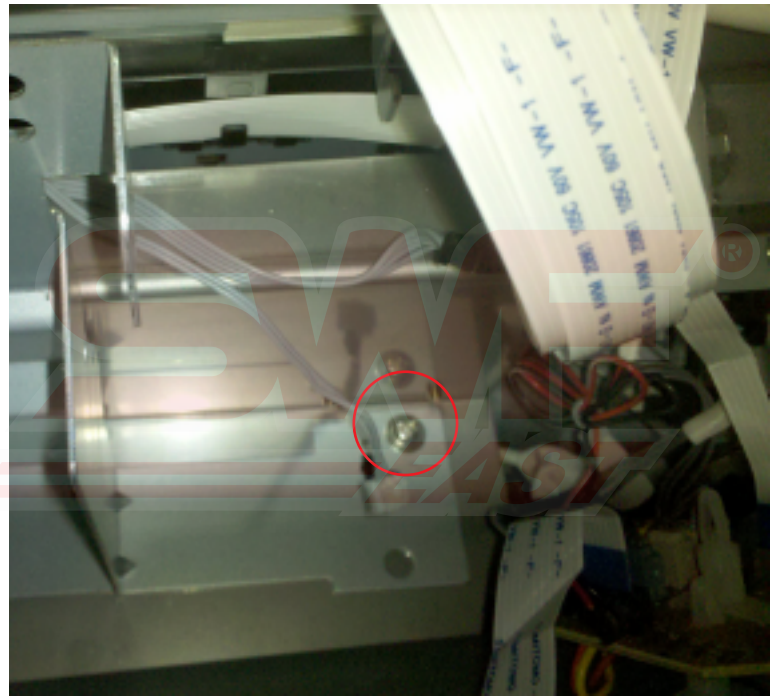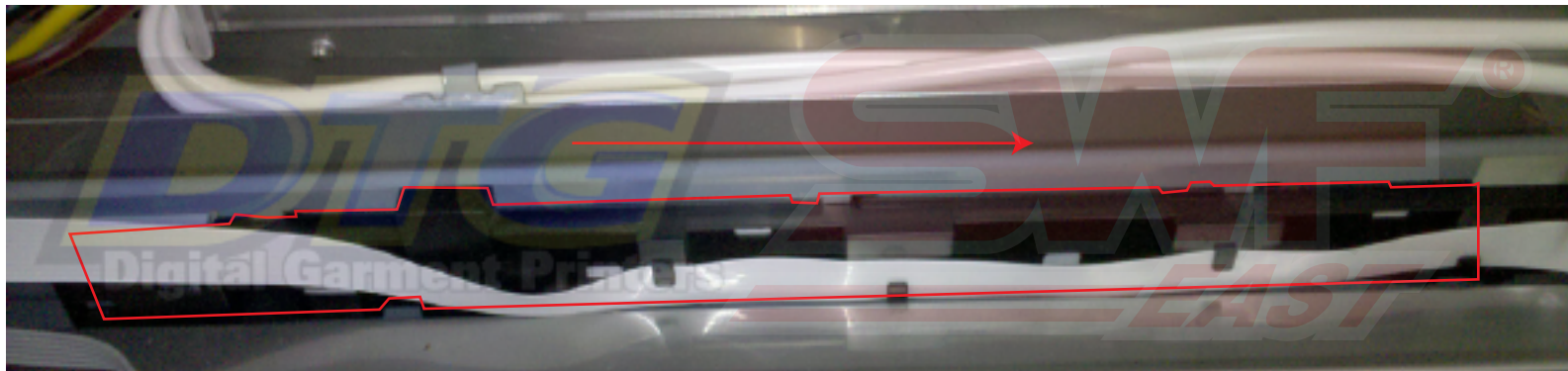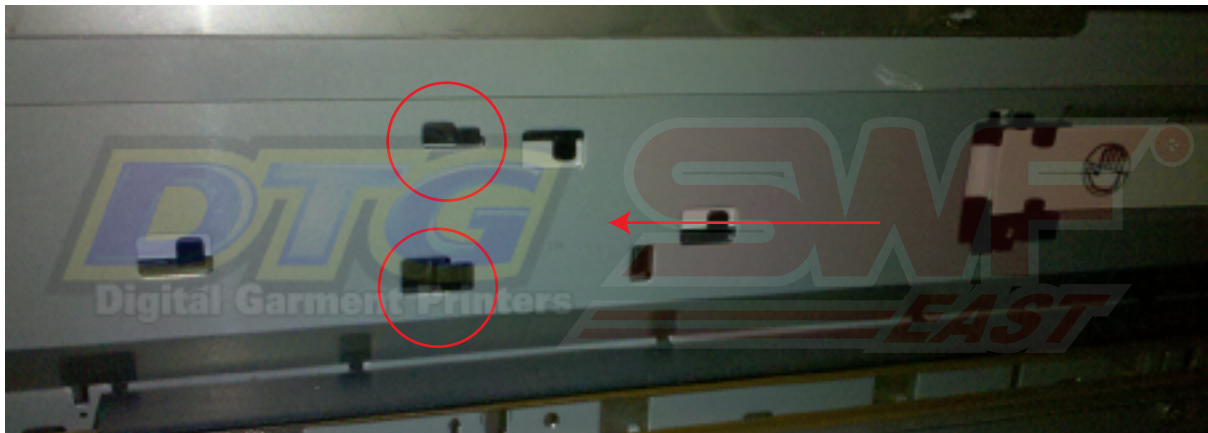13) Remove the screws from the left and right side of the mainboard assembly back piece.




