

Cable Management Best Practices

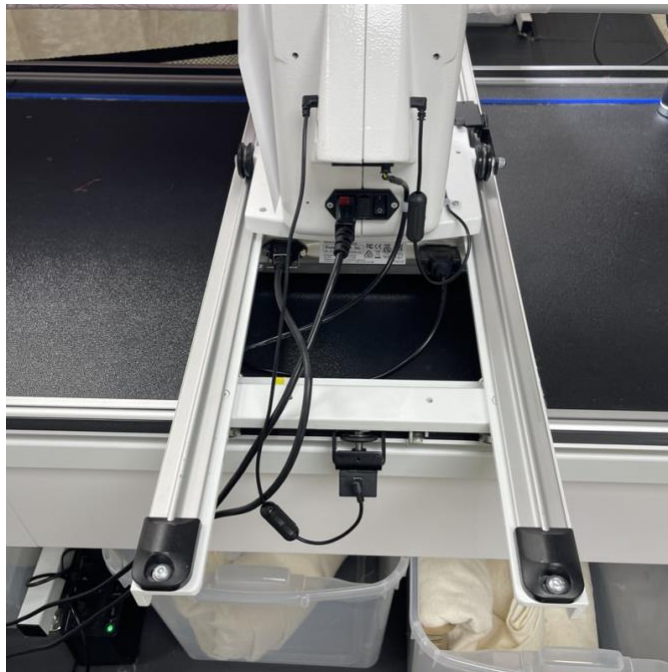
The most common reason a machine experiences a **long** stitch is the encoder at the rear being lifted by one of the other cables. In addition, cables can be caught on the carriage and either damaged or partially disconnected, causing various problems. All machines have these issues and require attention to their cable management to avoid these problems.

This document shows the Handi Quilter Amara 24 machine (previously known as a Forte) with Pro-Stitcher in the carriage. This document contains recommendations only, and people are free to come up with their own solutions.

Note: This is not an official Handi Quilter Document. All information contained in this document is the responsibility of MK Quilts. Recommendations for changes should be emailed to webmaster@mkquilts.com.

1. No Cable Management

Here is a photo of a Handi Quilter Amara 24 machine with no cable management. This situation can be improved with a few simple changes.



2. Cable Management Tape

Medical care self-adhesive bandage wrap comes in many sizes and colors. This tape is your best friend for helping manage your cables.

If you are picking up something else on the MK Quilts online store, you might want to add one of two of these into the cart:

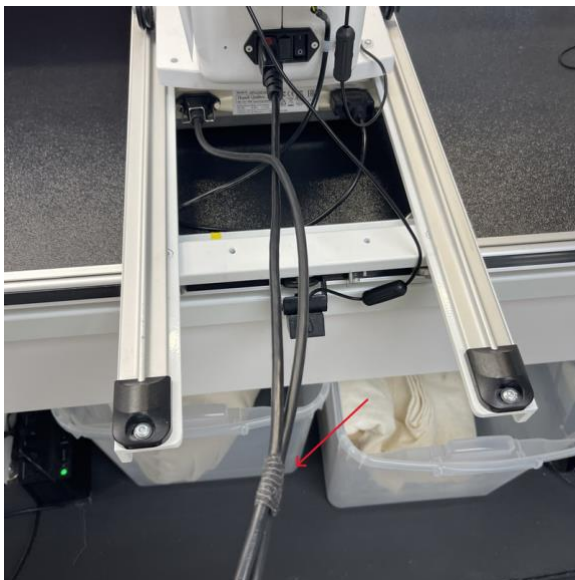
<https://shop.mkquilts.com/cable-management-tape-black/>

Otherwise, your local drugstore will probably have something inexpensive available (probably in skin-tone).



3. Power Cords

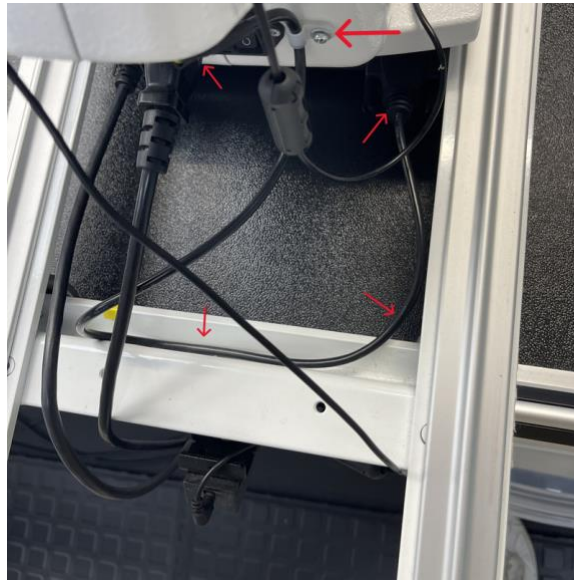
Combine the two power cords together. You may have to experiment to get them positioned properly so that you still have full motion on the machine. Be sure that the cables come down as far away from the encoder as possible. Once you are satisfied with the positions of the cables, secure them together using the cable management tape. (See the two photos below.)



After securing the power cords, move your machine to each end of the frame. Make sure that the cords do not drag across or hit the encoder with the machine at any position on the frame.

