



COOKBOOK

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1 GENERAL INFORMATION

The printer should only be used by **operators** who are appropriately **trained** in its safe operation. The printer is **not suitable** for use in places where **children** are present.

1.1 SOFTWARE

Always make sure that you use the latest software for your **GTXpro BULK DTF R2R**.

You find the latest versions here:

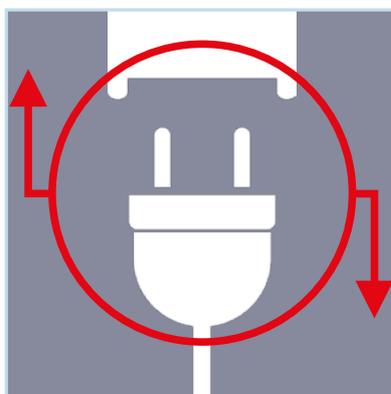
<https://base.brother.digital/driver-firmware/gtxpro-roll/>

1.2 IMPORTANT RULE REGARDING THE POWER SUPPLY

The **GTXpro** should always be left with power ON, also when it is not in use.

Power is needed to perform the recirculation of the white ink every day. This process does not consume ink.

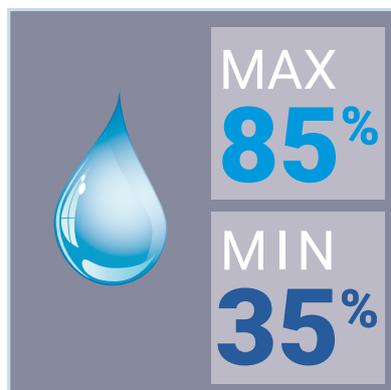
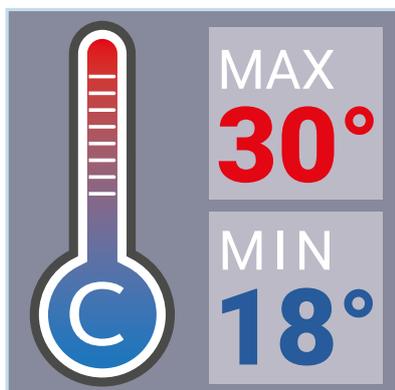
If the **GTXpro** is turned OFF for a long time it might get damaged.



Only pull the plug in an emergency or when requested by a display message!

1.3 ENVIRONMENTAL PRINTING CONDITIONS

Mandatory temperature and air humidity for the best print result:



Required to keep your warranty for the printer!

Temperature & air humidity are recorded in the log file!



Please check the temperature and air humidity in the menu of the printer:



If temperature is too cold: The printer will switch automatically to “Low-Temp Mode” and reduce the speed. Raise the temperature of the printer’s environment.

If temperature is too high: Please turn down the temperature of the surrounding area of the printer.

If humidity is too low: The printer will perform auto-cleaning after every print if the humidity is lower than 35%.

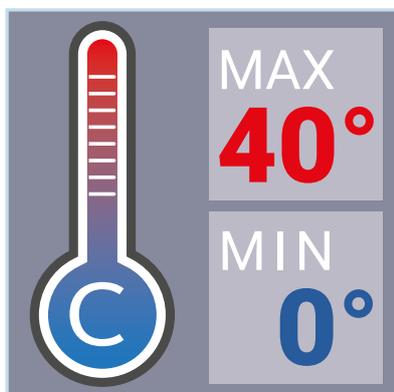
Please install a humidifier in your workspace.

If humidity is too high: Please try to lower the humidity of the surrounding area of the printer.

Please always keep the temperature and humidity within the required ranges, otherwise the **GTXpro** might get damaged.

1.4 STORAGE OF THE LIQUIDS

The liquids should be stored at a temperature between minimum 0°C and maximum 40°C.



- ▶ Please turn over the **white ink refill tank** every week.
- ▶ Do not use inks or liquids with a temperature below 18° C or above 30° C .

1.5 EXPLANATION OF THE CONTROL PANEL



The display shows the current loaded print file with the chosen print format, the approximate ink consumption for it and the number of prints. In the bottom left corner the ink level is shown. The light blue rectangles show the selection of print direction and the resolution of the print. Warnings are displayed in yellow in the bottom right corner. By pressing ▶, the display changes to the warning display on which the warning and the needed operations are indicated.





- A: Freely assignable speed dial button
- B: Button for platen moving
- C: Cancel button
- D: Print start
- MENU/OK:** Opens the menu and confirms actions.
- ▶: Cursor buttons for moving through the menus.
- E: The LEFT cursor button is the go back button.



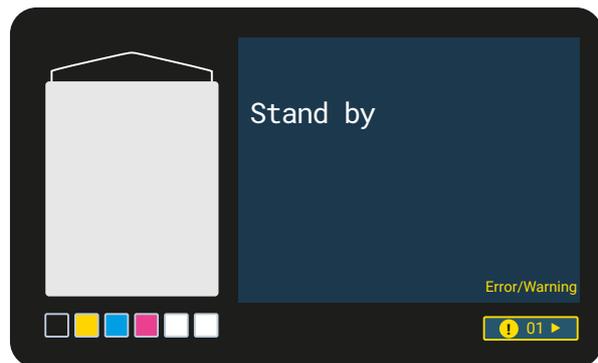
- F: Power switch ON/OFF
- G: USB 3.0 Typ A port to load print files from an USB-stick.
- H: LAN port for connection to your PC.
- J: USB Typ B port for connection to your PC.

2 BEFORE PRINTING

2.1 VISUAL INSPECTION

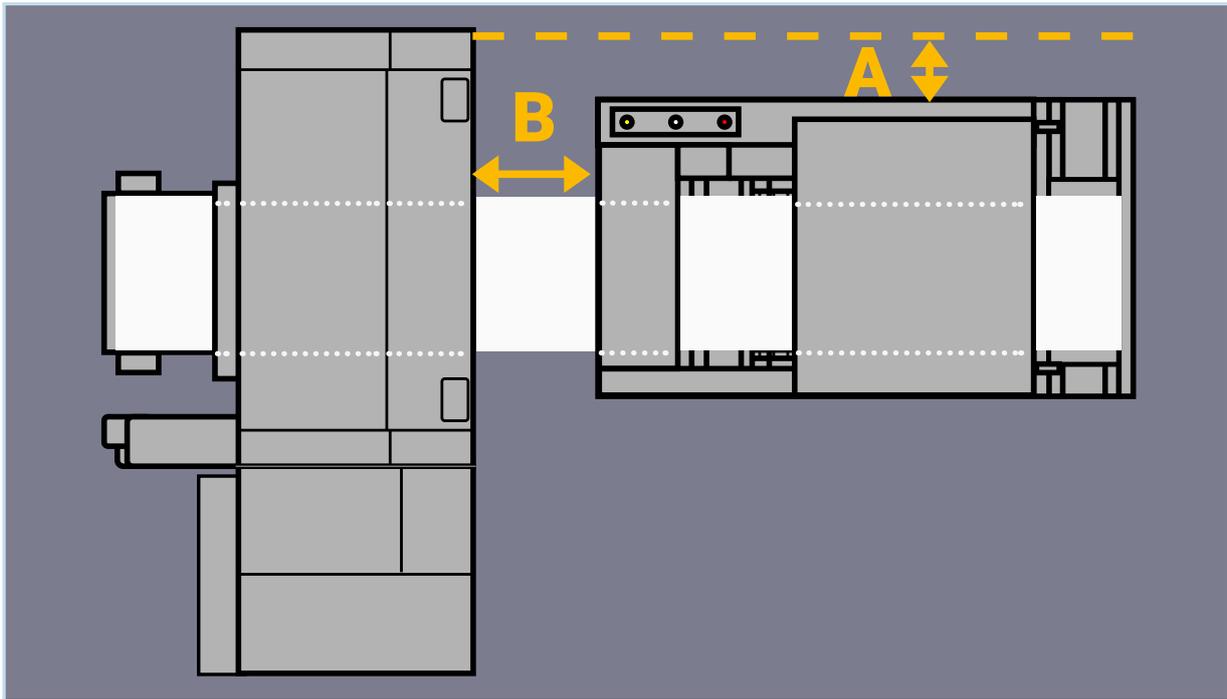
- ▶ Regularly check all moving parts of the machine and look for ink leaks.
- ▶ Check the level in the waste ink tank and, if necessary, empty it.
- ▶ Please follow all the instructions shown on the display.

When you see an "Error/Warning" yellow number press the "▶" key to know what you have to do to erase the Error/Warning.



2.2 ALIGNMENT OF THE MACHINES AND THE FILM

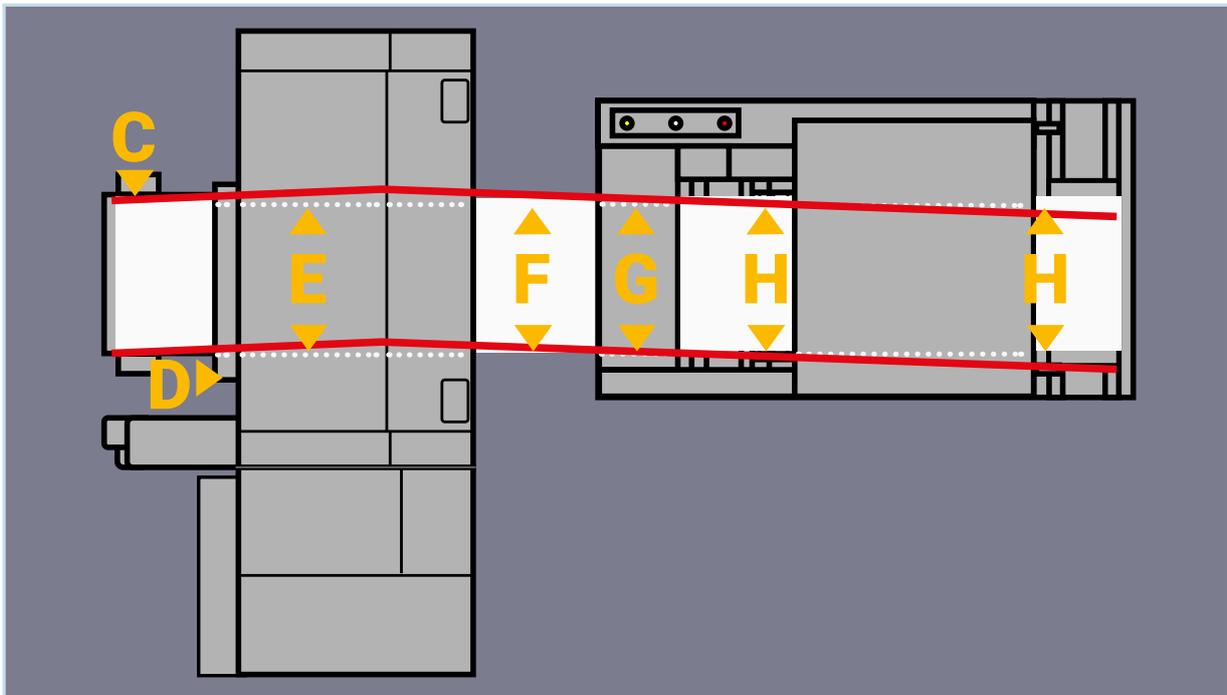
Check that the GTXpro Roll and the PowDR are still aligned (a laser is helpful).
The brakes of the castors should always be applied.

