



Performing GTX Maintenance

OVERVIEW

The GTX platform has several automated features that help keep the printer maintained. As part of this, the GTX will prompt you from time to time to take care of some of the manually performed maintenance processes. Aside from these prompted processes there are also periodic items that will need to be tended to. Combined with these items, the use of when and how to use the carriage pin is included.

Prompted items give a warning display message and will eventually cause the printer to error out if not addressed in a reasonable amount of time. There are two ways that these types of items or events can be triggered. The first of which is by reaching a print threshold which triggers the event to prompt. The second prompt is the length of time since the last exchange was performed. When we pass either set parameter or amount in these categories it will cause a maintenance prompt message. If we continue to use the printer after the next parameter marker hits the printer will then error out. To reset this counter; we will need to perform the maintenance task requested.

There are a few other items that require manual cleaning that will need to be tended to periodically. These items should be checked during some of the previously mentioned prompted maintenance items. These items include checking areas of the printer to see if they need to be cleaned. These include manually cleaning the internal area of the printer's metal surfaces, cleaning the Carriage Plate, cleaning and greasing the Carriage Guide Shaft, and cleaning the roller system and carriage rollers. For any cleaning of the print head surface, we will touch on the only time such an action should be performed. Lastly, we will discuss in this section how putting the printer in storage mode will affect performing these items as well as discuss the process for doing so and what is still required for upkeep of the printer.

KEY LEARNING OBJECTIVES:

- ☑ How and when to use the CR Holding Pin
- ☑ Consumable replacements and their timing
- ☑ Keeping the waste tank empty
- ☑ Cleaning areas of the printer
- ☑ How and when to clean areas of the printer
- ✓ Information for where the consumable items can be purchased
- ☑ Modes of storage and how they affect maintenance tasks
- ☑ Cleaning around the print head area and when to clean the nozzle surface.

ADDITIONAL DOCUMENTATION:

GTX Maintenance Videos

GTX Instruction Manual

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WHAT TO DO IN THE EVENT OF EMERGENCY POWER OUTAGE:

If the power goes out at your location and the printer is either in the middle of a print or you were performing a maintenance operation, you will need to utilize the CR Holding Pin. We will go over how to use the CR Holding Pin that came with the accessory box and how to store the pin.

- What should I do with the printer if the facility loses power?
- Using the CR Holding Pin.
- Storing the CR Holding Pin.

DEALING WITH MIST INSIDE THE PRINTER:

In this tutorial, we will discuss what to do about mist buildup in the printer and how to clean it. Mist buildup is not just about how the inside of the printer looks. Keeping items that move the carriage such as the guide and rollers clean, for example, help prevent errors in addition to wear and tear on the printer. We will discuss the points about mist build up, how to keep it minimal, and how to remove it.

- When do I check for build-up of mist in the printer?
- What is mist build-up?
- How to minimize build-up from happening.
- How to clean areas important to carriage movement.
- How to clean areas such as the hard frame sections in the printer.
- What cleaning supplies will be needed to perform these cleanings?
- Where do I apply grease to the printer after cleaning?
- What functions do I need to run after being cleaning and greasing?

DAILY WHITE INK MAINTENANCE PROCEDURE:

It is important to understand the process of white ink agitation. This item is referred to as daily white ink agitation; however, it is called this by default assuming the user will print each day. There are a few important items that we need to understand about this process. First, understanding when to agitate the ink and press **OK** on the printer can affect ink waste when the refilling is triggered. We will give a sample schedule of how to use this function if you do not print every day of the work week. Secondly, the length of time you agitate the cartridges and how you agitate the cartridges can affect the vibrancy of your white prints. It is also a great idea to utilize this time to check the pouches to ensure they roll up properly.

- Discussion and table about printing every day or some days only.
- How to Agitate the white ink before hitting **OK** on the panel.
- How long should I agitate the cartridges?
- Is there a certain technique or procedure that I should use?
- Things to be cautious about when handling the cartridge, and pouch.
- How to properly check that a cartridge is rolling up and reseating it.
- If I have new pouches should those be agitated differently?

UNDERSIDE CR PLATE CLEANING:

From time to time we should clean the carriage plate at the side of the print head. This plate is affected by ink splashing from the wiper blade, ink mist in the printer, and any

backsplash from flash firing operations over the flushing foams. Cleaning the plate can help prevent ink/debris from falling from this area onto a garment.

- What supplies will be needed to keep this area clean?
- Why do we need to keep this area clean?
- How to clean the CR Plate.

ABOUT THE PRINTER COVER:

There are two very important aspects about the printer cover that you need to know when operating the printer. The first is that opening the printer cover will cut the power to the printer immediately as a safety feature. This includes if the printer is printing or if you are performing a maintenance operation. You should never do this; instead power the printer off properly. The second thing to know is that while the windows are meant for viewing artwork being printed; the cover itself should never be used to lean on to watch this printing process. Additionally, we do not want to set shirts onto the cover of the printer as weight on the cover can cause the tubes to hang on the reinforcement ribbing.

- How to open the printer cover.
- What happens when I open the printer cover?
- How do I properly power off the printer?
- Warning Label information about putting weight on the cover.
- What can happen if I put weight onto the cover?

CLEANING THE WIPER BLADE:

Cleaning the wiper blade is important because doing so keeps the smooth silicone rubber surface free of debris. We always want to keep our wiper blades for white and CMYK clean because they touch the nozzles of the print head directly. Aside from cleaning the front and back of the wiper blade, we also need to keep the tracks of the blade freed of any ink that may have hardened. Large pieces of ink built up on the wiper blade in these tracks can cause the blade to become deviated and uneven affecting the blade's ability to wipe the head evenly or completely. We will go over how to keep the blade clean, how to remove hardened ink, and how to know the signs of when a blade might need to be changed out.

