

# QUICK USER GUIDE



## **1** PLATENS

### **1** PLATEN HEIGHT ADJUSTMENT



With the GTX600, the height adjustment is performed **through the menu** using the control panel or **via the driver** using the latest version of Graphics Lab and the driver.

### **PLATEN HEIGHTS GTX600**

A	0.17in
B	0.19in
C	0.22in
D	0.26in
E	0.33in
F	0.39in
G	0.46in
H	0.56in
CUSTOM 1	Defined by User
CUSTOM 2	Defined by User

You can set **8 levels** of platen height from **A to H** [same as GTX Series]

In the menu "Height User Menu", you can customize **2 more heights**.

The height is set to **Position A** when the power is turned on at installation. After installation it will be set to the same as **previous setting**.

Up to **1.35in (34.3mm)** can be added [1.18in or 30mm from A position]

The distance is calculated from the **Nozzle surface** to the **top** of the **platen surface** 

### 2 HOW TO SET UP THE PLATEN HEIGHT ADJUSTMENT

### STANDARD SETTINGS

### *Menu > Printer Settings > Adjust platen height*

Menu	
Adjust platen height	
Head Cleaning	
Test Print	
Ink refill	
Print Data Load	

Adjust platen height	
Position A	
Position B	
Position C	
Position D	
Position E	



### **CUSTOM USER SETTINGS**

# Menu > Printer Settings > Platen Settings > Height User Settings



# **2** OBSTACLE DETECTION

### **1** STANDARD DETECTION SYSTEM

NORMAL DETECTING SITUATION



Obstacle Sensor
 Platen too low Sensor [EDP]

The GTX600 has **2 sensors** for the detection of problems.

The **Obstacle Sensor** is used to detect any obstacles for the Printheads. The **error** will occur **when obstruction** is detected.

The **Platen too low Sensor** [EDP: Excessive Dropping Prevention] is there to check if the operator is not setting the **platen too low** to avoid generating ink mist and bad quality printing. The **error** can occur **when there is no obstruction and the platen is set too low**.

### 2 DETECTED ERRORS

### OBSTACLE DETECTION SITUATION



Obstacle Sensor
 Platen too low Sensor [EDP]

When the **beam** of the **Obstacle sensor** is meeting an obstacle, it will **stop** the process of printing to **avoid damaging the printheads**.

### EXCESSIVE DROPPING SITUATION



When the **Platen too low sensor beam** encounters the beam receiver on the other side of the platen, it signals that the **platen is too low.** It will stop the print to prevent blurry printing quality & excess ink mist generation.

# **3** REFILLING INKS & CLEANING SOLUTION

Because ink and cleaning solution is delivered in **bulk**, you will have to follow the procedure stepby-step to activate the refilling with the **IC Stick**. The printer will **detect** when the ink is **filled** in any of the tanks.

- If the IC Stick is NOT in place, the printer will prompt you for it.
- Even when the printer is OFF, the refill will be detected by the GTX600 once it's turned back on.
- Calibration of the ink tanks is necessary once a month.





Scan QR Code for Refilling Bulk Ink Video

# WARNING: OLDER GTX Series CLEANING SOLUTION IS NOT COMPATIBLE with GTX600

GTX600 **Cleaning Solution** is a totally **different chemical formula** and is **NOT COMPATIBLE** with other GTX Series.

The bottles now have **different contents** and they also use an **IC Stick** just like the inks.

# **4** WHITE INK AGITATION & SEDIMENTATION

### BEFORE REFILLING BULK INK TANK, YOU HAVE TO SHAKE THE WHITE INK **•** TO BE DONE EVERY REFILLING

Before refilling the bulk white ink tank, you have to agitate the white ink container. When white ink is left idle for a period of time, ink separation occurs, where sediments from the ink start to settle at the bottom of the container. Sediments must be removed through proper agitation of the container BEFORE filling the White Ink Tank, otherwise, unagitated white ink could create an inconsistant flow of ink through the lines causing dull prints and potential damage to the ink delivery system.





Scan QR Code for Bulk White Ink Agitation Video



**Use an agitation machine to properly break up sediment.** Different types of agitation machines vary in the time it takes them to properly agitate white ink. A gyroscopic mixer takes about 5 minutes to agitate, while a vibrating plate can take up to 2 hours.

