brother
at your side

# DAILY OPERATIONS GUIDE

v 2.0


GTX

## REFERENCE GUIDE FOR ALL GTX SERIES USERS

BROTHERDTG.COM/SUPPORT

# ENVIRONMENTAL CONDITIONS

Link to Understanding Environmental Conditions Dcoument

## > Optimal Temperature & Humidity:

*Help keep your printer in warranty while saving on ink, consumables, and time!*

**The printer can operate outside of these ranges however it may use more ink or take longer to print.**

| TEMPERATURE | | HUMIDITY | |
|---|---|---|---|
| MIN | 62° | MIN | 35 |
| MAX | 77° | MAX | 85 |

Min Firmware v2.5

Link to Recommended Humidifier

*If not enough, please install a **humidifier** !*

Go to the menu: Maintenance > Temperature/Humidity info > MENU OK

*> If temperature too cold, printer will switch automatically to Low-Temp Mode and reduce the speed!*

*> Damages resulting from being too far outside of environmental requirements may not be covered by warranty.*

# PRE-TREATMENT RATIO

Watch the Video: Learning to Profile a Garment for Pre-treating

You can use an empty distilled water jug and marker to measure out the amount of PT and draw a line on the jug then fill to that line twice with water adding the contents into the Ready to Use container.

| | | | | |
|---|---|---|---|---|
| By Volume: | 1 Gallon | | 2 Gallons | 3 Gallons |
| | Concentrated PreTreatment | + | Distilled Water | = Ready to Use Solution |
| By Weight: | 4 lbs. | | 8 lbs. | 12 lbs. |

# PRE-TREATMENT QUANTITY on T-SHIRTS

Watch the Video for Understanding the Highlight-Mask Check Pattern

| PreTreatment Ready to use Quantity | | |
|---|---|---|
| High Absorbency | Thick materials or open weaves like hoodies | = 40-50 Grams |
| Med. Absorbency | Regular Cotton Tees 4.0 to 6.0 oz | = 30-39 Grams |
| Low Absorbency | Thin Material + Blend or Specialty Items | = 15-29 Grams |

Proper Pretreat volume for a garment should be determined by a **garment's absorbency rate** and in conjunction with using the **highlight check pattern** to help determine **driver ink settings**.

Don't forget that you have to define a surface of **14 X 16 inches** (35 X 40 cm) with your Pre-Treatment machine **to weight** with a **scale** after applying the PT liquid on a T-shirt!

*> For example, on a Schulze PTM, you should enter a Length of 13 in and Begin of 1 in the full width with 4 nozzles will be 16 in!*

# HEAT PRESS SETTINGS for Pre-Treatment DRYING

| Pre Treatment | 35 Seconds | 180°C / 360°F | 5 - 5,5 Bars / 75 - 80 PSI |
|---|---|---|---|
| 1/2 distilled water | | | |

Use **Silicon sheet** on the heat press to cover the pre-treatment and **clean** the surface every 5 T-shirts!

You can also use Parchment paper when curing the Pre-treatment in order to minimize needing to clean off the covers and to minimize issues with fibers standing up on the garment

# HEATPRESS & TUNNEL DRYER SETTINGS for INK CURING

| | | | |
|---|---|---|---|
| HEATPRESS Ink Curing | 35 Seconds | 180°C / 360°F | 0,7 - 1,4 Bars / 10 - 20 PSI |
| TUNNEL DRYER Ink Curing | 3:30 Minutes | 160°C / 320°F | |

Check the **Real Temperature** with a **Probe** or with **Strips** to be sure that you are safe for washability!

Watch the Video: Using and Storing the CR Holding Pin

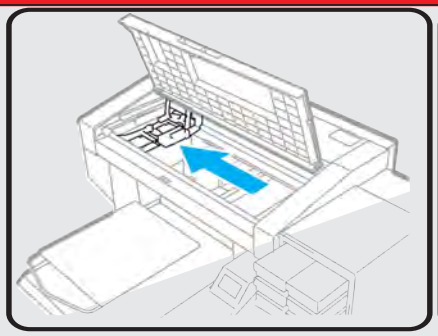
## VERY IMPORTANT

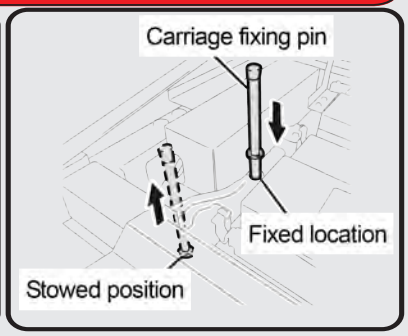
The Brother **GTX** should **ALWAYS** be left with Power **ON**


**NEVER** shut **OFF** the printer except if requested by the display informations!
Power is requested to perform the needed recirculation of the inks from time to time.

## NEVER POWER OFF THE PRINTER!

In the event that power goes out or your printer has an error during printing. Push the **Carriage** back all the way to the left to dock it and use the **Fixing Pin** to lock it in place.

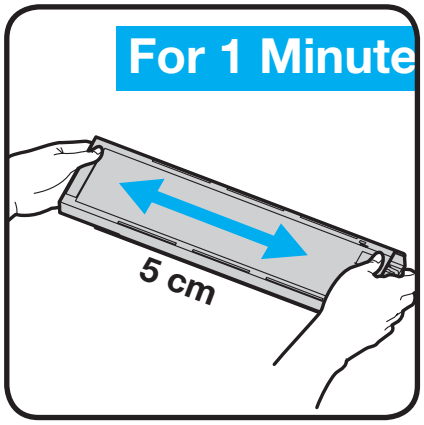




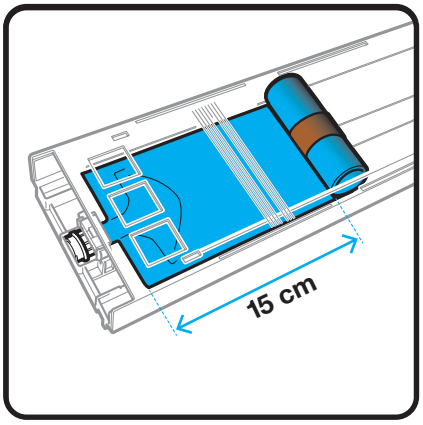
# DAILY AGITATION OF WHITE INK

Watch the Video: Daily Process of GTX White Ink Agitation

> Perform the procedure shown below if the message "*Remove the white ink cartridge and shake it* " is displayed before starting operation.




