INSTALLING THE DRIVE SYSTEM

You will need the hardware in this kit to complete the installation on your frame.

The hardware kit for the Hinterberg Stretch frame includes:

- (2) ¼-20 X 2" Screws
- (2) ¼-20 X 1" Screws
- (2) 8-32 nuts
- (2) ¼-20 nuts
- (4) ¼" Spacers
- (4) ½" Spacers
- (2) #8 Eye Screws
- (6) Washers
- (6) #8 X 3/4" Screws
- (1) Y-Axis wire holder
- (2) X-Axis wire holders
- (1) X-Axis drive bracket
- (1) Y-Axis drive bracket
- (1) Switch Box for QBOT
- (1) Connector Cord
- (1) Drive Wire Kit

First, install the X-axis wire holders on the frame end supports as shown in the pictures below. Remove the knob, then place the wire holder as shown. Re-tighten the knobs.

Next, align the drive assembly holder as shown in the photo to the left. Use the ‘V’ notches as a guide for proper placement of the wood piece. Use a 7/64” drill to pre-drill the carriage before installing the screws. Use (2) #8 X 3/4” long screws to secure the drive assembly holder to the lower carriage.

Attach the drive assembly using (2) 1½” long screws, (4) aluminum spacers, (2) washers, and (2) nuts as shown in the picture to the left. You will use (2) aluminum spacers per screw as shown in the photo to the left.
Finalize the installation of the X-Axis drive assembly by installing the drive wire. THE DRIVE WIRE MUST BE WRAPPED SO THAT THE WIRE ENTERS AND EXITS FROM THE BOTTOM OF THE DRIVE WHEEL AS SHOWN IN THE PICTURE.

Use the following chart to determine which X-Axis drive wire you should use and how many wraps to make on the drive wheel:

<table>
<thead>
<tr>
<th>Pole Length</th>
<th>Wire Length</th>
<th># of Wraps</th>
</tr>
</thead>
<tbody>
<tr>
<td>10’</td>
<td>124.50”</td>
<td>2</td>
</tr>
<tr>
<td>8’</td>
<td>100.50”</td>
<td>2</td>
</tr>
<tr>
<td>6’</td>
<td>76.50”</td>
<td>2</td>
</tr>
</tbody>
</table>

Apply tension to the drive wire by turning the barrel on the tensioner to remove the slack. Use the tensioning template in your QBOT manual to set the tension in the wire. BE SURE TO TURN THE BARREL OF THE TENSIONER AND NOT THE DRIVE WIRE. TWISTING THE DRIVE WIRE WILL SHORTEN THE LIFE OF THE WIRE.

Next, install the Y-Axis wire holder on the front of the lower carriage as shown in the picture to the right. Use the ‘V’ notches as a placement guide. Use a 7/64” or smaller drill bit to pre-drill the holes for the screws. Secure the wire holder to the carriage with (2) #8 X 3/4” long screws.
INSTALLING THE DRIVE SYSTEM

Next, attach the metal Y-axis drive bracket to the upper carriage as shown in the picture to the left. The vertical edge of the bracket should align with the edge of the upper carriage. Secure with (2) #8 X 3/4” long screws.

Attach the drive assembly to the bracket using (2) 1/4-20 X 1” long screws, (2) washers, and (2) nuts.

Finalize the installation of the Y-Axis drive assembly by installing the drive wire. THE DRIVE WIRE MUST BE WRAPPED SO THAT THE WIRE ENTERS AND EXITS FROM THE BOTTOM OF THE DRIVE WHEEL AS SHOWN IN THE PICTURE TO THE LEFT.

Wrap the drive wire around the drive wheel twice (2X). Tighten the nuts on the ends of the eye screws to apply tension to the wire. Use the tensioning template in the QBOT manual to set the final tension in the wire.

BE SURE TO TURN THE NUTS AND NOT THE EYE SCREW. TWISTING THE DRIVE WIRE WILL SHORTEN THE LIFE OF THE WIRE.
Using the 1/4-28 X 1 1/2” long socket head screw and the spacer, mount the QBOT head attachment bracket to the split collar as shown in the picture to the left.

Finally, remove the switch box on the handlebar assembly. First, remove the four screws visible from the front side of the box. Next, remove the two screws that hold the box to the handle. Replace the switch box with the new version that has a 3.5mm port in the top.

Re-assemble the box to the handlebar.

Use the double-ended cable provided to connect the QBOT to the switch box. One end will connect to the port on the QBOT marked ‘QCC Remote Port’, the other end will connect to the port on the switch box.

You’re almost done. Just a couple of final housekeeping steps before you are ready to quilt. Finish off the installation by making all electrical connections to your sewing machine and Quilter’s Cruise Control and the drive assemblies using the wiring harness that came with your QBOT.

If you are using the QBOT with the Voyager 17 sewing machine, you must use the special wiring harness for the drive assembly connections. The special wiring kit has longer cables that work with the larger sewing machine.

Finally, you must make a couple of changes to the parameters in the QBOT. The procedure for changing parameters is shown in the QBOT manual. Using that procedure, change the following parameters:

<table>
<thead>
<tr>
<th>Parameter Name</th>
<th>Change Value to:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y- Axis Direction</td>
<td>1</td>
</tr>
<tr>
<td>X-Axis Direction</td>
<td>1</td>
</tr>
<tr>
<td>Acceleration (Voyager 17)</td>
<td>1800</td>
</tr>
</tbody>
</table>