

Grace Evolution Elite Frame Instructions



White Belt



Black Belt



Zip Tie Kit



**D24
Display Bracket
3-M4 x 8
3-M5 x 8**





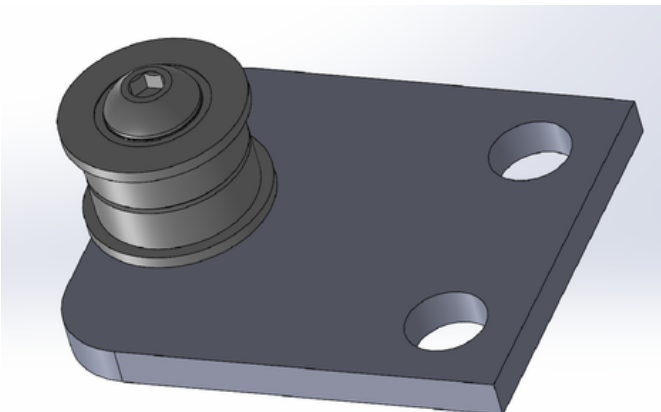
X17

**Rear X mounting
Brackets, screws
to attach this
bracket are on
the frame
already**



Y24

**Y extension
mounting
Brackets, with
M6 x 14 screws
to attach the
bracket**



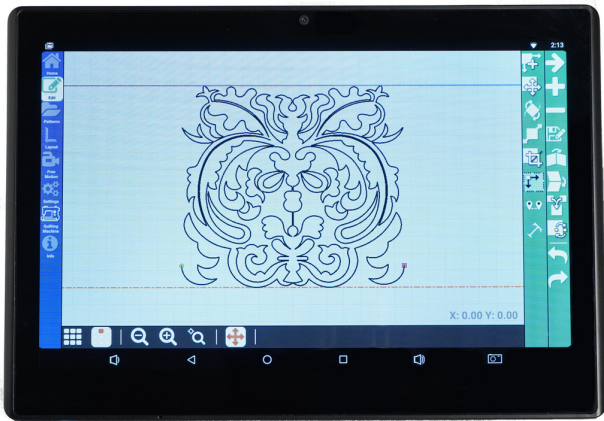
I123

**Idler Bracket
2-M6x14
2- M6 Klock**



**Robot Mounting
bracket- No bracket will
be sent.**

**You will use the holes
that are pre dilled in the
rear of your carriage**



ePC



Direct Connect Cable



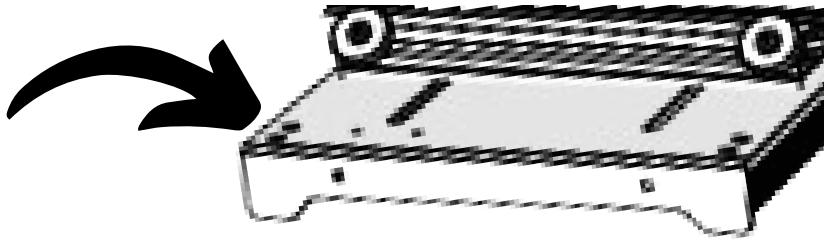
Robot Power Cable