Take out the white ink cartridge from the printer. Shake the cartridge **horizontally 100** times side by side to stir the white ink.

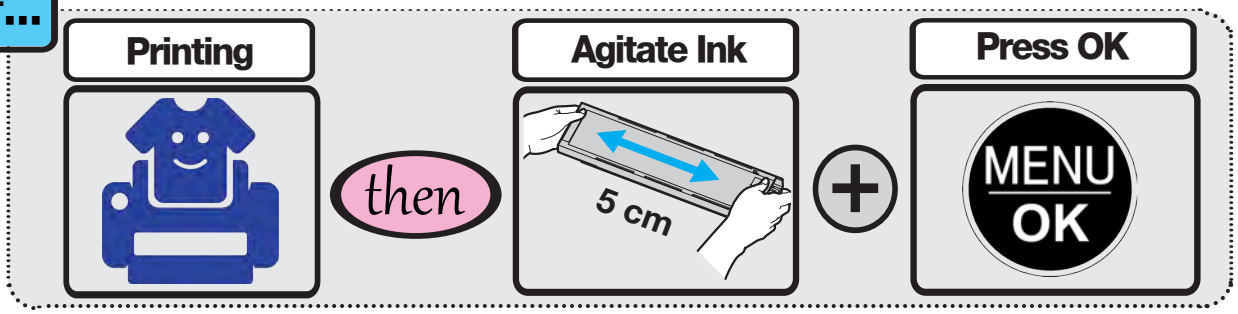



When the remaining ink level becomes approximately **15 cm**, shake the cartridge with its **cover open** and with the ink pouch slightly winded, to make the ink easier to stir. **Repeat the same process on the other white ink cartridge!**

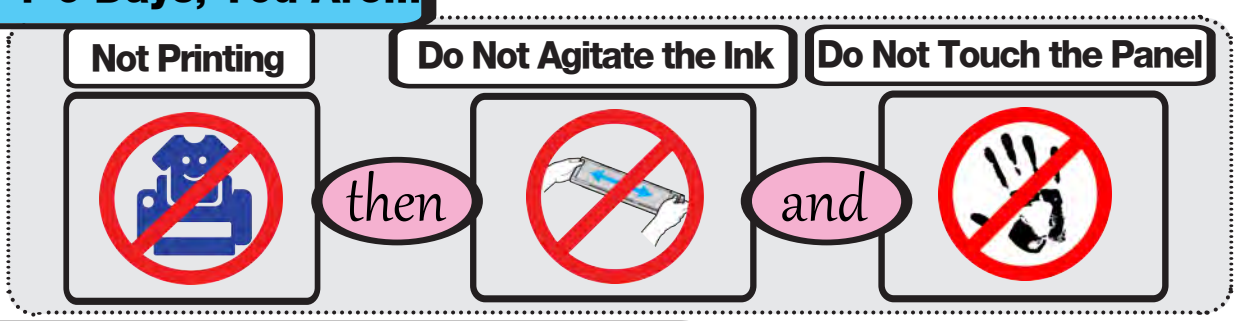
## When to Agitate the White Ink and Press "OK"

**Just as important as understanding how to agitate the ink daily is when to perform both the agitation and press MENU OK on the panel after reinserting the ink. If you are not printing for a few days you should avoid doing this process. There are some rules to know about when you should agitate the ink and press MENU OK. The printer will automatically perform a White Ink Refilling to refresh the ink in the lines and head after you press insert the ink and press MENU OK.**

