



# **How to Attach Butler Robotics to an A-1**

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

**Bag #**  
**Cables**

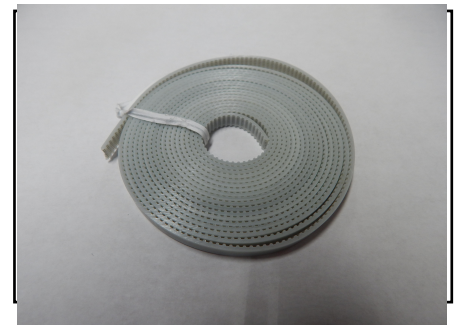
**Contents**  
Vary by machine type

**Picture**



**X1**

White Belt (15')



**Y1**

Black belt (86")



**Z1**

Zip ties, anchor, screws,  
washers



**X4**

White Belt Brackets



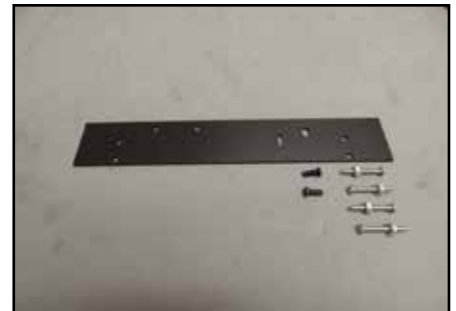
**Y7**

Black Belt, Carriage Bracket



**M4**

Front Motor Box Bracket



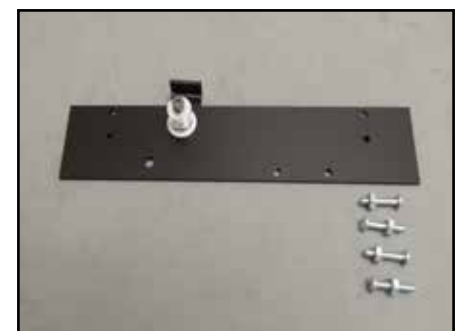
