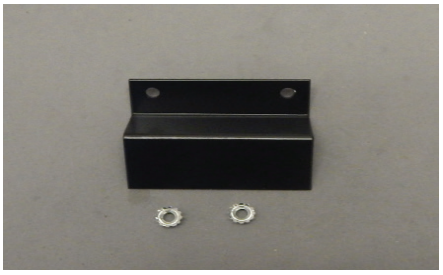
BUTLER

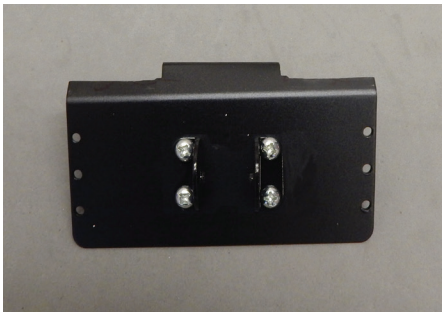
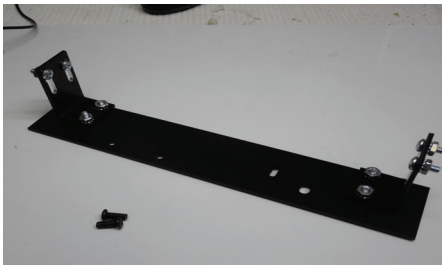
QUILTING ROBOT

Nolting Metal Frame Assembly Instructions

Revision: 10/24/2016

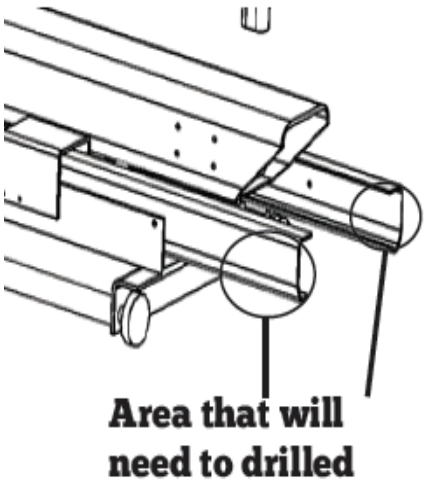
In order to accommodate all machine types we use universal parts bags, not all parts will be used in every installation.

Bag #	Contents	Picture
Cables	Vary by machine	
X1	1-White belt (12') 4 - Plastic belt clamps 4 - Screw (4-40 x 0.5)	
Y1	1 - Black Belt (86") 4 - Plastic Belt Clamps 4 - Screw (4-40 x 0.5)	
Z1	5- Plastic Anchors 2- Screw (M5 x 12mm) 2- Washer (M5) 1- Stylus 5-Zip ties	
Z3	1 - Motor Pulley Cover 2 - Nuts (M5 K-Lock)	

Bag #	Contents	Picture
D2	1- Display bracket 2- Screw (M3 x 8mm) 2-Remote base 4- Screw (M6 x 8) 4- Nut (M6) 2- Poly disc 2- Screw (M3 x 8mm)	
I6	1- Rear idler bracket 1- Rear idler clamp 2- Screw (10-24 x 1/2”) 2- Fender washer (#10) 1- Pulley assembly	
Y9	1-Carriage bracket 1- Universal Y-bracket 1- Thumb screw (#10-24 x 1/2”) 1- Eye bolt (M5 x 40) 2- Lock nut (M5) 1- Pan-head screw (#10-24 x 1/4”)	
X10	2- Clamp bracket (inside) 2- Clamp bracket (outside) 4- Screw (M5 x 25mm) 4- Lock nut (M5) 2- Eye bolt (M5 x 40mm)	
M6	1- Motor box bracket 2- Pan-head screw (M5 x 12mm) 2- Motor box offset bracket 8- Pan-head screw (#10-24 x 1/2”) 8- Lock nut (#10-24)	

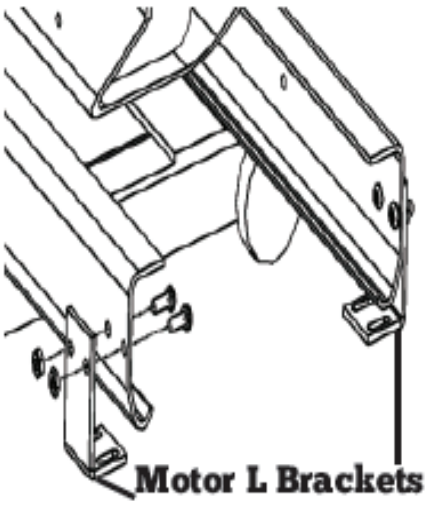
Install the Motor Box (Bag M6)

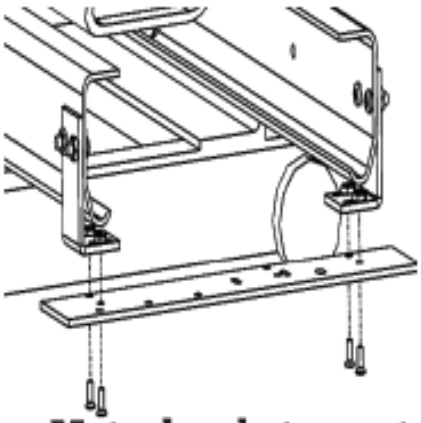
1 Use the drill template on page 24 to drill two holes onto both arms on the front of the carriage.



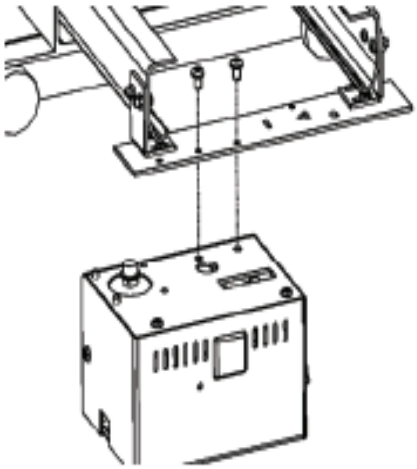
2 Attach the L-bracket onto the carriage with the provided screws with the head on the screw on the inside.

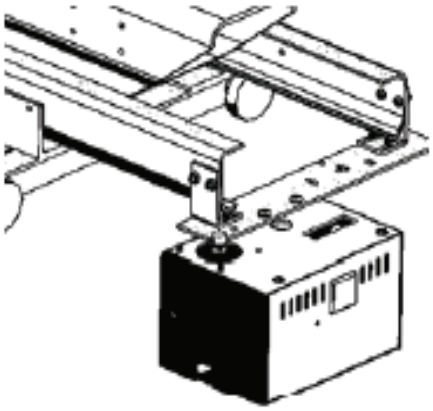
Attach the motor bracket to the L brackets.





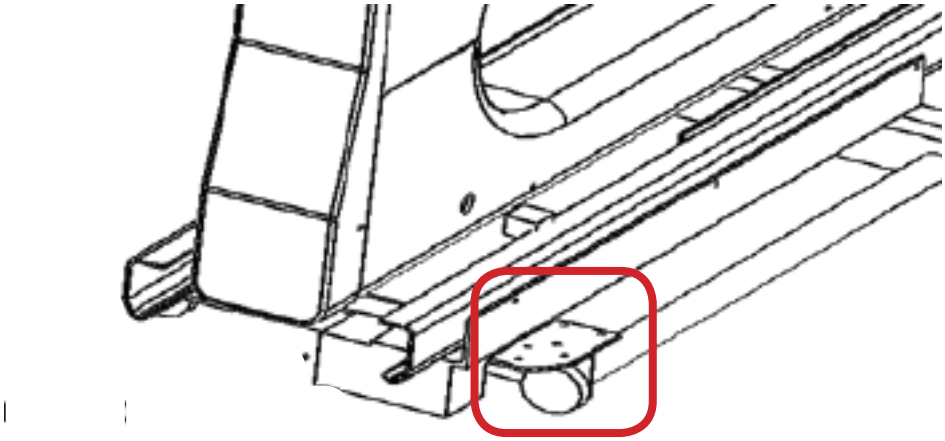
3 Attach the motor box to the left side of the motor box bracket with the provided screws.



