

For Technical Assistance Please Call Toll Free **1-877-4BROTHER** Email: <u>tsupport@brother.com</u> Website: <u>https://www.brother-usa.com/GarmentPrinters/OwnerLogin.aspx</u>

Determine the condition of the printer before starting the preventative maintenance service. Discuss all issues with the owner/operators and verify if any problems may be an application issue instead of the printer's performance. You should ask about concerns before visiting the customer and again on the service date.

Perform a nozzle check on the CMYK and White ink to see the actual nozzle performance; correct as needed.

The following steps will walk you through the preventative maintenance in a way that will help use time efficiently.

Check the firmware version on both panels and upgrade to the current version available if necessary.

• Power off the machine and remove the screws on the lid and top front cover that are inaccessible when the lid cover is open.



• Open the lid, remove the ground wire from the lid and bypass the lid sensor.



- Turn the power on to the machine. After the boot-up process, eject both platens and program the machine to retrieve the white ink. Continue with the next steps.
- Remove any items on the top covers of the printers and from on the top shelves above the CMYK and White ink bays.
- Start removing the platens and platen trays along with the machine covers. When the ink retrieval is completed, start the tube cleaning process. Complete the tube cleaning on all four white tubes. Continue with the cover removal as the tube cleaning progresses.



Once the tube cleaning has been completed, power off and remove both panels and all three top covers. Verify that the tubes have been cleaned completely. If the tubes need to be cleaned again, wait until reassembly to perform a second tube cleaning. Be sure to remove the bezel from the side of the left top cover. Only remove the silver Phillip Screws from the top covers; DO NOT REMOVE any of the black flat Allen head screws. These screws secure the parts for the components of the slides.



With the power off, inspect all eight ink tubes and link arm supports and connectors. Clear away any dust, debris etc. Take care not to pinch or cause the tubes to "kink". Manually lower the cap rubbers so you can manually position the carriages to be able to reach all sections of the ink tubes.

Chan & Inspect Covers etc.

Clean the top of the linear bearing rail that the carriages ride along.

Clean and inspect the CR belts, motors, encoder springs and gears.



Clean both Platen drive belts. Remove the cover over each platen motor; inspect and clean both motor gears and belts. Do not apply grease at this time. Wait until all sections are cleaned so all sections that are to be greased can be done at the same time.



Inspect and clean the Platen tray support rails. Move the platen base so you can clean the entire rail. Tighten any loose screws. Clean the platen sensors and inspect the sensor harnesses.





Remove the covers on the two control boxes. Clean and inspect the main and power pcb's. Verify that all connections are secure. Attach the cover when completed.



Remove the cover over the Power PCB and clear away any lint. Inspect the connections and check the harness and on/off power switch. Attach the power box cover when done.





Clean both panels and inspect all connections including the FFc and print button harness and switch.





Inspect and clean (as needed) the ink bay areas. Check the operation/movement of the cartridge and sensor plates in the detection guide plates. Check the connections on the sensor pcb A & B and the harness to the maintenance pcb.



Check for ink splash inside the bay which would indicate that people are inserting the ink cartridges with too much force. Point this out to the operator/owner or supervisor if this is evident.

Thoroughly clean the cap rubbers and wiper sub assembly. Inspect the capping tube connections under the cap rubbers.



Check the capping tubes for wear at the point where they pass into the interior of the maintenance unit.



Change the wiper cleaner cartridges if necessary.





Inspect the micro switch for the Wiper Cassettes. Verify that each switch is mounted correctly and that the harnesses are anchored properly.



Inspect the cap sensor, harness and motor gear on both Maintenance Stations.



Inspect the Wiper Sensor, Sensor Dog and the clearance from the sensor as it passes across the sensor. Inspect the wiring harness and the anchors.



Inspect both Carriage pcb's. Check all FFC sockets. Do not clean the encoder sensor at this point.



