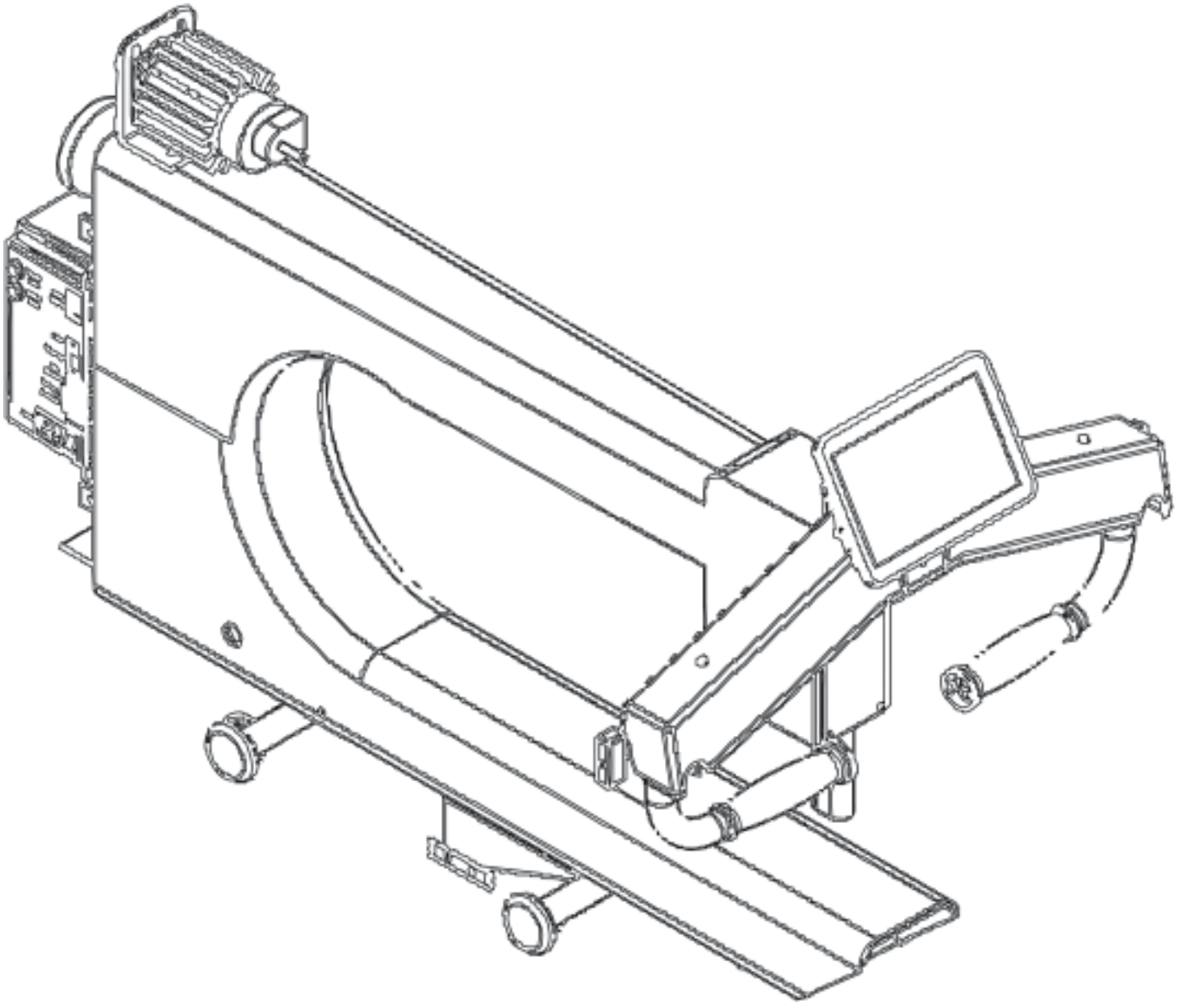
Quilt EZ

PerfectStitch

Machine Upgrade

Gammill Assembly Instructions



Revision: 1/11/16

Machine Checklist

BE SURE TO TEST THE MACHINE BEFORE REMOVING ANY ELECTRONICS.

1. All cables run properly and will not be caught by any moving parts

2. All cable plugged into their respective locations and seated well
    a. Will not come unplugged if vibrated.
    b. Might want to have them address each cable here…showing pictures of well seated and not well seated cables.
3. All screws tight for all pieces
    a. Will not come loose after vibration.

4. Belts a good tension
    a. Discuss belt tension and how it should not be extremely tight, but also should not easily slide, needs some give, but also some tension.

5. After all pieces confirmed power on system.

6. Confirm the display comes up and communicates
    a. If gives the communication error should refer them to their trouble shooting guide, to a specific step.

7.Have them go into the system – additional settings and set the motor ratio.
    a. Don't forget to BOLD to check the box to "load ratio" when the machine starts. Explain if they don't check this box the ratio will default and need up position will not be proper.