After agitation, let the white ink settle for 10 minutes. This gives the white ink time to dissipate any foam that may have appeared during the agitation process.

**Turn the container upside down and use a flashlight to view the sediment.** Move the container around gently to clear any foam that has appeared.

A flashlight will review the amount of sediment in the container. Look for dark areas of more solid material. If ink has no sediment, it is OK to refill the tank. An example is below:









**Repeat Agitation Steps If Any Sediment Remains** 

> The shadows of bubbles may be mistaken for sediment after the white ink agitation, so wait until bubbles disappear before checking the container for sediment.

> To distinguish between bubbles and sediment, lightly shake the replenishment ink container. The shadows of bubbles move but the shadows of sediment do not move.

# **5 HANDLING BULK INK CONTAINERS**

When handling bulk ink containers, you will need specialized tools to help you in your daily workflow. 20 Kg [18 L] bulk ink containers are heavy and cumbersome, which necessitates the use of both a **hydraulic scissor lift** and an **agitation device**. These specialized tools will help to professionally move and agitate the inks before filling the tanks on your printer.

HYDRAULIC SCISSOR LIFT



AGITATION DEVICE



### 1 ADJUSTABLE HYDRAULIC SCISSOR LIFT WITH CASTORS



This tool will help to move the bulk ink containers into position to fill the ink tanks cleanly and easily.

To use the adjustable hydraulic scissor lift to help refill an ink tank, adjust the lift to the appropriate height and guide the faucet on the ink container directly over the opening of the ink tank before opening the spout (see photo to the left). This will keep the ink from spilling on the floor.

### **2** AGITATION DEVICES FOR WHITE INK CONTAINERS

> White ink needs agitation EVERY TIME before refilling the tank.
 > White ink containers MUST BE FLIPPED 180° in your stock room once a week.

We suggest two different types of machines to agitate the white ink containers before filling the ink tank on the printer. These tools will help you to mix the ink homogeneously. Remember that a bulk ink container of 18 liters is quite heavy and weighs around 44 pounds. Once the non-agitated ink goes inside the tubes of the printer, it is not possible to remove it and shake it again.

If white ink is not agitated thoroughly, white prints will look faded and gray.

### **3** TWO SUGGESTED AGITATION DEVICES

An agitation device must be used, such as a Santint G48 Gyroscopic Paint Mixer for high ink usage or a fitness vibration plate for low to intermediate ink usage. It is best to pick the agitation device based on how often you will use an 18L container of white ink. You must have a device available to use even if neither of these examples are purchased.



> Inspect white ink containers for sediment periodically during agitation. Test, as time listed is only recommended.

# 6 INTEGRATED HUMIDIFIER

### **1** PURPOSE OF A HUMIDIFIER

**Humidification** is performed inside the machine **to prevent** the **nozzle surface** from **drying out**. Without humidification, the ink on the nozzle plate **dries out** and **missing nozzles may occur**.



**GTX600** and its humidifier can help extend the life of the printheads by keeping them in a **high humidity environment** when they are not operating.

### 2 LOCATION OF HUMIDIFIER & SENSORS

The **Humidifier** is located on the **right side** of the GTX600. There are **3 Temperature & Humidity sensors**. The humidity is distributed with **soft pipes** inside the printer to control humidity near the **PH Capping area** and the **Cleaning area**.



### 2 Water Supply methods are available:

- A direct line from pure water equipment, such as a tank of distilled water.
- Via a water pipe, with a regulator and ion filter to ensure clean water.

Do not use the optional humidifier water supply tube to connect to unfiltered tap water piping.

Use an ion filter to purify water if using a water pipe setup. If non-pure water, such as tap water, is used, white powdery impurities will adhere to the inside of the unit, causing damage to the printer and print heads.

Test water output for conductivity after installing an ion filter. The water source should have a conductivity of  $10\mu$ S/cm or less.

If using a regulator in the water pipe setup, ensure that the pressure supplied is 40kPa(0.04MPa) or less to the printer.

### **4** SETTING THE HUMIDIFICATION SCHEDULE

The Humidification Schedule can be set from the **Maintenance tool**.

