How to Attach Butler Robotics to an APQS

APQS Bliss Carriage

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

Bag #	Contents	Picture
X1	1-White belt (86") 4 - Plastic belt clamps 4 - Screws (4-40 x 0.5)	
Y1	1 - Black belt (12") 4 - Plastic belt clamps 4 - Screws (4-40 x 0.5)	
Z1	1- Stylus 5 - Zip ties 5 - Plastic anchor 2 - Washer (M5 Flat) 2 - Screw (M5 x 12mm)	
Z3	1 - Motor pulley cover 2 - Nut (M5 K-Lock)	
D3	1 - Universal display bracket 4 - Screw (M6 x 8mm) 4 - Nut (M6) 2 - Screw (8-32 x 0.5) 2 - Plastic washer	

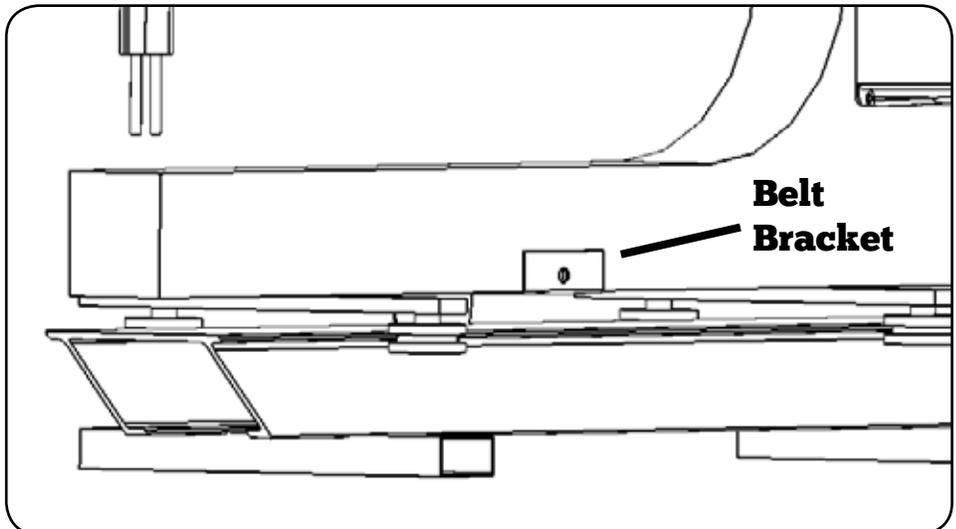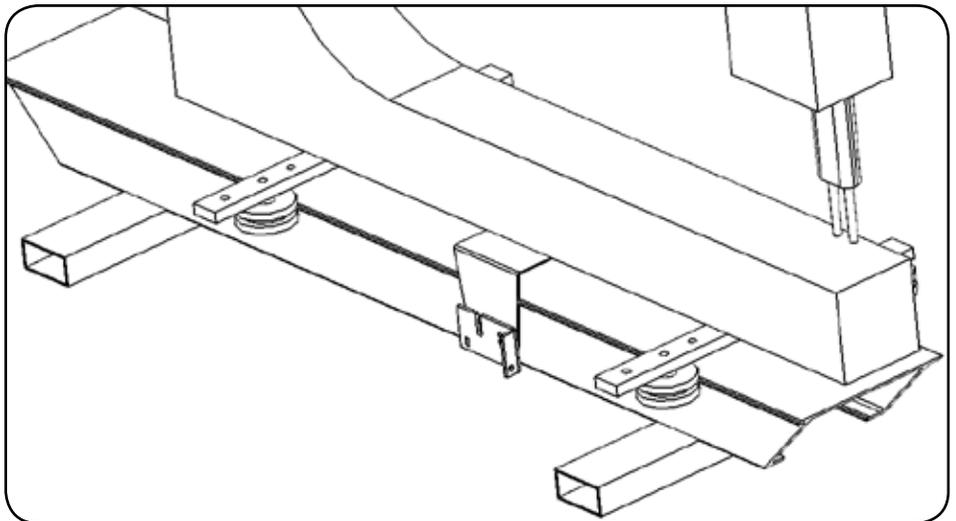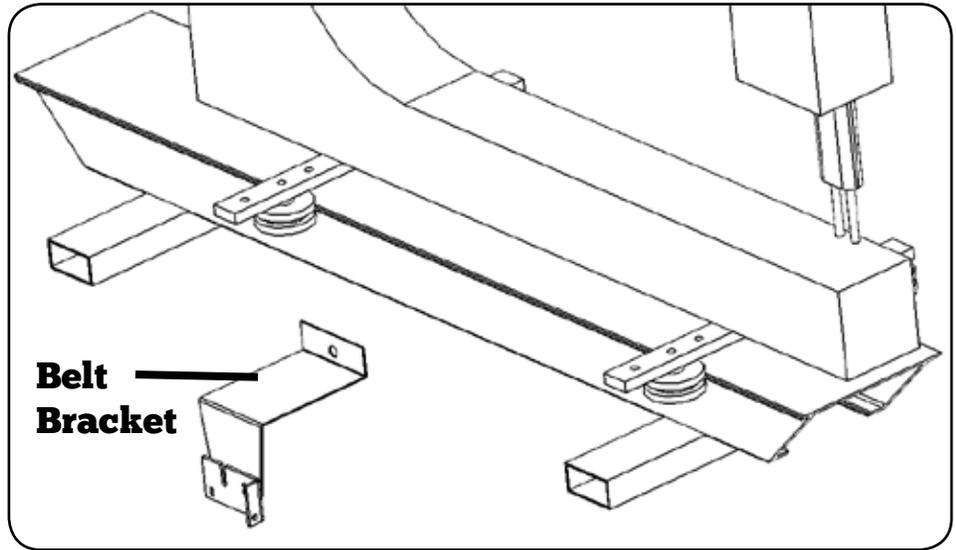| Bag #	Contents	Picture
Cables	Vary by machine	
X8	2 - L - Shaped bracket 2 - Slotted bracket 2 - Eye bolt *(M5)* 2 - Nut *(M5 K-Lock)* 2 - Screw *(10-24 x 0.5)* 2 - Nut *(10-24 K-Lock)*	
M11	1 - Front motor box bracket 1 - Front motor box bracket clamp 4 - Screw *(10-24 x 0.75)* 4 - Nut *(10-24 K- Lock)*	
Y15	1 - Carriage bracket 1 - Y bracket 1 - Foam sticky tape 1 - Small screw *(10-24 x 0.25)* 1 - Thumb screw *(10-24 x 0.5)* 1 - Eye bolt *(M5)* 2 - Nut *(M5 K-Lock)*	
I11	1 - Idler pulley bracket 1 - Idler bracket clamp 1 - Shoulder screw 1 - Pulley 1 - Plastic Washer 4 - Screw *(10-24 x 0.75)* 5 - Nut *(10-24 K- Lock)*	

