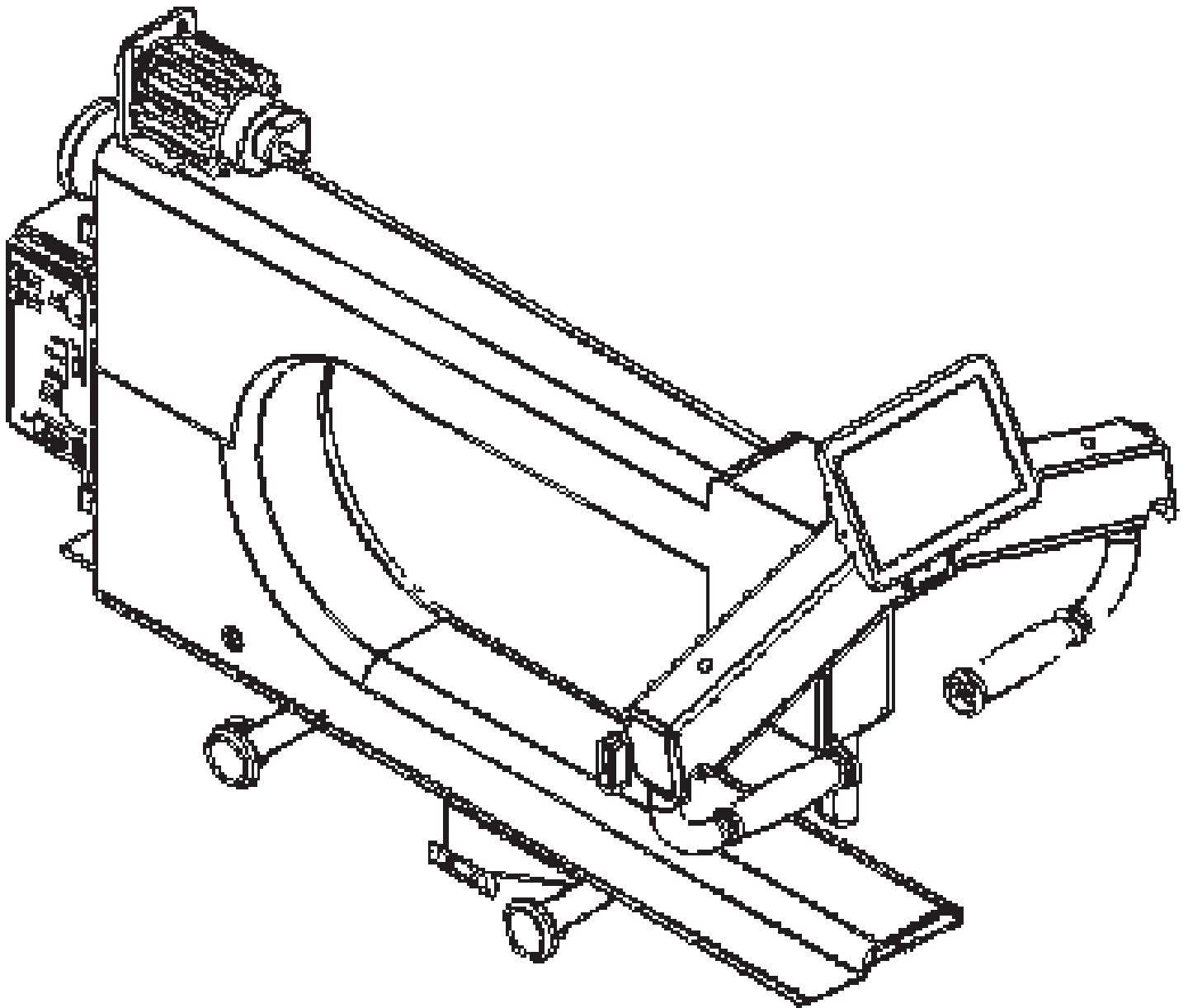


Quilt  
EZ

# Perfect Stitch

Machine Upgrade

HandiQuilter Assembly Instructions



Revision: 1/11/16

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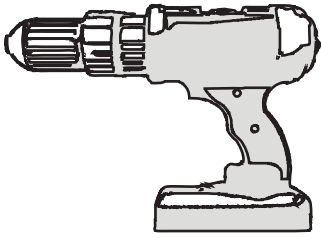
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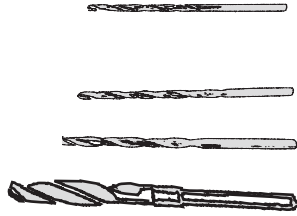
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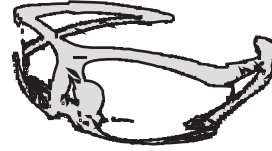
# Tools Required



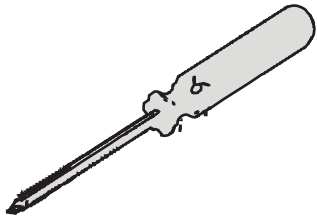
Hand Drill



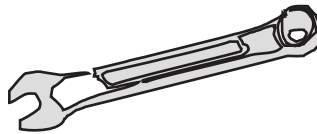
#29 (.1360") Drill Bit  
#25 (.1495") Drill Bit  
#7 (.2010") Drill Bit  
3/4" (.75") Drill Bit



Safety Glasses



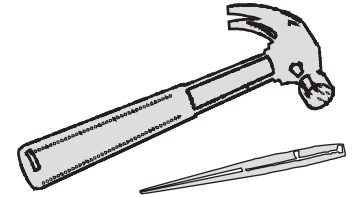
Phillips Screwdriver  
(#1 and #2)



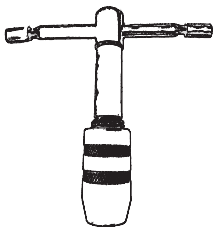
Wrench or Socket Set  
(Standard and Metric)



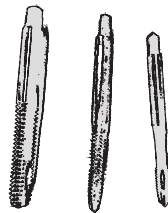
Hex Key Set  
(Standard and Metric)



Hammer and Punch



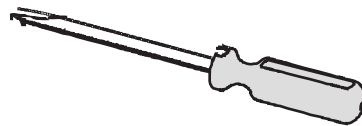
Tap Wrench



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



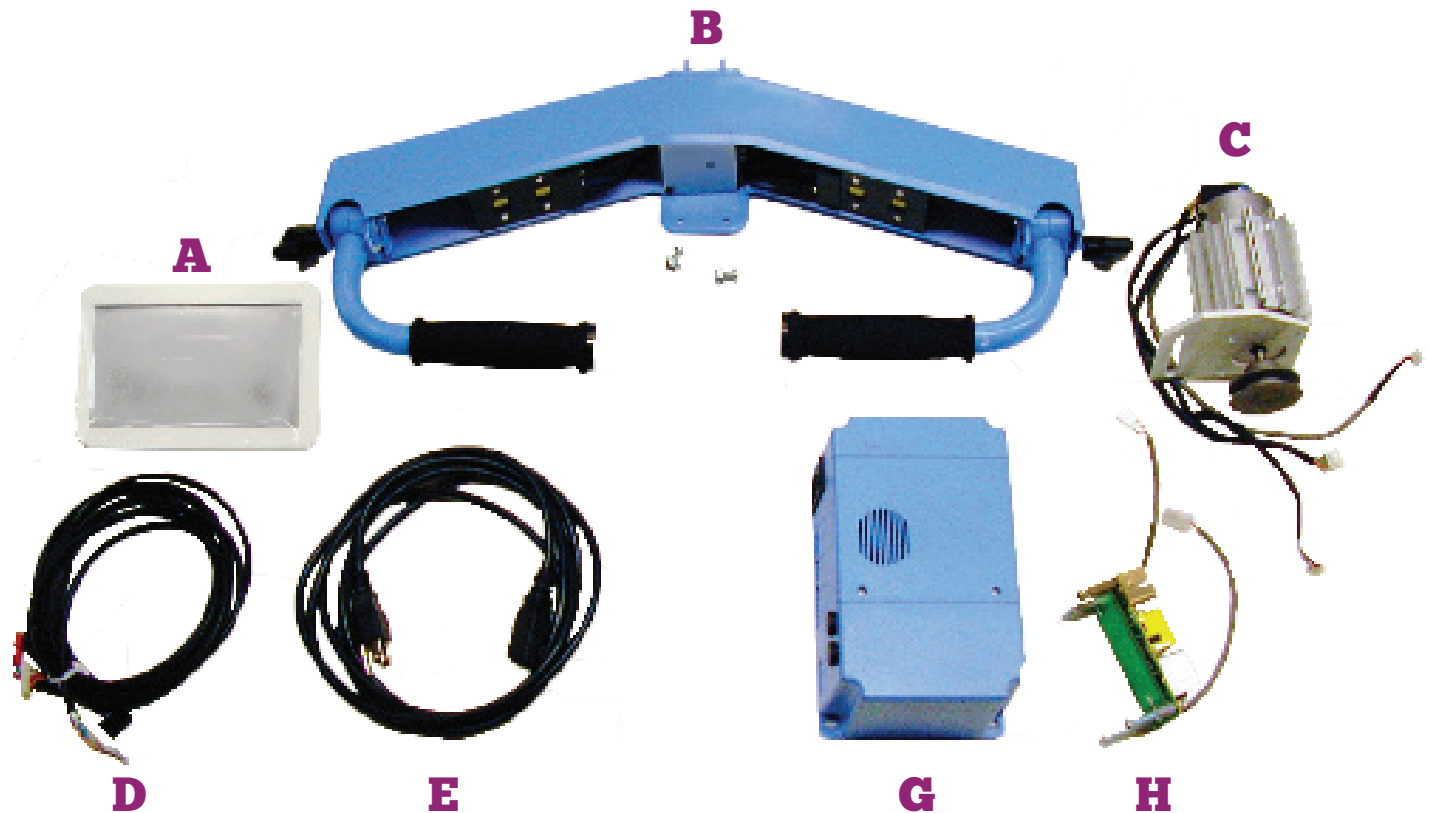
Tapping Oil



Flat Head Screwdriver



# Perfect Stitch Parts

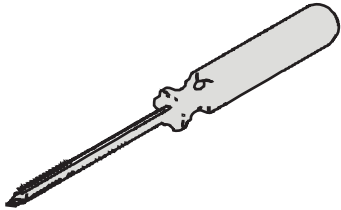


Letter	Description
<b>A</b>	Display
<b>B</b>	Handle Bars
<b>C</b>	Motor
<b>D</b>	Handle Bar Wires
<b>E</b>	Power Cord
<b>F</b>	Control Box
<b>G</b>	Power Supply
	(part colors may differ from current picture)

