



Preparation for an Extended Idle Period of the GT-381/361

This document is for GT printers that have white ink introduced to the white side. If you are running a CMYK unit only it is advised to thoroughly clean the printer and perform a nozzle check on the print heads before powering off the unit. Instructions are below on how to clean the printer. For a CMYK unit only be sure to conduct a nozzle check every 2 weeks to check on the health of the printer.

If the printer is not to be used for an extended period of time, the white print heads and ink tubes will still need to be maintained. The tube cleaning will have to be performed once every two weeks during the period of time that the printer is not used. This is not a storage process of the printer. Storing the printer without proper maintenance **WILL** damage the print heads, Ink Delivery System and Maintenance Station.

If the tube cleaning **IS NOT** performed at least once every two weeks, the print heads may dry and clog, rendering them unusable when the printer is to be returned to use.

To place the machine in a non-use status, you must have a supply of maintenance solution for performing the tube cleaning process during the term of non-use, a supply of the vials of the wash solution for proper cleaning of related parts to be maintained, and a supply of cleaning swabs to clean the cap rubbers, wipers and the nozzle plates as needed. You must have Capping Cartridges to seal the ink needle from air input into the ink tubes. Air input through the ink needle or directly through the nozzle plate without solution being returned will eventually dry the nozzle plates and render the print heads unusable.

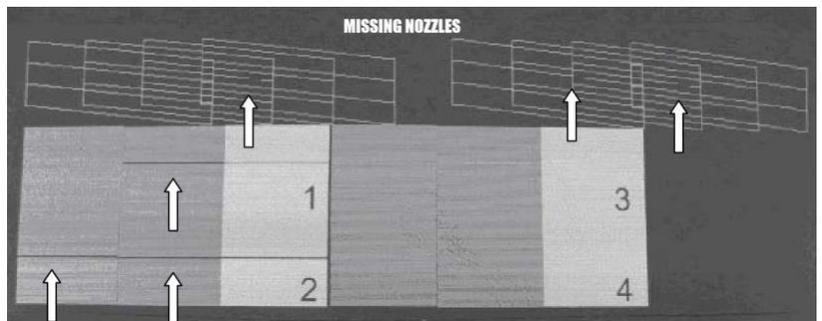
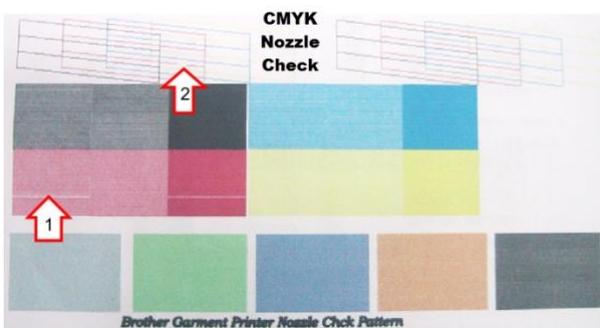
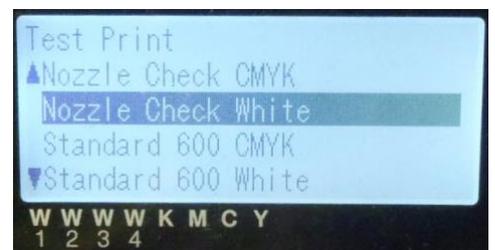
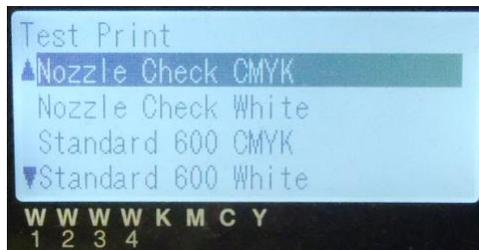
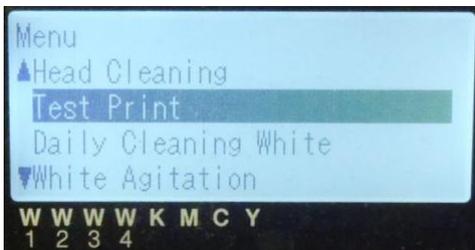
Items you will need for long idle periods of the printer:

- Supply of maintenance solution (5L container PN is BGC5000S5K10002)
- Wiper Cartridge, swabs, wash solution Glove kits (need 2) PN SB3168001
- Capping Cartridge PN SB3047001 (4 needed for GT-381, 2 needed for GT-361)

