HQ
Electromagnetic Channel Locks
For the HQ Infinity™
Overview

The HQ Electromagnetic Channel Locks attach to the quilting machine base, carriage and frame. They constrain the machine to quilt a straight horizontal line or a straight vertical line. This is useful when basting down the quilt edges, quilting a plumb line for aligning the quilt top, stitching in the ditch, quilting piano keys, crosshatching, and more.

This kit is compatible with the HQ Infinity. Read all instructions carefully before beginning installation.

HQ Electromagnetic Channel Locks Kit Contents

Kit for the HQ Infinity: part number HG00704

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<td>1</td>
<td><img src="image1.jpg" alt="Photo" /></td>
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<td>2. Carriage Frame System Y-axis</td>
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3. Zip Tie 1

4. Wire Guide and ¼-inch Screw and Washer 1 each

5. Channel Lock Ribbon Cable 1

6. Machine Steel Plate 1

7. M4 Flathead Screws 4
8. Frame Steel Plates

9. Plastic Shims (Use only if necessary to adjust magnet height; see Troubleshooting at the end of this manual for more information.)

10. Instruction Sheet

Tools Required

- 2.5mm hex tool (provided)
- 4mm hex tool (provided)
- Tape Measure
- Flat Screwdriver

Installation

To install the channel locks on the carriage

1. Unplug the machine’s ribbon cable from the carriage encoder. Then carefully lift the machine off the carriage and set the machine aside.

2. Measure the length of the carriage. Mark the center point. (See the picture to ensure you mark the correct side of the carriage.)
3. Locate Carriage Frame System X-axis. Loosen the two screws with the 2.5 mm hex tool so that the clamps can slide onto the long carriage rails.

4. With clamps still attached, slide the Carriage Frame System X-axis underneath the carriage and against the crossbar farthest from encoder.

5. Ensure that the clamps are on top of the white rails. Then tighten the two screws with the 2.5 mm hex tool.

**NOTE**: It may be helpful to use something to prop up both ends of the carriage to ensure that the encoder is not damaged.
6. Locate the Carriage Frame System Y-axis. Loosen the two screws (circled at the right) with 2.5mm hex tool. Plug in the cable from the Carriage Frame System X-axis into the receptacle on the circuit board (see arrow at the right).

7. Use the zip tie to join the two cables together, and trim off the excess of the zip tie. With the clamps still attached to the Carriage Frame System Y-axis, slide it underneath the carriage. Ensure the clamps are on top of the white rails. (See the next picture.)

8. Align the arrow with the center measurement mark you made it step 2. Tighten the two screws with 2.5mm hex tool.
9. Plug the Channel Lock Ribbon Cable into Carriage Frame System Y-axis.

10. Run Channel Lock Ribbon Cable over the carriage cross bar with encoder. Install the Wire Guide using the ¼-inch screw and washer.

11. Ensure that the ribbon cable runs inside the wire-guide channels and that the two tabs are under long carriage rail.

12. Tighten the screw and washer for the Wire Guide with the 4mm hex tool. Remove any slack in the cable from the Carriage Frame System Y-axis to the Wire Guide, being careful not to pull out the cable.

13. Locate the Machine Steel Plate. Carefully lay the machine onto its left side (i.e. the non-thread path side of machine).

14. Align the Machine Steel Plate with the machine baseplates. Use the four M4-flathead screws to attach the Machine Steel Plate to the base of machine.

15. Place the carriage back onto the frame, aligning the wheels with the track.
16. Move the carriage to one side of frame. Slide one of the Frame Steel Plates under the carriage toward the frame’s sidearms. Align one of the Frame Steel Plates centered under the Carriage Frame System X-axis magnet.

The top photo shows the steel plate when facing the carriage. The bottom photo shows the steel plate centered below the Carriage Frame System X-axis from the side.

17. Position the remaining Frame Steel Plates along the full length of the frame. Ensure the Frame Steel Plates span the full length of the frame and that they align with the Carriage Frame System X-axis magnet.

18. Remove the release paper from the bottom of the Frame Steel Plates and carefully adhere to the table top.

19. Carefully place the quilting machine back onto carriage.
20. Remove the original ribbon cable from the encoder at the rear of the Infinity. Plug the new Channel Lock Ribbon Cable into the encoder and into the back of the Infinity.

Using the HQ Electromagnetic Channel Locks

*One-time Setup*

1. Turn on the HQ Infinity. Select the **Tools** icon in the toolbar, and then select the **Diagnostics** icon at the bottom of the screen.

2. Touch the on-screen text box. Enter `clon` using the keyboard that appears, and then press **Done**.
3. Press **Home** to return to the Main Screen. The two Channel Lock icons appear below the On-Screen Handwheel.

To use the channel locks to stitch horizontally

1. Press the Horizontal Channel Locks icon. The bars on each side of the icon turn green. When the channel locks are engaged, the machine moves only left to right and right to left.

2. Turn off the channel locks by pressing the button again. The icon bars turn lavender.

To use the channel locks to stitch vertically

1. Press the Vertical Channel Locks icon. The bars on each side of the icon turn green. When the channel locks are engaged, the machine moves only front to back and back to front.

2. Turn off the channel locks by pressing the button again. The icon bars turn lavender.

To customize the HQ Infinity handlebar buttons

You can customize the star and diamond buttons on the handlebars to turn on and off the horizontal and vertical channel locks.

1. Select the **Settings** icon in the toolbar. Then select the **Configure Handlebars** button.
2. Press the down arrow next to the star or diamond to display a drop-down box with the options for the star and diamond buttons. Select **X – Channel Lock** to stitch horizontally when you press that handlebar button, or **Y – Channel Lock** to stitch vertically when you press that handlebar button.

**Troubleshooting**

**Carriage Frame System X-axis magnet does not engage with the Frame Steel Plates:** You may need to use the provided plastic shims to adjust the magnet height. Contact your local Handi Quilter authorized retailer or Handi Quilter technical solutions, Monday through Friday, 8:00 AM through 5:00 PM mountain time.