# 1 - DISASSEMBLE THE MACHINE

## 1A - Remove the Handle Bars, Back Cover, Motor

### Tools Needed



Phillips Screw Driver

### Remove Left Side Cover

1. Using a Phillips screw driver, remove the left side cover.





2. Unplug the cables from the PCB.

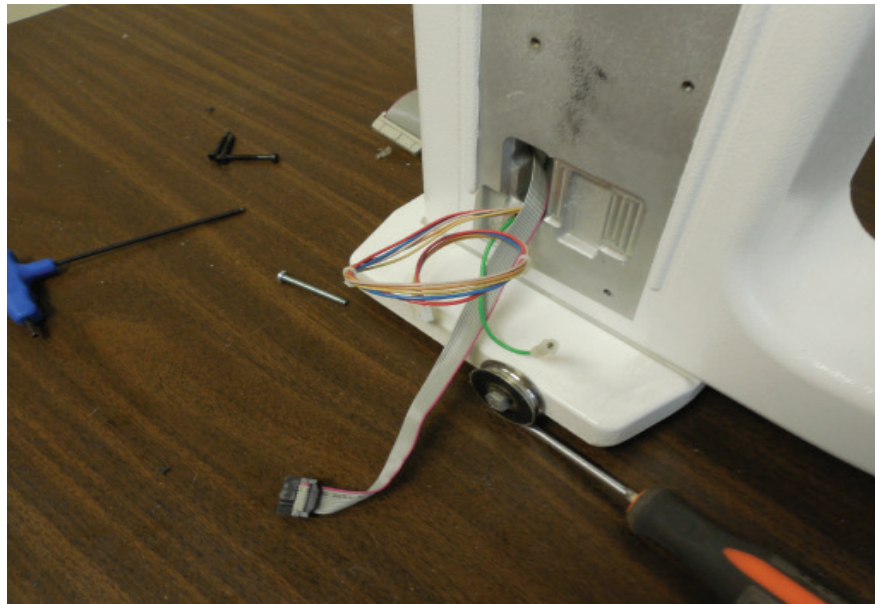


## Remove Right Side Cover

1. Repeat the process for the right side cover, remove the left side cover.



2. Unplug the cables from the PCB.

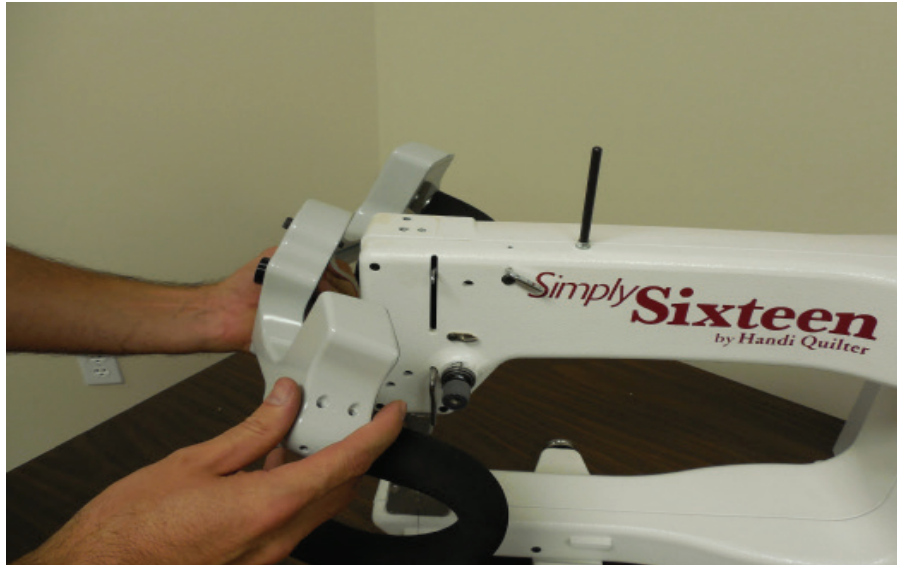




## Remove Handle Bars

1. Loosen three top screws and remove handle bars.





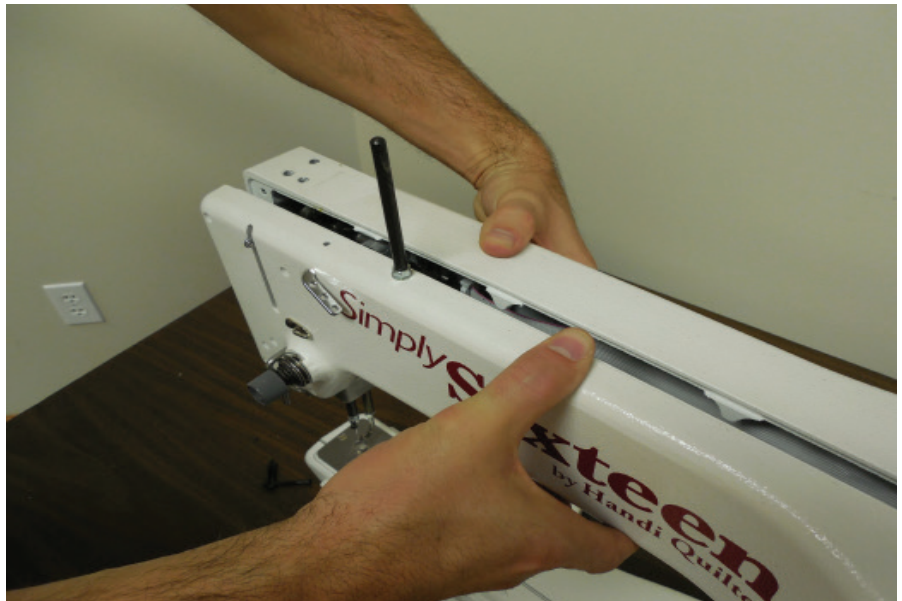
## Remove Side Casting

1. Using a hex key set, remove the screws attaching the side casting of the machine.



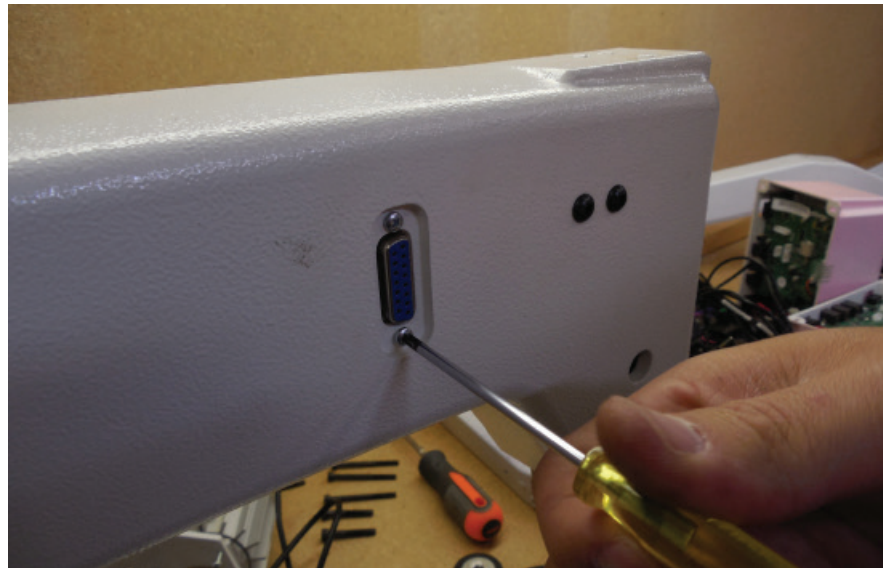


2. Separate the side casting and set it aside.

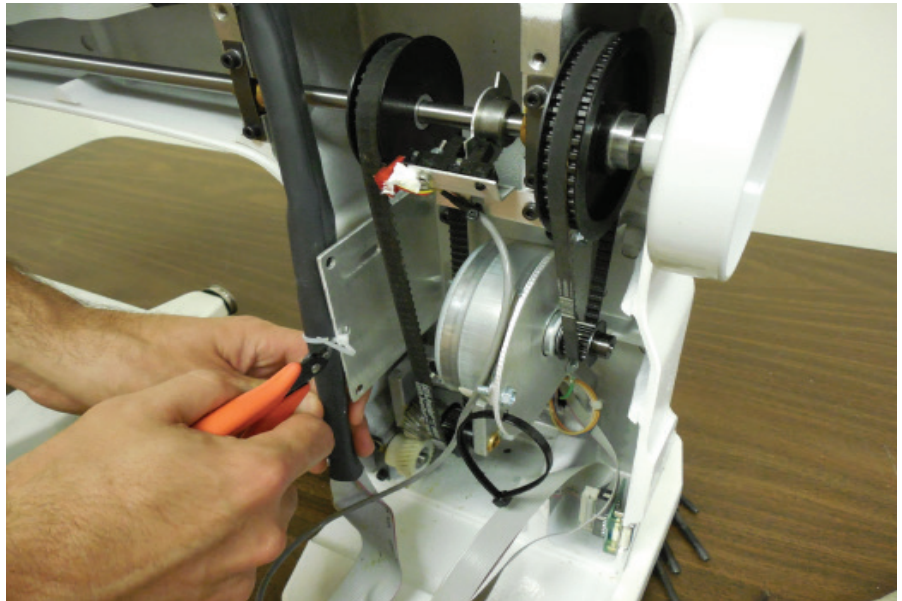


## Remove Wires, Motor

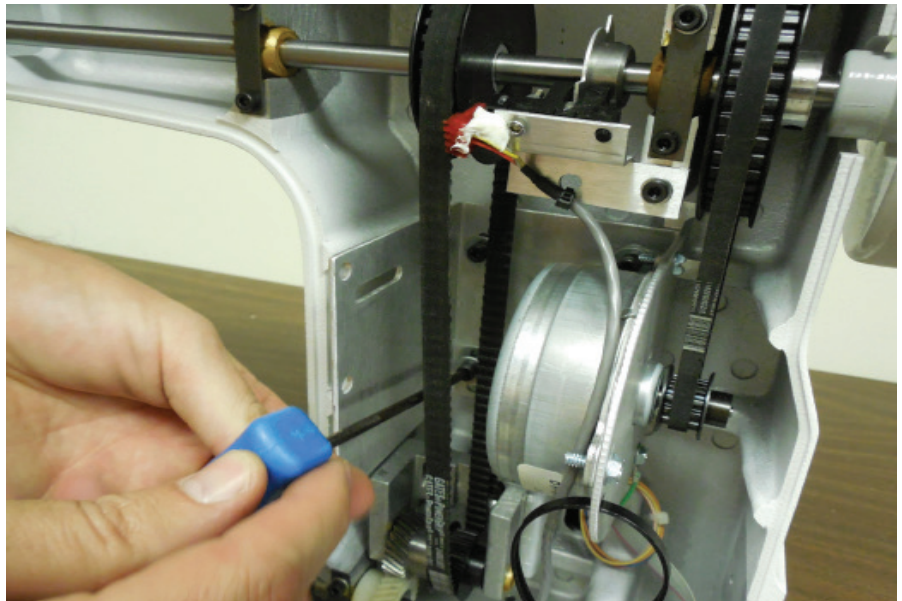
1. Remove the plug and wires near the head of the casting.



2. Clip any zip ties holding the wires inside and remove the wires from the machine.

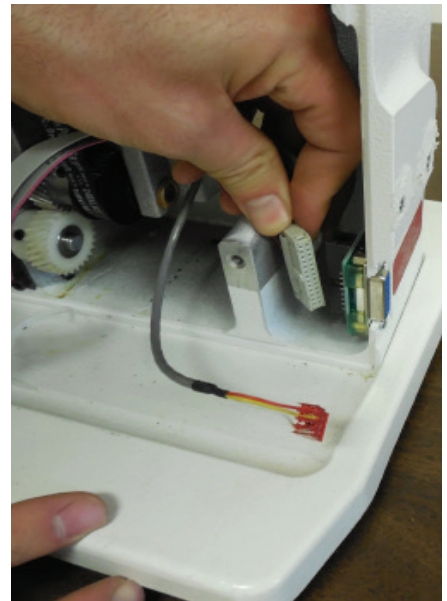
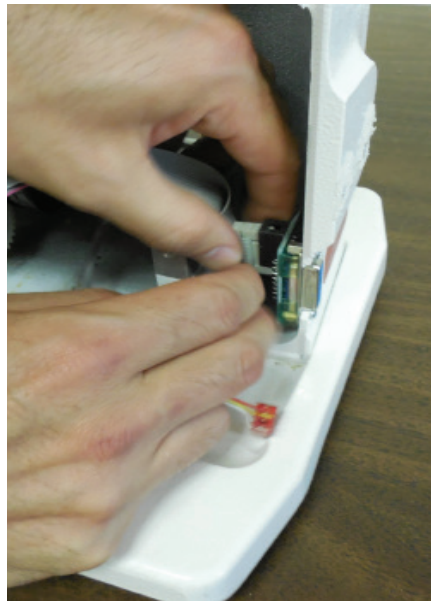
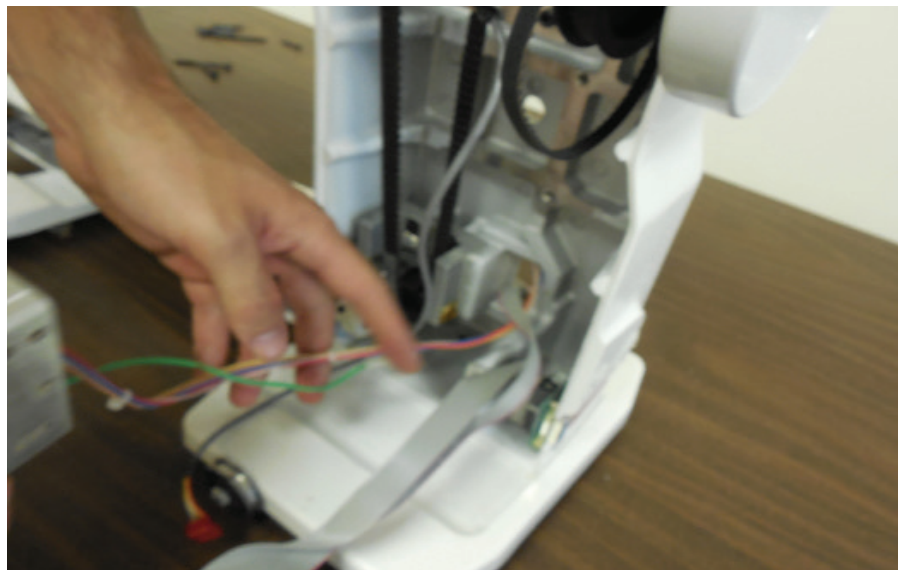


3. Using a hex key set, remove the motor bracket and motor from the casting.





1. Remove the remaining wires and plug near the base of the neck.



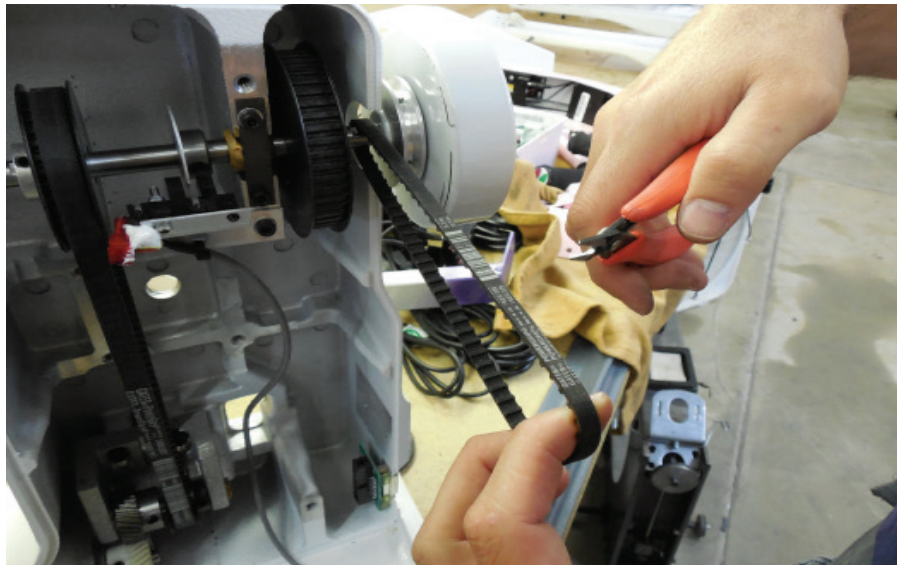
## **Attach Pulley, Remove Belt**

1. Remove the hand wheel and slide the provided pulley onto the shaft.

Tighten the pulley and hand wheel to the shaft.