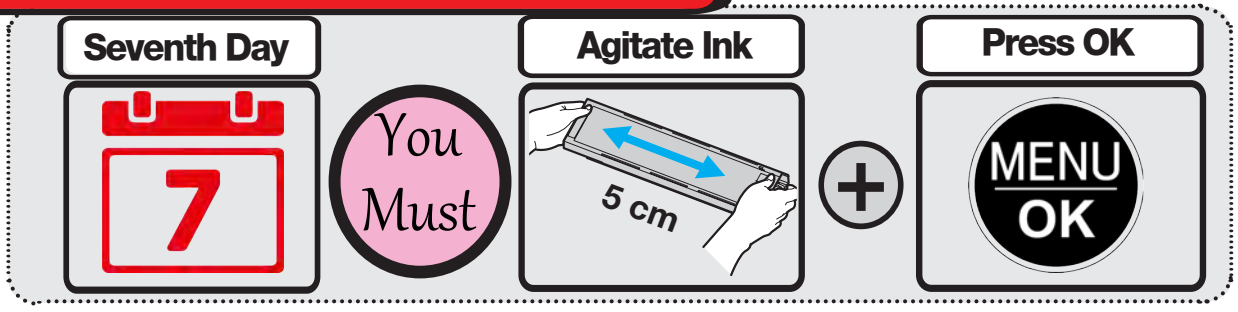
**Each day, If...**




**If Between 1-6 Days, You Are...**

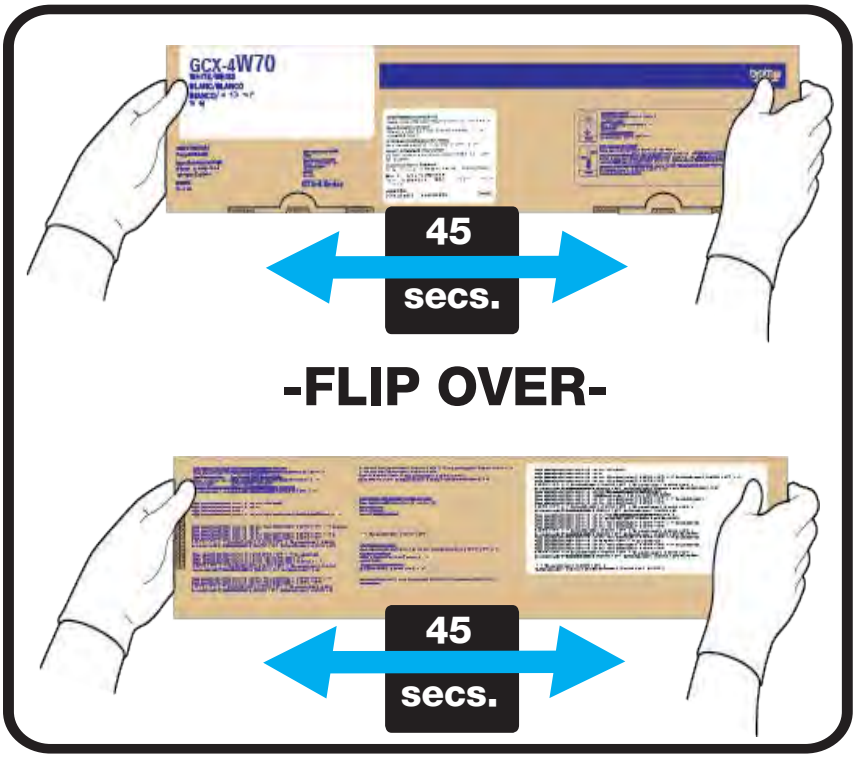



**Whether You Print or Not Each Day, On the...**



## POUCH REPLACEMENT - VERY IMPORTANT !

**If you know your going to print a large order or are low on ink, ensure you have spare ink on hand. Attempting to run the printer dry can damage the unit and keep you from finishing a job as well it can lead to costly repairs!**



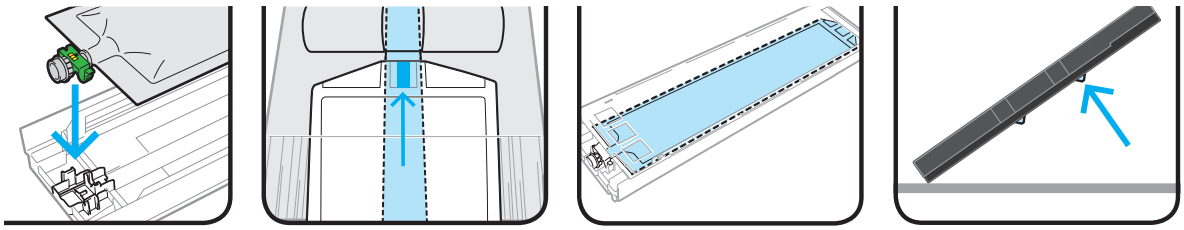

You can agitate New White Ink still in the box before putting it into the pouches in the same back and forth manner as the cartridges. New ink should be agitated longer 45 secs. each side; doing this while still in the box saves time as both pouches are in the box.

## POUCH REPLACEMENT - VERY IMPORTANT !

Open the cartridge's **lid** on a **flat surface** and remove the empty pouch.
Unpack a new ink pouch from its shipping carton. **Avoid wrinkling the pouch.**

**Push** the **green tip end** of the ink pouch into the cartridge until it **clicks** into place.
Straighten the ink pouch to align it straight inside of the cartridge, and mount in position inside the metal spring by pulling it with your hand.
If the edge of the ink pouch is bent or undulating significantly, make it **flat and straight** with your hand **to avoid wrinkling the pouch**.
Place the pouch in a straight alignment with the cartridge. Align lines with each other!
Close the lid, verify if the spring is rolling to the front.

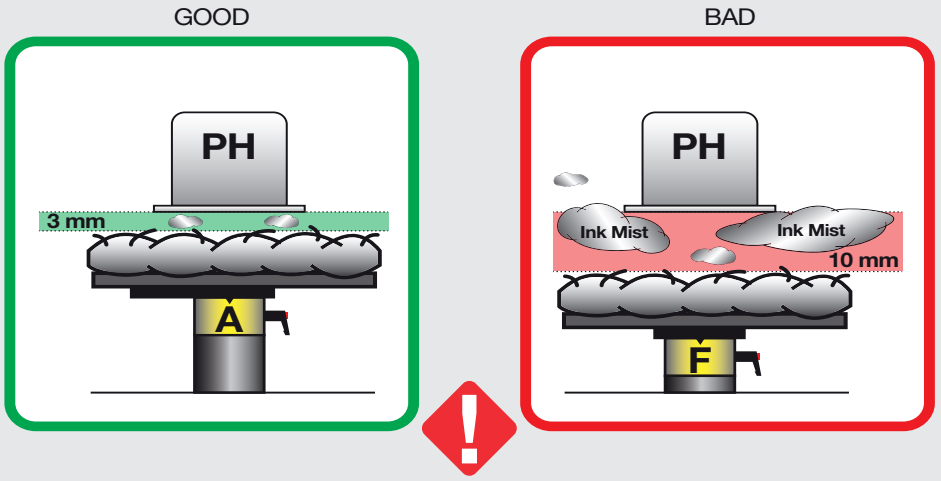
Attach a shelf life **sticker** 09. 2019 XXXX included with ink pouch onto the front of the cartridge.



## > STORED INK

**If storing ink for more than one week without use then you should flip the boxes weekly in order to keep ink pigments from settling in the pouch.**

# BEST PRACTICE FOR PRINTING >>> A MUST!

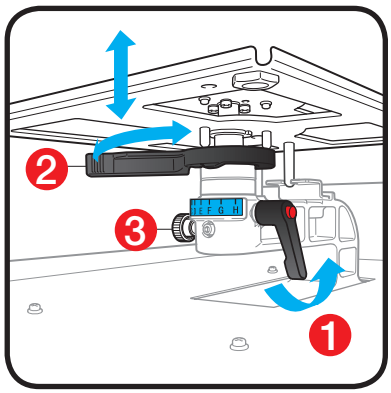



> ALWAYS KEEP THE **CLOSEST DISTANCE** BETWEEN THE PRINTHEADS AND THE SURFACE OF THE GARMENT!
IT IS VERY IMPORTANT FOR THE LONG LIFE OF YOUR PRINTER!