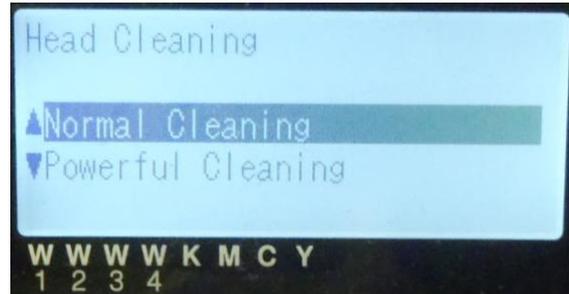
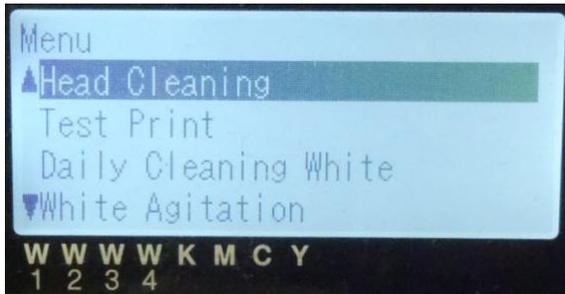
You can order the vial of wash solution separately, part number **SA6248401** and a package of 100 swabs is art number **SA5784001**. These parts can be ordered from our Partner Portal, you can setup an account to order from our supplies department, <http://www.brotherdtg.com/supplies>. You will need to **click learn more to begin setting up an account** but you can review on how to setup an account with our helpful video, <https://vimeo.com/282358432>.

You should verify that all of the nozzles fire properly before you perform the tasks necessary to make the printer ready for the extended period of non-use.

After performing the daily maintenance on the white ink, a nozzle check print should be performed on the white nozzles (use a transparent sheet), and the CMYK nozzles (use a letter size piece of paper). It is better to learn if nozzles are missing on a test print now and removing any air in the head than allowing the air trapped in the head causing irreparable damage to the head. A tube cleaning will be performed on the white heads so it is very important to verify that the CMYK nozzles fire. Place the sheet on the right front edge of the platen (closest to the panel) and set the platen height to level "A". You may have to tape the paper edge if the paper is curled.

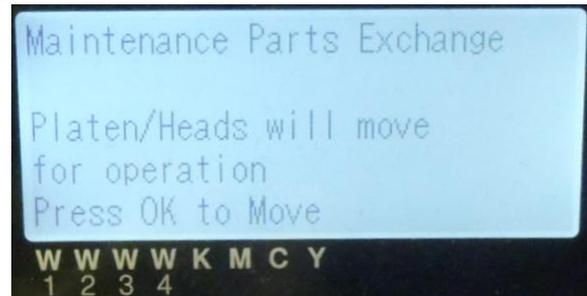
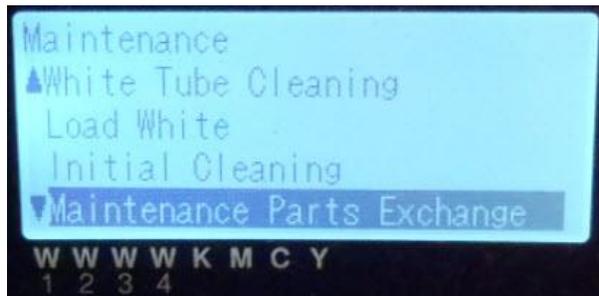


If there are several missing nozzles you should perform a head cleaning on the problem head. If only one or two nozzles are missing, those nozzles will likely resume as the printing process flows ink through the print head. White heads can print when several nozzles are missing since four white heads print over the same spot with a GT-381 and two white heads print with a GT-361.

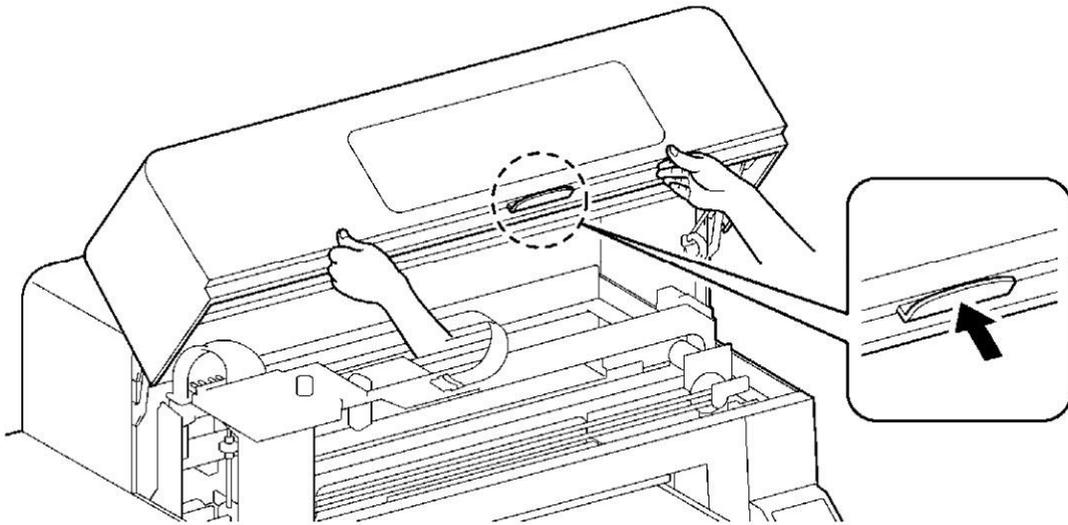


Select **Head Cleaning** from the main menu and **press [OK]**. Select **normal cleaning** if only **several nozzles are missing** and **powerful cleaning** if **multiple nozzles are missing**. Press **[OK]** on the panel. Use the arrow keys to select the color or white head number to be cleaned. **Repeat the Nozzle Check** after the head cleaning to check the cleaning results.