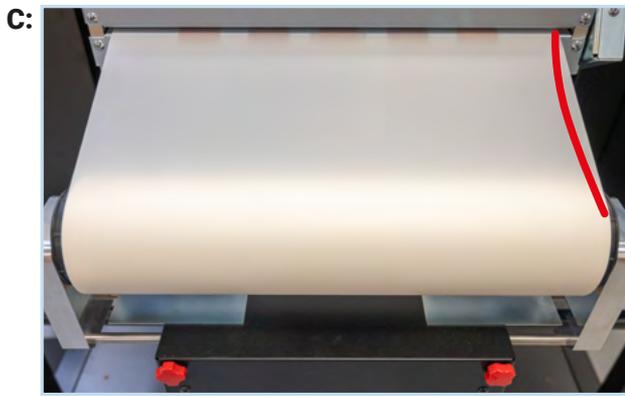


A: 23 cm parallel to the printer; **B:** 25-30 cm parallel to the printer

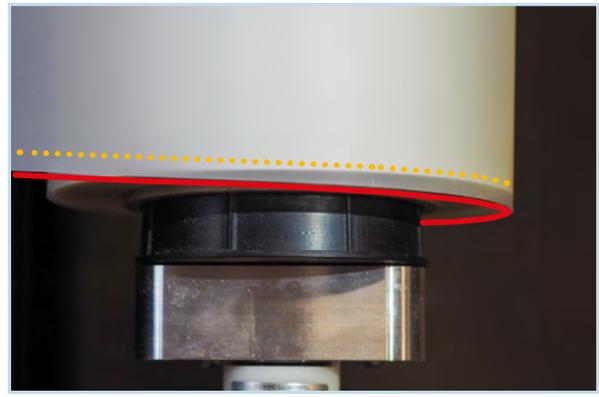
The film can run skewed through the system for various reasons, even if the machines are precisely aligned. **Missalignment of the film leads to poor print results.**

The missalignment can be checked on different positions on the runway of the film.





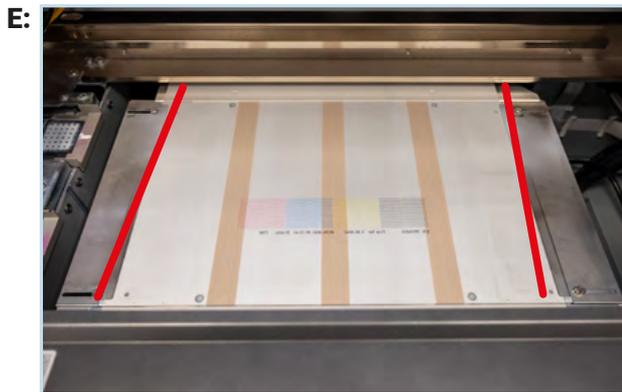
Is the film roll centred and does the film have equal tension at the edges?



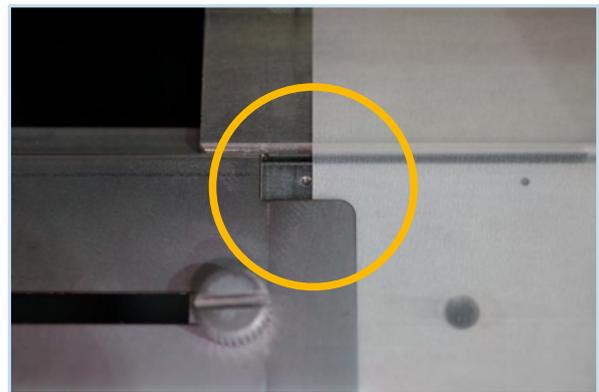
Is the film just aligned with the roll?



Is the fixing lever closed?



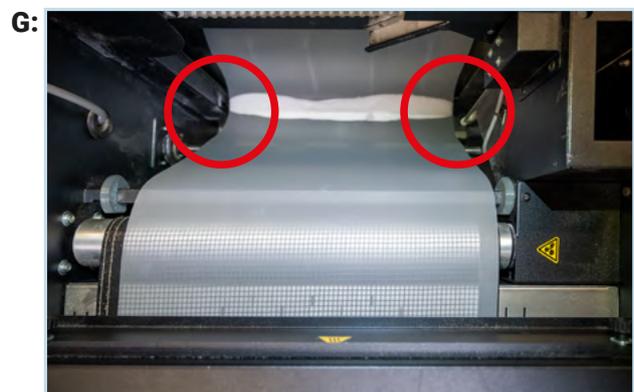
Is the film aligned straight on the printing table?



Can the film slide freely through the guide



Does the film have the same tension at the edges?



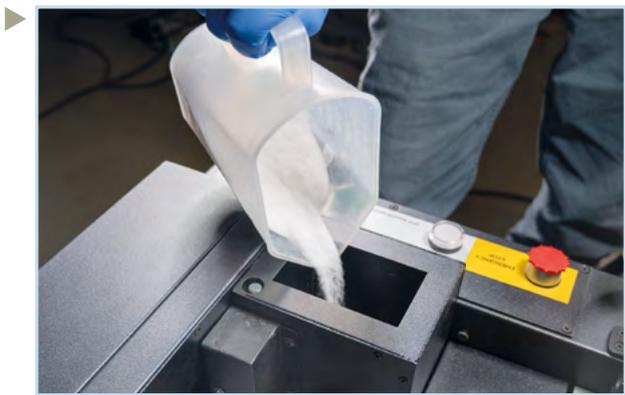
The film does not touch any part of the powder unit?





Is the film in the melting unit well aligned?

2.3 REFILL THE POWDER AT THE PowDR



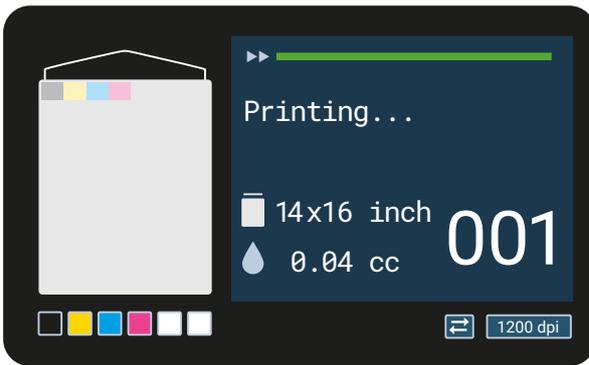
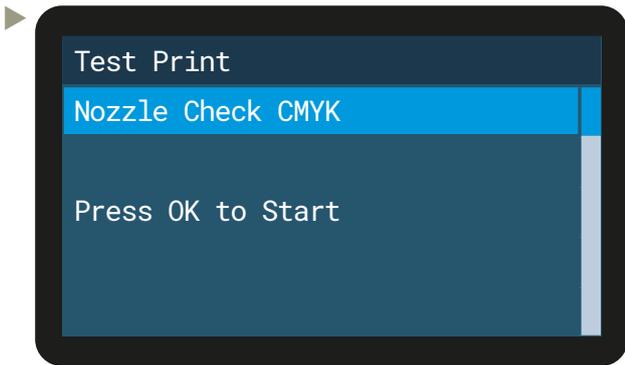
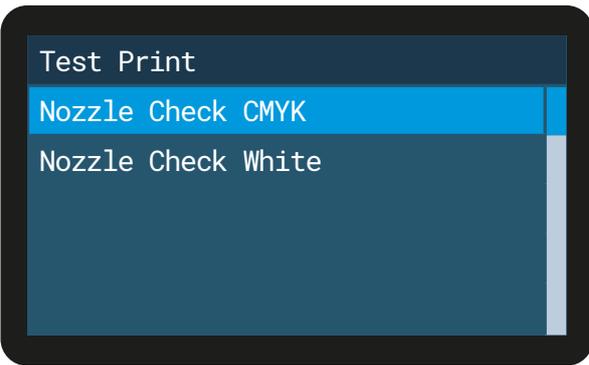
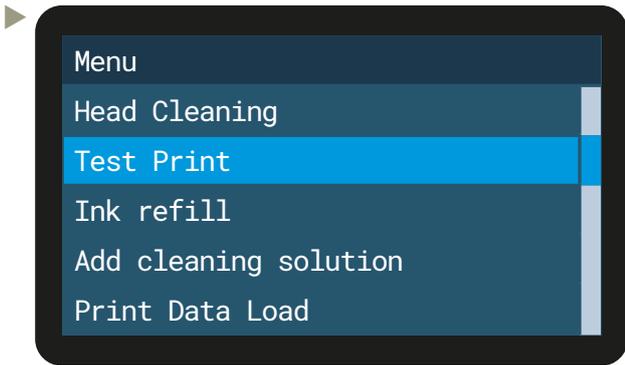
Fill the powder tank with the necessary amount of DTF powder.

