brother
GTXpro DTF R2R

*We share our experience to give you the **best Support***

COOKBOOK

CONTENT

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 Roll .**

You find the latest versions here:

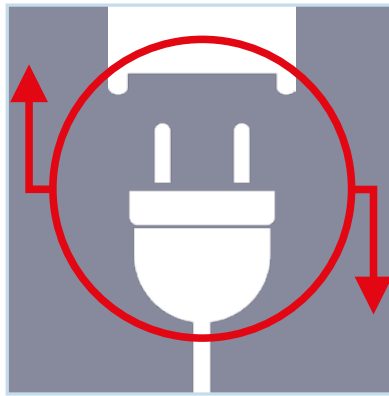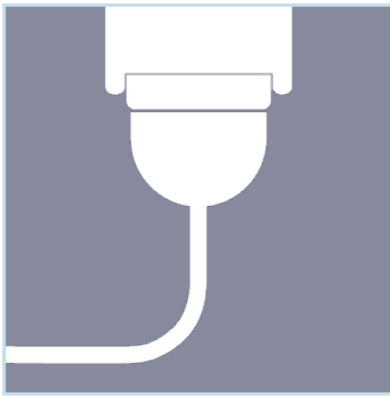https://base.brother.digital/driver-firmware/gtxpro-roll/

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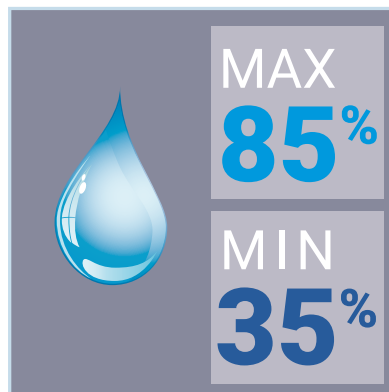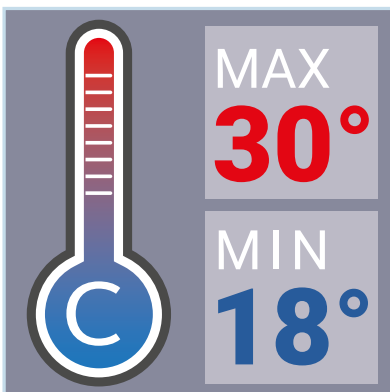If the **GTXpro** is turned OFF for a long time it might get damaged.

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

1.3 ENVIRONMENTAL PRINTING CONDITIONS
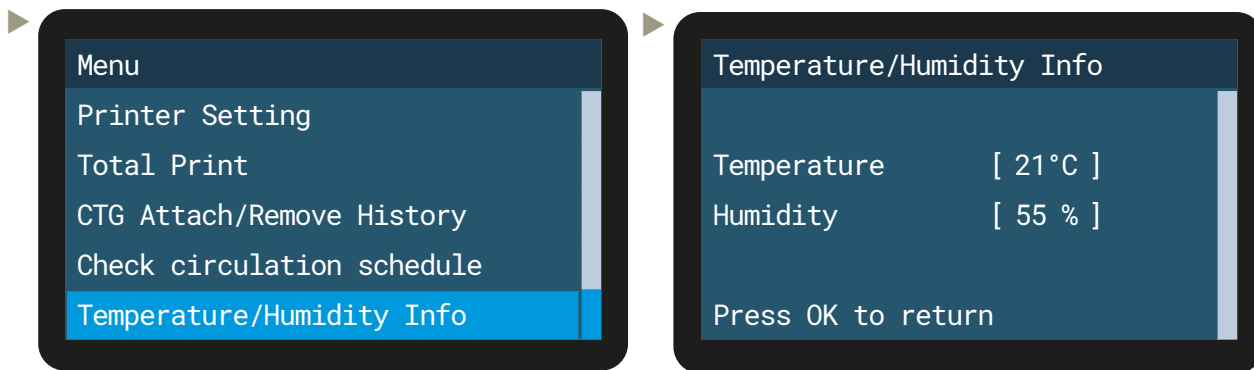
Mandatory temperature and air humidity for the best print result:

MAX **30°**
MIN **18°**

MAX **85%**
MIN **35%**

Required to keep your warranty for the printer!
Temperature & air humidity are recorded in the log file!

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

▶
```
Menu                         ⇄  ❗▶
Printer Setting
Total Print
CTG Attach/Remove History
Check circulation schedule
Temperature/Humidity Info
```

▶
```
Temperature/Humidity Info

Temperature        [ 21°C ]
Humidity           [ 55 % ]


Press OK to return
```

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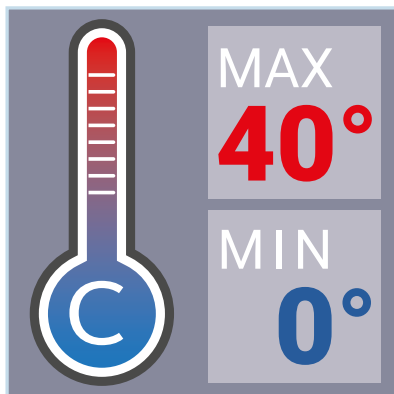
▶ Please turn over the **white ink packets** every week.
▶ Do not use inks or liquids with a temperature below 18° C or above 30° C .

| 1.5 | EXPLANATION OF THE CONTROL PANEL |

The display shows the current loaded print file with the choosen 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.

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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.

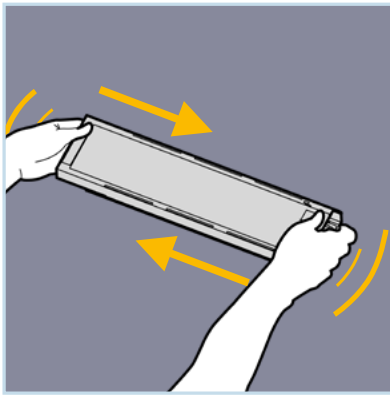▶ Please follow all the instructions shown on the display.

When you see an *"Error/Warning"* yellow number press the "▶" key to know what you have to do to erase the Error/Warning.
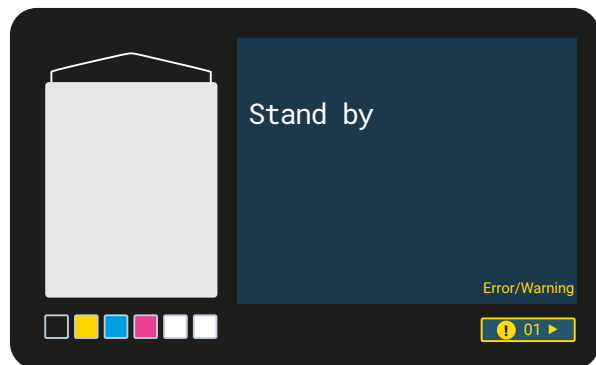
2.2 DAILY AGITATION OF WHITE INK

Perform the following procedure as shown below, when the message *"Remove the white ink cartridge and shake it"* is displayed:
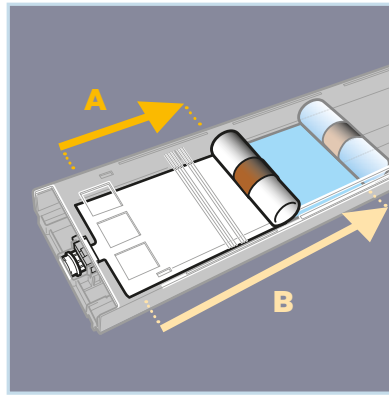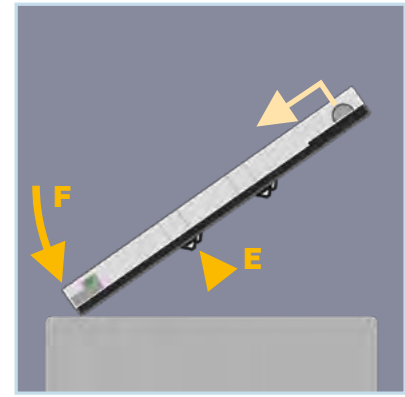
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▶ **Shake them horizontally back and forth 100 times.**
This is necessary because there are particles in the white ink that separate.

▶ **A:** 15 cm
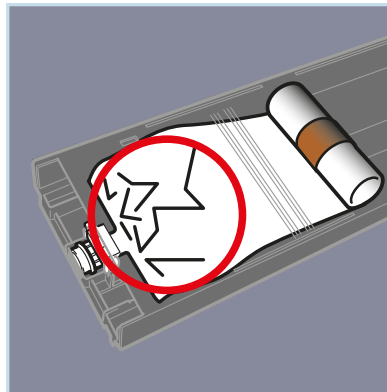**B:** If the pouch is only filled up to 15 cm, please roll it out a little before shaking.

▶ **E:** Push on the 2 upper metallic latches
F: Gently tap the front end of the cartridge on the base so that the bag rolls up a little more and creates enough pressure for the ink.

▶ **Make sure that there are no wrinkles caused by tapping, they block the ink flow and lead to poor printing results.**

▶ After you finish shaking the white ink cartridge, gently insert the cartridge in the correct slot and press OK in the menu. The white ink will automatically be refilled into the system by the printer.

