

Installing Robotics onto the Q'nique Longarm with a Q'nique 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

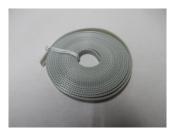
Cables

Vary by machine



X1

1-White belt (12')



Y1

1 - Black Belt (86")



Z1

- 5- 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)



Bag

Contents

Picture

M1

- 1- Motor box bracket
- 1- Sub motor bracket (unused)
- 2- M5 x 12mm pan head screws
- 2- M5 x 12mm flat head screws
- 2- M5 hex nuts
- 2- M5 flat washers



I4

- 1- Rear idler bracket
- 1- Rear idler clamp
- 2- 10-24 x 1/2" screws
- 2- #10 fender washers
- 1- Pulley assembly



Y23

- 1- Carriage bracket
- 1- Y Bracket
- 1- M5 x 40mm eyebolt
- 2- M5 K-lock nuts
- 2- 10-24 x 1/2" pan head screws
- 2-10-24 K-lock nuts



X2

- 4- M5 x 25mm pan head screws
- 2- X-belt brackets (inside)
- 2- X-belt brackets (outside)
- 2- M5 x 40mm eye bolts
- 8- M5 K-lock nuts



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 (Bag M1)

Align the two holes on the top of the black motor box with the like holes on the motor box bracket.

Secure using the two provided M5 x 12mm screws.



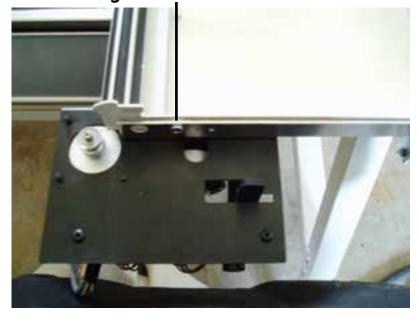


Align the bracket with the front of the carriage as shown so that the holes on the bracket match up with the pre-drilled holes on the carriage.

Make sure to insert the washer between the carriage and the bracket.

Secure using the provided M5 x 12mm screws and M5 nuts.

Washer spacer in between carriage and bracket

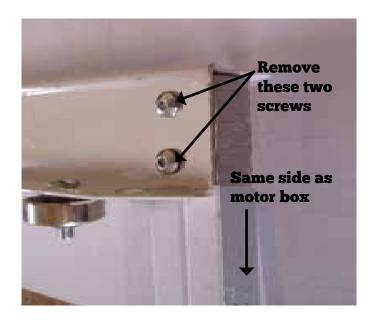


Note: The white sub bracket is unused in this assembly.

Installing the Rear Idler Bracket (Bag M1)

Attaching the idler braket is easier if the carriage and machine are both removed.

Remove the two screws located at the back of the carriage that are on the same side as the motor box.

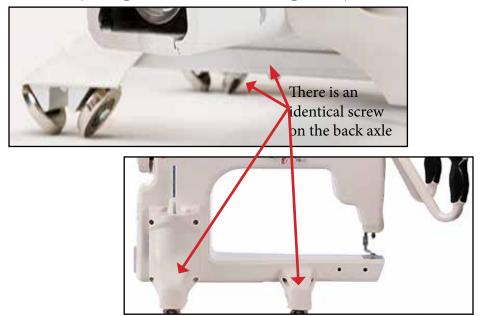


Use the removed screws to attach the rear idler bracket to the carriage.

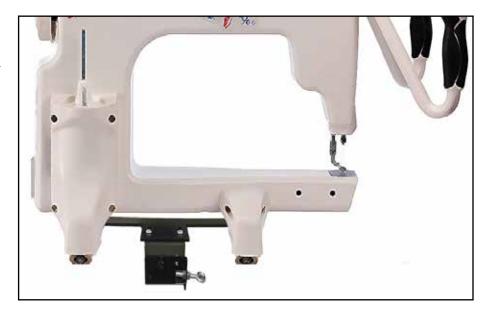


Installing the Black Belt (Bag Y18 and Bag Y1)

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

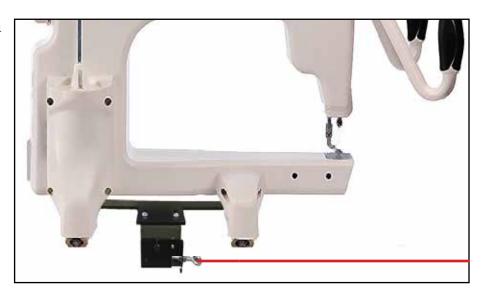


2 Use the screws removed in step 1 to fasten the carriage bracket assembly to the axle.



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.