**D2**

Display Bracket



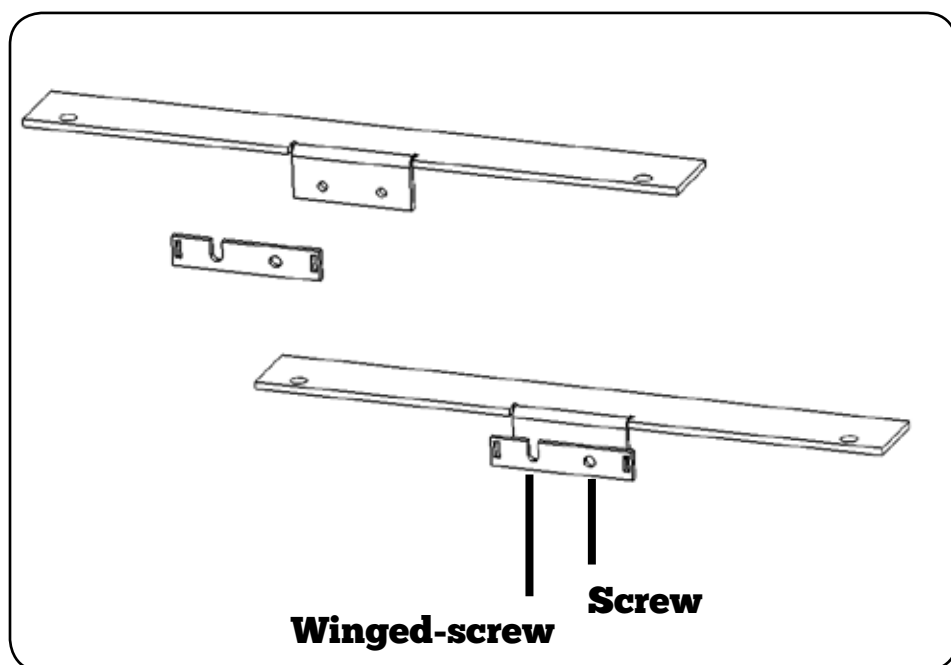
**I5**

Rear Idle Bracket

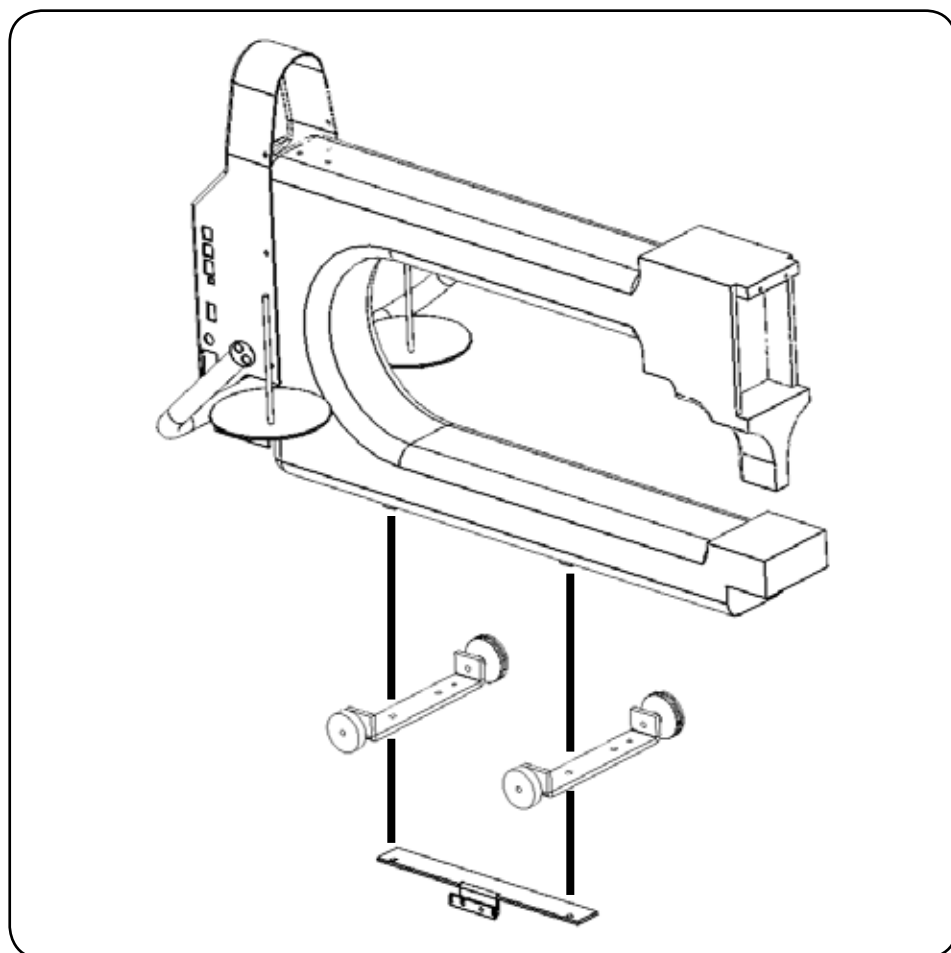


# Install Belt Bracket

- 1** Attach the black belt bracket to the carriage bracket using the provided screws.



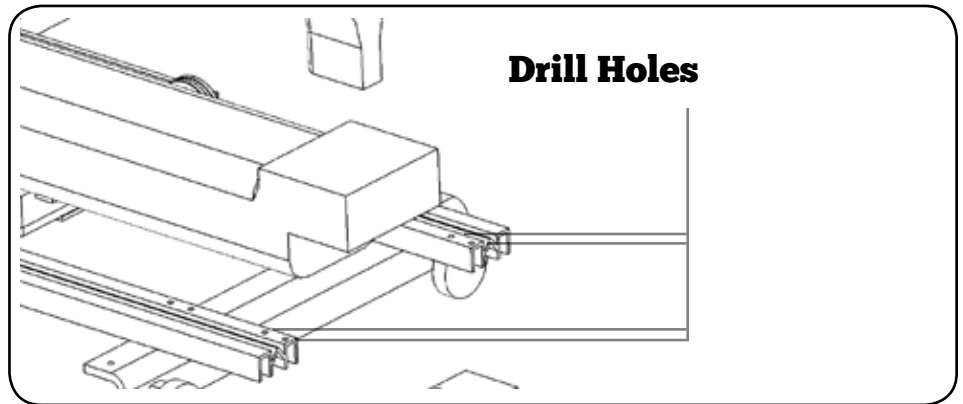
- 2** Remove the carriage wheel screws, line up the carriage bracket with the carriage wheels, and reattach wheels and bracket to the machine using the original carriage screws.