4. Pro-Stitcher Cable

The Pro-Stitcher cable is the most often damaged cable. Failure to have the cable restrained to the machine at the point indicated at the top of the photo below will lead to failure in the cable due to repetitive flexing at the top connector.



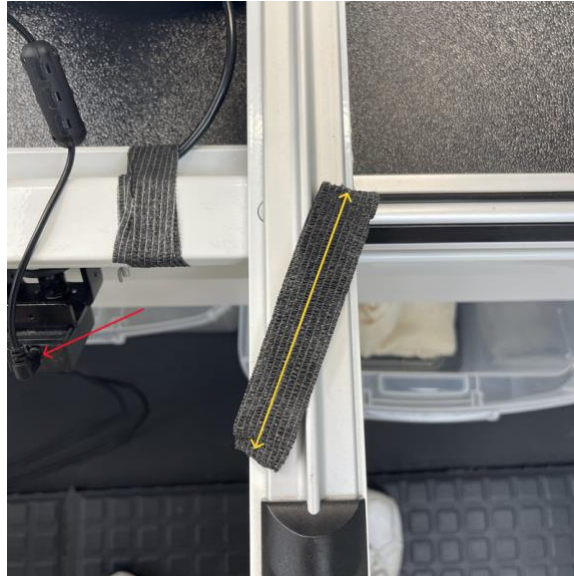
Depending on the throat depth of your machine, there may be more or less of a gap between the Pro-Stitcher motor tray and the back carriage crossbar, but there is only one length of the Pro-Stitcher cable. You don't want the cable to be able to loop down and catch on the encoder.

We recommend securing the cable to the crossbar using the trough as a guide (see below). Twisting the cable before attaching it to the motor tray may result in it behaving better. After securing the cable, make sure that you still have full motion of the machine.

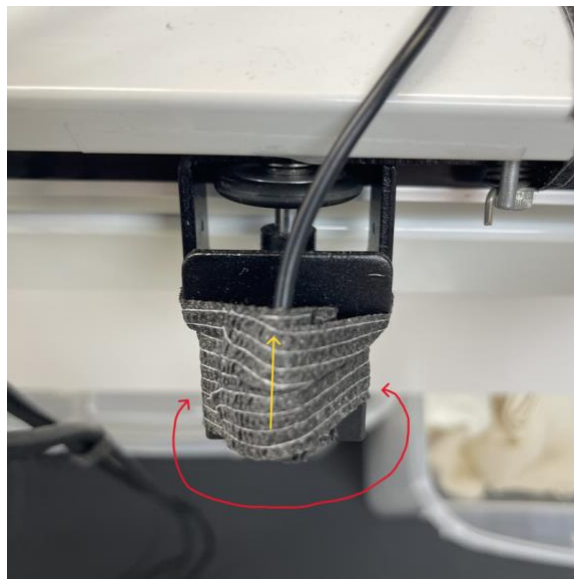


5. Encoder Cable

Secure the encoder cable at the encoder. You want to make sure that the cable connector is pointed to the 12 o'clock position (see the photo below) so that it cannot pivot down and become a "hook" point for other cables. You also want to make sure that the cable doesn't come part way out, giving intermittent problems.



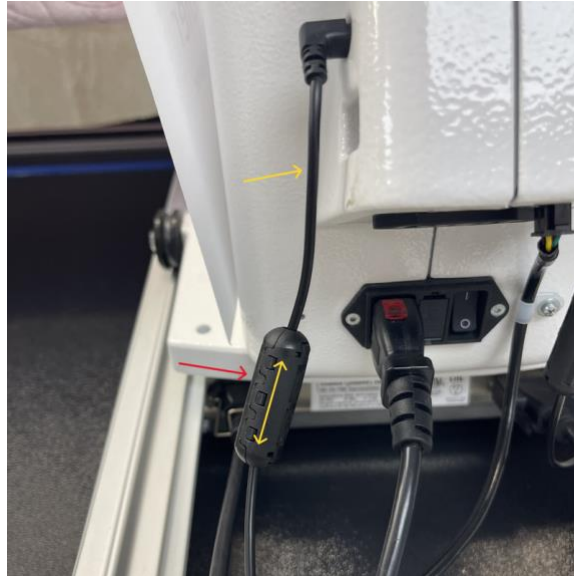
You need about 6 inches of tape to wrap around the encoder. Wrap the tape as shown below.



(Note that older systems do not have a detachable cable. If your cable is not detachable, skip this step.)

6. Ferrite Bead

Move the ferrite bead (plastic tube) up toward the machine. The ferrite bead can slip down toward the encoder and cause the cable to jam and crimp itself. Moving the ferrite bead up will avoid this. Do not move it so high that it is close enough to the connector that it might cause the connector to pop out slightly. (See the photo below.)



7. Final Check

Now move your machine through all positions on your frame (up and down, left and right). The encoder cable (which has the ferrite bead) should be the **top** cable. Make sure that the power cord never drags across and hits the encoder, even when the machine is moved to the end of the frame. Make sure that none of the cables appear tight or can catch on any part of the frame, the encoder, or another cable. If you see any issues, adjust your cables and re-tape until you are satisfied.