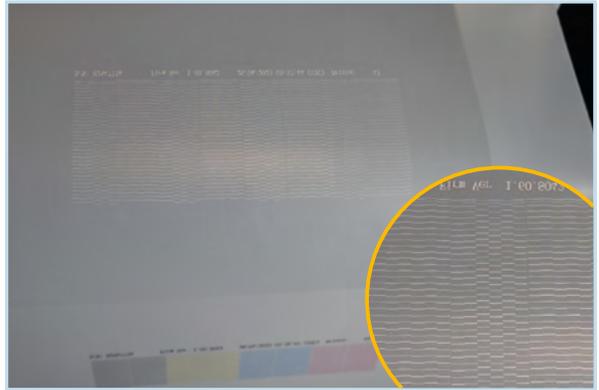
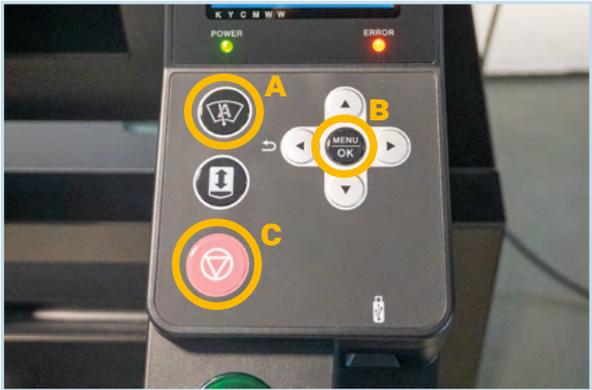
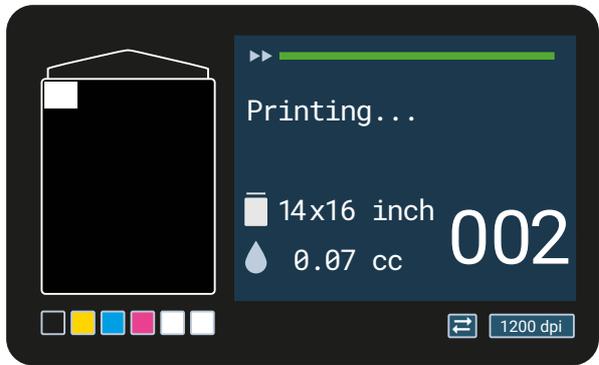
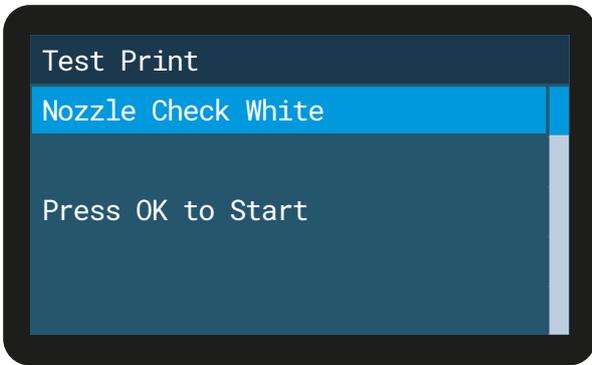
If a new powder type has been filled into the powder unit or the unit has been moved, the powder sensor must be recalibrated.

Consult the PowDR manual.

2.4 DAILY NOZZLE TEST

You have to perform a nozzle test for CMYK and white **every morning** before starting your production.



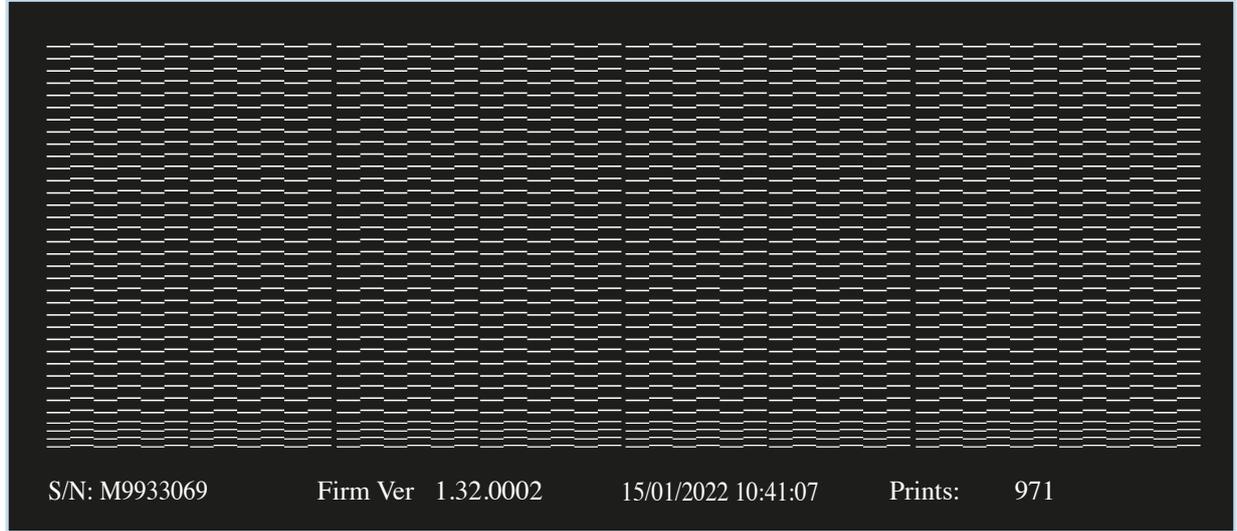
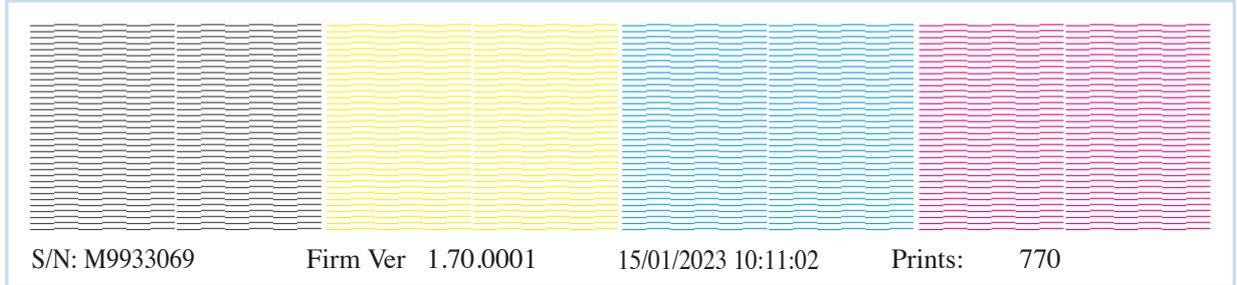


When the nozzle checks are done, run the film out of the back of the printer:

- A:** Press for transportation of the film.
- B:** Press the Menu/OK button.
- C:** Press Cancel when the print comes out of the back of the printer.

Check the nozzle pattern by holding a white (CMYK print) or black (White print) paper sheet behind the film.

This is what the nozzle checks should look like:



If not all nozzles are firing, start a cleaning of the affected print head to open the clogged nozzles.



- ▶ If still more than 10 nozzles are missing, select super cleaning.
- ▶ Perform a nozzle test to check the result and perform another cleaning if the nozzles still do not spray.

3 HOW TO PRINT

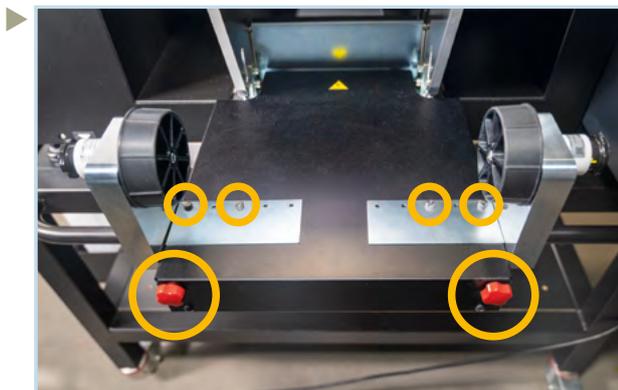
You can find instructions for printing here (>TIP-Sheets > GTXpro Roll > Print Settings/Software Guide):

<https://base.brother.digital/tip-sheets/>

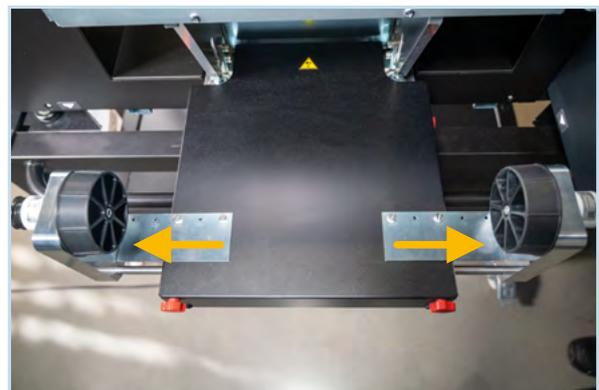
Please make sure that the resolution of your printfile is not too low.
A resolution of 300 dpi in relation to the print format is recommended.

4 DURING DAILY WORK

4.1 INSERTING A FILM ROLL



Loosen both thumbscrews of the roll holder on the front side and the screws of the plates.



Adjust the plates to the width of the roll. The numbers under the outer screws are decisive.





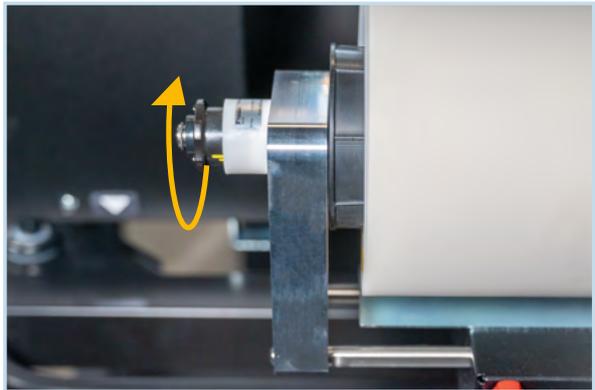
Insert the film roll between the jaws.
A: The rolling direction



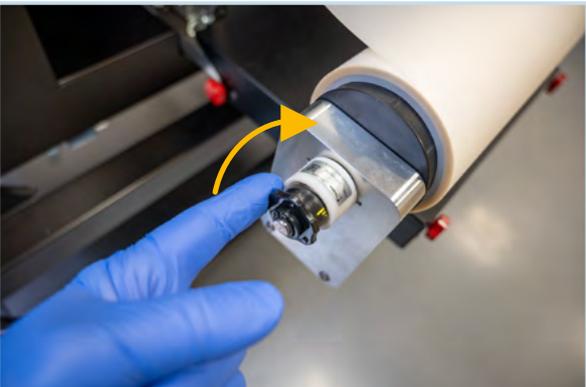
Center the roll between the edges of the plates.
 Then fasten the thumbscrews.



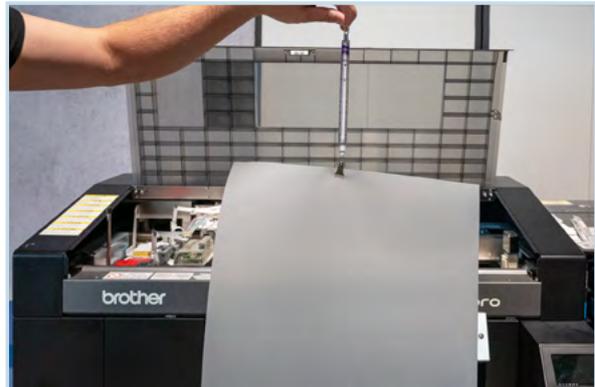
Turn the brake knob right side counter-clockwise until it stops to release the brake completely.



Repeat the operation on the left side.



Then slightly, with one finger, turn each knob clockwise till you feel a slight resistance. It is best to set the buttons identically.



HELPFUL: Attach a spring balance to the film and slowly unroll it a little. The resistance value should not exceed 100 gr.