8. Confirm all system settings:
    a. Index working
    b. Motor encoder working
    c. Carriage encoders working – add the encoder test sheet to this section
    d. Lights working
        i. White Lights on and dimming
        ii. Black lights turning on (if available)
        iii. Laser working (if available)
9. Run manual stitch for 5 minutes, confirm all good

10. Run regulated for 5 minutes faster and slower, confirm all good.

11. Run Idle for 1 minute, confirm

12. Run baste for 1 minute: confirm the needle stops up each time.
    a. IF it does not stop consistently in the up position, go into the motor settings
    b. Additional setting – PID Settings
    c. Change the "stat position – KD" to .0012

13. IF the unit has rear handle bars:
    a. Confirm all 4 buttons function
    b. Confirm rear display communicates and functions

Pulley Size

To get the correct measurement of pulley needed for your machine you will need to measure how long your current machine pulley is.

Measure the machine pulley from end to end.

Once measure you will Divide by 1.5

This will be giving you the ratio and corresponding size of pulley, keep in mind that you get an exact number. You will need to round to whatever number it is the closest to.

Pulley Sizes

1”
1 1/2”
2”
3”

You will then decide which one of the listed pulley sizes you will need for your machine.

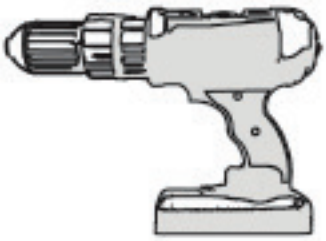
Table of Contents

1

2

3

Tools Required



Hand Drill

#29 (.1360”) Drill Bit
#25 (.1495”) Drill Bit
#7 (.2010”) Drill Bit
3/4” (.75”) Drill Bit

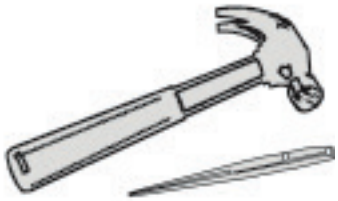
Safety Glasses

Flat Head Screwdriver

Phillips Screwdriver
(#1 and #2)

Wrench or Socket Set
(Standard and Metric)

Hex Key Set
(Standard and Metric)