14) Remove the mainboard assembly back piece. You can now see the ribbon cable holder, outlined in red below.



15) The ribbon cable holder is secured with plastic tabs sticking through the front of the machine. Some of these tabs are highlighted in the picture below.
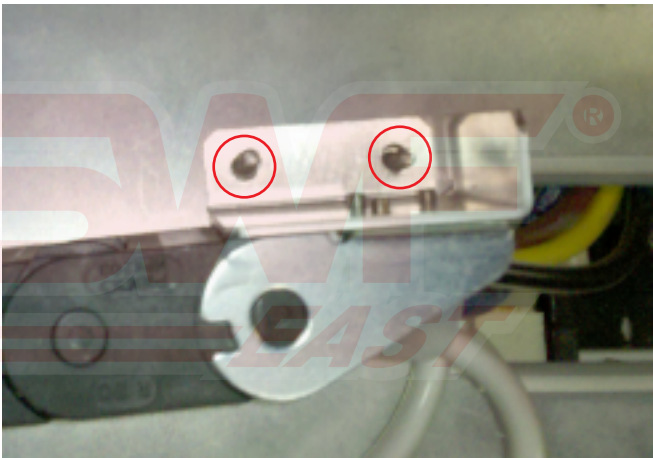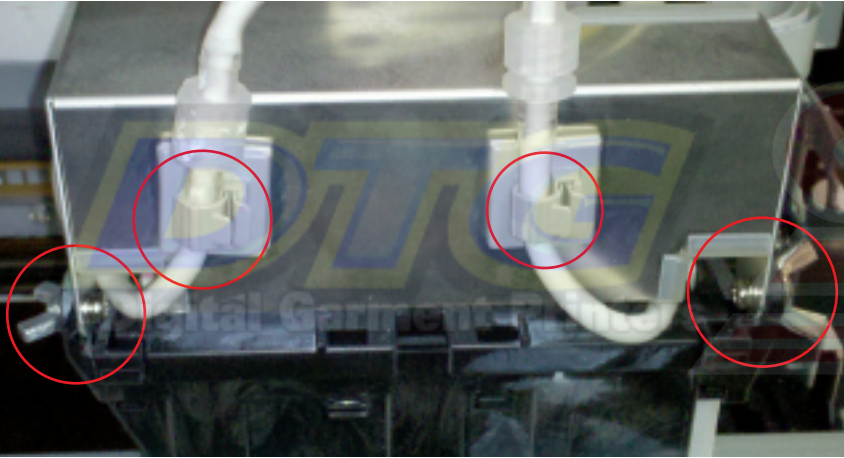


16) To release the ribbon cable holder, slide it in the direction of the arrows in these two pictures to release the plastic tabs. The first picture is taken from the back of the machine. the second is from the front. The arrows are going the SAME direction.

17) After the ribbon cable holder has slides out so that the plastic tabs are free, it must be removed. The metal hook on the right side of this picture will cause the holder to break if you force it out, so be very gentle and careful to not break the holder as you work it free of this hook.
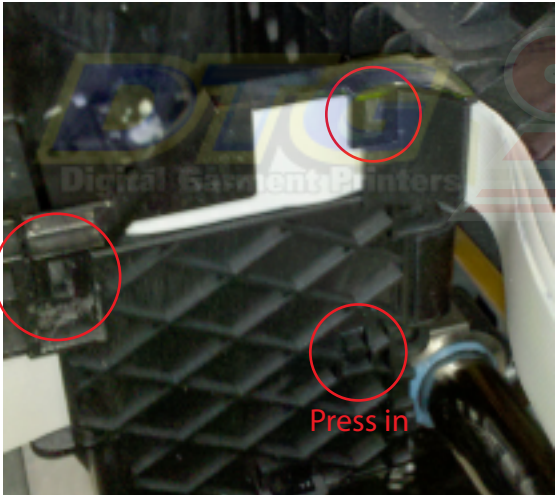
18) It is time to remove the ribbon cables from the print head. Begin by unscrewing the wingnuts from either side of the head carriage. Unclip the white ink tubes. Your head carriage cover may be different than the one pictured here. Lift the tractor off of the two pins onto of the carriage cover, and then carefully remove the carriage cover.