To make the printer ready for the extended idle period you must perform the maintenance parts exchange function. The felt pads and flushing tray parts and fan filter do not have to be replaced at this point but if you have them, you may as well change them at this time as well. From the Maintenance menu select maintenance parts exchange and press **[OK]**.



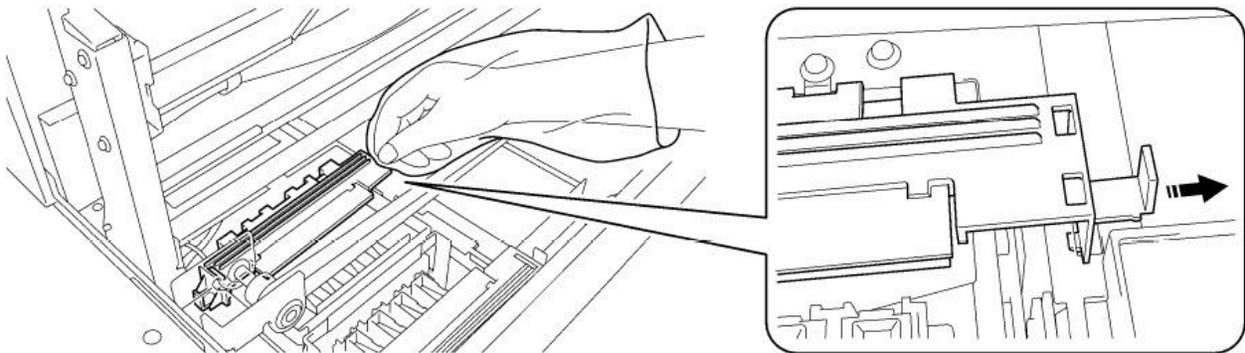
The **Platen will have to reset** by moving out and then back into the machine. **Press OK** for this action to occur. The machine will lower the cap rubbers and move the carriage to the center of the machine. You will be prompted to shut off the machine. **Power off the machine**, push upward on the center latch and **open the lid**. If you need more clearance to the maintenance station area, you can move the carriage farther to the right side of the machine by pushing or pulling the vertical posts on the side of the carriage. **Take care to only touch the side brackets of the carriage**. The plastic gloves provided with the maintenance parts kit should be worn while performing this process.



The **two wiper cassettes** need to be replaced. The **Wiper rubber blades**, and **all of the cap rubbers** should be cleaned thoroughly with the swabs and wash solution. Please use the plastic gloves provided with the maintenance parts kit whenever you touch any items that are part of the maintenance station parts exchange to help avoid possible injury or skin irritation.

Wiper Cartridge Replacement

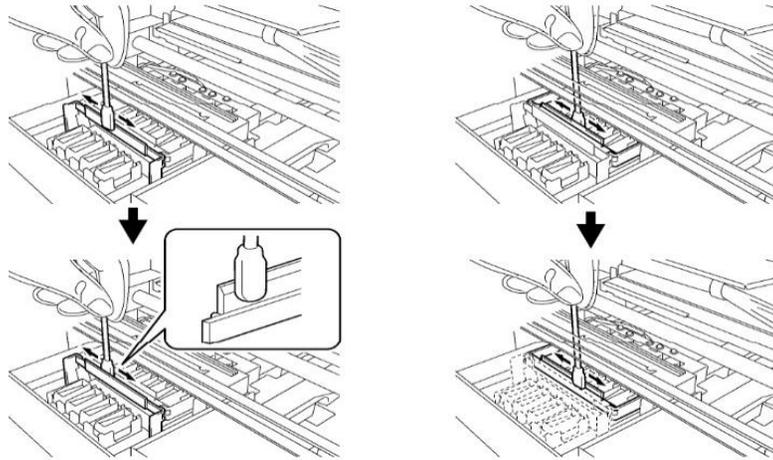
The wiper cartridge (cassette) can be removed by pulling outward on the tab to the right side of the cartridge. Lift upward and pull the left tab to release the cartridge. Be certain to wear gloves before touching the wiper cartridges. **All machines have two cartridges seated in the White and CMYK positions. Remove one at a time** so you have an example for replacement. After removing and inserting a cartridge several times, the replacement process will seem quite easy. Once you are comfortable replacing and inserting the wiper cartridge, remove the cartridge.