2.3   ALIGNMENT OF THE MACHINES AND THE FILM

Check that the GTXpro Roll and the PowDR are still aligned (A crossline laser is helpful).
The brakes of the castors should always be applied.
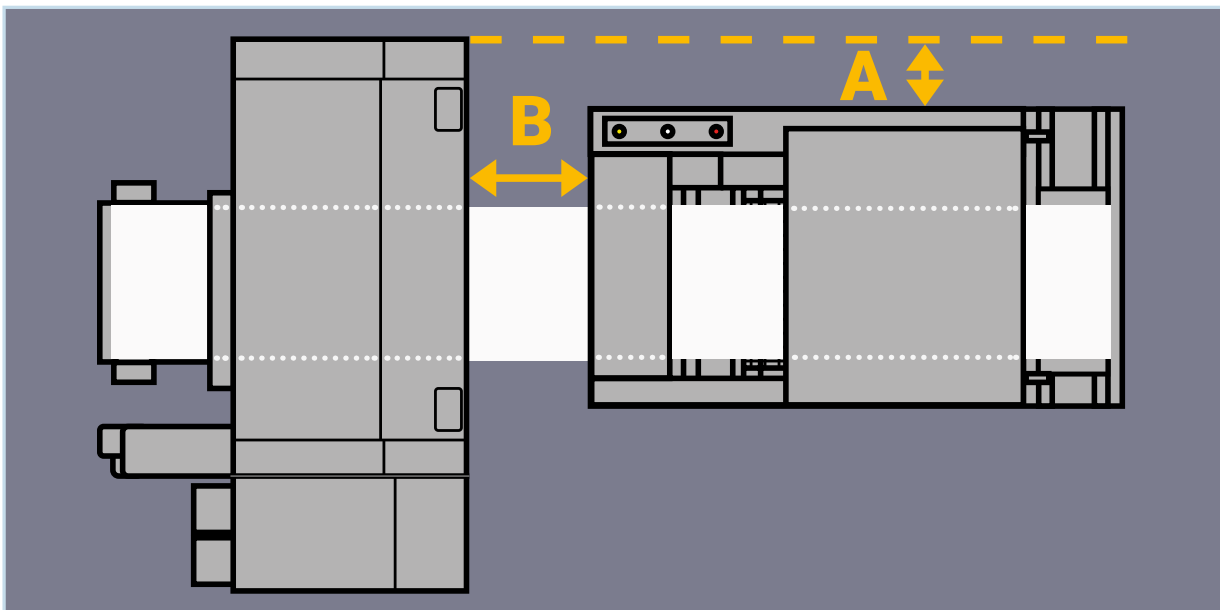
**A**: 23 cm parallel to the printer; **B**: 25-30 cm parallel to the printer

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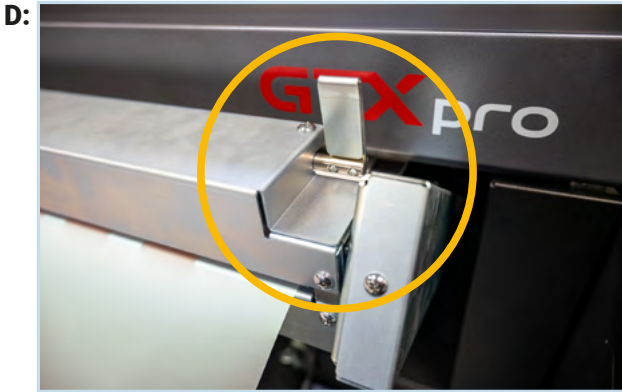The missalignment can be checked on different positions on the runway of the film.

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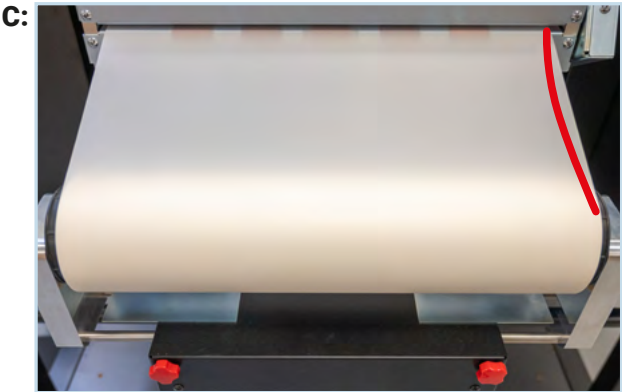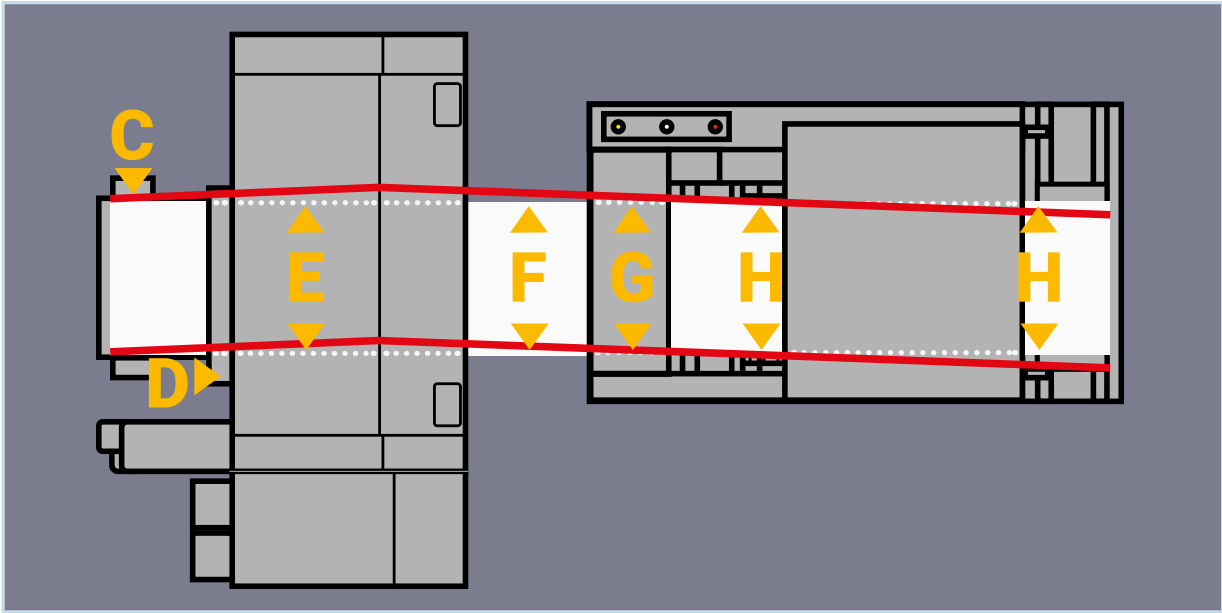
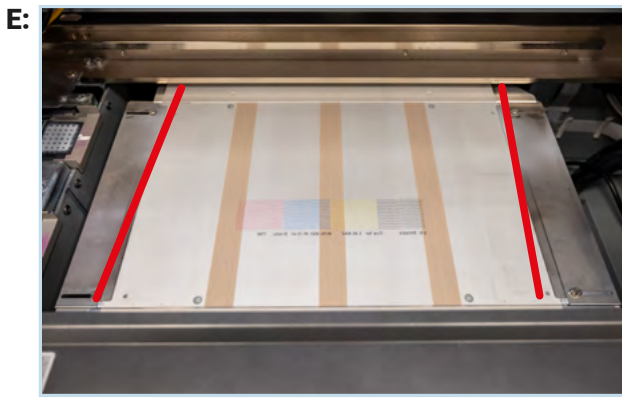Is the film roll centred and does the film have equal tension at the edges?
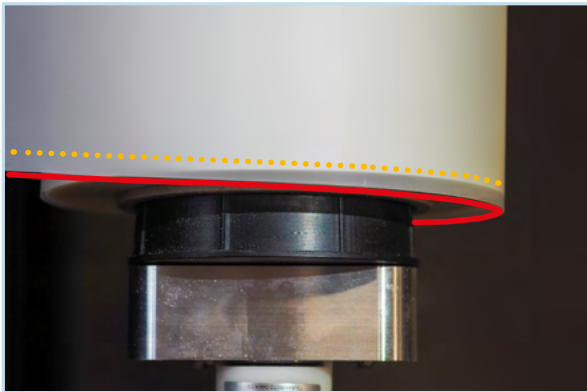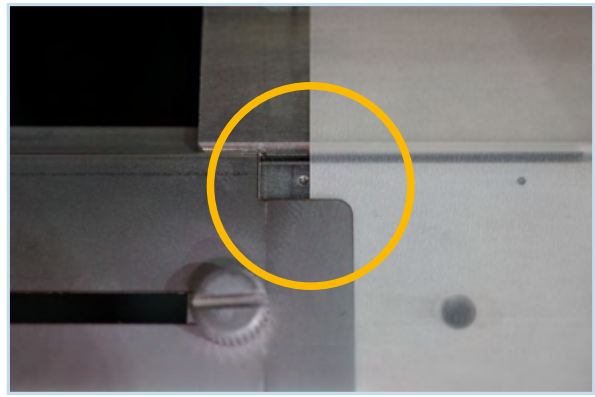

Is the film just aligned with the roll?

D:

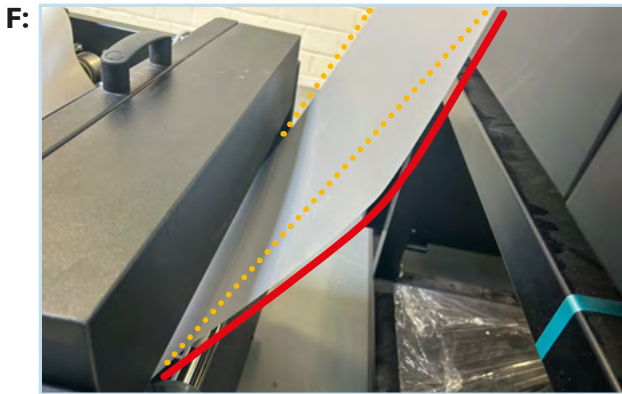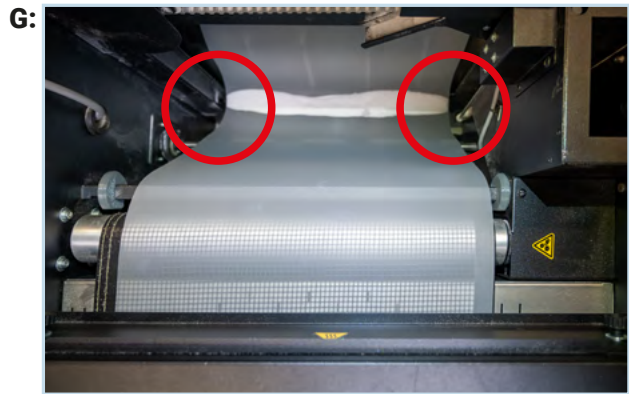Is the fixing lever closed?