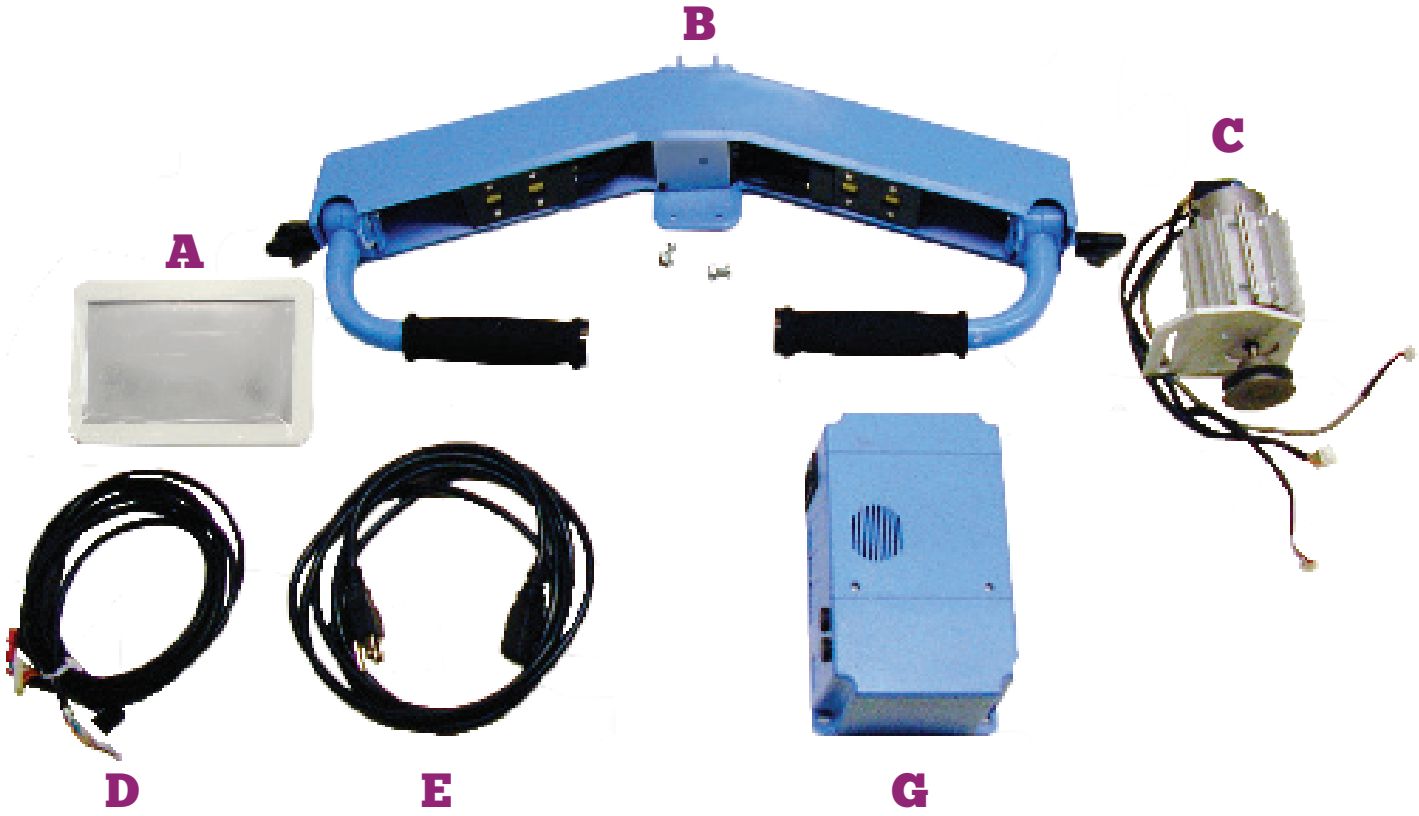
Hammer and Punch

Tap Wrench

#1 4/20 Tap
#8-32 Tap
#10-24 Tap

Tapping Oil

Perfect Stitch Parts

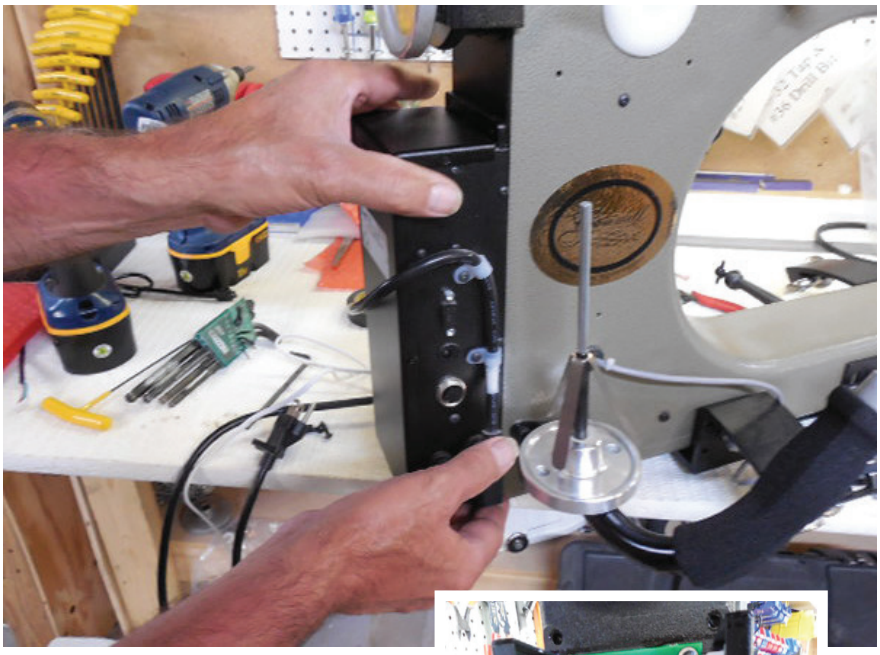


Letter	Description
A	Display
B	Handle Bars
C	Motor
D	Handle Bar Wires
E	Power Cord
F	Control Box
G	PCB Box
	(part colors may differ from current picture)

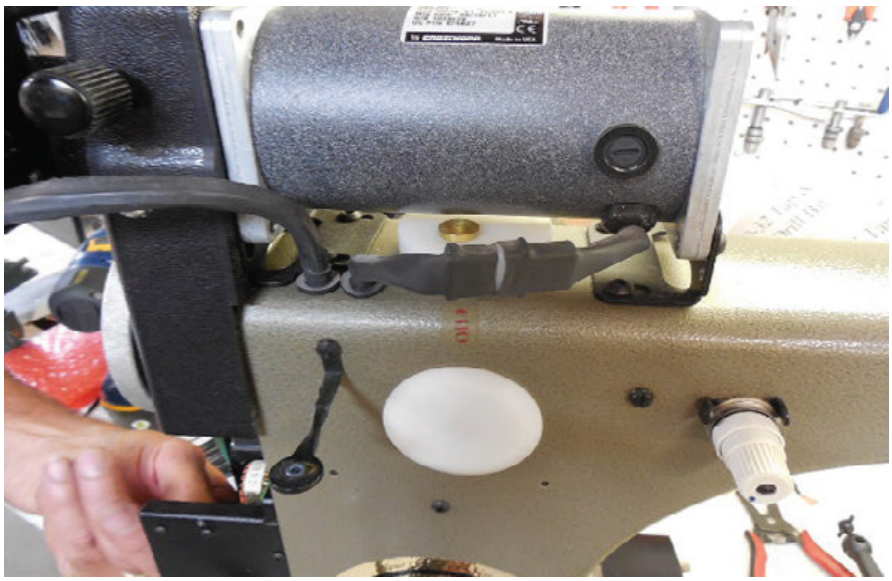
Removing PCB & Motor

1. Remove Rear PCB.

   Disconnect all of the wiring and remove entirely from rear of machine.



