18" Stationary to Moveable Machine Conversion Kit

Assembly Instructions

May 2021



Parts Lists

Conversion Kit for 10-foot or 12-foot Frame

ITEM	PART #	DESCRIPTION	QTY
1		Frame Box 1	1
2		Frame Box 2	1
3		Frame Box 3	1
4		Frame Box 4	1
5	QF09537	Carriage Assembly 18 8W	1
6	QM09811	Precision-Glide Wheel Kit - Contains: 4 QM10233 Wheel-Machine POM 3 QM10766 Screw ¼-20 x 1.25" Hex ZN 1 QM10777 Screw ¼-20 x 1.75" Socketed Set 1 QM10776 Nut ¼-20 Jam 1 QM10772 Nut ¼-20 Nyloc 2 QM10635 Washer .010" x ¼" x ½" 4 QM10188 Washer .031" x ¼" x 3/8" 8 QM12487 Washer .010" x ¼" x 3/8" 1 QM10287 Hex Key 3mm L	1
7	QM29753	Machine Encoder Assembly	1
8		Handlebar Front 18" Machine (Includes three QM10955 button head mounting screws)	1
9	QM20795	Cable-Terminator 18	1
10	QM20205	Bobbin LED Jumper	1

Conversion Kit for 5-foot Frame

ITEM	PART #	DESCRIPTION	QTY
1		Frame Box 1	1
2		Frame Box 2	1
3	QF09537	Carriage Assembly 18 8W	1
4	QM09811	Precision-Glide Machine-Wheel Kit Contains: 4 QM10233 Wheel-Machine POM 3 QM10766 Screw ¼-20 x 1.25" Hex ZN 1 QM10777 Screw ¼-20 x 1.75" Socketed Set 1 QM10776 Nut ¼-20 Jam 1 QM10772 Nut ¼-20 Nyloc 2 QM10635 Washer .010" x ¼" x ½" 4 QM10188 Washer .031" x ¼" x 3/8" 8 QM12487 Washer .010" x ¼" x 3/8" 1 QM10287 Hex Key 3mm L	1
5	QM29753	Machine Encoder Assembly	1
6		Handlebar Front 18" Machine (Includes three QM10955 button head mounting screws)	1
7	QM20795	Cable-Terminator 18	1
8	QM20205	Bobbin LED Jumper	1

Tools Needed

- 1: Hex Key, 3mm Provided
- 1: Hex Key, 4mm Included in Frame Tools
- 1: Hex Key, 5mm Included in Frame Tools
- 1: 7/16 Wrench Included in Frame Tools

Remove the Machine from the Table

Step 1: Remove the table insert connection cable from the circuit board in the bobbin area.



Step 2: Remove the foot control from the insert connection cable.



Step 3: Remove the table insert and set it and the foot control aside.

Step 4: Set the machine on a solid work surface table with good access to the machine.



Preparing the Machine - Front Handlebar

- **Step 1:** Remove the front display cable from the front display (this cable will now be used with the new front handlebar display).
- Step 2: Using a 5mm hex tool remove the two front display screws. Set aside the two screws and the display.
- Step 3: Install the front handlebar to the machine using the three new QM10955 (Screws-M6X16 SKB ZN) and tighten them firmly with a 4mm hex tool.
- **Step 4:** Plug the cable removed from the old display into the left side of the new handlebar display.





Preparing the Machine - Wheels

Wheel overview, please read this first

The QM09811 Precision-Glide Machine-Wheel Kit provided includes several washers for precise alignment of the machine wheels with the carriage tracks. In most instances, the wheels will correctly align with the carriage's aluminum tracks by placing a thick washer on the inside of each wheel and two thin washers on the outside of each wheel (this will be done during steps 2 and 4 on the next page). First complete all of the installations steps. Then, if further adjustments are necessary, use the washers included in the kit for fine tuning the wheel alignment.

If further adjustments are necessary

Make the adjustments to the wheels on the side of the machine without the Stitch-Regulation Encoder. Changing the washers on the wheels on the one side should make both sets of wheels on the machine align better with the track.

If the wheel spacing needs to be wider

Add thin outside washers to the inside of both wheels until the wheels on both sides of the machine properly align with the radius on the tracks.

If the wheel spacing is too wide

Remove the thick washer from the inside of both wheels and replace it with one or more thin washers until the wheels on both sides of the machine properly align with the radius on the tracks.

If the wheels still are not centered properly on the aluminum carriage tracks

Make the same washer adjustment to the wheels on the Stitch-Regulation Encoder side of the machine. The wheel radius should now match the radius on the track.







Preparing the Machine - Wheels continued

- **Step 1:** Assemble the frame following the instructions included with the frame.
- **Step 1:** Use the provided 3mm hex key to rotate the 1.75" screw into the machine base plate 11 or 12 revolutions.

- **Step 2:** Place the parts onto the 1.75" screw as follows: thick washer, wheel, two thin washers and the jam nut (thinner and not locking).
 - IMPORTANT: The wheel has a ring on one side surface; be sure to place the ring side of the wheel towards the machine.

Step 3: Fully tighten the jam nut against the wheel with a 7/16" wrench.



Preparing the Machine - Wheels continued

- Step 4: Place the remainder of the parts onto the 1.75" screw as follows: large outsidediameter (OD) washer, encoder, large OD washer, Nyloc nut.
 - **NOTE:** The encoder housing has an upper tab that goes over the baseplate and a lower tab that holds the compression spring. Make sure the upper tab is over the baseplate before tightening the Nyloc nut.



- **Step 5:** Tighten the Nyloc nut until the encoder has minimal play on the 1.75" screw but still springs up when lifted and released (after the spring is installed in the next step).
- **Step 6:** Install the coil spring onto the encoder and base plate tabs.



- Step 7: Prepare each of the remaining three wheels as follows: Slide two thin washers, the wheel and a thick washer onto the 1.25" screw with hex head.
- Step 8: Attach the bolt to the baseplate, be sure the ring side of the wheel is towards the machine and fully tighten with a 7/16" wrench.
- **Step 9:** Check that the wheels are prperly aligned with the carriage's aluminum tracks. If further adjustments are necessary, make the adjustments outlined in the Overview at the beginning of this wheel section.



Preparing the Frame

Step 1: Assemble the frame following the instructions included with the frame.

Placing the Machine onto the Frame

- **Step 1:** Place the carriage onto the frame and the machine onto the carriage.
- Step 2: Plug in the cables:

Cable from machine to front handlebar Cable machine encoder to machine (Y) Cable carriage encoder to machine (X) Cable power to machine





Step 3: Plug in the bobbin LED jumper into the front bobbin area circuit board. This jumper makes the LED light work in the bobbin area.





Update the Software

- IMPORTANT: Visit your machine manufacturer's website and download the movable machine code for your machine. Your machine will not work properly until movable machine code is installed. Detailed software update instructions are also available in your machine user manual.
- 1. Place the USB stick into the port on the right side of the display as shown.
- 2. Wait for the the selection buttons to change color.
- 3. Select the machine, display, or sensor icon for update as needed.
- 4. When the display update button is selected the screen will go blank and you will hear three beeps until the update has completed and the screen comes back on.
- 5. Power down the machine between doing the display and the machine updates.
- 6. When the machine update button is selected, the display screen stays on and a count down number appears. A four tone signal sounds when the update on the machine is done.