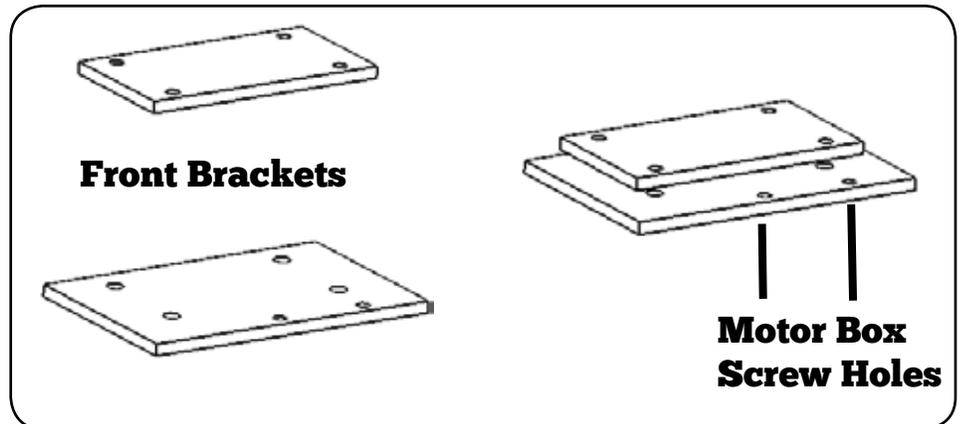# Install Belt Bracket (Bag Y15)

1 Install belt bracket to the laser holder post on the left side of the machine.

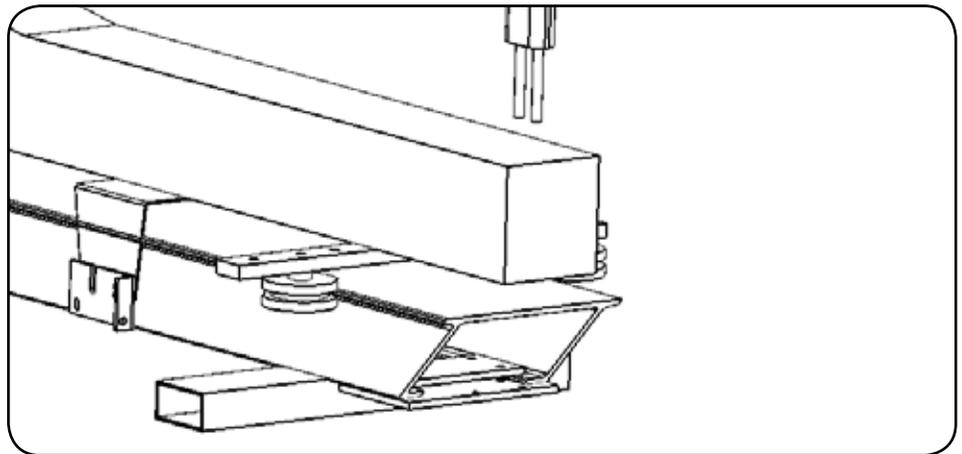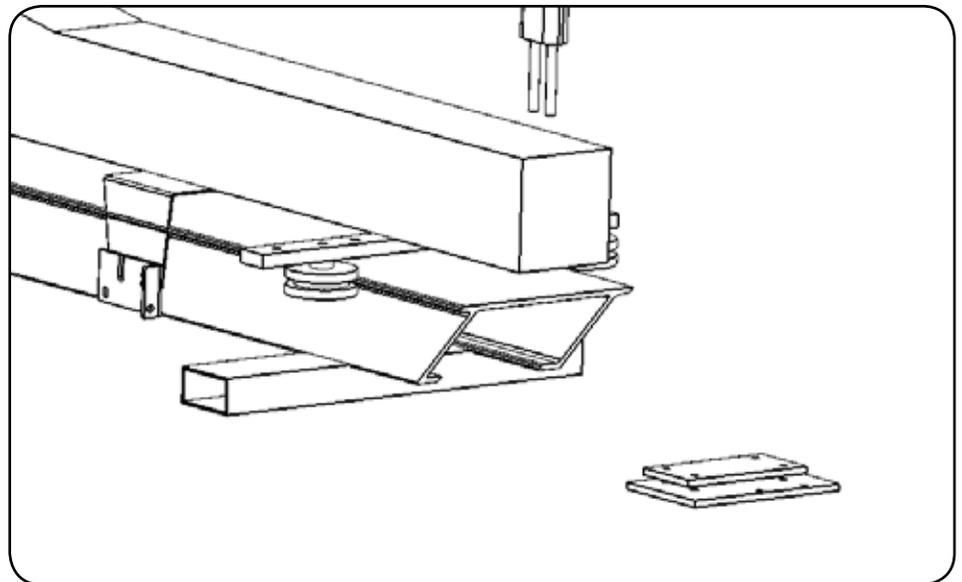(Bracket should reach under the machine to the right side of the machine.)