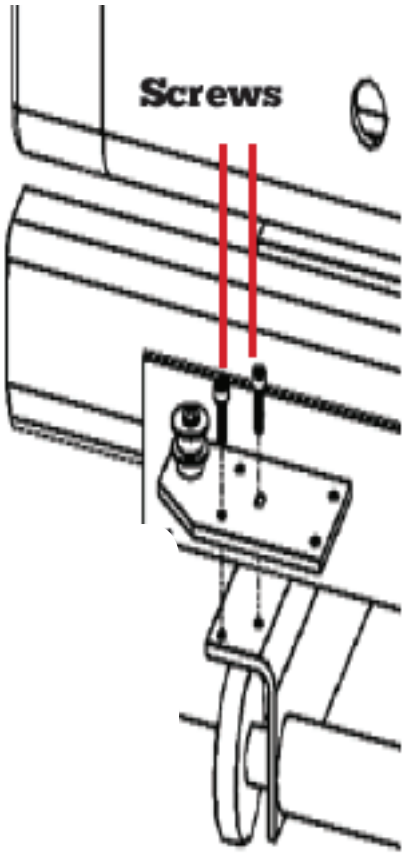


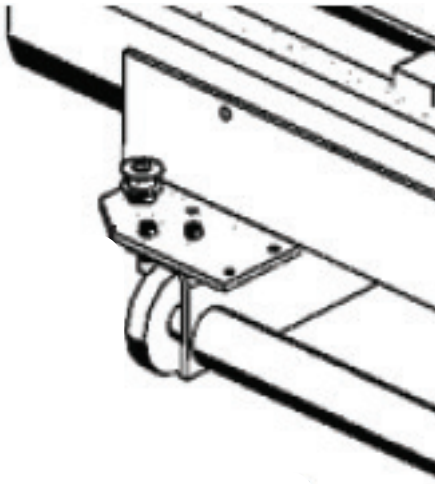
Install the Rear Idler Pulley (Bag I6)

1 Remove the clamp over the back left wheel. Set aside the screws for use in the next step.



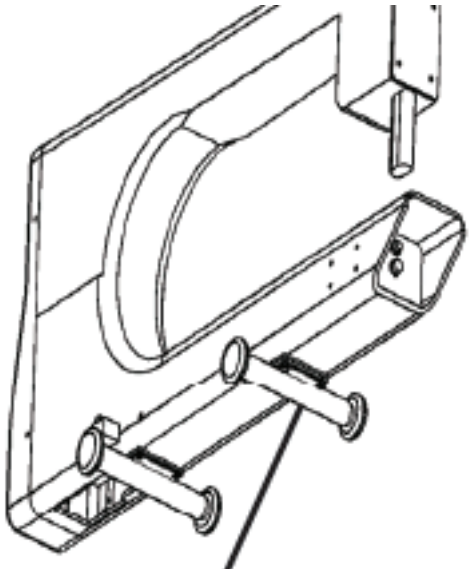
2 Attach the rear idler bracket using the screws removed in step 1.



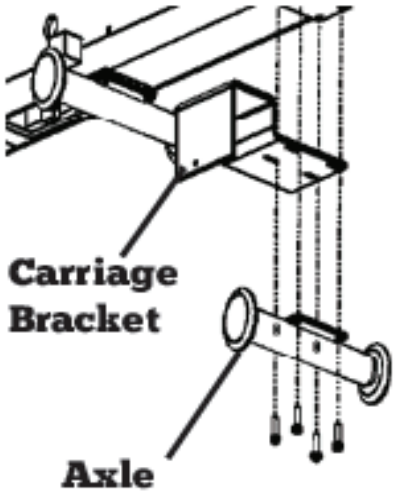


Install the Carriage Bracket (Bag Y9)

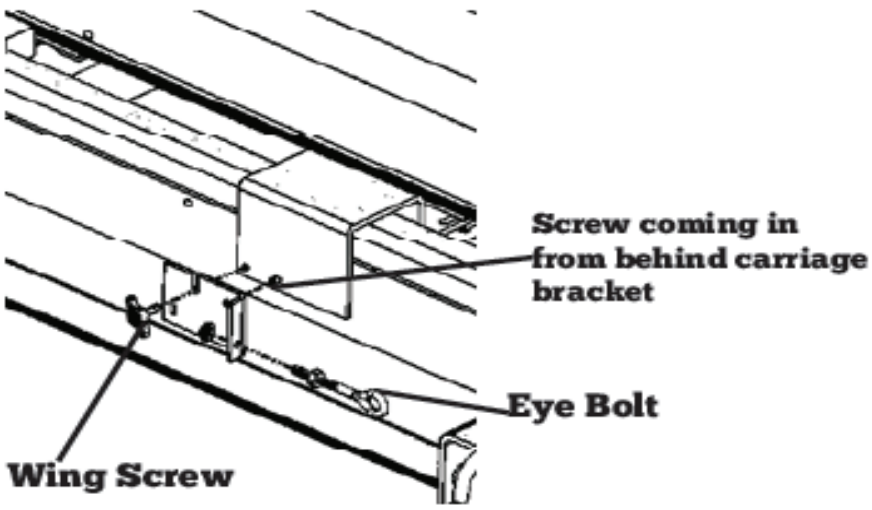
1 Take the machine off of the frame and remove the front axle.



2 Reattach the front axle with the carriage bracket mounted in between the axle and the machine.



3 Attach the belt bracket to the carriage bracket with the provided wing screw.

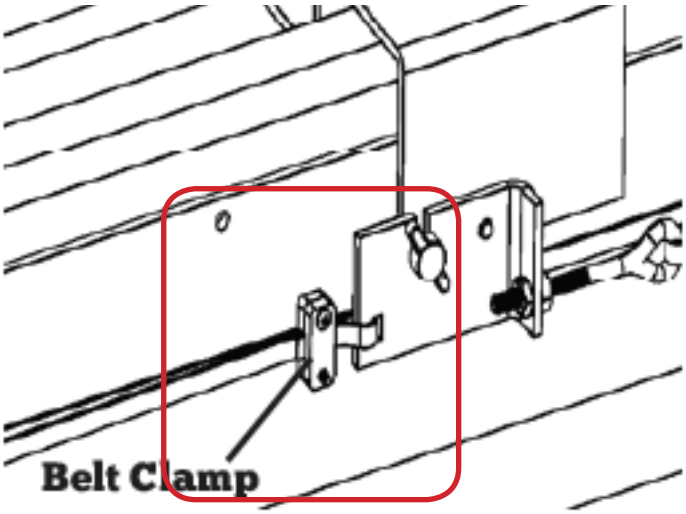


Install the Black Belt (Bag Y1)

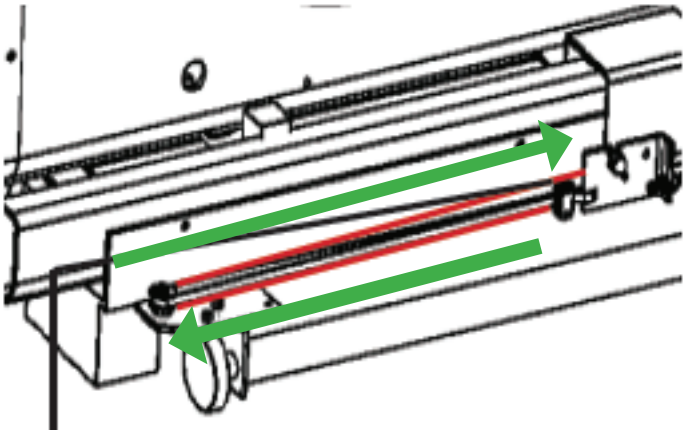
1 Loop the black belt through the slot on the belt bracket with the teeth facing the machine.

Secure with a belt clamp.

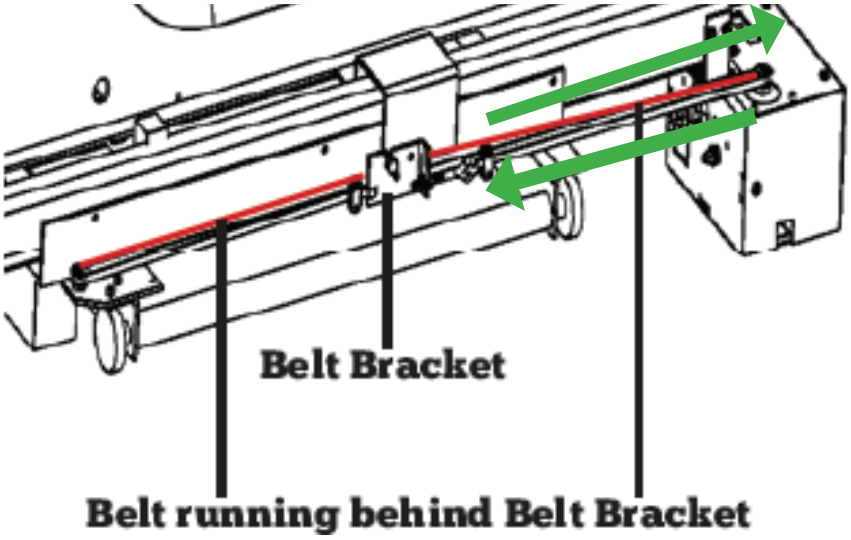
Refer to Appendix A for details on how to use the belt clamps.