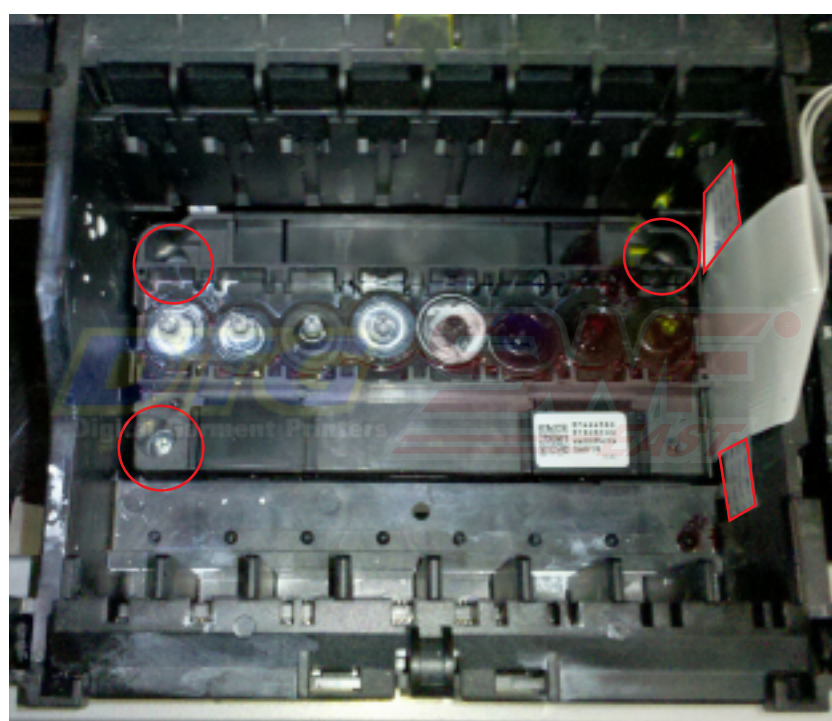19) Lift all of the dampers off the print head. Be careful not to squeeze the sides of the dampers so that you don't get ink everywhere. Be especially careful not to drip ink on the print head itself. Leave the dampers hanging over a paper towe for now.

20) Use your fingernails to gently pry up the tabs holding the ribbon cable cover. Use a screwdriver to gently press in the bottom tab, and slide the cover up and off.

Press in

21) Unscrew the three screws securing the print head. The se are #1 screws, and it is VERY important that you do not strip the threads when reinserting the print head. When reinserting the head, back the screws up until they "click" into place before driving them.

22) Lift the print head out of the carriage, being careful to not damage the ribbon cables highlighted in this picture.



23) Unplug the cables from the print head by gently pulling them straight out of their connectors. If you see ink on the end of the ribbon cables, like the blue end pictured below, that is why you are replacing them. In this case, the print head will have to be replacerd as well. Most head cable problems are not this obvious.



24) Begin unthreading the ribbon cables from the holder from the end in the left of this picture first. There is one ribbon cable on the back side of the holder which also must be unthreaded from the holder.



25) To remove the ribbon cables from the right side of the holder, hold them as pictured below, then slide them down to free them from the top tab, then up to remove.

26) You can now pull the head cables out completely. Make sure to keep them together. Before putting the new head cables in, lay the old obnes out on a table. Then lay the new ones next to them. Position them exactly the same, then LABEL THE NEW CABLES AT THE MAINBOARD END with your Sharpie.

28) Put a small piece of tape on either side of the ribbon cables as pictured. This tape is just to prevent the ribbon cables being damaged as you pass theem through the slot on the front of the machine. The tape WILL have to be removed in order to get the cables back into the holder, so don't make it impossible to remove.



29) Reassembly is everything we just did, in reverse. Use this guide to see how things are positioned, and which screws you should use. Generally, screws with built-in washers screw into the frame of the machine, and pan head screws (with now washers) screw into parts.

NOTES: When reassembling, the most frustrating part is getting the ribbon cable holder back into position. Often there are pieces of tape on the front side of the machine that prevent the plastic tabs from going back into the proper slot. Temporarily move the tape if necessary.

When plugging the mainboard back in, double check to make sure that the four wires are plugged back in before powering the machine back on. One of them is quite short and has a tendency to pop out if the mainboard assembly is moved around.