Belt Bracket

Attach the Front Carriage Bracket (Bag M11)

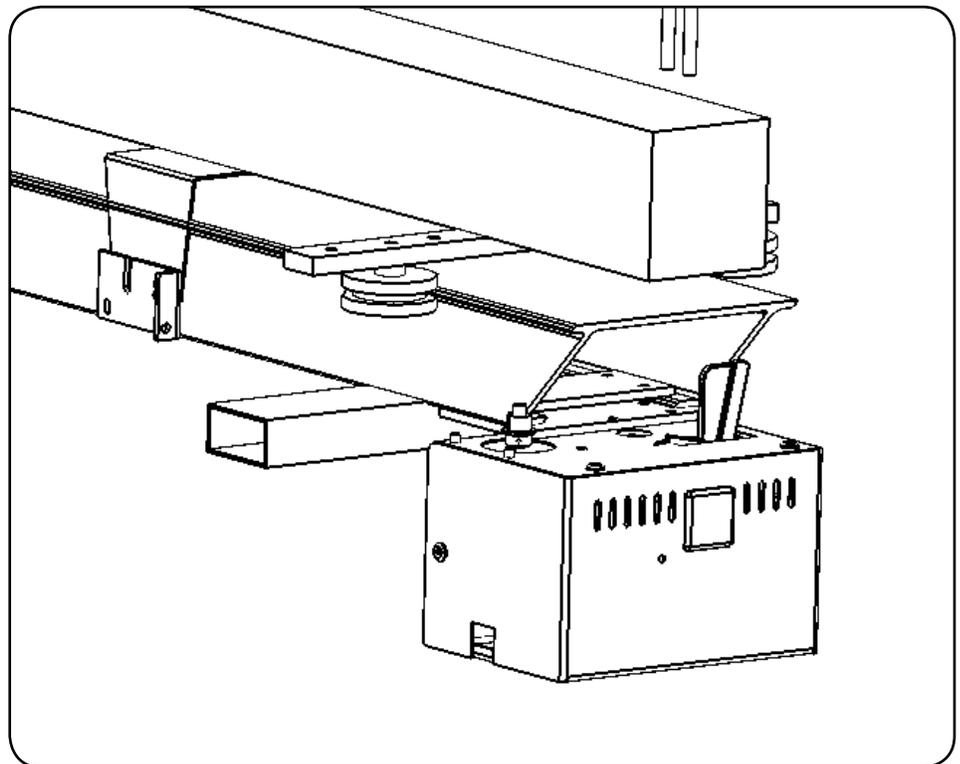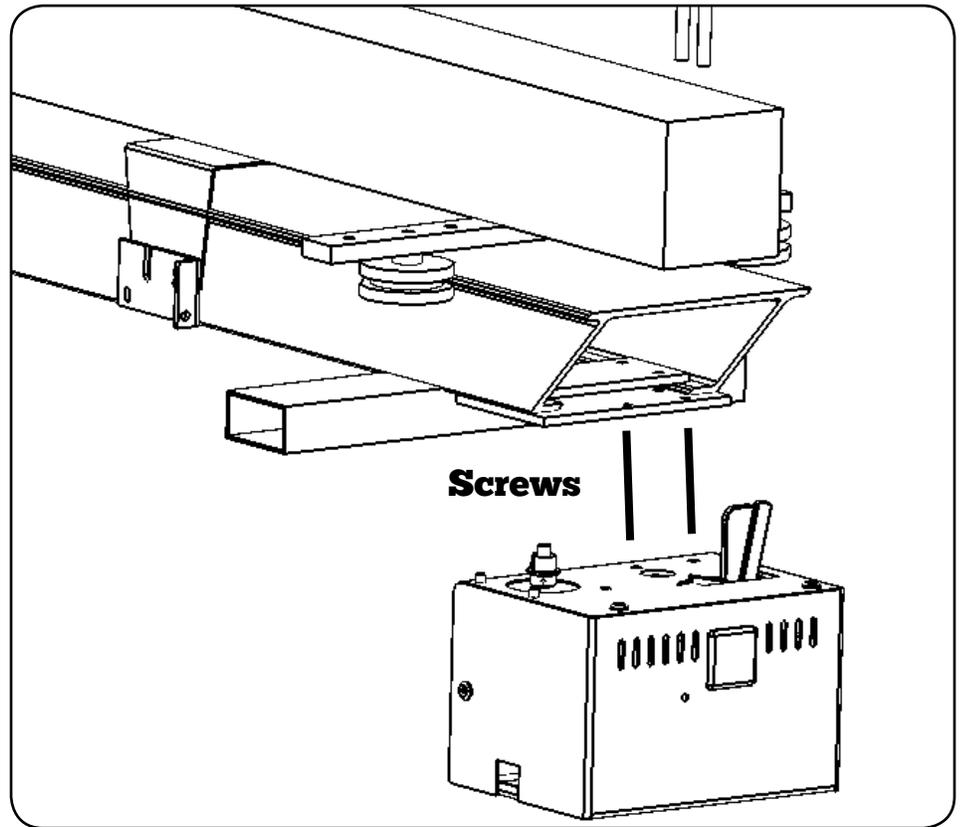**1** Attach two front carriage brackets with four provided screws. (The front bracket should have two holes to attach the black motor box.)