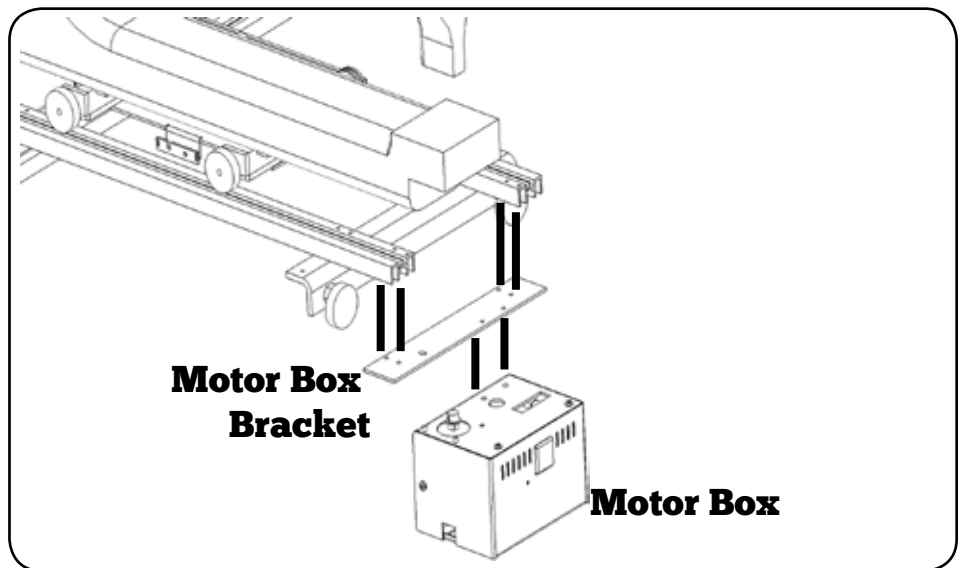


# Attach the Front Carriage Bracket

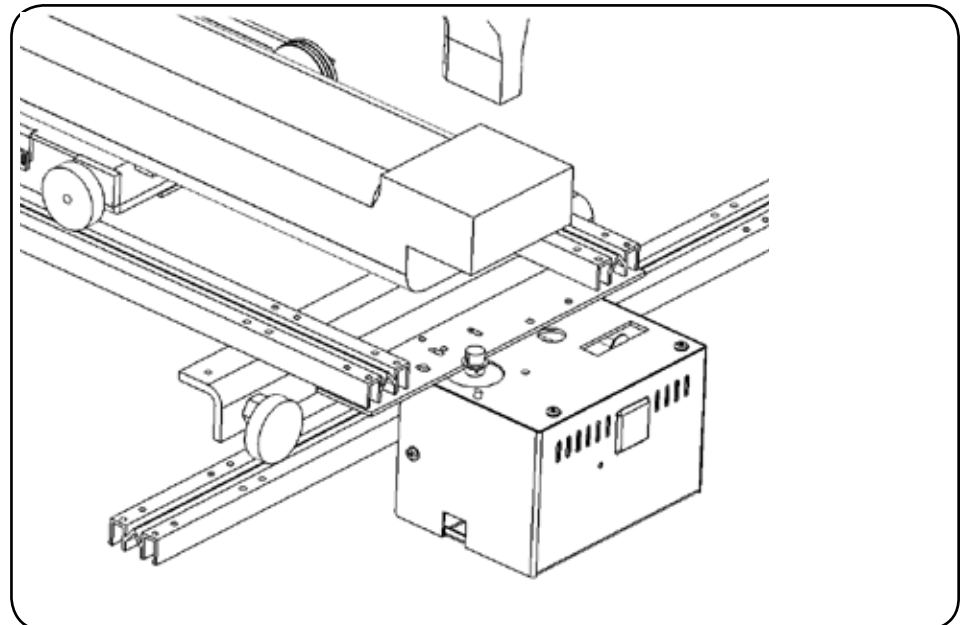
- 1** Drill in front of carriage according to drill template specifications.



- 2** Attach Motor box and motor box bracket to machine using provided screws.