2. Remove Rear Motor and motor wires.

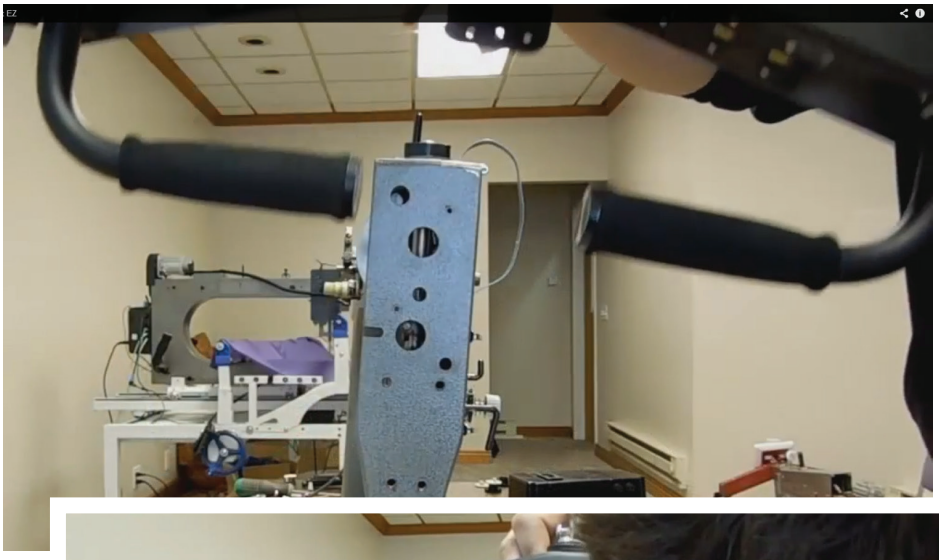


Be sure to leave the back plate off as you will be coming back to install the Magnetic Index alongside bringing all your wiring to the back end of the machine.

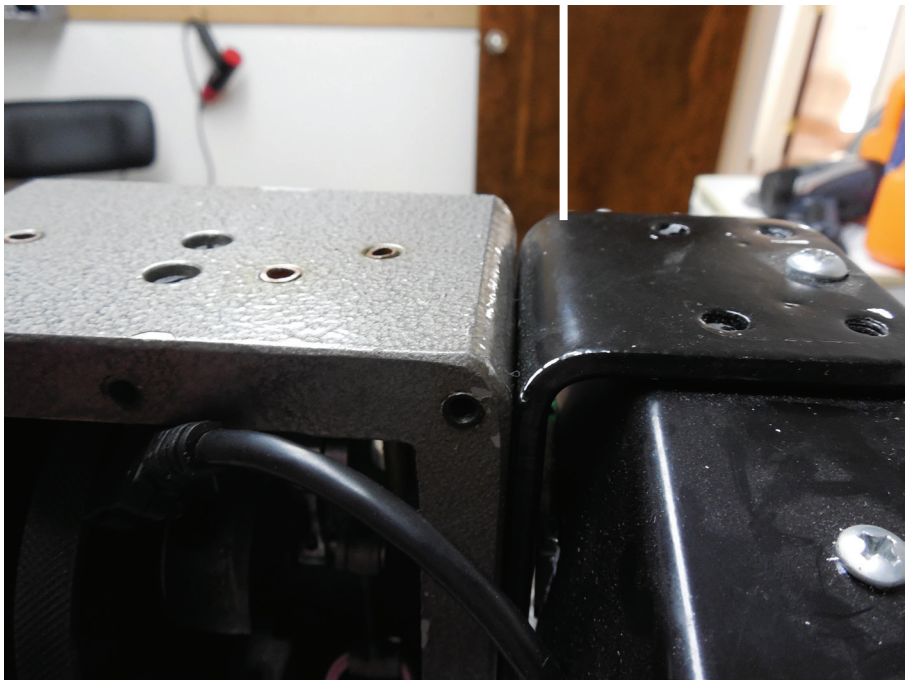
Installing Handle Bars

Mark Holes

1. Align the handle bars so they align flush with the top of the machine head. (you many need to remove the machine faceplate.)
2. Mark two holes with a permanent marker.