Inspect the FFC and guard ribbons from both Carriage pcb's to the CR Relay pcb's and on to the control box. Inspect all connections on the CR Relay pcb's. Check the Ink Return 2 Tubes for damage.







Inspect the four Ink Return 1 Tubes and the elbow joints, filter down to the Head Tubes and the tube connectors. Lightly squeeze the elbow tube joint (90 degree) back into the Ink Return 1 Tube while supporting the back of the Ink Return 1 Tube. Lightly squeeze the tube joints, filter, and head tube to verify a tight compressed fit.





Inspect/clean both Maintenance pcb's. Verify that all of the connectors are secure. Clean the plastic shield protecting the Maintenance pcb if necessary.

Remove the two Phillips screws at the top of the black box (Rotor Holder); they are coated with red loctite. Lift the rotor holder up and outward so the pump tube will be accessible in the pump housing. Apply a small amount of white lithium grease along the top of the tube, (Molykote EM 30L). Do this to the CMYK and White pumps. Make sure the pump sensor and the window in the rotor gear are free from grease, ink or other debris.





If ink is spilled in the area, remove the four large Phillips screws around the pump bracket and pull the bracket outward with the pump assembly still attached. You will only be able to tip the bracket so you can examine the suction tube connections of the capping tubes and branch fitting. You will have to remove the end of the branch fitting from the pump tube, (on the upper right of the pump housing as it appears in the picture below), and the Breaker tube that connects to the top of the suction tube of the air intake solenoid, middle solenoid, to the drain plug in order to pull the bracket away for more access.



Wipe away old grease and lint from the upper and lower grooves on the CMYK and White carriage linear bearing rails. Apply small amounts of white lithium grease (Molykote EM 30L), in several spots in the upper and lower grooves of the CMYK and White carriage linear bearing rails.





Apply small amounts of white lithium grease (Molykote EM 30L), in several spots along the guide bars of both platens. Be sure to apply grease in front and back of the platen base so the grease will be spread evenly by the platen movement.



Apply grease (Molykote EM 30L), in several spots along the guide rails of the wiper. Be sure to apply small amounts to the front and rear of the bushings so the grease will be spread along the entire length of the rails. Apply grease on the gear rack and in the positioning cam track of the wiper.



Clean both encoder strips. You will need a lint free cloth and Isopropyl alcohol (90% pure or higher). Wear plastic gloves when handling the encoder strip. Inspect the strips for any damage. Clean the strips with the cloth moistened with the alcohol. Lift the strip out of the encoder sensor and pass the edge of the cloth through the groove of the sensor.



Insert each encoder strip back in the sensor. Examine the sensor from the side to determine if the strip is centered in the sensor; adjust if needed.



Attach the top three covers and insert the bezel in the left cover. Connect the panels and print buttons. Insert the wiper cassettes and power on.

Enter the Advanced Menu and run the CR Origin on both maintenance stations. You should use the Cr Origin Gauge to set the origin.









After completing the CR Origin procedure, power off/on the machine to verify the carriage will position over the caps properly.

Eject both platens and then start the CR Speed Adjustment on both carriages. While this is running, start installing the platen trays and platens. Start installing the remaining covers until the CR Speed Adjustment is completed. When the CR Speed Adjustment is completed, power off/on to verify the proper carriage movement and positioning. Upon boot-up completion, start the white ink initial cleaning and perform a powerful head cleaning on the CMYK print heads. Complete the cover installation as the ink is loading.

When the white ink is loaded, power off and remove the item from the lid switch and complete the lid and top cover installation. Be sure to connect the lid ground wire.

Connect the USB cable to the PC used to send designs to the printer. Print a nozzle check on the White and CMYK to verify that all nozzles are firing; correct as needed.

Run the GT Maintenance Menu; Head Firing Adjustment and White/Color Alignment. Download the log data after completing head firing and alignment procedures and send the log to Brother Technical Service.



Print several designs to verify operation with the customer. The PM has now been completed.