

Installing Robotics onto a Q'nique Longarm with a Phoenix Frame

Revision: 12/1/16

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	 Stitcher Box Power cable White 8' network cable Black 5' network cable Start/Stop handlebar cable Needle Up handlebar cable 	
X1	1-White belt <i>(12')</i> 4 - Plastic belt clamps 4 - Screws <i>(4-40 x 0.5)</i>	
¥1	1 - Black Belt <i>(86")</i> 4 - Plastic Belt Clamps 4 - Screws <i>(4-40 x 0.5)</i>	
Z1	5- Plastic Anchors 2- M5 x 12mm screws 2- M5 washers 5-Zip ties	
Z 3	1 - Motor Pulley Cover 2 - Nuts <i>(M5 K-Lock)</i>	

Bag #	Contents	Picture
Ж3	2- M8 eye bolts 2- M8 nuts	
14	1- Rear idler bracket 1- Rear idler clamp 2- 10-24 x 1/2" screws 2- #10 fender washers 1- Pulley assembly	
¥18	1- Carriage bracket 1- Y-bracket 1- #10-24 x 1/2" thumb screw 1-#10-24 x1/4" pan head screw 1- M5 x 40mm eye bolt 2- M5 K-lock nuts 2- 1/4-20 x 3/4" pan head screws	
D3	 1 - Universal Display Bracket 4 - Screws (M6 x 8mm) 4 - Nuts (M6) 2 - Screws (8-32 x 0.5) 2 - Plastic Washers 	

Installing the Motor Box and Rear Idler Pulley (Motor box kit and Bag I4)

1 Locate the front white bracket that is attached between the two sides of the carriage.



2

If the frame has spacers as shown, they will need to be removed and the bracket reattached so that it is flush on the carriage.

Otherwise the motor box might hit the center support rail when it is attached.





4

Make sure that the bracket shown is at the front of the machine. If it is not then the carriage is backward, and will need to be flipped.

Line the holes on the motor box with the pre-existing holes on the bracket.

Secure with the M5 x 12mm screws.





Mount the rear idler pulley bracket at the rear of the carriage in the pre-drilled holes closest to the back of the carriage.

Clamp the rectagular bracket to the bottom with the carraige in between.



Installing the Black Belt (Bag Y18 and Bag Y1)

Remove the screws from the bottom of the axles on the left side of the machine if standing at the front.



Use the screws removed in step 1 to fasten the carriage bracket assembly to the axle.

2

3



Use a belt clamp to fasten one side of the belt to the eye bolt with the teeth facing the machine. Run the belt toward the black motor box.

See Appendix A for help with belt clamps.



Loop the belt with the teeth facing in around the motor box, back around the pulley and up to the carriage bracket as pictured.

Use a belt clamp to attach this end of the belt to the slot on the carriage bracket.







When engaged the black belt should have approximately 1/4" of play in the line. Play is measured when the machine is in the center of the frame. Adjust belt clamps as needed.

Installing the White Belt (Bag X3 and Bag X1)

Attach the eye bolts to the frame using the hole that is in line with the motor box pulley.

Attach the belt to each eye bolt 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.



When engaged the white belt should have approximately 1" of play in the line. Play is measured when the machine is in the center of the frame. Adjust belt clamps as needed.

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

Motor Box Pulley Cover 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.



Install the Stitcher Box

1

2

Locate the Black 5' Network Cable and connect one end into the Stitcher box port on the Black Motor Box.



Run the cable along the base of the carriage behind the back of the machine.



*Image not representative of all machine types.

Plug the remaining end of the Black Network Cable into the Motor Box port on the included Stitcher Box.

Then attach the Stitcher box to the back of the machine.





Install the Android 10" Display (Bag D3)

Apply pressure to 1 the tab holding the display in place with a screwdriver.

Remove the display









2

Remove the handlebar control box.





4

Remove the four inner screws with a hex key to remove the entire handlebar assembly.





Plug each of the handlebar wires into their respective ports on the





Run the handlebar cable along the side of the machine up to the handle bar controls.



Plug the side of the handlebar cable that is labeled start/stop into the right handlebar cable and into the control box.

6

Plug the side of the handlebar cable that is labeled Needle Up into the left handlebar cable and into the control box.





Left

Note: Make sure the pins are face up as shown.

Insert the bracket from bag D3 between the handlebar assembly and the machine with the inside of the curve facing front a shown.

Secure by refastening the four screws removed in step 3.







Connect Cables

Connect the power cable

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.



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

Note: If a battery backup is used as a power source at least a rating of 1000 VA is recommended to prevent power issues.



*Image not representative of all machine types.

Δ

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



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.



*Image not representative of all machine types.

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

5

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.





Set Machine Type

Android Tablet

1

1

Power on the display, go to Settings > Machine and set the machine type to S.C. 3.0

Addition Settings Quilting		ates Parameters Machine
Machine Info	Q. ⊕	Machine
Machine Type: Default	Default	Prodigy
		S.C. 3.0
		Custom
	Ē	Custom-DoublePress

Standard Display

Power on the display, go to Setup > Advanced and set the machine type to S.C. 3.0



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.



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 motorbox.

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

You can now use free motion quilting.