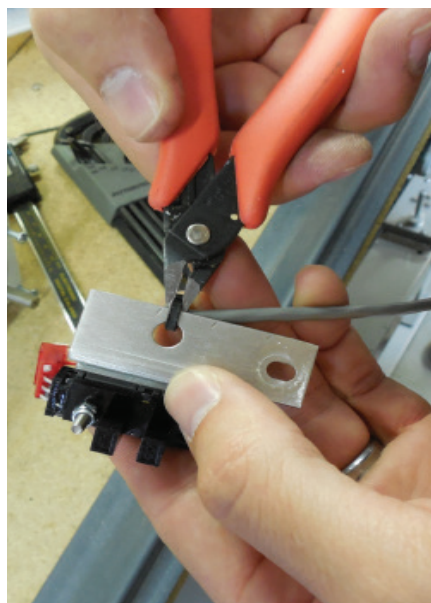
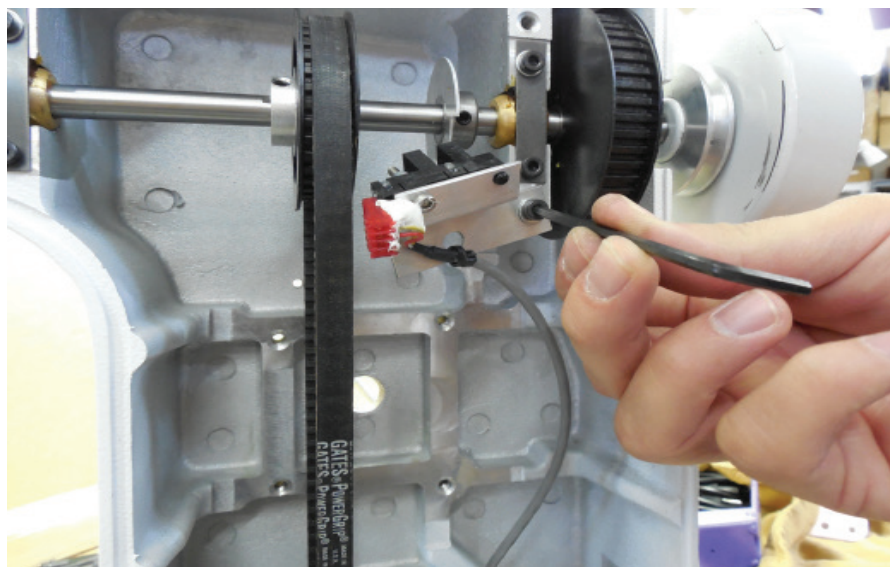


2. Clip and remove the attached belt.



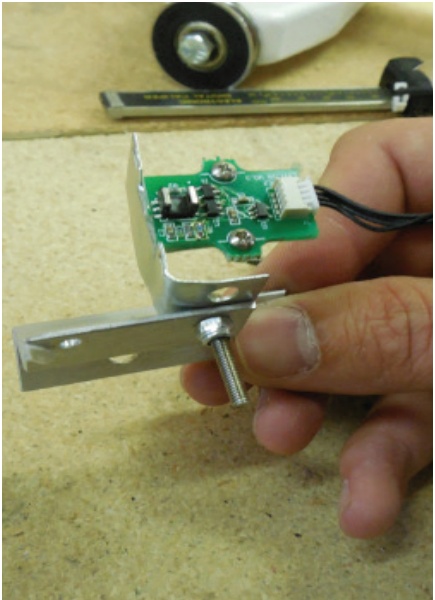
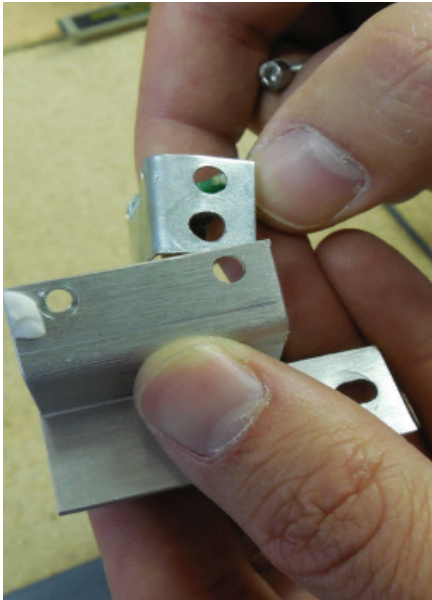
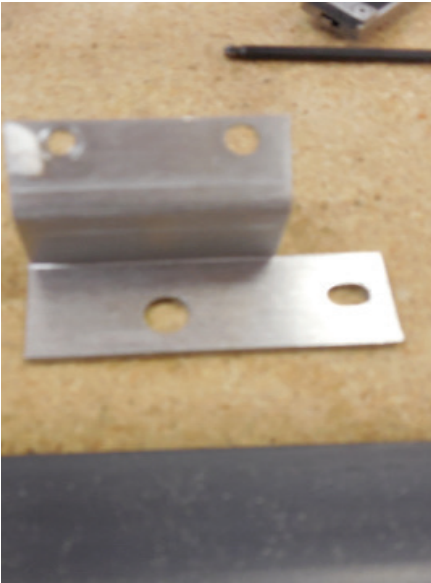
## Remove Index

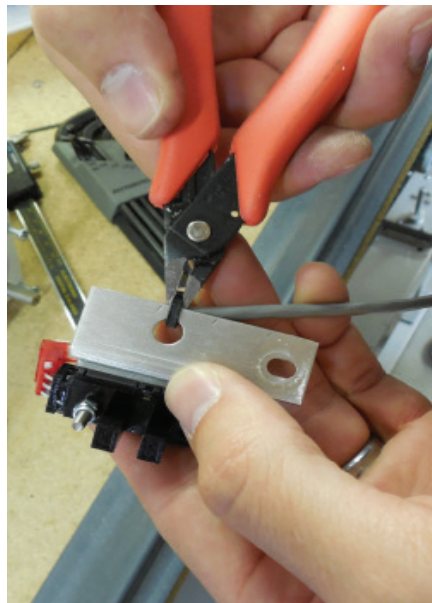
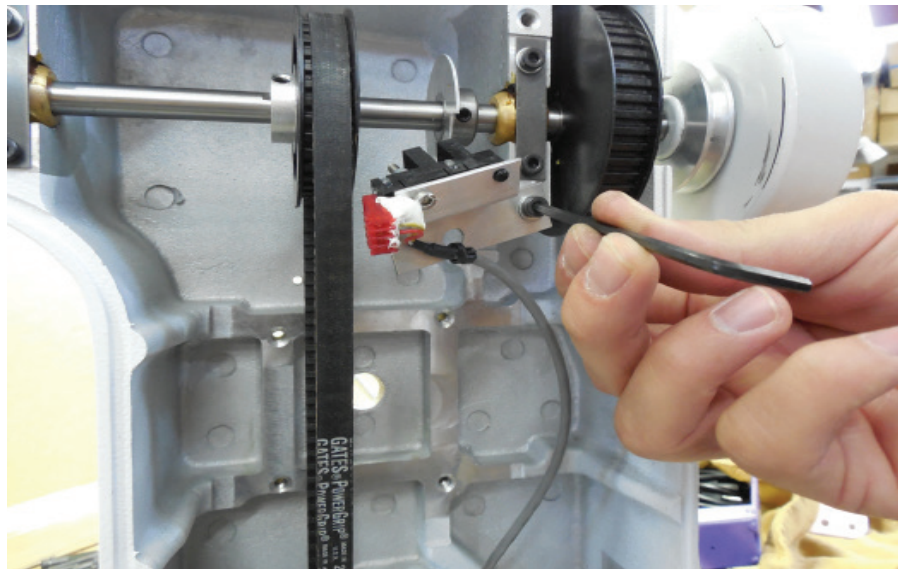
These pictures may not be accurate due to a change in the index sensor used. We are now going to use their existing index sensor.



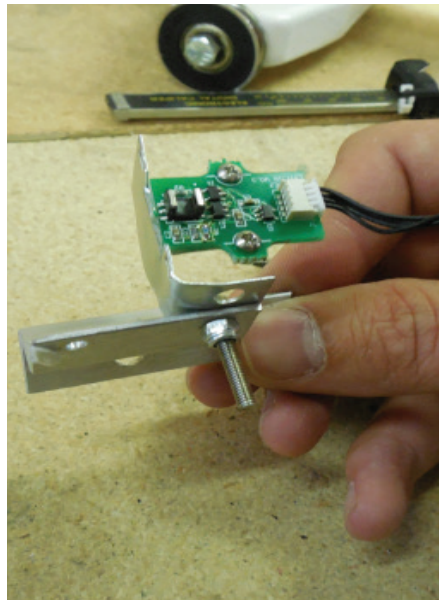
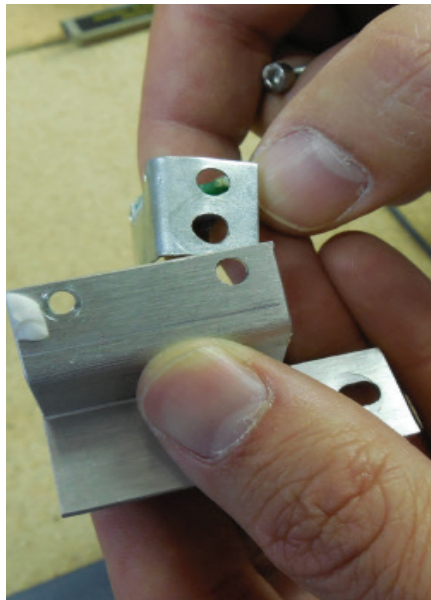


**Assemble, Reattach  
Index**



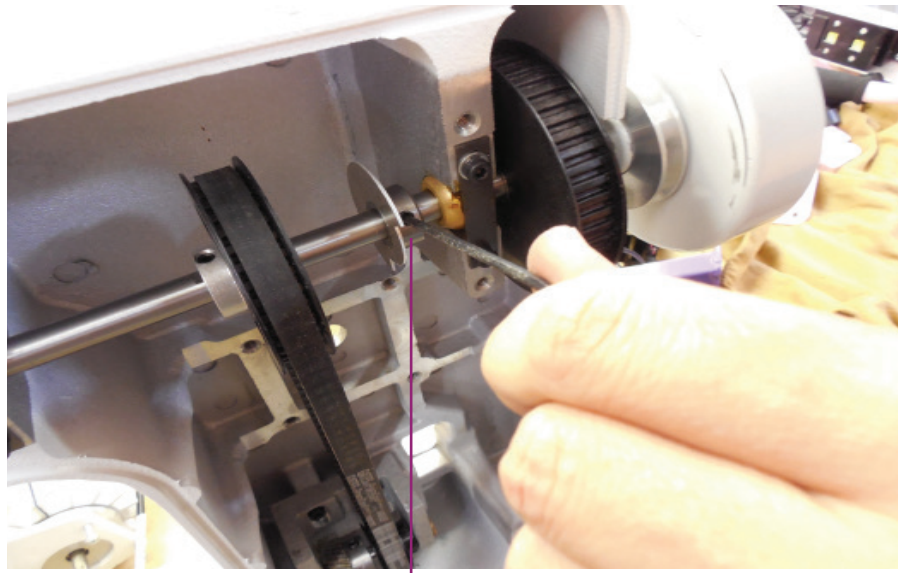




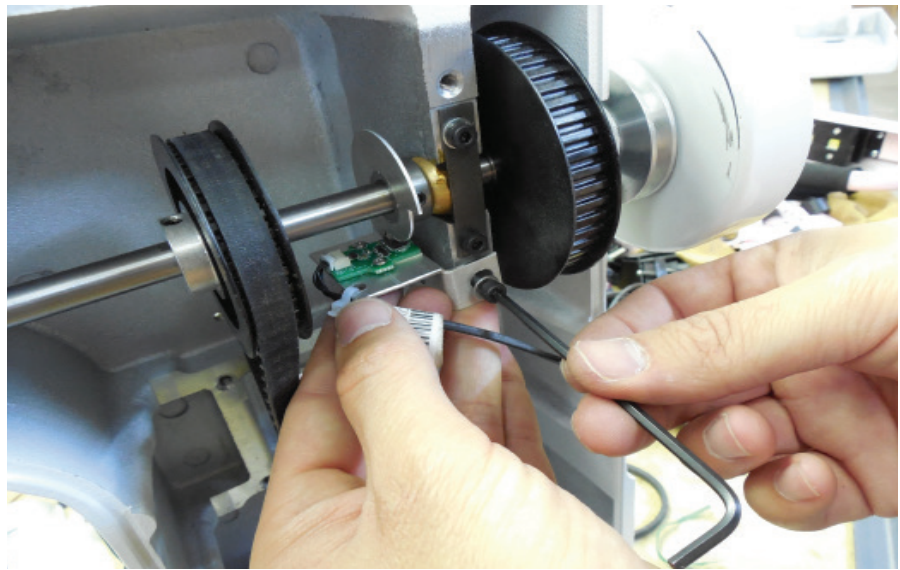


Loosen collar, slide the collar and flag to the right, and re-tighten collar.