Front Brackets

Motor Box Screw Holes

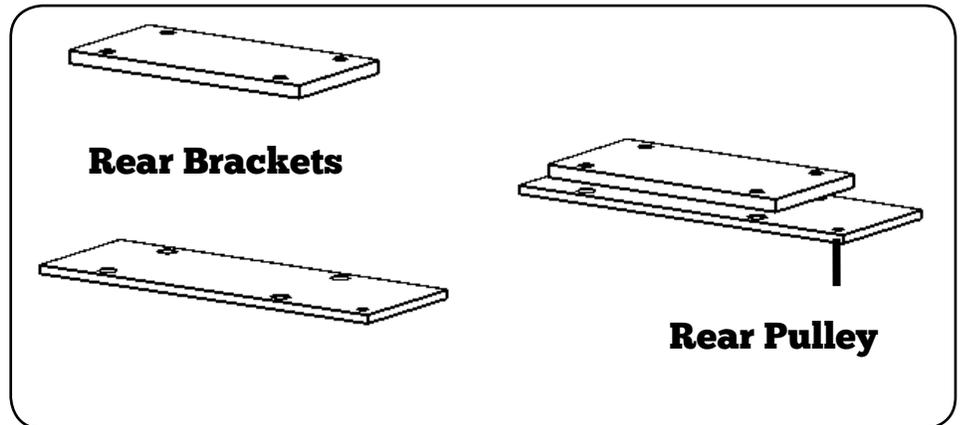**2** Slide front carriage bracket onto front of machine and tighten screws as needed to secure in place.

3 Attach Motor Box to front carriage bracket using two provided screws.(Make sure bracket isn't to far in, so carriage doesn't hit the tension lever on the motor box.

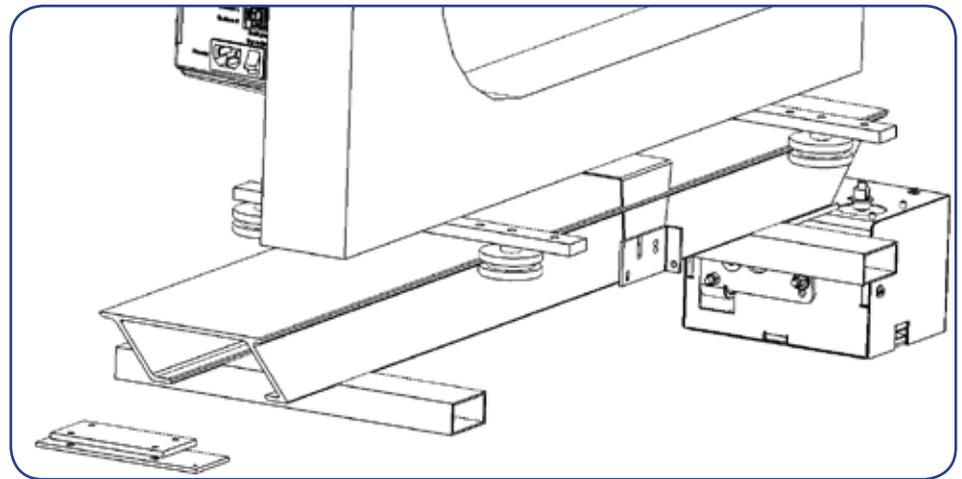**Screws**

Attach Carriage Brackets

Attach the Rear Idle Bracket (Bag I11)