To attach the idler bracket to your carriage

Take your machine off your carriage

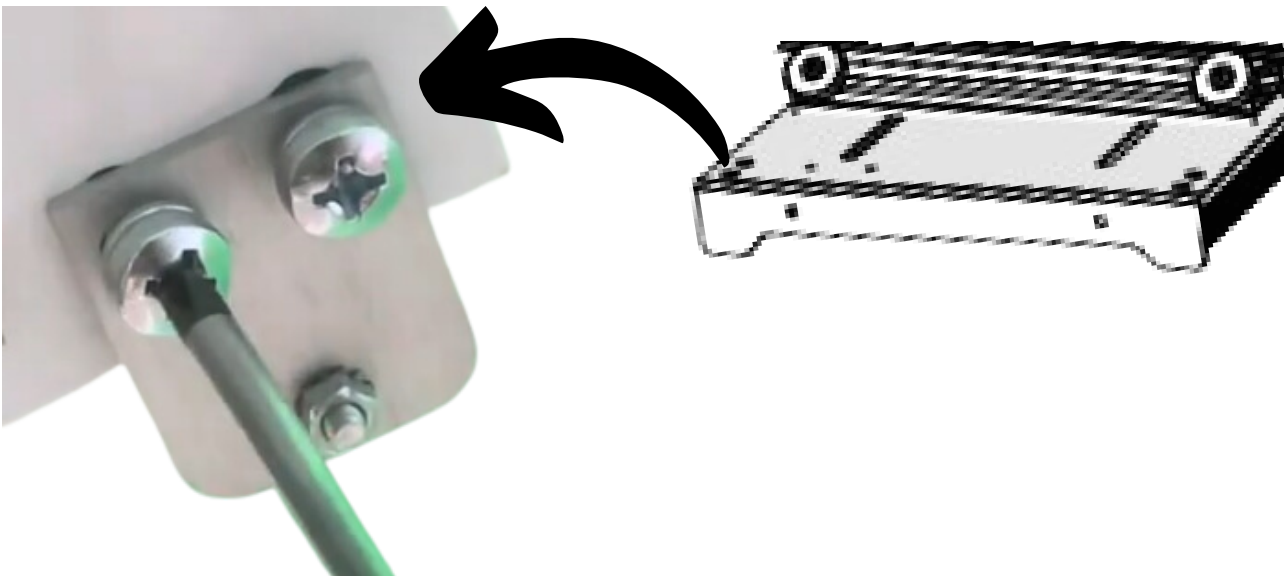
Flip your carriage over

On the front left there will be 2 screws

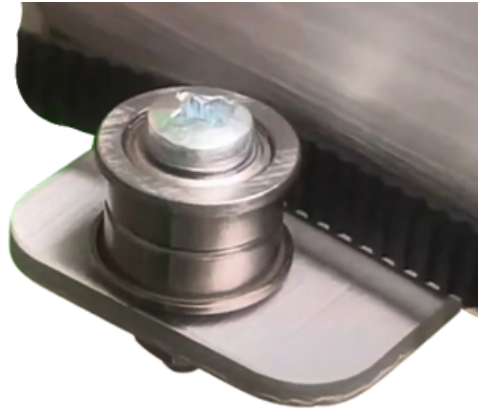


Unscrew those screws.

Place the idle bracket to so that the pulley is facing upside down. Attach with the screws that you removed earlier



The top view will look like this. It will be on the right front, if looking at the front of the frame.

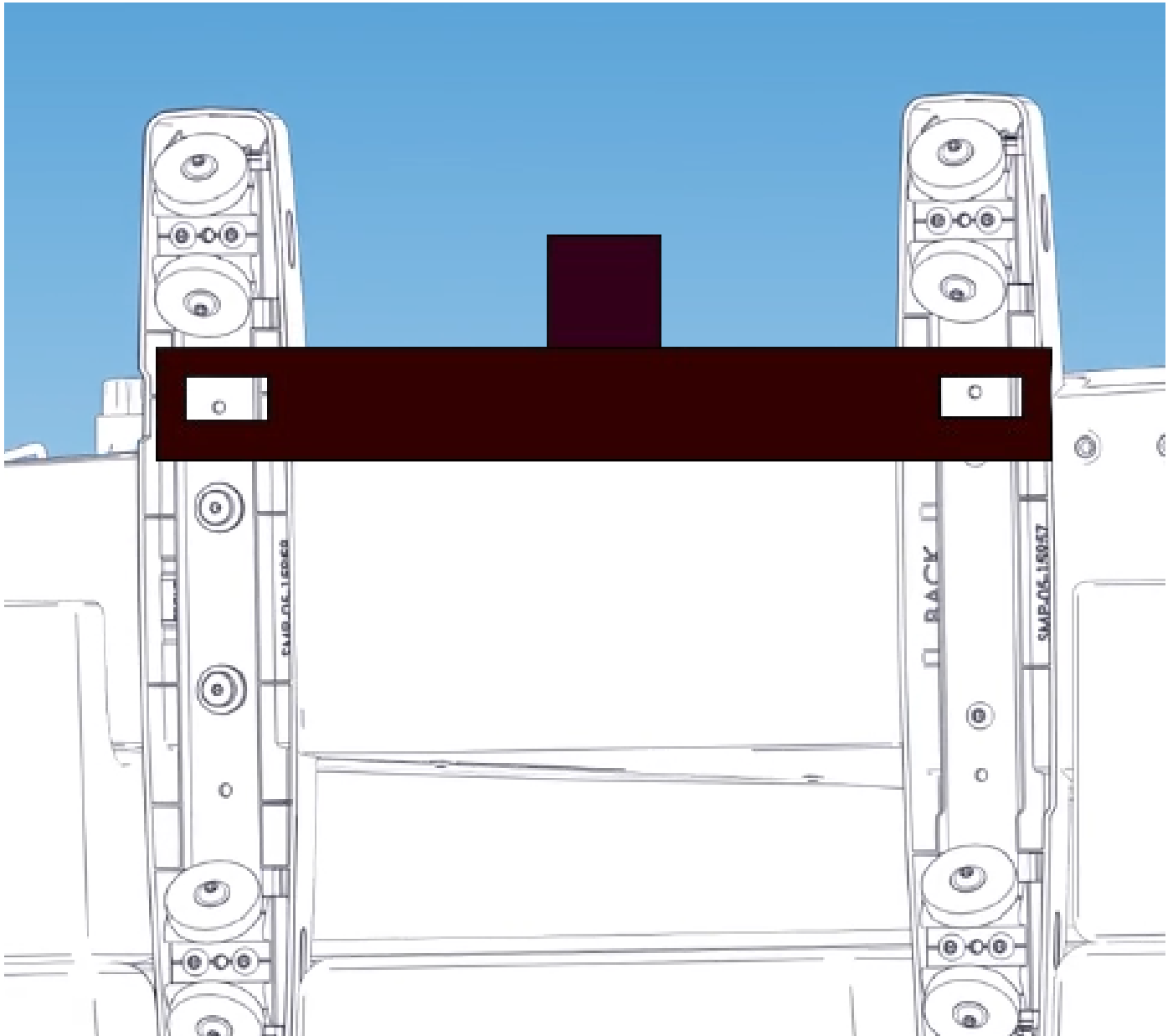


**Place your carriage back on the frame.
While you still have your machine off, install bracket Y24.**

On the underside of your axels there are 2 holes to install the bracket.