Flushed with top of Machine Head

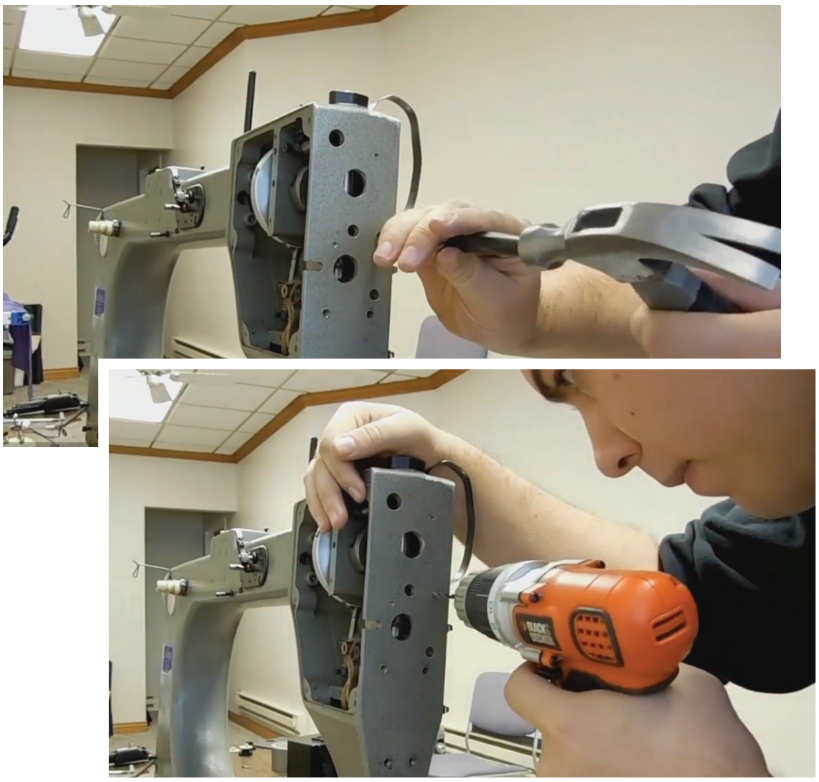


Installing Handle Bars

Punch

1. Punch the marked holes.

2. Drill the holes with the (2) 10-24 x 1/2” Bit.

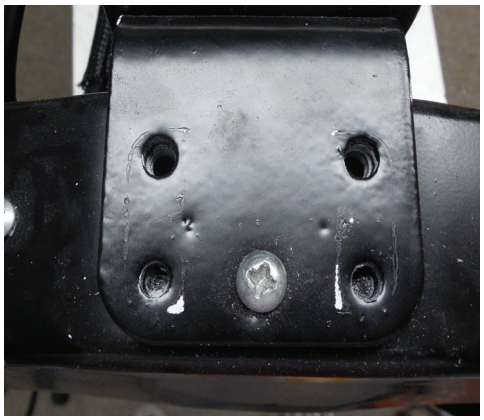


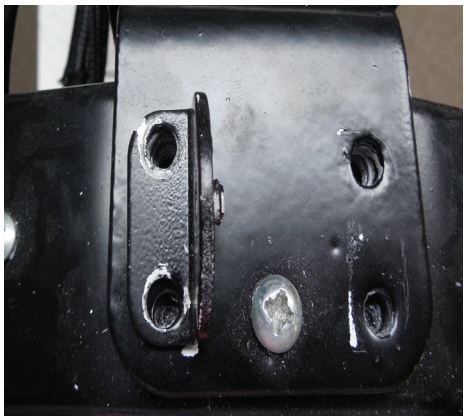
Drill

1. Install the (2) 10-24 x 1/2” screws.

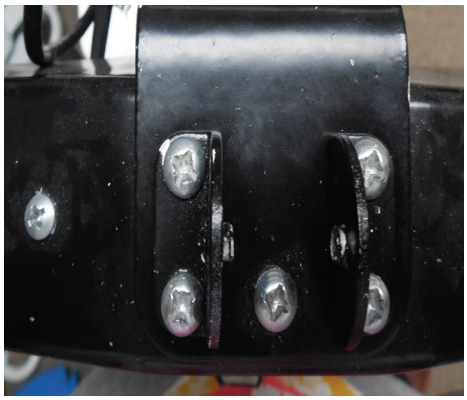
Mounting 7” Display

1 You will align the remote brackets you were provided with to the holes on your L bracket that is attached to your Handlebars. Use the next pictures as a reference.





2 Once the remote bases are attached you will proceed to mount the display on the remote basis. Use picture 4 as a guide.

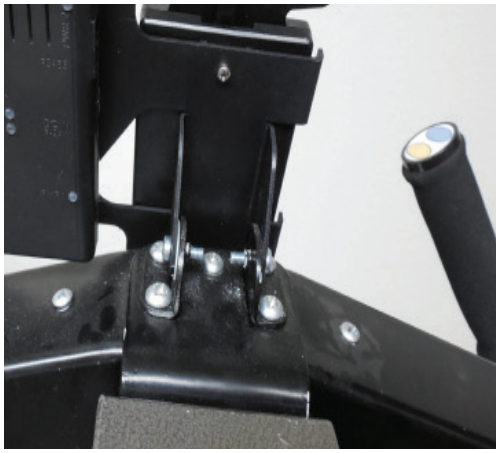


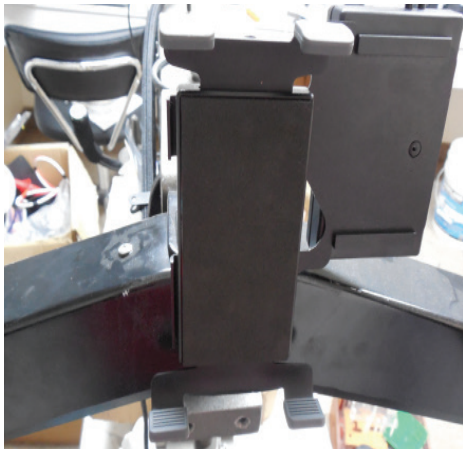
For instructions on installing the 10” display please turn to the next page.

Mounting 10” Display

1 You will be mounting the 10” display bracket onto the remote bases you were provided with.

Be sure that the screws are being held tight, but not too tight that you wont be able to move the display back and fourth.



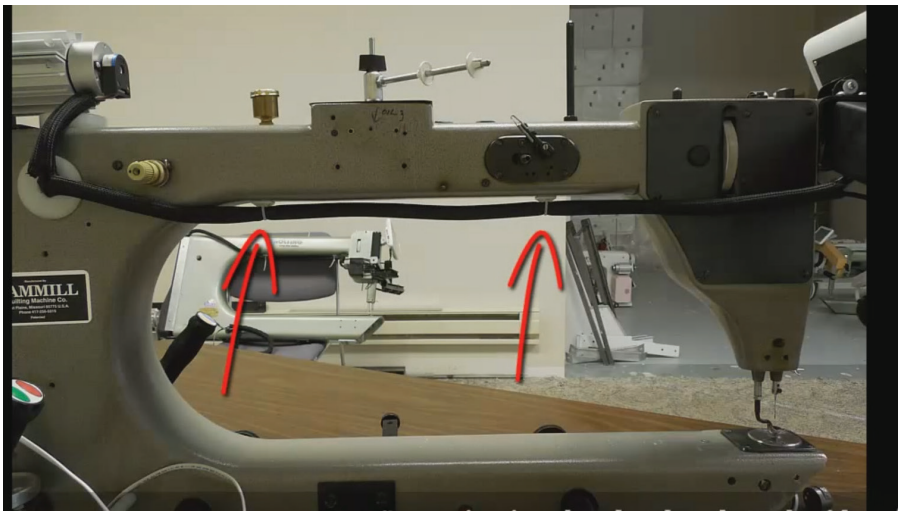


For instructions on how to install your 10” Tablet onto the Tablet bracket please see the “ Installing/Troubleshooting Your Android Tablet” manual.