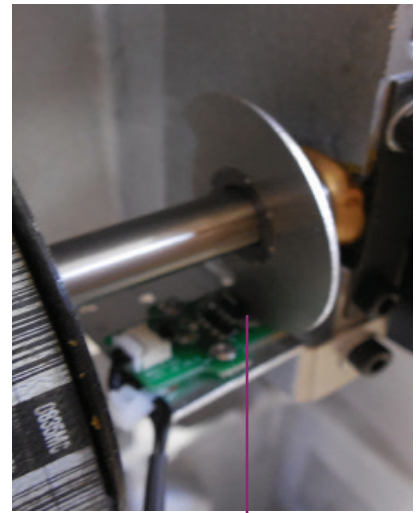
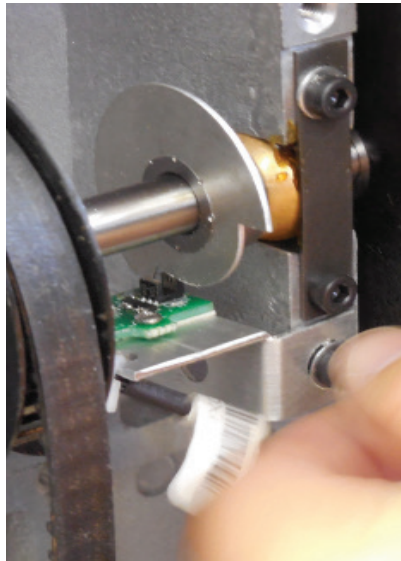
Attach index sensor to the frame.



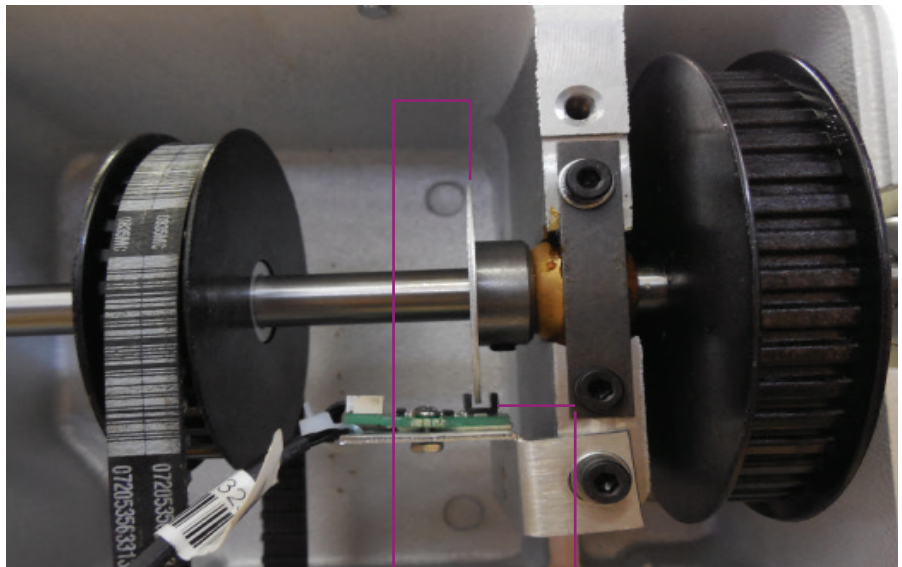
## Shaft Collar



Set machine so that the end of the gap in the index sensor flag passed through the window of the index sensor at needle up.



**End of gap at needle up**



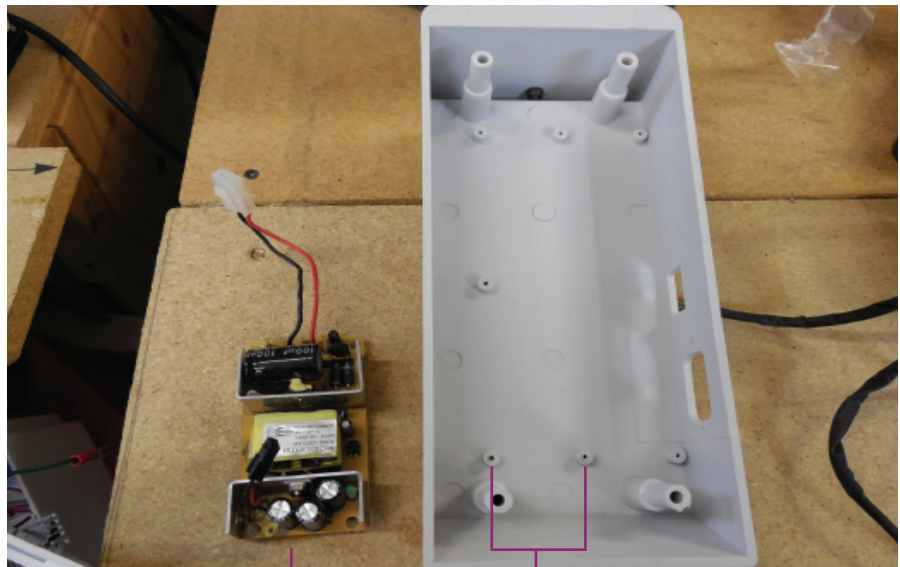
**Flag**

**Window**



## Attach Power Supply

1. Align the power supply with the two bottom screw holes of the side cover.
2. Using a Phillips screw driver, attach index sensor to the side cover with the ?? screws.



**Power supply**

**Bottom screw holes**



Slide wires through the casting of the machine.

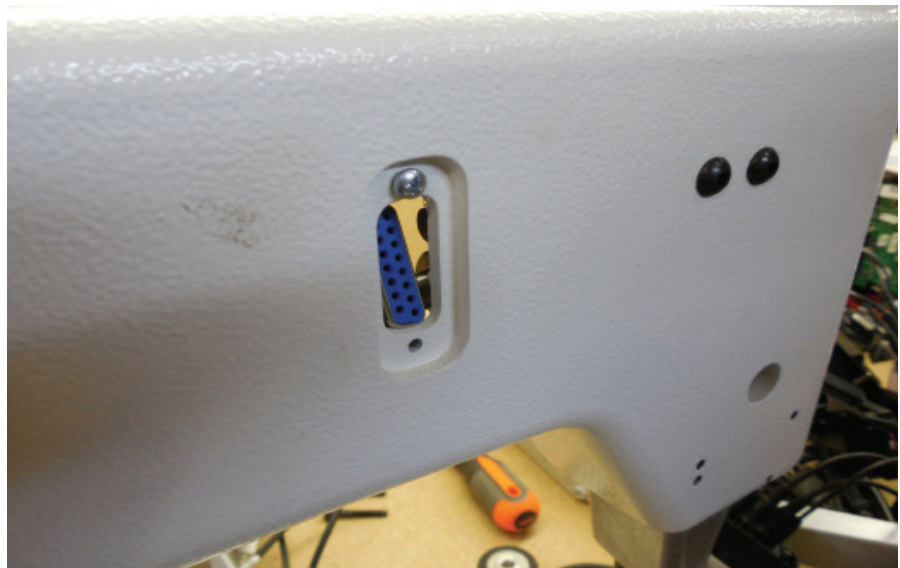
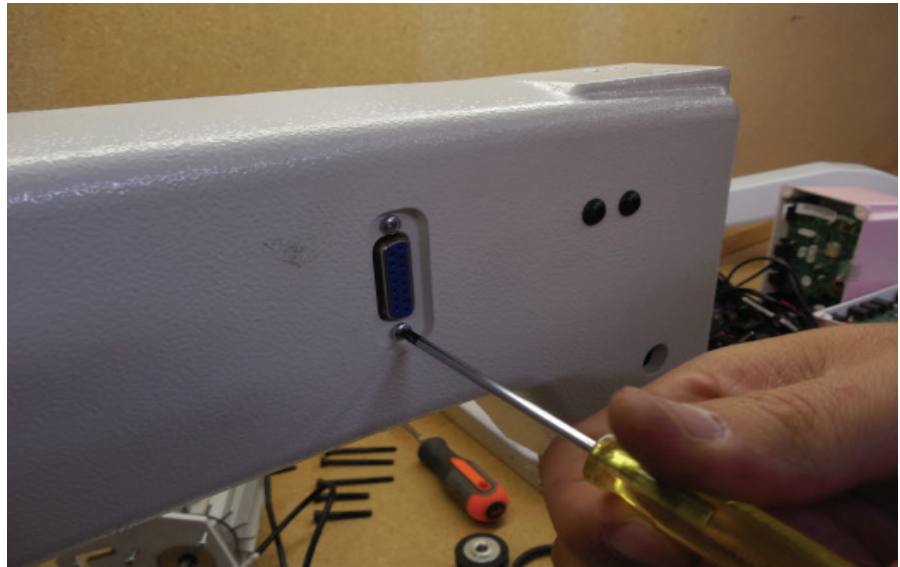
(the shown connections with to the power supply are connected to the pcb box)

Reattach side cover to the main frame.