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E:

Is the film aligned straight on the printing table?

Can the film slide freely through the guide

F:

Does the film have the same tension at the edges?
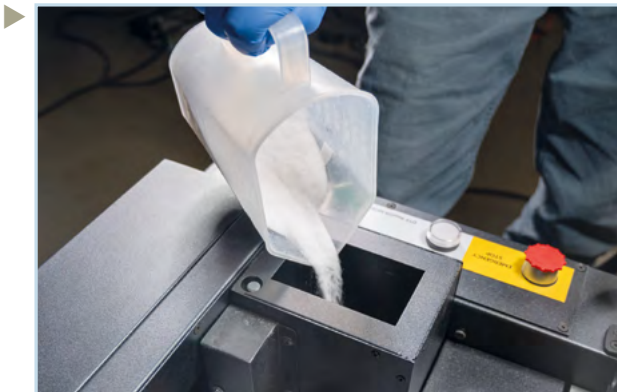
G:

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

H:

Is the film in the melting unit well aligned?

2.4 REFILL THE POWDER AT THE PowDR

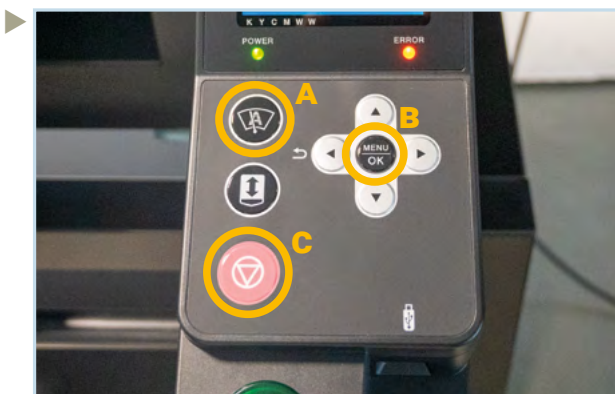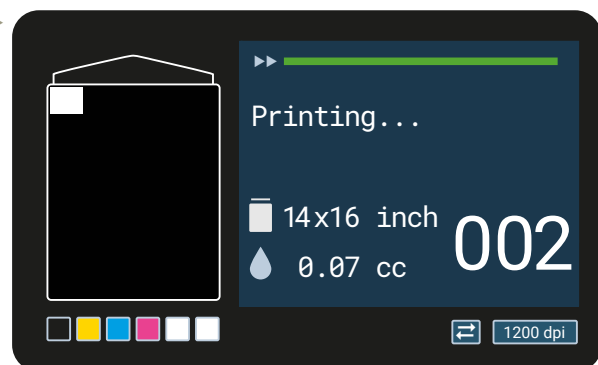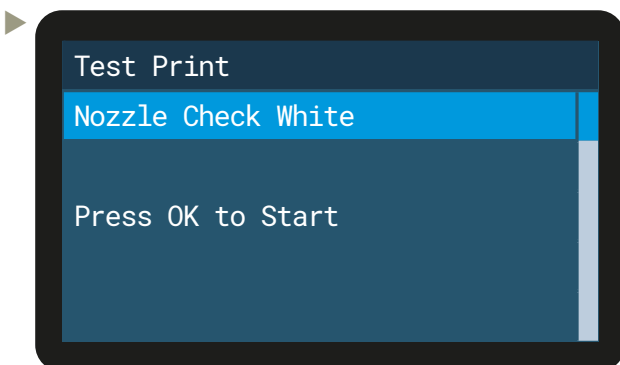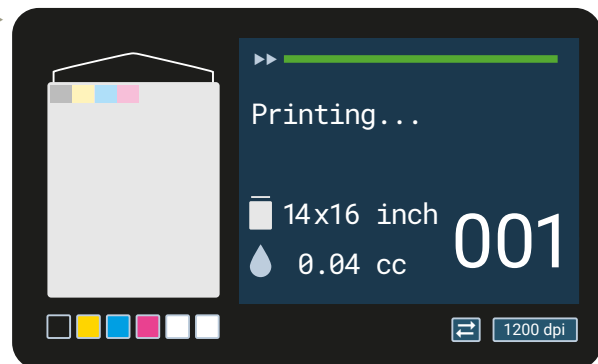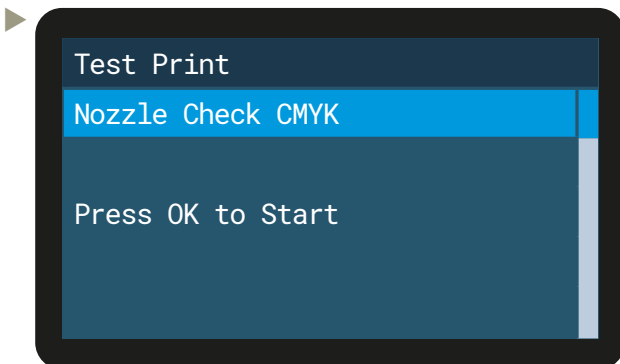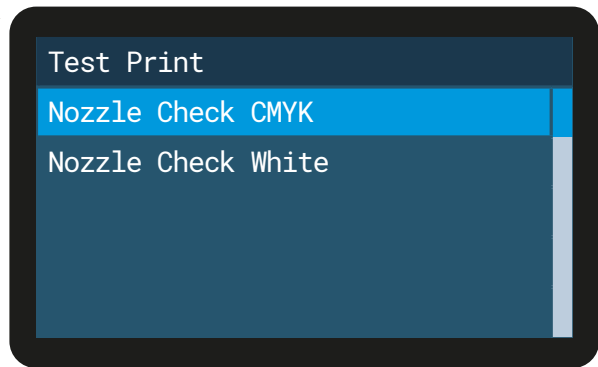Fill the powder tank with the necessary amount of DTF powder.

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.

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

▶
```
Menu
Head Cleaning
Test Print
Print Data Load
Receiving History
Maintenance
```

▶
```
Test Print
Nozzle Check CMYK
Nozzle Check White
```

▶
```
Test Print
Nozzle Check CMYK

Press OK to Start
```

▶
```
Printing...

14x16 inch    001
0.04 cc

1200 dpi
```

▶
```
Test Print
Nozzle Check White

Press OK to Start
```

▶
```
Printing...

14x16 inch    002
0.07 cc

1200 dpi
```

▶
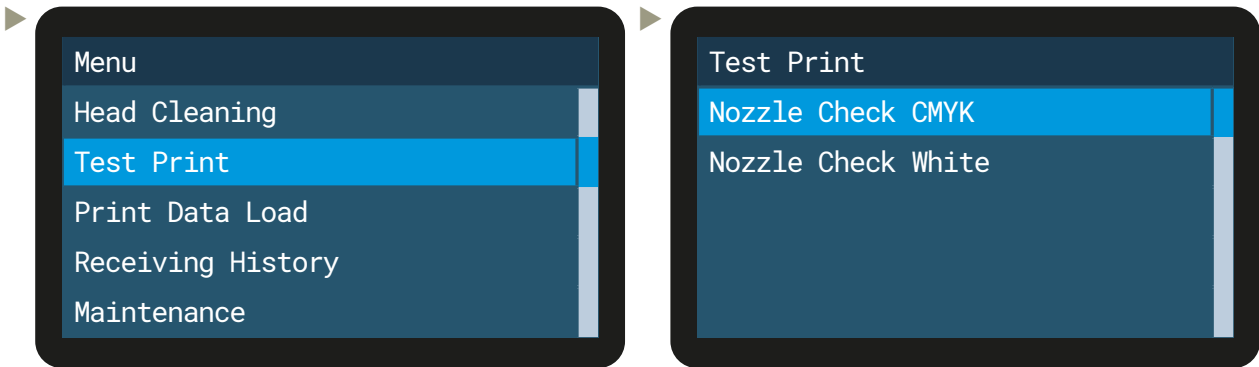
When the nozzle checks are done, run the film out of the back of the printer:
A: Press for transportation of the film.
B: Press the Menu/OK button.
C: Press Cancel when the print comes out of the back of the printer.

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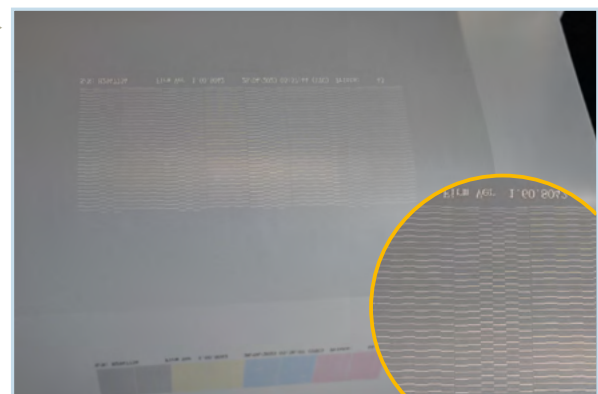
Check the nozzle pattern by holding a white (CMYK print) or black (White print) paper sheet behind the film.