Set the humidifier to start **1 hour before** you plan to start daily operations. That way it will be at a "**Suitable**" humidity level for production printing throughout the day.

Menu		Check h	umidificat	ion	schedule
Confirm network setting		Sun.	09:00		17:00
Check circulation schedule		Mon.	07:00		19:30
Check humidification schedule		Tue.	07:00		19:30
Language		Wed.	07:00		19:30
Prepare Power OFF		Thu.	07:00		19:30
	, ,				

Step 2: Enter the star	t time and end	time of humidification		
Current time		08:36		
Day of the week Sun. Mon. Tue. Wed. Thu. Fri. Sat.	Start time 08:00 08:00 08:00 08:00 08:00 08:00 08:00	End time 17:00 17:00 17:00 17:00 17:00 17:00 17:00	- When you check a day of the week, you can enter the start time and end time. If the day of the week is unchecked, humidification will not start automatically. - Humidification will start when the humidification time comes. Set about one hour before printing for the time. Insufficient humidification may affect the print quality and speed. - The humidification will stop at the end time.	
Before proceeding, make sure that the date and time settings on your PC match the current time.				





Scan QR Code for Setting the Humidification Schedule Video

### **5** TEMPERATURE & HUMIDITY RECOMMENDATIONS

To get the **best** out of your GTX600 printer, please allow your workshop to stay within the **recommended range** of Temperature and Humidity:

> Between **64**° and **86**° **F** for **operating** temperature.

> Humidity is regulated INSIDE the machine via the built-in humidifier.

# 7 WASTE TANK

### **1** WASTE INK TANK & WASTE WATER TANK

The **2 tanks** must be set in the **correct position like below**. The **drain tubes** should be located **right above** the tank **holes**.





### 2 EMPTYING THE WASTEWATER & WASTE INK TANKS



A **warning message** will appear when the Waste Ink Tank or Waste Water Tank is full. To verify which tank needs to be emptied, press the right arrow button on the control panel.





Scan QR Code for Emptying the Wastewater and Waste Ink Tanks Video



TEMPERATURE

# HUMIDITY



# 8 PRINT/STOP BUTTONS

### **1** PRINT BUTTONS

Press the 2 **GREEN** Print switches on the **left** and **right** side SIMULTANEOUSLY to start the printing process.

When pressing both buttons, you will hear a **beeping sound** and you need to **hold** the buttons until you hear a second **beeping sound**.

If you do not **hold the 2 buttons down** long enough, the GTX600 will **STOP** the print for **safety** reasons.



WAIT FOR ACOUSTIC SIGNALS

### 2 STOP BUTTONS

Press **ANY** of the **BLACK** switches on **left** or **right** side **to stop** the printing process immediately.

The **Platen** movement **will be stopped** and the **Carriage** will go back to the **Home** position.



# 9 DAILY MAINTENANCE: NOZZLE CHECK

In order to check the status of the nozzles in the print heads, a **Nozzle Check** must be performed for White and CMYK. This should be done every day to ensure optimal performance.

### 1 HOW TO PERFORM A CMYK NOZZLE CHECK

Always place the Platen at level A









# **11** CLEANINGS & PARTS REPLACEMENT SCHEDULE

PARTS	ACTIONS	WARNING	GTX600 ERROR	
SUCTION CAP	CLEANING	<b>5K</b> pcs or 2 weeks	7.5K pcs or 3 weeks	
WIPER	CLEANING	No Need	No Need	
NOZZLE GUARD CLEANING		<b>5K</b> pcs or 2 weeks	7.5K pcs or 3 weeks	
MIST FAN FILTER	PARTS REPLACEMENT	FOLLOW <b>DISPLAY</b> MESSAGES		
WIPER	PARTS REPLACEMENT	<b>23K</b> pcs Follow DISPLAY messages	<b>25K</b> pcs Follow DISPLAY messages	
CAP FOAM	PARTS REPLACEMENT	<b>23K</b> pcs Follow DISPLAY messages	<b>25K</b> pcs Follow DISPLAY messages	
FLUSHING FOAM	PARTS REPLACEMENT	<b>23K</b> pcs Follow DISPLAY messages	<b>25K</b> pcs Follow DISPLAY messages	
CARRIAGE FOAM	PARTS REPLACEMENT	<b>23K</b> pcs Follow DISPLAY messages	<b>25K</b> pcs Follow DISPLAY messages	

# **12 CLEANING SUCTION CAPS & NOZZLE GUARDS**

### 1 CLEANING SUCTION CAPS & NOZZLE GUARDS

When a **Warning message** appears on the display, perform the necessary cleanings.

