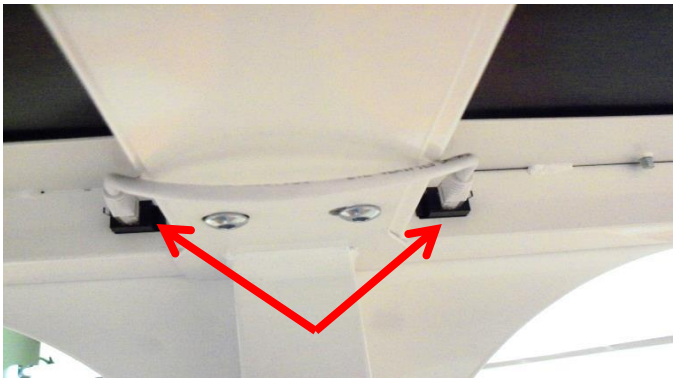
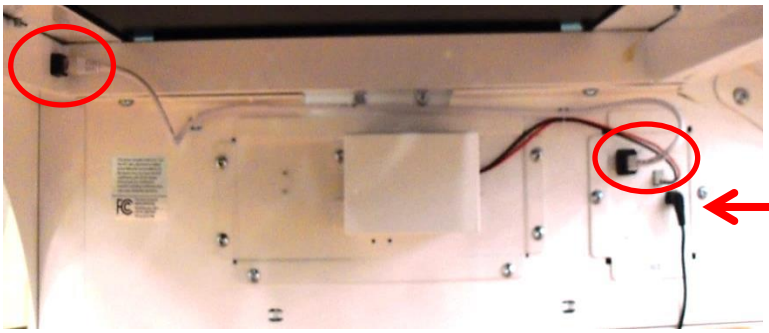
Momentum Frame Quick Reference Guide

Connect the short Ethernet cable, found in the accessories for the frame, between the two frame tables.



Connect the cables on the right side of the frame. These cables come taped to the inside of the right side of the frame. Plug in the power supply adapter.



Connect the cables on the left side of the frame. These also are taped to the inside of the frame. There is no power supply on this side.

Mount the Sensor bracket on the right side of the machine carriage.

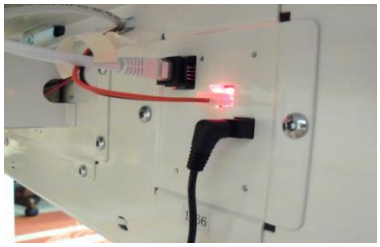
The bracket has two tabs that fit around the bottom edge of the carriage side rail.

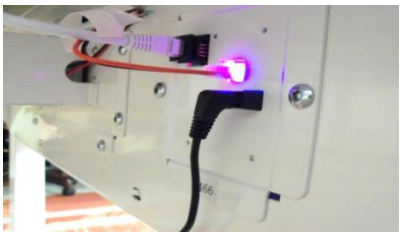
Front of carriage

1 .Tighten two set screws to hold the sensor bracket in place and peel the two sided tape at the back end of the bracket and press it to the carriage.

2. Attach the master board box using the two sided tape to the sensor bracket. Plug the sensors into the correct port as marked on the box. Plug in the power adapter to the box.

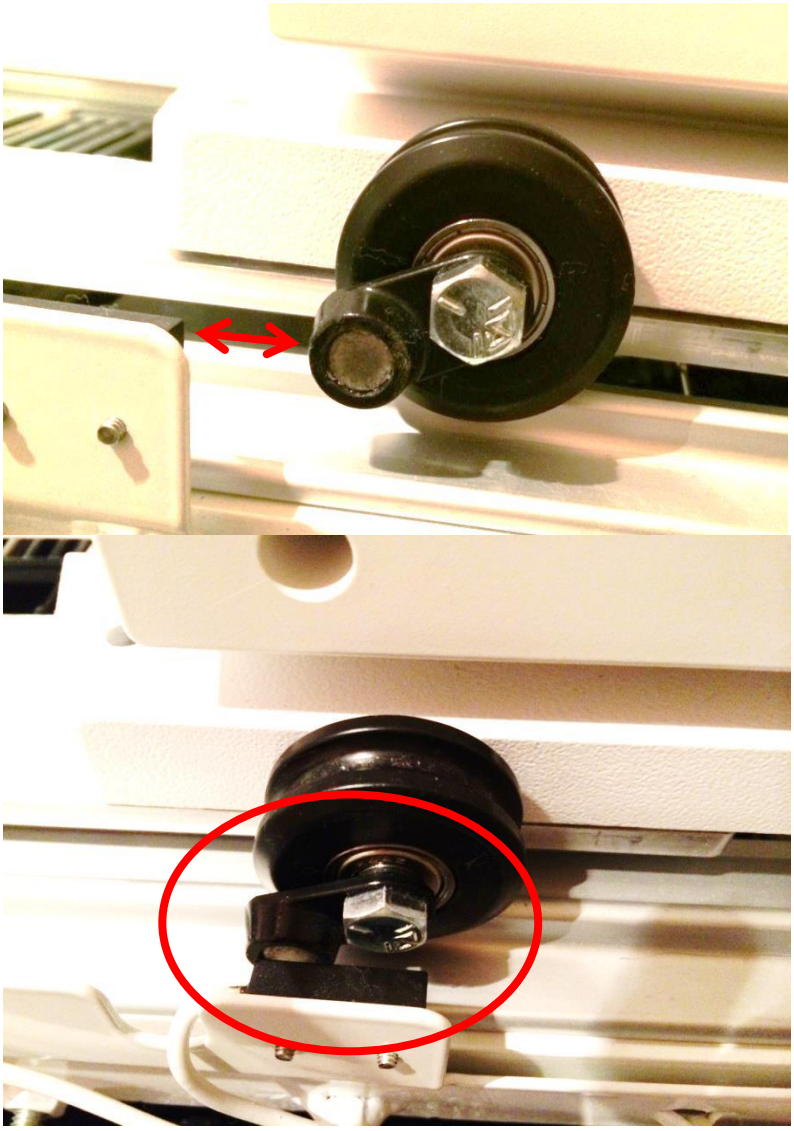
Plug in the power supplies.