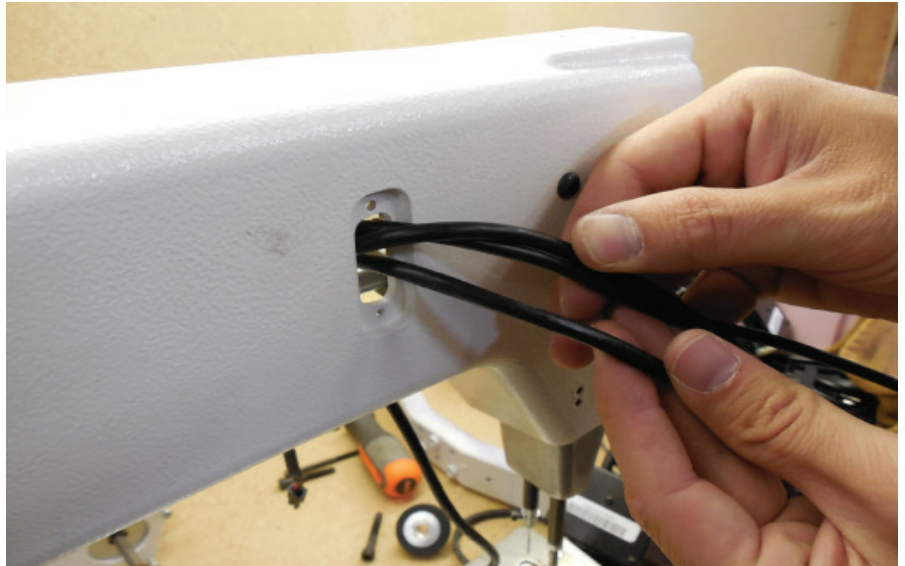
## Insert Handle Bar, Display Wires

1. Remove the plug  
need the head of the  
machine.

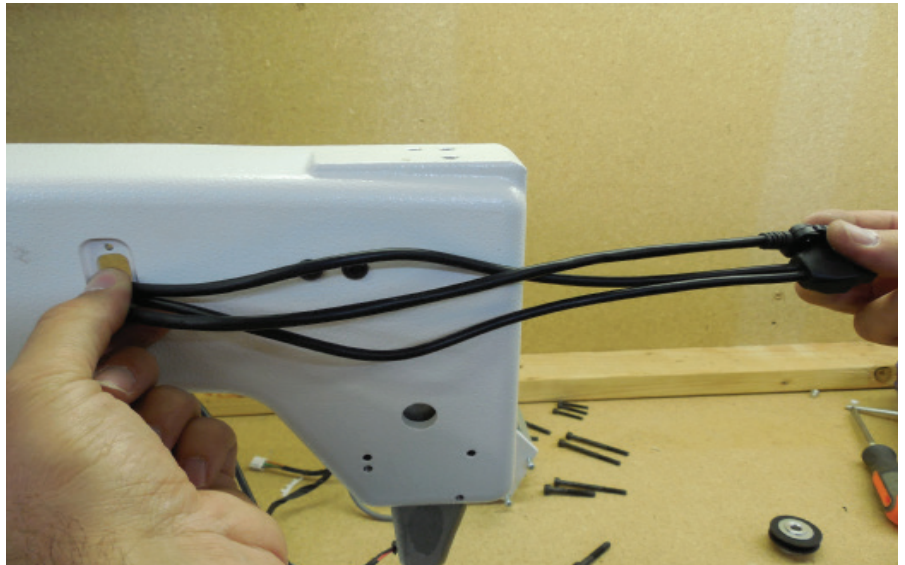




2. Insert the handlebar wires and the display wires through the plug hole.



3. Ensure you have about 7" of slack for the handle bar and display wires exiting the plug hole.

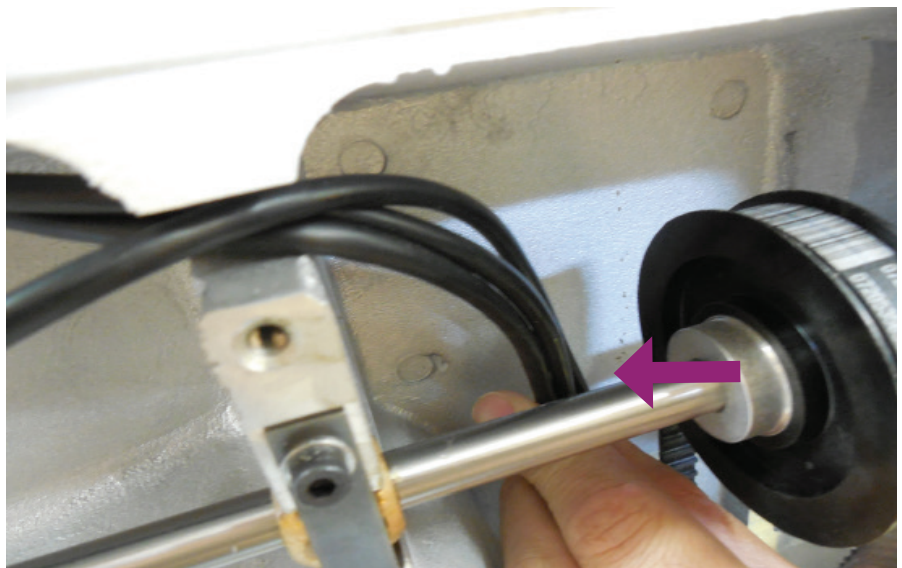


## Anchor Wires

1. Position the wires above the shaft and inside the interior cut out.



2. Slide the wires behind the shaft going down the interior of the neck.

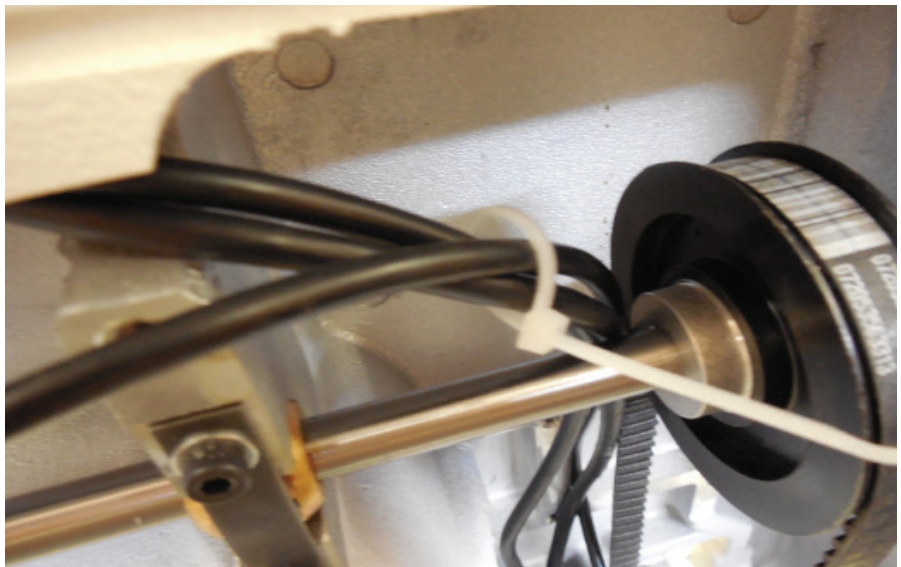




3. Use an anchor and ziptie to ensure the wires will not fall onto the shaft during use.

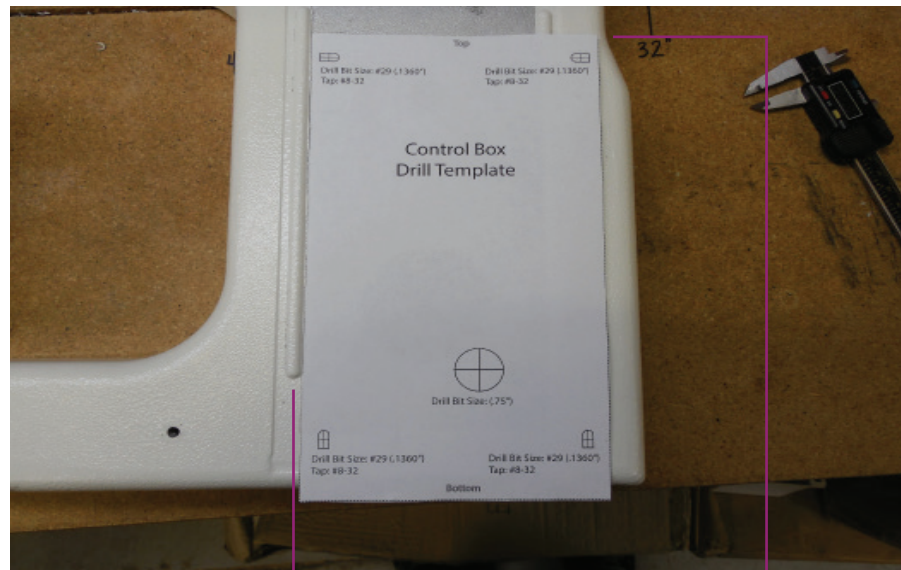


4. It is also recommended to anchor the wires to this wall.



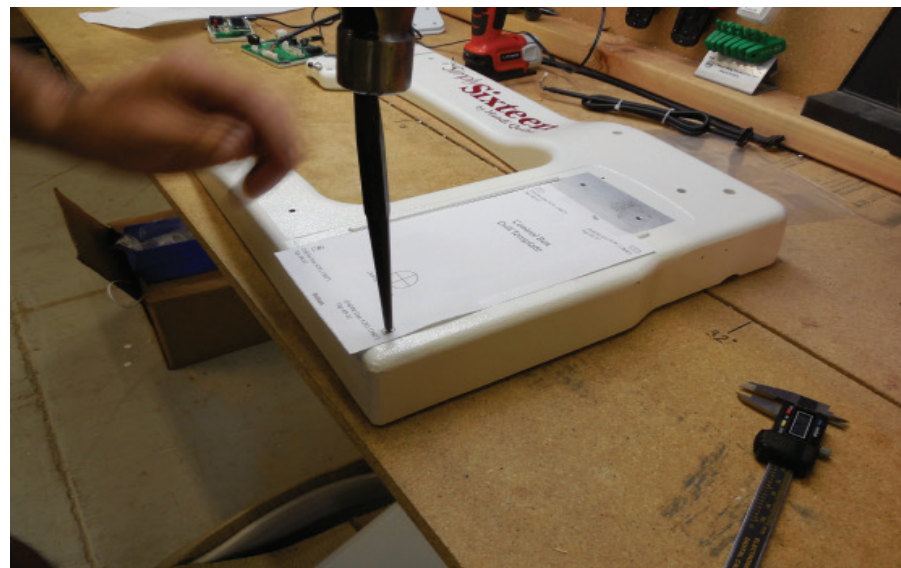
## Drill Control Box Template

1. Align the left edge of the template with the raised length on the frame. Align the top edge of the template with the indent on the cover.
2. Using a hammer and punch, mark each of the drill points on the template.

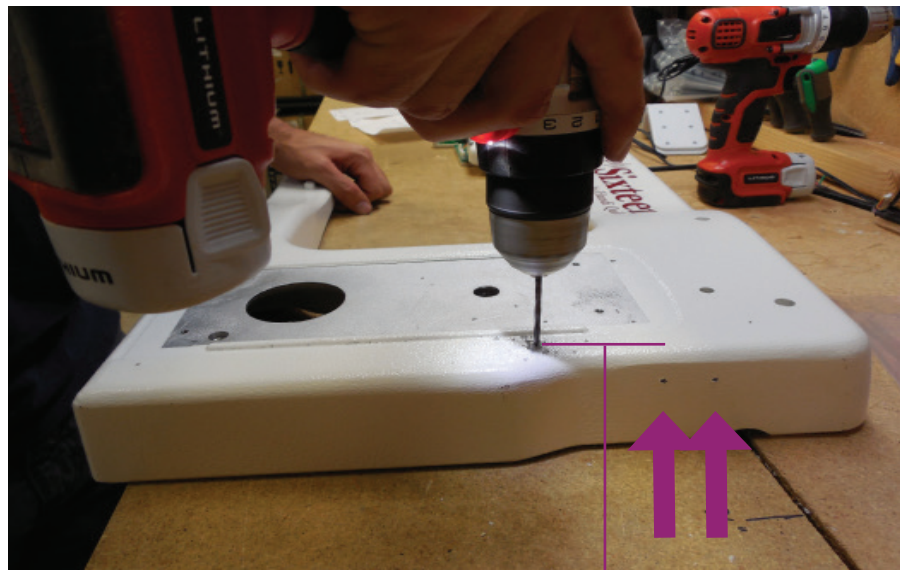


**Raised length**

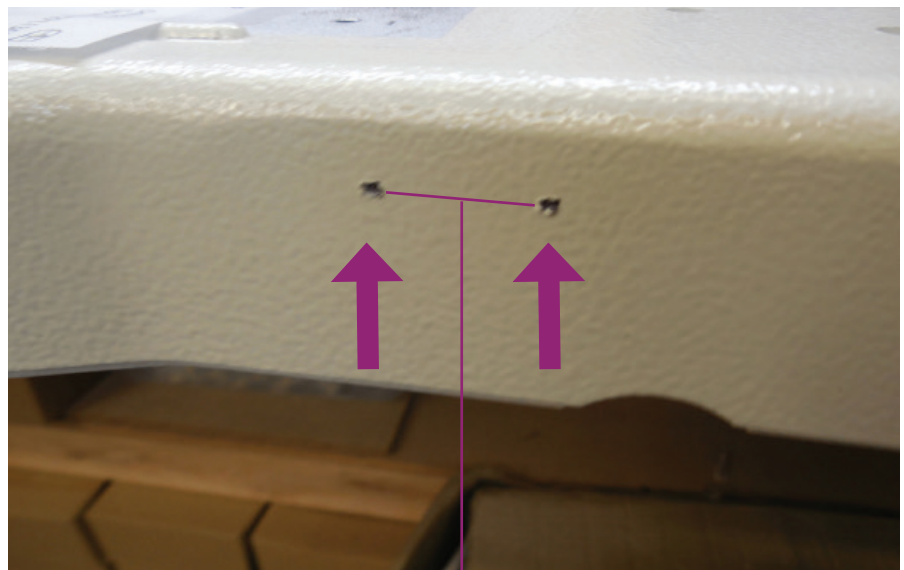
**Indent**



- Using the specified Drill bit, drill out each hole on the template.
- Using an ??? drill bit, drill out two holes 2 inches from the top right drill hole of the control box.