1 Attach the rear carriage brackets together using provided screws. (The rear bracket should have a pulley on it.)
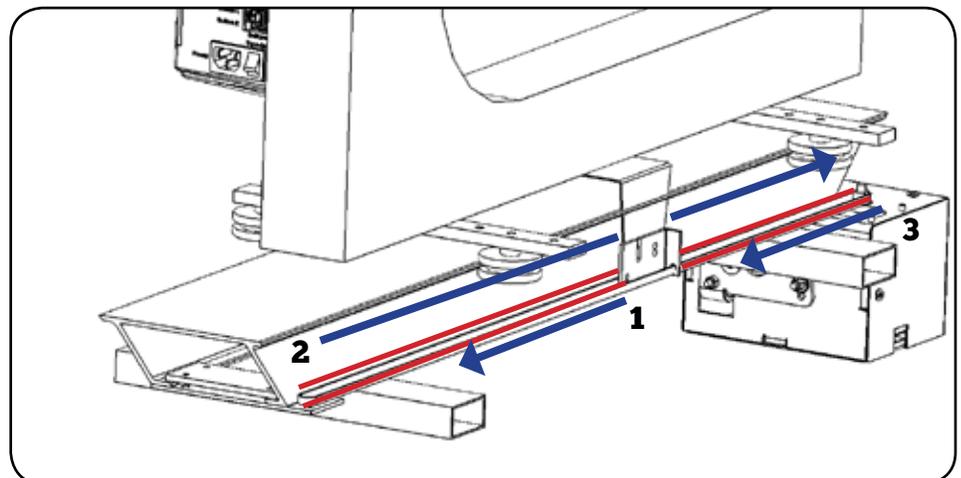

Rear Brackets

Rear Pulley

2 Slide the rear carriage brackets into place and tighten screws as needed to secure in place.

3 Use the belt clamps to attach one end of the belt to the slot on the belt bracket.

Wrap the black belt with the teeth facing in around the rear idler pulley and up, behind the carriage bracket to the motor pulley.

Attach the other end of the belt to the eyebolt with a belt clamp.

Once the belt is installed the pulley should rotate counter-clockwise as the machine is brought forward toward you.
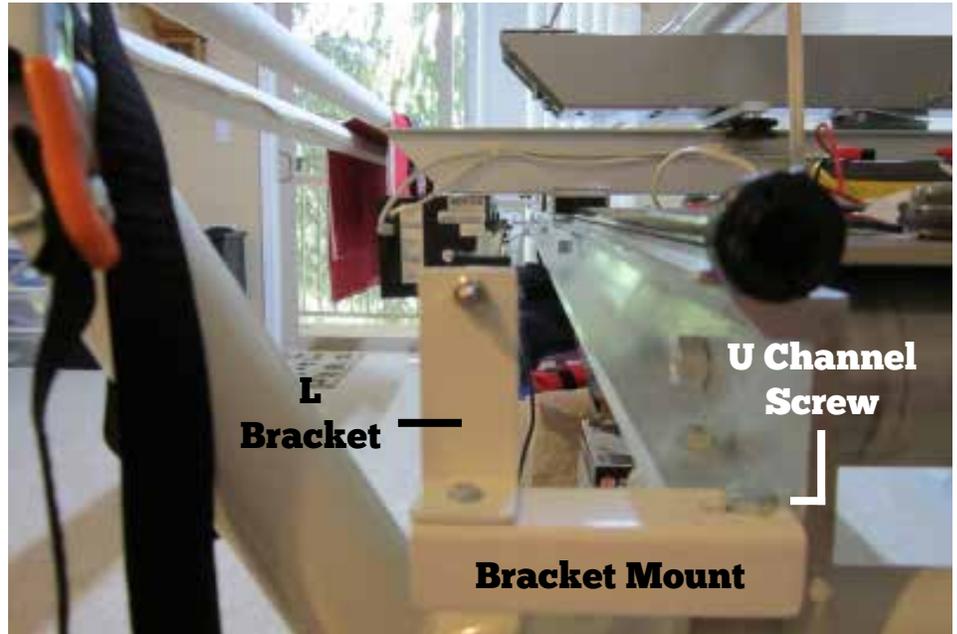
For help with belt clamps see Appendix A.