2 Run the belt around the rear idler clockwise behind the carriage bracket.

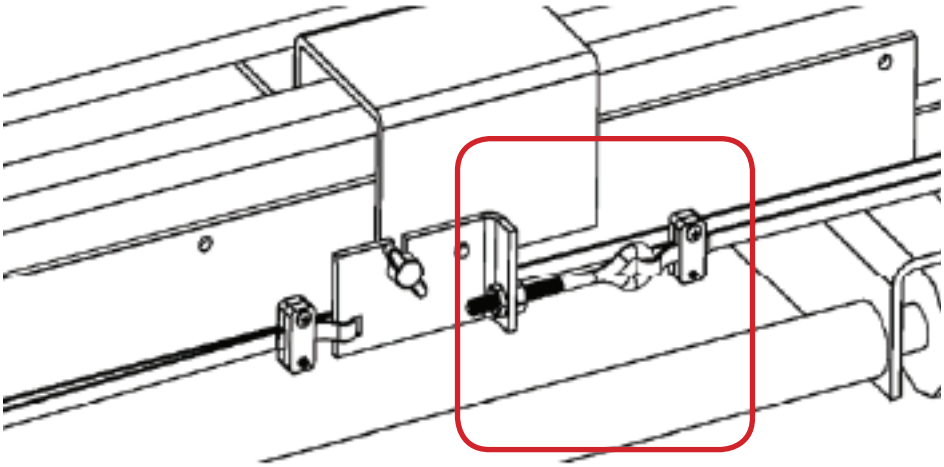


3 Run the belt up to the pulley on the motor box, and wrap it around clockwise.



4 Attach the remaining end of the belt to the to the eye bolt with a belt clamp.

Tighten the eye bolt as needed to tighten the belt. It should have some play, but not a lot.

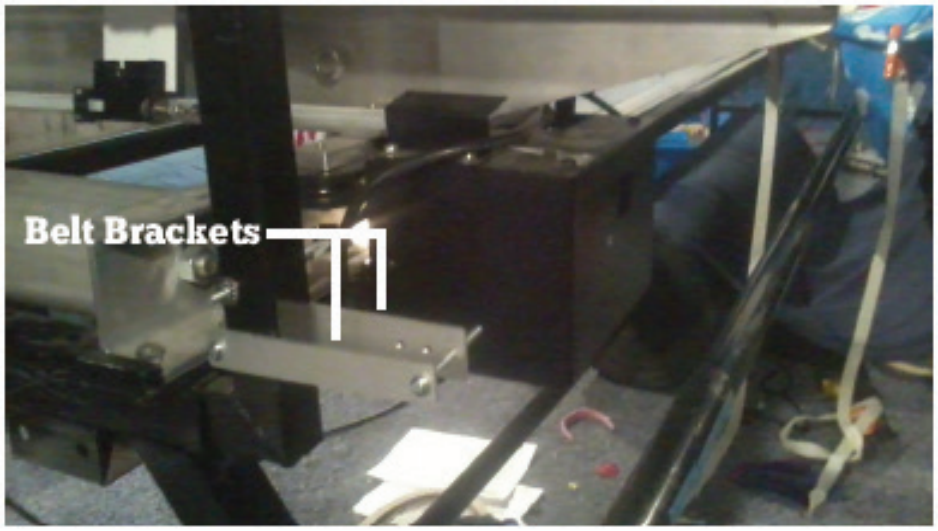


Install the White Belt (Bag X10 and Bag X1)

1 There are many different options to mount the clamp brackets to the frame.

The brackets must be mounted in a way that the eye bolts are in line with the x-axis pulley on the motor.

Displayed are two options for mounting, but options are not limited to these two.



2

Attach the eye bolt to the clamp bracket facing in.

Attach the white belt to the eye bolt using the belt clamps with the teeth facing up.

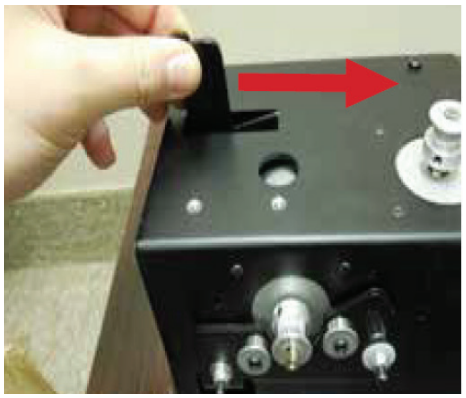
Repeat for the other side.

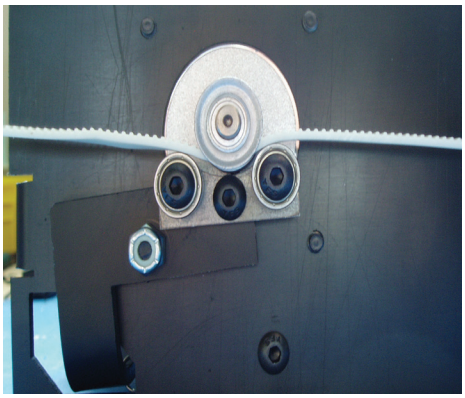
3

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 eye bolts as needed to remove excess slack in the belt.



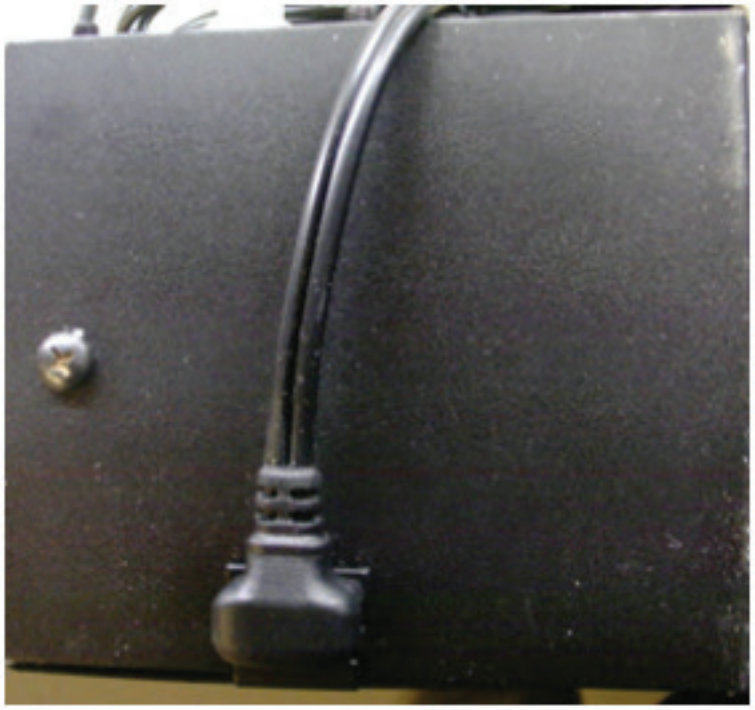


Connect Cables

Connect the power cable

1 Plug the power cable into the port on the motor box.

Ensure that the cable is running towards the top of the motor box and not towards the ground.



2 Run the cable along the carriage to the back of the machine, and then plug into the outlet or power source.

For Standard model *continue to next page.*

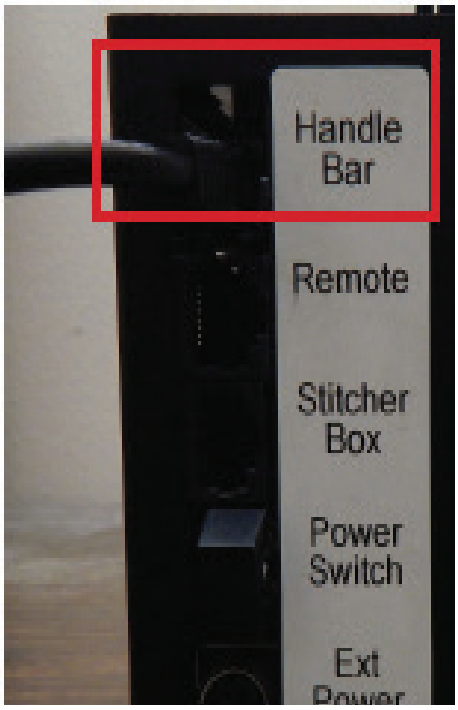
For Pro model *continue to page 14.*

For PerfectStitch *continue to page 17*

*Image not representative of all machine types.