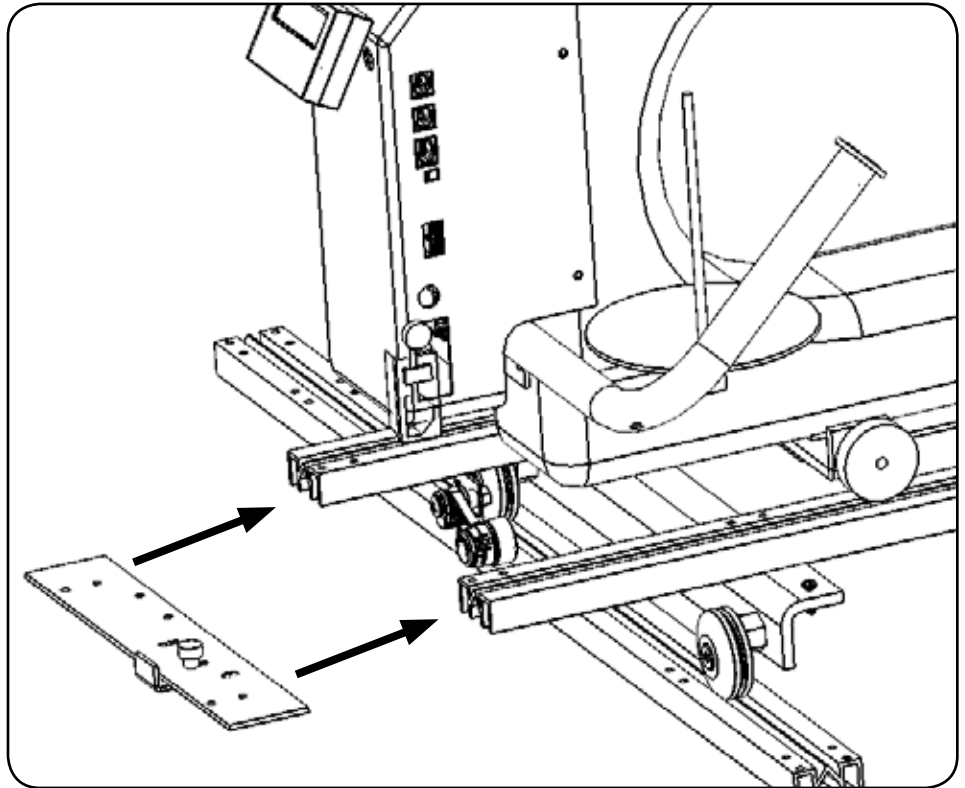
**For carriage drill templates, see Appendix B.**



## Attach the Rear Idle Bracket

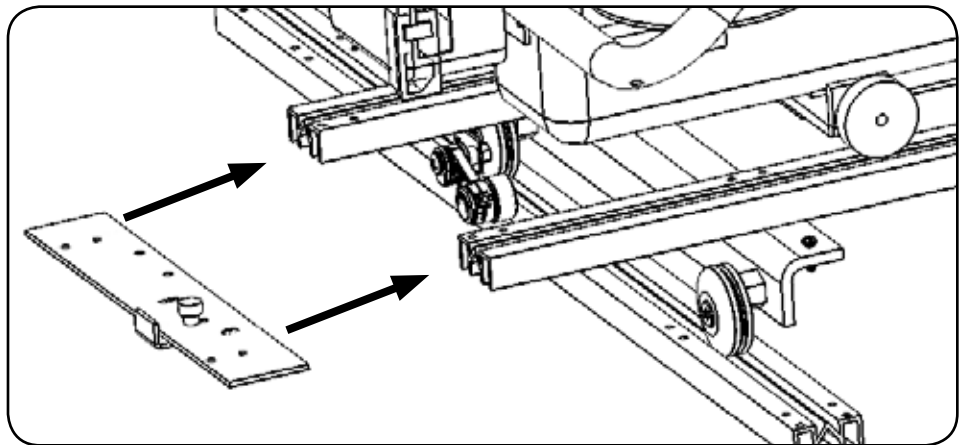
- 1 Drill holes in front of carriage according to drill template specifications.

**For carriage drill templates, see Appendix B.**



- 2 Attach rear pulley motor bracket using provided screws.

Make sure that the pulley lines up with the pulley on the motor box.