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This is what the nozzle checks should look like:

S/N: M9933069   Firm Ver   1.70.0001   15/01/2023 10:11:02   Prints: 770

S/N: M9933069   Firm Ver   1.32.0002   15/01/2022 10:41:07   Prints: 971

If not all nozzles are firing, start a cleaning of the affected print head to open the clogged nozzles.
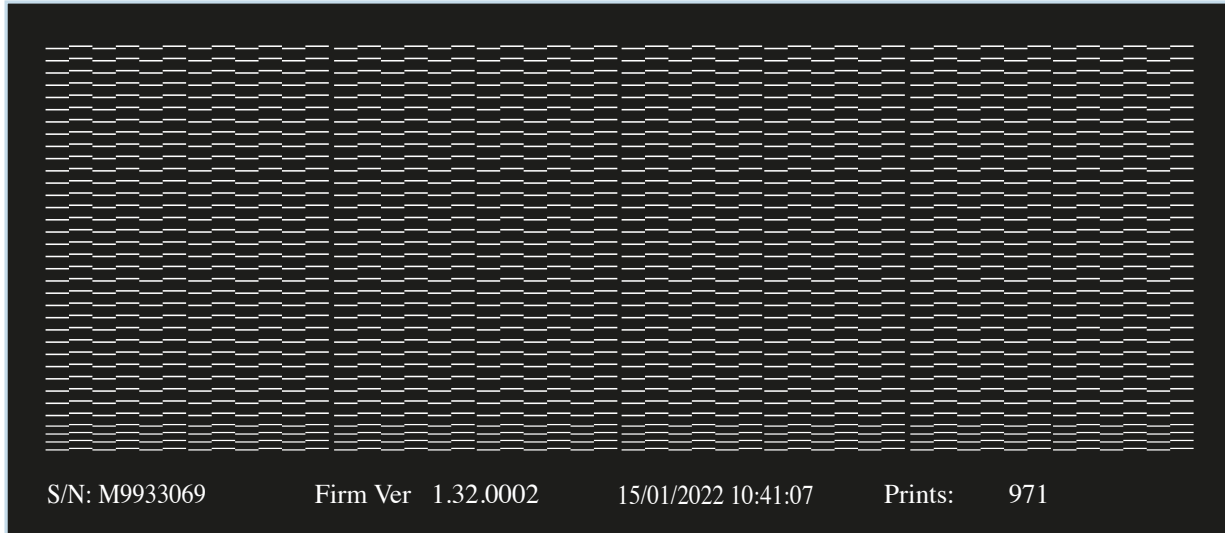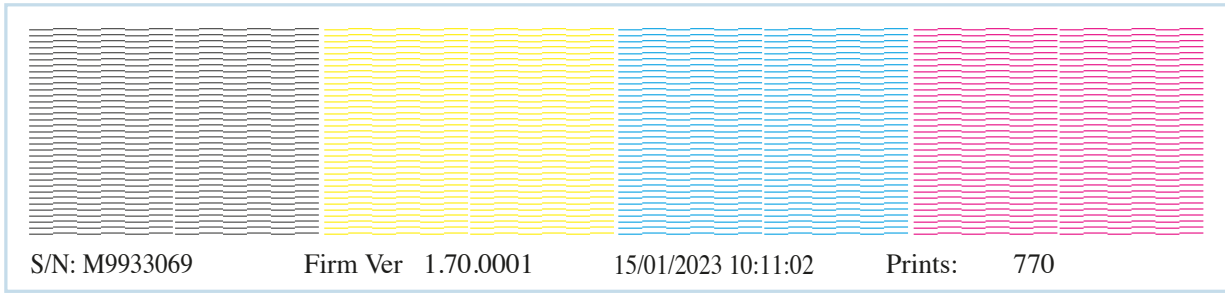
▶
```
Menu
Head Cleaning
Test Print
Print Data Load
Receiving History
Maintenance
```

▶
```
Head Cleaning
Normal Cleaning
Powerful Cleaning
Super Cleaning
Flash Firing
```

▶
```
Powerful Cleaning
All Colors
All Whites
All Print Heads
```

▶
```
Powerful Cleaning
All Colors


Press OK to Start
```

▶ 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.

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3 HOW TO PRINT

You can find instructions for printing here (>TIP-Sheets > GTXpro Roll > Print Settings/Software Guide):
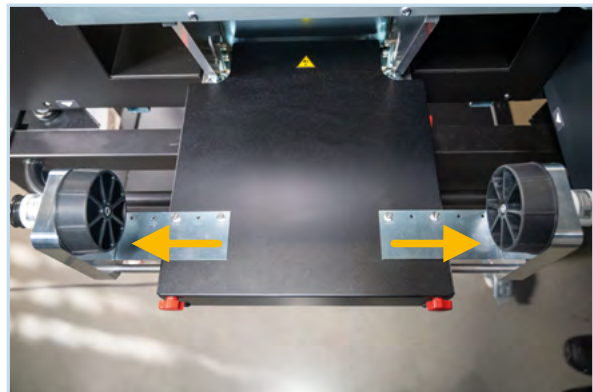
https://base.brother.digital/tip-sheets/

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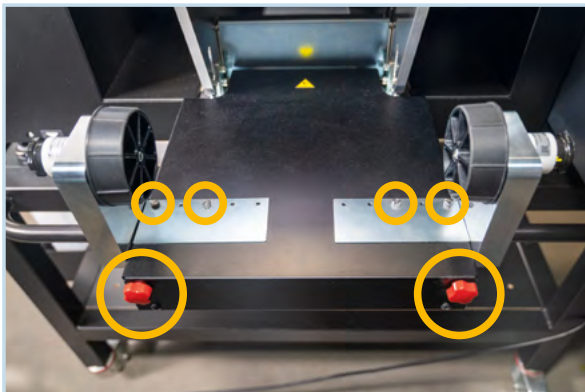
Loosen both thumbscrews of the roll holder on the front side and the screws of the plates.

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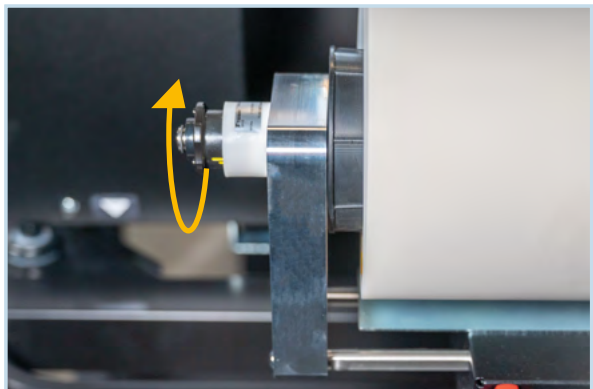

Insert the film roll between the jaws.
A: The rolling direction

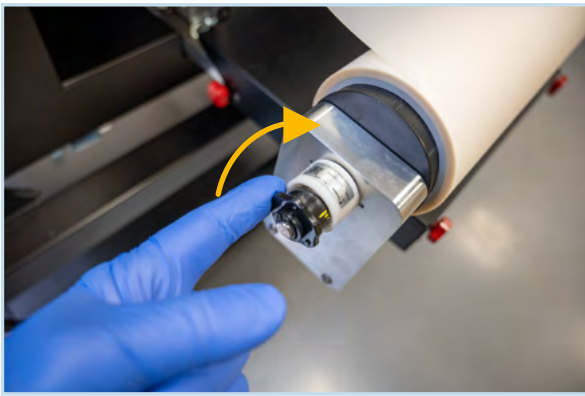Center the roll between the edges of the plates. Then fasten the thumbscrews.

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

Repeat the operation on the left side.

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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 side guides and screw them back into the outer holes.
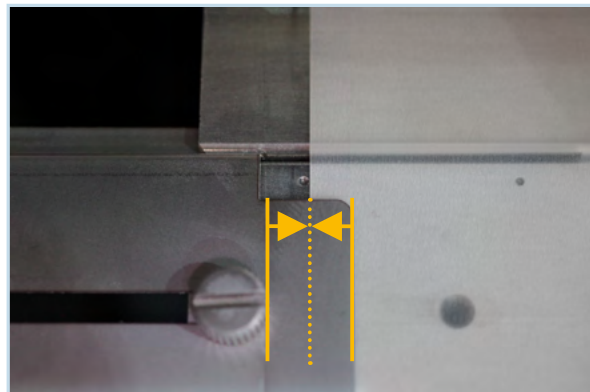
Adjust the guides. The guides should only cover the film with a maximum of half of their width. Then slide the film out of the printer by hand.

Switch OFF the power at the PowDR.
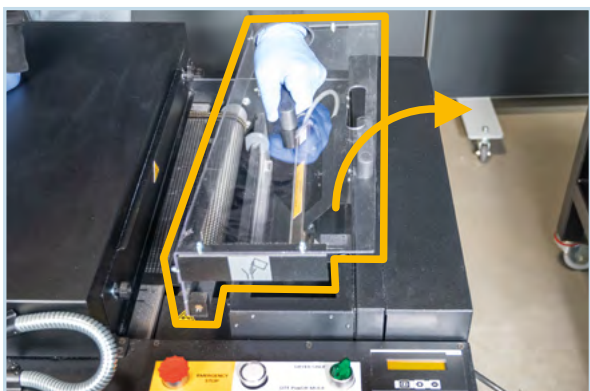
Remove the transparent lid.

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

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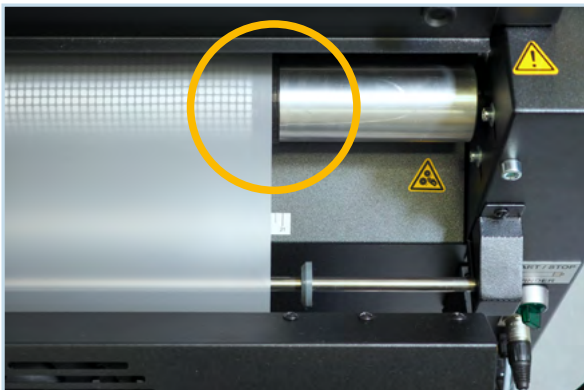
Place it under the ionizer and on the conveyor belt.

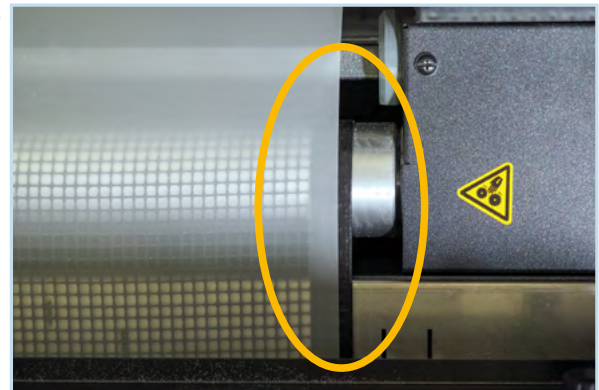Open the big lid of the PowDR. Lift it up with the handle on the left side until it stops.