**2 inches**

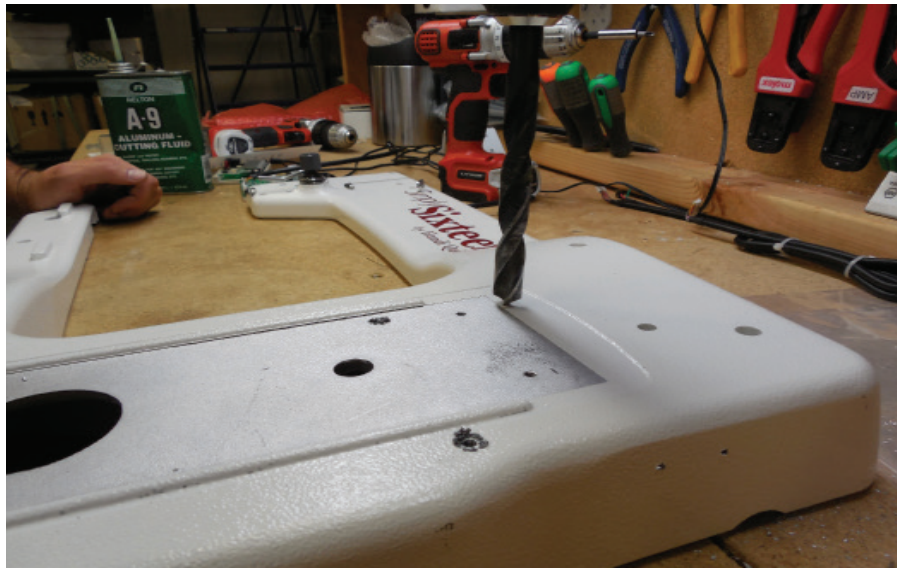


**1 inch**

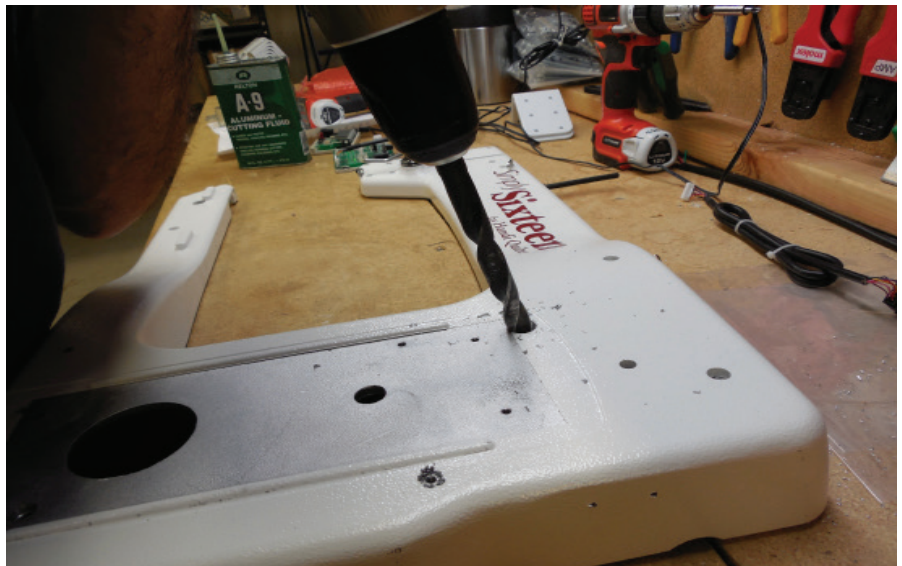


## Drill Motor Wire Hole

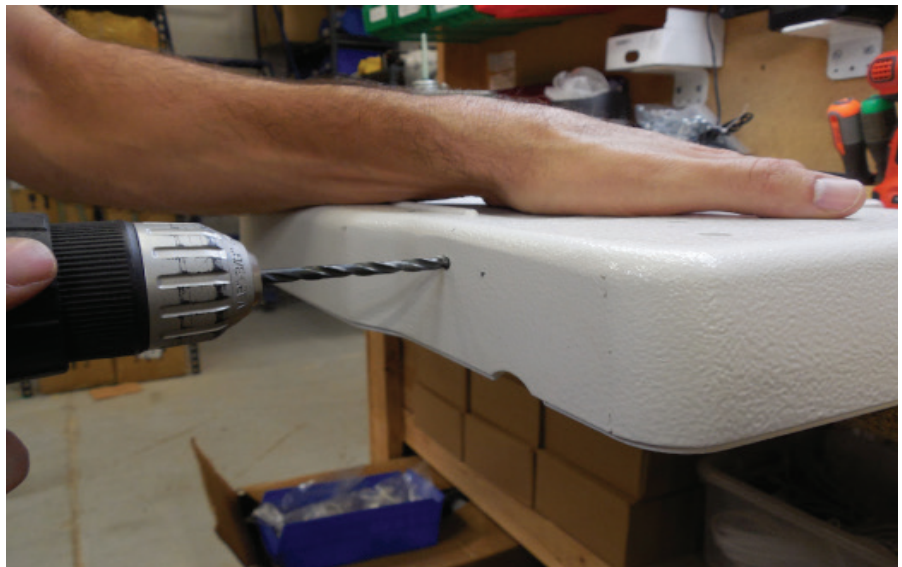
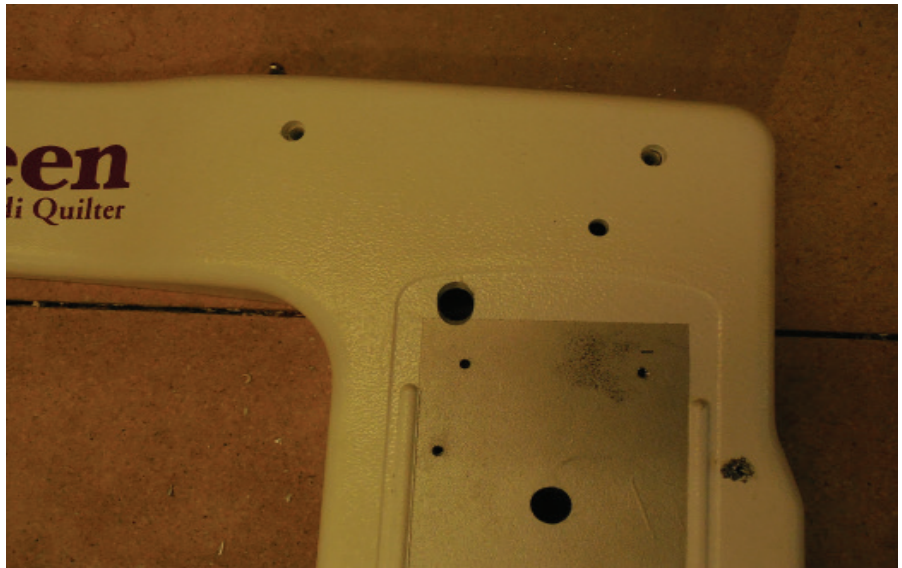
1. Using a 1/2" drill bit, drill out the a hole about 1" above to top left control box drill hole.



2. Rock the drill bit back and forth to widen the hold for the motor wires to pass through.



- Using a ?? drill bit, drill out the motor attachment drill holes.



## Attach Motor To Side Casting

1. Use a ??? tap to tap out each drill hole.

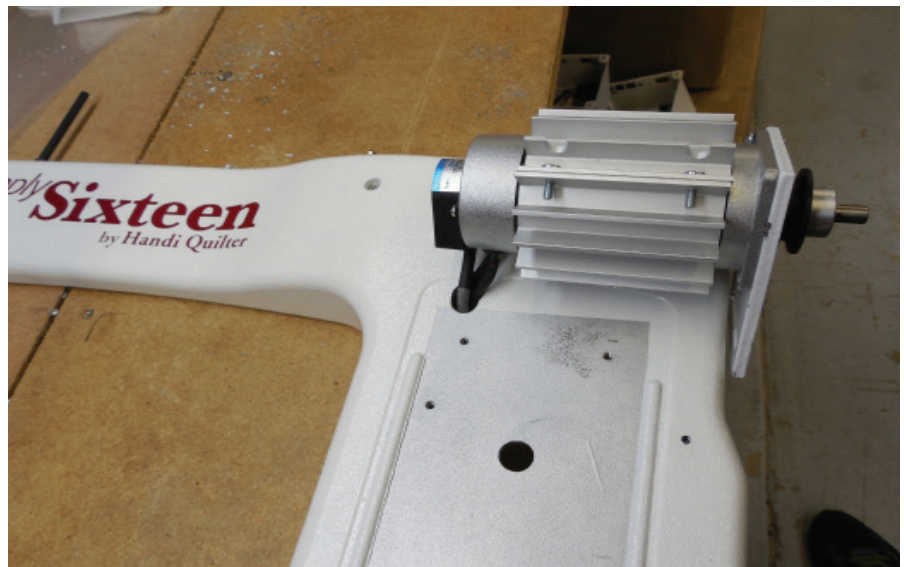


2. Insert the motor wires through the 1/2" drill hole.

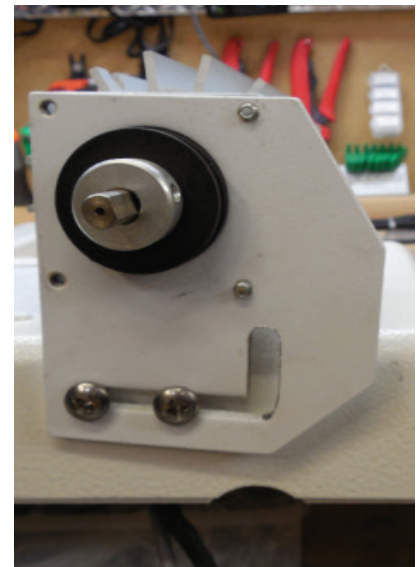
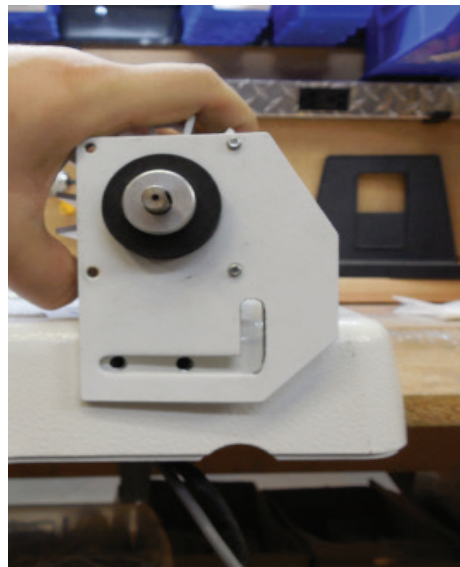




3. Ensure the wires are facing towards the casting.

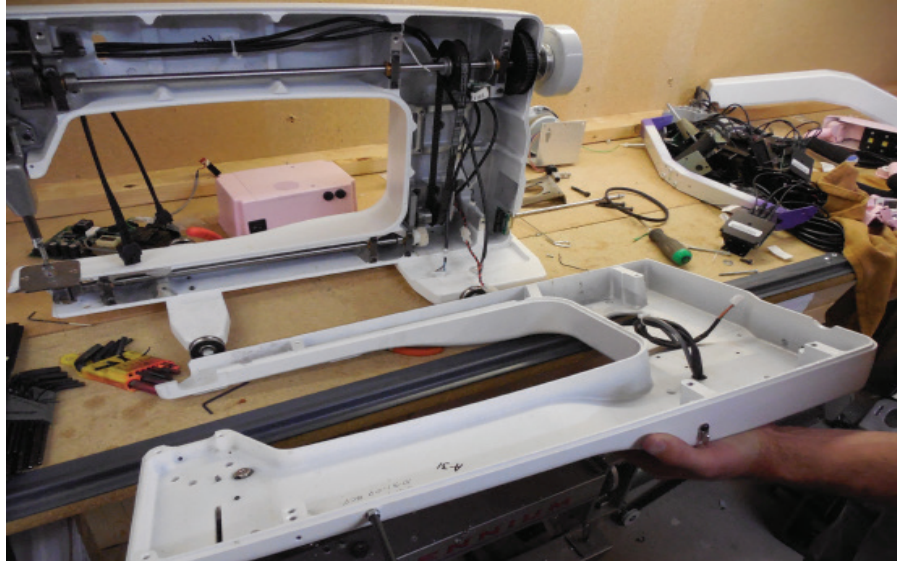


4. Align the motor bracket with the two drill holes.

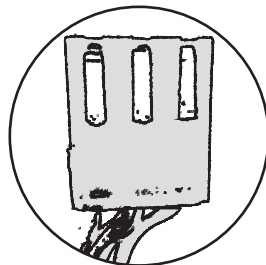


## Attach Side Casting

1. Align the side casting with the motor attached near the main casting.



2. Insert the UVW through the large bottom hole and the remaining two motor wires through the center hole.

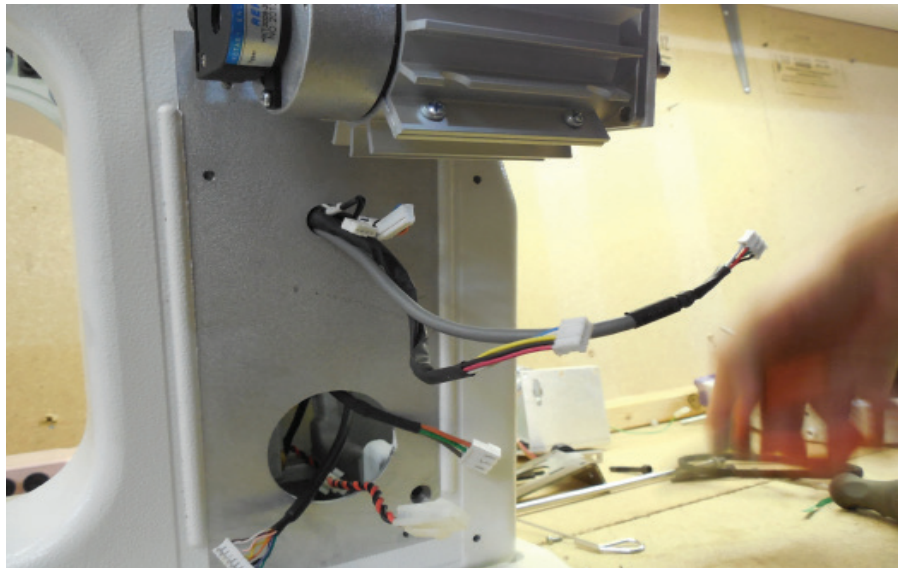


**U V W**  
**(3 pin)**

**Bottom Hole**



3. While realigning the side cover with the main machine assembly, push the handle bar, display, and power supply wires through the large bottom hole of the side casting.
4. Reattach the side cover using the screws you removed earlier.