Installing Motor

Nylon sheath

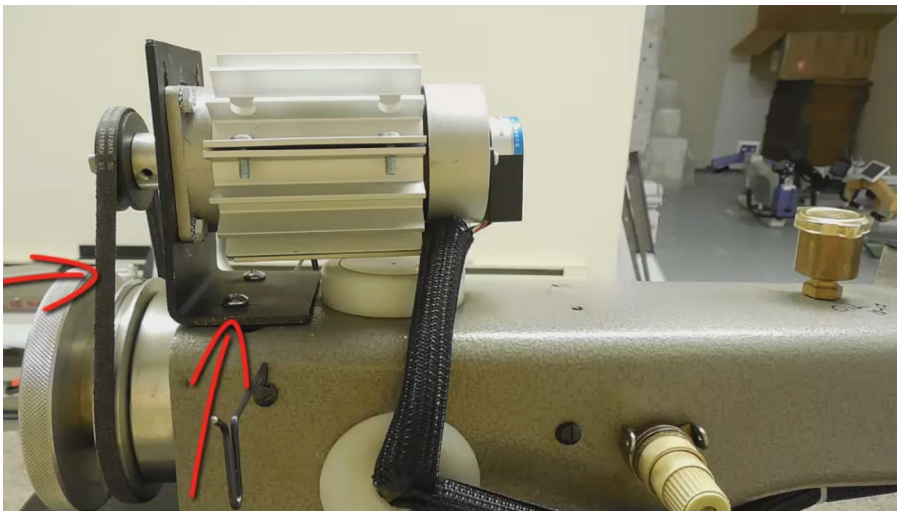
1. Sheath the wires in the provided nylon and use the zip ties and adhesive zip-tie anchors to affix neatly to machine.

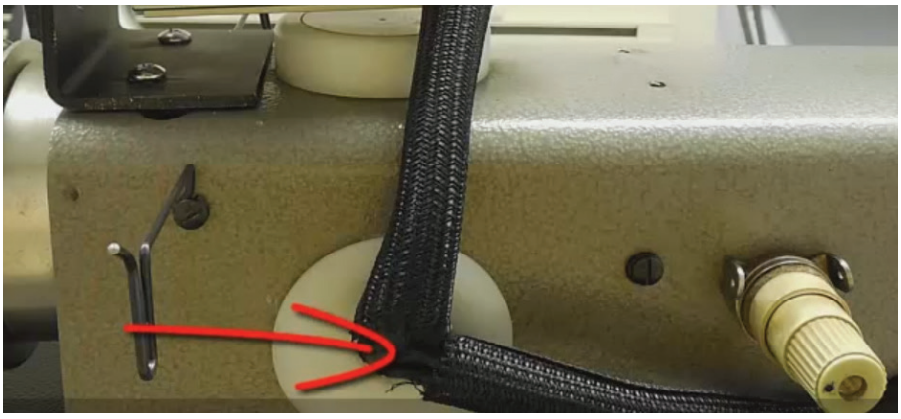


Install Motor, Belt

1. Install motor, motor bracket, and motor belt.

2. Ensure that motor wires are sheathed in nylon as well. (You may need to drill a hole in the plastic plug shown at right to run wires properly.)

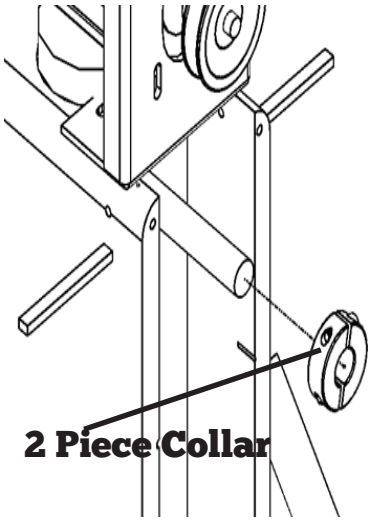




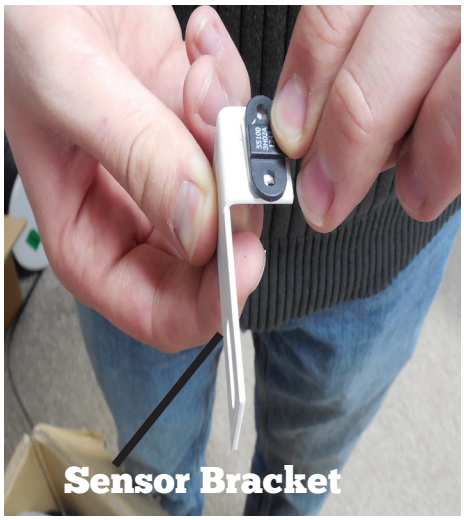
Installing Magnetic Index

1 The back plate to your machine should still be removed up to this point. You will now proceed and install the Magnetic Index.