Install White Belt (Bag X8)

1 Remove the U-channel screw to attach the bracket mount to the frame.

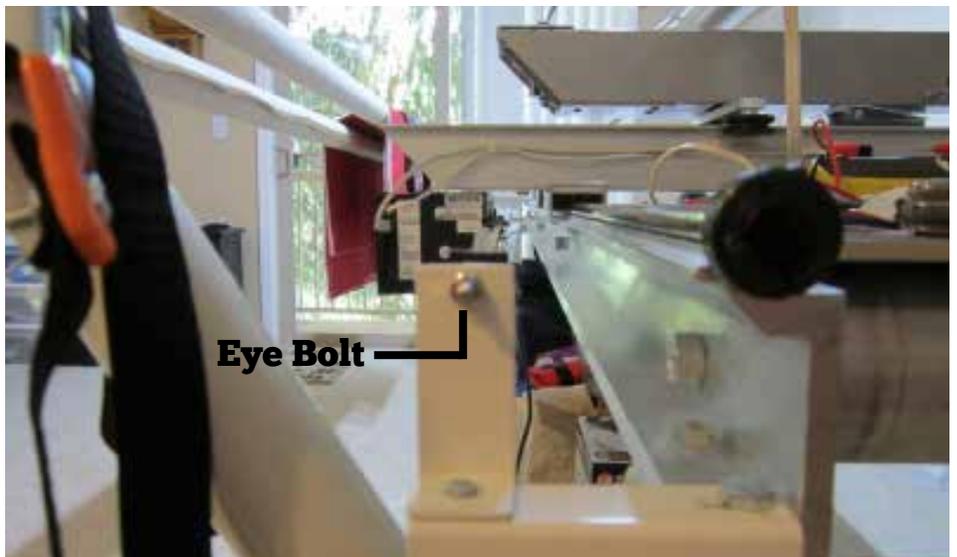Use the provided screws to attach the L bracket to the Bracket mount.

Repeat for other side of frame.

2 Connect one end of the white belt to an eye bolt using belt clamps and install the eye bolt into L Bracket.

Run white belt down the length of the frame to connect the other end of white belt to the other L Bracket, again using belt clamps and an eye bolt.

Ensure the white belt runs through the belt pulley on the side of the black motor box, and pull lever on black motor box to lock into place.
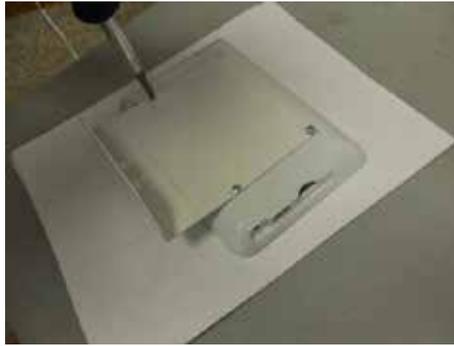
Install Display (D3 or D6)

1 Attach display to
display bracket with
provided screws.(For
10" model please turn to
page 8.)

Remove top two screws
on machine head,
position the bracket on
the head, then reinstall
screws to attach
display.

2 Plug in display wire,
then run display wire
(Black lines at right) to
the black motor box.

3 Plug the display wire into the remote port.

Handle Bar

Remote

Stitcher Box

Power Switch

Ext Power

Installing Android display bracket

1 Remove top two screws on machine head, position the bracket on the head, then reinstall screws to attach display.

2 Make sure that the screws are placed on the correct hole on the display bracket.

For installing your 10" display check out the "Installing/ Troubleshooting your Android Tablet manual."
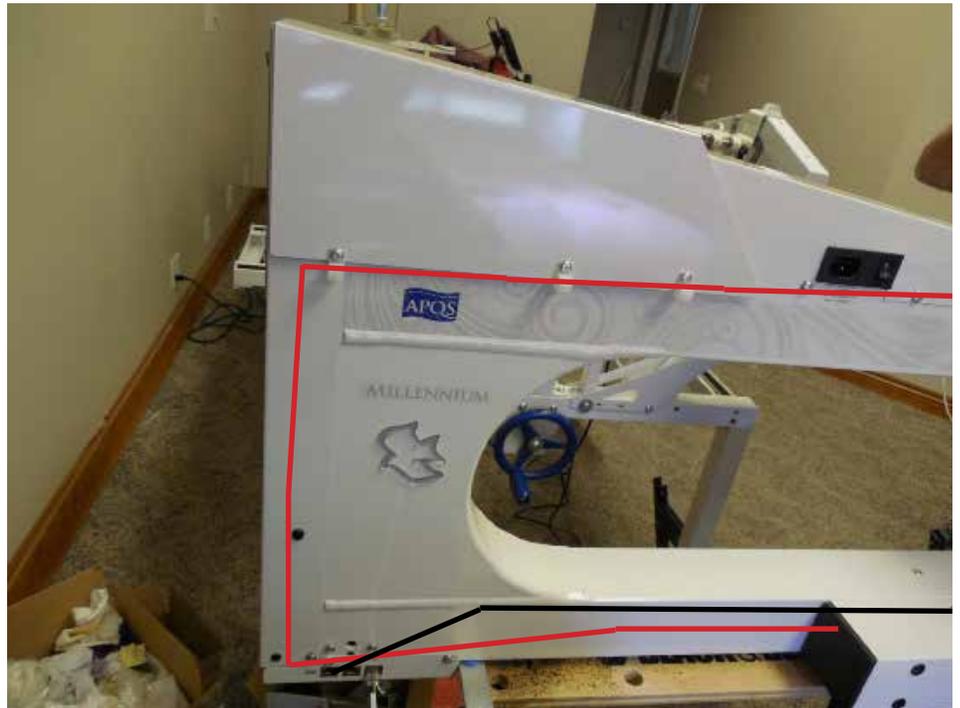
Connect Handle Bars

For "Aux Port" Model

1 Plug the handle bar wire into the auxiliary port at the rear of the machine.

(Newer models have an AUX—auxiliary— port at the back base of the machine.)