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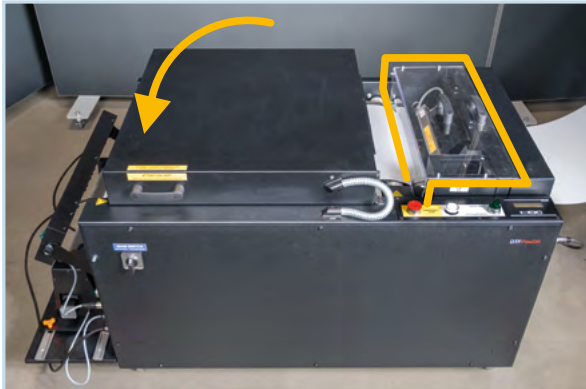
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Give the film some slack when under the ionizer and right before the conveyor belt.

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.
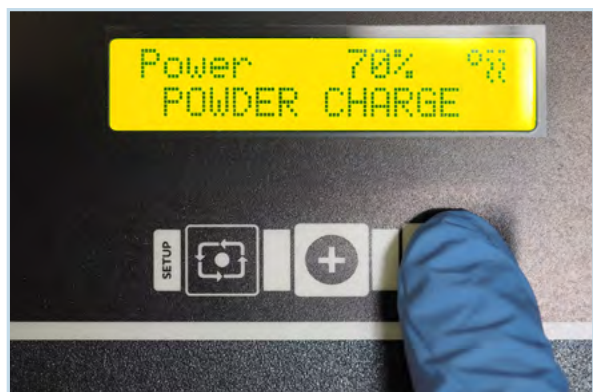

Switch ON the power.

Make sure that the edges of the film have the same tension on both sides. If not so, align the machines with each other!

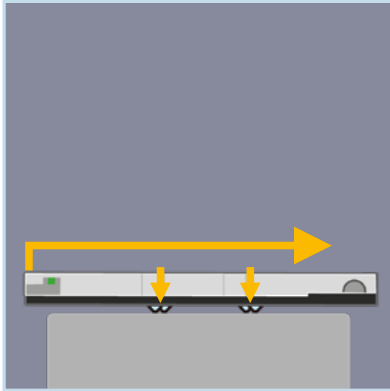Never join two films with tape or in any other way.

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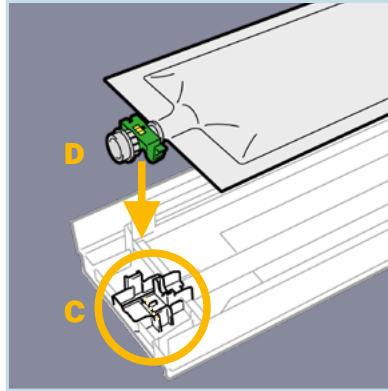Put some powder on the film via the menu to have a little weight on the slack.

Power   70%   °
POWDER CHARGE

Press minus button and hold for 10 seconds.

▶ In case of white ink replacement you have to shake the white ink package 100 times,

▶ Place the cartrige on a flat surface. Open the cartridge with a slight pressure downwards and then slide the lid. Remove the empty pouch.
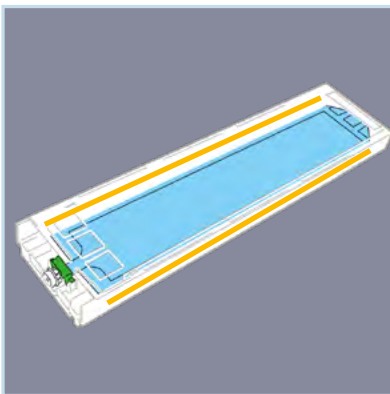
▶ **C:** Clean with a cleaning stick and a tweezer.
D: Insert the new ink pouch and fix the green connector in the holder, gently pushing it down until it clicks.
Do not touch the Chip!
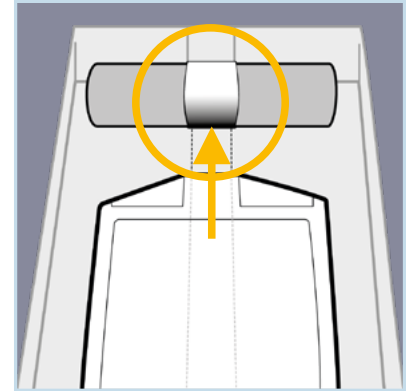
▶ Align the ink pouch centrally in the cartridge and place its end in the rewinder by pulling it by hand.

▶ Insert the cartridge gently to avoid damaging the ink needle and chip reader in the slot.

▶ Make sure that the pouch has no creases or wrinkles at the edges. Close the cartridge by pushing back the lid till it clicks.

▶ **E:** Push on the 2 upper metallic latches
F: Gently tap the front end of the cartridge on the base so that the bag rolls up a little more and creates enough pressure for the ink.

Take the expiration date label out of the package of the pouch and stick it to the front of the cartridge.

Normal situation:

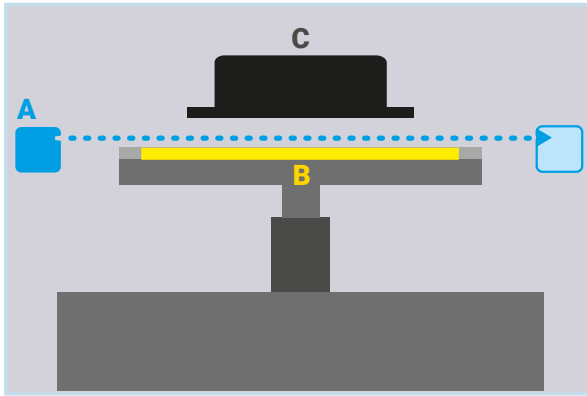
A: "Obstacle sensor"
It is used to detect any obstacle on the platen for the print heads.
An error occurs when obstruction is detected.

B: Film on the platen

C: Print head

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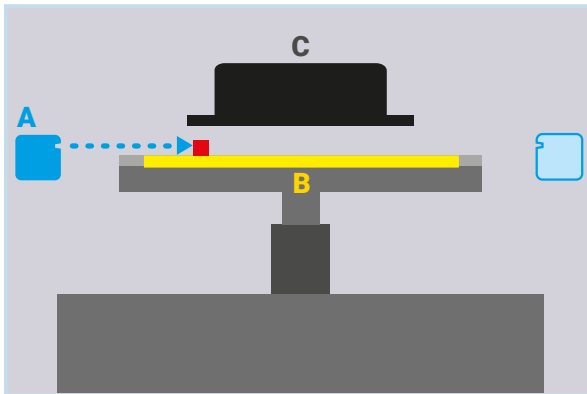
A: When the beam of the obstacle sensor hits an obstacle, the printing process will be stopped immediately to avoid crashing the print heads.

On the display **Error 2070** appears.

Position:

Normal situation (Sectional view):

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

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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 looses contact with the sensor.
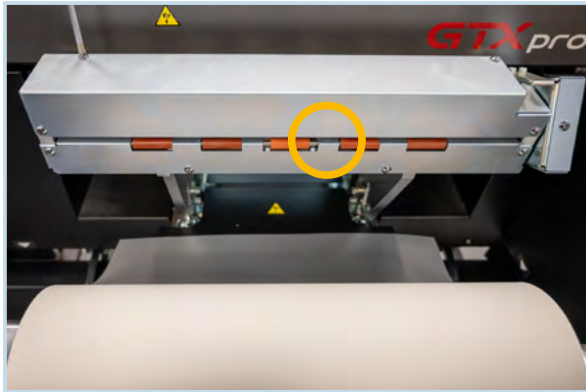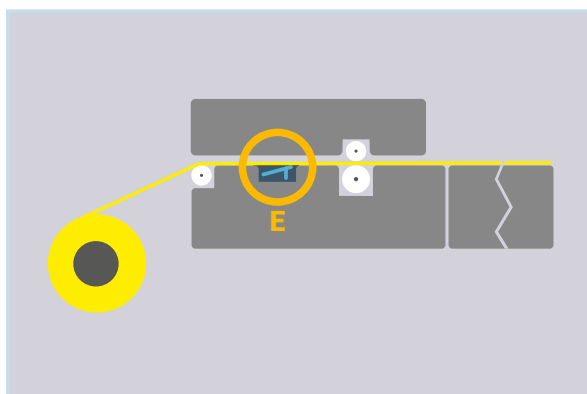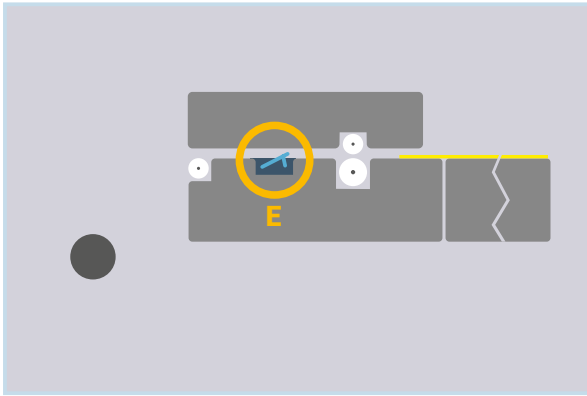
The printer will stop immediately.

The following message will be displayed:

►
```
⊗ Error Code: 2073


There is no film



Press ok
```

The display changes (see right).