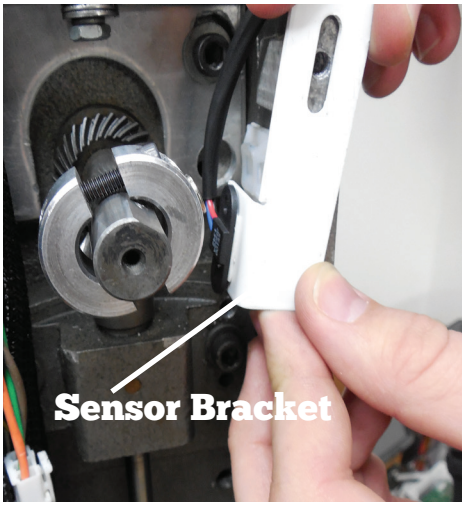
You will start off by attaching the two piece collar provided to the shaft coming from the inside of the machine. Before tightening down the Collar make sure that the needle is in the up position. Other wise your machine will not function properly.



2 Next you will attach the Index to the Sensor Bracket using the double sides slip tape you were provided with.



3 Now you will attach the Sensor bracket with the Magnetic index attached, it will be held in place using the front face plate and screw you removed at the beginning. The Sensor bracket should be sandwiched at the top right corner, just like the picture shows.



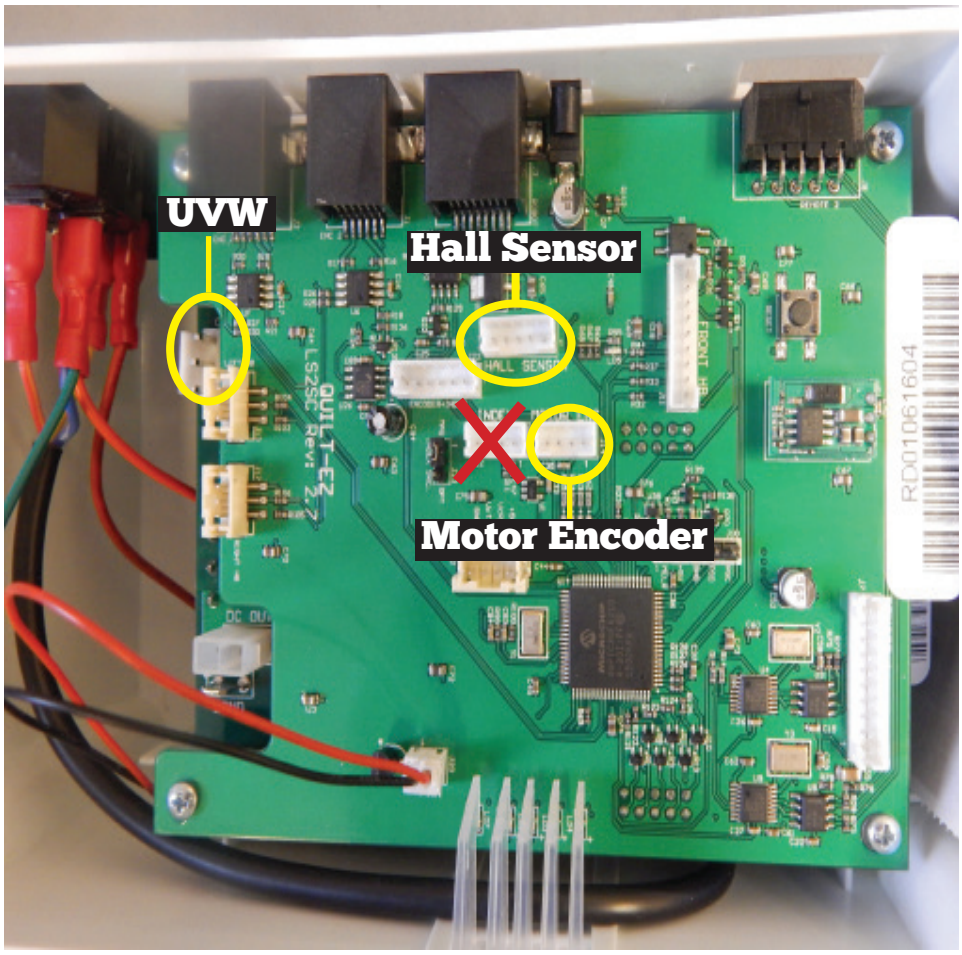
Attaching PCB Box

1 Connect Motor Wires

Connect the motor wires as shown at right.