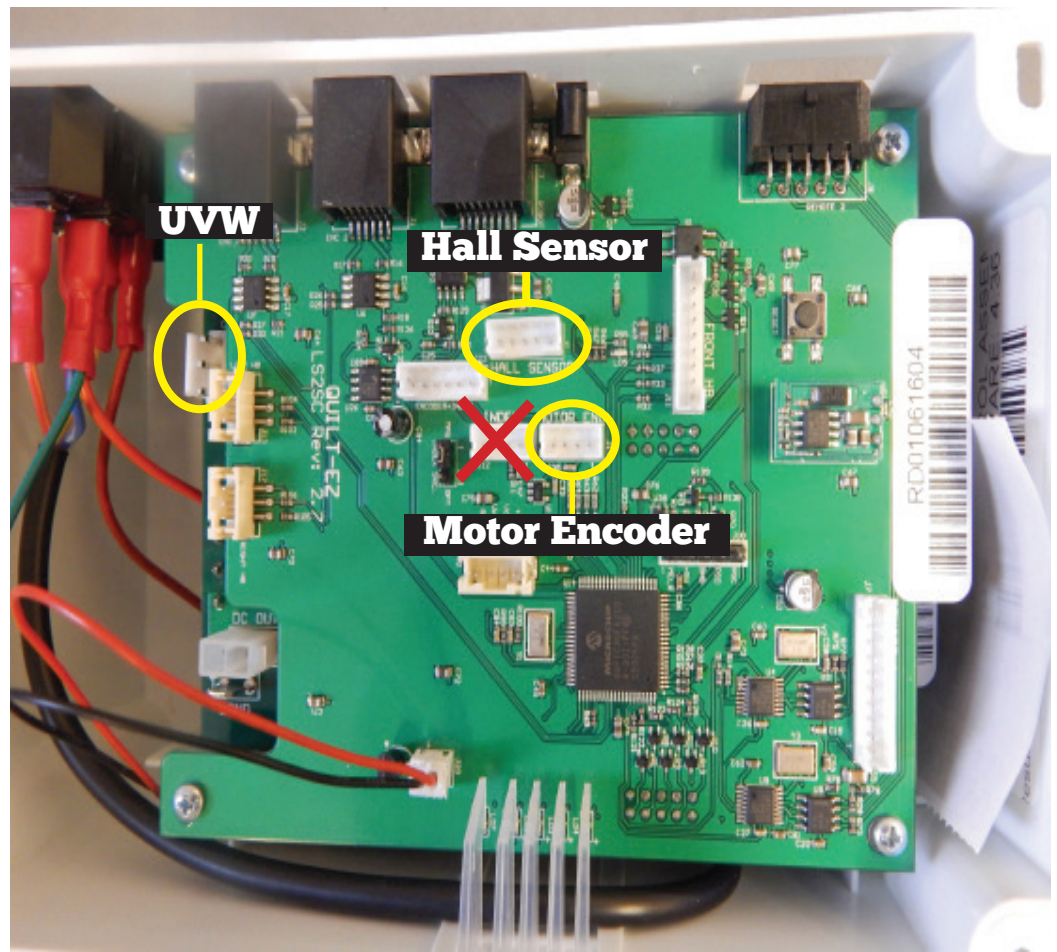


## Connect Motor Wires

1. Connect the motor wires as shown at right.

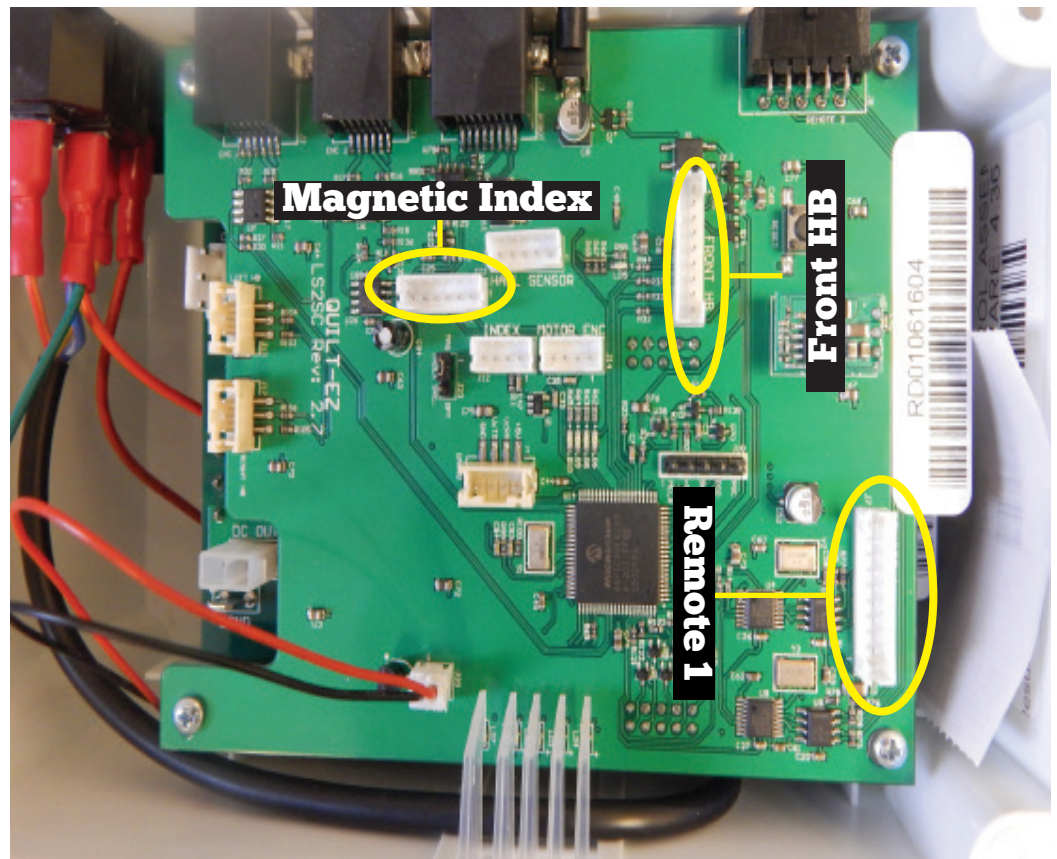
Each of the ports will be labeled. Be sure to plug into the correctly labeled ports on the PCB.

## Motor Wires



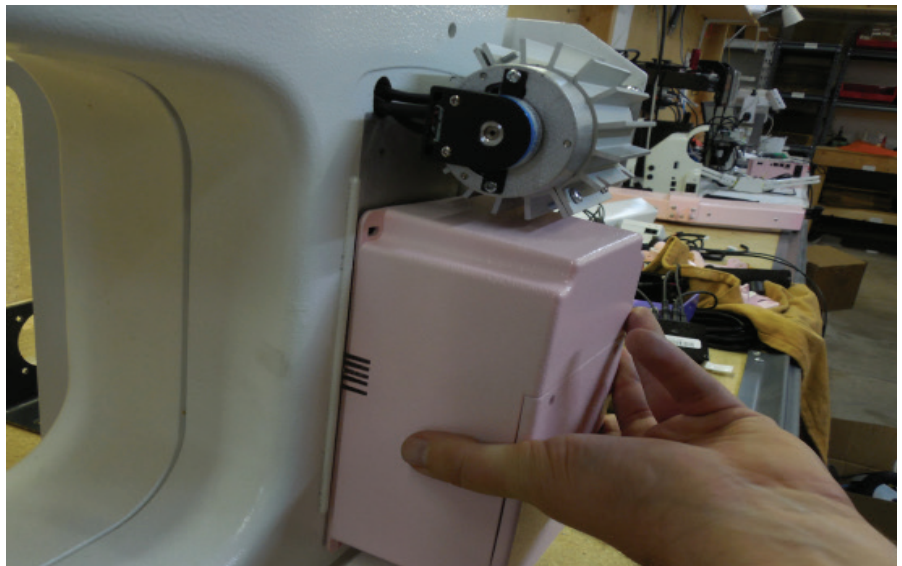
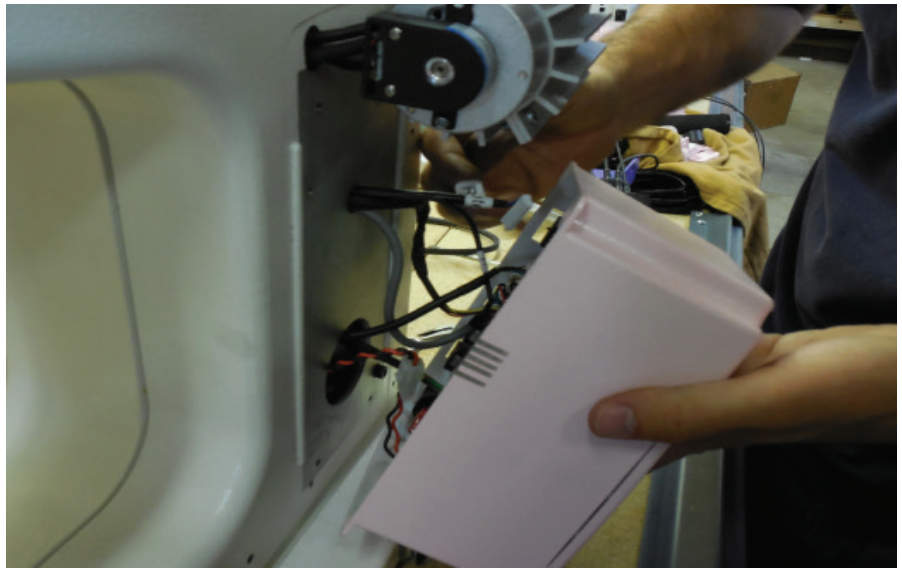
## Connect Index, Handle Bars

2. 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.



## Attach Control Box

1. Align the control box with the drilled holes.

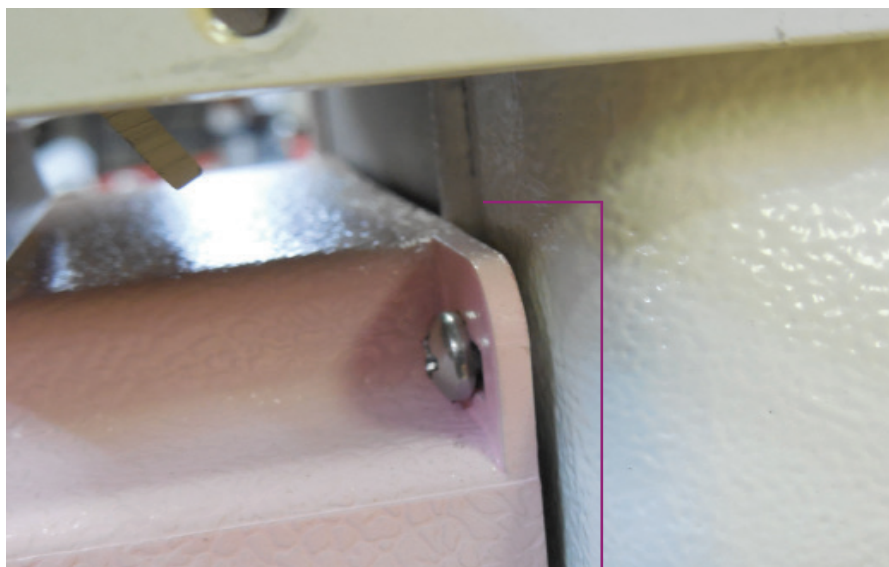




- Using the Phillips screw driver, attach the control box with four 8x32x1/2" screws.