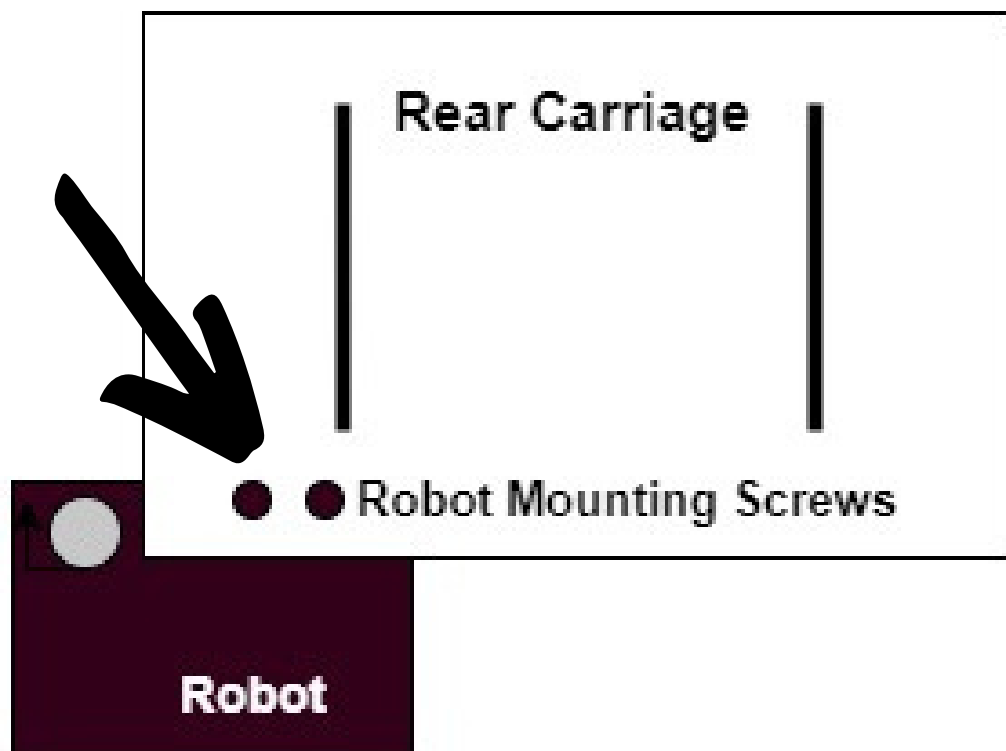
The bracket is going to be mounted so that when the machine is upright it is on the right side of the machine. The bracket is attached with the provided M6 x14 screws



When finished, place the machine back on the carriage. It should look like the picture below.