For Standard Model

1 Plug the Y- handlebar cable into the handle bar port of the black motor box.



2 Run the handlebar cable along the base of the carriage to the back handlebars.

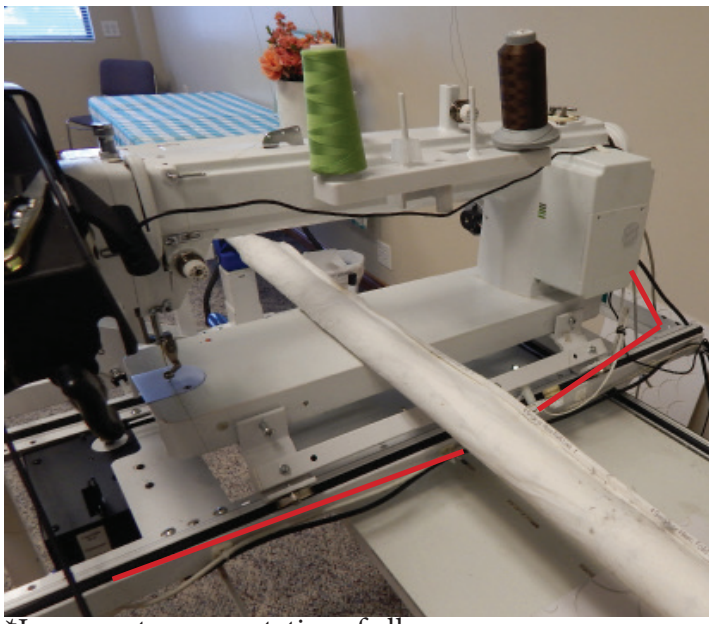
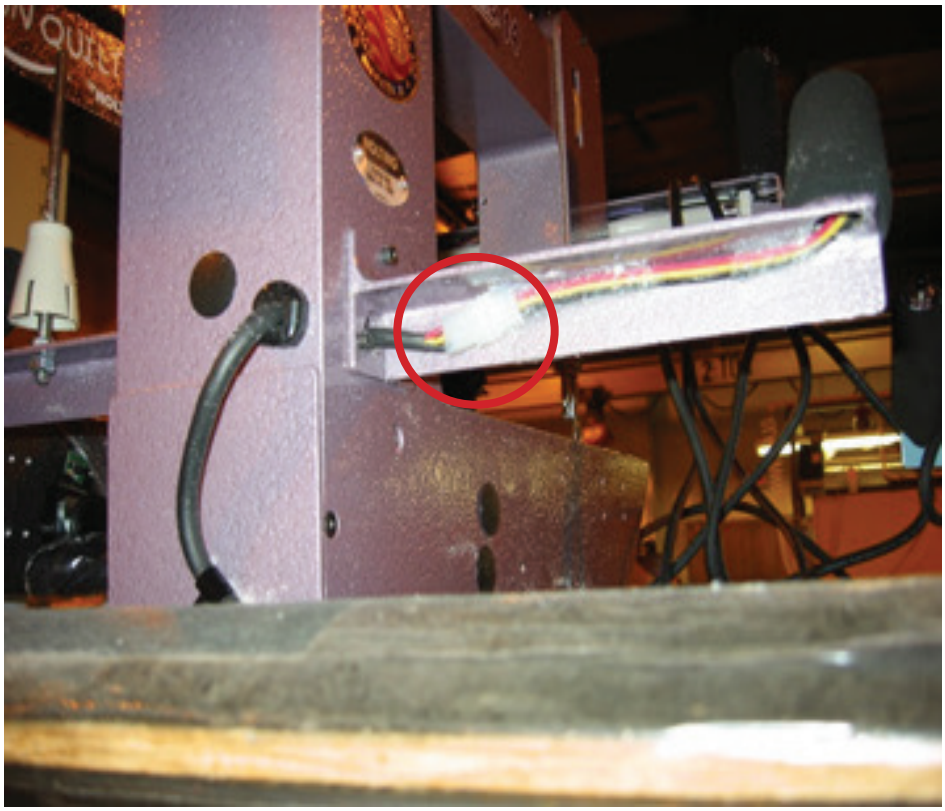


*Image not representative of all machine types.

3 Disconnect the handlebar cable on the right rear handlebar.

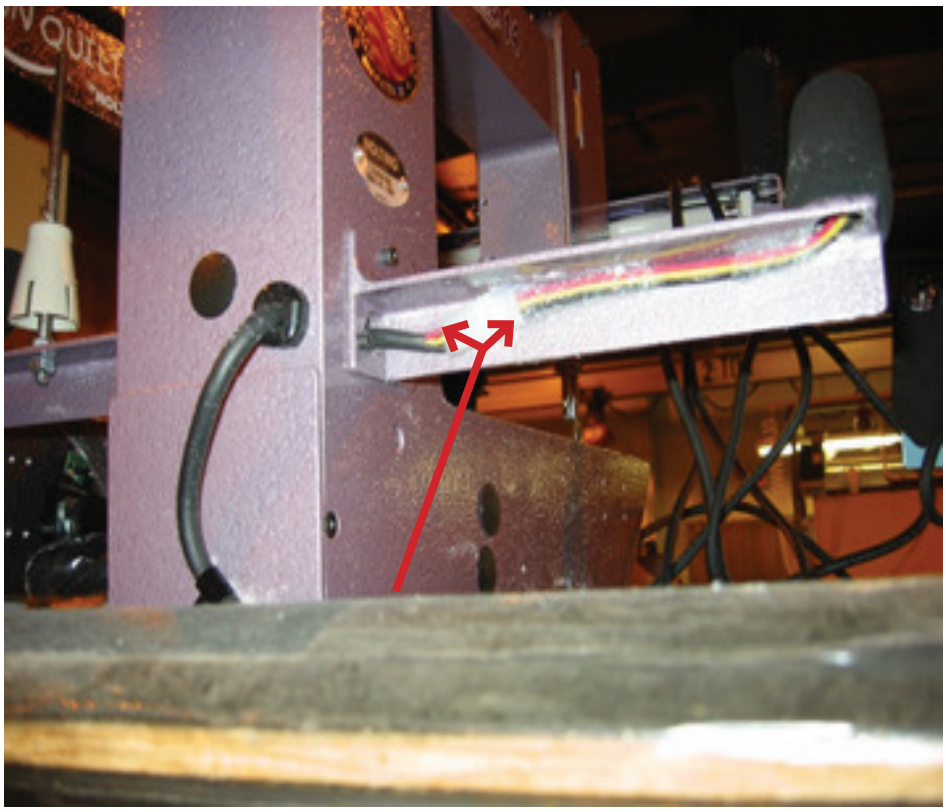


4 Take the split side of the Start/Stop wire, and connect into each port.

The start stop wire will 'T' into the existing handlebar wire.

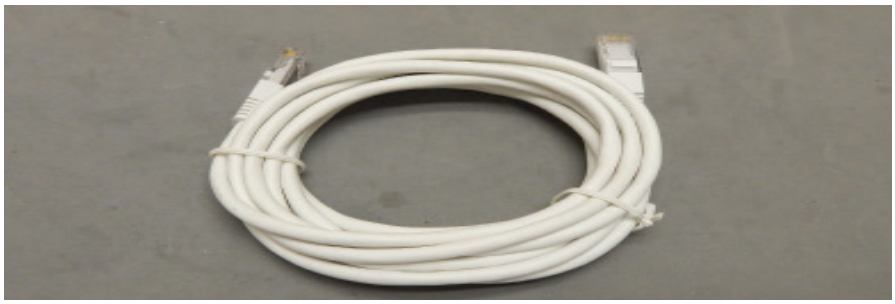
Repeat on the left side for the Needle Up wire.

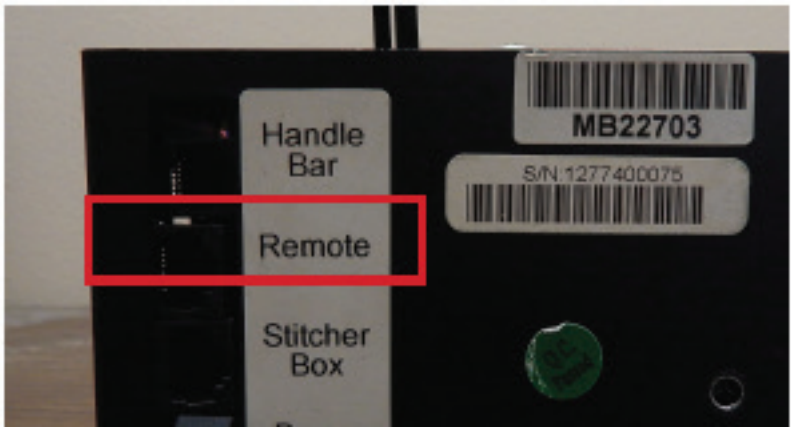
If the machine handlebar wires on only one side the needle up wire is unnecessary.