►
```
▶▶ ▬▬▬▬▬▬▬▬▬▬▬▬▬
Cancelling

▭ 14x16 inch    002
◊ 3.07 cc
⬜🟨🟦🟥⬜⬜          ⇄ 1200 dpi
```
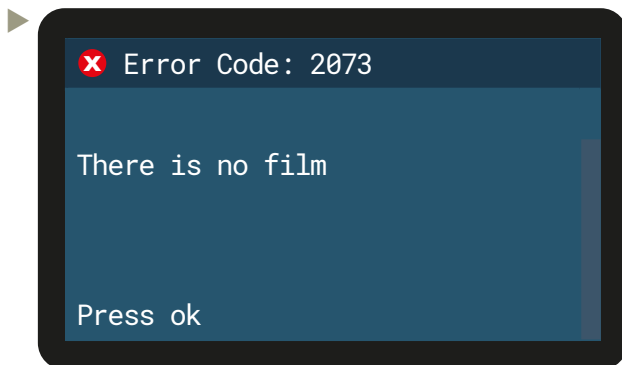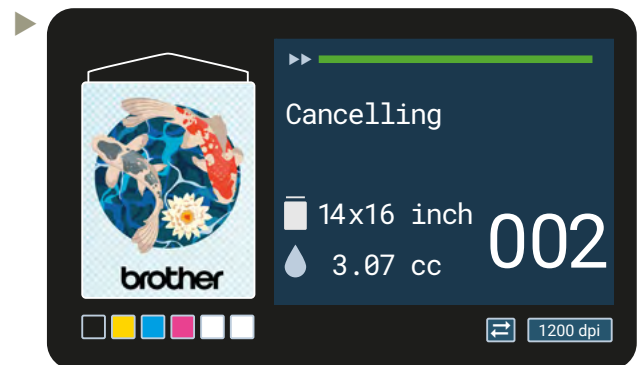
After installing a new film or realigning press ok.
The display changes (see next).

►
```
⊗ Maintenance
Obstacle detected during print

Perform test print and
check head firing
Press ok
```
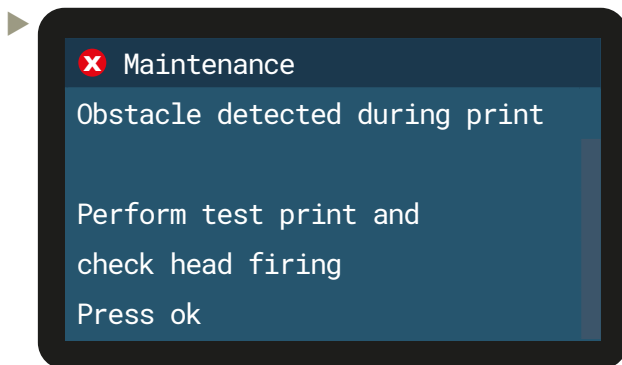
Now go to your PC.

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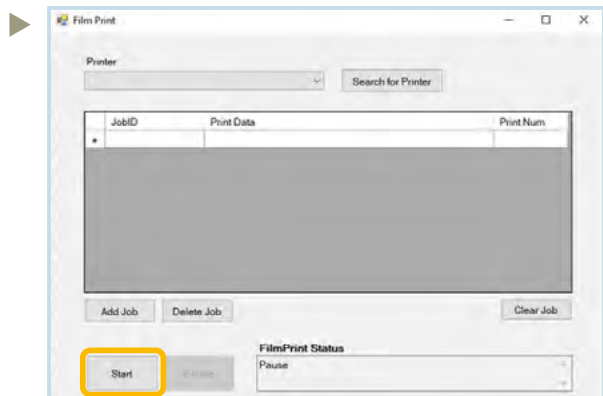
In "Film Print" click on Start.
The printing process will continue from where it was interrupted.

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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.

4.6　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:
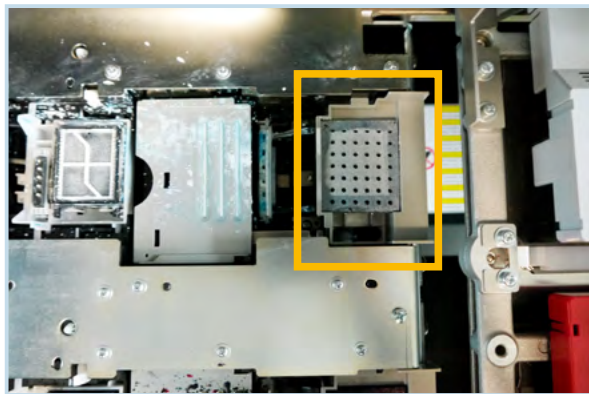

Position of the flushing foam (white side).
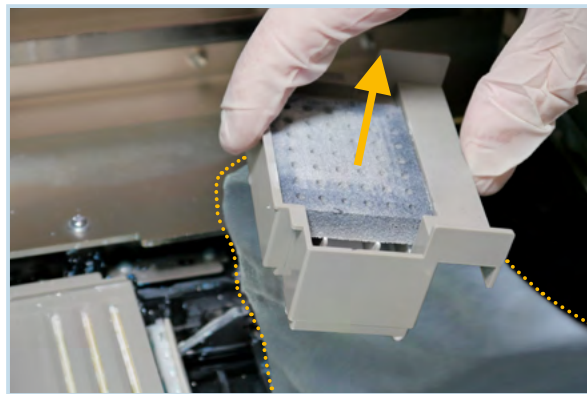
Lift up the flushing receiver and use a waste cloth to avoid that ink drips into the **GTXpro**.
Remove the flushing foam and clean the receiver from inside to ensure that the hole in the receiver is open. Insert a new flushing foam and reinstall the receiver. Repeat the same on CMYK side.

In case of a *"Warning/Error"* message connected to the wiper cleaner, please carry out the following actions:
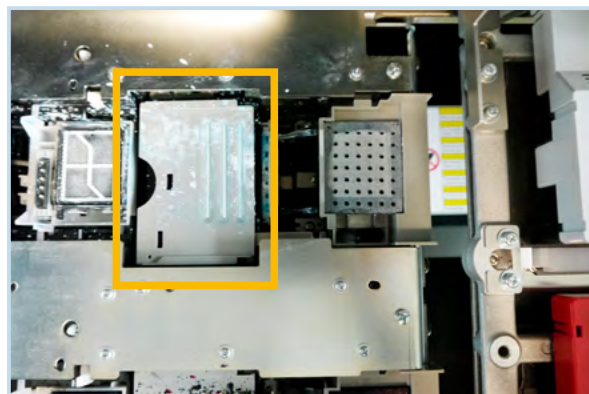
Position of the wiper cleaner (white side).

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.

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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** in each holder. Insert the holders in the **GTXpro**.

In case of a *"Warning/Error"* message connected to the cleaning solution, please carry out the following actions:

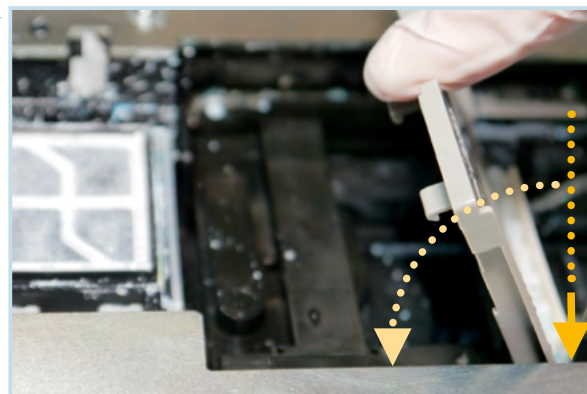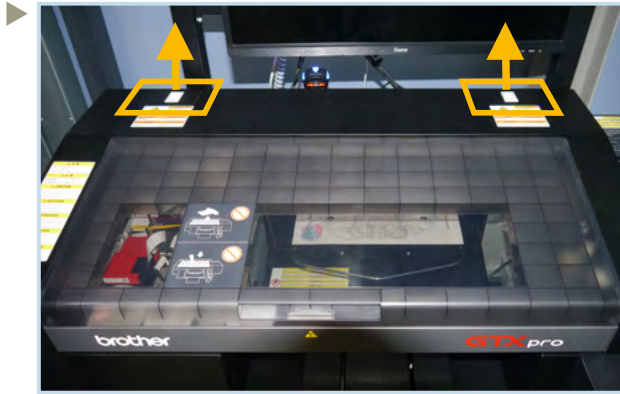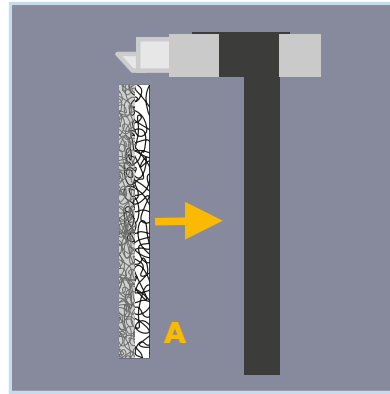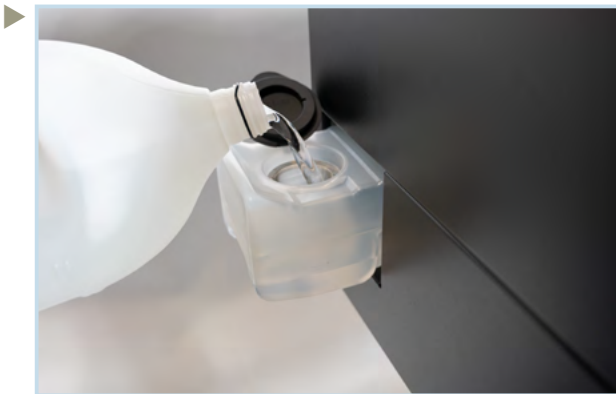Pull out the cleaning solution tank from the left side of the printer. Open the lid to fill the cleaning solution tank with Brother Cleaning Solution.

Make sure to not exceed the FULL line.

Close the lid and slowly push the tank back inside the printer. Push it completely in, otherwise it will cause an error.

