

Replacing the carriage (Y) transmission FJE

Procedure P/N 110753 REV 0



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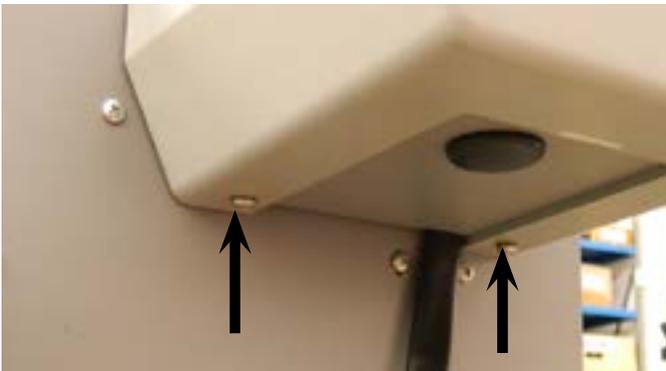
Tools required: Phillips scwdriver, 9/64" Allen wrench, a wire clippers and a socket wrench 11/32" with long extension.



Step 1: Turn off and un-plug the machine.



Step 2: Remove the right end cover by removing the screw as shown above. 2 more screws need to be removed as shown in step 3. (Phillips screwdriver)



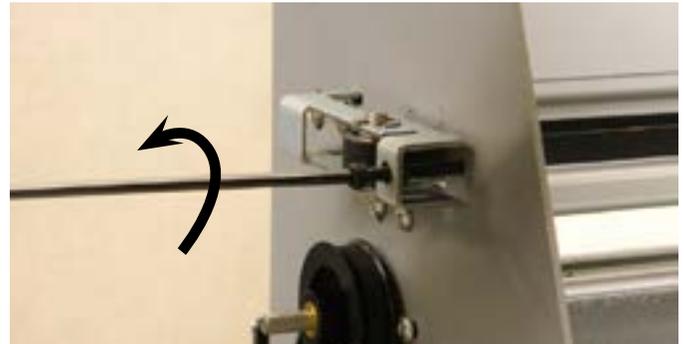
Step 3: The 2 screws on the bottom of the right end cover need to be removed. You can now remove the cover by pulling straight out from the machine.



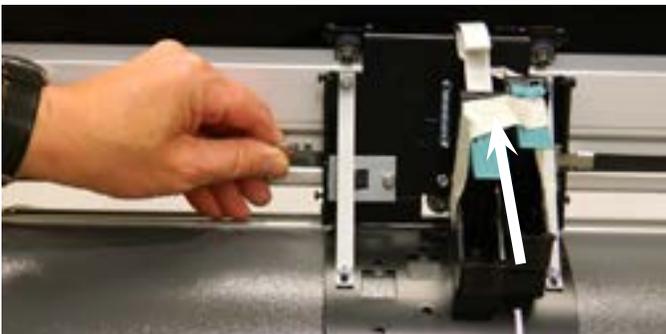
Step 4: Remove the left end cover by removing all 3 screws. One on the side, two on the bottom.



Step 5: Remove the carriage cover by **loosening** all 4 screws, (2 shown, 2 on the left side). [**You do not need to remove these screws to remove the carriage cover**]. The cover slides forward.



Step 6: Turn the tensioner screw 2 full turns counter clockwise to loosen the Y belt with a 9/64" Allen wrench.



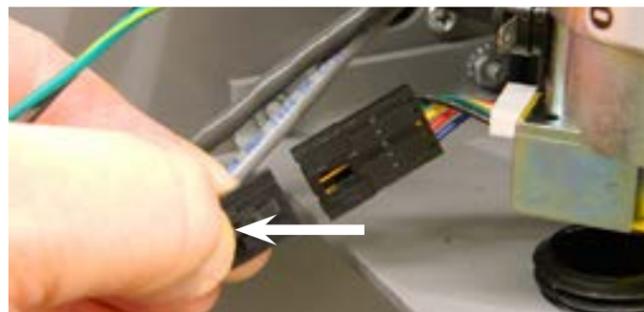
Step 7: Remove the Y belt (left and right clips) from the carriage. Support the carriage with the other hand if needed.