5 Plug the network style cable into the "Remote" port on the motor box.

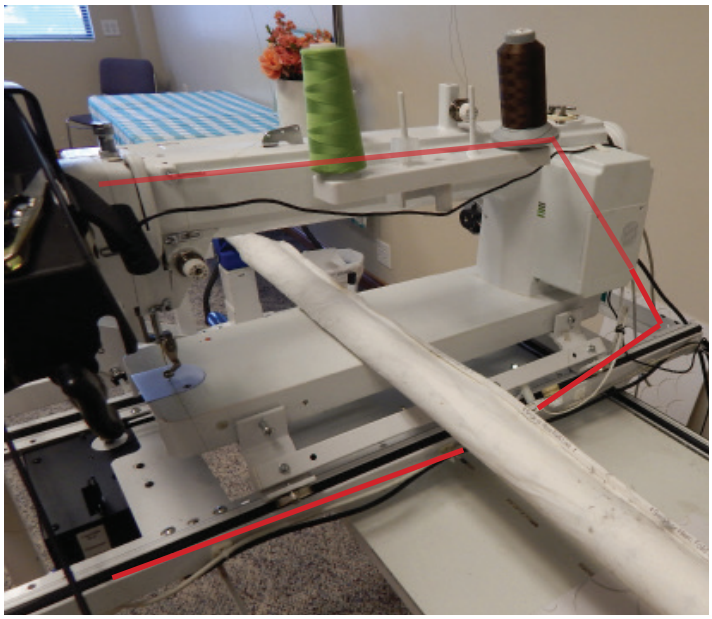
Note: You will only have one of the cables pictured.





6 Run the cable with the handlebar cable around the back of the machine up to the display.

Use the provided anchors and zip-ties to secure the cables to the carriage. Make sure they are out of the way of any moving parts.

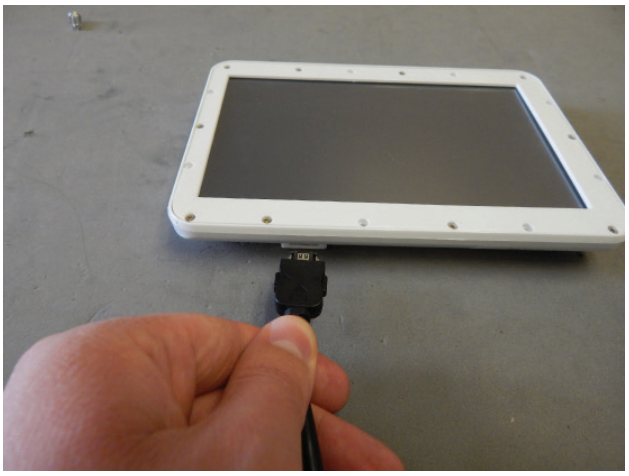


7 Connect the other end of the display cable into the display.

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

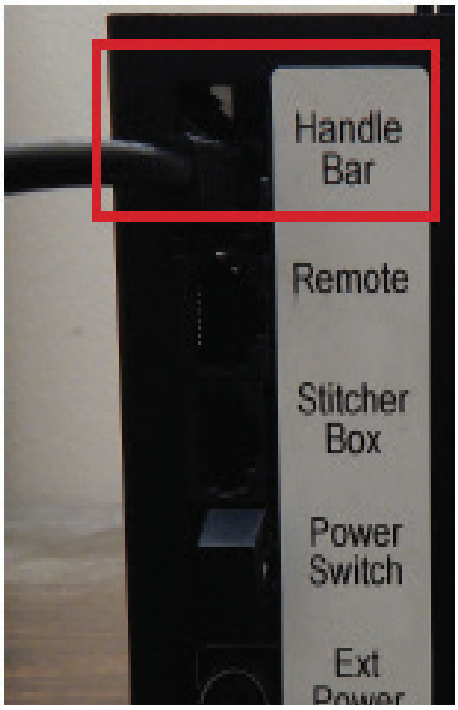
Standard displays will plug into the slot on the bottom of the display.

Continue to page 19

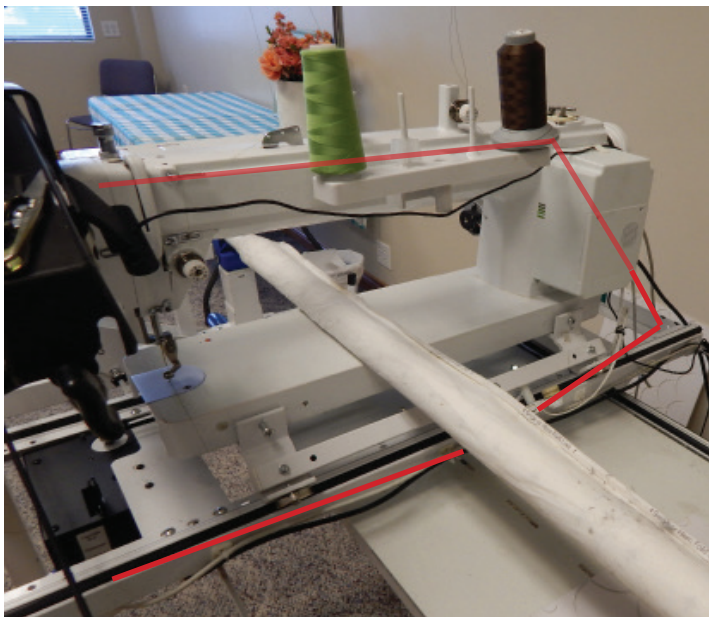


Pro Model

1 Plug the handlebar cable into the handle bar port of the black motor box.

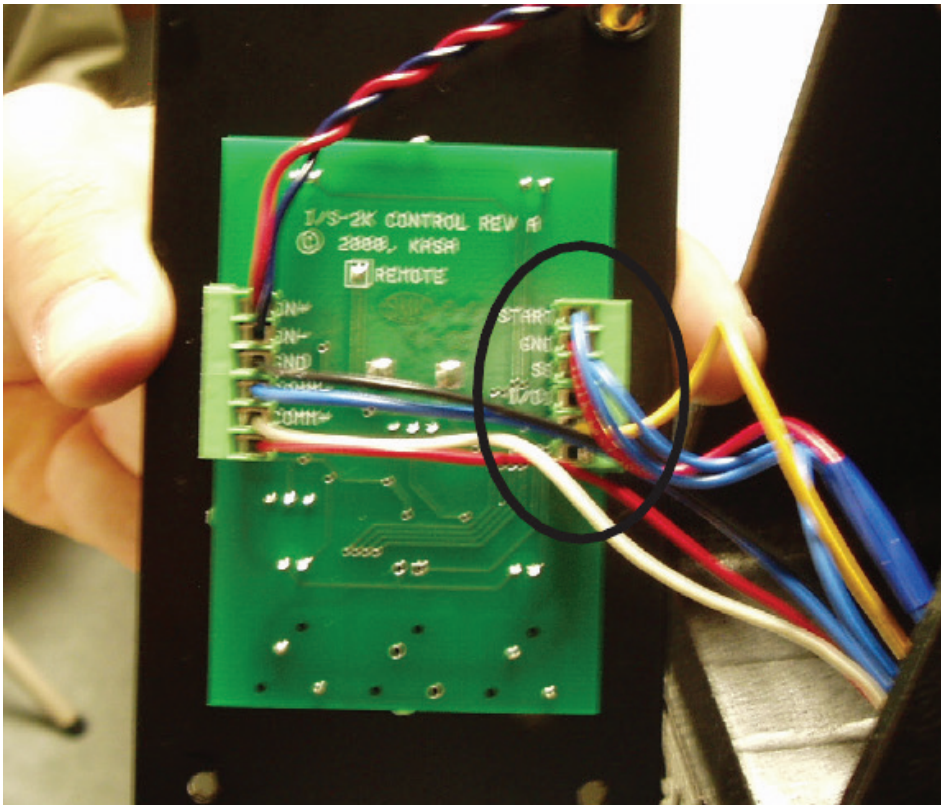


2 Run the handlebar cable along the base of the carriage to the back handlebars.



3 Remove the front faceplate of the stitch regulator.

Loosen the screw for the terminals labeled start, GND, and SS.



Connect the ground (green) from both Needle Up and Start/Stop cables into the GND port.