3. Due to the raised casting, the control box have a small gap near the top.



**Raised length**

### **Attach Motor**

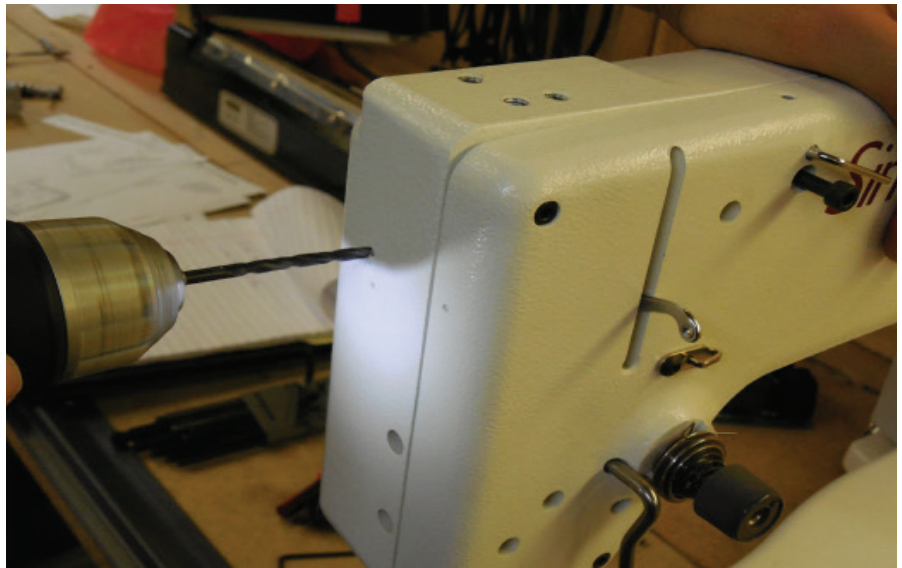
1. Attach the motor belt to the handwheel pulley and the motor pulley.



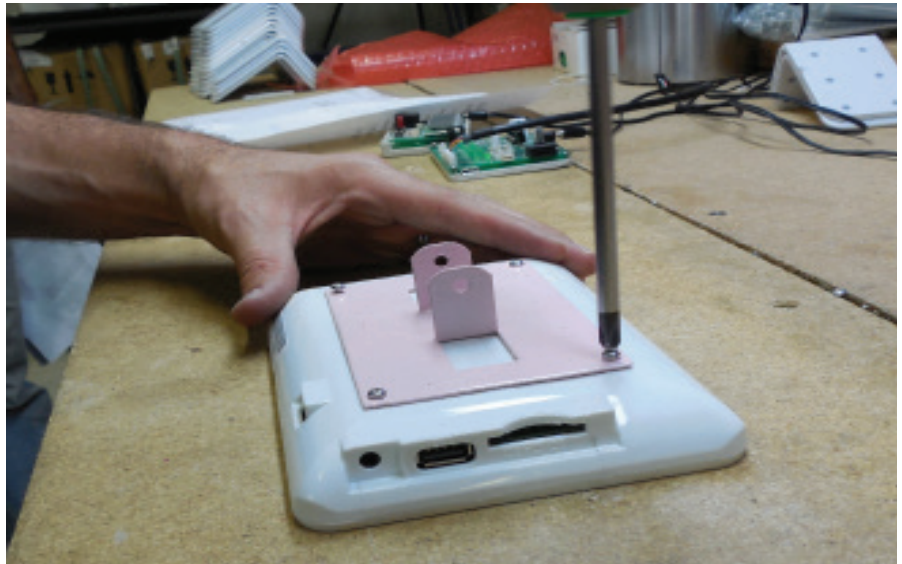




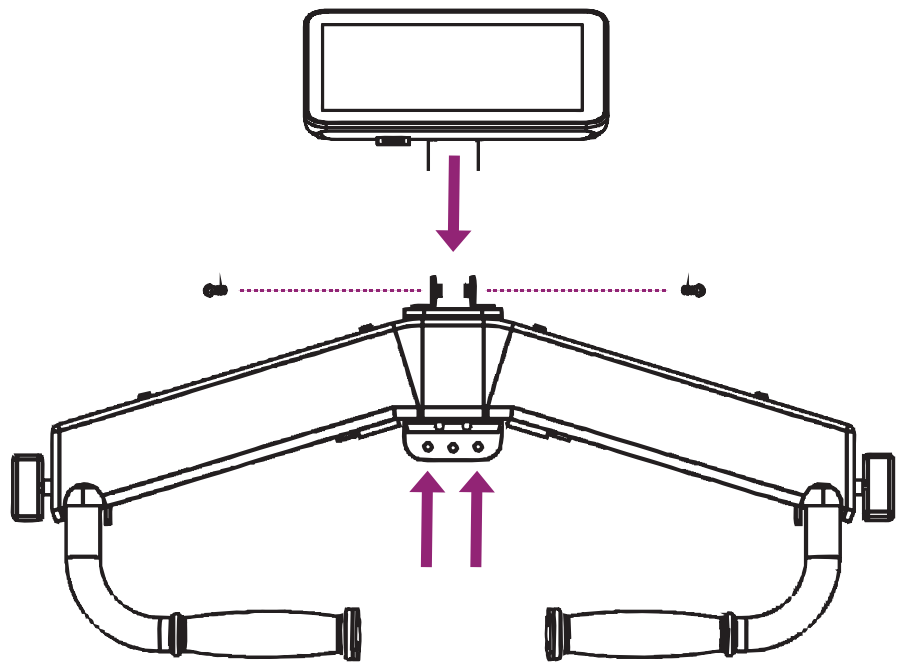
- Using a #?? drill bit, drill out the drill points.



- Attach the display bracket to the back of the display using the ?? screws.



- Using the included screws, attach the handle bar display to the handle bars.
- Using a #?? screw, attach the handle bars to the front of the machine.



7. Using a hammer and Punch, mark the 4 drill holes for the rear handle bars and display.

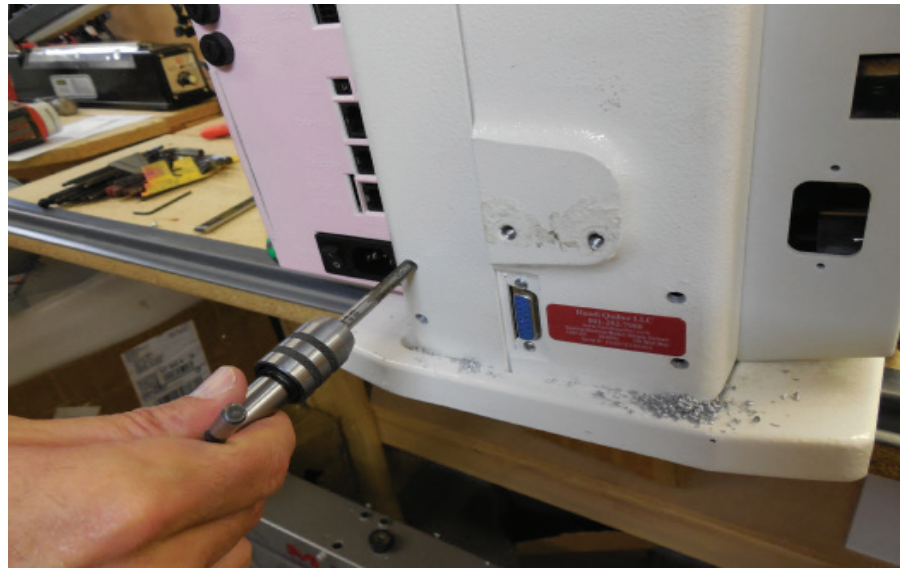


### **Drill, Tap Rear Handle Bars**

1. Drill the marked holes for the rear handle bars and display.



- Using the tap sizes designated on the rear display template, tap out the holes for the rear handle bars and display.



### **Attach Rear Handle Bars**

- Using a size ?? screws, attach the rear handle bars. Ensure that the rear handle bar with red-green buttons is on the opposite side of the front handle bar with red-green buttons.



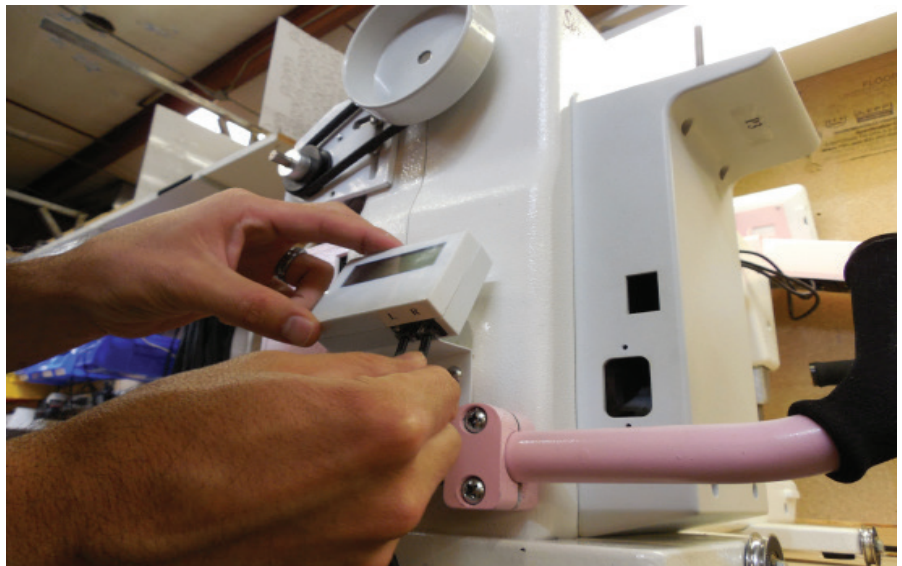


## Attach Rear Display

3. using the size ?? screws, attach the read display bracket to the machine.

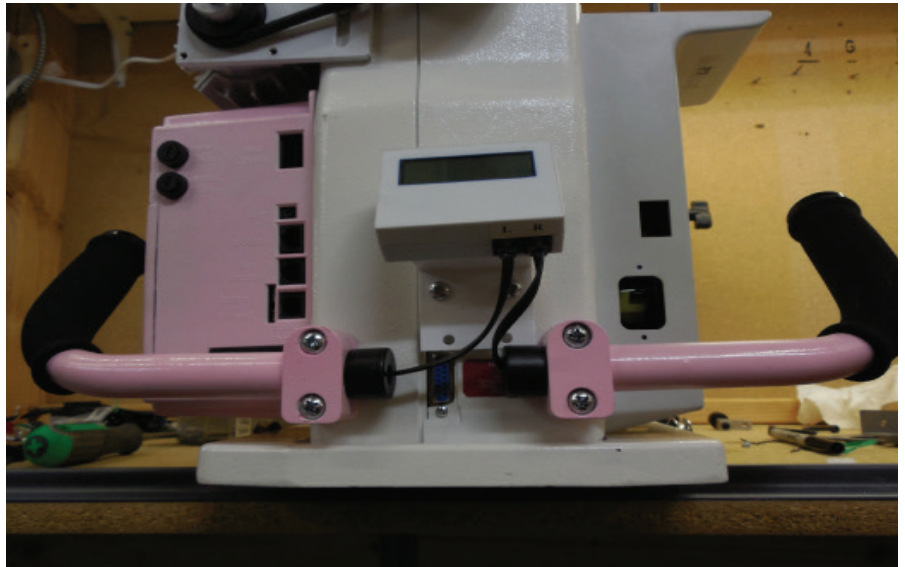
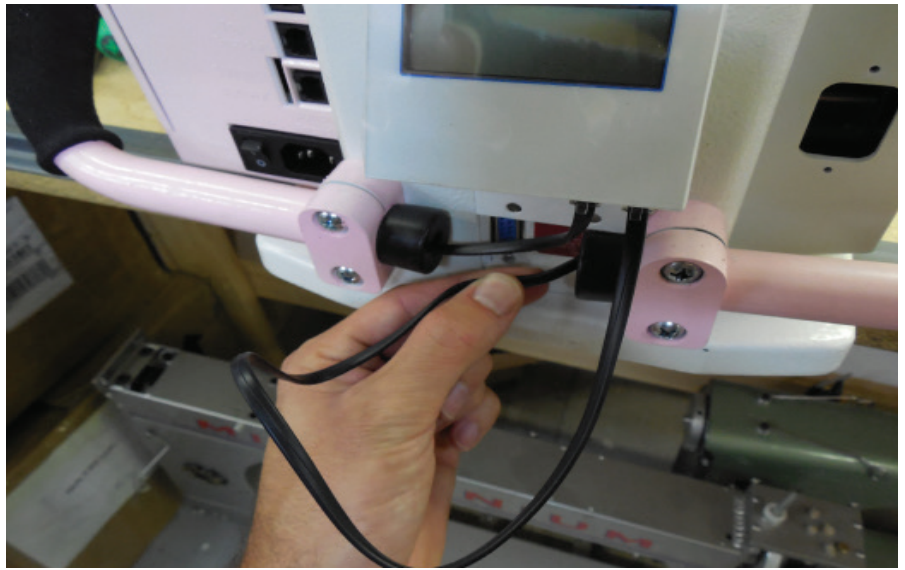


Plug the rear handle bars into the rear display.





Tuck the excess wire into the handle bar.



# Quilt EZ



*Perfect Stitch*  
Machine Upgrade

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