5 MAINTENANCES

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

5.1 ▷ WEEKLY MAINTENANCE

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


```
⚠ Warning
Cap/Wiper Cleaning
Please Clean Nozzle Guard
```
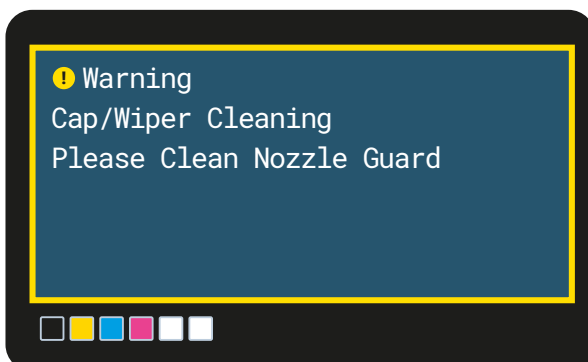
▷ Use the following menu to perform cleaning or *"Maintenance Part Clean/Replace"* after receiving the warning on the menu:

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```
Menu
Head Cleaning
Test Print
Print Data Load
Receiving History
Maintenance
```

```
Maintenance
Maintenance Part Clean/Replace
White Ink Circulation
Head Replacement
Install Ink after Replacing Head
Initial Ink Installation
```

```
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.

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Position of the cappings, exhausts and wipers.
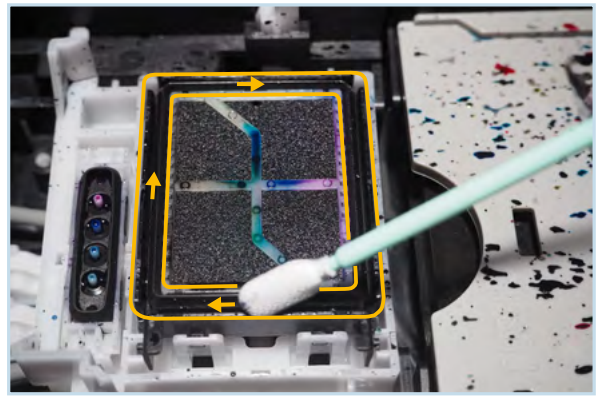
It is necessary to remove the ink residues remaining on the silicon lips of the caps. Be careful not to touch the foam.
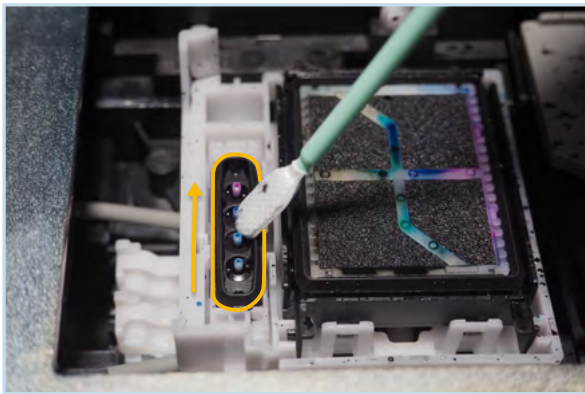
When cleaning the exhaust start from the front and go backwards. Always move the stick away from the drain hole placed in front.

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.
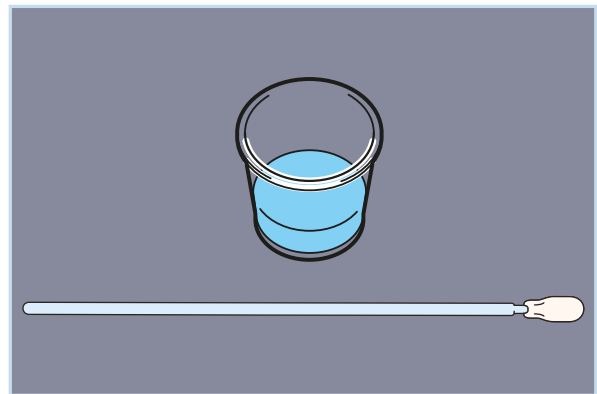
▶ Before you clean the wipers take a new cleaning stick T and fresh cleaning solution.
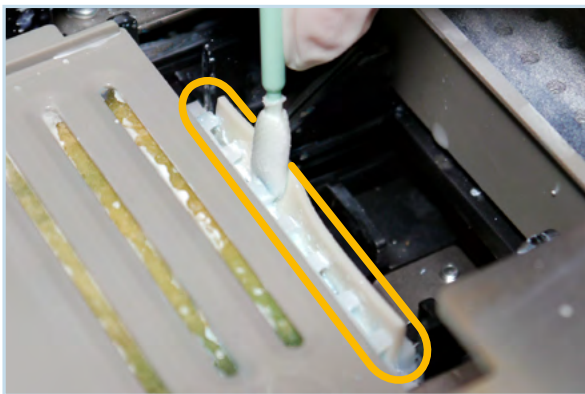
Clean the wiper on both sides, under the teeth of the wiper holder and remove the dried ink.

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.
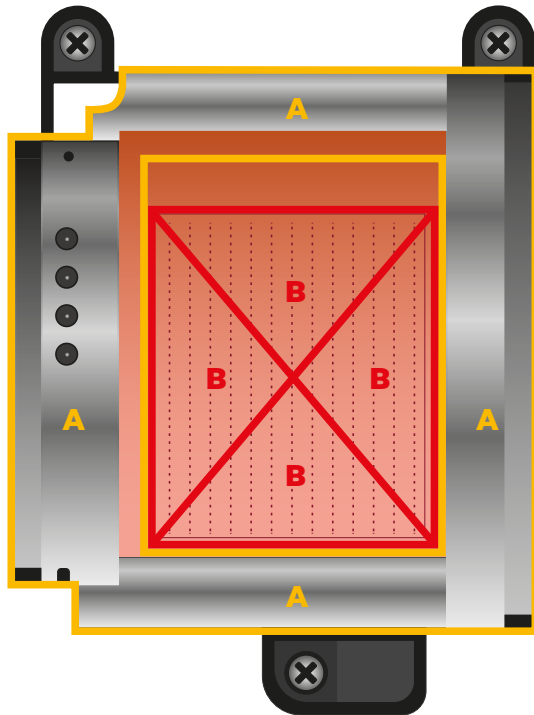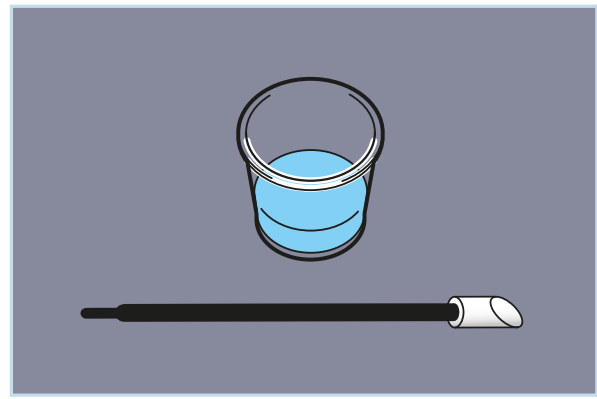
View from below
A: Surfaces to be cleaned on the underside of the print heads.
B: Do not touch the nozzle surface at all.

Side view

▶
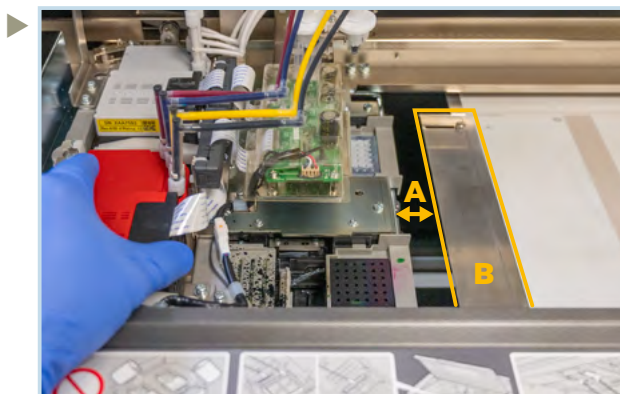
A: The nozzle guard must be cleaned from underneath through the gap between the platen and the maintenance unit.
B: If the gap seems too narrow for you, you can remove the left slider.
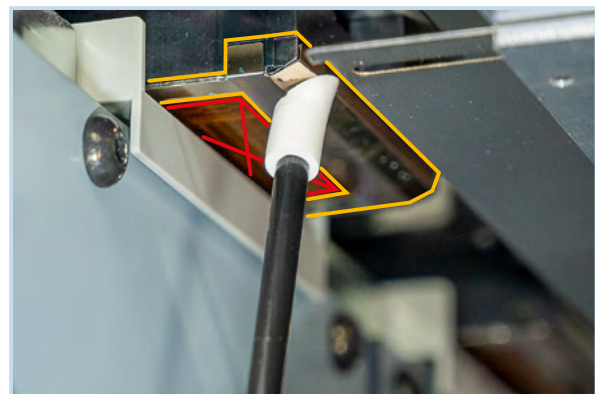
Be careful not to touch the nozzle surface during cleaning. Move the print head carriage by hand from left to right to reach the complete nozzle guard.
Do not touch the nozzle surface at all.

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▶ 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.

▶ Check the white ink pouch outlet and the needle in the cartridge slot for dry ink residue.

Remove the residues of dry ink with tweezers.
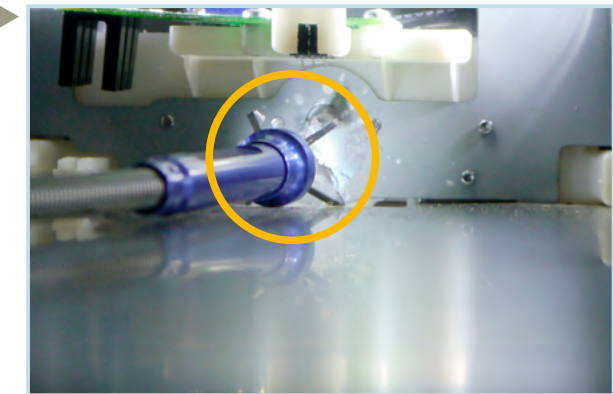
Remove the dry ink with from the needles in the cartridge slots.