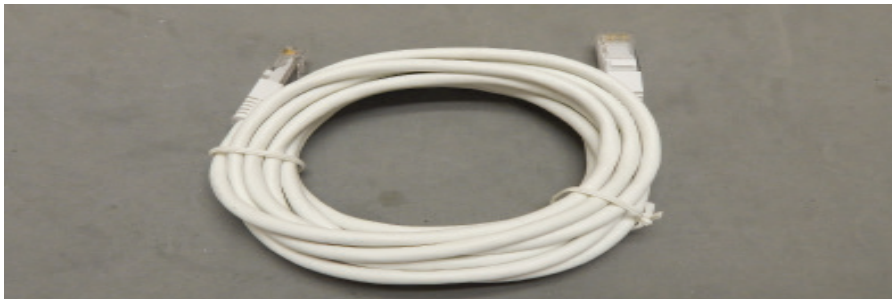
Connect the control wire from the Start/Stop wire into Start terminal.

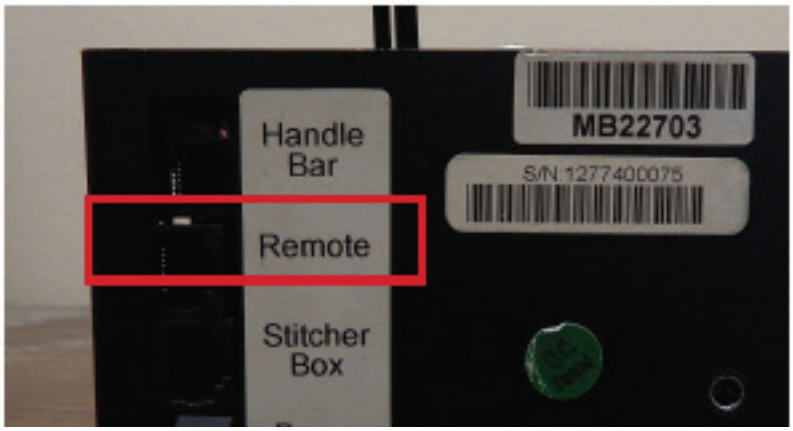
Connect the control wire from Needle Up cable into SS terminal.

Reattach the faceplate.

4 Plug the network style cable into the "Remote" port on the motor box.

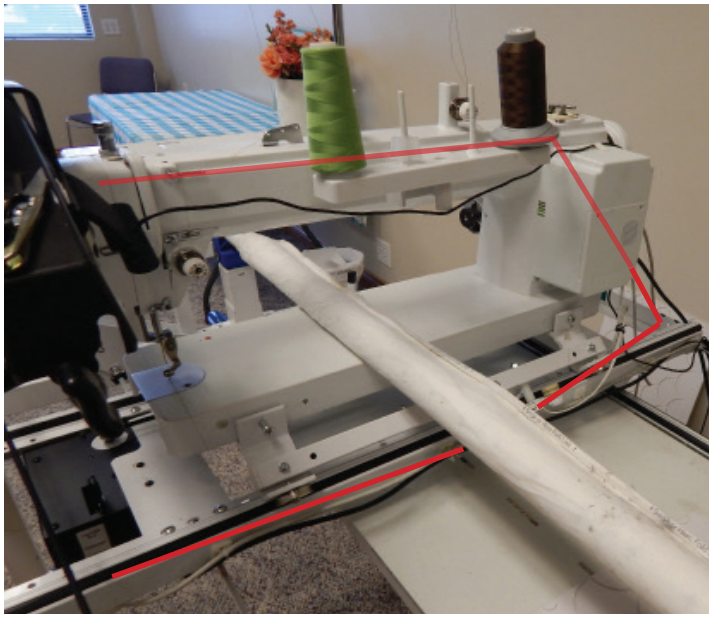
Note: You will only have one of the cables pictured.





5 Run the cable with the handlebar cable around the back of the machine up to the display.

Use the provided anchors and zip-ties to secure the cables to the carriage. Make sure they are out of the way of any moving parts.



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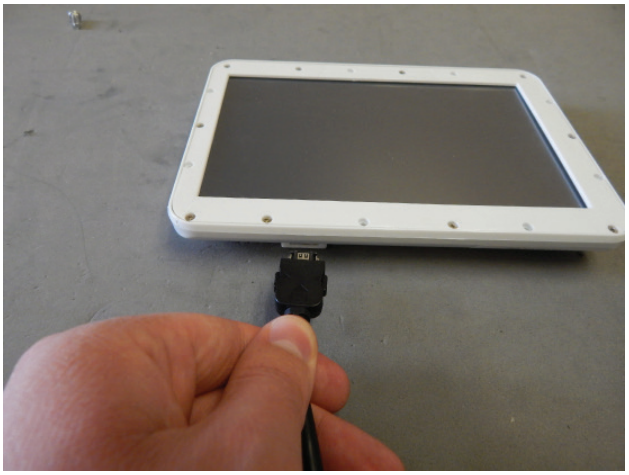
Continue to page 19



For PerfectStitch

1 Plug the remaining end into the Stitcher Box port on Butler.

2 Run the cable along the carriage with the power cable to the control box and plug into the robotics port on the PCB.

Use the provided anchors and zip-ties to secure the cables to the carriage. Make sure they are out of the way of any moving parts.

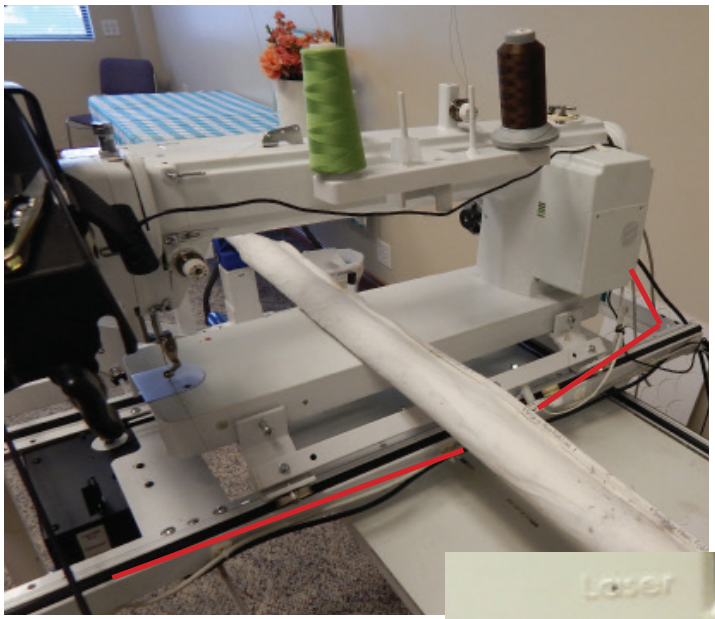


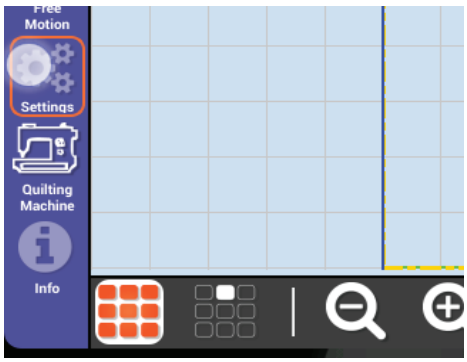
*Image not representative of all machine types.

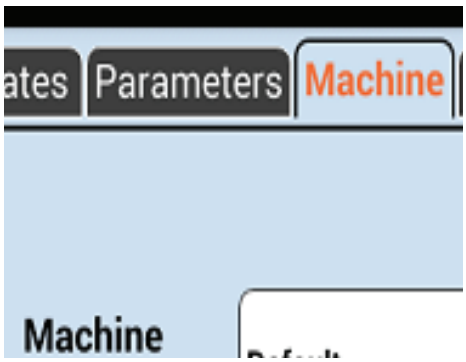
Set Machine Type

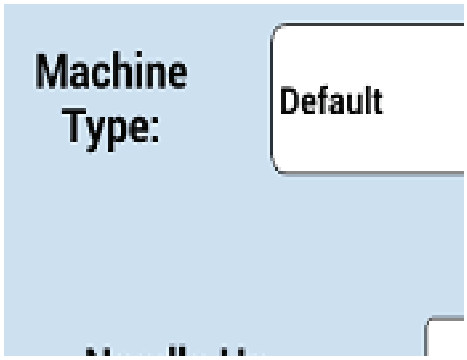
Important: If the machine has been upgraded to PerfectStitch, then the machine type is to be set to Default.

