

Attaching DX Encoders to your Majestic Carriage

Encoders are the white wheels that you need to have on your carriage in order for the stitch regulation to work. Encoders detect the movement of the machine in a left/right or front/back motion to send a signal to the control to signal time to stitch. These left/right or front/back movement sensors work together to sense any movement of the machine and determine how fast or slow the machine is being moved. This in turn signals the machine when in the start/stop is in the start position to initiate the needle motion to create the stitches and determined what rate of speed to travel.

The following instructions will help you to attach encoders to you carriage for the stitch regulation to be active.

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General Orientation of a Frame

Front of frame
This side has the fabric rails



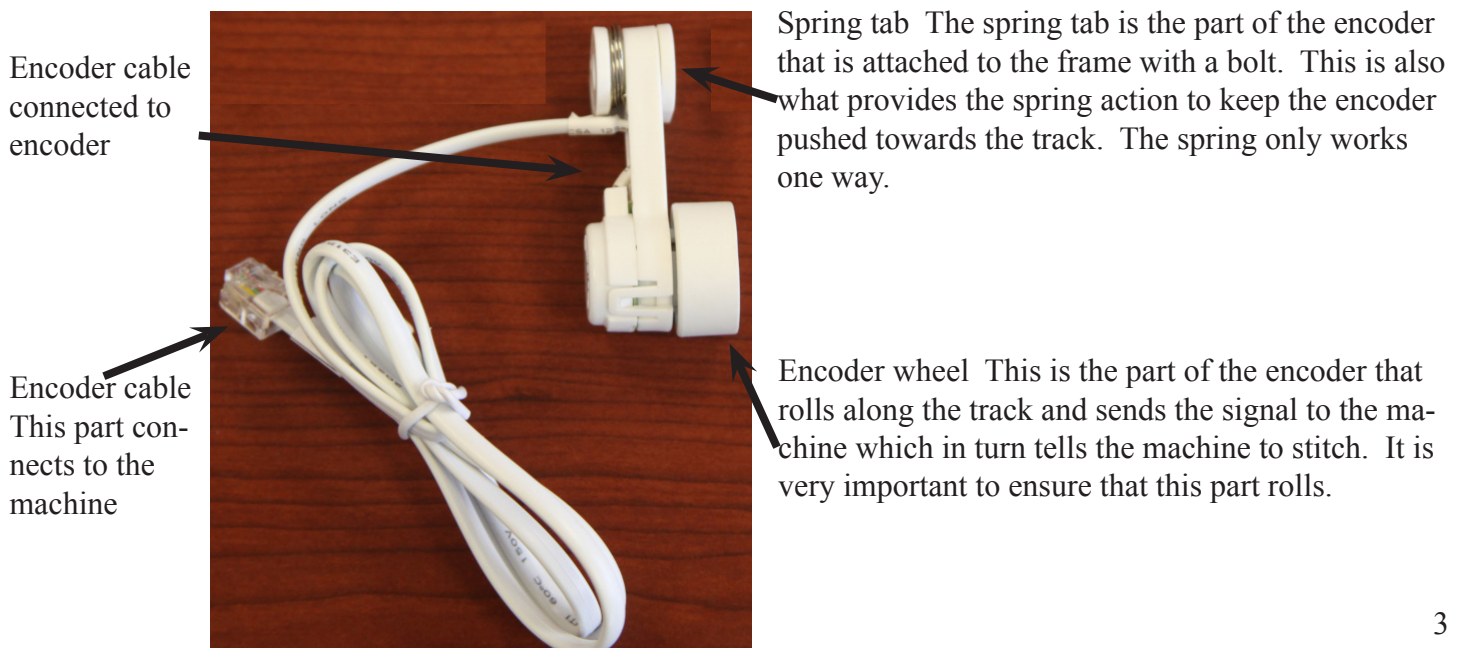
Left side

Back of Frame

Right side

General Anatomy of the Encoder

Pick up an encoder so that you can look it over while looking at the diagram below so that you will know the parts of the encoder



How do I know when it is tight



This shows the encoder without tension on the spring. Spring tab down between 5:00 and 6:00

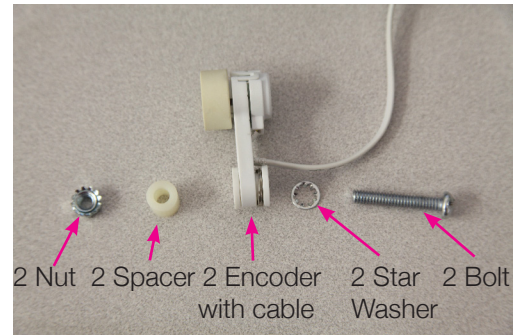


This shows the encoder with tension on the spring. When you have the encoder in place the Spring tab should be located between 11:00 and 12:00

Installing Encoders on the Majestic Carriage

With your machine you will get two encoders. Each encoder will include the encoder with an attached cable, a screw, a star washer, a spacer, and a nut.

You will need a screwdriver and an adjustable wrench to attach the encoders to the carriage.



Let's get started

Step 1 If your carriage is not already on the frame place your carriage on the frame.

Step 2 Set your upper carriage off to the side for now and we will put the encoder on the bottom carriage first.

Step 3 Place the star washer on the bolt

Step 4 Slide the encoder onto the bolt with the cable side of the encoder towards the head of the bolt.

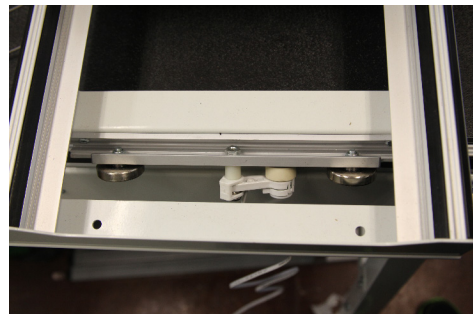
Step 5 Slide the spacer onto the bolt

Step 6 Stand at the back of the frame

Step 7 Between the two wheels there is a hole. This is for your lower encoder.

Step 8 Thread your bolt into this hole. Attach the nut to the bolt. Ensure that the spring is pushing the encoder down to the track.

Step 9 When the spring tab is between 11:00 and 12:00 with the encoder arm you will know you are tight enough to hold it in place.



Step 10 The encoder for upper carriage will go on the left side of the carriage. When standing at the back of the frame.

Step 11 Place the star washer onto the bolt

Step 12 Next slide the encoder onto the bolt with the cable side towards the head of the bolt.

Step 13 The spacer is next placed onto the bolt.

Step 14 Locate the hole between the wheels on the left side of the carriage when looking at the carriage from the back.

Step 15 Insert the assembled bolt into the designated hole.

Step 16 Use the nut to secure to the wheel assembly

Step 17 When the spring tab is between 11:00 and 12:00 with the encoder arm you will know that you are tight enough to hold the encoder in place.



Connecting encoder cables to the Machine

Once you have your encoders attached to the carriage check to ensure they are rolling and nothing is caught. Wire under a wheel, wheels not on the tracks, or any extra instructions or papers. Place the machine on the carriage and ensure you have full movement and access to the full arm between the fabric holder and the take up roller.

Now we want to connect the encoder cables to ensure your Stitch Regulation is going to work.

Step 1 Route the encoder cable for the upper carriage along the side of the machine towards the back of the machine

Step 2 Route the encoder cable for the lower carriage up through the center of the carriage to the back of the machine

Step 2 Plug the upper carriage encoder cable into the top encoder connector

Step 3 Plug the lower carriage encoder cable into the bottom encoder connector

Your encoders are now attached and connected and ready for use.