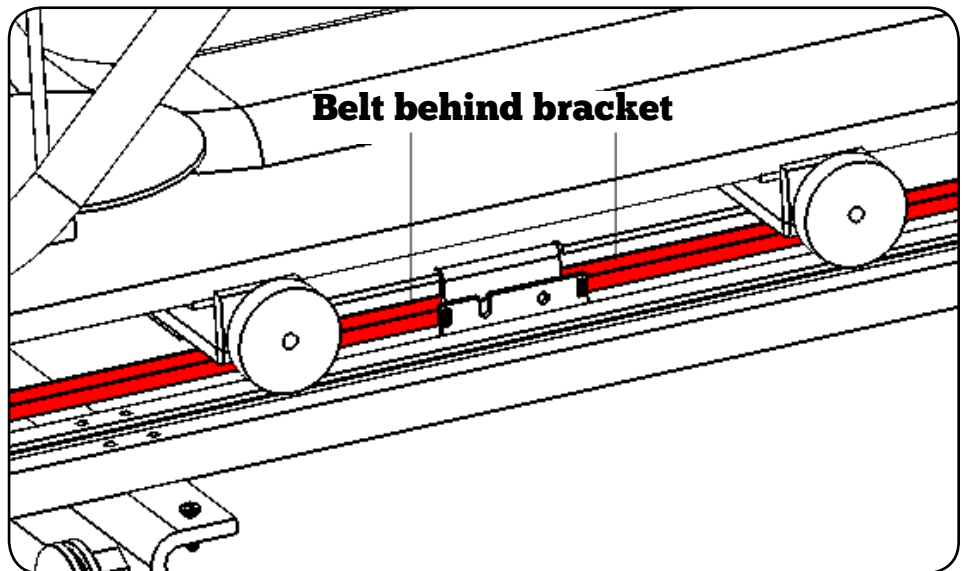
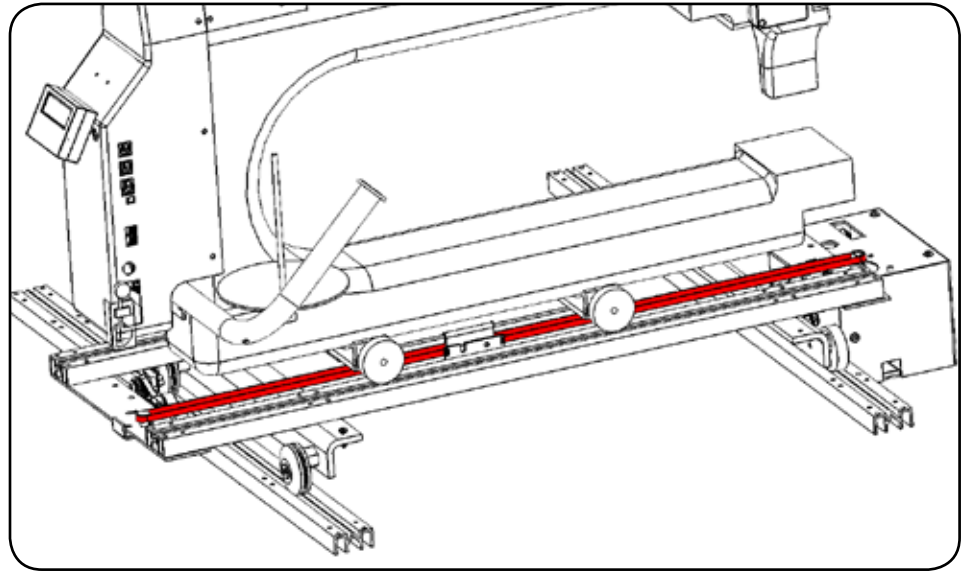
# Install Black Belt

**1**

Using the zip ties, attach one end of the black belt to the carriage bracket.

Wrap the toothed side of the black belt (highlighted at right) around both the Idle and Motor Box pulleys, then use zip ties to attach the remaining end of the belt to the carriage bracket.