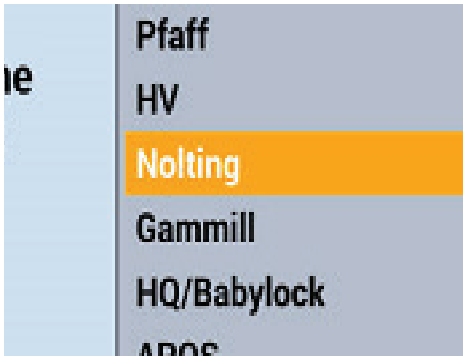
Android Tablet

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



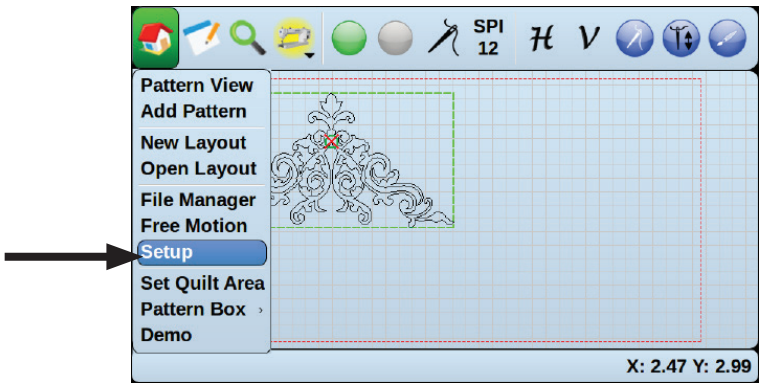


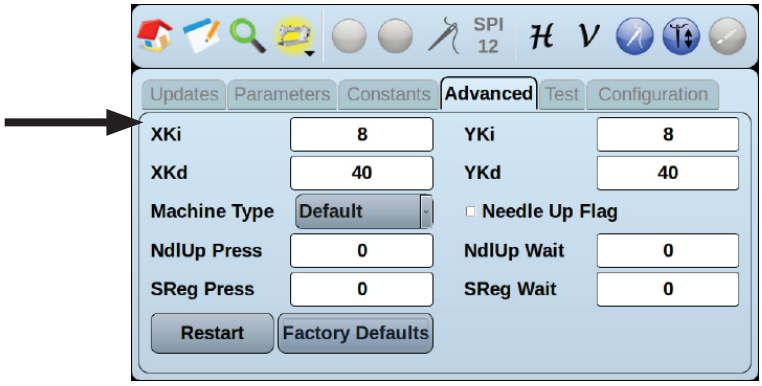




Standard Display

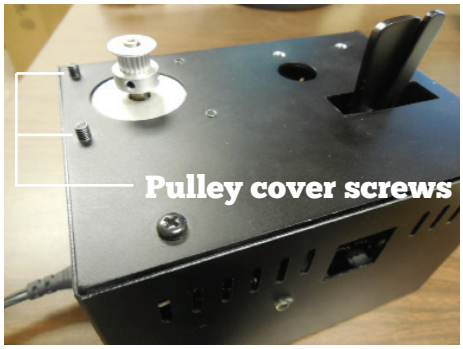
1 Power on the display, go to Setup > Advanced and set the machine type to Nolting.

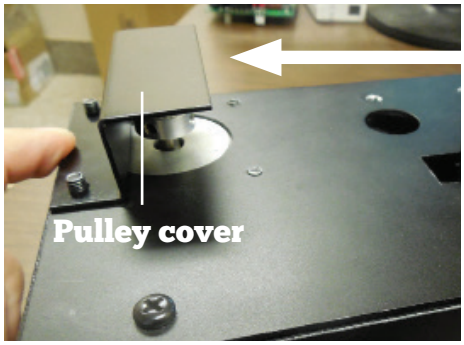




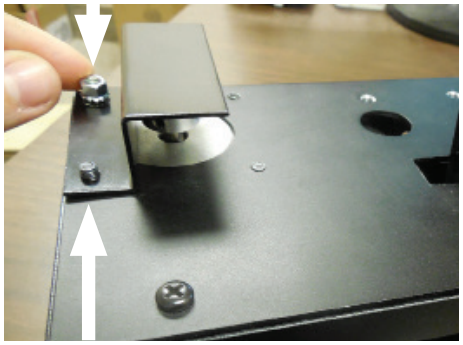
Motor Pulley Cover (Optional)

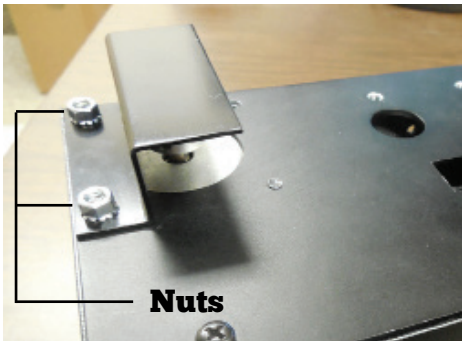
1 Place cover onto two screws near the top motor box pulley.





Tighten nuts onto top of screws to secure the Pulley cover.





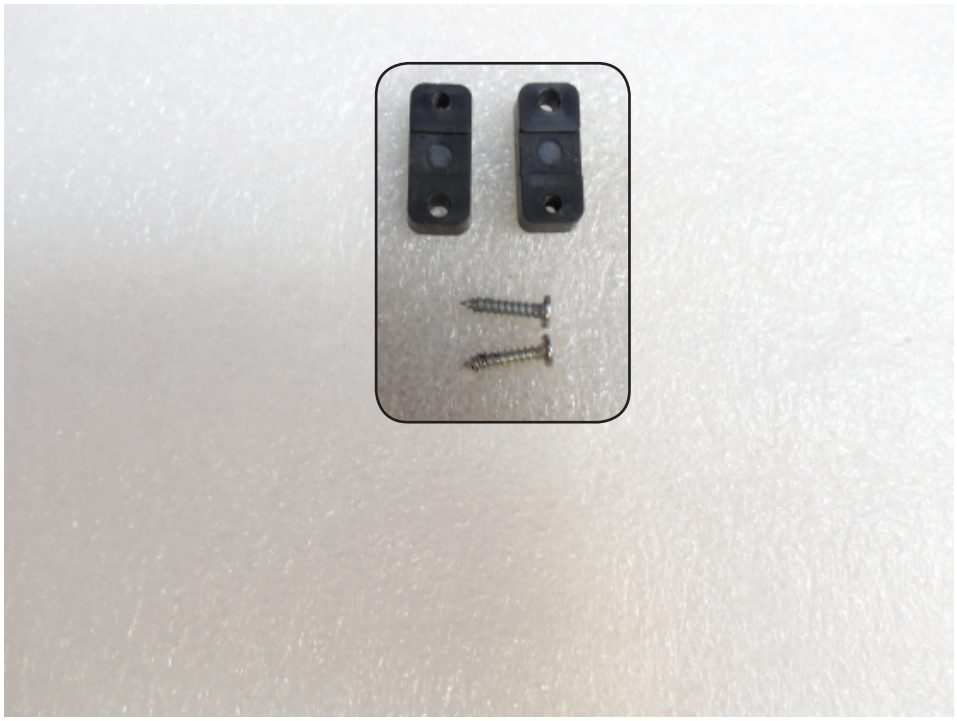
What is the Pulley Cover for?

The Motor Pulley cover is an extra safety precaution to protect your fingers from getting entangled in the belt.

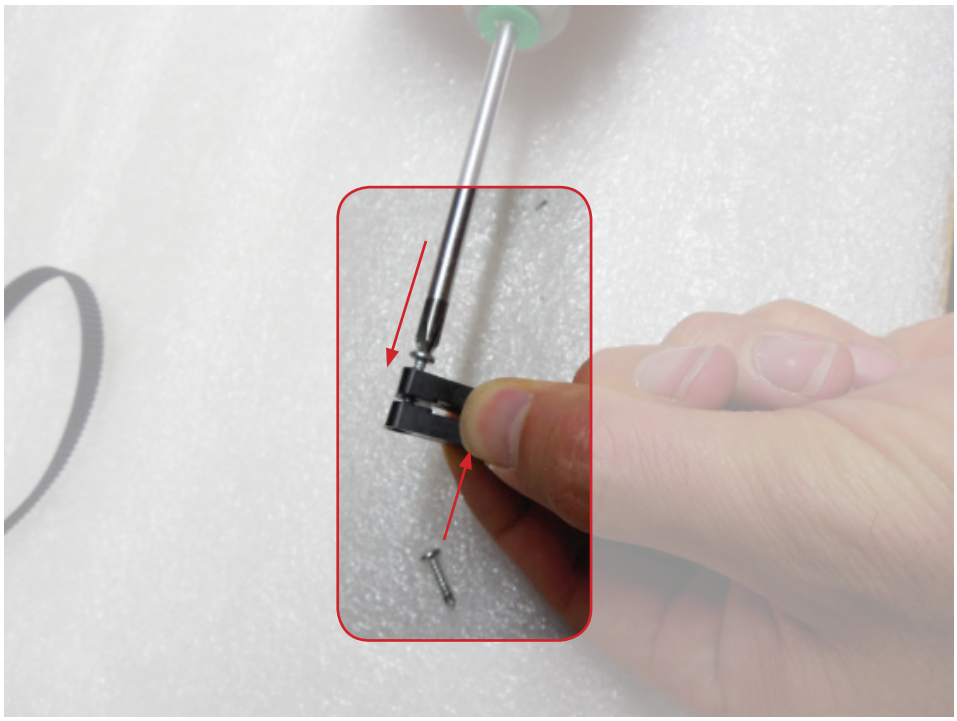
We recommend it is installed after all your belts are installed and connected to the pulleys.