Link to the Document: Use of the Platen and Platen Mechanism

# ADJUSTING THE HEIGHT OF THE PLATEN

To provide an optimum printing image quality when a thicker textile is used, you need to **adjust** the platen's height related to the **thickness of the garment**.




To adjust the platen height, loosen the **Platen Fixing Lever** ❶ and move the **Platen Height Adjustment Lever** ❷ to a lower position. Then re-tighten the Platen Fixing Lever. To check if the new garment is not detected by the **sensor,** push the button and **repeat** the process **if needed**!

If you need to go down further, remove 1 or 2 collars, loosen the knob ❸ and push down the platen bearing by 1 or 2 steps.

Re-attach everything and tighten again the **Platen Fixing Lever**

> Don't forget to **bring back** the platen to the **A position** printing on thicker material! > Always leave the knob ❸ tighten after changing position!

*> if you have to print above hem and seams, go for **UNI-directional** printing to keep quality!*

# GTX MAINTENANCE OVERVIEW

There are several maintenance procedures that **must be performed** on a daily, weekly, or prompted basis in order to keep your printer performing **properly**.
This short guide describes the maintenance procedures that must be performed.

*> Please see the **Instruction Manual** for each specific maintenance procedure for step by step instructions.*

Please also check useful videos at
https://vimeo.com/showcase/5386998

## > NOZZLE TEST

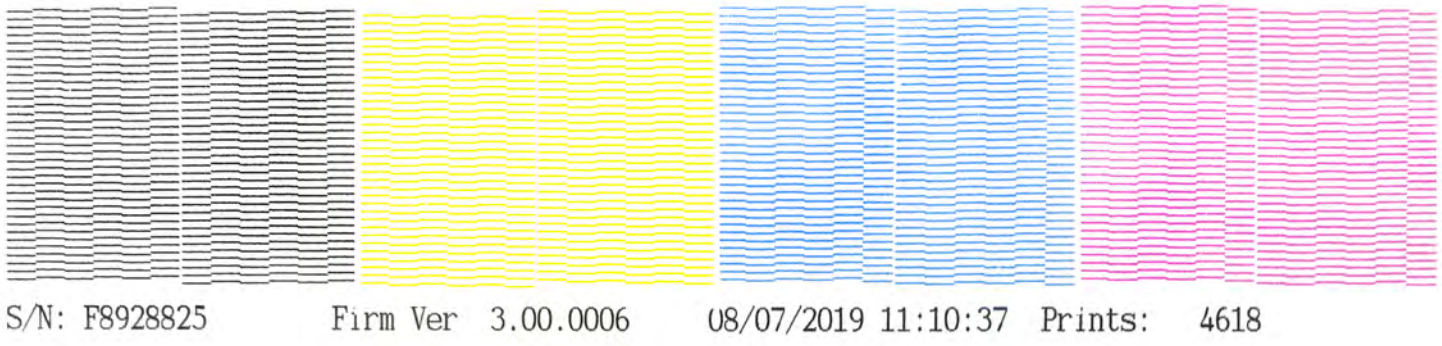
TO BE DONE ***EVERY*** WORKING DAY

You have to print a nozzle test for White & CMYK **every morning** before using the printer. It is the only way to know the status of the nozzles in the machine before printing!

## > HOW TO DO A NOZZLE TEST ?

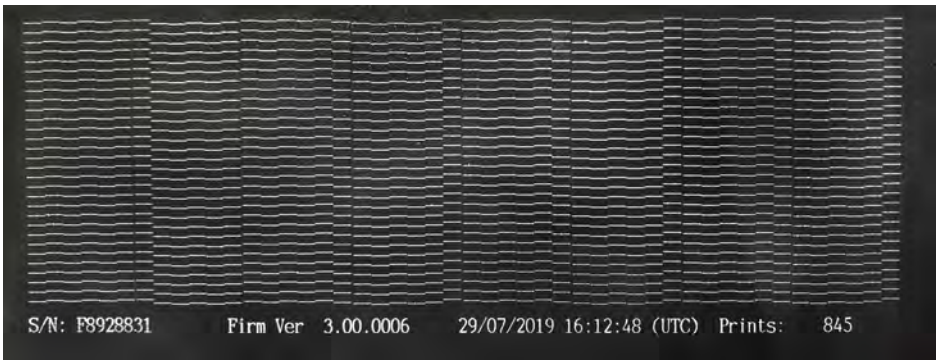
NZC Always place the **Platen** at level **A**

Menu > Test Print > Nozzle Check CMYK > MENU OK *to check colors on a white paper sheet*




NZC Repeat the same procedure to perform a nozzle test for the **White** print head

Menu > Test Print > Nozzle Check White > MENU OK *to check White on a black paper sheet or inkjet plastic sheet*




*> If not all nozzles are firing, start a **Head Cleaning** to open the closed nozzles!*

See Below Section For Head Cleaning Information

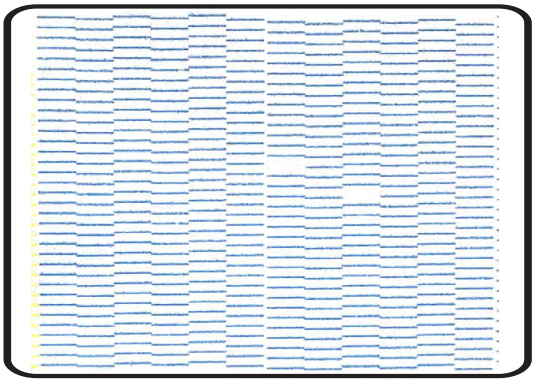
# Missing Nozzles & Deflection Cleanings & Flash Firing

Missing Nozzles are defined by a test print pattern missing horizontal pins (that represent each of the nozzles of the print head) being closed up with debris and therefore not showing up. When nozzles/pins are missing you will want to perform one of the below indicated cleanings.