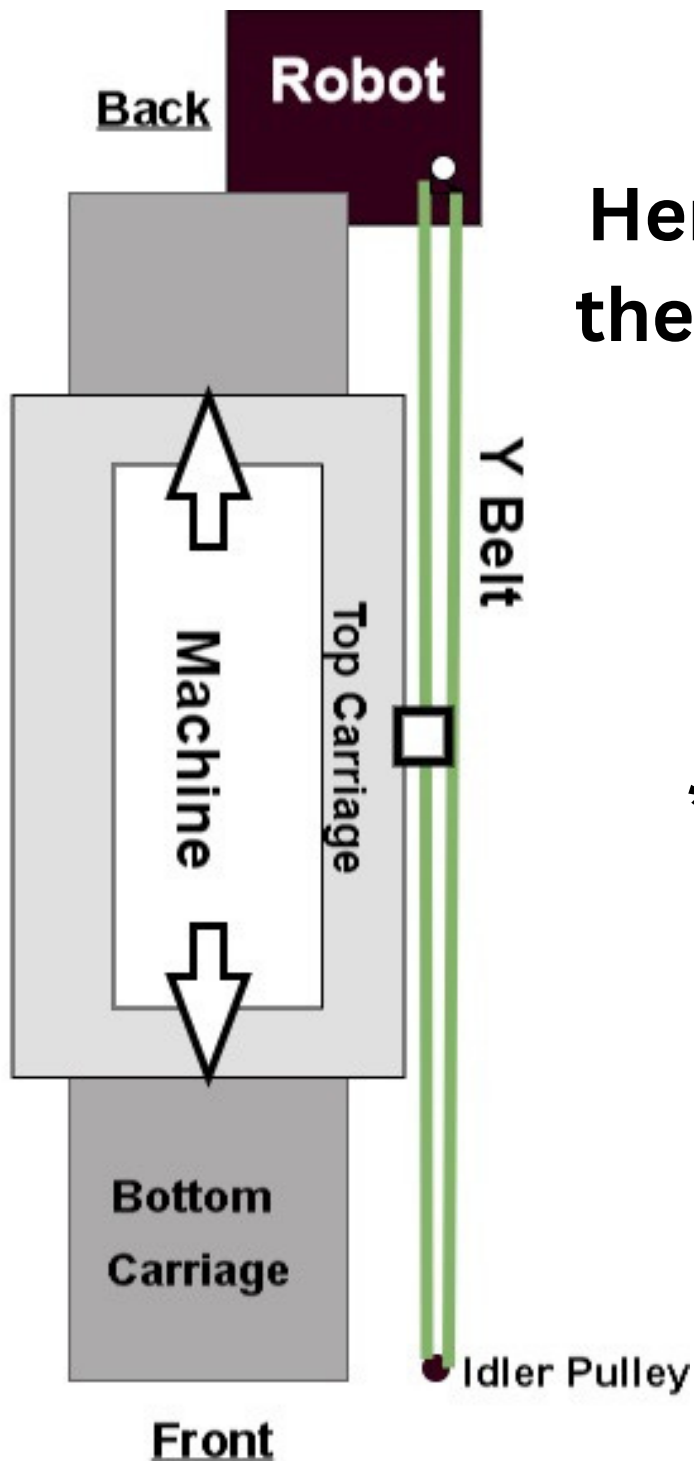


**Attach the robot with included screws.
M5x12**



Once the Robot is mounted, the next step is to run the Y belt (black belt) from the Y24 bracket to the robot and idler bracket.

The diagram on the next page will show that.



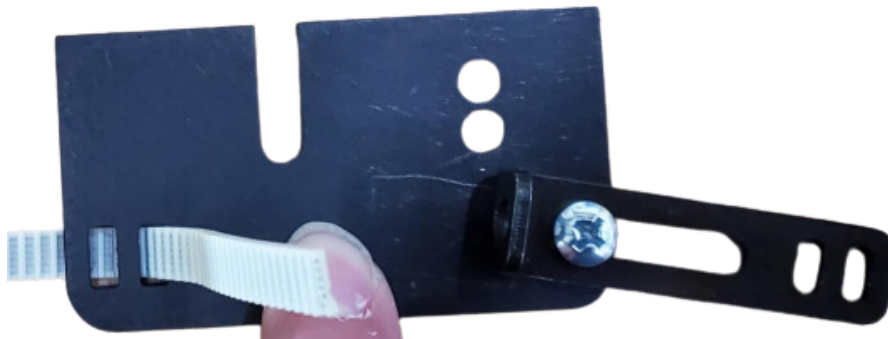
**Here is the over view,
there is more detail to
follow.**

***Note on the pictures
to follow, we used
the white belt in the
instructions so it
could be seen better.
You will use the Y
(black) belt.**

This is the bracket that is attached to the bottom of the long bracket.



Thread the belt up through the inner slot that is on the main plate.