- Where is the wiper blade located?
- What is the function of the wiper blade?
- How do I clean the wiper blade?
- How do I remove built up ink from the base of the blade?
- What supplies will I need to perform the cleaning operation?
- What is the timing for performing this cleaning operation?
- What is the approximate life of the wiper blade?

CLEANING THE CAPS:

Cleaning the rubber caps of the print head is very important. The upper rubber lip of the caps must be kept clean to get a good seal on the print head. This is important as cleaning solution wets the caps and cleaning cycles need a good seal between cap and print head to function effectively to help keep the head clean and firing. Failure to keep this area clean will mean that ink can build up; creating an uneven surface and preventing the sealing action from happening. This allows the head to be constantly exposed to air which can dry out the nozzles causing the print head to stop firing. We will go over how to clean the cap and the importance of the techniques and actions to take when the printer prompts this cleaning.

- Where are the rubber caps located?
- What supplies will be needed to clean the rubber caps?
- What is the suction cap?
- What is the exhaust cap?
- How do I clean these caps?
- Are there areas I need to be aware of not to touch?
- Areas of importance when cleaning the caps.
- Things to avoid doing when cleaning the caps.
- What is the timing for performing this task and will the printer prompt me?

NOZZLE GUARD TIMING:

To help ensure the print head and the rubber caps have a good seal, we will need to keep the nozzle guards clean of ink buildup. The printer will prompt you for this item. Please note that this is the same message that prompts when it is time to clean the rubber caps and wiper blades. During the cleaning operation you will need to be aware of the exact areas to clean around the perimeter of the print head while avoiding the nozzle plate surface. We will discuss these items in this section.

- When and how often will I need to clean the nozzle guards?
- What supplies will I need to clean the nozzle guards?
- Will I be prompted to clean the nozzle guards?
- How to perform the nozzle guard cleaning operation.
- What areas do I clean during this operation?
- What areas should I avoid during this operation?
- How long will this operation take?
- What other items are tied to the prompt for this cleaning?

WHEN TO WIPE THE HEAD SURFACE:

The nozzle surface where the ink jets from is a sensitive area. We do not want to take any action that could compromise the nozzle area without first discussing the matter with a technical services representative. We will discuss when you may possibly need to perform this action.

- This method should never be used without reaching out to tech services.
- When would I be requested to perform this action?
- Why is it imperative to contact a representative before attempting this process?

PREPARING THE UNIT FOR LONG TERM LEAVE (MORE THAN 2 WEEKS):

To prep a printer for long term storage there are certain items that we need to be aware of. First and foremost; the printer still needs to be connected to power and monitored during the time it is in storage. In this section, we will discuss how to put the printer in

this mode. We will also discuss what actions might be required for us to perform while the printer is in this mode.

- How to prep the unit for storage.
- What steps need to be taken to put the printer in storage mode?
- How to remove the printer from this mode.
- What actions will need to be taken while the printer is in this mode?

HOW TO REPLACE THE FAN FILTER:

Replacing the fan filters will occur as one of the prompted actions or warnings the printer will flag during operation. Keeping the filters replaced will help minimize ink mist build up within the printer. In this section, we will go over the timing of the operation as well as how to perform the exchange of fan filters in the printer.

- What are the fan filters and where are they located?
- How often will I need to replace the fan filters?
- Why should I replace the fan filters?
- Is there a correct method to install the fan filters?
- How to replace the fan filters.

HOW TO REPLACE THE FLUSHING FOAMS:

Flushing foam replacement is also a prompted maintenance item. The printer will prompt for their exchange at a regular interval. Keeping this area clean will allow ink to drain from the waste tray to the waste tube. The foam is used to absorb ink as the printer fires briefly to refresh the nozzles both before the print and when it pauses during a print.

- What are the flushing foams and where are they located?
- How often will I need to replace the flushing foams?
- Why should I replace the flushing foams?
- Is there a correct method to install the flushing foams?
- How to replace the flushing foams.
- Do I need to keep the flushing tray clean?

HOW TO REPLACE THE WIPER CLEANERS:

The wiper cleaners are used to clean off the wiper blades which help to keep the print head clean. These items are also prompted for replacement at regular intervals by the printers. The printer also cannot run without these items inside the printer. We will go over the what, when, where, why and how to replace the wiper cleaners.

- What the wiper cleaners are and where are they located?
- How often will I need to replace the wiper cleaners?
- Why should I replace the wiper cleaners?
- Is there a correct method to install the wiper cleaners?
- How to replace the wiper cleaners.

REFILLING THE CLEANING SOLUTION:

Keeping the cleaning solution tank full is another item that we always want to be mindful of. The printer will prompt us when the solution becomes low and allow us to print a bit longer before the printer eventually errors out. Refilling the solution is also important as the solution is what keeps the cap foams inside the maintenance station wet. This is also what is used to help keep the print head nozzle surface moist. We discuss when, where, why, and how to refill the cleaning solution.

- Where is the cleaning solution tank located?
- How often will I need to refill the cleaning solution?
- What is the purpose of the cleaning solution?
- Is there a correct method to use when refilling the cleaning solution?
- How to refill the cleaning solution tank.

EMPTYING THE WASTE TANK:

To help keep ink draining properly from the printer during operation we will on occasions need to check the waste tank and empty it. The printer only warns to check this item and never errors out. You will want to always take the recommendation to check the waste tank periodically and when the printer states to do so. Here we will discuss how and why to empty the waste tank.

- Ensuring the waste tube is trimmed correctly.
- How to empty the waste tank.
- When should I empty the waste tank?
- What happens if I do not empty the waste tank?

FOR ADDITIONAL TECHNICAL SUPPORT INFORMATION:

GTX Support Videos
GTX Drivers/Firmware