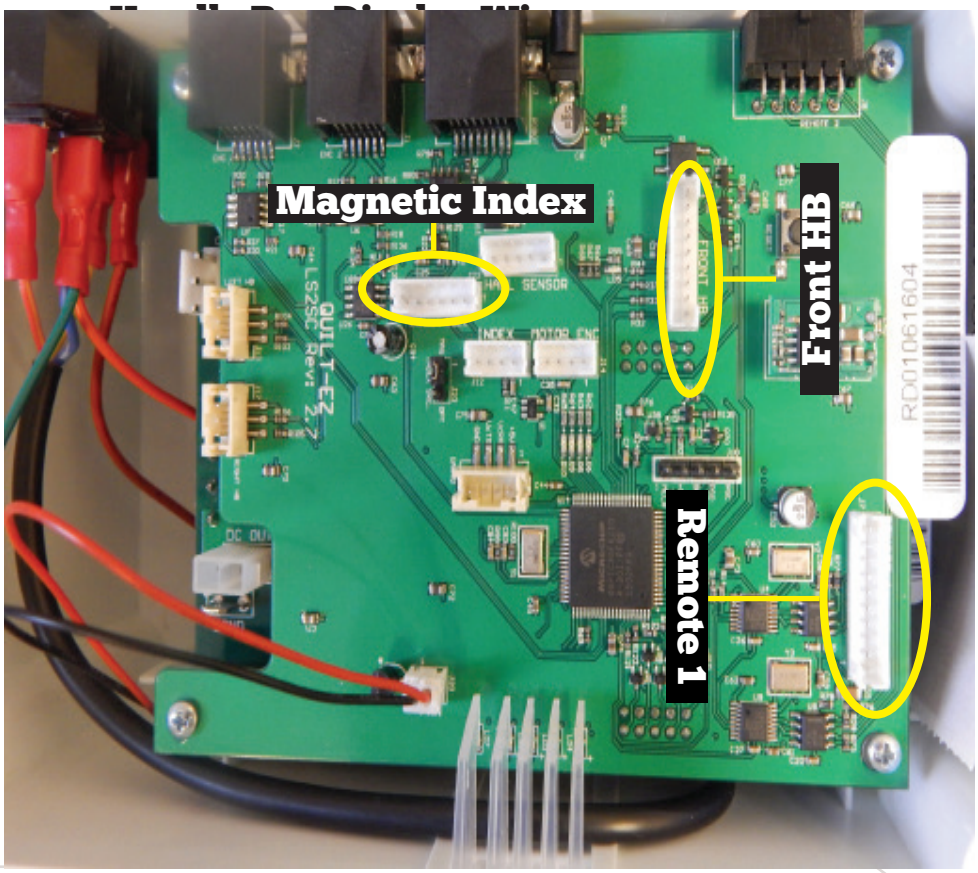
Each of the ports will be labeled. Be sure to plug into the correctly labeled ports on the PCB.

Motor Wires

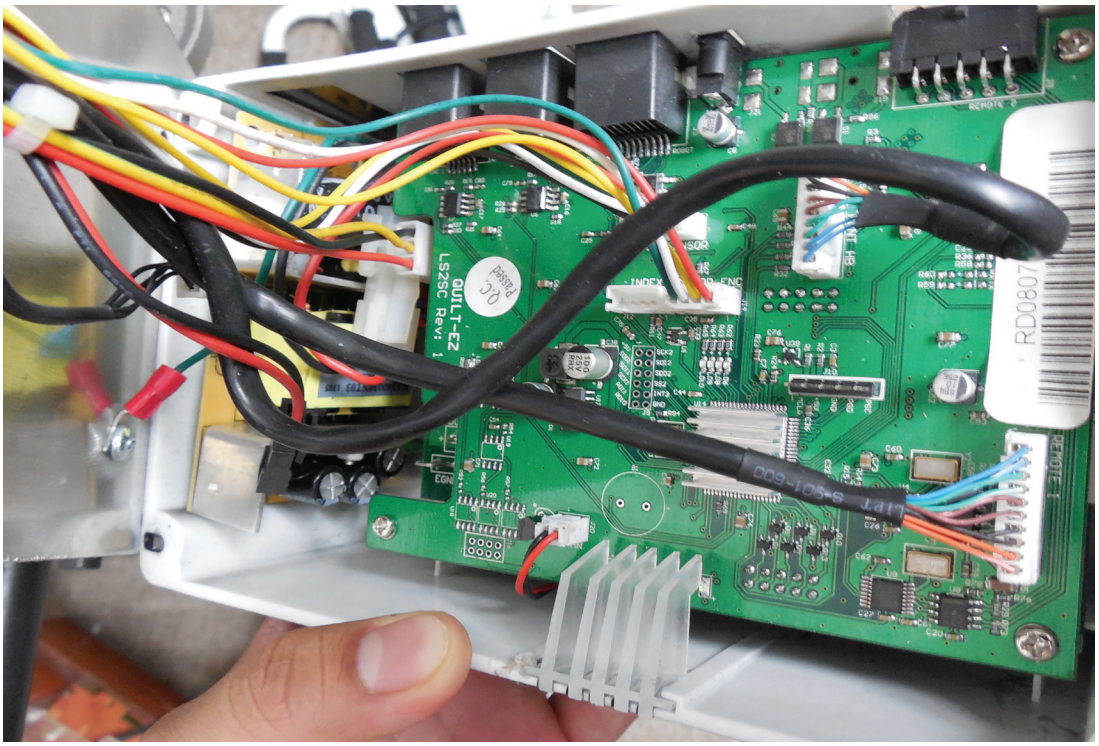


2 Connect Index, Handle Bars

Connect the handle bar and display wires as shown at right. Each of the ports will be labeled. Be sure to plug into the correctly labeled ports on the PCB.



Connecting PCB



3 Attach PCB Box to rear plate using the four 8-32 1/2” screws.