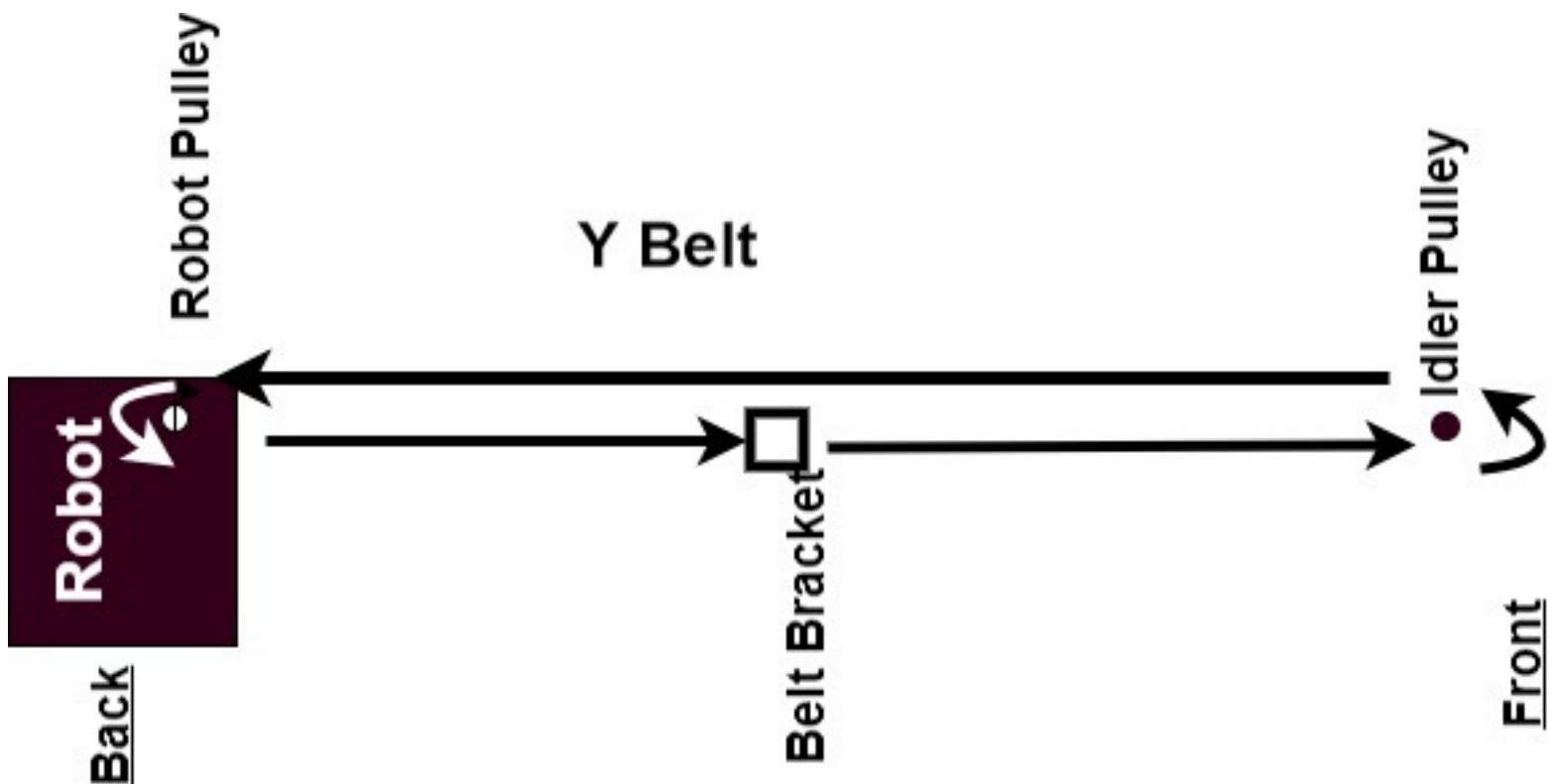
Thread the belt down through the outer slot of the bracket.



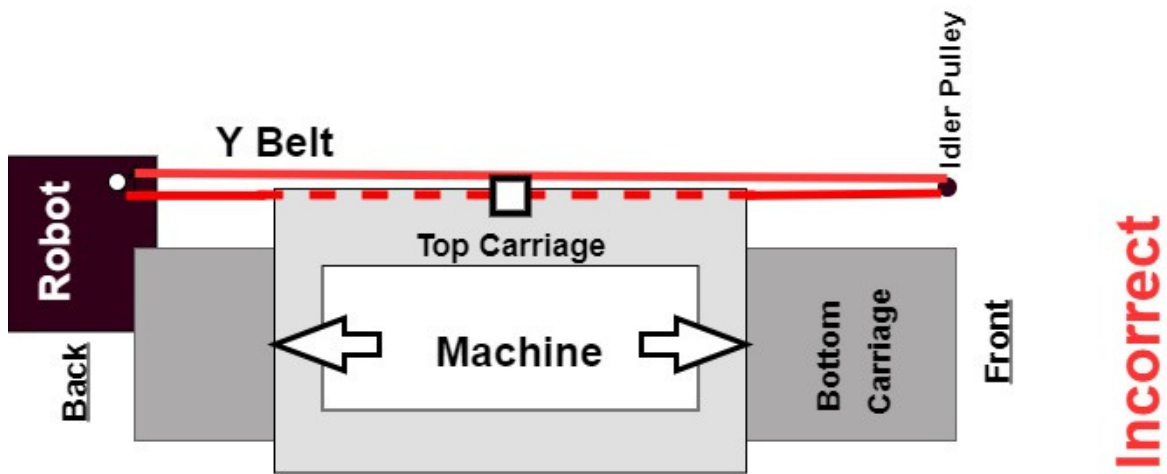
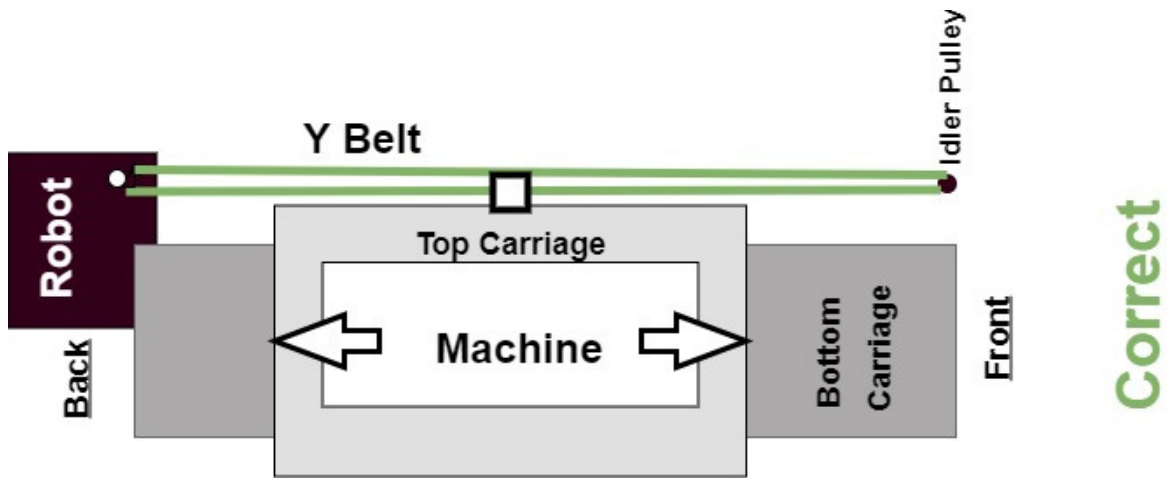
**Attach zip tie on the 2 belt pieces, tighten,
and clip off extra**