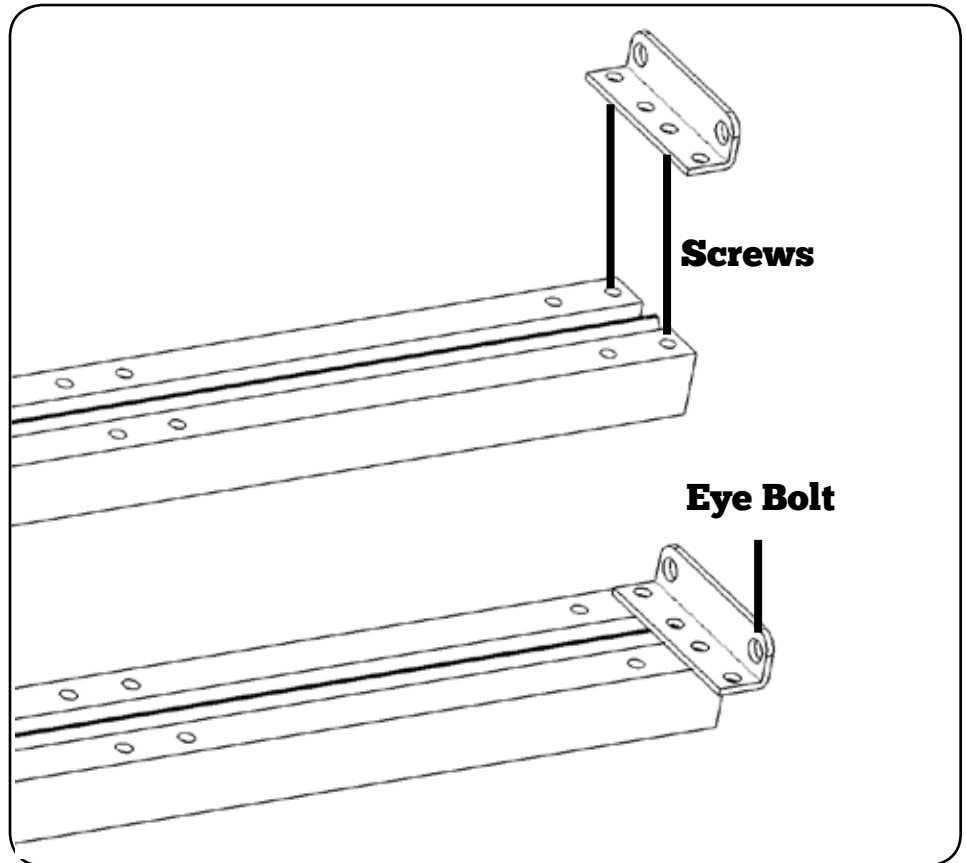
Ensure that the black belt travels **behind** the carriage bracket (shown at right).



## Install White Belt

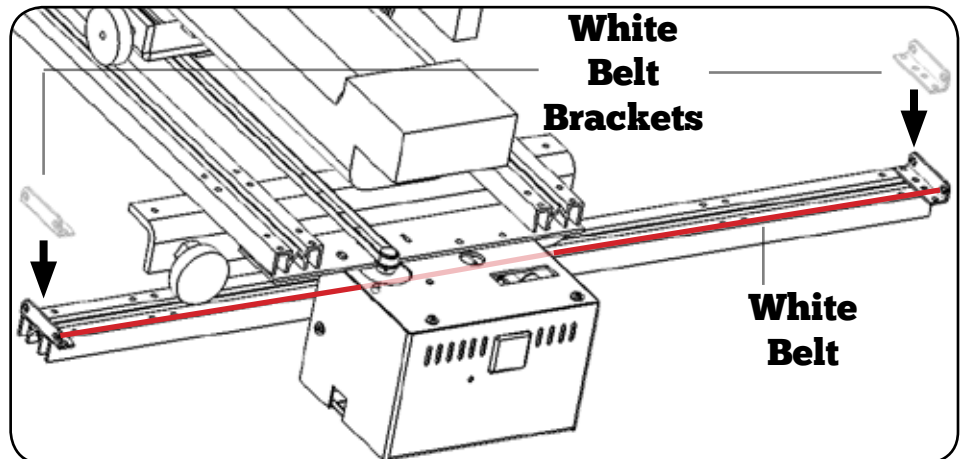
- 1 Remove the screws at each end of the frame use them to attach the white belt brackets onto the frame.

Attach one end of the white belt to an eye bolt using the belt clamps and screw the eye bolt into the white belt bracket. (Install with the eye of eye bolt closest to Motor Box.)



- 2 Position the white belt into the pulley on the motor box.

Attach the remaining end of the white belt to an eye bolt and install eye bolt into remaining White belt bracket.



# Install Display

**1** Attach display to display bracket with provided screws.

**2** Loosen faceplate screws and slide display bracket tab between faceplate and machine head. Tighten faceplate screws.

(Note that machine pictured at right is not an A-1, but the method is the same.)