**NOTE: This process can be used for CMYK or White**

**Only a few**

**If Missing**

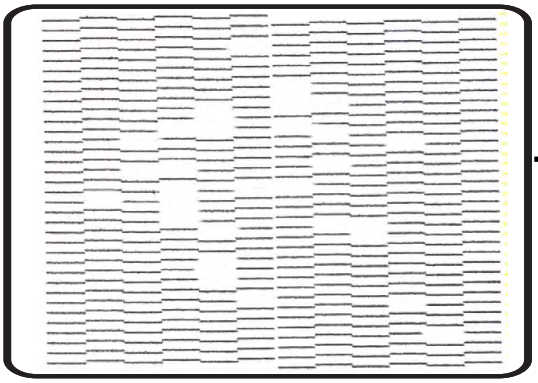


**Then**

On the Panel Select
↓
Head Cleaning
↓
**Powerful Cleaning**
↓
Choose the Affected Color/Channel
↓
Press OK
↓
Perform Another Nozzle Test Print

**10 or More**

**If Missing**



**Then**

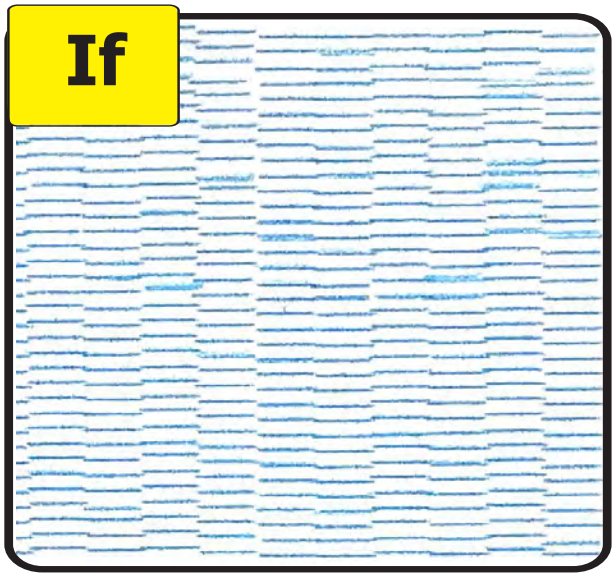
On the Panel Select
↓
Head Cleaning
↓
**Super Cleaning**
↓
Choose the Affected Color/Channel
↓
Press OK
↓
Perform Another Nozzle Test Print

---

> *Repeat the same process as needed up to 3 times and ensure all maintenance has been performed such as cleaning the cap and wiper blade and the wiper cassette is fresh and still has moisture. If there is no improvement by the 4th time; please contact support.*

# Deflection & Flash Firing

**If**



Deflection appears as odd bunched up or gapped lines sometimes the horizontal bars will appear blurred and staggered.

When this is present you will want to perform a **Flash Fire Cleaning**.

**then**

On the Panel Select
↓
Head Cleaning
↓
**Flash Cleaning**
↓
Choose the Affected Color/Channel
↓
Press OK
↓
Perform Another Nozzle Test Print

*If this does not resolve the matter please contact your dealer or brother representative for further troubleshooting.*

## > WEEKLY MAINTENANCE PROCEDURES

7 days

To **maintain the machine weekly** you will have to do the following actions:

**WEEKLY MAINTENANCE**

- + Suction Cap Cleaning
- + Exhaust Cap Cleaning
- + Wiper Blade Cleaning
- + Nozzle Guards Cleaning

30 Min

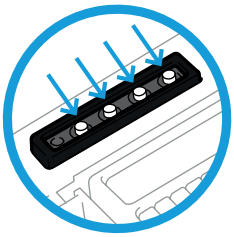
> *Always use this menu to perform cleanings or replace parts :*

Menu > Maintenance > Maintenance Part Clean/Replace > MENU OK *and follow instructions on the display*

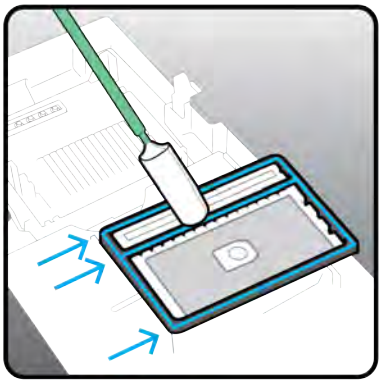
## > Suction Cap & Exhaust Cleaning

TO BE DONE ***EVERY*** WEEK

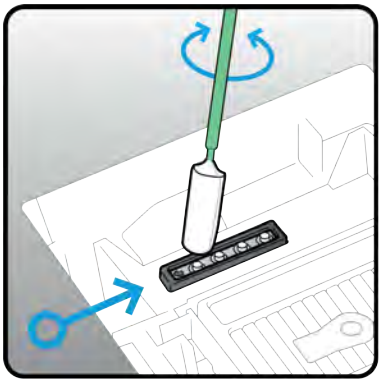
The black silicon lips of **both caps** should be cleaned with the **Cleaning Stick T** dipped in **Cleaning Solution.**
It is necessary to remove the built-up ink remaining/stuck on the edges of the caps. Completely clean caps prevent air leakage and keep good suction of the pumps which translates to better print head health and life!
Be careful not to touch the foam! Keep it flat!



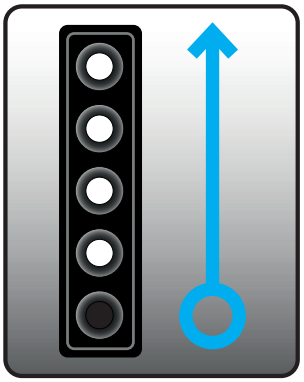
The **four extrusion lances** *(see in the blue circle…)* and the **hole** sitting on the side of the capping at the **Exhaust** position need also to be cleaned and free of dried ink.
**Always** clean from the hole at the front and go backward while cleaning the **lances**!