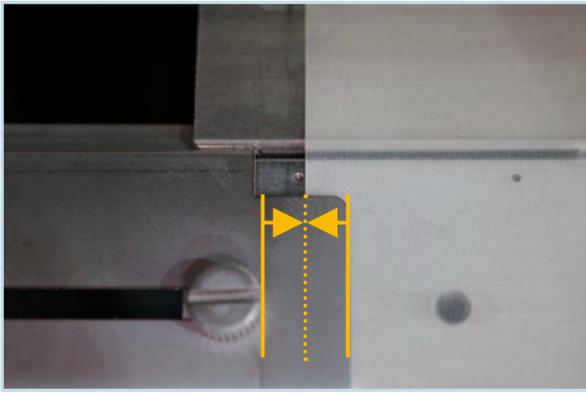


A: Insert the film carefully and in an even way.
B: The lock lever must be down to be open.



Align the film straight on the print table. If you use a 40cm roll, remove the screws from the side guides and screw them back into the outer holes.

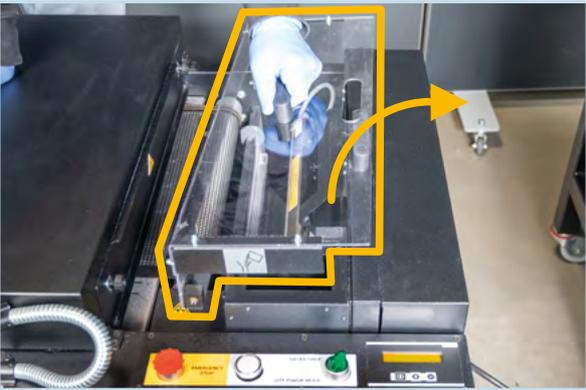




Adjust the guides. The guides should only cover the film with a maximum of half of their width. Then slide the film out of the printer by hand.



Switch OFF the power at the PowDR.



Remove the transparent lid.



Pull some film through the printer and insert it over the rod into the PowDR.



Place it under the ionizer and on the conveyor belt.



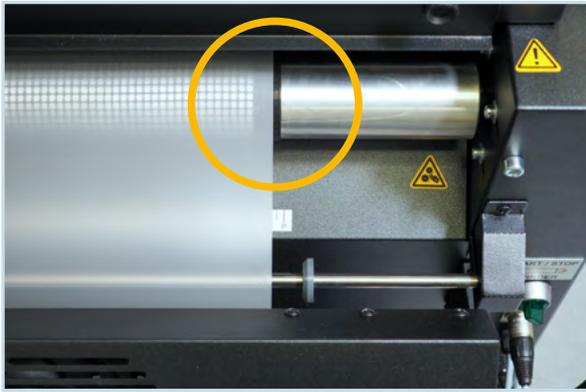
Open the big lid of the PowDR. Lift it up with the handle on the left side until it stops.



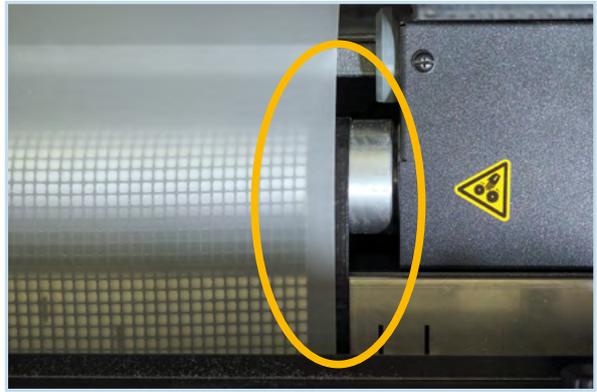
Pull the film through and lay it over the thin rod (A) on the backside of the PowDR.



Loosen the thumbscrews and insert an empty roll that is wider than the film. Center it to the film to ensure correct winding.



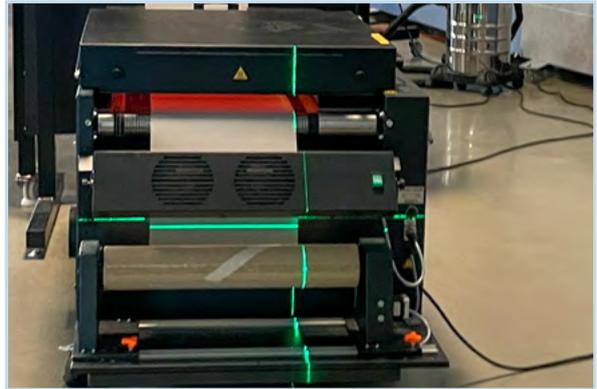
Place the film on the left edge of the belt when installing a roll with 40 cm width.



Make sure that the film lays completely parallel to the conveyor belt.



Tape the film at a point in the middle of the roll. The film can thus freely align itself a little.



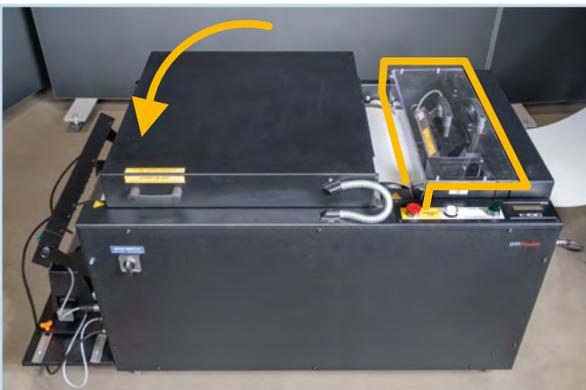
HELPFUL: Check the alignment of the film with a laser.



Give the film some slack when under the ionizer and right before the conveyor belt.



Make sure that the film does not touch any part of the powder unit!



Close the big lid and reinstall the transparent lid.



Close the lock lever by pushing up.





Switch ON the power.

HELPFUL to know:

Put some powder on the film via the menu to have a little weight on the slack.

- ▶ Make sure that the edges of the film have the same tension on both sides. If not so, align the machines with each other!
- ▶ Never join two films with tape or in any other way.



Press minus button and hold for 10 seconds.

4.2 BEFORE REFILLING THE WHITE INK

In general the chemical composition of white ink includes pigments and other substances which are not soluble. This insolubility might lead to sedimentation in white ink what has to be eliminated by agitation before the refill process starts.

If the white ink is not agitated well before refilling, the print result will not be acceptable and the refill container as well as the white ink in the printer will be lost. In addition, the removal of the unusable white ink from the printer is time-consuming.

Before every refill of white ink you have to agitate the refill canister.



Tools that help to shake the white ink properly:

- A:** Fitness vibrating plate
- B:** Vibrational shaker
- C:** Gyroscopic mixer



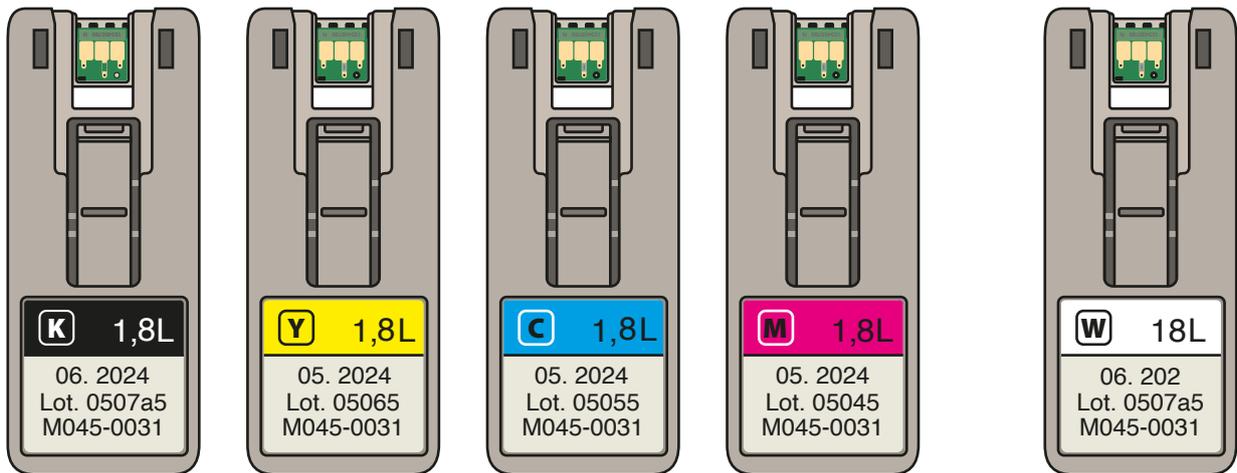
Turn the canister upside down and check it with a flashlight. If there is only foam, but no sedimentation left, you can start the refill process.



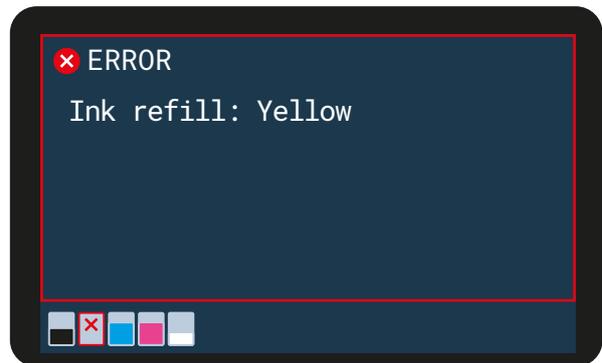
4.3 INK REFILL

The ink refilling process is guided by the menu. The IC-Stick, which is included with each ink canister, is necessary to activate the refill process in the menu.

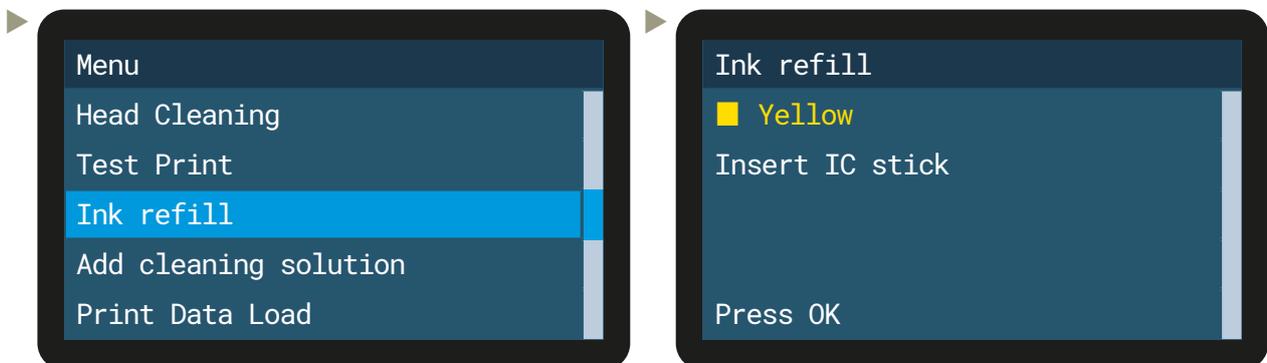
- If the IC stick is not in place, the printer will ask for it.
- If the IC stick from a wrong color has been inserted, the printer will detect it and report it.
- If the IC stick is lost or broken, contact your dealer immediately.
- A reserve set of ink enables a continuous production.