Step 8: Shown are the connected wires that you need to unplug.



Step 9: Grip and hold tight the right orange connector, (brown wire) then pull out towards you. DO NOT PULL BY THE WIRE. Do the same with the orange clip (black wire) on the left side.



Step 11: Disconnect the black motor wire connector by pressing the release clip then pull apart.



Step 13: Remove the keypad ribbon cable shield by peeling the Velcro apart and then place aside. You will re-attach this shield later.



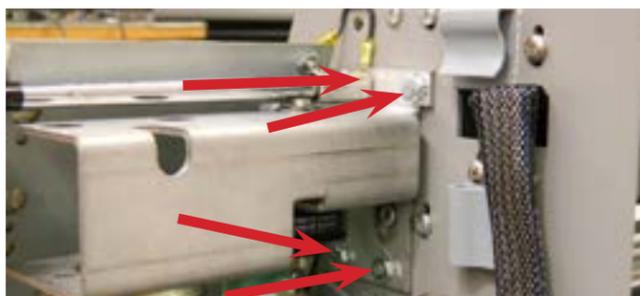
Step 15: While holding the Y transmission, remove the key pad ground wire from the Y transmission bracket. Leave the other end attached to the keypad.



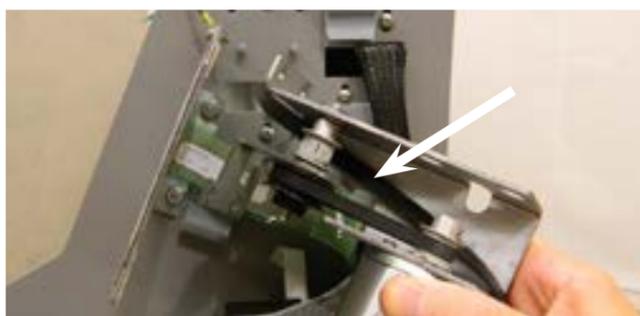
Step 10: Cut the cable tie with the wire clippers.



Step 12: Remove the 1 screw holding the ground wire and move that wire off to the side. You will re-attach the ground wire and the screw to the new transmission.



Step 14: Remove the (4) locking nuts that hold the Y transmission with a 11/32 socket wrench (long extension).

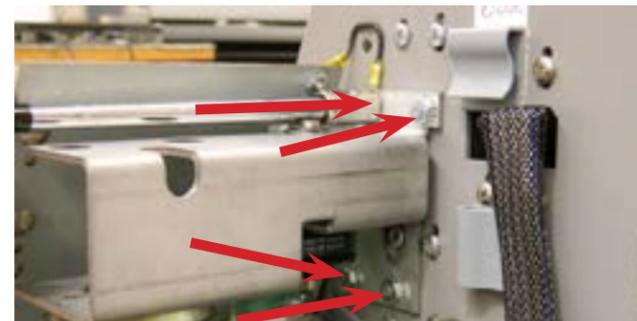


Step 16: Remove the old Y transmission and allow the long black Y belt to slide out from the gear, pulley and bracket.

Installing the new Y transmission.



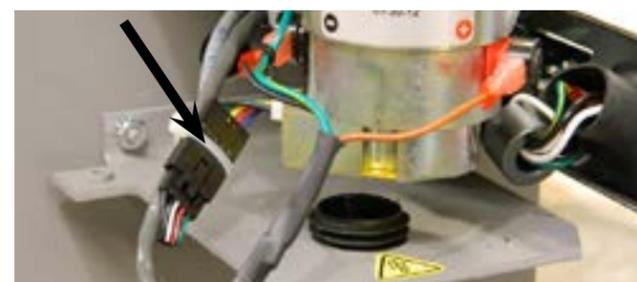
Step 17: You are ready to install the new transmission. With the long black Y belt threaded over the pulley wheel and back through the slot in the platen, place the new transmission over the threaded studs. Make sure that the green ribbon cable (white arrow) is NOT in the way of the threaded studs.



Step 19: Tighten the 4 locking nuts with a 11/32 socket wrench (long extension).



