Attaching Encoders

Any cables that the Purchaser needs to connect must be connected with care. Careless connection or disconnection may result in dam- age to the cables and/or components that the cables are connected to.

The following instruction will guide you through the installation of the encoders which sense the movement of the machine and send signals to the control board that the machine is moving in order to provide the stitch regulation for your machine. Without these encoders attached to the carriage your stitch regulation will not work properly. When working with the cable great care must be taken to ensure that the cable is not damaged during setup.

The Parts

With your machine you will find a package with Two encoder sets and a Y cable.

The encoder set includes the following for each encoder.

- 1 Bolt
- 1 Brass longer than the other one
- 1 Encoder
- 1 Spring
- 1 Spring Keep
- 1 Brass shorter than the first one
- 1 Nut only used to keep the set together. Some frames may require use of nut most new frames have threaded placement holes. See Photo 1

Unless this falls a part when you remove the nut or you are replacing the encoder there should be no reason to completely disassemble the encoder set.

Shipping configuration for your encoders is like you see to the right Photo 2

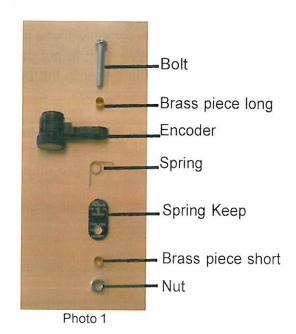
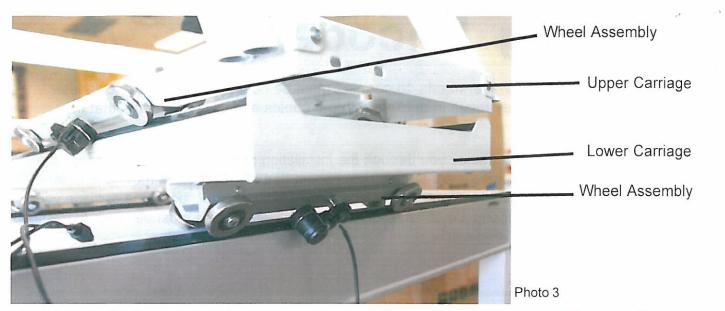




Photo 2



Attaching Encoder to Lower Carriage

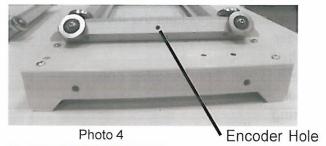
1. Locate your lower carriage.

On your lower carriage you will see a wheel assembly on both sides. We want to put the Encoder on the back side so that it is closer to the point you will be connecting it to the machine.

- 2. Locate the wheel assembly between the wheels you will note a threaded hole. This threaded hole is where you will place the encoder. See photo 4
- 3. Take one of your Encoder assemblies and remove the shipping nut. See photo 5
- 4. Thread the bolt with the assembly into the hole between the wheels.

Note, If you find this hole is not threaded then use the shipping nut to secure the encoder set to the carriage.

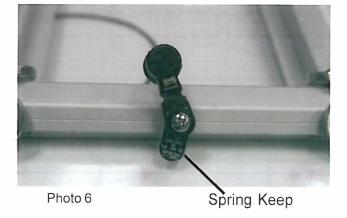
- 5. Tighten your Encoder assembly to the wheel assembly.
- 6. As you are get the Encoder to the point of being tight you want to check the spring keep. You want the spring keep to be pointing slightly to the right of the bolt. The spring keep ensures that you have tension on your encoder to keep it making contact with your frame. See photo 6 Note: if you install this on the carriage upside down like seen in the photo's then you will need to ensure that the spring keep is towards the carriage and not towards the track or up as you see it in the photo.





Remove the nut

Photo 5



Attaching Encoder to Upper Carriage

1. Locate your upper carriage.

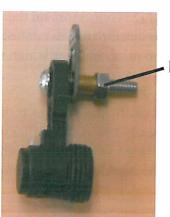
On your upper carriage you will see a wheel assembly on both sides. We want to put the Encoder on the side that it is closer to the point you will be connecting it to the machine. From the back side of the frame (non quilt load area) this would be the left side.

- 2. Locate the wheel assembly between the wheels you will note a threaded hole. This threaded hole is where you will place the encoder. See photo 7
- 3. Take one of your Encoder assemblies and remove the shipping nut. See photo 8
- 4. Thread the bolt with the assembly into the hole between the wheels.

Note, If you find this hole is not threaded then use the shipping nut to secure the encoder set to the carriage.

- 5. Tighten your Encoder assembly to the wheel assembly.
- 6. As you are get the Encoder to the point of being tight you want to check the spring keep. You want the spring keep to be pointing slightly to the right of the bolt. The spring keep ensures that you have tension on your encoder to keep it making contact with your frame. See photo 9





Remove the nut



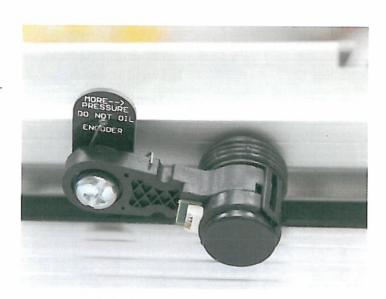


Photo 9

Attaching Encoder Y cable.

Remember to handle the Y cable with care.

If you can the best place to attach the Encoder Y cable is with the carriage sitting on the frame. If you put this cable on the carriage while it is not sitting on the frame then you will need to use care when moving the carriage so that you do not damage the encoders or the encoder Y cable.

- 1. The Encoder Y cable has three connectors on the cable. You have two small connectors which connect to each encoder and you have a 6 pin connector which will connect to the machine.
- 2. Carefully connect the two small white connectors of this cable to the encoders. Gently line up the cable with the holes close to the arm of the encoder and press the cable into the connector on the encoder. Do this for each encoder See photo 10
- 3. Connect the 6 pin cable to the machine. On the back of the machine where the handle bars connected there is a connection for the Encoder Y cable. See Photo 11



Photo 10

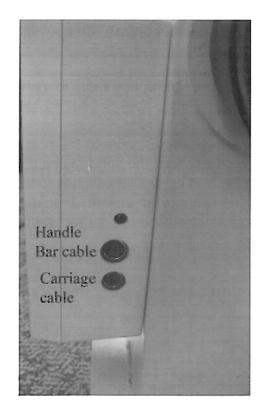


Photo 11