Aux Port

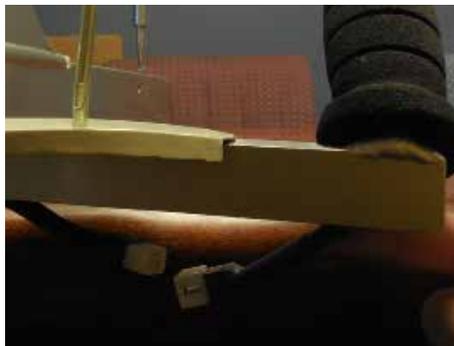**2** Run the handle bar wire (black lines at right) to the black motor box.

3 Plug the handle bar
wire into the handle
bar port.

Connect Handle Bars

For Pre "Aux Port" Model

1 Locate and disconnect
the two rear handle bar
cables.

2 Connect the included Y cable to the rear handle bars. (The Y cable will be labeled left and right to indicate which rear handle bar to connect to.)

3 Plug the remaining end of the Y cable into the AUX port of the included stitcher box.

Mount the stitcher box with the adhesive tape near the rear handle bars.

Stitcher Box

4 Plug the included stitcher box wire into the Stitcher Box port of the black motor box and the other end into the Motor Box port of the junction box.

Handle Bar

Remote

Stitcher Box

Power Switch

Ext Power

Attach Motor Box
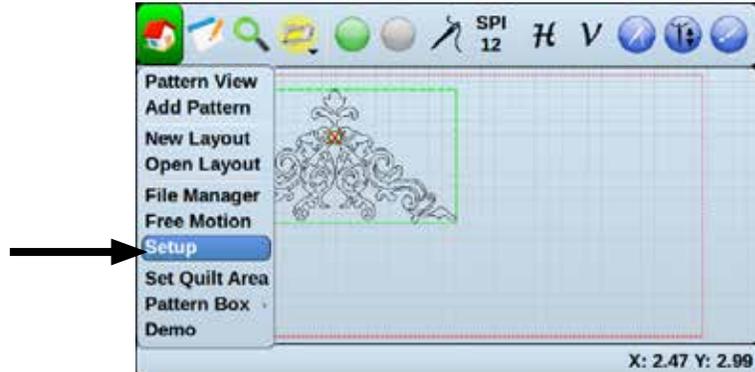
Connect Handle Bars

Set Machine Type

If you have a QuiltEZ Perfect Stitch Regulator, then set your machine type to Default.

7" Tablet:

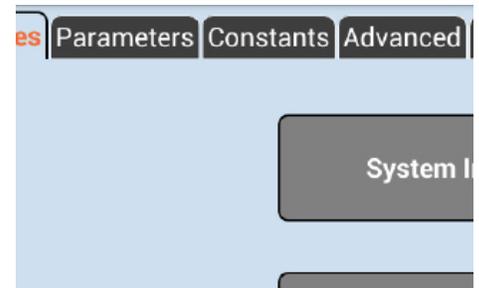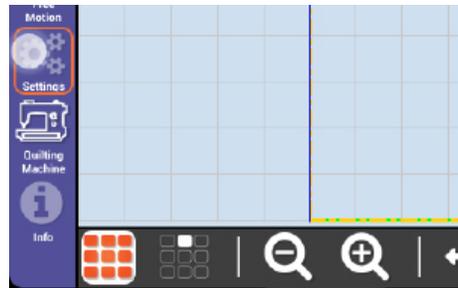**1** Power on the display, go to **Home> Setup**

2 Go to the **Advanced**

Select Machine Type.

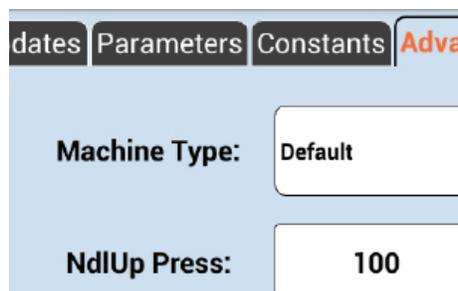See next page to determine machine type settings.

10" Android Tablet:

1 Power on the display, go to **Settings > Advanced** tab.

2 Select Machine Type.

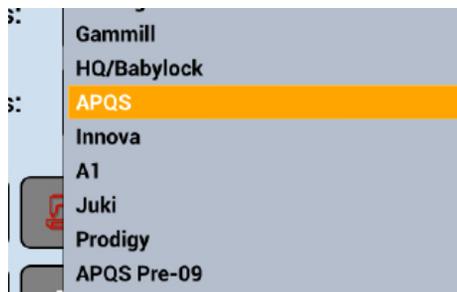See next page to determine machine type settings.

Which Machine Type?

Pre "AUX Port" Model
Select Machine Type and set the machine type to APQS Pre-09.