3. Plug in the power supplies. The light on the right will be red. Turn on the speed switch and the light should be blue and red. The blue light means the boards are communicating. The light on the sensor bracket board will be red.

4. Attach the magnet to the right rear wheel of the machine. The magnet must be positioned so that it passes next to the sensors on the sensor bracket when the carriage is moved forward and back.



5. Move the machine forward so the magnet passes the sensor and the idle rail should move forward. Then move the machine back and the idle rail will move back. It may take several times for the two sides to calibrate and be in sync with each other.

Momentum Frame: Getting Started

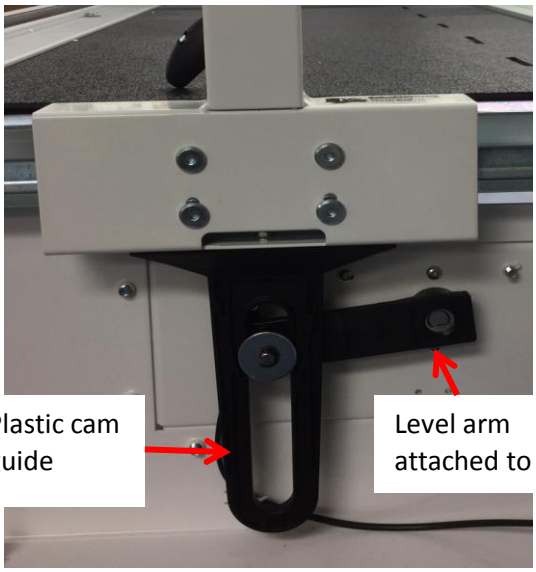
1. Use a surge protector to protect the system from power surges.
2. The red light on the Master Control Board (the black box mounted to the carriage) and the Right Frame Side indicates the system has power.
3. The blue light on the Right Frame Side indicates communication between the circuit boards
4. Set the control knob on the right side of the frame to Fast. Move the machine forward and back on the carriage five or six times to calibrate the system. The Take up Rail will move away from the needle as you move the machine back and away from the back of the throat of the machine as you move the machine forward.
5. During calibration the initial first few movements of each side of the frame may not be immediately even until calibration is complete.
6. As the system calibrates the two sides move more and more evenly.
7. Each time the frame is powered on or the speed setting is changed, it will begin the calibration process.

Trouble shooting

Take up rail not moving	1. Check power on right side board, light on board should be red and blue. 2. Check the Master board (black box) red and blue lights on, blink when magnet passes sensors 3. Check the Speed dial is set on 4. Check the magnet attached to the wheel of the machine is even with the sensors when it passes. 5.Recheck all Ethernet connections
Take up rail moves one time, then won't move	1. Check the magnet is installed correctly on the wheel of the machine. 2. Check the bracket attached to the carriage is not overtightened, causing the bracket to bow away from the carriage, thus the sensors are too far from the magnet.
During quilting take up rail moves unevenly	Secure the power supply cords. If the system loses power for even a second, the take up rail will go to the calibrate mode as if the system was turned off or the speed was changed.
Idler rail is hard to close	1. Check the set screws holding the idle rail end clamps and the couplers into the poles are not overtight. Overtightened set screws will bow the metal and they will not close well. 2. Check the Rail Clamp Lock Pin is attached according to page 14 in the Assembly Instructions.**

How it works

The take up rail is able to move the completed part of the quilt so the maximum pattern size can be quilted from the beginning to end of a quilt without having to compensate for the increasing size of the fabric roll on the take up lever.
The take up rail is on a track system with rollers.



The Rolling Rail track assembly is driven by the level arm attached to the motors on each side of the frame. The circuit board on the right side of the frame and the master board (the board in the black box on the carriage with the sensors) are codified to communicate with each other. This coummunication is similar to the pairing of a TV and it's remote. These boards are codified at the manufacturer and must remain as a set. If the master board or the right side board quit working, they must be replaced as a set**, A100118-Master Rightside Rail Board Set**.
The board on the right side frame and the left side frame communicate through the eathernet cables and are not codified to each other, so the Left Side Rail board can be replaced independantly.
When the magnet passes the sensor it activates the circuit board and tells the motor to "go". The motor then moves the take up rail, either forward or back.

Accessories and optional accessories for the Momentum Frame

GFCL-Grace Frame Cloth Leaders

BLQM-EXT-two foot extension can be used to make a 7 foot frame or 12 foot frame.

BLQM-CASTER-casters for momentum frame.

These come 2 per package. Order the following:

5 foot frame, order 2 sets
10 foot frame, order 3 sets
12 foot frame, order 4 sets