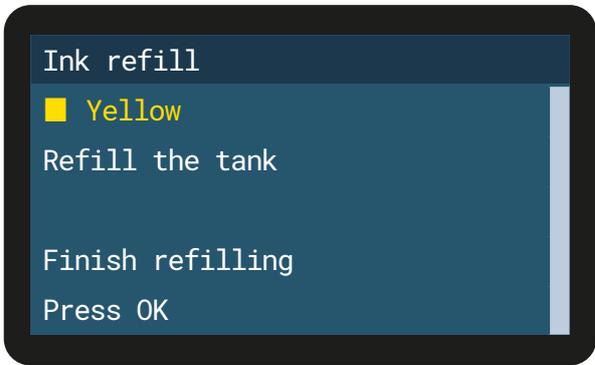
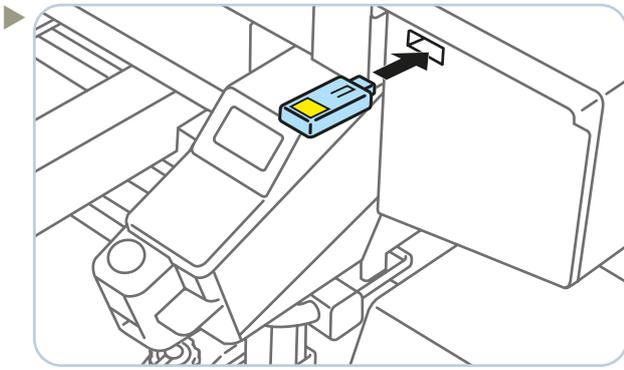


If the following message is shown on the display the mentioned color has to be refilled:

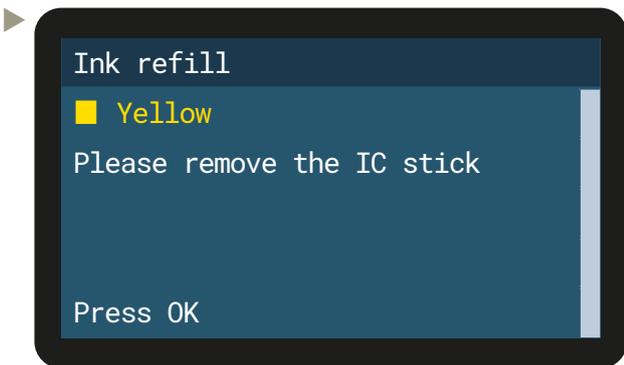
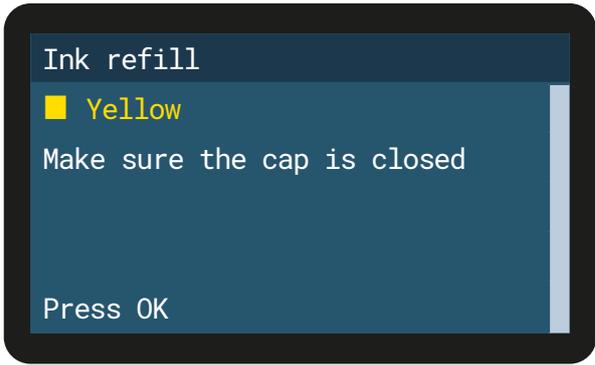
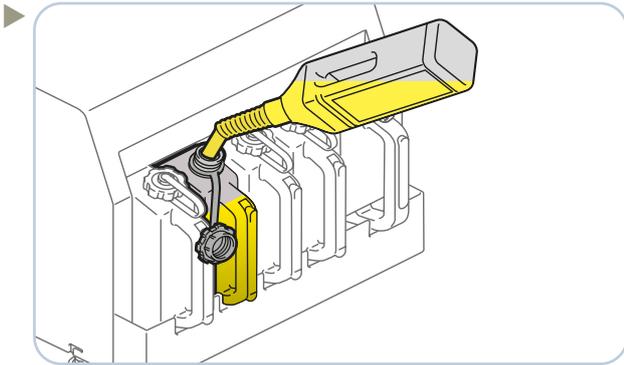


Choose "Ink refill" from the menu and follow the guided steps:





Insert the IC-Stick from the needed refill bottle into the dedicated slot of the printer.



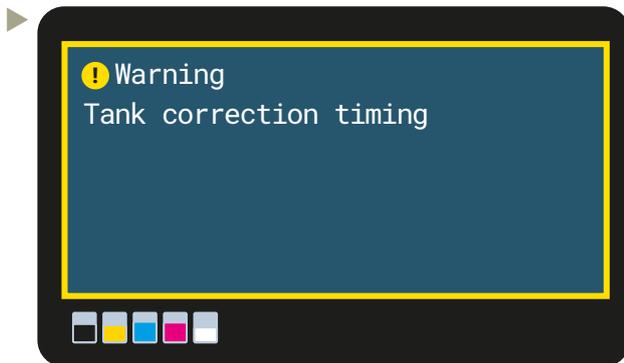
A rolling scissor lift is helpful for refilling white ink:



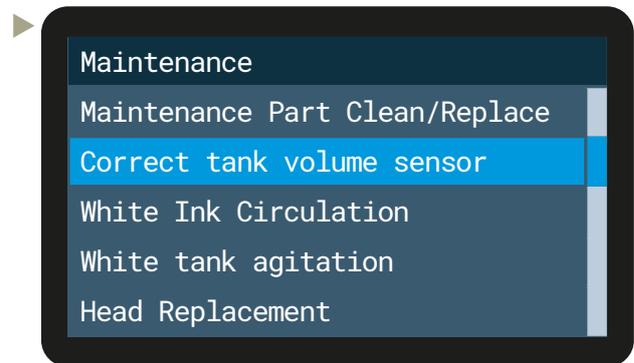
4.4 INK TANK CALIBRATION

Every 30 days a warning appears: the ink tank calibration must be performed for all ink tanks. If it is not performed after 32 days error, 1011 will occur.

You will not be able to print until calibration is done.

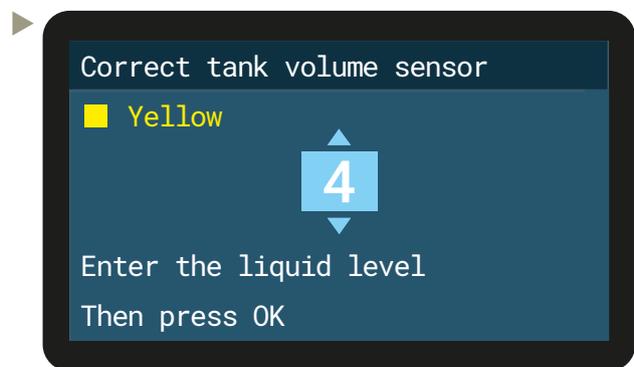
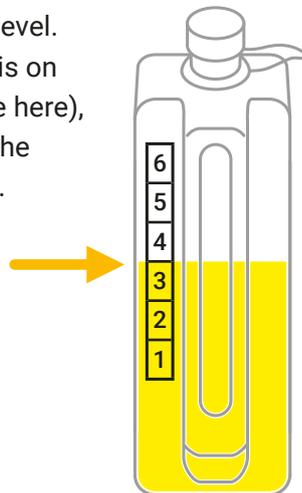


If this warning is displayed, ink tank calibration must be performed.



Select "**Correct tank volume sensor**"

- ▶ Check the ink level. If the ink level is on the border (like here), please select the higher number.



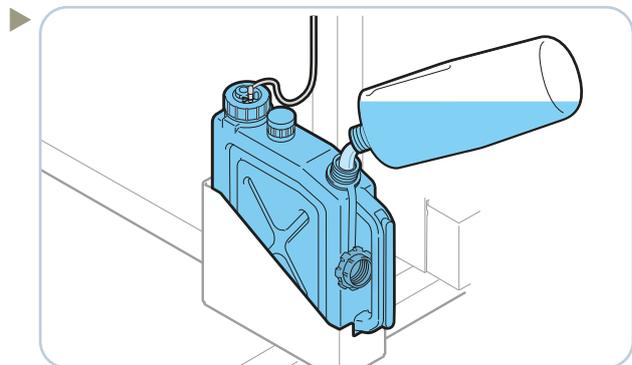
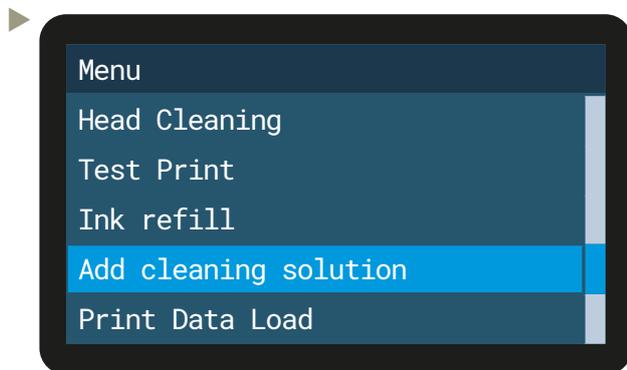
A flashlight is helpful to check the ink level of the white tank.



4.5 CLEANING SOLUTION REFILL

The refill of the Cleaning Solution circuit is done from the bottom tank.
The upper tank is refilled by a pump activated by a sensor.

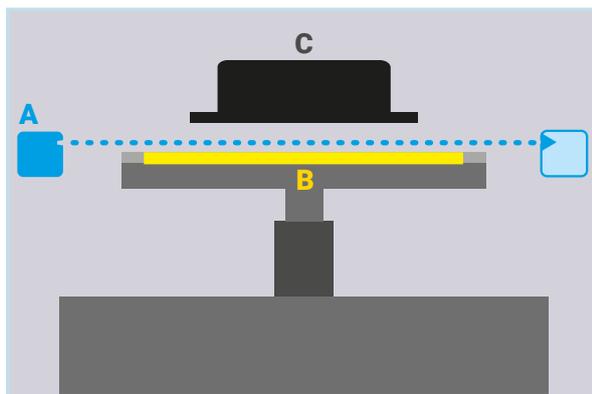
▶ Please refill the bottom tank, when **"C.S. Empty"** is shown on the display.



Select **"Filling solution tank"** and follow the instructions in the menu.

4.6 THE OBSTACLE SENSOR

Normal situation:

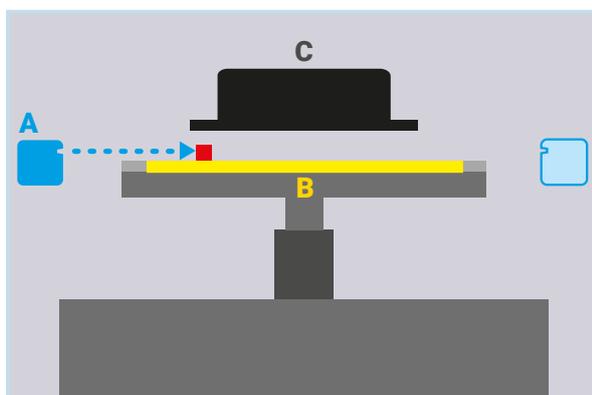


A: "Obstacle sensor"
It is used to detect any obstacle on the platen for the print heads.
An error occurs when obstruction is detected.