Suction Cap Cleaning



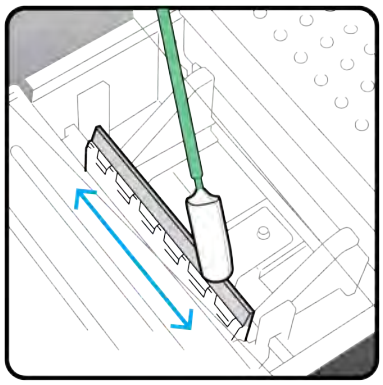
Exhaust Cleaning



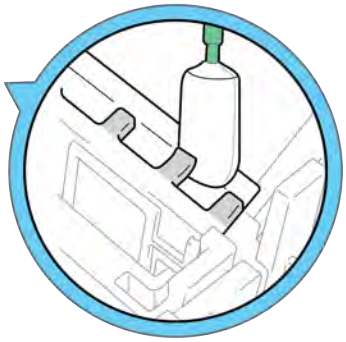
Direction to clean

## > Wiper Blade Cleaning

TO BE DONE ***EVERY*** WEEK



Both white plastic wipers [White & CMYK] should be cleaned on **both sides** and **top** with the **Cleaning Stick T** dipped in **Cleaning Solution.**



Use the tip of the **Cleaning Stick T** to clean under the teeth of the wiper holder and remove the dried ink.

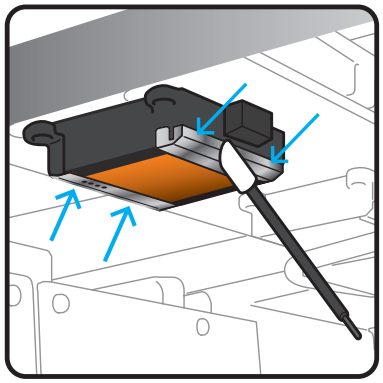
Be sure to use the Cleaning stick **T** separately for **white** ink and **color** ink!

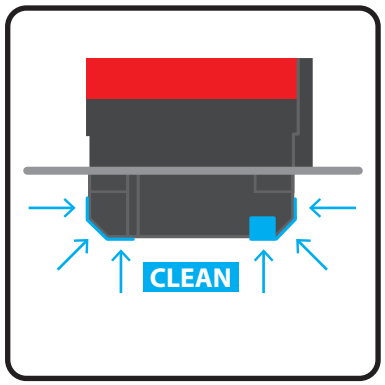
## > Nozzle Guards Cleaning

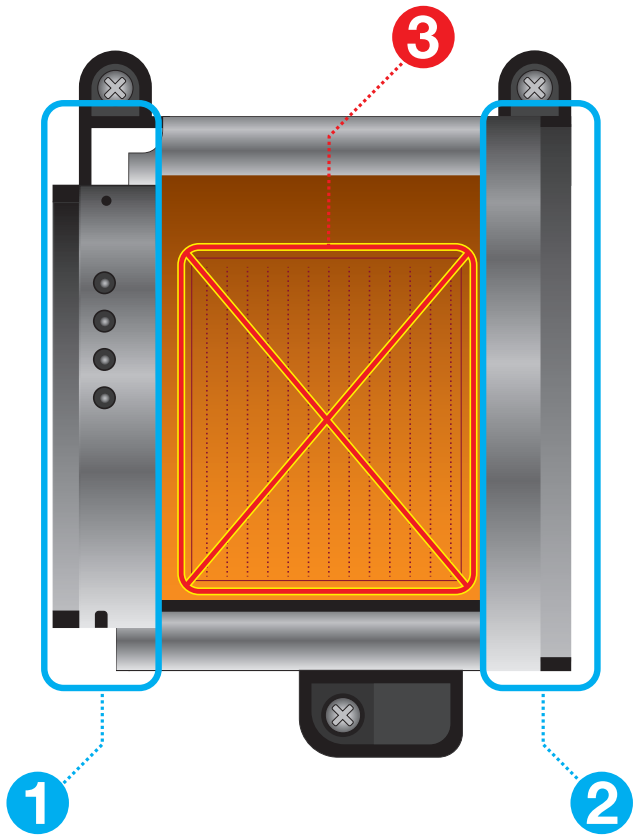
TO BE DONE ***EVERY*** WEEK

Wipe the 2 nozzle guards clean 1 & 2 with the **Clean Stick R** dipped in **Cleaning Solution.**
Be sure **not** to touch the **nozzle surface** 3 at all!

Manually move the carriage **by hand with the power off;** to a position that you can perform the cleaning with ease.






*> The remaining Cleaning Solution from the Cleaning Cup should be emptied into the* ***Waste Tank*** *below the printer!*

## > MAINTENANCE PARTS CLEANING & REPLACING PROCEDURES

WARNING / ERROR

In case of Warning/Error messages please follow the following procedures:

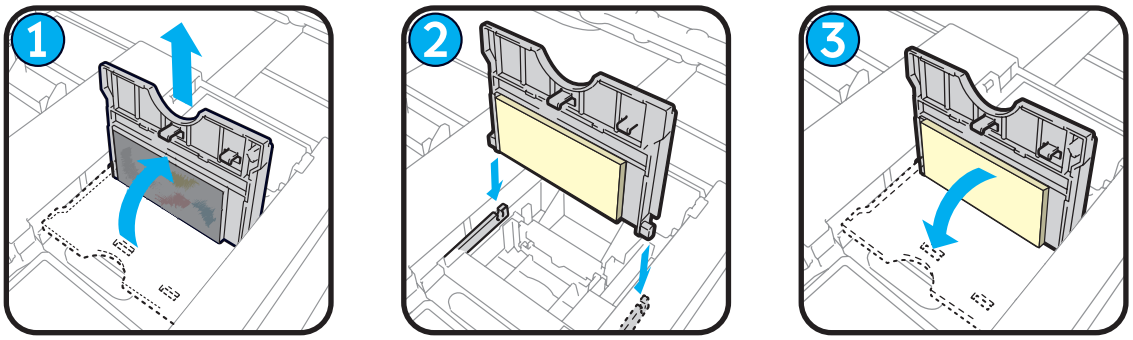
30 Min

> *Always use this menu to perfor m cleanings or r eplace parts :*

Menu > Maintenance > Maintenance Part Clean/Replace > MENU OK *and follow instructions on the display*

