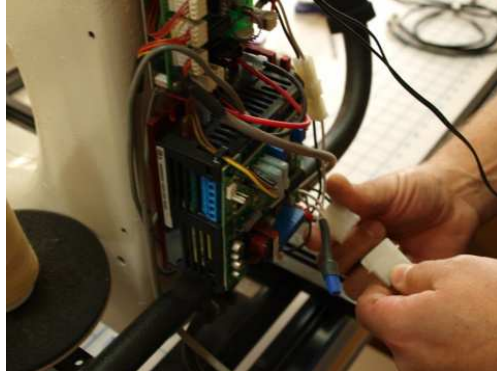


**PANTOVISION INSTALL FOR A-1 QUILTERS VER. 2.0**

Step 1: Disconnect the machine power cord from the outlet.

Step 2: Carefully remove the rear black plastic cover from the machine. This will require unplugging a few cables from the electronics behind the cover. See images below.

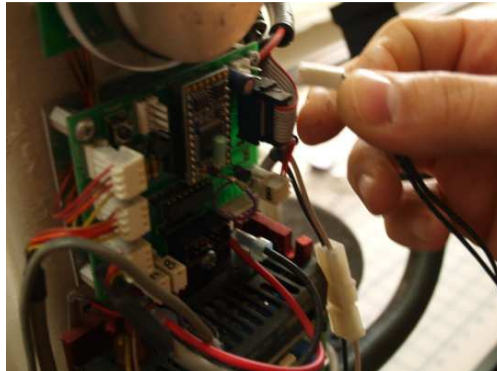
Unplug the power supply cable at the white connector



Unplug the ribbon cable from the board



Unplug the two-conductor plug from the board





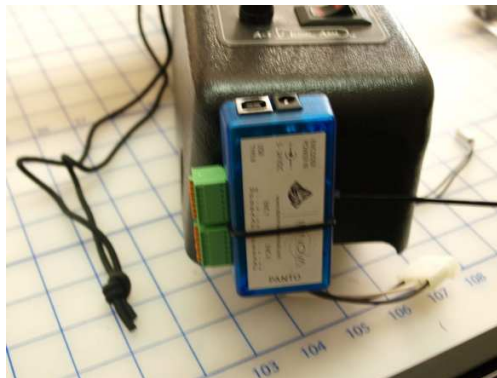
**ABM International, Inc.**  
Model: PANTOVISION

Series: PANTO FOR A-1 V2.0  
PANTOVISION

Step 4: Connect the PANTOVISION 4 pin connectors labeled X and Y to the controller board. Please note the connectors are keyed and will only plug in one way.



Step 5: With the cover removed, either nylon tie the blue PANTOVISION box to the bottom of the cover or use the provided hook and loop tape. Make sure the green connectors face to the left and the USB connector faces to the rear of the machine when installed (see photo below).



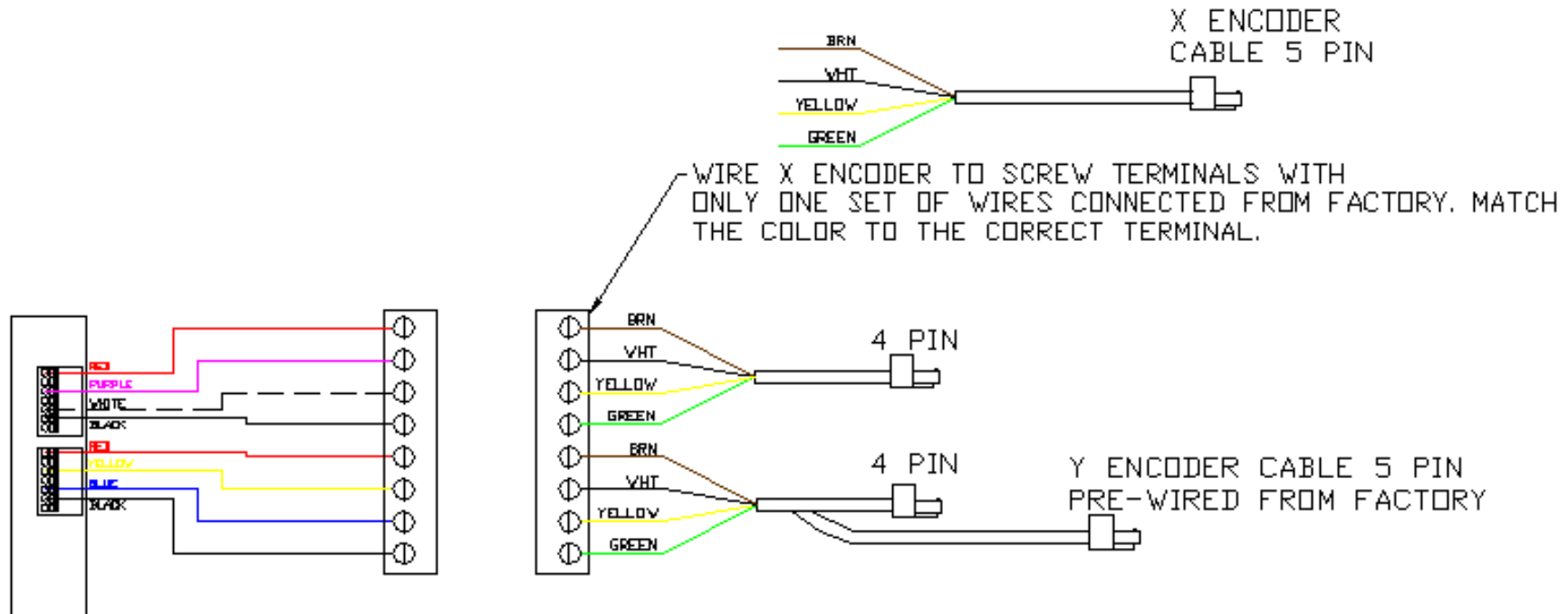
Step 6: Route the new encoder cables connected to the controller board along the left edge of the electronics. Reconnect the cover electrical connections and re-install the rear cover.

Step 7: Route 5 pin encoder cables in the same location as the original cables. Use the provided nylon ties if needed. Please note longer X-axis encoder cable is not wired to the PANTOVISION so that you can route the cable through the carriage easily.

Step 8: Connect the cables to the encoders. Make sure that the BROWN wire is connected to the terminal labeled +5V and the GREEN wire is connected to the terminal labeled GND. If not, stop immediately and contact ABM International. FAILURE TO DO SO WILL CAUSE UNREPAIRABLE DAMAGE TO YOUR ENCODERS AND POSSIBLY YOUR CONTROLLER AND PANTOVISION.

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**ABM INTERNATIONAL, INC.**

Step 9: Wire the long encoder cable to the green screw terminals that only have one red, one green, one yellow and one black wired into the connector of the PANTOVISION. Note that when wired correctly, each screw terminal should contain two similarly colored wires. See image below.



Step 10: Using nylon ties, tie up the wired ends of the encoder cables at the blue box so no strain is placed on wires of the green terminal block. Check to make sure the encoder cables do not snag or get caught on the machine as it is moved left to right or front to back.

Step 11: Connect the power cord of the machine to an available outlet and confirm that the A-1 stitch regulator still works correctly. Check left to right and front to back.

Step 12: Connect the USB cable to the blue box and the PC or tablet being used.

Step 13: Refer to the software installation guide for final testing. Note: the configuration file should have enc\_directions=0 and enc\_bpi=18500 for X and Y.