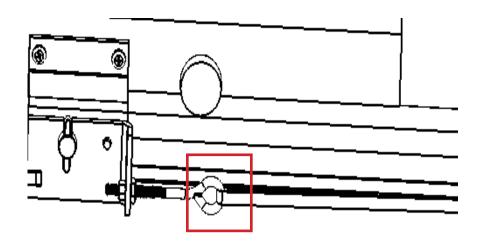
See Appendix A for help with belt clamps.



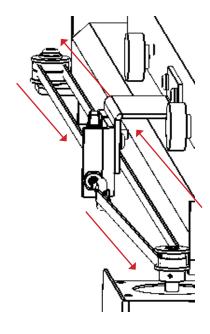
Installing the Black Belt (Bag Y1)

Use a belt clamp to attach one end of the black belt to the eye bolt on the carriage bracket assembly with the teeth facing the carriage.

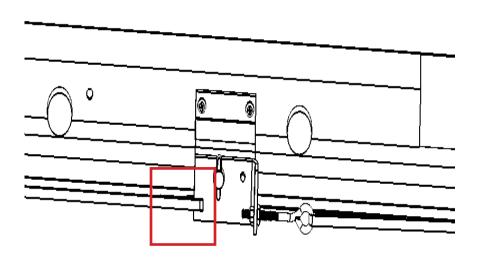
See Appendix A for help with belt clamps.



2 Loop the around the pulley on the top of the motor box, back around the rear idler pulley and back to the carriage bracket as shown.



Use a belt clamp to attach the remaining end of the black belt to the slot on the carriage bracket assembly.



Installing the White Belt

Attach the belt clamps to the arms of the frame where the eye bolt will be in line with the pulley on the back of the motor box as shown.

The bracket with two holes goes on the outside of the frame, while the bracket with three holes goes inside.





2 Repeat for the other side.





Use a belt clamp to attach the white belt to each eye bolt.



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.





When engaged the white belt should have approximately 1" to 1 1/2" of play in the line. Play is measured when the machine is in the center of the frame. Adjust the eye bolts or belt clamps as needed.

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 Handlebar Cable and Android 10" Display (Bag D3 and Cables)

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

Remove the display

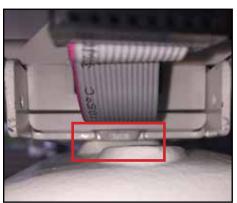


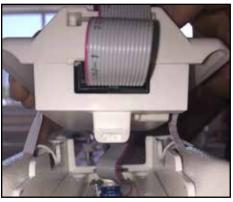




Apply pressure to the tab holding the handlebar control box in place with a screwdriver.

Remove the handlebar control box.

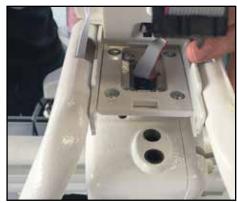






Remove the four inner screws with a hex key to remove the entire handlebar assembly.





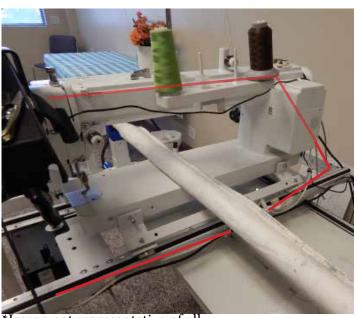
Plug the handlebar wire into the "HandleBar" port on the motor box.

Colors may vary





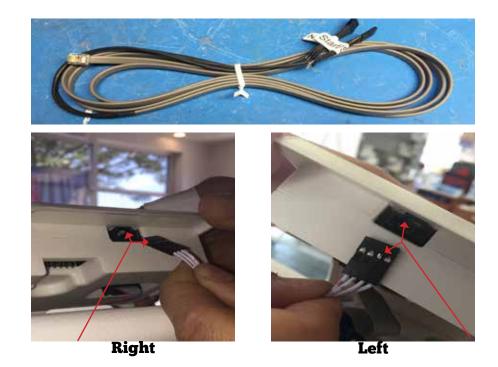
Run the handlebar cable along the base of the carriage behind the back of the machine up to the handle bar controls.