**3** Plug the display wire into the remote port.

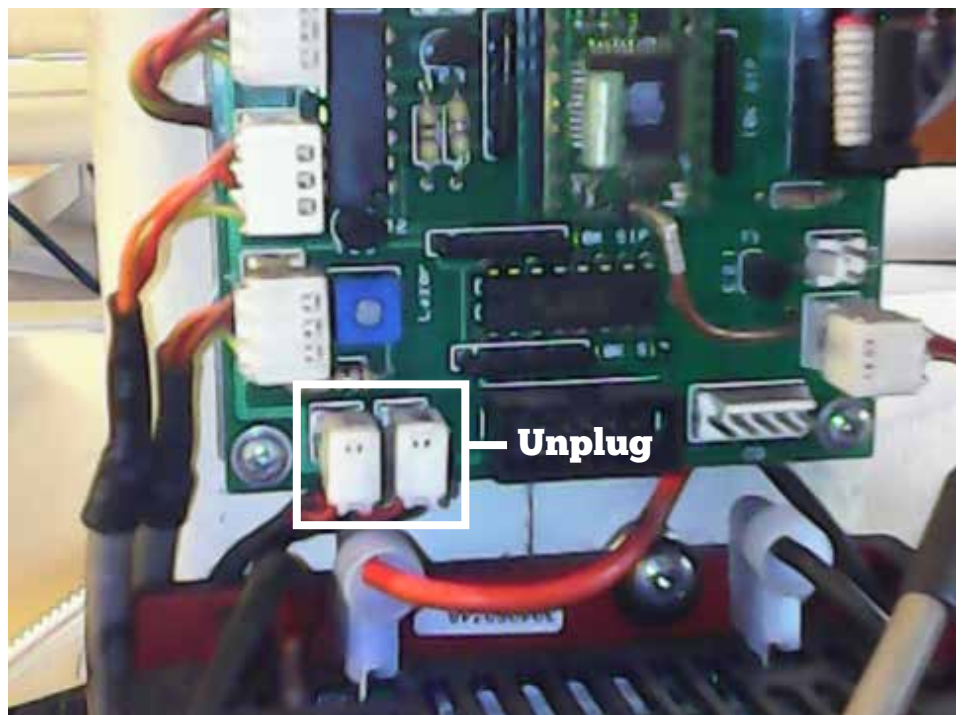
Plug the remaining end into the display.



## **Connect Handle Bars- This is for the Ruby, Imperial and Professional Butlers only**

**For Non-Perfect Stitch**

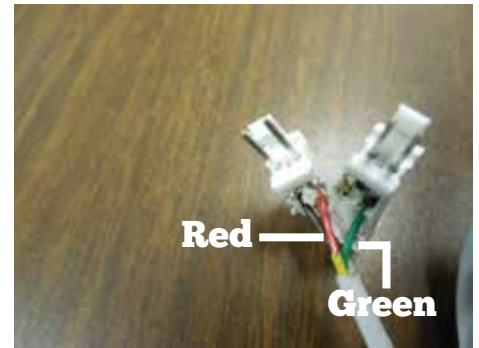
**1** Unplug the indicated wires from the PCB located at the rear of the machine.



- 2** Plug the red wire into the Start/Stop port and the green wire into the Needle Up port.

(The two ports you just unplugged.)

(Bag #10)



- 3** Plug the remaining end of the handle bar wire into the handle bar port.



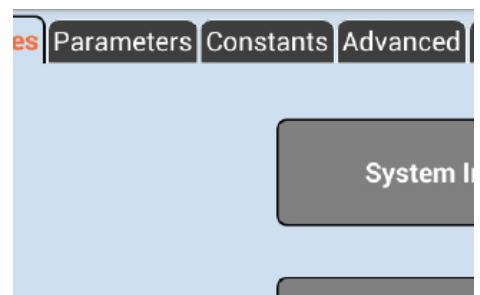
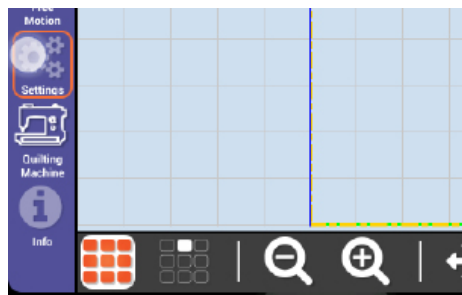
# Set Machine Type-This is for the Ruby, Imperial and Professional Butlers only

This Machine needs to have the machine type set to A1

1

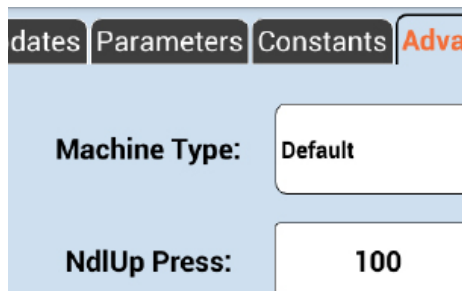
## Android Display:

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



2

Select Machine Type  
and set the machine  
type to A-1.