Step 21: Place the ground wire back on the transmission bracket as shown. The same one that you removed in step 12. With the new Y transmission, you will need to remove this screw first.



Step 23: If you have it, wrap a cable tie, around the black connectors and the 2 gray wires to secure all 3 elements.



Step 18: Place the keypad grounding wire as shown. It is attached outside the bracket. You can hand tighten the locking nuts at first to hold the transmission in place.



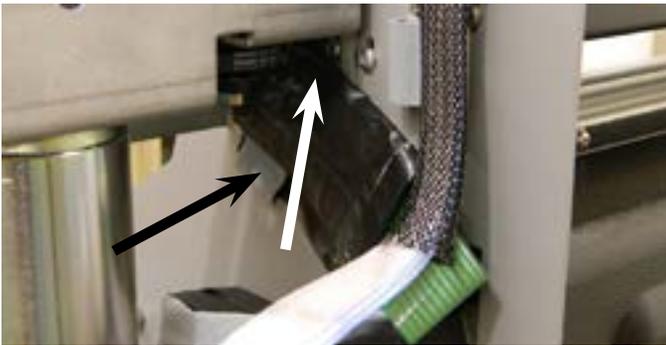
Step 20: This is how the transmission should appear with all 4 locking nuts installed. NOTE: The green ribbon cable (white arrow) is clear of the locking nuts.



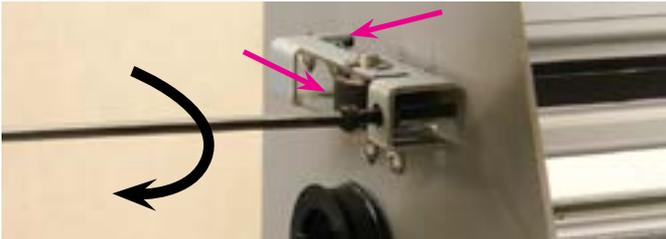
Step 22: Replace the positive and negative wires back on as shown. Clip the black connectors together by aligning the locking latch and pressing together. You will hear a clicking sound when clipped together.



Step 24: Re-wrap the ribbon key pad cable with the shield as shown.



Step 25: Place the protected ribbon cable in the clip as shown. NOTE: The plastic clip holds the shielded cable secure along with a piece of VHB tape already adhered to the back of the black shield which is pressed onto the end plate. That tape prevents the shield from rubbing on the pulley wheel (white arrow).



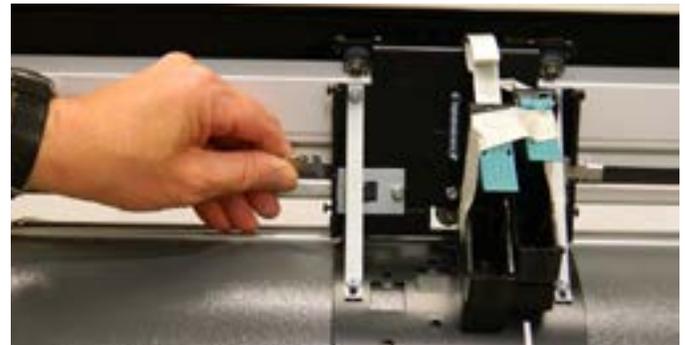
Step 27: Tighten the Y belt by turning the tensioner screw 2 full turns clockwise with the 9/64" Allen wrench. NOTE: Make sure that the tabs (arrows) on the bracket align with the holes in the platen.



Step 29: Before installing the end covers, connect cables, power on the machine, and run a plot to check the quality. If needed, check the calibration as instructed in the user guide. If it fails, check the belt tension. Call Ioline support for additional help if needed.



Step 31: Install the 2 bottom screws in and tighten.



Step 26: Re-attach the Y belt to the carriage. Attached the right side first. You will need to support the carriage with your free hand for attaching the left side.



Step 28: Place the carriage cover back on by sliding the cover forward over the threads of the screws then re-tighten all 4 screws. The carriage should move smoothly left and right along the rail by hand.



Step 30: Install the right end cover back on and attach with 1 screw as shown.



Step 32: Install the left end cover with 3 screws (1 on the side and 2 on the bottom). ...FINISHED