Appendix A - How to use Belt Clamps

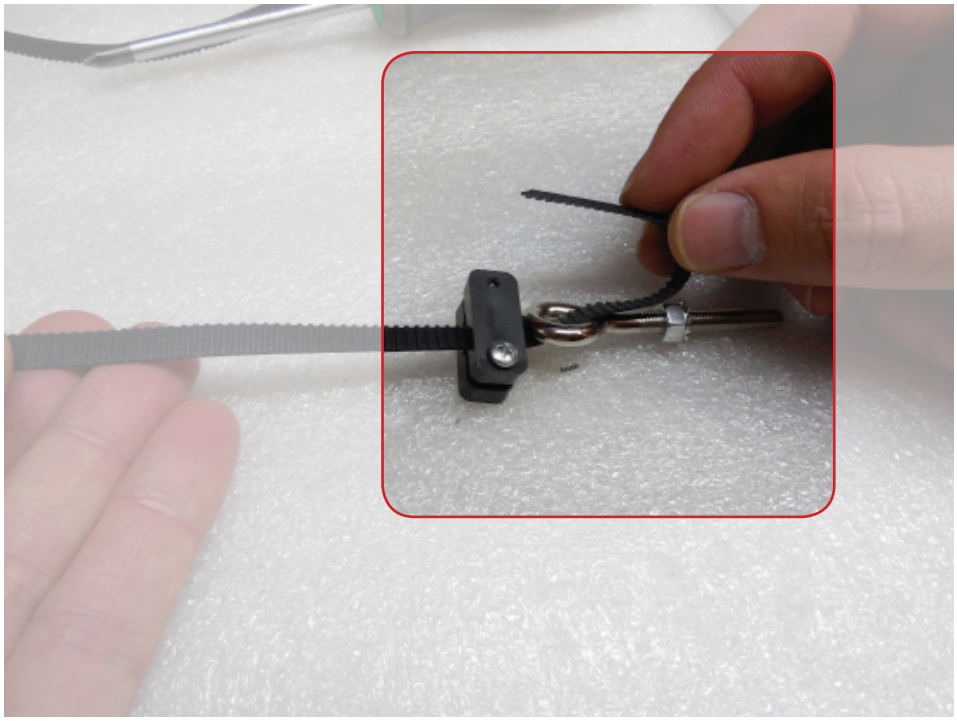
A belt clamp consists of two clamps and two screws.



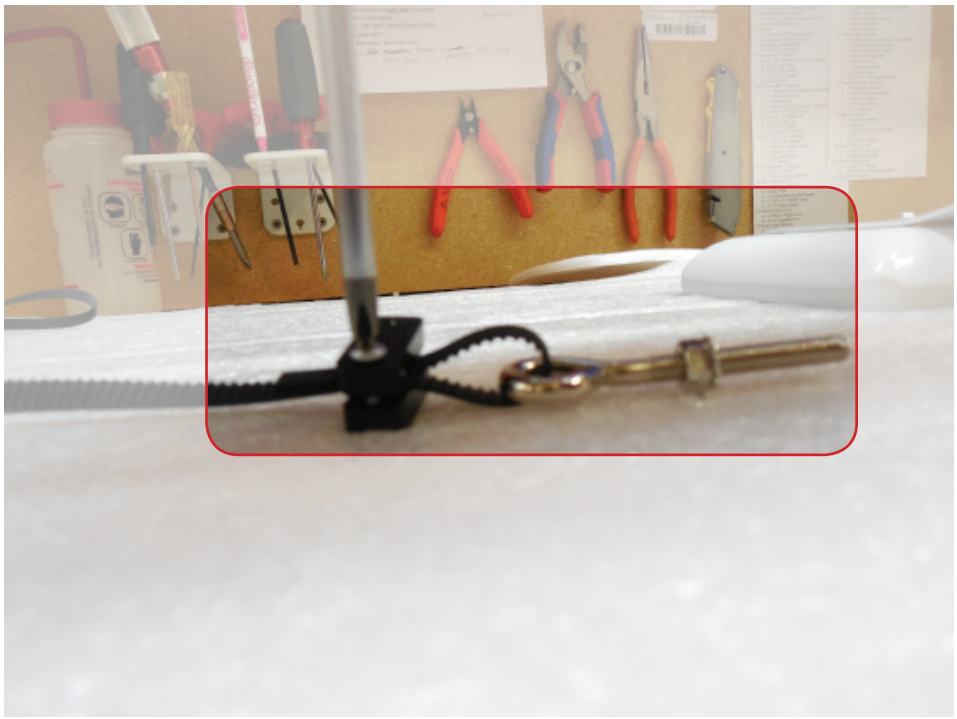
1 Using a Phillips screwdriver, insert each screw on opposite sides of the clamps and tighten halfway.



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

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.

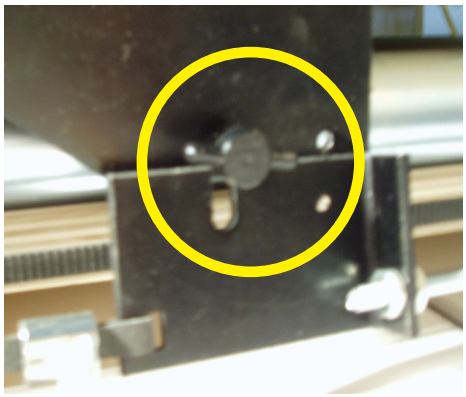
Disengage belts for free motion

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.



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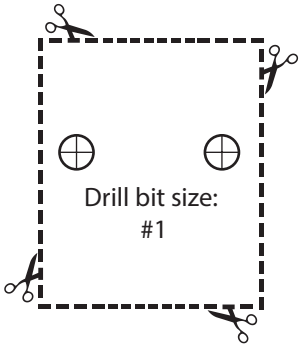
Nolting Motor Box Drill Template

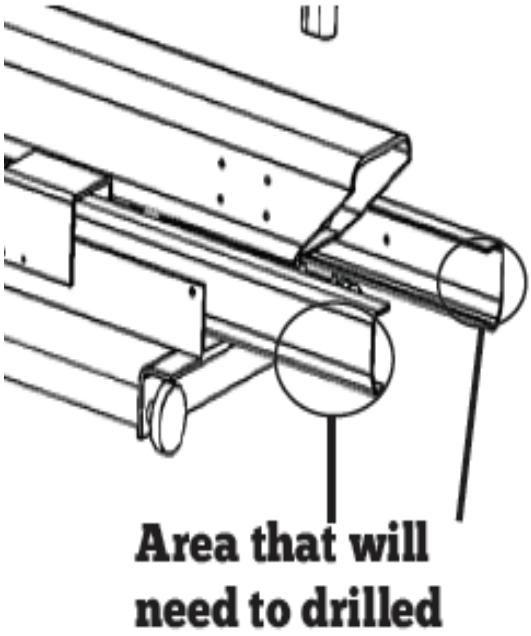
Left

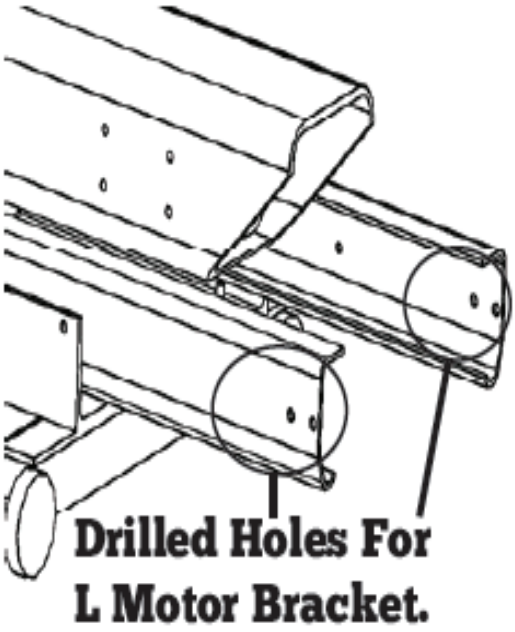


Right

When printing PDFs, DO NOT select fit to page, otherwise the template will be distorted when printed.

Line up the side of the template with the front of the carriage rail.





Still need help?

Visit support.quiltez.com for tutorial videos and additional help documentation