B: Film on the platen

C: Print head

Obstruction situation:



A: When the beam of the obstacle sensor hits an obstacle, the printing process will be stopped immediately to avoid crashing the print heads.

On the display **Error 2070** appears.

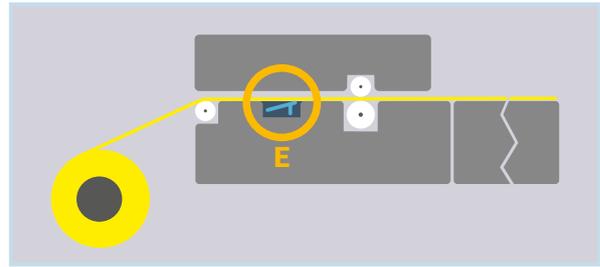


4.7 END OF FILM SENSOR

Position:

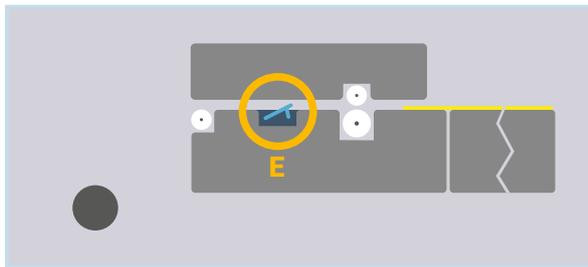


Normal situation (Sectional view):



E: The well aligned film presses the sensor down with its tension.

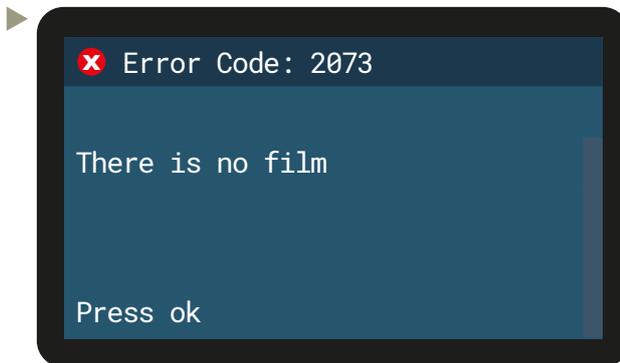
End of film situation (Sectional view):



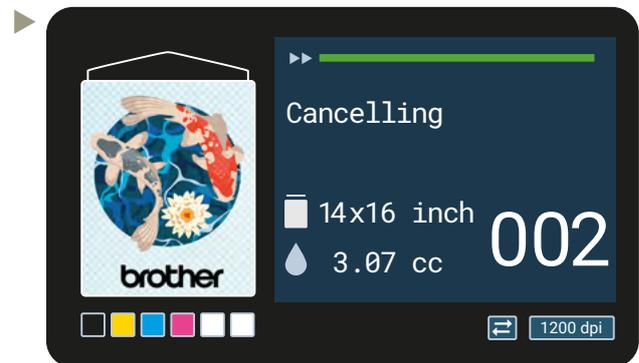
E: The sensor comes up when:
 - the end of the film passes the sensor
 - the film curves due to misalignment and loses contact with the sensor.

The printer will stop immediately.

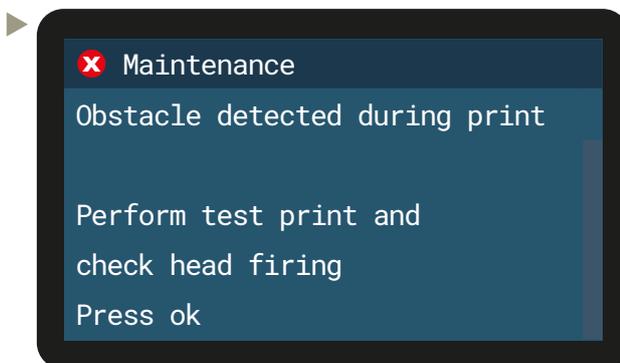
The following message will be displayed:



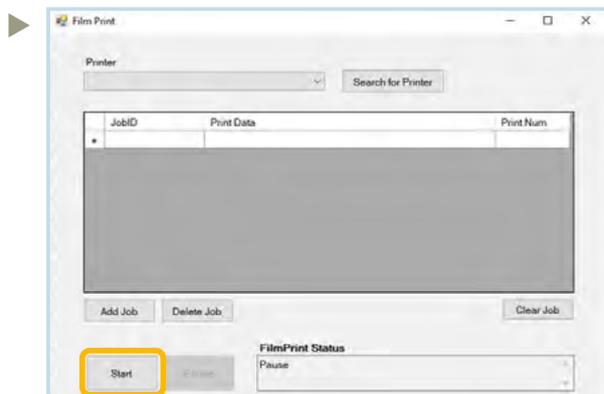
The display changes (see right).



After installing a new film or realigning press ok. The display changes (see next).



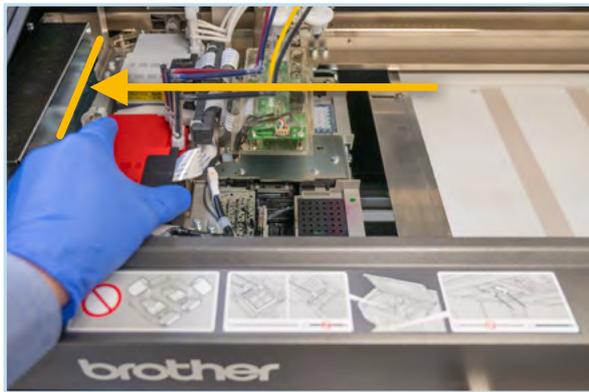
Now go to your PC.



In "Film Print" click on Start. The printing process will continue from where it was interrupted.



4.8 EVENT OF POWER FAILURE

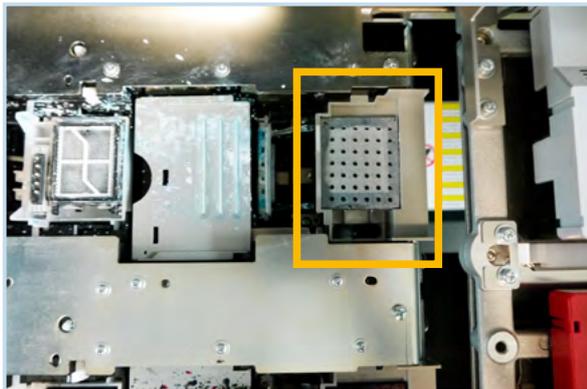


In the event of a power failure in your workshop, push the print head carriage to the capping position by hand. This will protect the print heads from drying out for some minutes, giving you some time to solve the problem.

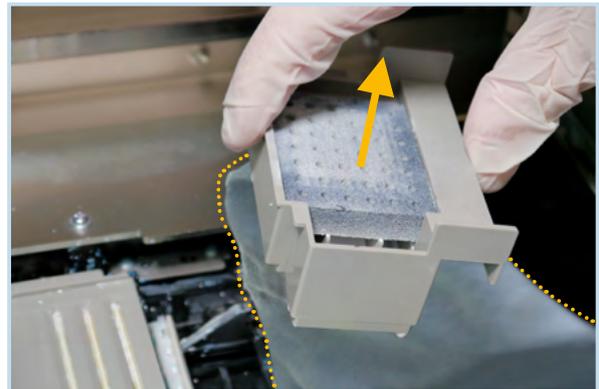
4.9 CLEANING AND REPLACING OF MAINTENANCE PARTS

In case of a “Warning/Error” message connected to a maintenance part, you always have to use the menu and run “Maintenance Part Clean/Replace”.

In case of a “Warning/Error” message connected to the flushing foams, please carry out the following actions:



Position of the flushing foam (white side).

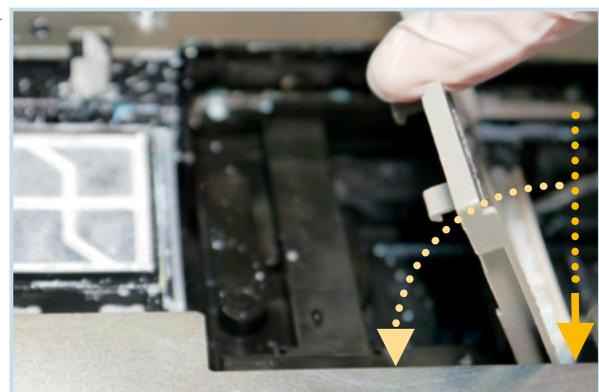


Lift up the flushing receiver and use a waste cloth to avoid that ink drips into the **GTXpro Bulk**. Remove the flushing foam and clean the receiver from inside to ensure that the hole in the receiver is open. Insert a new flushing foam and reinstall the receiver. Repeat the same on CMYK side.

In case of a “Warning/Error” message connected to the wiper cleaner, please carry out the following actions:



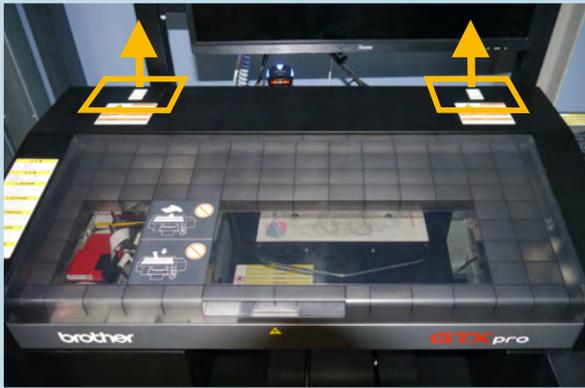
Position of the wiper cleaner (white side).



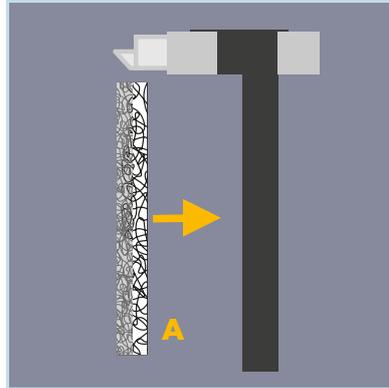
Lift the wiper cleaner up and remove it. When you insert the new one vertically, you hear a “Click” . Proceed in the same way on CMYK side.



In case of a "Warning/Error" message connected to the fan filter, please carry out the following actions:



Position of the fan filters.
Please remove the two fan filter holders.