"AUX Port" Model
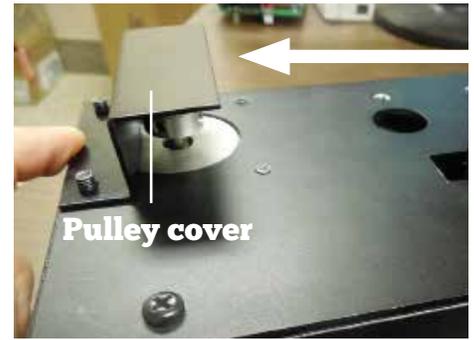Select Machine Type and set the machine type to APQS.

Check Belt Tension

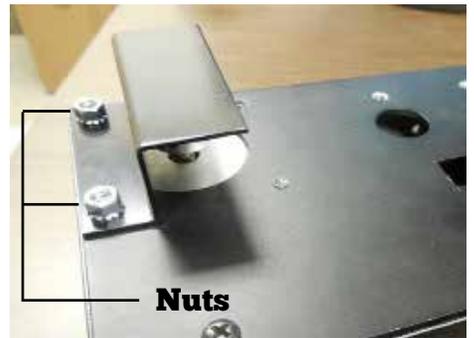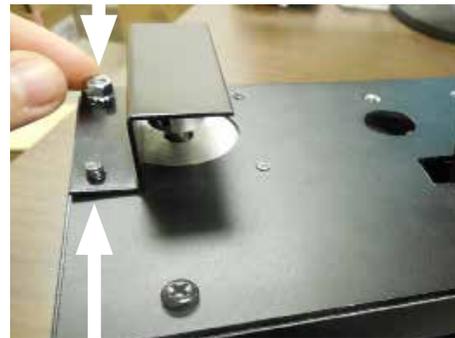**1** A correctly tensioned belt won't be as tight as a piano string but not sagging either. Aim for a taught belt.

Adjust belts as necessary.

Motor Pulley Cover (Optional)

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

Pulley cover screws

Pulley cover

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

Nuts

What is the Pulley Cover for?

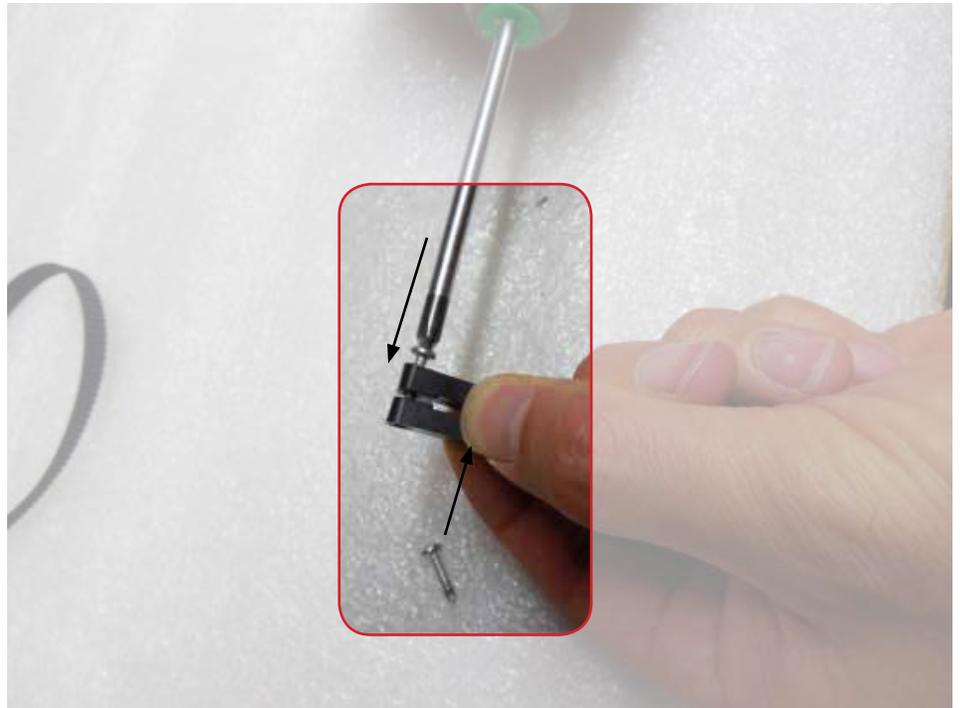The Motor Pulley cover is an extra safety precaution to protect your fingers from getting entangled in the belt.

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

Installing cables

Please refer to the Connecting Robot to Quilt Machine instruction set for help installing cables.

Power on the robotics

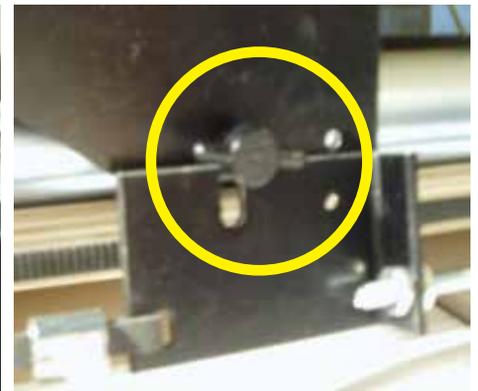Use the power switch located on the side of the motor box with the ports to power the motor box off and on.

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