**Run the long end of the belt around the
idler pulley and back round the pulley on
the robot back to the other side of the
bracket.**

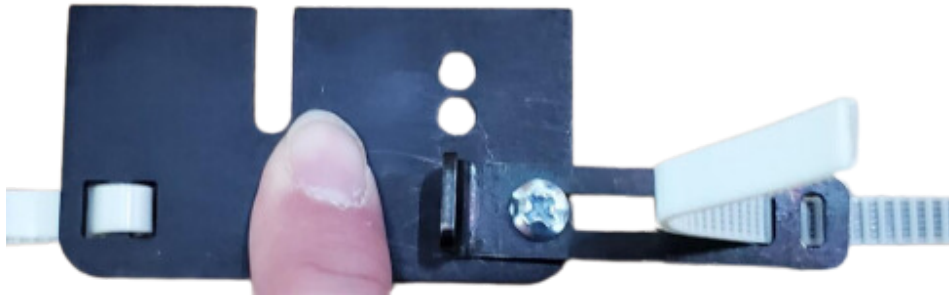


***The black belt will need to be run so that the teeth on the belt match the teeth on the pulleys on the robot. You also want the short part of the belt are behind the bracket. As shown in the pictures below.**

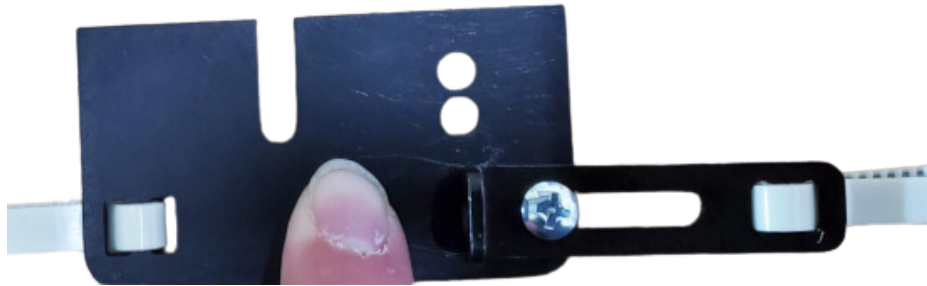


Now we will attach the belt to the other side of the bracket.

Thread the belt up through the inner slot.



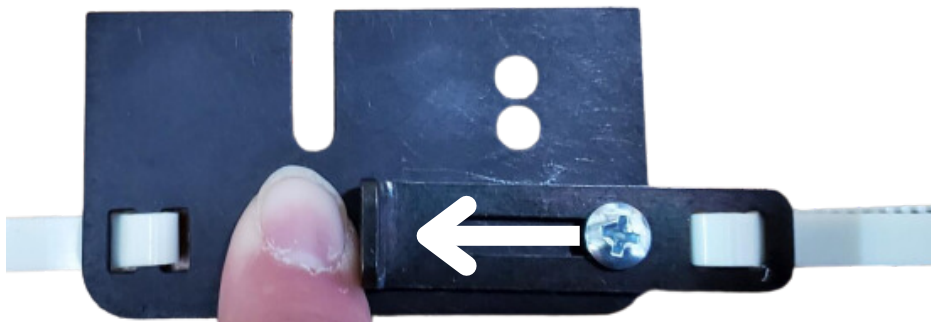
Thread the belt down through the outer slot of the bracket.



Pull the belt tight, attach zip tie on the 2 belt pieces, tighten, and clip off extra



Pull the arm towards the middle of the bracket to further tighten the belt, tighten screw once tight.