*Image not representative of all machine types.

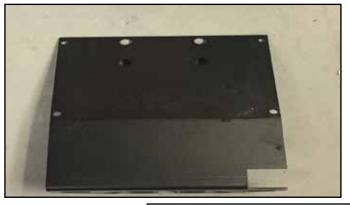
Plug the side of the handlebar cable that is labeled start/stop into the right handlebar cable and into the control box.

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

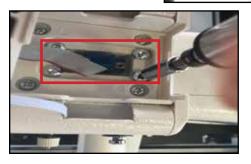


Insert the bracket from bag D3 between the handlebar assembly and the machine with the inside of the curve facing front a shown.

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. .



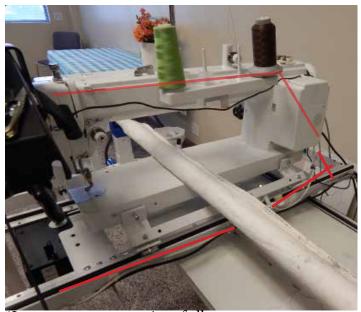
Plug the network style cable into the "Remote" port on the motor box.





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.

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

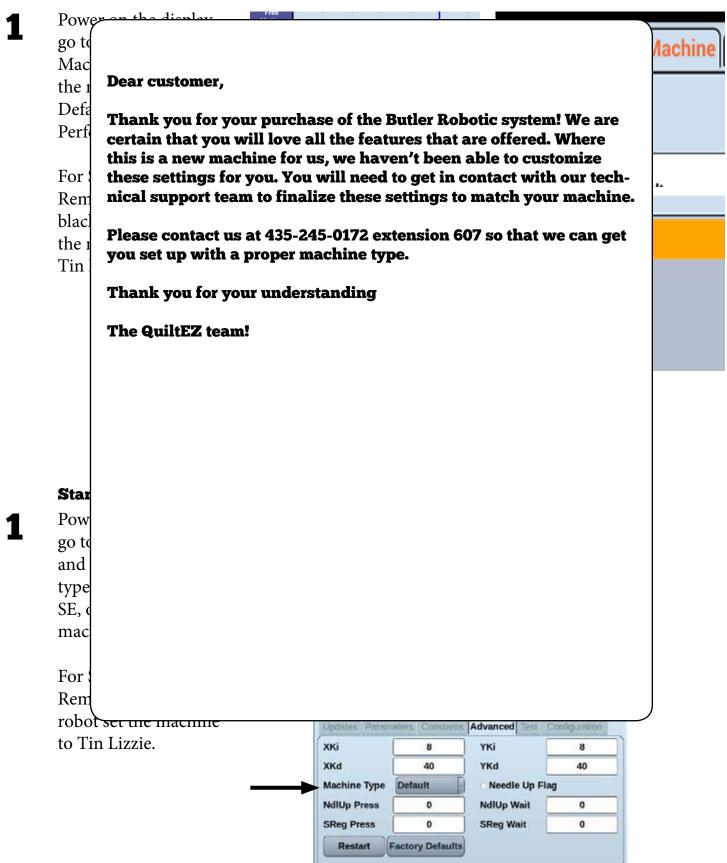
Standard displays will plug into the slot on the bottom of the display.





Set Machine Type

Android Tablet

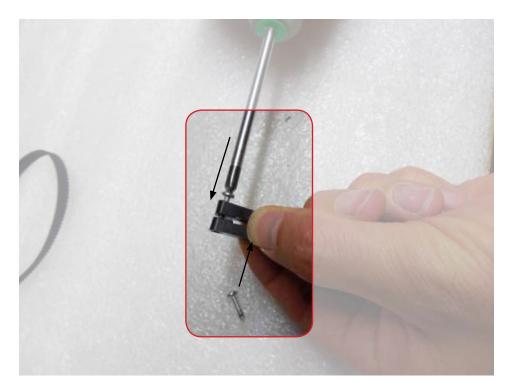


Appendix A- How to Use Belt Clamps

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.