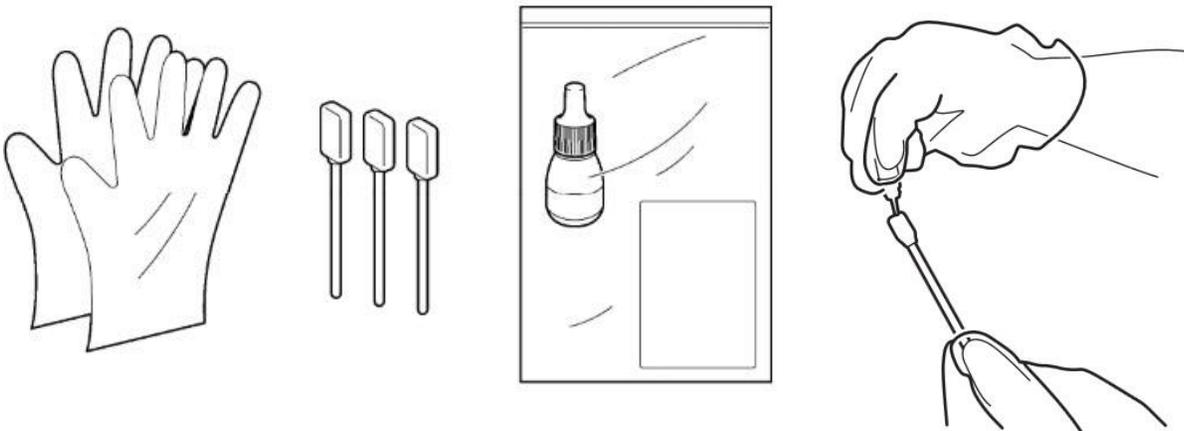
Do not insert the new cartridges until the wipers and caps have been cleaned (instructions following), and the other maintenance parts have been replaced. The new wiper cartridge(s) come in a plastic bag; this will serve as a disposal container for all parts to be discarded.

Clean the Wiper Blades

The **wiper blades should be swabbed with a moistened swab** (contained in the Maintenance Kit). The wiper cleans the underside of the print heads to allow the nozzles to fire properly. The wiper is cleaned by passing across the wiper cartridge. Once the cartridge is dirty or over saturated, the wiper edge can no longer be cleaned and therefore no longer clean the nozzle plates. If the edge is not cleaned for the non-use period, the ink on the wiper will gel and clog the nozzle plates the next time the printer is powered on.



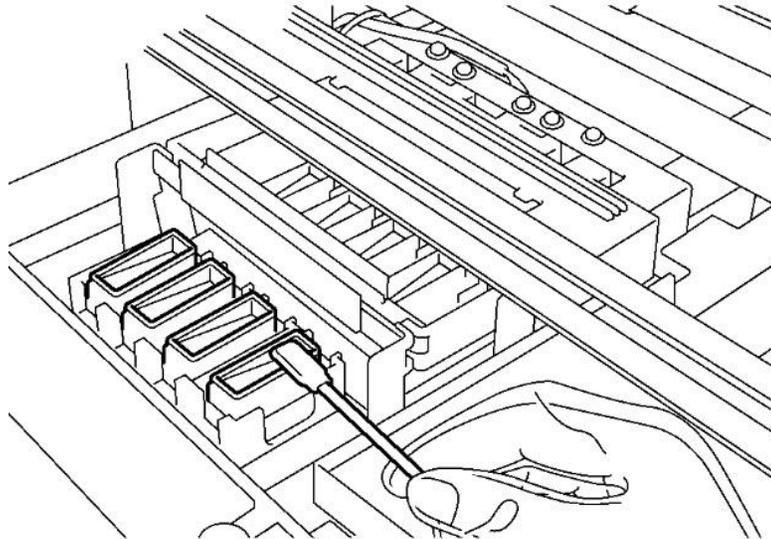
Apply solution to a swab and wipe across the front and backside of the wiper blade. Check the wiper edge for any tears or separation from the metal base. If any exist, the wiper subassembly must be replaced.



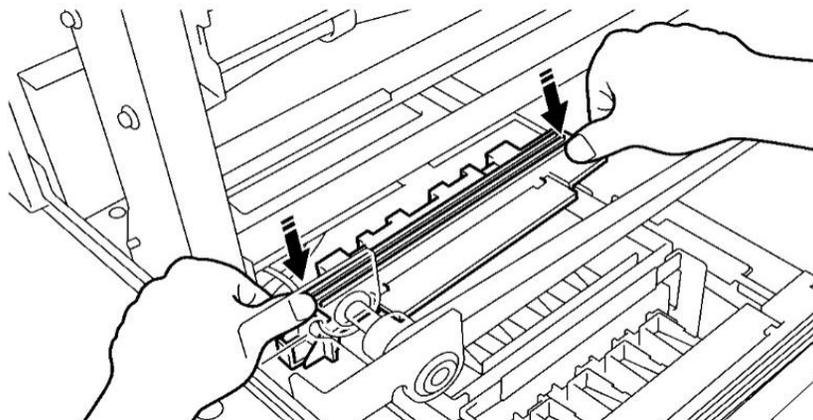
Clean the Cap Rubbers

Once the wipers are clean, the cap rubbers must be cleaned with the swabs as well. The rims of the cap rubbers press against the bottom of the print heads, Nozzle Plates, to form a seal so air cannot dry the heads. If the rims of the caps have debris, dried or excessive ink, the ink will back

away from the membrane and nozzles will misfire. If this continues over time, the head will dry and eventually become defective. Moisten a swab as done for the wiper blade cleaning and swab the edges of the cap rubber. Use one side of a swab per cap so you do not contaminate one color to another. If one ink does transfer to another cap, clean each cap thoroughly. You want to avoid having one color ink make contact with the nozzle plate of a different print head. No damage will occur to a head if this happens, but color matching may not be correct on your prints until all ink contamination has been cleared.



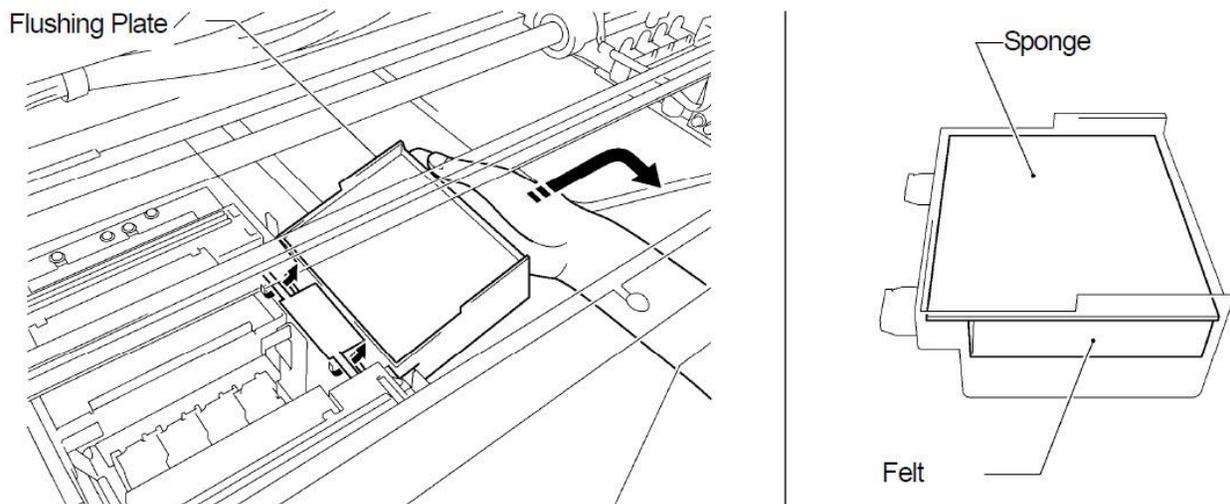
Once all the caps have been cleaned, insert the new wiper cartridges. The **wiper blades should be in the center, between the two sets of cap rubbers**. If not, move them by hand so they are extended to the middle. It will be difficult to insert the new wiper cartridges if the wipers are set in the home (back) position.



If you have the felt pads for the carriage brackets, the flushing tray felt and sponge and the fan filter replace them now.

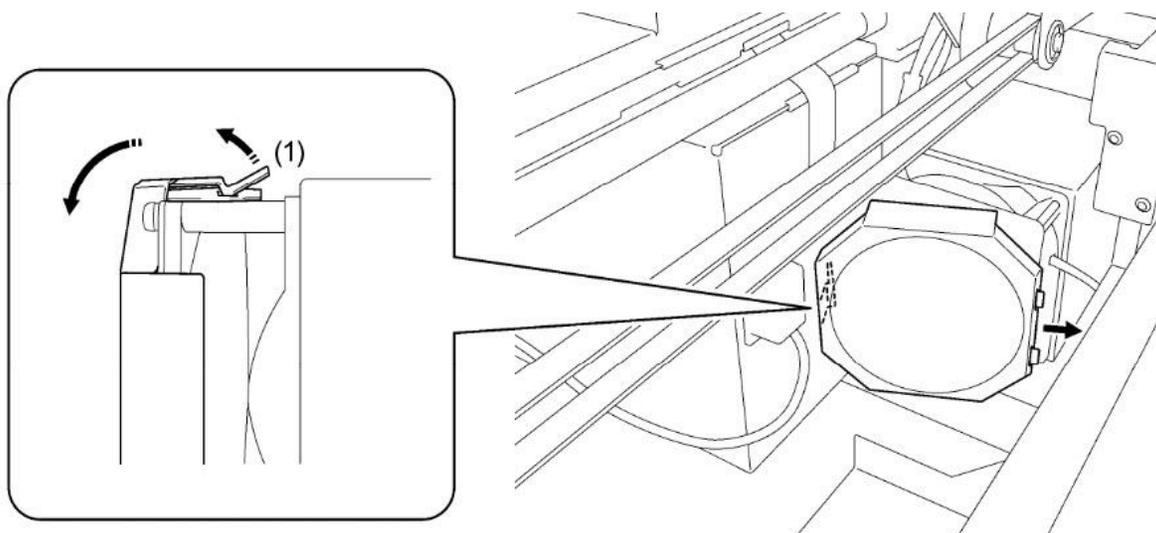
Flushing Tray felt/Sponge Replacement

Lift the Flushing tray from the right side. Notice the left side has two tabs that allow it to hang onto the maintenance station. The tray must be inserted into the same openings on the side of the Maintenance Station once the felt and sponge have been replaced. If the tray contains excessive liquid, remove it with a cloth or flush the excess liquid with water and dry it. The ink is non-toxic; however, discard the waste ink within community regulation allowances.



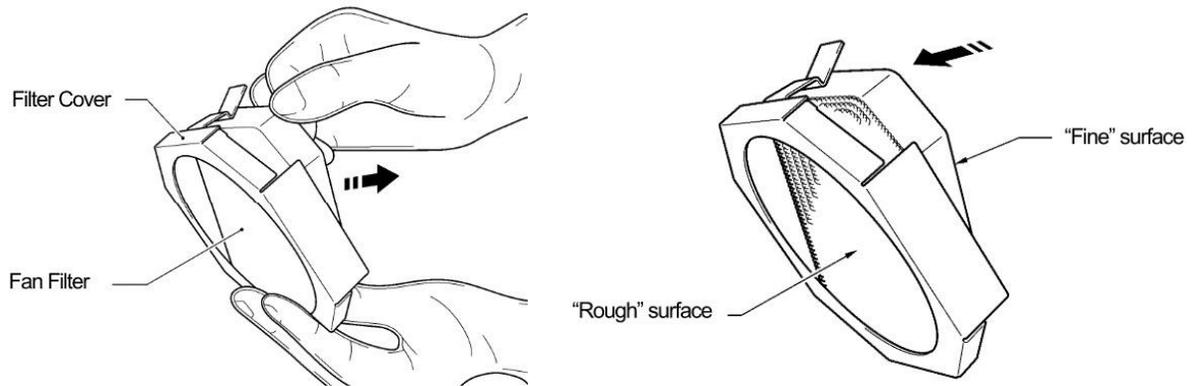
Fan Filter

The **fan filter** collects the mist from the **print head spray** through the exhaust provided by the fan. The mist of ink is greater when the platen is lowered thereby creating more space between the print heads



and the print surface. **The filter is contained in a bracket over the fan.** The bracket is removed by reaching into the machine and pulling the release clip outward from the fan assembly.

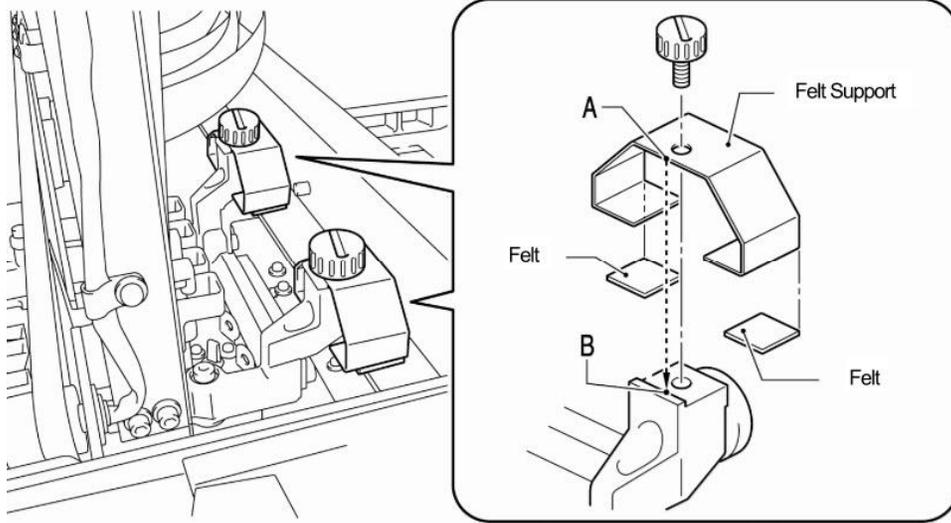
When the filter bracket is removed pull the filter from the bracket and discard it. Insert the new filter with the coarse side inserted into the bracket. The air flow should enter the coarse side.



Insert the fan bracket by inserting the right edge of the bracket over the two tabs on the front edge of the fan assembly. Push the bracket across the end of the assembly so the bracket latches onto the attachment on the inner edge.

Replace the Carriage Felts

The **Carriage contains two brackets on the front edge that hold four felt pads onto Velcro inserts.** These pads clean the front rail that the carriage rides upon as it travels during the print process. The carriage assembly has two wheels that ride along the front rail. The pads keep the rail clean to help allow the carriage move unrestricted. These pads should be replaced during the Maintenance Parts Exchange. Remove one bracket at a time so you can look at the other as an example for proper insertion. Remove the black thumbscrew and slide the bracket from the carriage assembly. Peel the old felt pads from the bracket and press the new pads onto the Velcro tape on the bracket. Be sure the pads are set straight on the bracket. Place the bracket back onto the carriage assembly so the pads rest on the front rail; look at the other bracket to confirm the correct alignment.

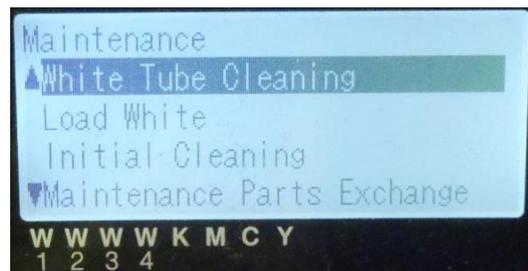
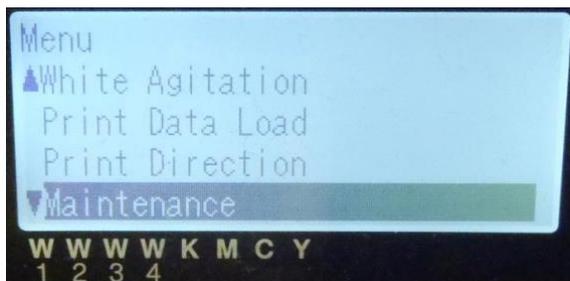


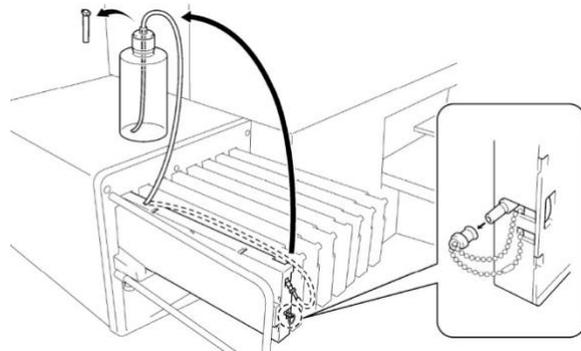
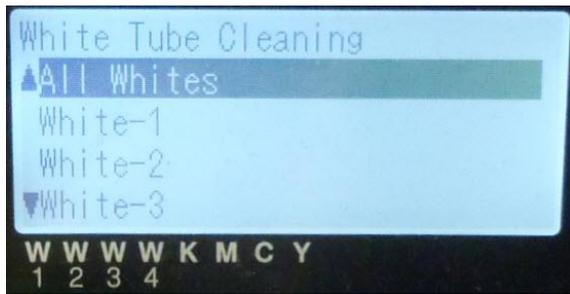
Do not press too hard on the brackets and be sure not to over tighten the black thumbscrews. If the brackets are bent or over tightened, the carriage may be restricted from proper movement. If any error does occur (i.e. 6107, 6108), power off and remove the brackets. If the machine operates properly at this point, the brackets were likely bent so they press too hard against the rail and restricted carriage movement.

Now the white tube cleaning must be done on each white tube.

Prepare the maintenance cartridge and bottle. Fill the bottle completely with maintenance solution. Select the **maintenance menu** and **press [OK]**. The white tube cleaning feature will be highlighted.

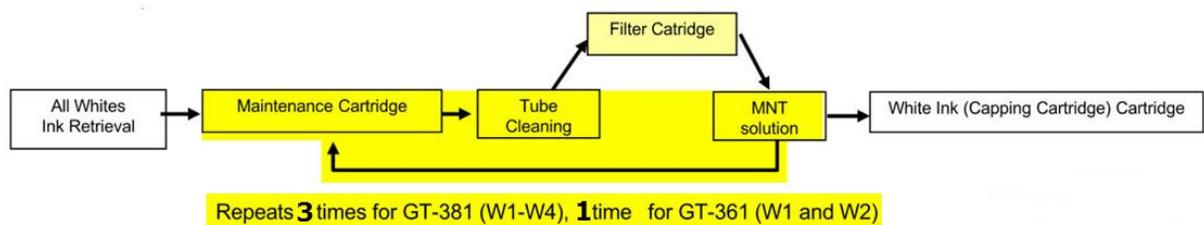
Press [OK] to enter this menu. **Select [All Whites]** and **press [OK]**. This will activate the retrieval solenoid for four minutes, which allows air into the white ink tubes so the white ink will drain back into the white ink cartridges.





Once the retrieval solenoid closes after the 240 second countdown you will be prompted to insert the maintenance cartridge in the W1 ink bay. After doing so, press [OK]. You will be prompted to close the air cap on the front of the maintenance cartridge. Close the air opening with the cap and press [OK]. The panel will display a countdown of 34 seconds. When it is completed you will be prompted to remove the cap and press [OK] when you have done so. The panel countdown will display 640 seconds although it will take close to twelve minutes. When the countdown is complete you will be prompted to insert a filter cartridge into the W1 ink bay. Remove the maintenance cartridge and insert the filter cartridge and press [OK]. The display will countdown for 122 seconds. Upon completion you will be prompted to insert the maintenance cartridge into the W1 ink bay. Remove the filter cartridge and insert the maintenance cartridge and press [OK]. You will be prompted to close the air cap. Do so and press [OK]. The countdown will show 94 seconds. Upon completion you will be prompted to perform the same process on W2. **Insert a capping cartridge into the W1 ink bay when you remove the maintenance cartridge.** Repeat this process for all of your white ink tubes. A capping cartridge **must** be in each white ink bay when completed.

The chart below displays the tube cleaning process.



When the tube cleaning has been completed power off the machine. You can now let the machine sit for two weeks.

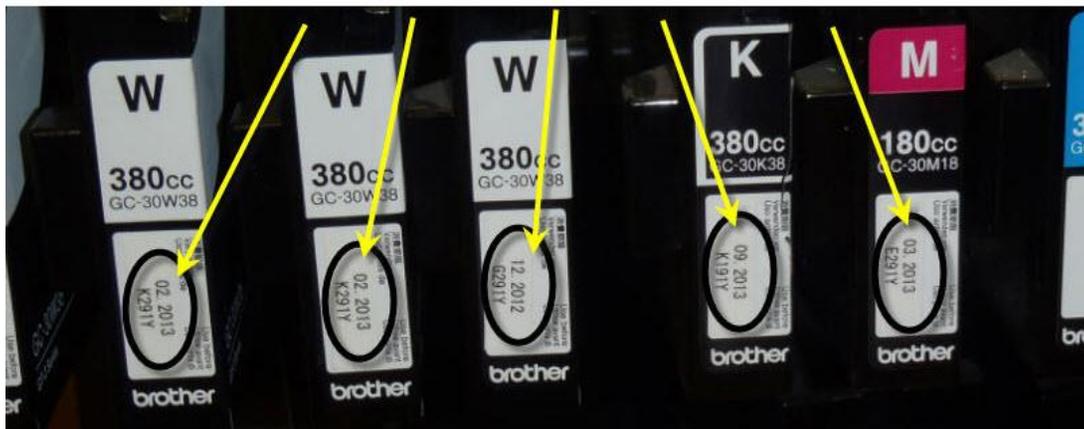
Two Week Cleaning

After **two weeks, power on the machine**. Perform a nozzle check on the CMYK and perform head cleanings as needed and print another CMYK nozzle check to verify all of the nozzles fire. Once all of the nozzles have fired, program a nozzle cleaning from the maintenance menu. When you are prompted to power off the machine, do so and open the lid and clean the CMYK wiper blade and cap rubbers as explained in the previous pages. Make sure the wiper blades are in the center position when you have finished and that the wiper cartridges are in place. Close the lid and power on the machine. When the machine has completed the boot up process perform the white tube cleaning process **BUT DO NOT** select all whites. This **MUST** be done one tube at a time. Follow the prompts on the display. Once this has been completed you can power off the machine and let it sit for another two weeks and perform the same steps again. Agitate the stored white ink cartridges for several minutes as well. Please keep in mind the quantity of maintenance solution, wash solution and swabs remaining after you complete each two week maintenance process and order more supplies if you will need them for the next two week maintenance procedure.

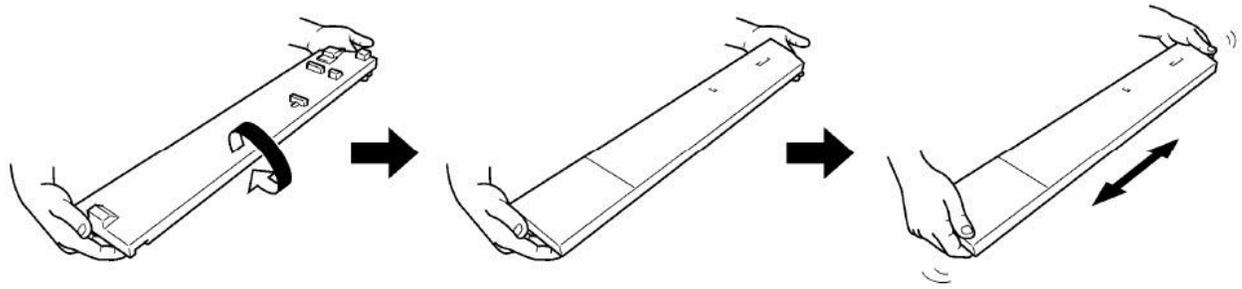
Resuming Printer Functions

Before you resume printer functions you must verify that your ink has not exceeded the expiration date. Old ink will likely clog the LCF filters above the print heads, possibly clog the ink needle and possibly clog the print heads with extended use. The ink expiration date can be found on the front edge of the ink cartridge.

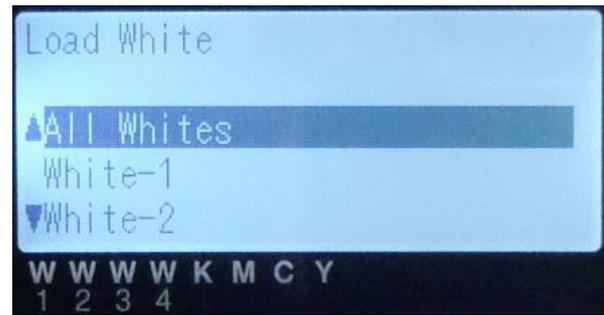
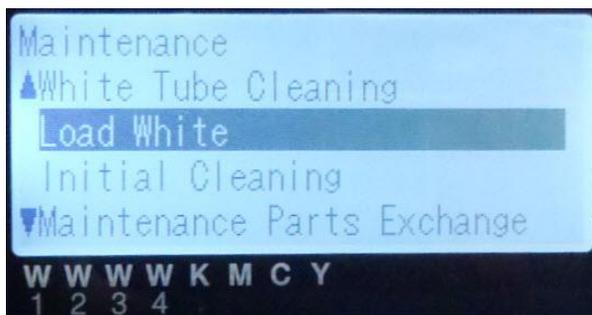
Ink Expiration Dates



With fresh ink available, **agitate the white ink cartridges** by shaking the cartridges for **45-60 seconds**.



Turn the printer power on. Once the boot process has completed remove the capping cartridges and insert the white ink cartridges.



From the maintenance menu select load white and press [OK]. Select all whites and press [OK]. When the process is completed perform a white nozzle check test print to verify the nozzles fire. Perform head cleaning as needed to achieve acceptable nozzle firing.

Perform a nozzle check on the CMYK heads and perform head cleanings as needed so all nozzles fire properly. You should now be able to resume printing.

For additional support on the direct to garment printers, please visit www.BrotherDTG.com/Support