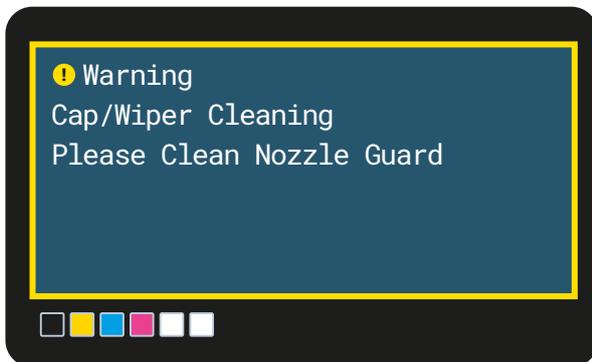
Insert a new filter with the coarse side **A** facing to the inner area of the **GTXpro Bulk** in each holder. Insert the holders in the **GTXpro Bulk**.

5 MAINTENANCES

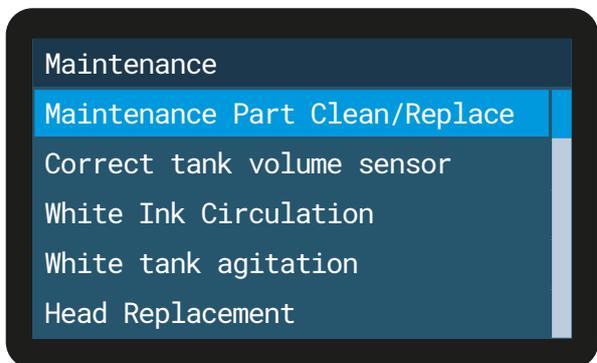
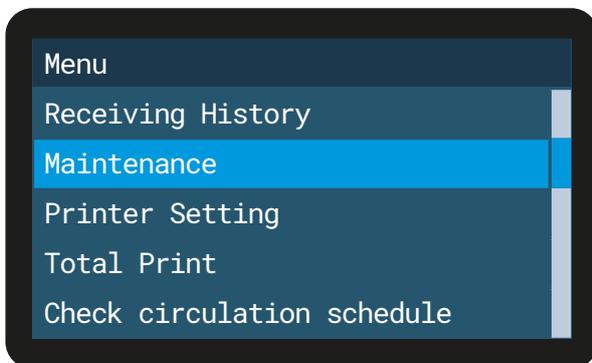
For the maintenance of the PowDR, please refer the PowDR manual.

5.1 WEEKLY MAINTENANCE

After the installation of your **GTXpro Bulk**, the following warning will appear every seven days:



Use the following menu to perform cleaning or "Maintenance Part Clean/Replace" after receiving the warning on the menu:



Maintenance Part Clean/Replace

Error and warning parts

Select individually

Maintenance Part Clean/Replace

Platen/Heads will move for operation

Press OK to move

Maintenance Part Clean/Replace

Turn OFF power

See Instruction Manual

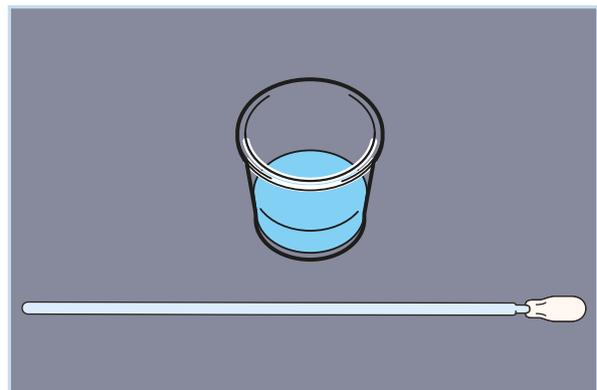
Clean within 15 min to prevent the head from drying out

Perform the cleaning within 15 min to prevent the print heads from damage.

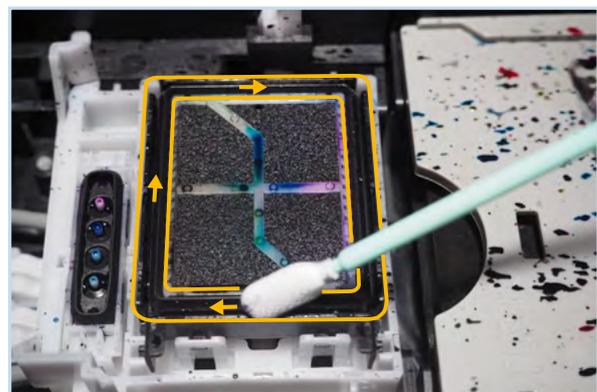
- ▶ For cap and exhaust cleaning you need cleaning sticks **T** and a bit of cleaning solution.

Make sure that you use new cleaning sticks.

Never use the same cleaning stick for white and color parts.

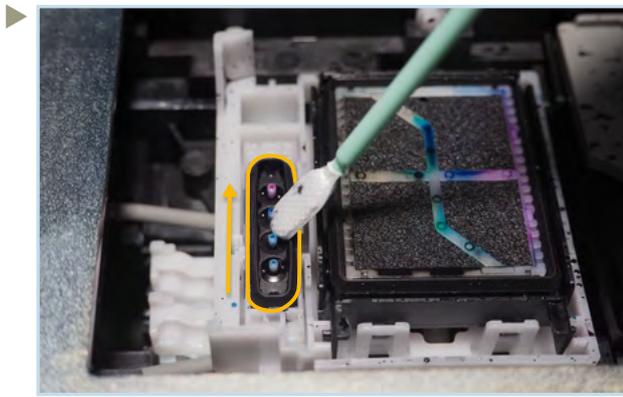


Position of the cappings, exhausts and wipers.



It is necessary to remove the ink residues remaining on the silicon lips of the caps. **Be careful not to touch the foam.**

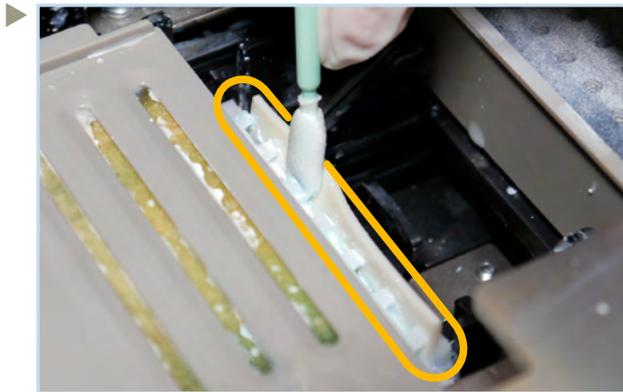




When cleaning the exhaust start from the front and go backwards. Always move the stick away from the drain hole placed in front.

Before you start cleaning the white capping, take a new cleaning stick T and fresh cleaning solution. Pour the dirty cleaning solution into the waste tank.

▶ Before you clean the wipers take a new cleaning stick T and fresh cleaning solution.



Clean the wiper on both sides, under the teeth of the wiper holder and remove the dried ink.

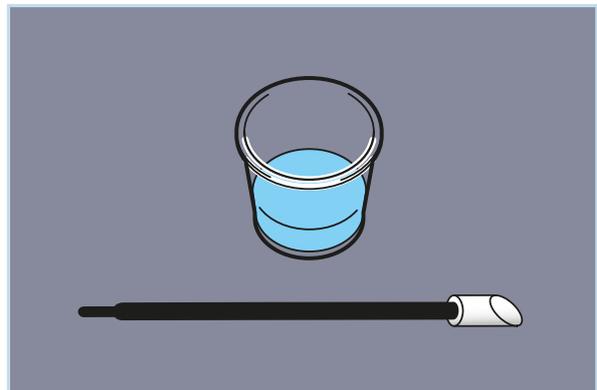
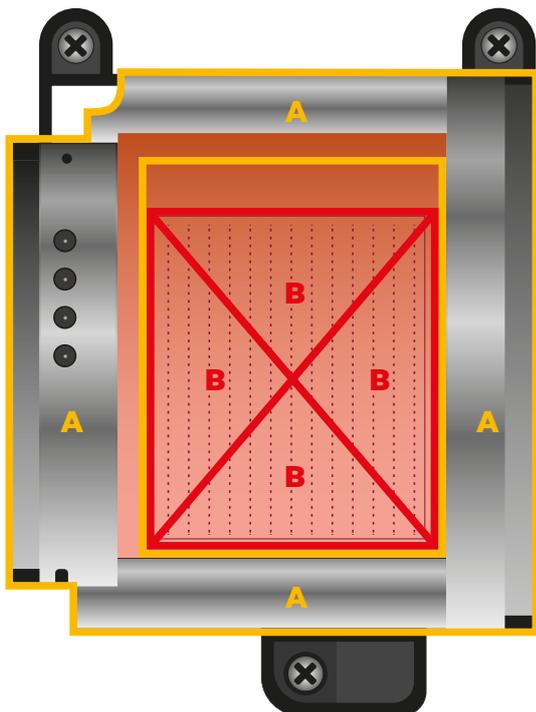
Before you clean the color wiper, take a new cleaning stick T and fresh cleaning solution. Pour the dirty cleaning solution into the waste tank.

▶ Use a new cleaning stick R and fresh cleaning solution for the cleaning of the nozzle guards of each print head.

View from below

A: Surfaces to be cleaned on the underside of the print heads.

B: Do not touch the nozzle surface at all.

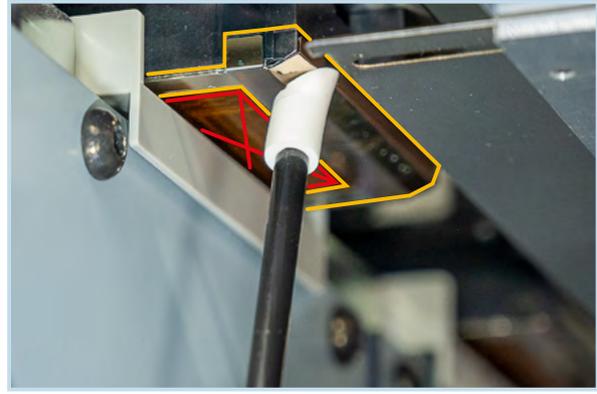


Side view





- A:** The nozzle guard must be cleaned from underneath through the gap between the platen and the maintenance unit.
- B:** If the gap seems too narrow for you, you can remove the left slider.



Be careful not to touch the nozzle surface during cleaning. Move the print head carriage by hand from left to right to reach the complete nozzle guard.

Do not touch the nozzle surface at all.

- ▶ Remove and clean up the side guides of the film on the printing table weekly. Friction causes abrasion of the film at the guides, which can affect the alignment of the film.