- > Maintenance
- > Maintenance Part Clean/Replace
- > Clean Nozzle Guard and Cap

and press Menu/OK







Scan QR Code for Cleaning Suction Caps & Nozzle Guard Video





When all steps are FINISHED, perform a **Printhead Cleaning** through the Menu. And then do a nozzle check for CMYK and White.





Remove any dried **ink ink & debris accumulation** [like above] that are protruding under the Nozzle face of the Print Heads.

If you touch the Nozzle face, nozzles may be damaged. Use gloves and pinch with a cleaning stick or fingers to remove. **DO NOT** use hard objects like tweezers.

### **3** CLEANING UNDER THE CARRIAGE

Clean the under face of the carriage like indicated below:





Use a Clean Stick **R** or waste cloth to clean the area:

- Absorb ink droplets wth Clean Stick R.
- Wipe off mist like ink buildup with a lint free cloth

### 4 DETAILED CLEANING OF NOZZLE GUARDS

Wipe clean the 2 nozzle guards 1 & 3 with the **Clean Stick R** dipped in GTX600 **Cleaning Solution** [1 for White Ink and 1 for CMYK Ink to avoid cross color contamination].

A very important place to clean is area 2 between the nozzle guard and nozzle plate.

Be sure **NOT** to touch the **Nozzle surface** 4 at all.



> **Do not** forget to remove any **ink and debris accumulation** that could appear under the nozzle face and carriage.



> **Do not** empty remaining **Cleaning Solution** from the Cleaning Cup into the Maintenance station but rather empty it into the **Waste Tank** below the printer.

### **5** DETAILLED CLEANING OF SUCTION CAPS

Wipe clean the **lips** of the **Suction Caps** in parallel with the side of the tip of **Clean Stick** (T) dipped in **Cleaning Solution** [1 for White Ink and 1 for CMYK Ink to avoid cross color contamination].

Wipe and clean the **Outer Frame** in the same way.

Do not touch the cap foam of the suction cap. The cap foam may come off.

Never touch the tip end of the clean stick T with your hand.

Do not use metallic tweezers or other sharp objects to clean.







# **13** PREVENTIVE MAINTENANCE FOR CUSTOMERS

Your printer requires regular maintenance for optimal performance and endurance. Protect your investment and the quality of your products by performing this regular maintenance immediately when prompted. This will ensure that the parts which can wear out over time are replaced before they break, based on the total number of prints made over the life of the printer.



# **14 MIST FAN FILTER REPLACEMENT & CLEANING**

**1** MIST FAN FILTER REPLACEMENT





Scan QR Code for Mist Fan Filter Replacement Video

### 2 CLEANING BEFORE AND AFTER REPLACING THE MIST FAN FILTER

Use a Clean Stick **R** or Clean Stick **T** to clean the areas specified in the pictures below.

All loose debris needs to be removed with a vacuum cleaner.





Remove all the dirt accumulated in the 2 openings and then vacuum them.





Clean the edges of the 2 clearance areas. Remove all the dirt and vacuum them.





Clean the areas where you can see ink mist and lint debris which has formed while printing.

When finished cleaning and vacuuming, you can **install** the 2 new Mist Fan filters.