Installing the X Brackets

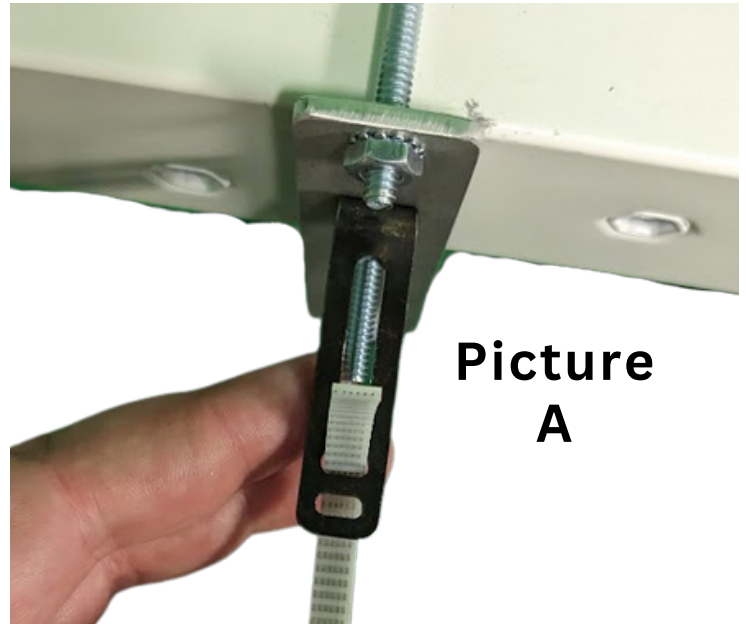
On the rear of your frame on both the left and right sides there are a set of screws. These are where the X brackets are installed.



Unscrew these screws and add the bracket by aligning the holes in the bracket with the screw holes. Then screw the screws back in. Do this on both sides.



Thread the x (white) belt up through the x belt bracket slot closest to the screw. Thread the belt with the teeth facing up. As shown in Picture A.



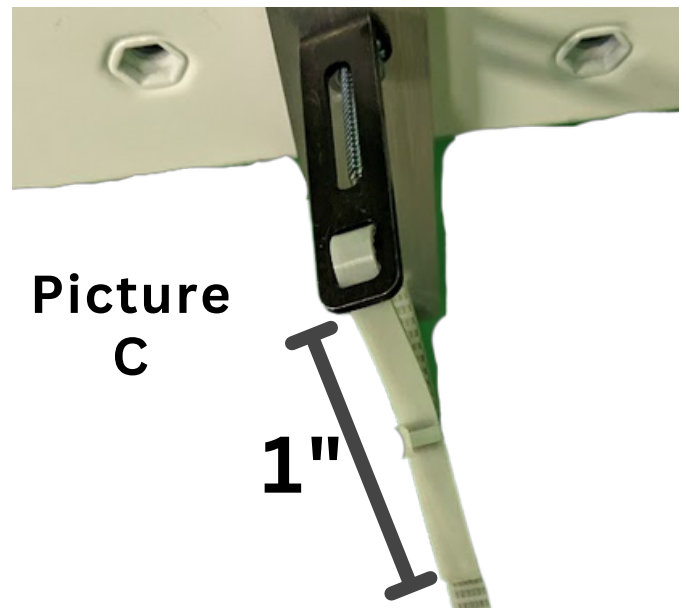
Picture A

Thread the x (white) belt down through the x belt bracket slot furthest from the screw. As shown in Picture B.



Picture B

**Pull the belt through
and leave about a 1"
tail. As shown in
Picture C.**



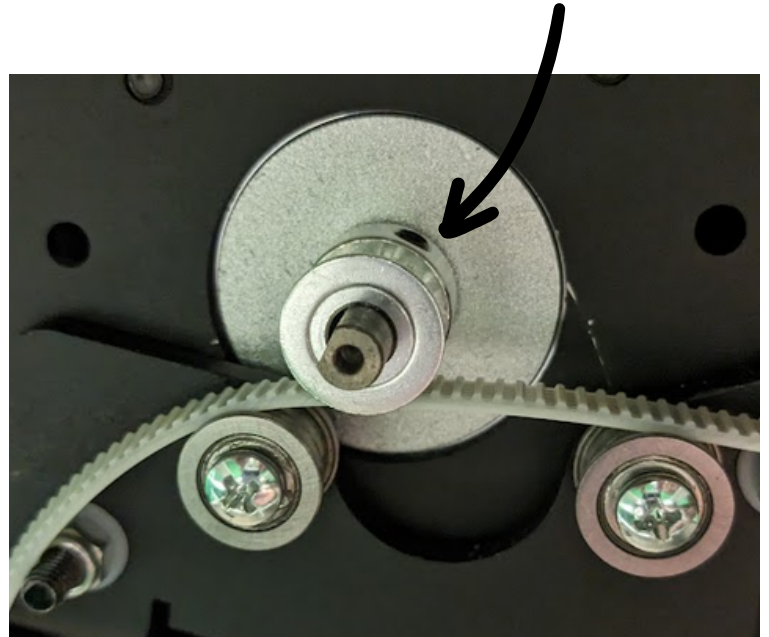
**Attach a zip tie to the belt,
and clip off the extra zip tie
As shown in Picture D.**