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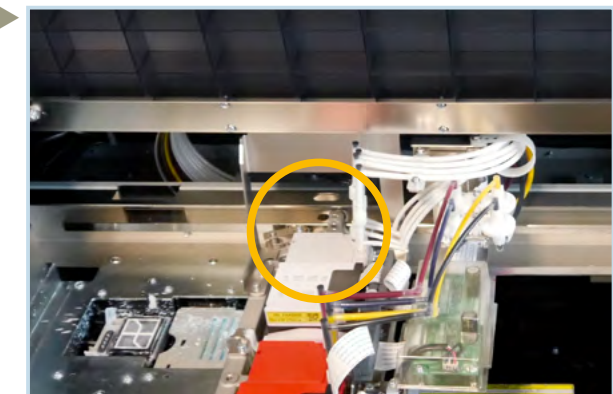
Position of the 4 carriage rollers behind the white print head.

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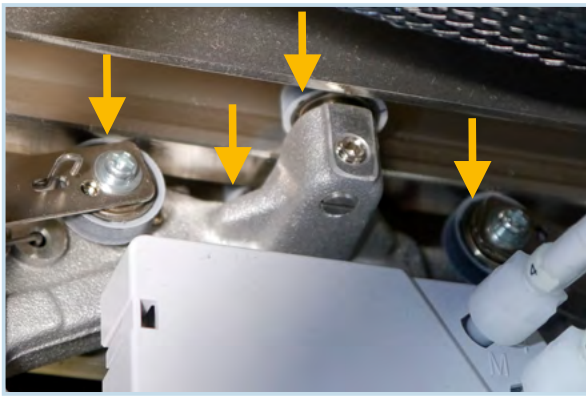
Clean the 3 carriage rollers on top and the roller underside with a new stick **R** dipped in cleaning solution.
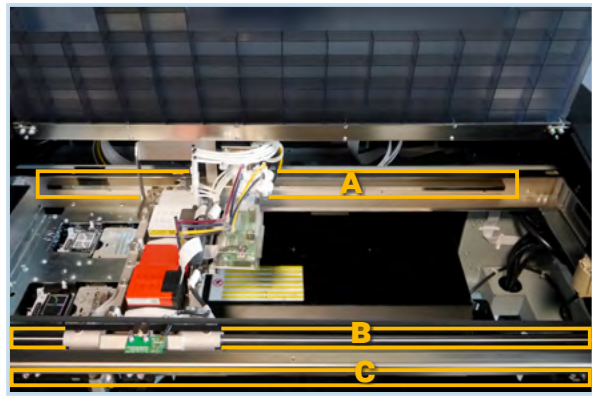
Use a non-fuzzy cloth moistened with a bit of Isopropyl Alcohol (95%) for the cleaning of:
A: The 3 sides of the roller guide
B: The carriage guide shaft
C: Both sides of the encoder strip.
Do not use Isopropyl Alcohol on any other parts.
Then apply a proper amount of *Molykote 30 Grease* onto the carriage guide shaft (B) only.

Perform a CR Speed Adjustment via the menu:

▶
```
Menu
Printer Setting
Total Prints
CTG Attach/Remove History
Check circulation schedule
Temperature/Humidity Info
```

▶
```
Printer Setting
Cartridge Attach/Remove Check
CR Speed Adjustment
```

▶
```
CR Speed Adjustment
Start
Start (after cleaning/set up)
```
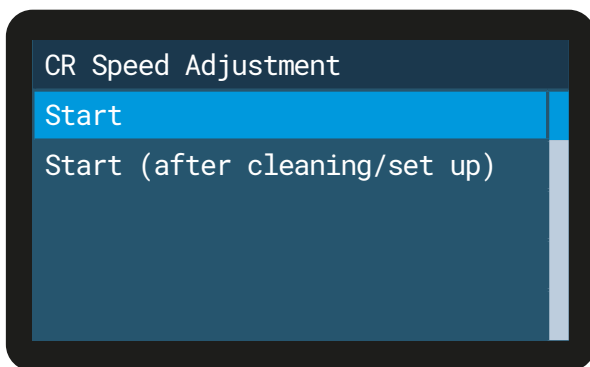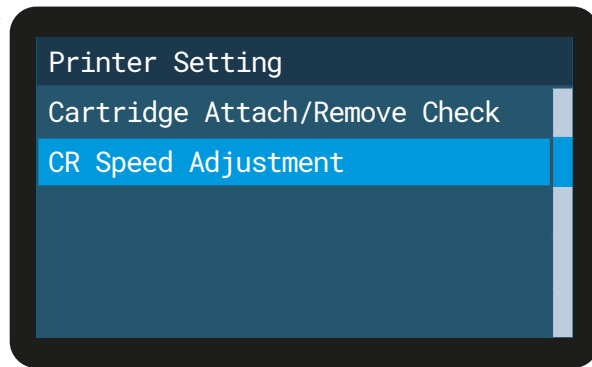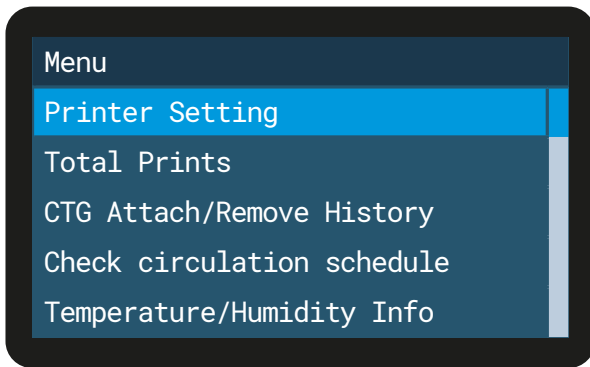
▶ Follow and wait till finished.

▶ 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** *"Preventive Maintenance Tool"* .

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5.4 EXTRACT A LOGFILE FOR SUPPORT

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

▶
```
Menu
Head Cleaning
Test Print
Print Data Load
Receiving History
Maintenance
```

▶
```
Maintenance
Log copy to USB
```

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

The **GTXpro** should always be left with power ON, also when it is not used.
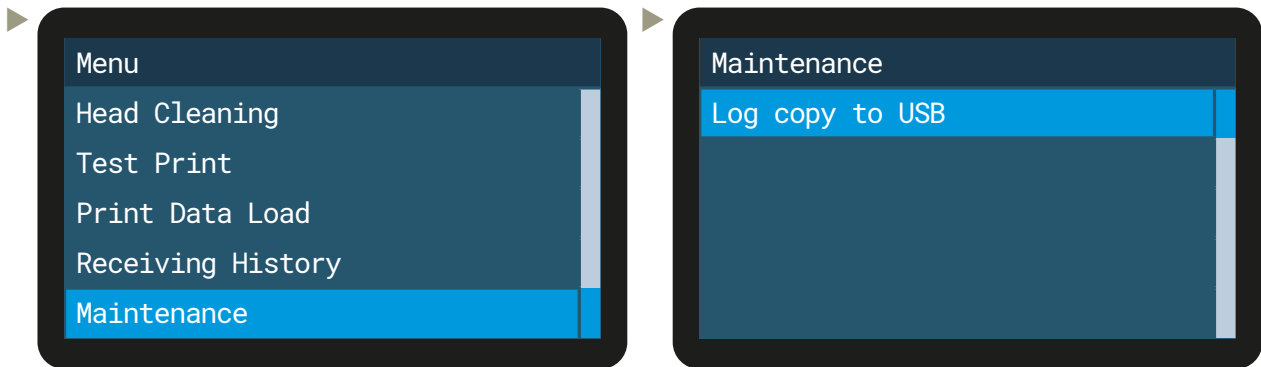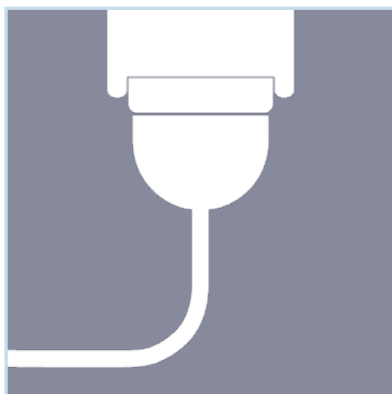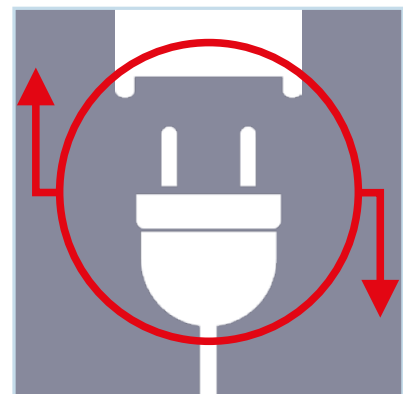Power is needed to perform the recirculation of the white ink every day. This process does not consume ink.
If the **GTXpro** is turned OFF for a long time, it might get damaged.

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

If the **GTXpro** 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

▶ Shake the white ink cartridges when the message *"Remove the white ink cartridge and shake it"* is displayed

▶ 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.

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6 CONSUMABLES

Inks

Name (Pieces)	Quantity	Order Number
C CYAN Pouch (1)	350 cc	BGCX40C03500112
M MAGENTA Pouch (1)	350 cc	BGCX40M03500112
Y YELLOW Pouch (1)	350 cc	BGCX40Y03500112
K BLACK Pouch (1)	350 cc	BGCX40K03500112
C CYAN Pouch(1)	700 cc	BGCX40C07000112
M MAGENTA Pouch(1)	700 cc	BGCX40M07000112
Y YELLOW Pouch (1)	700 cc	BGCX40Y07000112
K BLACK Pouch (1)	700 cc	BGCX40K07000112
W WHITE Pouch (2)	700 cc	BGCX40W07000022

Liquids

Name (Pieces)	Quantity	Order Number
CS CLEANING SOLUTION (1)	1.8 L	BGCX40E002K052
CS CLEANING SOLUTION (1)	5 L	BGCX40E005K042
MS MAINTENANCE SOLUTION (1)	700 cc	BGCX40S0700002

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

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