5.2 MONTHLY MAINTENANCE

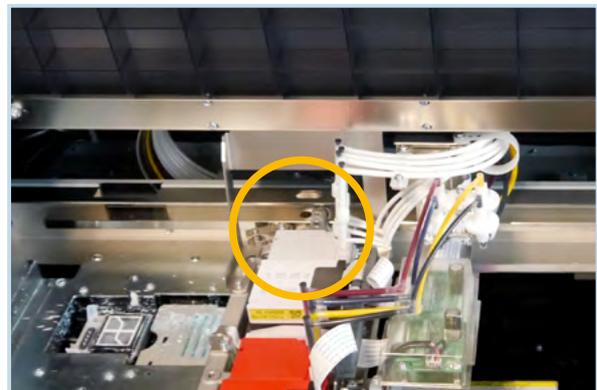
Due to the production process, lint and ink mist contaminate the inside of the machine. These must be removed to increase the longevity of the machine.

Use the menu "Maintenance Part Clean/Replace".

Perform the cleaning within 15 min to prevent the print heads from damage.

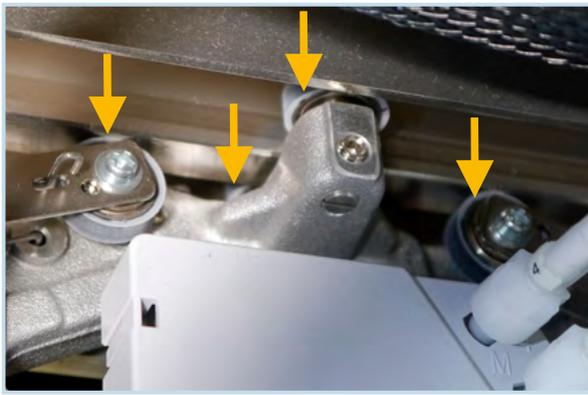


Remove the 3 screws to remove the encoder cover.

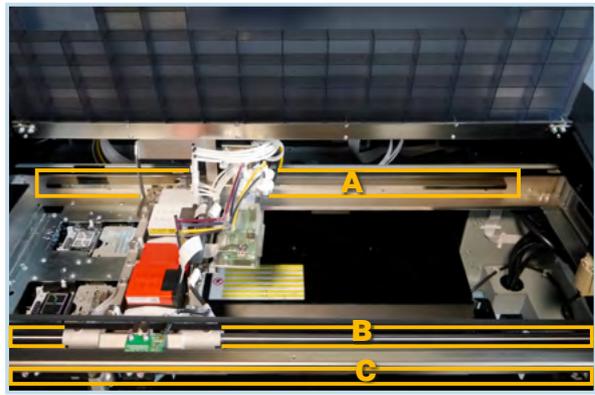


Position of the 4 carriage rollers behind the white print head.





Clean the 3 carriage rollers on top and the roller underside with a new stick **R** dipped in cleaning solution.



Use a non-fuzzy cloth moistened with a bit of Isopropyl Alcohol (95%) for the cleaning of:

A: The 3 sides of the roller guide

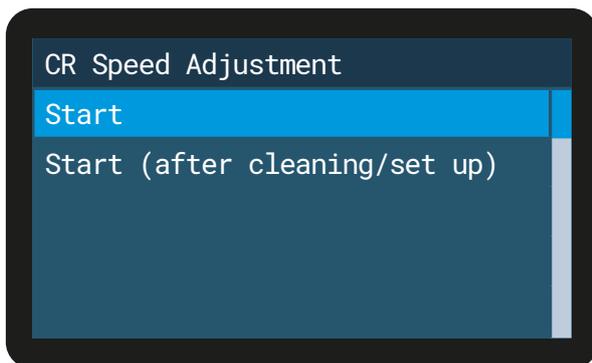
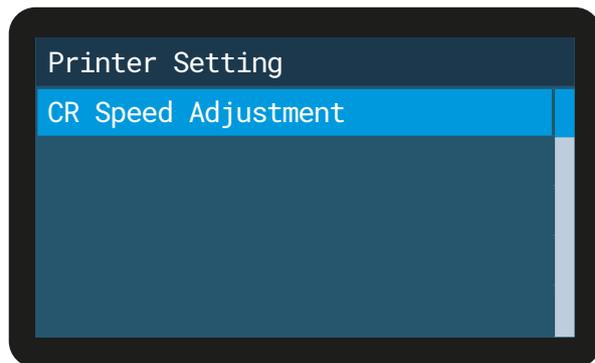
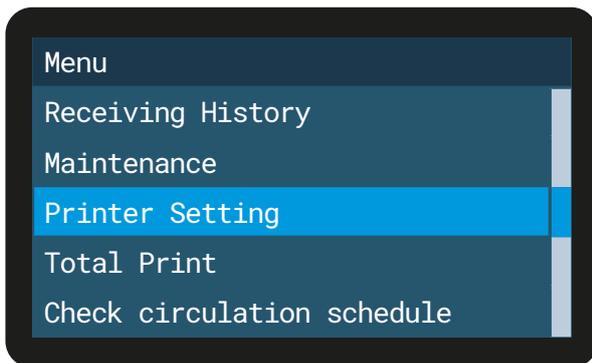
B: The carriage guide shaft

C: Both sides of the encoder strip.

Do not use Isopropyl Alcohol on any other parts.

Then apply a proper amount of *Molykote 30 Grease* onto the carriage guide shaft (B) only.

Perform a CR Speed Adjustment via the menu:



Follow and wait till finished.

Print out a nozzle check pattern and do a nozzle cleaning if necessary.



5.3 PREVENTIVE MAINTENANCE

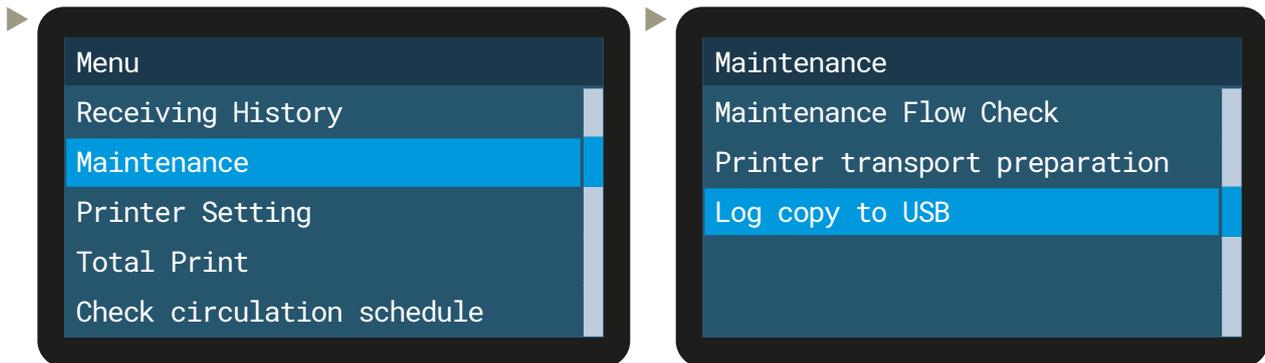
Preventive maintenance of the machine is necessary to keep the machine in good working condition and to ensure good printing quality.

The following maintenance intervals must be observed: at **25k / 50k / 75k / 100k** prints and so on.

Regular maintenances are carried out by the service technician and can only be done by using the **GTXpro Bulk** "Preventive Maintenance Tool" .

5.4 EXTRACT A LOGFILE FOR SUPPORT

Insert a USB stick in the front slot of the **GTXpro Bulk** to be able to copy the logfile. Then use the menu:



5.5 WHEN NOT USING THE PRINTER FOR A LONG PERIOD OF TIME

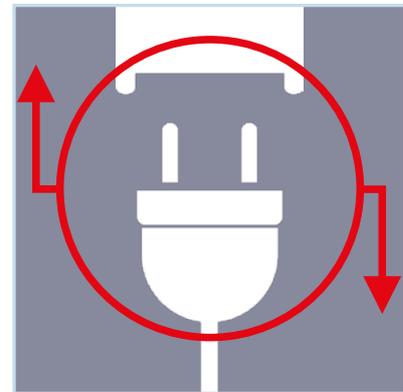
The **GTXpro Bulk** should always be left with power ON, also when it is not used.

Power is needed to perform the recirculation of the white ink every day. This process does not consume ink.

If the **GTXpro Bulk** is turned OFF for a long time, it might get damaged.



Only pull the plug in an emergency or when requested by a display message!



If the **GTXpro Bulk** is not going to be used for a prolonged period of time contact your local dealer, because preparatory operations for storage must be carried out.

If you want to resume production after several hours or days, the following preparatory steps are necessary:

- ▶ Empty the waste ink tank;
- ▶ Check the amount of cleaning solution in the cleaning solution tank and refill the tank if its amount is below the proper level
- ▶ Print out a nozzle check pattern for white and CMYK.
If a non-firing nozzle is found, perform "Head Cleaning" and then another test print.
Continue the same process until all nozzles are open again.

6 CONSUMABLES

Inks

Name (Pieces)	Quantity	Order Number
C CYAN Refill ink bottle (1)	1.8 L	BGCX40C002K0152
M MAGENTA Refill ink bottle (1)	1.8 L	BGCX40M002K0152
Y YELLOW Refill ink bottle (1)	1.8 L	BGCX40Y002K0152
K BLACK Refill ink bottle (1)	1.8 L	BGCX40K002K0152
C CYAN Refill ink bottle (1)	9 L	BGCX40C009L0132
M MAGENTA Refill ink bottle (1)	9 L	BGCX40M009L0132
Y YELLOW Refill ink bottle (1)	9 L	BGCX40Y009L0132
K BLACK Refill ink bottle (1)	9 L	BGCX40K009L0132
W WHITE Refill ink bottle (1)	18 L	BGCX40W020K0032

Liquids

Name (Pieces)	Quantity	Order Number
CS CLEANING SOLUTION (1)	1.8 L	BGCX40E002K052
CS CLEANING SOLUTION (1)	5 L	BGCX40E005K042

Other parts

Name (Pieces)	Quantity	Order Number
FLUSHING FOAM (2)	1	SC0935001
WIPER CLEANER (2)	1	SB6673101
FAN FILTER (2)	1	SB7007001
CLEANING STICK R (50)	1	SB7008001
CLEANING STICK T (100)	1	N40001601

Film

Name	Pieces	Order Number
SCH-73451 DTF PREMIUM FILM 0.3x100 ROLL	1	N40002305
SCH 75125 DTF PREMIUM FILM 0.4X100 ROLL	1	N40002393
ITEX-IGDTF2S40 DTF TRANSFER FILM 40CMx100M ROLL	1	N40002376

Powder

Name	Pieces	Order Number
SCH-73325 DTF POWDER 1,5 KG (80-200µ)	1	N40002096
SCH-73324 DTF POWDER 5 KG (80-200µ)	1	N40002095
SCH-73323 DTF POWDER 25 KG (80-200µ)	1	N40002094
ITEX-75RPU80200-2 ADHESIVE POWDER (2 KG)	1	N40002374
ITEX-75RPU80200 ADHESIVE POWDER (20KG)	1	N40002373