# **15 WIPER BLADE REPLACEMENT**

When a **warning message** appears on the **display**, start the replacement process From the **Menu** select: > *Maintenance* > *Maintenance* part Clean/Replace

> Replace Maintenance Unit Parts and press





Scan QR Code for Wiper Blade Replacement Video

# **16 FLUSHING FOAM REPLACEMENT**

When a **warning message** appears on the **display**, start the replacement process From the **Menu** select: > *Maintenance* > *Maintenance* part Clean/Replace

> Replace Maintenance Unit Parts and press





Scan QR Code for Flushing Foam Replacement Video

# **17 CAP FOAM REPLACEMENT**

When a warning message appears on the display, start the replacement process From the **Menu** select: > Maintenance > Maintenance part Clean/Replace

> Replace Maintenance Unit Parts and press







Scan QR Code for Cap Foam Replacement Video

# **18 CARRIAGE FOAM REPLACEMENT**

When a warning message appears on the display, start the replacement process From the **Menu** select: > Maintenance > Maintenance part Clean/Replace

> Replace Maintenance Unit Parts and press





Scan QR Code for **Carriage Foam Replacement** Video

\*Part numbers subject to change. Visit the Brother Partner Portal for current part numbers.

	Product Description	Product Code	Price/Unit
	Cyan Ink 9L Bulk Container	BGCX60C009L0132	
	Magenta Ink 9L Bulk Container	BGCX60M009L0132	
	Yellow Ink 9L Bulk Container	BGCX60Y009L0132	
S	Black Ink 9L Bulk Container	BGCX60K009L0132	
ne	White Ink 9L Bulk Container	BGCX60W009L0032	
3	Cyan Ink 18L Bulk Container	BGCX60C018L0132	
<b>D</b>	Magenta Ink 18L Bulk Container	BGCX60M018L0132	
ິ	Yellow Ink 18L Bulk Container	BGCX60Y018L0132	
2	Black Ink 18L Bulk Container	BGCX60K018L0132	
	White Ink 18L Bulk Container	BGCX60W018L0032	
	Orange Ink 9L Bulk Container (GTX600 Extra Colors Only)	BGC60RE009L0032	
	Green Ink 9L Bulk Container (GTX600 Extra Colors Only)	BGC60GR009L0032	

	Cleaning Solution 9L	BGCX60E009L0032
s	Cleaning Solution 18L	BGCX60E018L0032
0	Pretreatment 5 Kg Jug	BGCX40PS05K0044
В	Pretreatment 20 Kg Jug	BGCX40PS20K0034
	Pretreatment 200 Kg Jug	BGCX40PS2HK0034
	Premixed 2:1 Pretreatment 5 Gallon Jug	BGCXPT8158PM5US

	Print Head Supply Unit GTX6 C	SC3340001	
S	Print Head Supply Unit GTX6 W	SC3355001	
ล้	Mist Fan Filter (2/pack)	SC5066001	
<u>م</u>	Clean Stick R (50/pack)	4Y1-9096	
he	Clean Stick T (50/pack)	SC0032001	
Б	HUMIDIFIER FILTER SUPPLY ASSY	SC5138001	
	CLEANING CUP	SB6925001	

# **20** 25K MAINTENANCE KITS

# GTX600 - GTX600NB25KPMKIT

WIPER HOLDER SUPPLY ASSY GTX6 (4/pack)	SC4894101	
CAP FOAM GTXB SUPPLY ASSY (4/pack)	SC5084001	
FLUSHING FOAM SET GTX6 (2/pack)	SC4848001	
CARRIAGE FOAM SUPPLY ASSY	SC5026101	

# GTX600 Extra Colors - GTX600SB25KPMKIT

WIPER HOLDER SUPPLY GTX6 SP	SC7420001
CAP FOAM GTX6 SUPPLY ASSY SP	SC7423001
FLUSHING FOAM SET GTX6 SP	SC7419001
CARRIAGE FOAM SP SUPPLY ASSY	SC7418001

# **21 MAINTENANCE TUTORIAL VIDEOS**



All the maintenance procedures described in this Quick User Guide **MUST** be performed on a daily, weekly, or prompted basis in order to keep your printer performing **properly**.

> Please carefully read the <u>Instruction Manual</u> for each specific maintenance procedure for step by step instructions.

Scan QR Code for GTX600 Maintenance Videos Showcase



# 22 BROTHER ACADEMY & SUPPORT

Get access to <u>Brother Academy</u>, an online resource for training new employees, learning new application techniques, and maintaining DTG equipment.

If you still need technical support with your GTX600, submit a support ticket at <u>ProductionDTG</u>. <u>com/Support</u>





Scan QR Code for the GTX600 Brother Academy Video