## Check Belt Tension

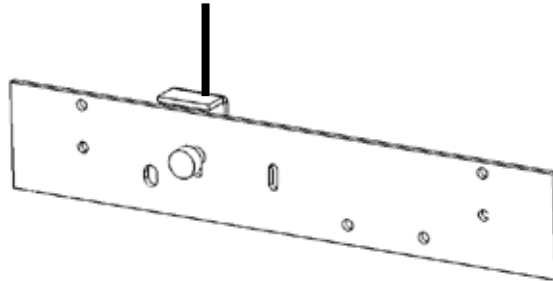
**1**

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.

Note that the rear idle pulley can have the screw loosened, moved to tighten the white belt, then the screw re-tightened to adjust tension.

**Rear Pulley**



# Appendix- 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 motorbox.



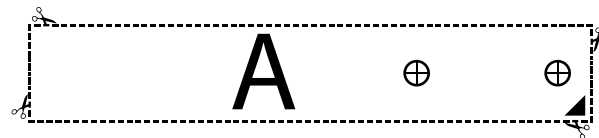
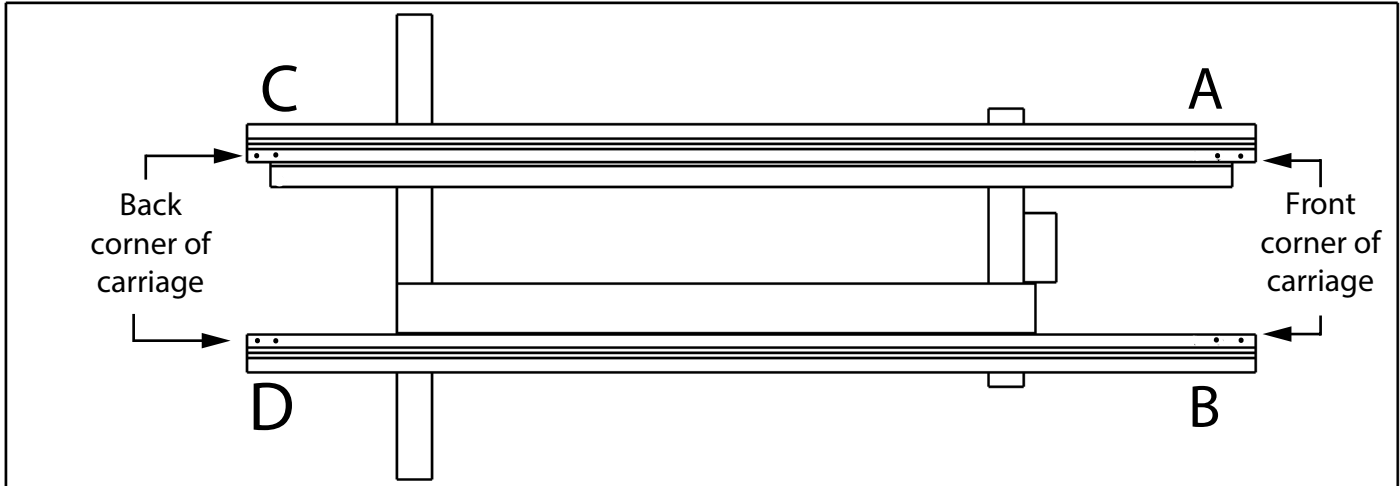
To disengage the y-belt, loosen the wingnut on the carriage bracket.

You can now use free motion quilting.

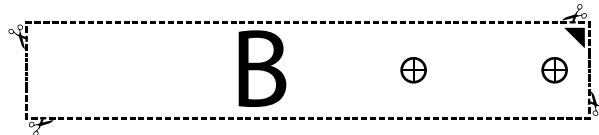
## Appendix C - Carriage Drill Templates

Cut out, position, and tape templates into place on the carriage. Drill holes using a #29 drill bit.

**A-1 Carriage (Top View)**



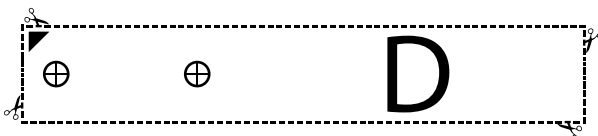
Drill Bit Size:  
#29 (.1360")



Align this corner with rear inner corner of carriage



Drill Bit Size:  
#29 (.1360")





**Still need help?**

Visit [support.quiltez.com](https://support.quiltez.com) for  
tutorial videos and additional  
help documentation