Picture D



Pulley



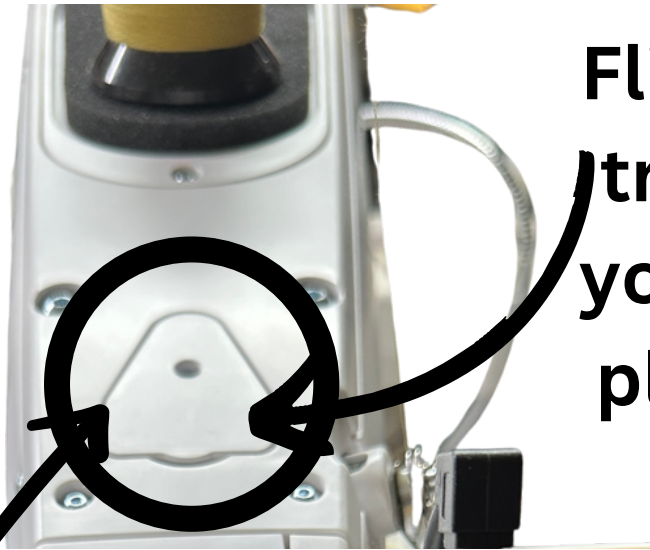
***Make sure when you thread the white belt through the pulleys on the Butler, you go over the bottom pulley, under the top pulley, and over the other bottom pulley. The teeth on the belt will be facing the top pulley.**

Now repeat the belt clamp threading process for the other side.



Installing the Display Bracket

The display bracket will go in the circled area on your machine.



Flip up the plastic triangle piece on your machine and place the display bracket.

The bottom of the display bracket will fit right in that space

Use the provided screws to attach the display bracket to the machine.

*We have provided 2 different sizes due to the fact that some differences in screw sizes we have encountered.



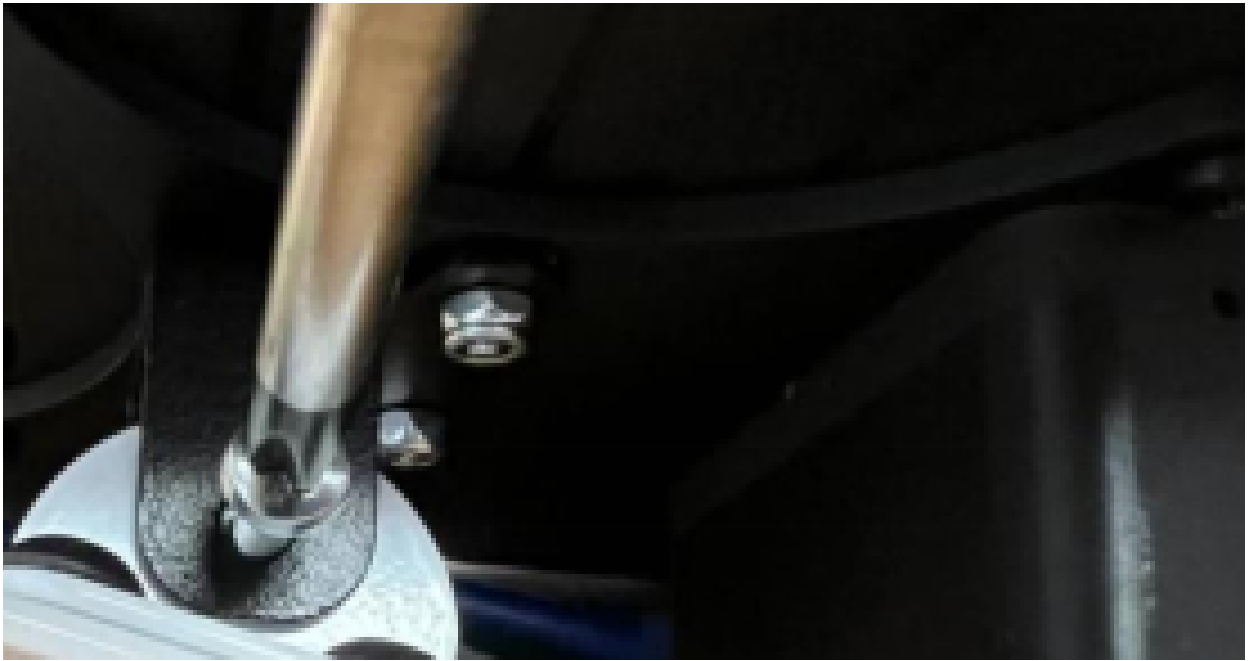
The back of the ePC has a bracket on it.



The bracket that is on there will match up with the bracket on your machine. It will have 2 display bases, the like the picture below.



Take the 2 screws out that are currently there and then match up the ePC bracket with display bracket and screw the screws back in.



*You will want to make sure you screw the screws in tight enough to hold the display. Then you can adjust the display to the angle that works best for you. Once you have the correct angle, tighten the screws up nice and tight.