## > WIPER CLEANER REPLACEMENT

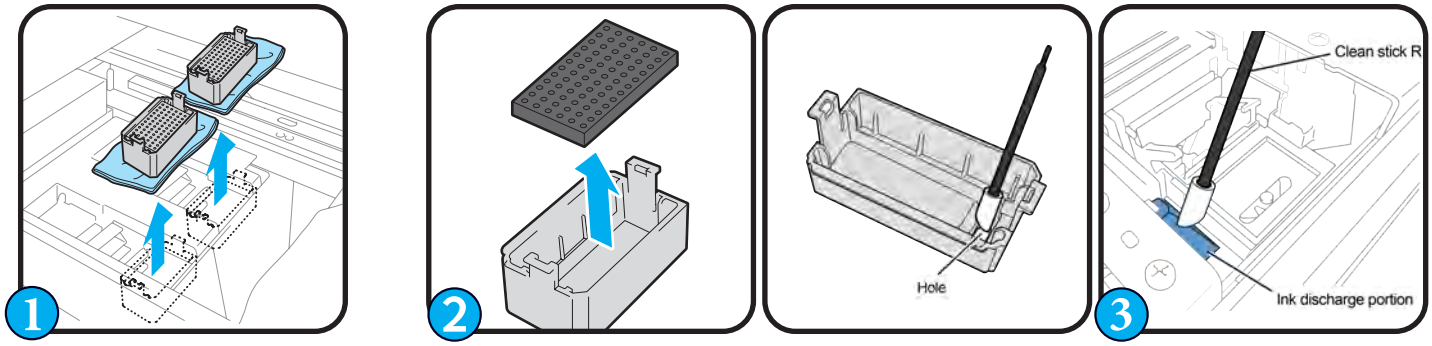
**Watch the Video: Replace the GTX Wiper Cleaner**




Simply remove the old **Wiper Cleaner** by lifting it up. Replace it with a new one.

## > FLUSHING FOAM REPLACEMENT

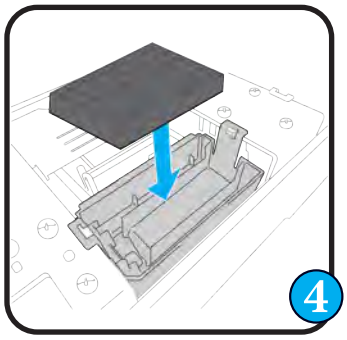
**Watch the Video: Flushing Foams Replacement**




Lift up the **flushing receivers** and place them on a waste cloth to avoid dripping ink.

Remove **Flushing Foams** and clean the holes of the 2 receivers.

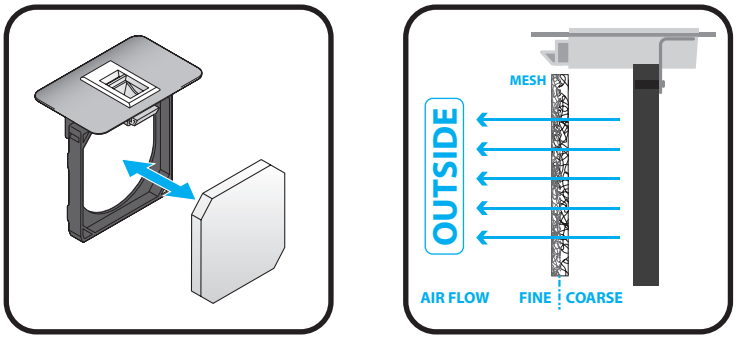
Clean also under where the receivers sit on the maintenance unit if ink is blocking drainage!




Install new Foams and put reinstall everything back into the printer.

## > FAN FILTER REPLACEMENT

**Watch a Video: Fan Filter Replacement**




Remove the 2 filter holders from the back of the machine.

Mount a **new Fan Filter** in each of the black frames.

The coarse mesh surface should face the direction of the inside of the printer and fine mesh surface in the direction of the outside of the printer.

# ADDITIONAL WEEKLY MAINTENANCE

**Visual inspection** is important to keep your printer up and running. Verify all the moving parts of the machine and also check for any leaking or dripping ink.


02 Please also follow all the instructions that appear on the **display** of the printer!

When you see a yellow number push the ▶ **key** to see what you have to perform to erase the **Error/Warning** message.

# INTERNAL CLEANING OF PRINTER

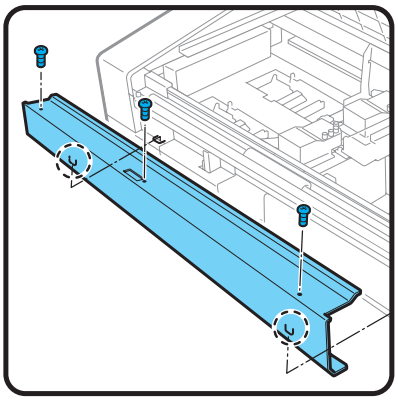
Watch the Video: Cleaning Internal Areas of GTX Printer

> If the inside of your printer is covered with **ink mist**, perform a **cleaning**!

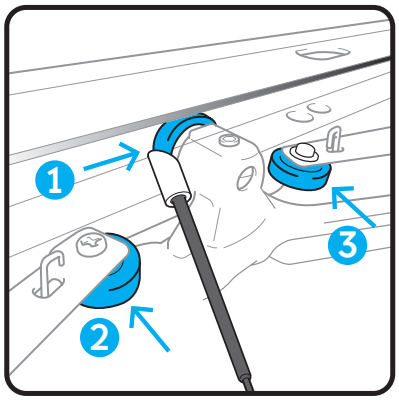
30 Min

*> Always use this menu to perform cleanings or replace parts :*

Menu > Maintenance > Maintenance Part Clean/Replace > MENU OK *and follow the instructions on the display*

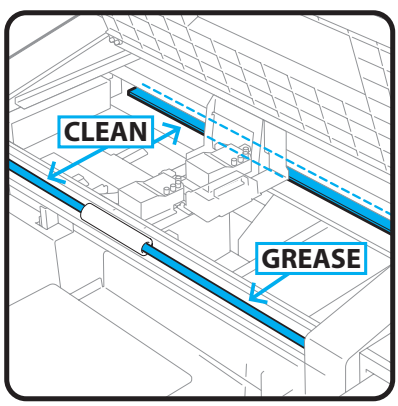


Remove 3 **Screws** to remove the **Encoder Cover**.




Dip the **Clean Stick R** in **Cleaning Solution**, then use it to wipe away the mist build-up on the **3 Carriage Rollers**. Move the carriage from side to side to wipe all around the 3 rollers completely.
Clean the **Carriage Guide Shaft** and the **3 sides** [upper, front, and lower] of the **Roller Guide** with a lint free cloth; moisten the cloth with a small amount of isopropyl **alcohol** [if using rubbing alcohol it should be above 90%]

**Do not** use alcohol on parts other than the carriage guide shaft and the roller guide!




Apply a proper amount of **Molykote 30 Grease** onto the **Carriage Guide Shaft** only [never on the Roller Guide!]

Remove 3 screws to take out the encoder metal cover. Take a lint free cloth; moisten with **alcohol**, clean carefully both sides of the **Encoder Strip**

Perform a **CR Speed Adjustment**.
*Menu > Printer Setting > CR Speed Adjustment > OK*

Print out a **Nozzle Check** pattern.

# WHEN NOT USING PRINTER FOR LONG PERIOD OF TIME

When the printer will not be used for a prolonged period of time, take appropriate steps before storing the printer depending on storage period or condition.

> ***DO NOT*** *turn the printer* ***OFF****, otherwise, the printer may be damaged.*

## > WITHIN 2 WEEKS

The printer can be used through normal procedure after the storage period, by performing the following maintenance tasks:

- Please empty **any waste ink** in the **waste ink tank.**
- Check the amount of **Cleaning Solution** in the cleaning liquid **tank**, and refill the tank when its is below the proper level.
- Agitate the white ink if a white ink agitation message is displayed on the operation panel screen.
- Print out a **Nozzle Check** pattern.

## > FOR MORE THAN 2 WEEKS

When storing the printer for **more** than two weeks, **cleaning** the **Nozzle Guard**, **Wiper** and **Exhaust Cap** should be performed.

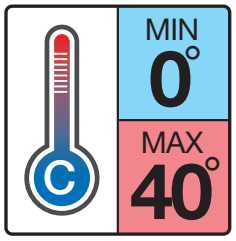
Same procedure as above **plus**:

- If a non-firing nozzle is found, perform **Head Cleaning** and run the **Nozzle Check** pattern print, and verify the result again.

# INK & SOLUTIONS STORAGE

CMYK & White inks, Cleaning Solution, Maintenance Solution & Pretreatment Solution should be stored at a temperature range between 0° and 40°

> *Be careful* ***NOT*** *to go below* ***Zero*** *degrees !*




# HOW TO EXTRACT A LOG FILE FROM THE PRINTER?

Switch on the printer and insert a **USB stick**

Go to the menu: Maintenance > Log copy to USB > MENU OK

**Watch the Video: Retrieving the GTX Log Data**

# GT INK & CONSUMABLES

| | Description of product | Product Code | Price/Unit* |
|---|---|---|---|
| INK POUCHES | C **Cyan** Ink Pouch 500cc [**GCX-4C50**] | BGCX40C05000112 | |
| | M **Magenta** Ink Pouch 500cc [**GCX-4M50**] | BGCX40M05000112 | |
| | Y **Yellow** Ink Pouch 500cc [**GCX-4Y50**] | BGCX40Y05000112 | |
| | K **Black** Ink Pouch 500cc [**GCX-4K50**] | BGCX40K05000112 | |
| | W **White** Ink Pouch **2 x 500cc** [**GCX-4W50**] | BGCX40W05000022 | |
| | C **Cyan** Ink Pouch 700cc [**GCX-4C70**] | BGCX40C05000112 | |
| | M **Magenta** Ink Pouch 700cc [**GCX-4M70**] | BGCX40M07000112 | |
| | Y **Yellow** Ink Pouch 700cc [**GCX-4Y70**] | BGCX40Y07000112 | |
| | K **Black** Ink Pouch 700cc [**GCX-4K70**] | BGCX40K07000112 | |
| | W **White** Ink Pouch **2 x 700cc** [**GCX-4W70**] | BGCX40W07000022 | |
| LIQUIDS | CS **Cleaning Solution** 1,9Kg [**GCX-4E02**] | BGCX40E002K0052 | |
| | MS **Maintenance Solution** Pouch 700cc [**GCX-4S70**] | BGCX40S07000012 | |
| | PT **PreTreatment** Liquid 5Kg-4L **[GCX-4P05]** | BGCX40P005K0042 | |
| PARTS | **W Capping Pouch** *pieces in the* | SB5696001 | |
| | **Wiper Cassettes** *[2 pieces in the box]* | SB6673001 | |
| | **Flushing Foam** *[2 pieces in the bag* | SB7006001 | |
| | **Fan Filter** *[2 pieces in the bag]* | SB7007001 | |
| | **Cleaning Sticks R** *[50 pieces ]* | 4Y1-9096 | |
| | **Cleaning Sticks Type T** *[50 pieces]* | SC0032001 | |
| | **Wiper Blade** *[1 piece; machine requires 2]* | SB7870001 | |
| | **Print Head** *[1 piece]* | SB9173001 | |
| | **Color Cap Rubber Assy.** *[1 piece]* | SB9630001 | |
| | **White Cap Rubber Assy.** *[1 piece]* | SB9650001 | |
| | **Acro37 Large W-Side Filter** *[4 pieces]* | GTXLCF231 | |
| | **LC Filter 10um** *[4 pieces; machine requires 2]* | GT3LCF124 | |
| | **GREASE EM-30L** *[1 piece]* | SB3229101 | |
| | **Platen Sheet Adult** *[1 piece]* | SB6667101 | |
| | **Maintenance Unit** *[1 piece]* | SB7869701 | |
| | **Encoder Strip** *[1 piece]* | SB2665001 | |
| | **Maintenance Pulse Motor** *[1 piece]* | SB5346001 | |
| | **Black Chip Cartridge Sensor** *[1 piece]* | A60014001 | |
| | **Main PCB Assy** *[1 piece]* | SB7016101 | |
| | **Encoder Resin Rivet** *[1 piece]* | SB5161001 | |
| | **Encoder Cleaner Tool** *[1 piece]* | SB3143101 | |

# NOTES

# CONTACT DETAILS OF YOUR BROTHER DEALER

Company Name:

Representative:

Email address:

Phone number: