FORMAX®

ColorMax8
Digital Color Printer

OPERATOR MANUAL
Rev. 2

8/2021

SAFETY PRECAUTIONS

THIS EQUIPMENT PRESENTS NO PROBLEM WHEN USED PROPERLY.
OBSERVE SAFETY RULES WHEN OPERATING THE COLORMAX8 PRINTER.

BEFORE USING PRINTER, READ THIS MANUAL CAREFULLY AND FOLLOW RECOMMENDED PROCEDURES, SAFETY WARNINGS, AND INSTRUCTIONS:

- ✓ Keep hands, hair, jewelry and clothing clear of rollers and other moving parts.
- ✓ Avoid touching moving parts or materials while machine is in use. Before clearing a jam, be sure machine mechanisms come to a stop.
- ✓ Always power-down and turn off machine before making adjustments, cleaning the machine, or performing any maintenance covered in this manual.
- ✓ Power cord supplied with machine. Plug it into a properly grounded, easily accessible wall outlet near machine. Failure to properly ground machine can result in severe personal injury and/or fire.
- ✓ Power cord and wall plug are primary means of disconnecting machine from power supply.
- ✓ **DO NOT:** use an adapter plug on line cord or wall outlet.
- ✓ **DO NOT:** remove ground pin from line cord.
- ✓ **DO NOT:** route power cord over sharp edges or trap it between furniture.
- ✓ Avoid using wall outlets that are controlled by wall switches or shared with other equipment.
- ✓ Make sure there is no strain on power cord caused by jamming it between equipment, walls or furniture.
- ✓ **DO NOT:** remove covers. Covers enclose hazardous parts that should only be accessed by a qualified service representative. Report any cover damage to your service representative.
- ✓ This machine requires periodic maintenance. Contact your authorized service representative for required service schedules.
- ✓ To prevent overheating, do not cover vent openings.
- ✓ Use this equipment only for its intended purpose.
- ✓ In addition, follow any specific occupational safety and health standards for your workplace or area.

This manual is intended solely for the use and information of Formax, its designated agents, customers, and their employees. The information in this guide was obtained from several different sources that are deemed reliable by all industry standards. To the best of our knowledge, that information is accurate in all respects. However, neither Formax, nor any of its agents or employees shall be responsible for any inaccuracies contained herein.

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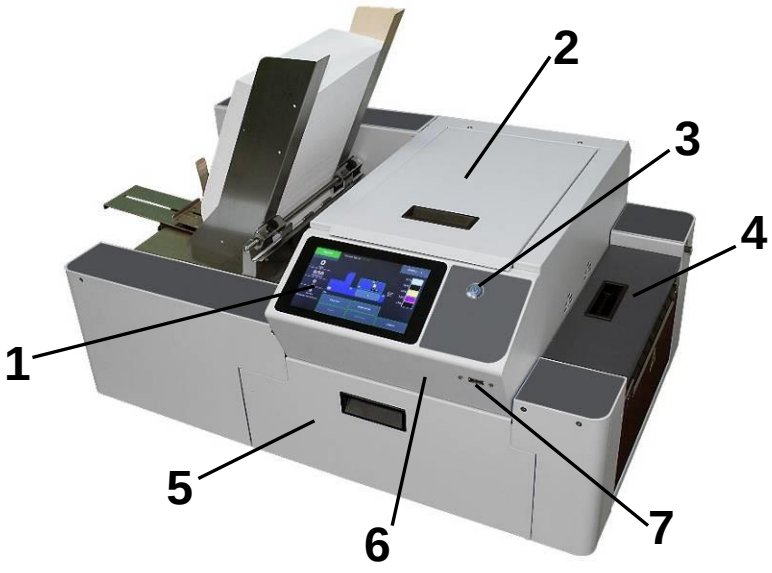
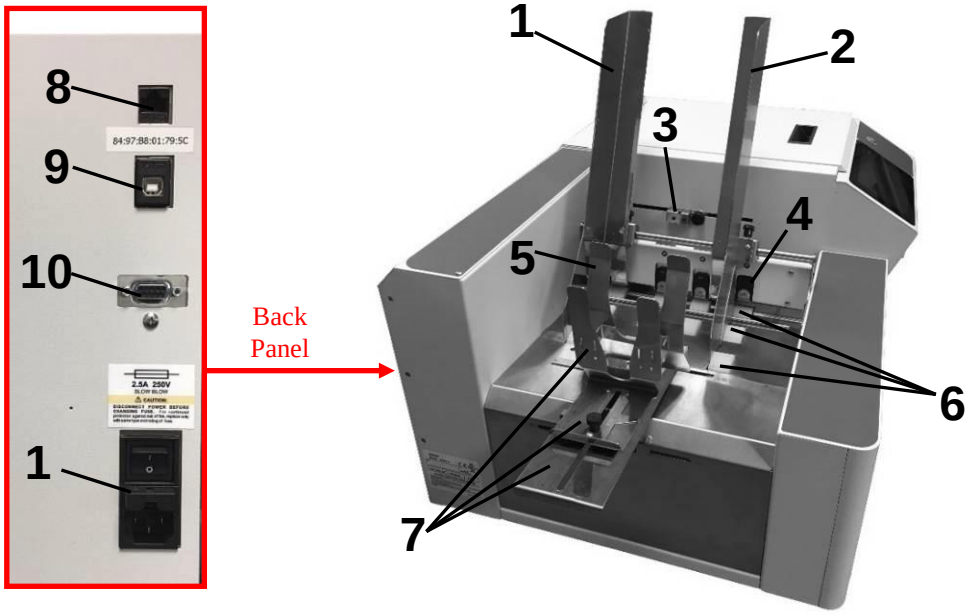
SECTION 1 – *Getting Acquainted*



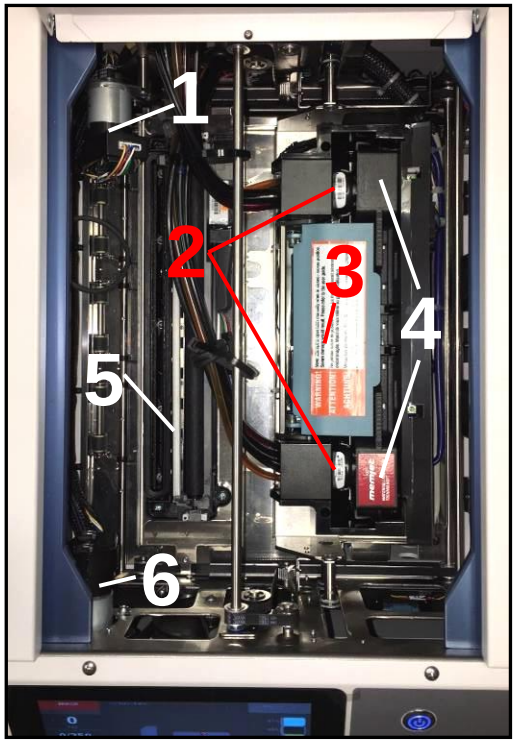
Front View

1.	**Touchscreen Display (Control Panel)** – Displays **Menu** and information about Printer status. You can set Printer features and control Printer functions from this display.
2.	**Printhead Door** – Provides access to Print Engine, Printhead and Service Station. NOTE: All doors must remain shut when printer is busy (printing, performing maintenance).
3.	**Soft-Power Button** – Used to power-up and power-down the Print Engine. NOTE: Button illuminates with blue light when Print Engine is powered-up (ON).
4.	**Exit Transport Cover** – Opens to provide access to media path and Media Transport Belts.
5.	**Ink Tank Door** – Provides access to Ink Tanks, Waste Ink Tray and Clamshell Latch. Opening Ink Tank Door disconnects Printer communication to Ink Tanks; allowing for safe Ink Tank installation/replacement. NOTE: All doors must remain shut when printer is busy (printing, performing maintenance).
6.	**Clamshell** – Upper section of Print Engine containing Printhead and Service Station. Raises up/down based on Media Thickness setting. To open Clamshell (hinged at rear) and gain access to media path/print area; open Ink Tank Door **[5]** and release (pull out on) Clamshell Latch **[A]**.
7.	**Backup/Transfer Port** – Used to backup system/debug log files and stored jobs to a USB Flash Drive. See "***Appendix C – Backup/Transfer Port***" for more details. **CAUTION**: Do NOT connect devices, other than USB Flash Drives, to this port. NOTE: This port may NOT be present on all printers.



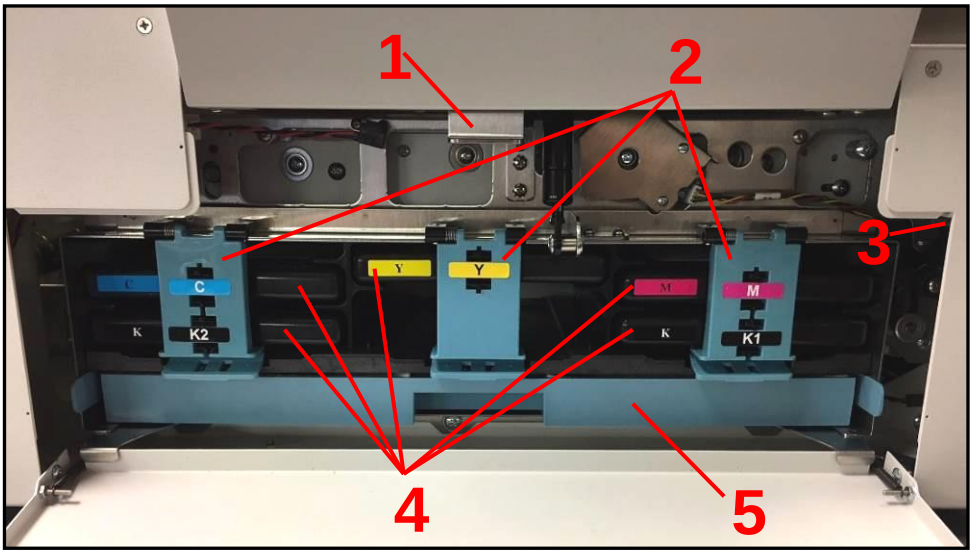
Entry End & Connections View

1.	**Media Side Guide - Inner** – Used to guide inner edge of Media.
2.	**Media Side Guide - Outer** – Used to guide outer edge of media.
3.	**Feeder/Entry Sensor Assembly** (adjustable) – Contains two sensors. Feeder Sensor is used to measure/monitor media length and control when next piece feeds. Entry Sensor detects leading edge of media as it enters Print Engine area. Adjustable position accommodates varying media widths/positions and to avoid problem areas on media surface. **IMPORTANT**: Be sure to position sensor assembly over media's path.
4.	**Sheet Separators** (four) – Separates each piece of media as it is fed.
5.	**Media Support Wedge Extensions** – Narrow and Wide Media Support Wedge Extensions are provided to accommodate a wider variety of different media widths and lengths. They attach to the Rear Media Support Guide [7].
6.	**Feed Rollers** (twelve) – Delivers media from Feeder section into Print Engine area.
7.	**Rear Media Support Guide/Sled** – Helps to force media against sheet separation area. Narrow and Wide Media Support Wedge Extensions attach to this device.
8.	**Network Port** – Ethernet cable attaches to Printer here
9.	**USB Port** – USB cable attaches to Printer here.
10.	**Interface Port** – DB-9 Interface to connect Printer with other equipment (future use)
11.	**Main Power Switch, Receptacle and Fuse**. – Plug in power cord here. Switch turns main power ON/OFF. Fuse protects Printer's electronic circuits. ***IMPORTANT!*** *Press Soft-Power Button to power-down Print Engine.* Wait until Soft-Power Button light turns off before you turn off main power switch. For best system performance, it is recommended to keep Print Engine powered-up at all times.



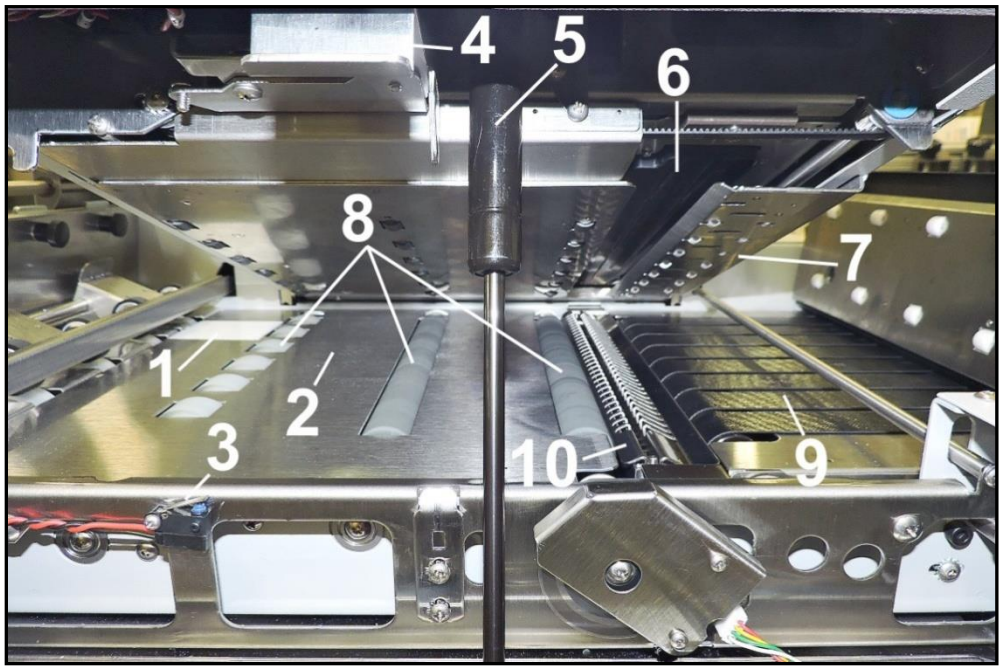
Print Engine View (Under Printhead Door)

1.	**Service Station Sled Motor** – Moves Service Station in and out from under Printhead Assembly for inspection, cleaning or service.
2.	**Ink Revolver Couplings** – Connect ink hoses to Printhead Cartridge. Printhead Latch extends and retracts couplings from Printhead.
3.	**Printhead Latch** – When closed connects Ink Revolver Couplings with Printhead Cartridge. When opened, retracts Ink Revolver Couplings from Printhead Cartridge and provides access to Printhead Cartridge for removal/replacement. **WARNING!** Never attempt to open Printhead Latch manually, severe damage will result. Use "**Release Printhead**" or "**System Deprime**" feature from Touchscreen.
4.	**Printhead Cartridge** – Memjet® Printhead produces an 8.77" (222.8 mm) wide full color print area.
5.	**Service Station** – Maintains the Printhead. The Printhead Assembly lifts and Service Station slides under Printhead to perform Printhead maintenance and or to cap Printhead. The Service Station slides out from under Printhead and Printhead Assembly lowers for printing and or "sled inspection". Contains 3 major components. - Wiper Roller – Cleans excess ink and debris from Printhead. - Cap – Keeps inkjet nozzles hydrated and protected when not in use. - Tray – Holds above components and initially captures waste ink; which is then pumped into Waste Ink Tray.
6.	**Printhead Assembly Lifter Motor** – Lifts and lowers Printhead Assembly. During printing, Printhead Assembly is lowered. During Printhead maintenance/cleaning or capping, Printhead Assembly lifts to allow Service Station to slide under Printhead.



Ink Tank View (Behind Ink Tank Door)

1.	Clamshell Latch – Used to release and open Clamshell to clear media jams, install/exchange Print Platen & Drip Tray and cleaning. Pull Latch out to release. Open Clamshell slowly to allow “Sump Pump” to remove waste ink from Service Station Tray and avoid ink spills. **WARNING!** To reduce the chance of ink spills from the Service Station Tray; avoid opening the Clamshell when there is printer activity, such as “wiper transfer”, occurring.
2.	Ink Tank Securing Latches – Used to hold Ink Tanks securely into slots. *NOTE*: Make sure both sides, at bottom part of latch, are engaged.
3.	Ink Door Switch – When Ink Tank Door is opened, Switch shuts down communication between Printer and Ink Tanks for safe removal and replacement.
4.	Ink Tanks – Printer has 5 Ink Tanks: Cyan (C), Yellow (Y), Magenta (M), Black (K1), Black (K2). Each Ink Tank is inserted into its appropriate color slot.
5.	Waste Ink Tray – Catches and absorbs waste ink produced by the system. This tray is filled with absorbent material. This tray must be replaced when it becomes saturated. Please inspect routinely. The tabs located at left and right sides of the tray secure tray to frame. Please be sure tabs “click” into frame, to secure the tray's position.



Print Zone View (Under Clamshell)

1.	**Entry Sensor Reflector** – Reflects sensor beam back to Media Entry Sensor. The leading edge of the media is detected as media passes between Entry Sensor and Reflector.
2.	**Paperpath Surface** – Flat metal surface supports media for smooth transport through Print Area.
3.	**Clamshell "Open" Switch** – Signals Printer when Clamshell Latch is released and Clamshell is opened.
4.	**Clamshell Latch** – Used to release and open Clamshell to clear media jams, install/exchange Print Platen & Drip Tray and cleaning. Pull Latch out to release.
5.	**Clamshell Support** – Holds up Clamshell during maintenance and service.
6.	**Printhead Opening** – Printhead will be presented in this opening during printing and during “Inspect Sled” event.
7.	**Exit Starwheel Assembly** – Starwheels allow for media, with freshly printed image, to be transported smoothly from print area with minimal image transfer.
8.	**Media Transport Rollers** – Keep media moving through Print Area.
9.	**Media Transport Belts** – Moves printed media out of the Printer.
10.	**Print Platen & Drip Tray** – Located under Printhead. Print Platen supports media during printing process. Two different Print Platens (High and Low) are provided with printer. Drip Tray catches any excess ink during printing and purging process. **CAUTION!** Make sure this assembly has been properly installed before you power-up and start using the printer. Be careful not to spill ink when removing assembly. This assembly must be removed and cleaned routinely to avoid ink overflow.

SECTION 2 – *Installing Printer*

Before using Printer:

- Conduct Transport Inspection. Upon delivery, inspect packaging and report any issues to the Carrier.
- Gather Tools
- Choose a location for Printer
- Unpack and verify Accessory Box contents
- Remove shipping materials – Yellow Zip-Ties, Foam Block and Shipping Tape
- Install Print Platen & Drip Tray Assembly
- Attach Media Guides to Printer
- Plug in Printer
- Install Ink Tanks
- Install Printhead
- Install Printer Software (Driver & Toolbox).
- Complete setup steps outlined within section titled “Operating Printer”.

Transport Inspection

The printer is shipped in appropriate packaging so that, under normal shipping conditions, it reaches its destination without damage.
NOTICE: Report damage to the carrier. The carrier is liable for any damage during transport.

Transport and storage should take place under the following conditions:

- At temperatures between -25°C and +50°C (-13 °F to 122 °F).
- At a relative air humidity between 5% and 95%, non-condensing.
- At an atmospheric pressure between 70 kPa and 105 kPa.

Exposure to conditions that are not permissible may lead to damage which is not externally visible.

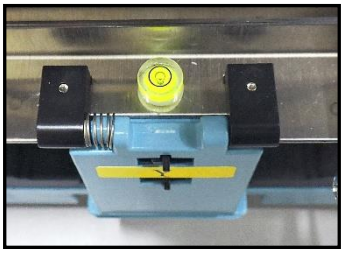
IMPORTANT Please save packaging materials for future use! It will be required if you ever need to ship printer. Before shipping; please refer to the section titled "Shipping or Transporting Printer".

Tools Needed

- ***Utility Knife*** and ***Scissors*** to open packaging.
- ***Cutting Pliers*** (Wire Cutters) to cut yellow zip-ties that secure wiper motor assembly to service station sled.
- ***Small Adjustable Wrench*** to hold nut when removing screws used to secure Rear Media Support Guide/Sled Assembly.
- ***#2 Philips Screwdriver*** to mount Guides.
- ***Protective, powder-free, Nitrile Gloves***.
  Should be worn to avoid getting ink on hands when installing/removing Print Platen and Drip Tray Assembly, Printhead Cartridge and Ink Tanks.
- ***Distilled Water*** to clean/wet Printhead nozzles.
- ***Non-abrasive, lint free Cloths*** to clean/wet Printhead nozzles.
- ***Paper Towels*** or rags to clean up any ink drips/spills. Do NOT use to clean/wet Printhead nozzles.

Choose a Location

Place Printer on a <u>sturdy</u> <u>level</u> worktable or cabinet at least 9" from any walls.
Use the following methods to verify that the Table and Printer are level:



- A carpenter's level should be used to make sure Table is level (front to back and left to right).
- The ***Bubble Gauge,*** mounted above the Yellow Ink Tank Latch, can be used to verify that the Printer is level. Open the Ink Tank Door and release the Clamshell Latch to access this area.

Protect Printer from excessive heat, dust, and moisture.
Avoid placing Printer in direct sunlight.

Operating Conditions

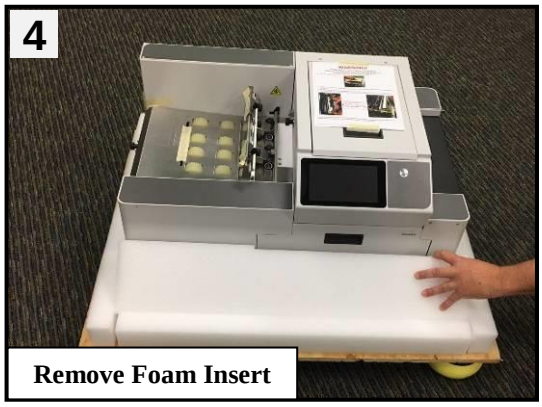
Operation should take place under the following conditions:

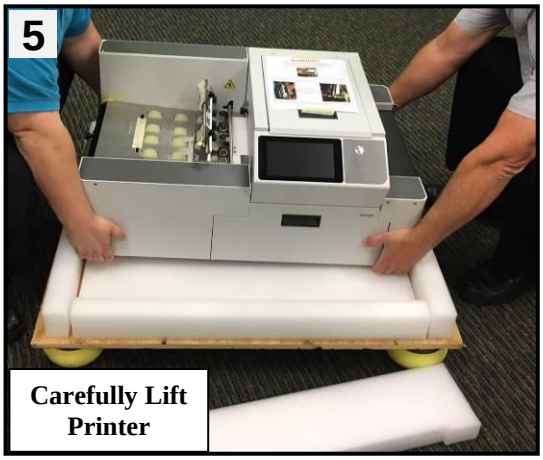
- At temperatures between +15°C and +30°C (59 °F to 86 °F).
  With max temperature change of +/- 0.5°C (+/- 0.9°F) per minute.
- At a relative air humidity between 20% and 80%, non-condensing.
- At an atmospheric pressure between 70 kPa and 105 kPa.
- Printer and Print Engine should be protected from excessive environmental debris/dust.
- Printer must be placed on a "Sturdy/Level" surface.

Exposure to conditions that are not permissible may lead to damage which is not externally visible.
Allow printer, Printhead and ink tanks to acclimate to ambient temperature before using the printer.

Unpacking

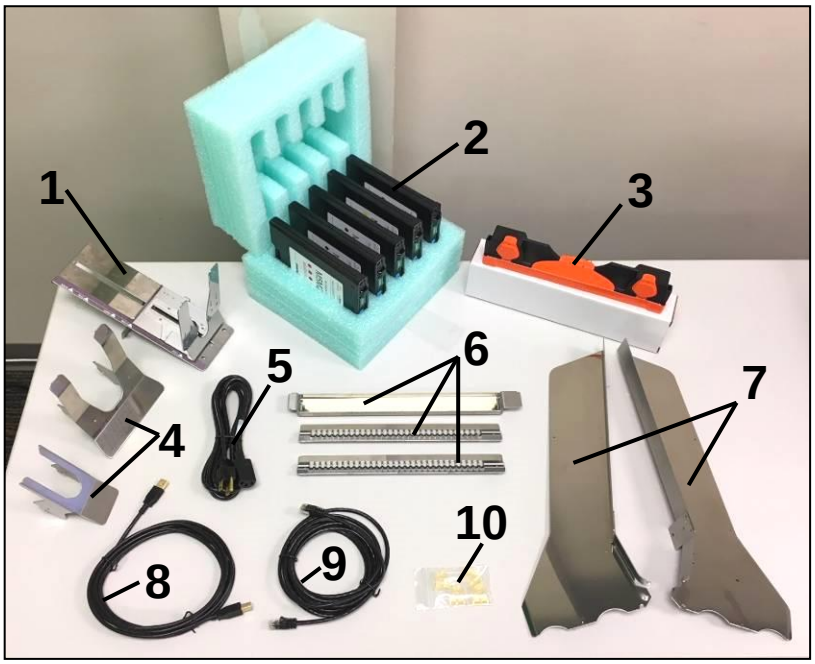
Please refer to the unpacking sequence, shown below.
NOTE: Packaging materials may vary slightly from what is shown below.
Please save packaging in a safe place, for possible future use.
Two people will be required to safely lift printer and place it onto a sturdy, level work table.
IMPORTANT: WORK TABLE SURFACE MUST BE LEVEL!





Contents of Packaging

Items included with the COLORMAX8 Printer.



1.	Rear Media Support Guide/Sled Assembly (*Thumbscrew and mounting screws attached to Printer*)
2.	Ink Tanks (five, *packed in foam molds*) – Cyan, Magenta, Yellow, Black, Black
3.	Printhead Cartridge (*shown removed from packaging*)
4.	Media Support Wedge Extensions: Narrow and Wide (*Attach to slots in Rear Media Support Guide/Sled*)
5.	AC Power Cord
6.	Print Platen & Drip Tray Assembly (*Includes High and Low Print Platens*)
7.	Media Side Guides: Inner and Outer (*Mounting screws attached to Printer*)
8.	USB Cable
9.	Ethernet Cable (Network Cable)
10.	Sheet Separators (four spare separators inside bag)
	USB Flash Drive – Contains Printer Driver, User Guide, Quick Start Guide and Installation Video. (Shipped attached to sidewall of printer, as shown.)

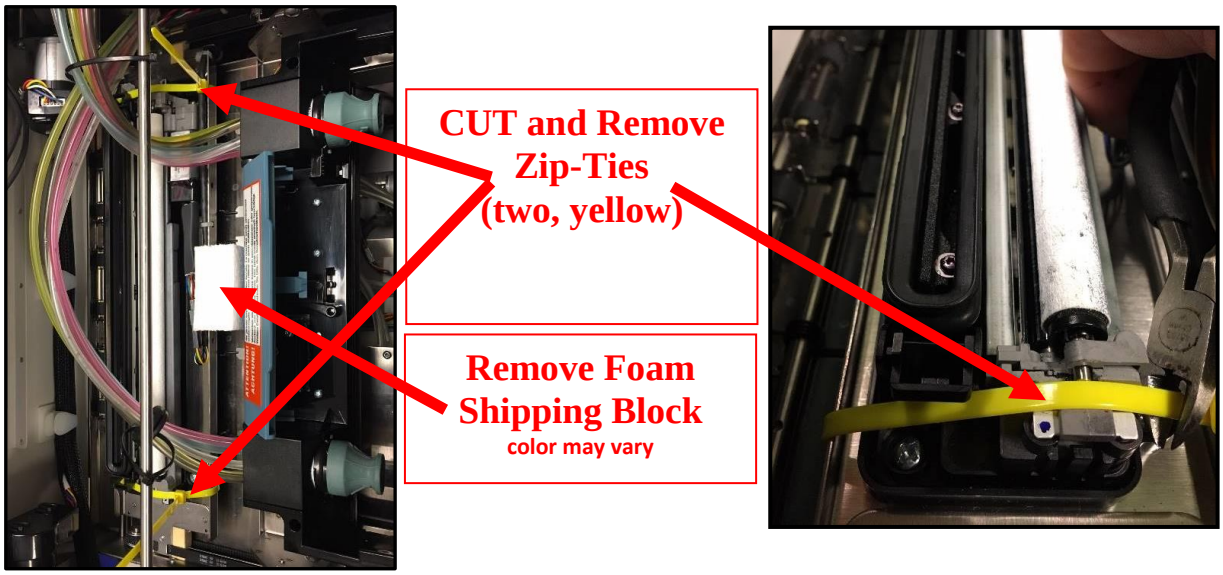
Removing Shipping Materials

WARNING

**TO AVOID POSSIBLE DAMAGE TO PRINTER;
DO NOT PLUG-IN OR POWER-UP PRINTER
UNTIL ALL SHIPPING MATERIALS HAVE BEEN REMOVED.**

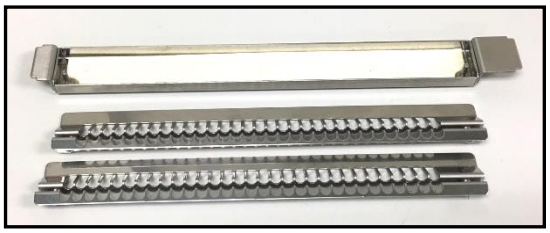
1. **Open the Printhead Door.**

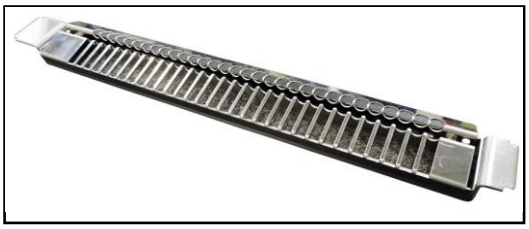
2. **Locate and Remove the Foam Shipping Block; shown below. Color of foam block may vary.**
   NOTE: Foam Shipping Block is used to secure Service Station Sled position during transport.
3. **Locate, Cut and Remove the two YELLOW Zip-Ties; shown below.**
   NOTE: Zip-ties are used to secure the wiper motor assembly to the service station sled during transport.
   Do NOT cut the white or black zip-ties used to control the position of the ink tubes.



4. **Be sure to remove all pieces of cut yellow zip-ties from the printer.**
5. **Gently close the Printhead Door.**
6. **Remove protective film from Touchscreen display.**
7. **Remove masking tape; used to secure USB Flash Drive and Guide mounting Screws during transport.**

Install Print Platen & Drip Tray Assembly





NOTE: Absorbent material, within new Print Platens and Drip Tray, may have some ink deposits on them. This is normal. Assemblies are installed and tested during quality control process, then they are removed and packaged in accessories box.

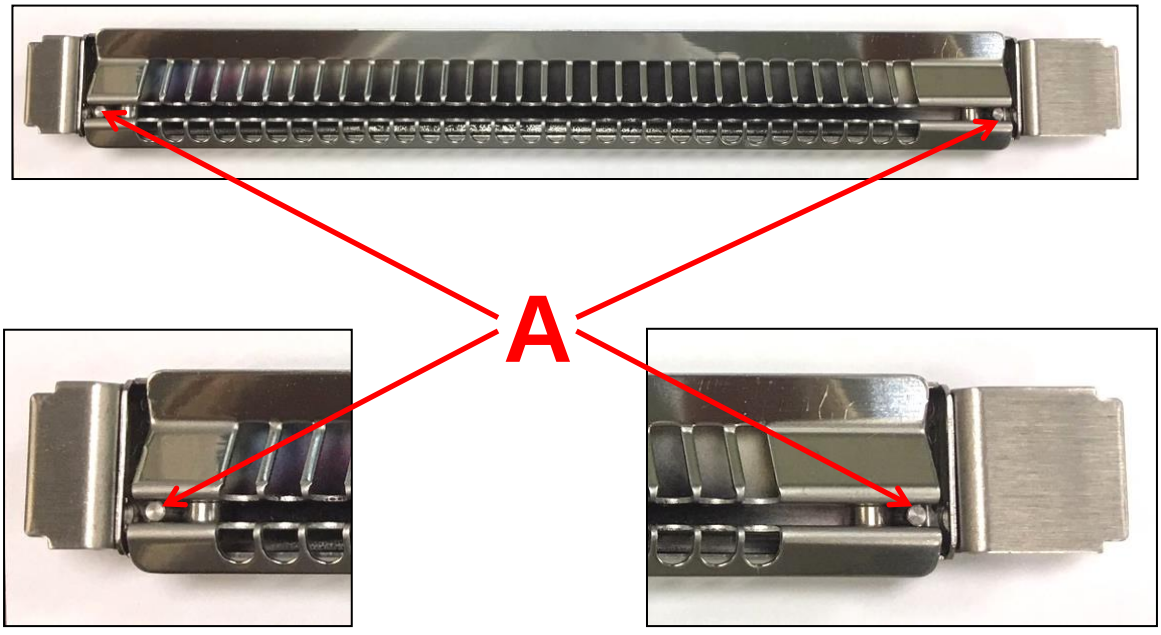
Select appropriate Platen and Install it into Drip Tray:

- **Low Platen [1]** (3 dots) is for media such as: heavy paper, envelopes, card stock, cardboard, chip-board, padded envelopes.
- **High Platen [2]** (4 dots) is for thin, flexible media, such as: sheet paper up to and including 32 pound media.

Make sure Platen is properly positioned, and fully inserted onto, both Alignment Pins [A], in Drip Tray, as shown below.

CAUTION

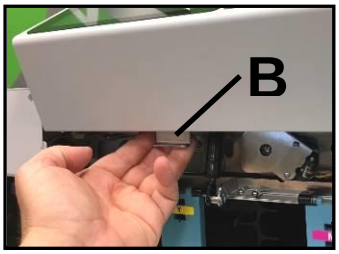
It is <u>extremely</u> important that you get Platen fully inserted onto both Alignment Pins [A], within Drip Tray. If not installed properly, media transport issues (skewing, jamming) and or damage to the system may occur.



Install Print Platen & Drip Tray Assembly into Printer:

1. Open Ink Tank Door **[A]**.

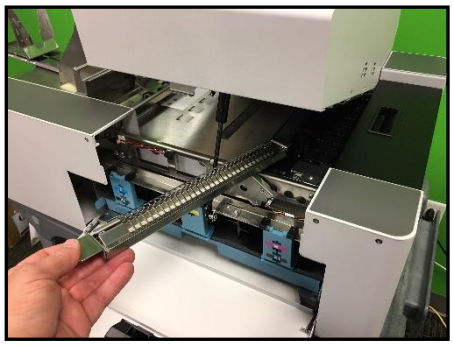
2. Release, pull out on, Clamshell Latch **[B]**, to release and raise Clamshell.



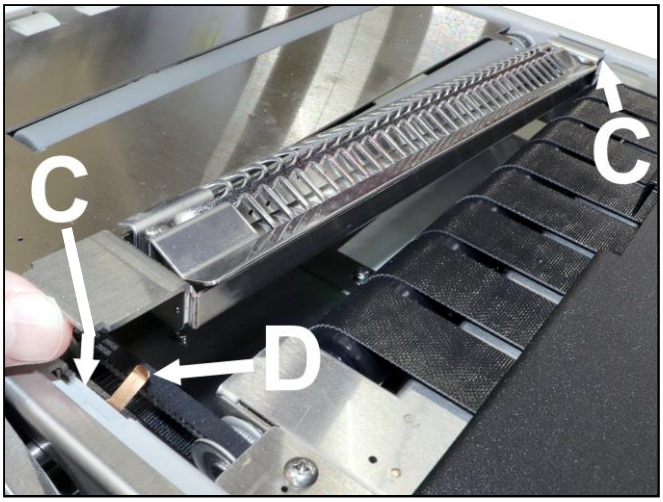
3. Insert tabs, at each end of Drip Tray, into frame slots **[C]** as shown below.

CAUTION

It is <u>extremely</u> important that you get Drip Tray tabs into frame slots [C] and that Platen is sitting level. If not installed properly, media transport issues (skewing, jamming) and or damage to the system may occur.



Tip: Larger tab, on Drip Tray, faces towards operator side of printer.



4. Verify that Print Platen and Drip Tray Assembly are sitting level in the printer, as shown below.

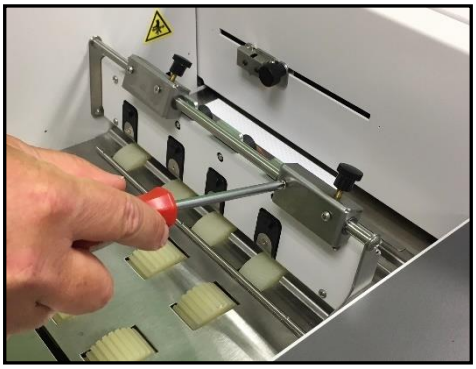
Tip: If front or back of Drip Tray is not sitting level; check to be sure both tabs are in slots **[C]**, shown above.
If front of Drip Tray will not drop into front slot **[C]**; you may have Drip Tray in backwards. Remove and rotate 180 degrees so the larger tab is at operator side of printer. If necessary, bend the tab on the Grounding Spring **[D]**, so it touches the bottom of the Drip Tray tab.

5. Carefully close the Clamshell and Ink Tank Door.

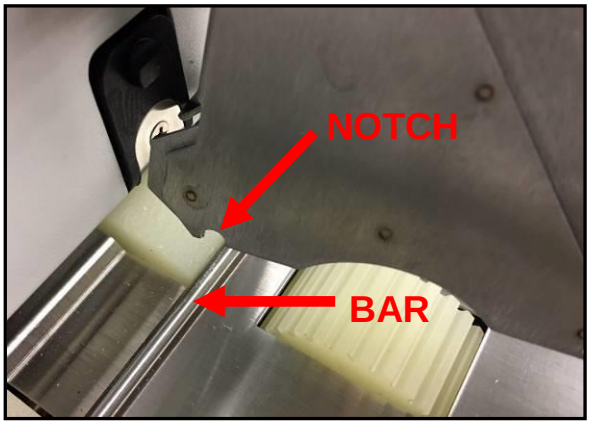
Attach Media Side Guides and Rear Media Support Guide/Sled

1. **Attach Media Side Guides (Inner and Outer)**

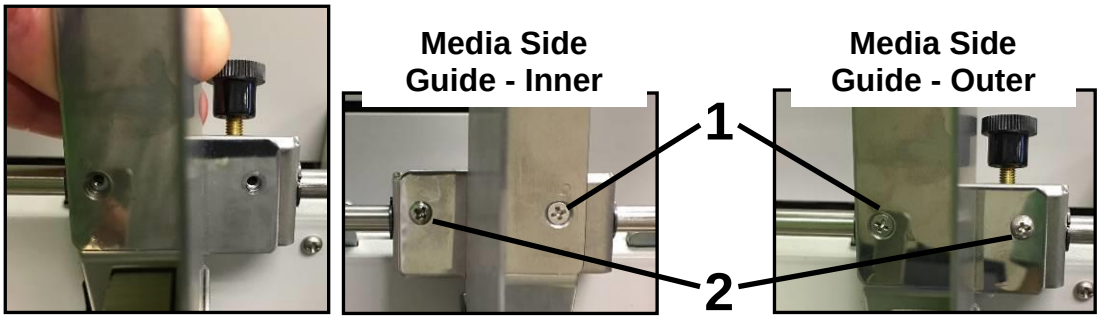
   A. Remove Screws from Mounting Blocks; as shown.
   NOTE: There is a button-head screw and a flathead screw on each block. Keep track of their locations.



   B. Position NOTCH (cut-out), located at bottom of Guide, over BAR; as shown.



   C. Align holes in Guide with holes in Mounting Block and install screws to secure Guide.
   NOTE: Screws are different. Make sure ***flathead screw*** **[1]** is installed into the inner, countersunk, hole and ***button-head screw*** **[2]** is installed into outer hole in the Guide; as shown below.

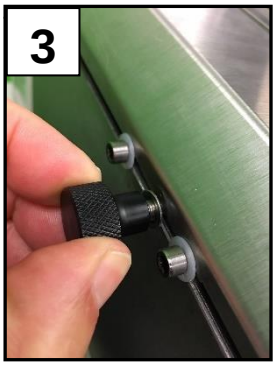


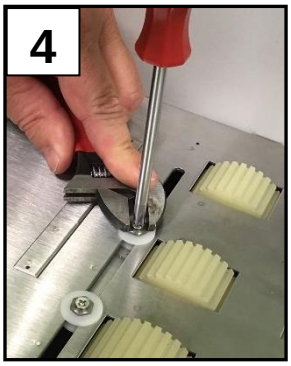
   Tip: If necessary; Guides can be aligned, so they are perpendicular with each other, by loosening button-head screw, making adjustment and securing button-head screw.

   D. Repeat for other Media Side Guide.

2. Attach Rear Media Support Guide/Sled Assembly.

A. Remove **Knob [3]** (thumb screw and washer) and two **Flathead Screws [4]** from Mounting Blocks; as shown below.

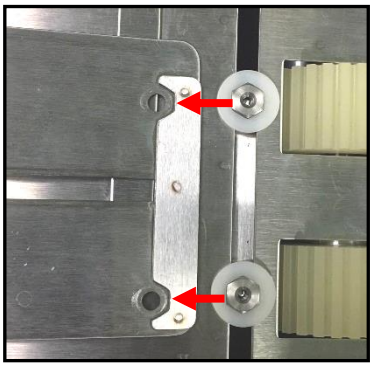




Tip: It may be helpful to use an Adjustable Wrench, to hold the Nut from spinning, when removing these two screws.

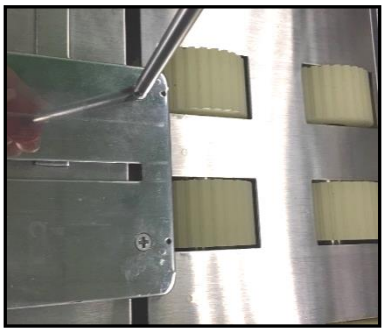
B. Align Nuts, on Mounting Block, before proceeding.
Bottom of Rear Media Support Guide/Sled Assembly has cut-outs that must fit over Nuts on Mounting Block.
NOTE: Image shown with Guide turned over so you can see cut-outs for Nuts.

Align Nuts so a flat side is facing the Feed Rollers; as shown.



C. Position Guide so outer holes in Guide fit over the two rear posts (Allen screws); as shown below. Then loosely install Knob, (thumbscrew and washer).

D. Align holes on top of Guide with holes in the Nuts on Mounting Block; as shown below.
Using the two flathead screws to secure Guide to the Nuts on Mounting Block.



Tip: If Guide is difficult to reposition (slide), after the two flathead screws are tightened; this is an indication that the Nuts are not sitting inside the cut-outs on the underside of the Guide. See step "B" above. Loosen screws and reposition Nuts so they fit into the cut-outs.

E. Tighten Knob (thumb screw) to secure position of Rear Media Support Guide/Sled Assembly.

Connect Printer

Plugging in Printer

- Plug power cord into a compatible AC outlet that supplies 100-240VAC, 50/60 Hz and provides earth ground.
- The use of a power protection device is highly recommended; to reduce damage caused by voltage sags, surges and brown-outs.
- Check to make sure Main Power Switch **[1]** is in the OFF position.
- Plug power cord into receptacle **[1],** located at rear of Printer.

CAUTION

DO NOT USE AN ADAPTER PLUGS OR EXTENSION CORDS TO CONNECT PRINTER TO WALL RECEPTACLE.

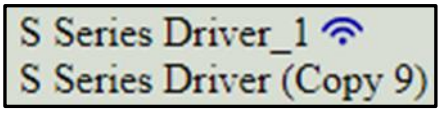
DO NOT USE OUTLETS CONTROLLED BY WALL SWITCHES.

DO NOT USE OUTLETS THAT SHARE SAME CIRCUIT WITH LARGE ELECTRICAL MACHINES OR APPLIANCES.

Connect to Computer

Printer can be connected to computer through the following ports:

- **USB Port [2]** for connecting printer to a local PC.
  If you plan to connect the printer via USB, **do not connect the USB cable at this time**. Wait until you are prompted to connect the USB cable, during the Printer Software (Driver and Toolbox) installation process.
- **Network Port [3]** for connecting printer to a network environment.
  Tip: Power-up one printer at a time, when similar printers are on the same network.
- Once Printer is connected and set up, opening the Printer Toolbox displays the Printer(s) available. You can then select the desired Printer to open its Toolbox screens.



Turning Power ON and OFF

Powering Up Printer:

1. **Turn ON the Main Power Switch [1].**
2. **Press the Soft-Power Button. Button will illuminate with blue light.**
   NOTE: After Soft-Power Button is pressed; it will take about 30 seconds before information will appear in the Touchscreen Display. Clamshell section will rise fully, to recalibrate position, and then lower to the current Media Thickness setting.

Powering Down Printer:

1. **Press the Soft-Power Button.**
   NOTE: After Soft-Power Button is pressed; it may take up to 60 seconds before the printer finishes preparing the system for shut-down. The Soft-Power Button will turn OFF when finished.
2. **When the Soft-Power Button turns OFF it is Safe to turn OFF the Main Power Switch [1].**

CAUTION

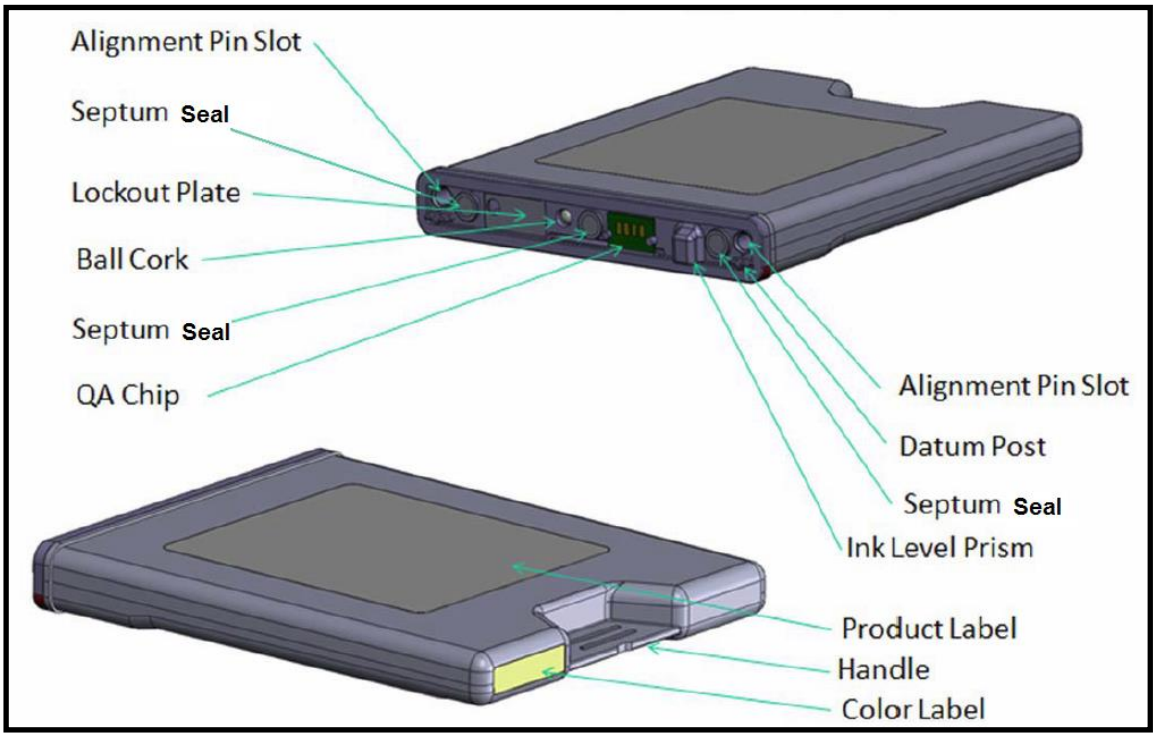
NEVER TURN OFF THE MAIN POWER SWITCH [1] BEFORE POWERING-DOWN THE PRINT ENGINE USING THE SOFT-POWER BUTTON.

Install Ink Tanks

The COLORMAX8 uses five Ink Tanks (*two Black, one Cyan, one Magenta, and one Yellow*).

The Ink Tank is a delicate, precision device. Handle with extreme care to avoid damage.

Ink Tank Anatomy



WARNING!

Ink in Ink Tanks may be harmful if swallowed. Keep new and used Ink Tanks out of reach of children. Discard empty tanks immediately.

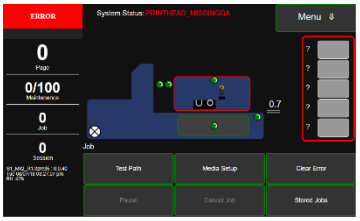
Procedure (Install Ink Tanks):

This procedure assumes that you are installing Ink Tanks into a printer that doesn't have any Ink Tanks installed. If you are replacing an empty Ink Tank, please refer to the section titled "Replacing ink tanks".

Install the Ink Tanks as follows:

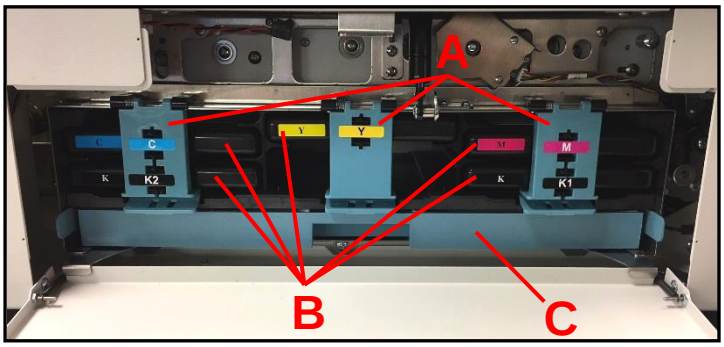
CAUTION
Use powder-free nitrile gloves when working with the Ink Tanks.

1. **Turn ON and Power-up the Printer.** Plug in Printer. Turn ON Main Power Switch. Press Soft-Power Button to power-up the Print Engine.



2. **Look at the Touchscreen Display.**
   Ink Tank status information appears at right side of the Touchscreen. Note that the **Ink Tank** indicator boxes are empty.
   Question marks (**?**) indicate that no Ink Tanks are detected by the Printer.

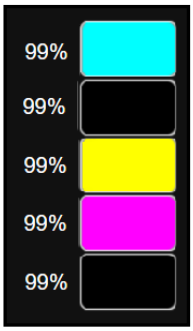
3. **Open Ink Tank Door** (*hinged at bottom*).
   Tip: When you open the Ink Tank Door, this also disconnects Printer communication with Ink Tanks to allow safe installation and replacement of Ink Tanks.



4. **Open Ink Tank Latches [A].**
   Pull up on bottom of Latch to release and swing Latch open (hinged at top).
5. **Verify Waste Ink Tray [C] is securely installed**. Latched into frame at both sides.
6. **Remove new Ink Tank(s) from packaging.**
7. **Insert Ink Tanks (*label side up*) into their appropriate color slots [B]**.

   INSTALLATION TIP: Make sure Ink Tanks seat properly. Insert Ink Tank into appropriate color slot. Push Ink Tank forward firmly and then pull back about an inch. Then push Ink Tank forward firmly again. This helps to insure that Septum Needles penetrate seals on Ink Tank.

8. **Close and Lock Ink Tank Latches.** Make sure bottom of all three Latches lock securely at both sides.
9. **Close Ink Tank Door.**
   After a few seconds, Touchscreen should show all Ink Tanks (colors fill in) and their status (percentages).
   Note: New (full) Ink Tanks will show as 99%; due to 3-character display limit.



   Tip: If ink color(s) do not fill in or Ink Tank status still shows as "?" or System Status shows "CARTRIDGE_MISSING…" verify that all Doors are closed, and then tap the Clear Error button (if present). If you continue to have a problem with the printer recognizing one or more of the Ink Tanks, please see section titled "Cleaning Ink Tanks Contacts".

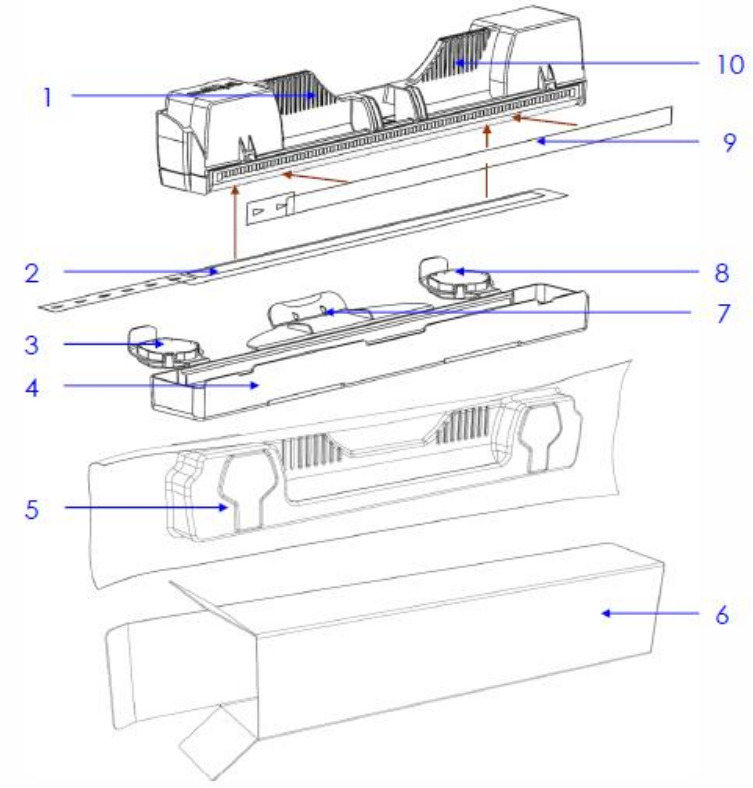
Install Printhead Cartridge

Use this procedure to install the Printhead into a printer that doesn't currently have a Printhead installed. If you are removing and or replacing a Printhead Cartridge; please refer to the section titled "Remove/Replace Printhead Cartridge"

Protective Packaging

ATTENTION

If you experienced fuzzy print quality or an abrupt failure in a particular area of nozzles on the previous Printhead, we recommend that you have the service station inspected/cleaned and the wiper roller replaced before installing a new Printhead Cartridge.
Failure to do so will increase the chance of damage to the new Printhead Cartridge.
Service station maintenance and wiper roller replacement should only be performed by a qualified/trained person. Please contact your service representative to obtain training or to have them perform this process for you.



1 & 10	**Handles**	**5**	**Foil vacuum bag**
2	**Protective strip for nozzles**	**6**	**Cardboard packing box**
3 & 8	**Protective cover flaps**	**7**	**Cover retaining clip**
4	**Protective cover**	**9**	**Protective strip for electrical contacts**

NOTE: Discard protective tape once it is removed. Do NOT reuse protective tape.
Keep all other packaging to store/dispose of old Printhead Cartridge.

WARNING!

Ink in Printhead Cartridge may be harmful if swallowed. Keep Printhead Cartridge out of reach of children. Discard empty Printhead Cartridge immediately.

CAUTION

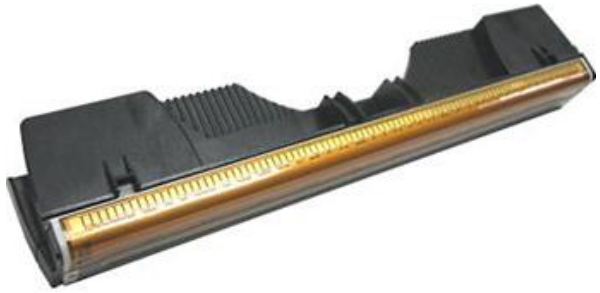
- **Use powder-free nitrile gloves when working with the Printhead.**
- **Use electrostatic discharge (ESD) protection when handling Printhead.**
- **Hold Printhead Cartridge by handles ONLY.**
- **DO NOT touch ink couplings, nozzle surface or electrical contacts.**
- **DO NOT unpack Printhead Cartridge until Printer is ready for installation. Once unwrapped, delay in installing Printhead can compromise print quality due to dehydration.**
- **DO NOT place an unwrapped Printhead onto any surface before installing. Protect Printhead from scratches, dust, fibers, dirt and other contaminants at all times.**
- **DO NOT pry or manually lift the Printhead Latch or the Latch will break. Only open the Latch using the Printhead Release or System Deprime buttons in the Touchscreen or Toolbox.**

NOTICE! **Read this procedure, in its entirety, before proceeding!**

Before you begin this process, you will need to obtain some distilled water and some lint free cloths. These items will be used to wet the Printhead nozzles.
NOTE: Do NOT use tap water or paper towels to wet or clean the Printhead nozzles. Doing so may cause damage to the Printhead Cartridge and possible contamination to the ink system.

Why is it necessary to wet the Printhead nozzles?
During the priming process a vacuum is created by the pump, to pull ink from the Ink Tanks into the Printhead and ink delivery system. If the Printhead nozzles are dry (open); air is pulled in through the Printhead nozzles causing the priming process to fail (pump is unable to create a vacuum). By wetting the Printhead nozzles this creates a temporary "water seal", which prevents air from getting pulled into the Printhead during the priming process.

The Printhead Cartridge and ink supply must be within the operating temperature range [(+15°C to +35°C) (59 °F to 95 °F)], before attempting to prime the cartridge with ink and starting to print. When stored at temperatures below the operating range it may take up to 3 hours for a cartridge in its packaging to reach operating temperature.
NOTE: Additional packaging will increase the time needed to reach operating temperature.



The Printhead Cartridge is a delicate precision device. Handle with extreme care to avoid damage and issues that could degrade print quality. Please read through this entire procedure before attempting this process.

NOTE: This procedure assumes all Ink Tanks are installed and recognized as containing 30% or more ink.

IMPORTANT!
PRINTER MAY NOT FULLY PRIME IF INK TANK(S) ARE LESS THAN 30% FULL.

1. **Turn ON and Power-up the Printer.** Plug in Printer. Turn ON Main Power Switch. Press Soft-Power Button to power-up the Print Engine.
   You can continue to the next step once the **Touchscreen Display** appears.

2. **Open Printhead Door.**

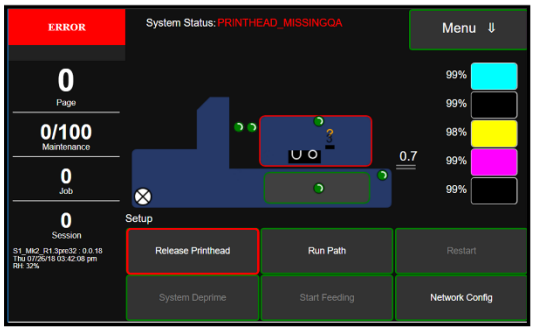
3. **Verify that the Printhead Latch [1] is released.**
   NOTE: If Printhead isn't detected (no Printhead currently installed); during the power-up process the Printhead Latch should automatically release.

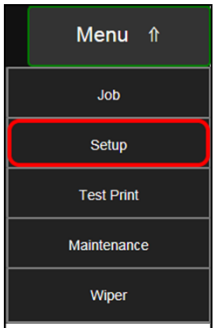
WARNING!
Do NOT force the Printhead Latch [1] open. Severe damage will result!

If the **Printhead Latch** was accidently closed after the printer powered-up; please use the following procedure to safely release the **Printhead Latch**.

Printhead Latch Release Process:

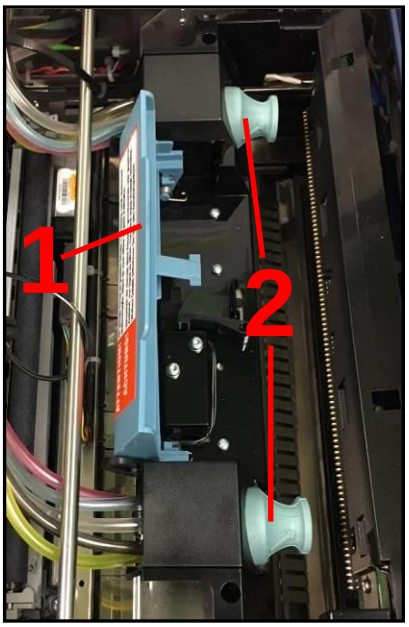
- **Close the Printhead Door** and **Ink Tank Door**.
- On the **Touchscreen**; tap **Menu** then tap **Setup** from drop-down list.
- Then tap **Release Printhead,** from the button choices provided at the bottom of the **Touchscreen**.
  You should hear a "click" as the Printhead Latch is release.





Tip: If "Release Printhead" is grayed out and "System Deprime" is available; this means that the printer sees a Printhead installed and primed. In this case use "System Deprime" to deprime the system and release the Printhead Latch.

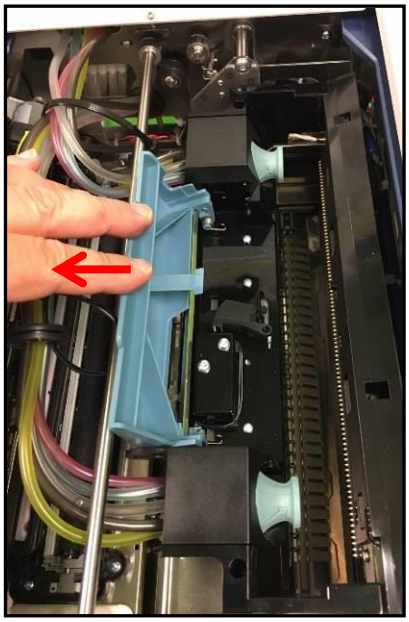
4. **Fully open the released Printhead Latch [1].** This will fully retract the Ink Revolver Couplings. Ink Revolver Couplings are shown with Fluidic Cap Protectors **[2]** installed, in images below.



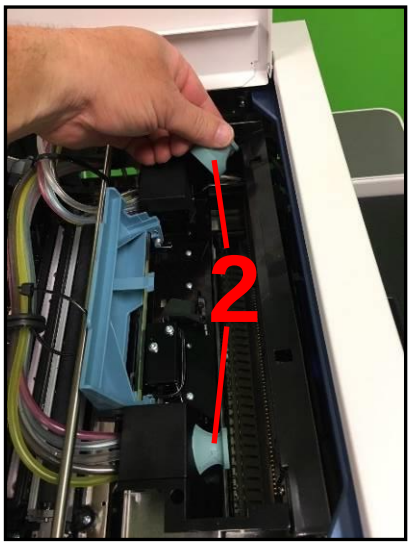
WARNING

If the Printhead Latch failed to release, don't force the latch open. Severe damage will result.

Release the Latch using the "Release Printhead" or "System Deprime" buttons on the Touchscreen or Toolbox.



5. **Remove Fluidic Cap Protectors** [2], if present, on Ink Revolver Couplings. Save these items. They should be used to seal and protect the open ink system whenever a Printhead Cartridge is not installed.

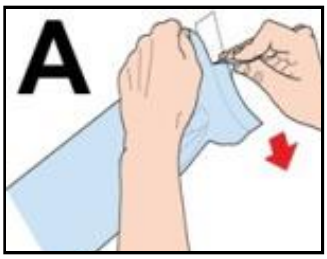


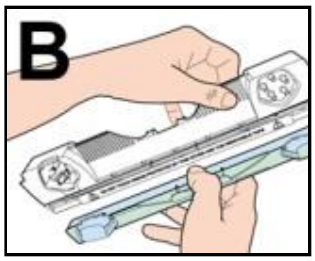
6. **Remove Printhead From Packaging.**
[A] Carefully remove Printhead Cartridge from foil packaging.
Tear foil at notch or cut the end with scissors.

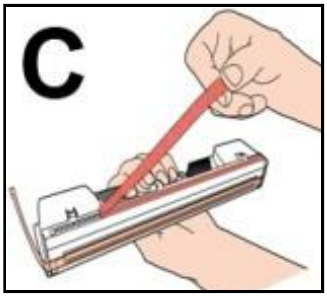
[B] Remove protective plastic cover. Hold Printhead by handle and unclip cover from Printhead.

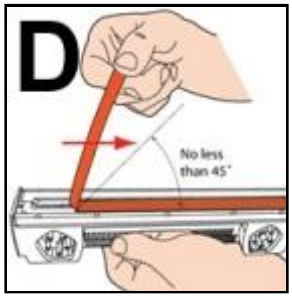
[C] Remove protective strip from Printhead Electrical Contacts.
Once removed, **DO NOT** allow removed strip to touch electrical contacts.

[D] Remove protective strip from Printhead Nozzles. Hold Printhead by the handle. Pull strip tab and slowly peel strip from Printhead at a 45° to 90° angle.
DO NOT pull strip at less than a 45° angle from Printhead surface.
DO NOT allow removed strip to touch Printhead Nozzles.

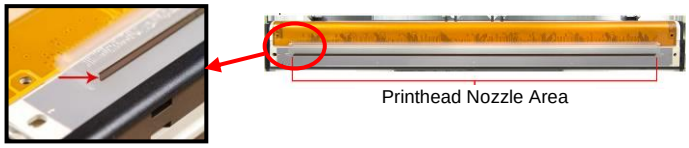


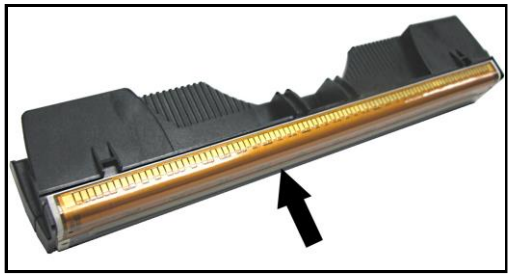




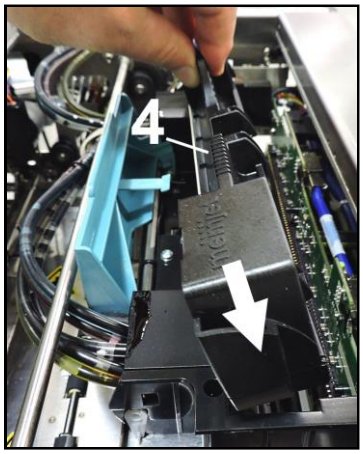


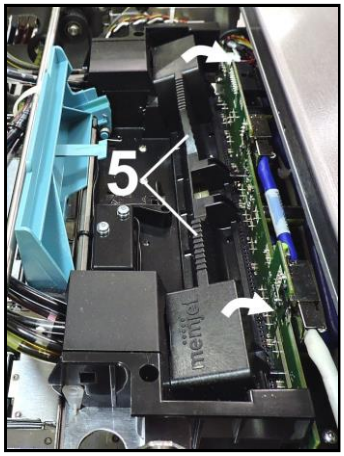
7. **Wet Printhead Surface.** (*Creates temporary water seal across inkjet nozzles to ensure that Printhead will prime correctly.*)
Using a lint free cloth, soaked but not dripping with distilled water, wet "Printhead Nozzle Area" (identified below). Wipe end to end. Take care not to wet electrical contacts.



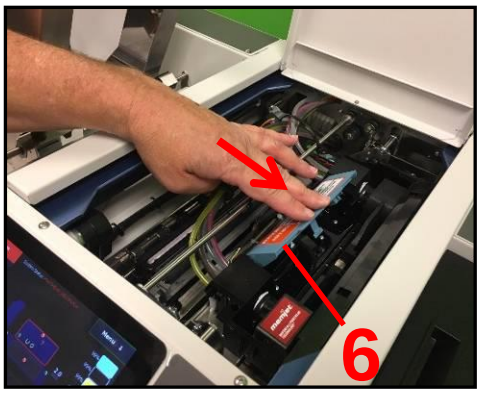


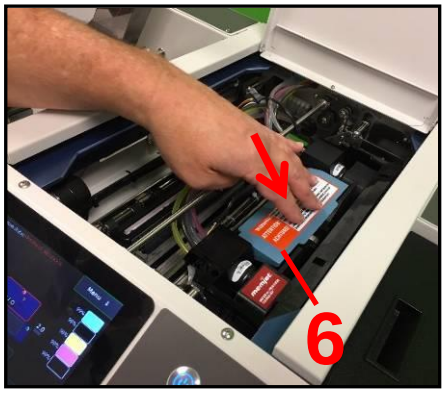
8. **Carefully insert Printhead Cartridge** into compartment at an angle **[4]**, with surface of Printhead facing down and Ink Couplings facing Ink Revolver Couplings (ink hoses). Once seated, gently tilt Cartridge forward until it snaps into an upright position **[5]**.
DO NOT FORCE Cartridge into position.



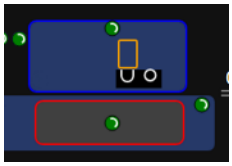


9. **Carefully Close Printhead Latch [6]**.
Tip: There will be a little resistance when closing the Printhead Latch with a new system; since the coupling surfaces are not lubricated (no ink present). Close the Latch slowly to avoid damaging the rubber O-rings located inside the Ink Revolver Couplings.





10. **Check the Touchscreen Display to verify that Printhead Cartridge was recognized.**
The **Printhead icon** should change from a question mark (?) to an outlined (unprimed, empty) Printhead icon and System Status should change from "PRINTHEAD_MISSINGQA" to "DOOROPEN_PRINTHEAD".



Tip: If you don't see this change, then the system isn't recognizing the Printhead. In this case you should tap the "Release Printhead" button, to release the Printhead Latch. Open Printhead Latch fully. Remove the Printhead and check/clean the contacts. Use a dry, lint-free cloth. Wet nozzle surface, re-install Printhead and shut Printhead Latch. If Printhead is still NOT recognized, call for technical support.

11. **Close Printhead Door!**
Printer will run a "priming routine" that fills the ink system and Printhead with ink. During that time "System Status: Maintenance Busy" will be displayed at the top of the Touchscreen and the following progress bar messages will appear: Printhead Prime, Ink Circulate, Transfer Wiper.

NOTE: Printer will take about 4 minutes to prime and prepare the Printhead for use.

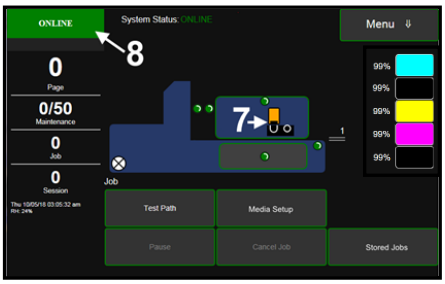
IMPORTANT

All Doors must be shut before the Printhead priming process will begin.

Do NOT open any of the Doors when the printer is working (priming, performing maintenance, printing); or the process will be interrupted.

Tip: The wiper roller is automatically conditioned during the Printhead Priming process.

12. **Watch the Touchscreen Display to identify when Printhead is finished priming.**
The **Printhead icon [7]** will turn from an outline (Printhead *unprimed*) to a solid orange color (Printhead *primed*) and **ONLINE [8]** will be displayed in the upper left corner of the Touchscreen.



13. **Open the Printhead Door and verify that <u>ALL</u> Ink Tubes are filled with ink.**
Be sure to check Ink Tubes at both ends (input and output sides) of the Printhead Cartridge.

WARNING
Attempting to use (print with) Printer that has empty Ink Tubes or a lot of air in the Ink Tubes can cause permanent damage to the Printhead Cartridge (Printhead nozzles).

BAD – Do NOT use Printer
(Empty Tubes or lots of air in tubes)

GOOD – OK to use Printer
(All Tubes filled with Ink)

GOOD: All Ink Tubes filled at both ends (input and output) of Printhead Cartridge. OK to use Printer.
Tip: It is normal to see a few air bubbles in Ink Tubes at the output (non-operator) side of the Printhead Cartridge. However you should not see air bubbles in Ink Tubes at the input (operator) side.

BAD: Empty Ink Tube(s) or a lot of air/air bubbles at either end (input/output side) of Printhead Cartridge.

14. If priming results are **BAD**; please perform the following steps.
    - Use a lint free cloth, soaked but not dripping with distilled water, wet "Printhead Nozzle Area" again. See section titled "Cleaning the Printhead" for instructions on accessing the printhead surface with the printhead installed.
    - Immediately after wetting printhead nozzle surface, with distilled water, close all Doors.
    - Use the "Full Clean Printhead" feature to attempt to fill the Ink Tubes.
    - If issue continues try removing and reinstalling the Printhead Cartridge; see "Remove/Replace Printhead Cartridge".
    - If issue continues; do NOT use Printer. Call for technical support.

15. **Close the Printhead Door.**

Install Printer Software (Driver & Toolbox)

Minimum System Requirements

For Printer software to operate properly, check that computer system meets **minimum requirements:**

- **Operating System:** Windows 8/8.1, Windows 10 (*Desktop Mode only*). Windows XP, Windows Vista, Windows 7. Supports 32 and 64 bit systems. (*You must have administrative privileges on system*.)
  NOTE: Windows 8, 8.1 and Windows 10 will only work in desktop mode. No Windows 8 or 10 metro apps will be supported (*applications that work ONLY in Windows 8 or 10 environments*).
- **Microprocessor:** Pentium II, 2 GHz minimum (*Pentium Dual Core, 2.5 GHz or better, is optimal*)
- **System memory:** 2 GB minimum; or as recommended for your operating system.
- **Free hard-disk space:** At least 10 GB.
- **Web Browser:** Firefox recommended; Chrome, Safari, and Opera also supported.
- **USB port (2.0/3.0):** (*Ports will be identified as "USB" or "Enhanced" in Device Manager*)
- Microsoft .Net Framework version 3.5 (*for 32 bit systems*) or Microsoft .Net Framework version 4 or higher (*for 64 bit systems*) must be installed.
  NOTE: Even if a higher .NET Framework version is installed; version 3.5 or 4 must also be installed, or Toolbox will not open.

IMPORTANT: Before installing Printer software (*Toolbox and Driver*), **temporarily disable all antivirus programs and firewalls**. In addition, you must be logged onto system with full administrative privileges (*admin rights*). **NOTE:** If you plan to connect printer via USB, **do not plug in USB cable until prompted**.

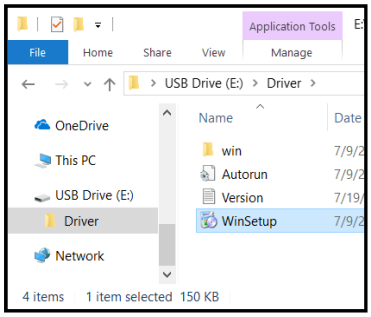
Connecting Printer via USB

Use this procedure for installing the Print Driver for a USB connection. If you plan to connect the printer using a Network connection please see section titled "Connecting Printer via Network (Ethernet Connection)".

1. **Disconnect USB cable, if already plugged in.**

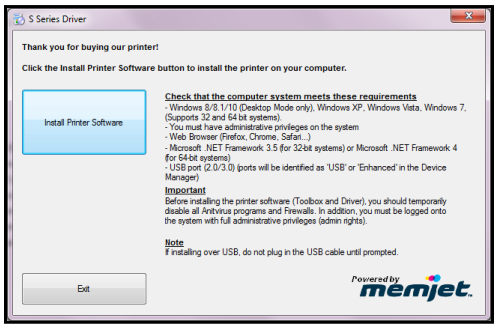
2. **Turn ON and Power-up the Printer.** Plug in Printer. Turn ON Main Power Switch. Press Soft-Power Button to Power-up the Print Engine.

3. Connect **USB Flash Drive,** supplied with Printer, to USB port on your computer.



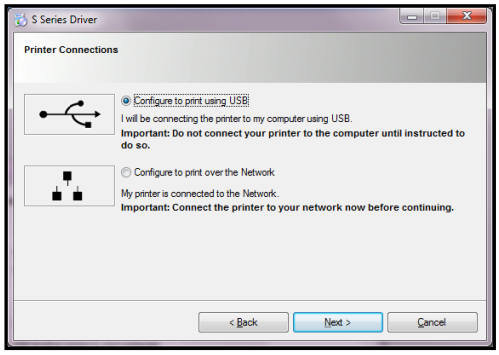
4. Browse the **USB Flash Drive**.
   Locate and open the "COLORMAX8" folder.
   Locate and open the "**S Series Driver**" folder.
   Locate and run **WinSetup.exe**.
   Tip: For best results; Right-click and "run as administrator".
   NOTE: You may want to check the distributor's website for a more recent version of the "M Series Driver" for the COLORMAX8.

5. **Install Printer Software.** Make sure computer system meets **minimum requirements** and you followed other instructions listed on screen.
   Click **"Install Printer Software"**.

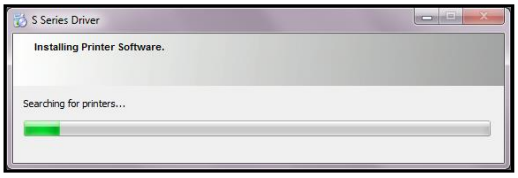


6. **License Agreement.**
Check "I accept…" then click **"Next>"**.

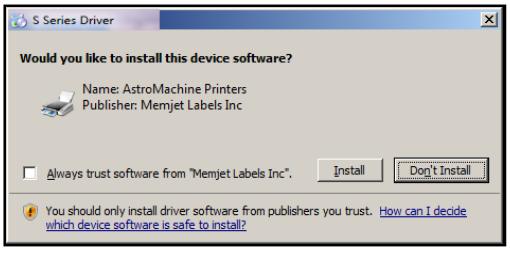
7. **Printer Connections.** Click **"Configure to print using USB"**. Then click **"Next>"**.



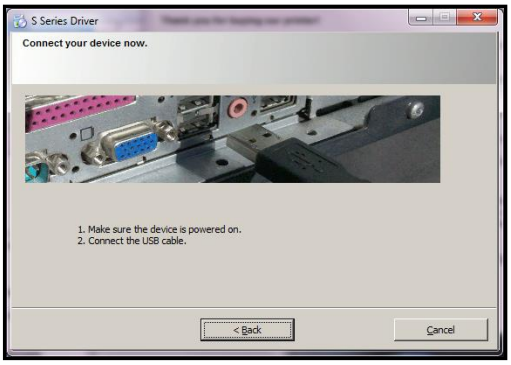
8. **Installing Printer Software.**
Software download begins.



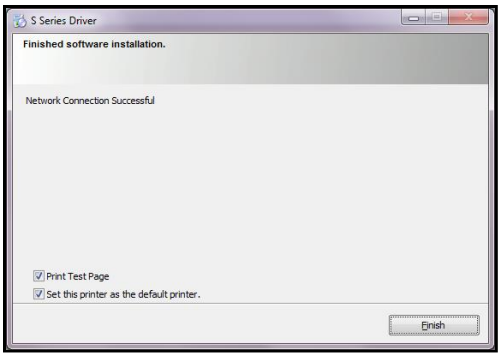
9. **Would You Like to Install This Device Software?**
Click **"Install"**.



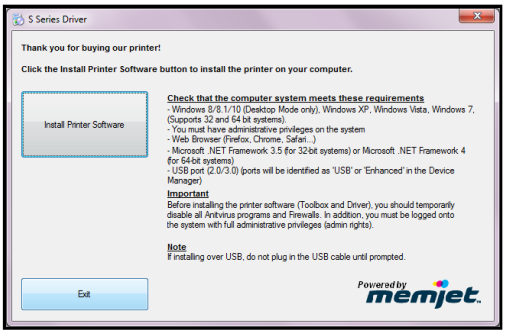
10. **Connect your Device Now** window appears**.**
Connect USB cable between printer and computer.
Don't click on either button.
After a period of time; system will automatically recognize device connection and continue driver install.



11. **Finished software installation.** Do not check **Print Test Page** as Printer is not set up yet. If desired; you can check "Set this printer as the default printer" at this time.
Click **"Finish"**.



12. **Install Printer Software.**
Click **"Exit"** to close installer.
13. Restart computer to complete installation.



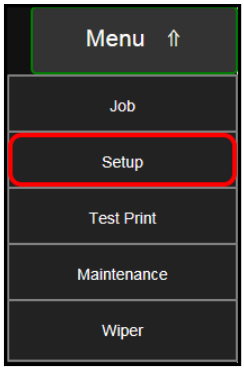
The "S Series Driver" should now be available in your "Printers and Faxes" or "Devices and Printers" folder.

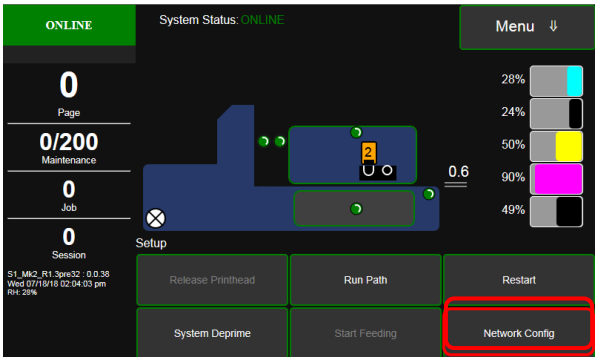
Tip: To help distinguish between multiple S Series Drivers on your system; open the **"Printers and Faxes"** (*Devices and Printers, Printers and Scanners*) folder and rename the Printers.
For example: You could rename a network-configured printer **"S Series Printer (Network)"** and a USB-configured printer **"S Series Printer (USB)"**.

Connecting Printer via Network (Ethernet Connection)

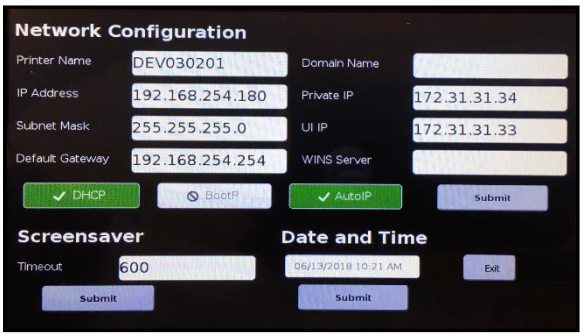
Use this procedure to install the Print Driver for a Network connection. If you plan to connect printer via USB, please see section titled "Connecting Printer via USB".
NOTE: Copy the 12-digit Hardware ID number listed on the Printer(s), on the label just below Ethernet port, so you can identify Printer(s) in a later step.

1. **Check that the printer is turned OFF.** If not, power-down by pressing the Soft-Power button. Wait until the blue light, on the Soft-Power button, goes out. Then it is safe to turn off the Main Power Switch.
2. **Connect Ethernet Cable** between an active network and the Printer's Ethernet port.
3. **Turn ON and Power-up the Printer.** Plug in Printer. Turn ON Main Power Switch. Press Soft-Power Button to Power-up the Print Engine.
4. From the printer's Touchscreen; tap "**Menu**" then tap "**Setup**" from the drop-down list.
5. Select "**Network Config**" from the choices provided at the bottom of the screen.



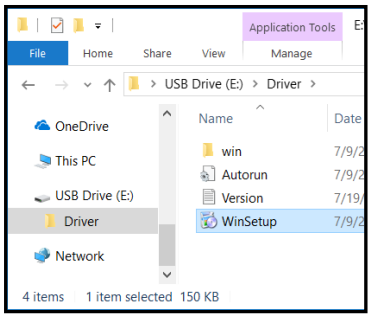


6. The "**Network Configuration**" screen will be open.
Tip: By default the printer is shipped with DHCP and Auto IP enabled. If your network uses these features it will automatically assign an IP address to the printer during printer power-up. However we strongly recommend that you turn off DHCP and Auto IP and use a "static" IP address. Using a "static" IP address eliminates the possibility that the IP address may be reassigned when the printer's power is cycled; causing loss of communication.

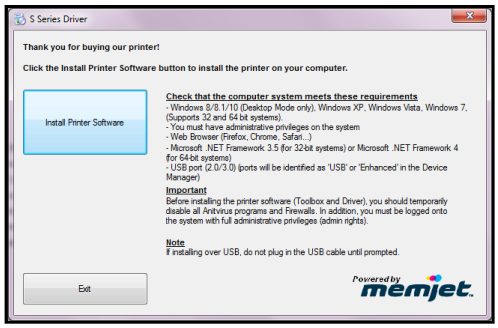


Ask your IT support person to select/fill-in the necessary information (*or you can get it from them*) then tap "**Submit"**.

7. **Make a note of the IP Address entered/displayed**.
Tap "**Exit**" to close the Network Configuration screen.
8. Connect **USB Flash Drive,** supplied with Printer, to USB port on your computer.
9. Browse the **USB Flash Drive**. Locate folder labeled "**Driver**". Open "**Driver**" folder, locate and run **WinSetup.exe**.
Tip: For best results; Right-click and "run as administrator".

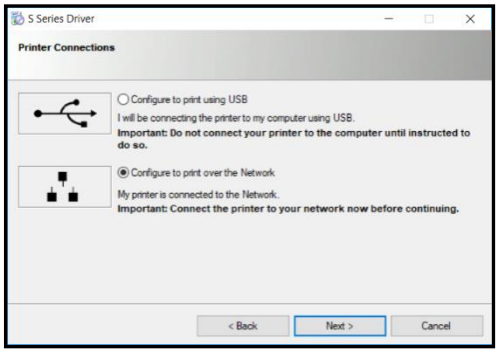


10. **Install Printer Software.** Make sure computer system meets **minimum requirements** and you followed other instructions listed on screen.
Click **"Install Printer Software"**.

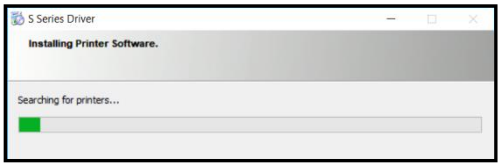


11. **License Agreement.**
Check "I accept…" then click **"Next>"**.

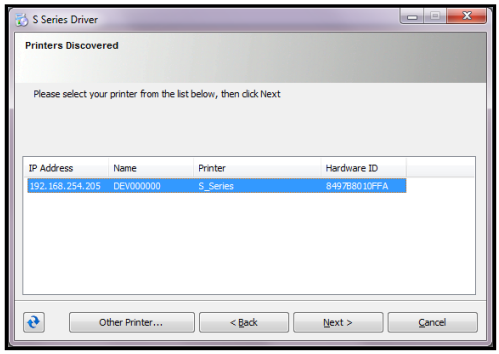
12. **Printer Connections.** Click **"Configure to print using over the Network"**. Then click **"Next>"**.



Installing Printer Software.
Searching for printers… will briefly appear.



13. **Printers Discovered** window will appear if one or more S-Series Printer is found on the Network. If more than one printer is shown; your Printer can be identified by its **"Hardware ID"** or the IP address that was used / entered in an earlier step.
Select the desired Printer and click **"Next>"**. Follow the remaining steps.

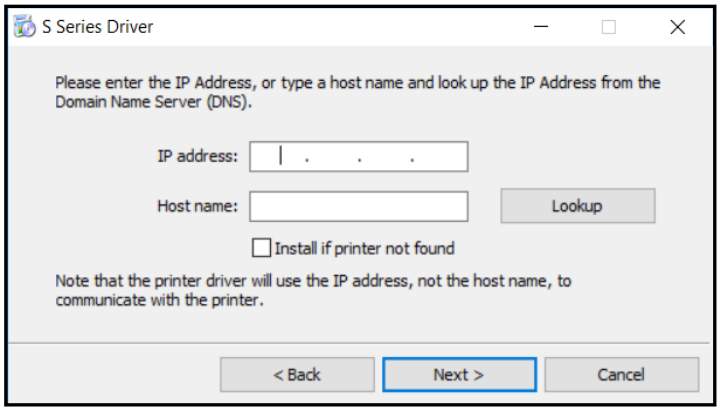


Tip: If your printer is not shown in this window; Click on "Other Printer…" button and proceed to next step.

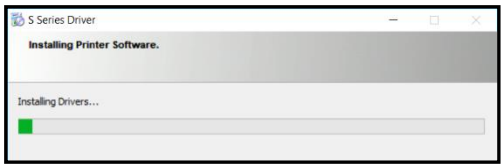
14. If an S Series Printer is not found or the "Other Printer" button, from previous step, was pressed; the window shown here will appear.

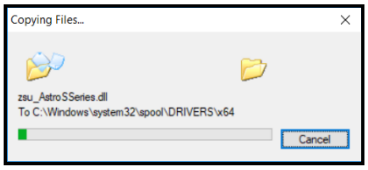
Enter the Printer's current "IP address" then click "**Next"**.

Tip: You don't need to enter a "Host name" or use the "Lookup" button; since the driver does not use the host name to communicate with the printer.

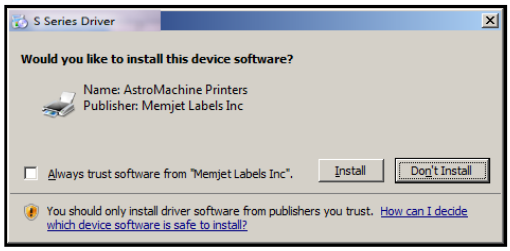


15. Installing Printer Software.
Software download begins.

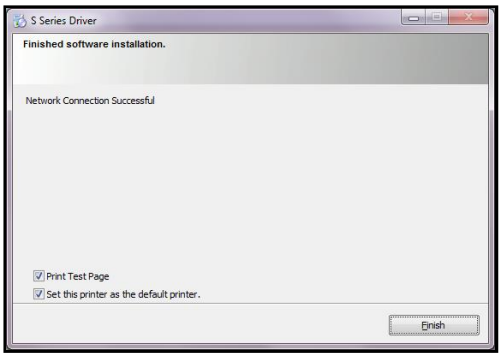




16. Would You Like to Install This Device Software?
Click **"Install"**.

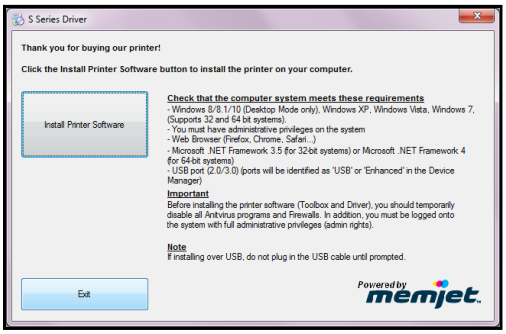


17. Finished software installation. Do not check **Print Test Page** as Printer is not set up yet. You can check "Set this printer as the default printer" at this time.
Click **"Finish"**.



18. Install Printer Software window.
Click **"Exit"** to close the installer.

Tip: To help distinguish between multiple S Series Drivers on your system; open the **"Printers and Faxes"** (*Devices and Printers, Printers and Scanners*) folder and rename the Printers. For example: You could rename a network-configured printer **"S Series Driver (Network)"** and a USB-configured printer **"S Series Driver (USB)"**.



SECTION 3 – *Operating Printer*

WARNING

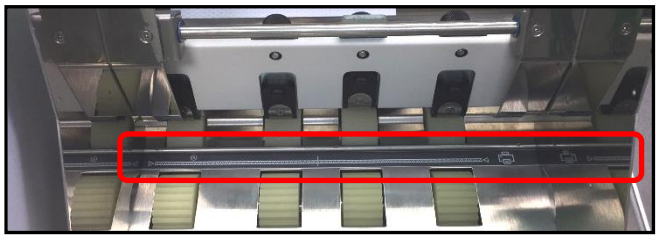
Before you start using the printer, please be sure you have properly installed the Print Platen and Drip Tray Assembly.

Media Feed Setup

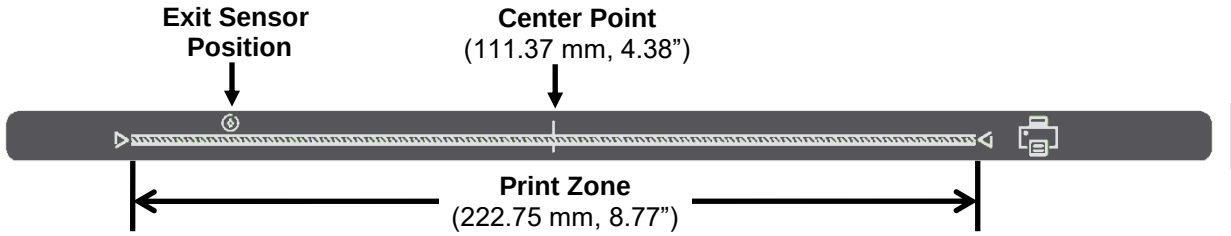
Printer is equipped with four Sheet Separators, two Side Guides, and a Rear Media Support Guide with two different sized Wedge Extensions. When properly adjusted these items will separate and guide the media so that only one piece of media is fed into the Print Engine at a time.

Print Zone Reference Tool

A Print Zone Reference Tool is attached to the Feed Table on the printer; near the sheet separation area.
It is provided as an aid for positioning the Media Side Guides so the Media passes under the desired area of the printhead (print zone) and as a reference for identifying if the media will pass over the Exit Sensor or not.



NOTE: The Print Zone Reference Tool identifies the approximate locations of the items identified on the Tool (decal). Some variation can be expected due to assembly tolerances.



Print Zone: Shows approximate position of print area (222.75 mm, 8.77") within print engine.

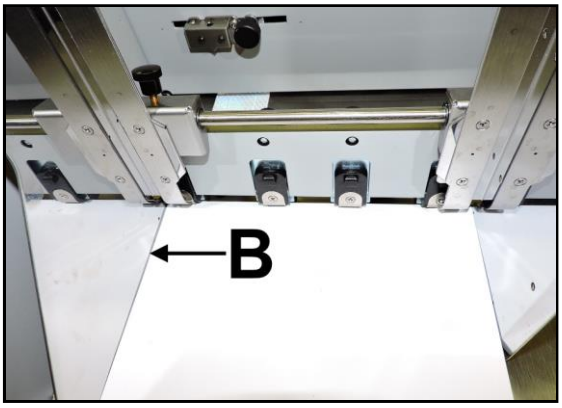
Exit Sensor Position: Shows approximate position of Exit Sensor.
If your Media doesn't fully cover the Exit Sensor symbol; you must select "Ignore Exit Sensor" in the Touchscreen (Job Menu, Media Thickness).
NOTE: Exit Sensor is located under the Exit Transport Cover, on the table top, between Media Transport Belts.

Center Point: Shows approximate center point of the Print Zone (Printhead).
This Center Point identifier is useful when primarily using media that measures up to 4.38". In this case you can position the media so it passes under the left side of the print zone. When the print quality in this area of the Printhead becomes unacceptable (reaches nozzle end of life); you can move media so it passes under the right half of the print zone, set Left Adjustment in the Driver to ~111 mm and select "Ignore Exit Sensor" in the Touchscreen. By doing this you can take advantage of the unused section of the Printhead; thereby extending Printhead life.
Tip: Don't forget to move the position of the Feeder/Entry Sensor Assembly so it is located over the media's path.

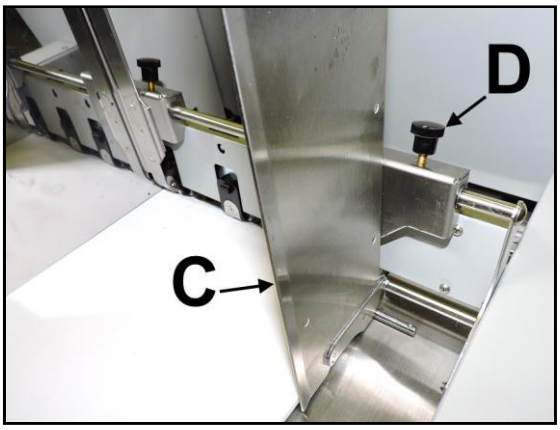
Position Media Side Guides (Inner and Outer)

1. **Position Media Side Guide – Inner [B]** to the desired position and secure it using the locking knob. Then lay a single piece of media into the hoper so it is positioned against Media Side Guide – Inner [B].

   Tip: You may need to move the Media Side Guide – Outer [C] to provide room for the media to fit between the Guides.

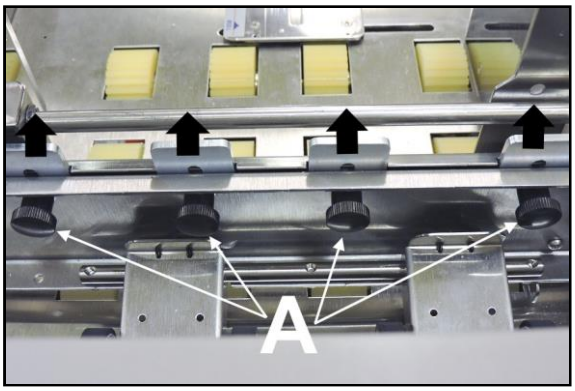


2. **Position Media Side Guide – Outer [C**] so that it is about 1/32" from the other side of media. Tighten locking knob **[D]** to secure Side Guide.



Adjust Sheet Separators

1. Loosen the locking screws, located behind Sheet Separators **[A],** and raise Separators; then tighten the locking screws to hold the Separators in the "Up" position.



2. Place one piece of Media (thickest area of media) under the Separators.
   Loosen Separator locking screw and allow Separator to settle onto media. Then tighten locking screw. Repeat for each Separator that has media below it.

CAUTION

To avoid damage to feed rollers and separators; make sure any unused separators are raised and locked at their "Up" position.

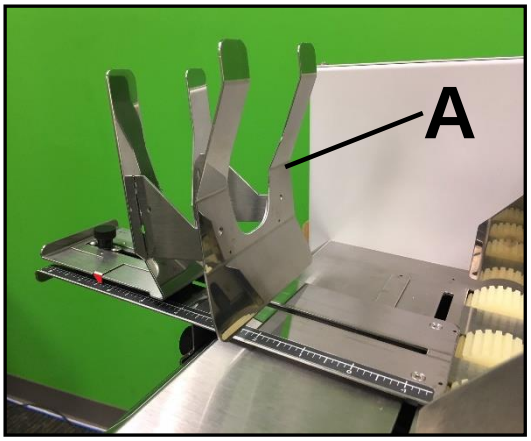
Attach Media Support Wedge Extension

Attach the appropriate Media Support Wedge Extension, if needed, to the Rear Media Support Guide/Sled; as shown below.

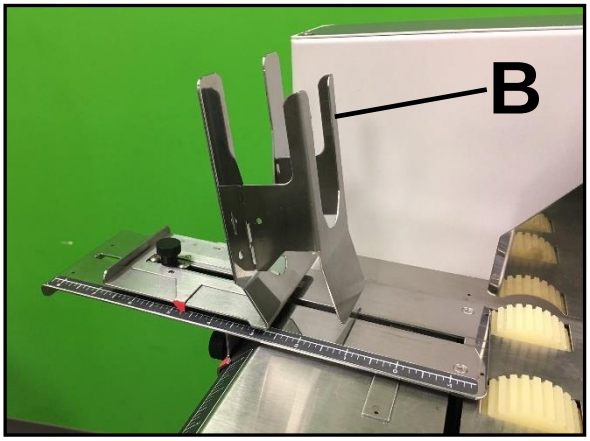
No Media Support Wedge Extension
– For media that is 6” to 17” in length.

Examples:
Letter sized (8.5”x11”) media feeding Short Edge First (SEF)
#9, #10 envelopes feeding SEF
9”x12” envelop feeding SEF
10”x13” envelope feeding SEF

Wide Media Support Wedge Extension [A]
– For media that is 6” to 10.5” in width and 4” to 13” in length.
– For feeding #9, #10 envelopes Long Edge First (LEF)

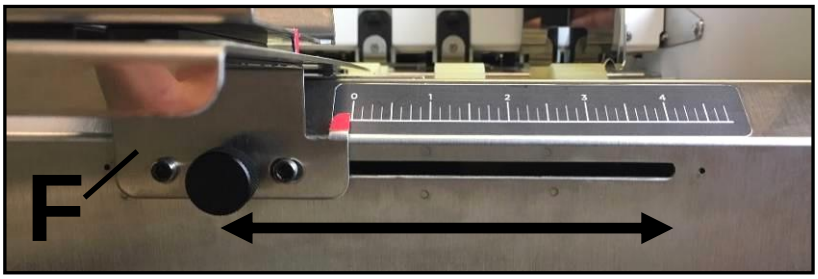


Narrow Media Support Wedge Extension [B]
– For media that is 3.25” to 6” in width and 4.5” to 13.5” in length.



Adjust Rear Media Support Guide/Sled Assembly

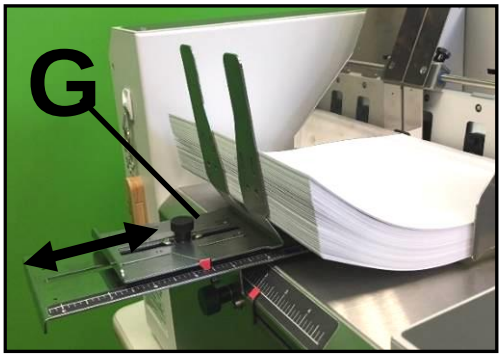
1. **Adjust Rear Media Support Guide [F]**. Loosen the locking knob and slide Guide right or left, to center Guide on the width of your media. Then secure locking knob.



2. **Adjust Rear Media Support Sled [G].** Loosen locking knob and move Sled to desired position, to raise/support trailing edge of media. Then secure locking knob.

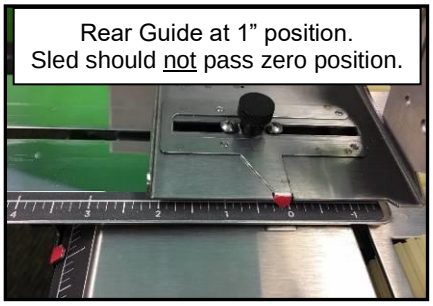
   Examples:
   Sheet Paper - Raise media ~ 1.25" above Feed Table
   #10 Envelopes – Raise media ~ 0.5" above Feed Table.

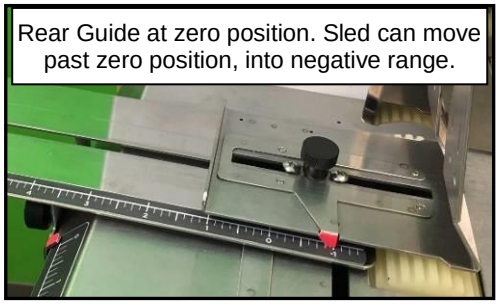
   NOTE: Raising the media too high above the Feed Table will cause loss of contact between media and feed rollers; which can cause hesitation in feed. The Rear Media Support Sled should be positioned so the media stack is being held against the separation area while still providing proper media to feed roller contact.



Guide/Sled Positioning Scales & Sled Safety Stop

Positioning scales are provided for your convenience. Once proper Guide/Sled positions are determined, for a particular media/job, make a note of their positions. This will make Guide/Sled positioning easier to duplicate when the same media/job is run at a later time.
NOTE: Scale values are in inches, but they do NOT correspond to a particular media width or length. Values are for reference purposes only. Right-side (flat side) of the pointer is reference side.





A "**Safety Stop**" is provided to help prevent the Sled from moving past its zero position when the Rear Media Support Guide is not at its zero position. Only when the Rear Guide is at its zero position, should the Sled be moved past its zero position (into negative range).

CAUTION

To avoid damage to feed rollers; make sure the Rear Media Support Sled does not make contact with the feed rollers. A safety stop plate, on the table top, is provided to help prevent this from occurring. However if you loosen the locking knob too much you may be able to accidently pass the Sled over this safety stop.

Load Media into Feeder Section (Hopper)

Place a stack of media into the hopper.
Make sure that the stack is fanned so the bottom piece is closer to the separators then the top pieces.

Tip: When loading an empty hopper. Place one piece of media so it is directly against the tips of the separators. Then place the fanned stack of media on top of this single piece. This will help to reduce the chance of double-feeding (overlapping media) issues when you start feeding.

Finding the Sweet Spot

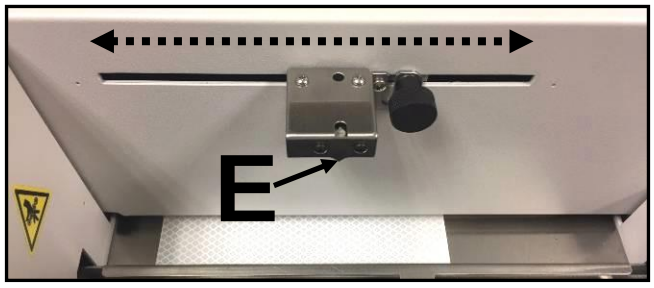
The amount of media that can be stacked into the Feeder Section is determined by the weight and size of the material.
- The feeder section may not feed larger and heavier media when the stack is high.
- The feeder section may not feed lighter media when the stack is low.

To keep the printer feeding consistently (without misfeeds or hesitations), you may need to reduce or increase the amount of media in the stack for a given media size/weight.

Position Feeder/Entry Sensor Assembly

Printer is equipped with a repositionable assembly that contains the Feeder Sensor and Entry Sensor.
Feeder Sensor is used to measure/monitor media length and to control when the next piece of media is fed.
Entry Sensor detects the leading edge of the media as it enters into the Print Engine area.
This sensor assembly must be manually positioned over the path of media being fed.

1. **To reposition Feeder/Entry Sensor.**
   Loosen the locking knob and slide Sensor Assembly to align with location where media will be fed into Print Engine. Pointer **[E]** on sensor assembly; depicts sensor beam location.



   Tip: Position sensor assembly to avoid holes in media and or areas on surface of media that may cause sensing issues. For example: When running "window envelopes" try to position Media Entry Sensor so the "window" does not travel under sensor beams. External light sources may cause a problem with media sensing. To identify a problem caused by external light sources; try covering the area above the Feeder/Entry Sensor assembly to block external light from hitting reflector.

NOTICE: If this sensor assembly isn't positioned properly (media not passing under sensor beams) the printer will likely feed a single piece. Then stop, with media inside Print Engine area, and display "Paperpath_Feed_Timeout". If this issue occurs you will need to: Tap "Menu" and select "Setup". From the "Setup" menu select "Run Path". This should clear all media from the paper transport section. Once media is clear from this area tap "Stop Path". Reposition the Feeder/Entry Sensor Assembly so it aligns with the location where media will be fed under the sensors. Then tap "Menu" and select "Job". From the "Job" menu tap "Resume", to resume the job.

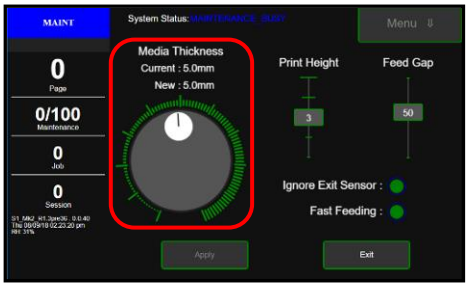
Adjust Media Thickness

Before you will be able to successfully run media through the printer; you will need to adjust the Clamshell height to accommodate the thickness of your media.

A reference line, for assisting with the media thickness adjustment process, is provided on the clamshell frame; as shown here.

Procedure:

1. Place a single piece of your media onto the operator side frame and push it lightly up-against the media thickness reference line decal.
   NOTE: If using multi-page or puffy media; compress the media (press down lightly on the surface of the media) to reveal the compressed thickness of the media.



2. Using Media Thickness control, from the printer's Touchscreen, adjust to a value that places the bottom of the white reference line even with the top surface of your compressed media; as shown in image above.
   Please see "Media Thickness" found in the section titled "Touchscreen Menu Choices and Features" for details on accessing and using this feature.

   NOTE: This procedure is meant to provide an approximate Media Thickness adjustment that will allow the media to successfully pass through the printer. However some experimentation (fine-adjustment, usually less than 0.5mm up/down) may be necessary to optimize media feeding.

Verify "Ignore Exit Sensor" Selection

Printer is equipped with an Exit Sensor that is used to help detect Media feeding issues.

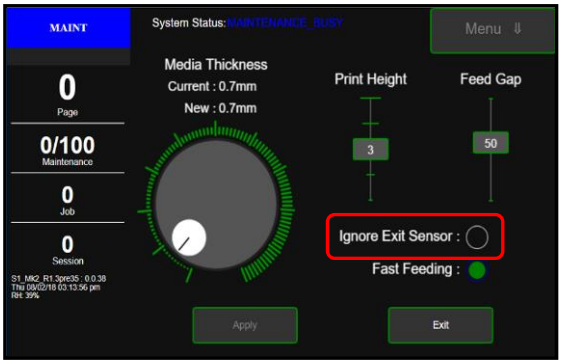
The Exit Sensor is a reflective sensor; that looks up at the underside of the media. It is located under the Exit Transport Cover, on the table-top, between Media Transport Belts.

Please see section titled "Print Zone Reference Tool" to help identify the position of the Exit Sensor, in relationship to where the Media is being fed.

From the printer's Touchscreen; select the appropriate choice for your application.
Please see section titled "Touchscreen Menu Choices and Features" for details on accessing "Media Setup" menu.

If the Media and media feed position meets all of the following points; "Ignore Exit Sensor" should not be selected:

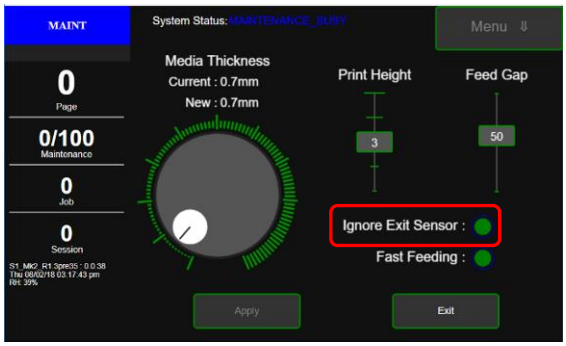
- Media is positioned so the entire length of the Media is passing over Exit Sensor.
- Underside of the Media is white or light in color (reflective to Exit Sensor).
- Media doesn't have any holes, cutouts or dark colors that pass over Exit Sensor.
- Exit Sensor is clean (functioning properly).



Ignore Exit Sensor not selected

In the following cases it will be necessary to select "Ignore Exit Sensor".

- Media is positioned so it does not pass over Exit Sensor.
- Entire length of Media does not pass over Exit Sensor. Feeding Media that is not square or not rectangular in shape.
- Underside of Media has dark colors that pass over Exit Sensor.
- Media has hole or cutout that passes over Exit Sensor.
- Exit Sensor is dirty (not functioning properly)



Ignore Exit Sensor selected

Correcting Misfeeds and Jams in Printer

Misfeeds (media feed hesitations, double feeds and overlapping media) can commonly be corrected by readjusting the Sheet Separators, checking/adjusting Media Thickness setting and verifying that the Print Platen & Drip Tray assembly is properly installed. If separators are worn they may need to be replaced. See **"Replacing Sheet Separators"**.
If the printer detects a hesitation in media feed it will stop and display "Paperpath_Feed_Timeout".
If the printer detects a jam, it will stop and display "Paperpath_PaperJam".

Some possible causes for misfeeds and jams are:

1. Improper printer setup, such as improper adjustment of sheet separation or media thickness.
2. Media that does not meet printer specifications.
3. Damaged media, such as dog-eared (*turned down corners*).
4. Media that is not stiff enough may not be usable. Media that meets Postal stiffness requirements for automated feeding is acceptable in Printer.
5. Envelopes caught under flap of another envelope or stick to one another.

Removing Jammed or Misfed Media

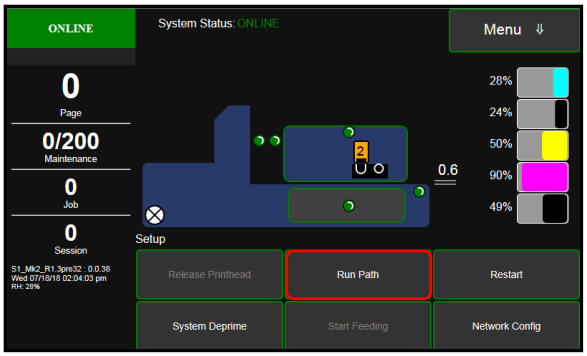
Clearing a jam or misfeed depends on where it occurred.

Feed Section:
Loosen Sheet Separators and remove media.

Tip: If media made it under the first set of pressure rollers it will be difficult to remove. In this case use the "Not a Physical Jam" procedure outlined below.

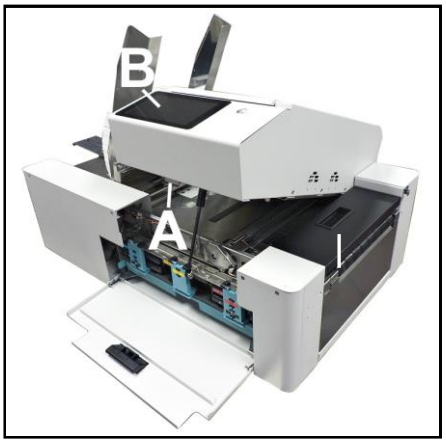
Print Area or Exit Area:

Not a Physical Jam. Use this porcedure if you are sure nothing is physically obstructing the paper path.



1. From **Touchscreen,** tap **"Menu"** and then tap **"Setup"** from the drop-down list.
2. Tap **"Run Path"**. This will clear the media from the paperpath without feeding more media.
3. Tap "**Stop Path**".
4. Tap "**Menu**", "**Job**" then **"Clear Error"**.
5. Tap **"Resume"** to continue printing.

Physical Jam. Use this procedure if there is a physical jam or if you are not sure if the paper path is obstructed or not.



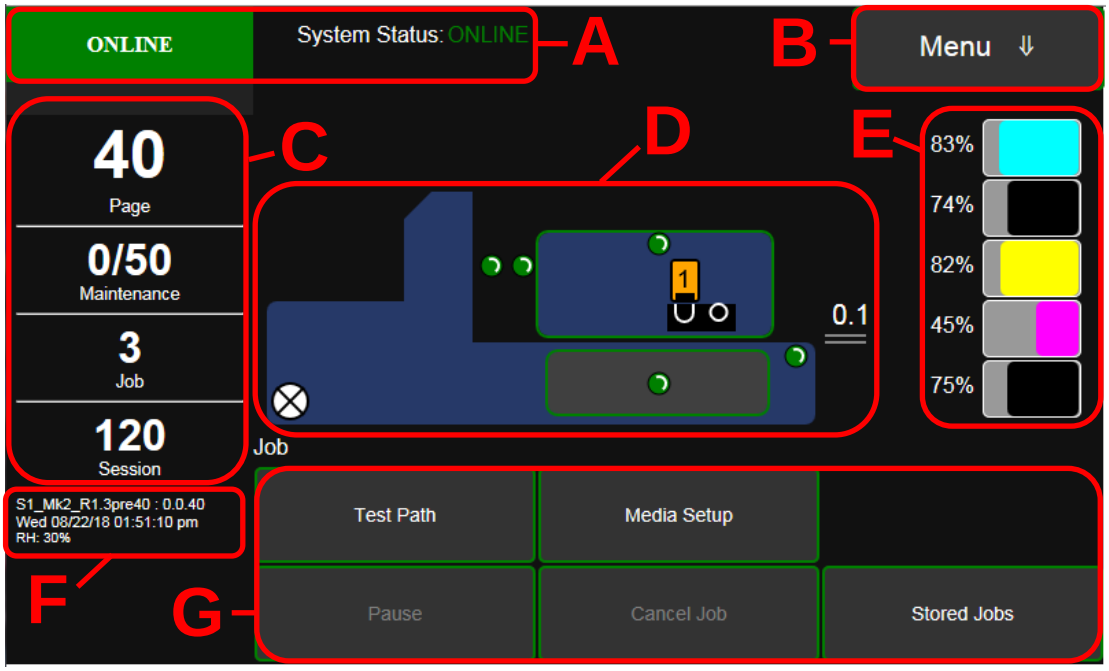
1. Open **Ink Tank Door**.
2. Pull/release **Clamshell Latch [A]** toward you to release and swing open the **Clamshell [B]**.
3. Open **Exit Transport Cover [C]**.
4. Remove media.
5. Carefully lower/latch the **Clamshell**.
6. Close Exit Transport Cover.
7. Close Ink Tank Door.
8. From **Touchscreen**, tap "**Menu**" and then tap "**Job**" from the drop-down menu. Then tap **"Clear Error"**.
9. Tap **"Resume"** to continue printing.

Using Printer Touchscreen Display

The **Printer's Touchscreen** can be used to check Printer status, monitor ink usage, configure network settings, print test prints, reprint stored jobs, to set media thickness and run maintenance tasks.
NOTE: These functions and more can also be operated remotely from a computer using the **Printer Toolbox**. See **"Using the Printer Toolbox"** following this section.

NOTICE: By default; the **Printer Touchscreen** will go into a "***screen saver mode***" (screen goes blank) if the printer is idle for more than 10 minutes. Tap the screen to wake it up and display the Touchscreen controls.

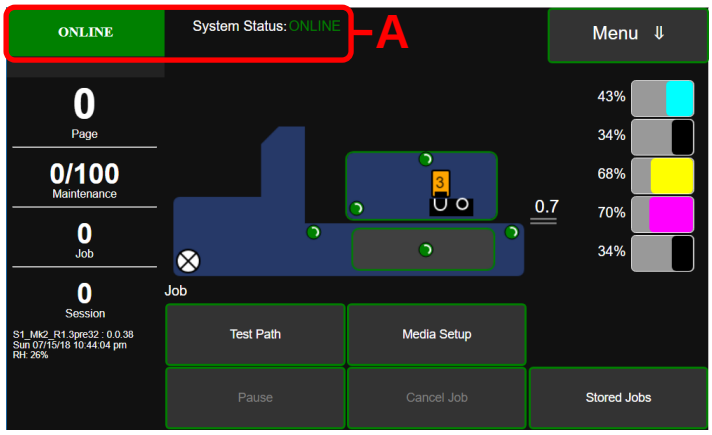
[A] System Status Indicator
[B] Menu Button – Tap to display a drop-down list of Menu selections
[C] Job & Maintenance Status
[D] Printer Status Icon
[E] Ink Tank Status
[F] Firmware, Date, Time, Relative Humidity Information
[G] Menu Feature Buttons – buttons (features) for currently selected Menu are displayed here



System Status Indicator

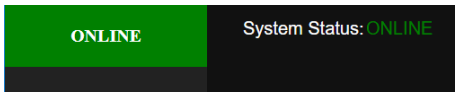
The upper left corner of Touchscreen [A] will show the System Status and status messages.

The color of the box provides a quick reference for the user to identify if the printer needs assistance or not.



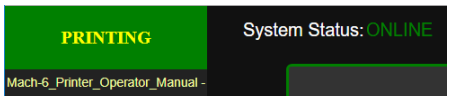
Here are some common System Status Indicators and messages:

ONLINE



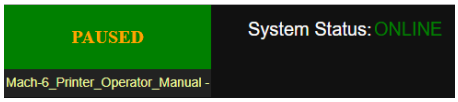
Green box indicates OK condition. Printer is ready. No operator assistance needed.

PRINTING



When PRINTING the area directly below the green box will show the name of the job being processed / printed.

PAUSED

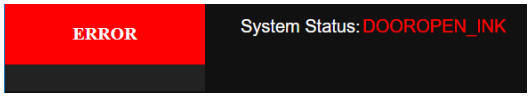


When job is PAUSED the area directly below the green box will show the name of the current job.
Tip: Tap “Resume” button to resume the job.

MAINTENANCE

Blue box indicates printer is busy performing some type of maintenance or adjustment.

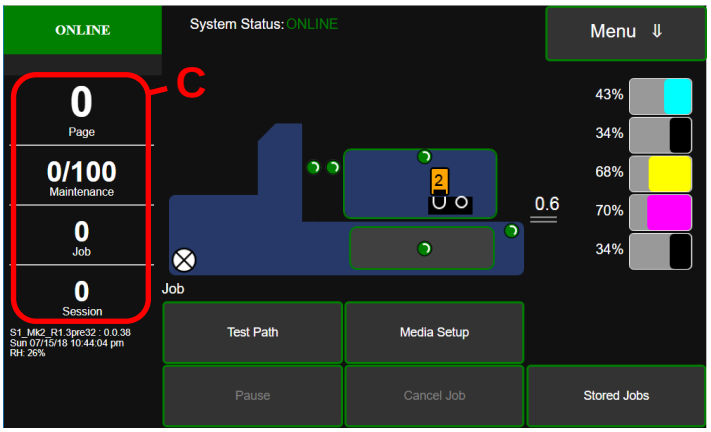
ERROR



Red box indicates issue or error condition. Operator assistance required.
Tip: Use the “Clear Error” button to clear an Error. After clearing the Error; the printer may go into the PAUSED state. Tap “Resume” button to resume the job.

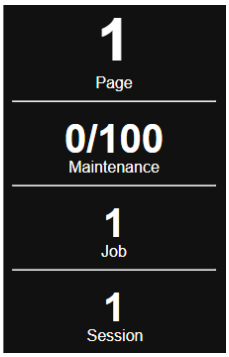
Job & Maintenance Status

This left-middle section of the Touchscreen [**C**] displays Job & Maintenance Status

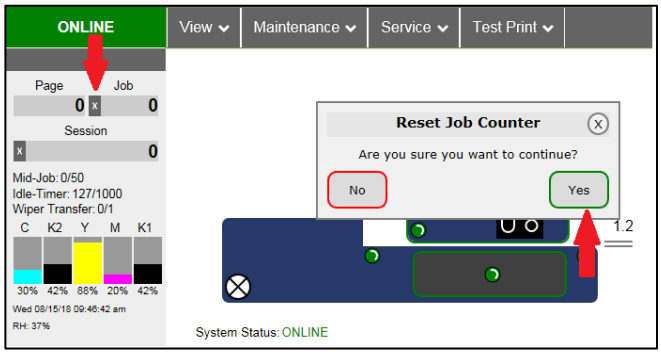


Page - shows page count for current or most recent job.

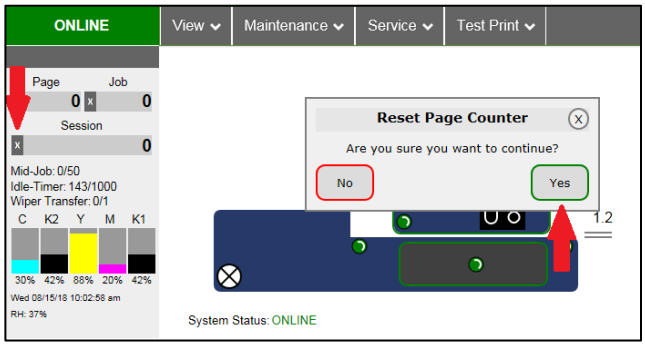
Maintenance - counts down pages until the next automatic Printhead maintenance (Mid Job Service) is performed by the Service Station.
NOTE: Mid-Job Service value can be adjusted from the Toolbox (View, User Interface). Some experimentation may be needed to find a value that provides adequate head maintenance (acceptable print quality) with the least amount of interruptions. Common settings range from 50 to 250. Values may need to be changed based on many factors; including but not limited to temperature, humidity and dust.



Job - shows number of jobs printed. Reset Job counter, from Toolbox (View, System Status), as shown below. Click on “X” to reset counter. When prompted click on “Yes”.



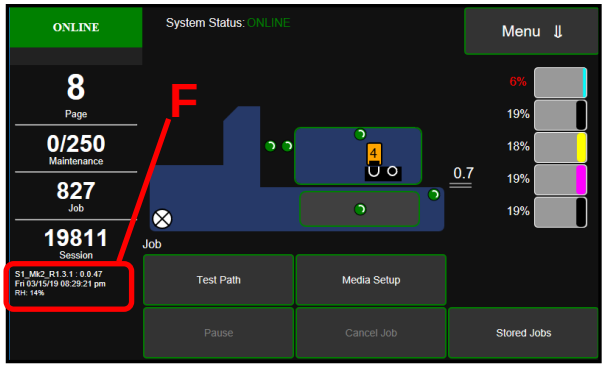
Session - shows total number of pages printed for all jobs.
Reset Session counter, from Toolbox (View, System Status), as shown below.
Click on “X” to reset counter. When prompted click on “Yes”.



Firmware, Date, Time, Relative Humidity Information

Small Text located at bottom left side of Touchscreen **[F]**.

- **Firmware** shows current firmware version installed in printer.
  Example: S1_Mk2_R1.3.1: 0.0.47 = Firmware version R1.3.1 and RPI (UI) file version 0.0.47
- **Date and Time** shows current date and time.
  Example: Tue 08/28/18 08:54:55 am = August 28, 2018 at 8:55 and 55 seconds AM
  Values can be adjusted under "Network Config" (Menu, Setup, Network Config).
- **Relative Humidity (RH)** shows current relative humidity; detected within printer.
  Example: RH 34%

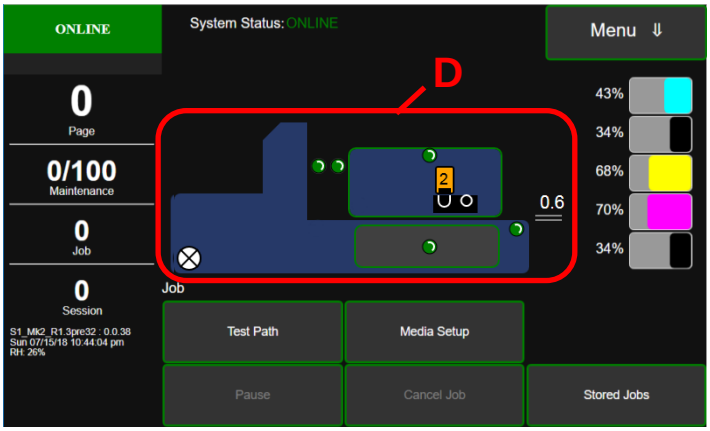


Printer Status Icon

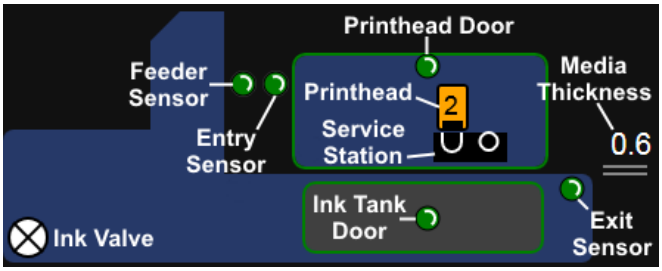
This middle section of the Touchscreen [**D**] displays a Printer Icon. Within this Printer Icon you will find additional icons and symbols that represent the current status for the following components:
Ink Valve, Media Sensors, Door Switches, Service Station, Printhead Height and Media Thickness settings.

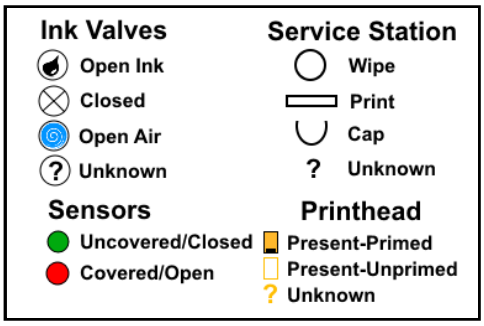
These icons and symbols can also be used to identify the locations of problems; such where a sensor is blocked by paper or if a Door is open.

Tip: Tap on a status icon (sensor, valve, Printhead, etc.) to display a description or more details about that item.



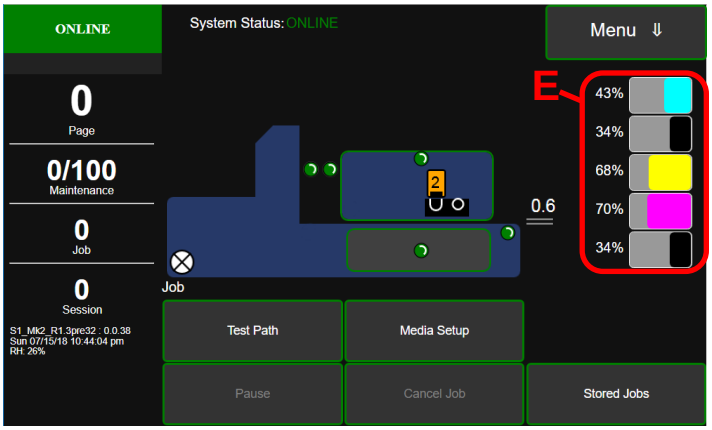
- **Ink Valve:** Shows current status of Ink Valve (open ink, closed, open air, unknown).
- **Sensors & Door Switches:** Shows status sensors (***Feeder Sensor, Entry Sensor, Exit Sensor***) and status of door switches (***Printhead Door, Ink Tank Door***)
  red = blocked/closed
  green = unblocked/open
- **Service Station:** Shows current Service Station position (wipe, print, cap and unknown).
- **Printhead:** Shows current Printhead status (primed, unprimed, unknown/missing).
  The number inside the Printhead icon shows the current Print Height (printhead height) setting.
  Range = 1 (lowest) to 9 (highest).
- **Media Thickness:** Displays the current Media Thickness setting. Range = 0.1 mm (lowest) to 10 mm (highest)



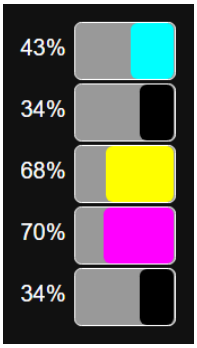


Ink Tank Status

This right side of the Touchscreen [**E**] displays the Ink Tank Status.

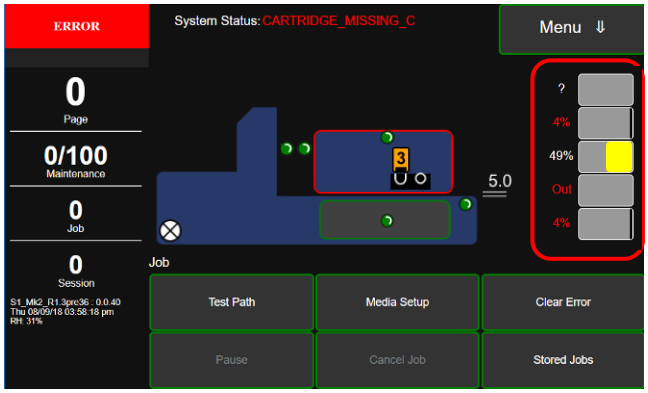


Ink Levels: The system will display the calculated value (percentage) of available ink for each Tank.
NOTE: When the value of any Ink Tank reaches 10% the numbers will turn RED. When the calculated value reaches zero (out) the printer will stop feeding/printing until the Ink Tank is replaced.
See section titled "Replacing ink tanks", within "Maintenance" section, for instructions.



Tip: Keep in mind that this is an estimated value. It is not 100% accurate. It would be wise to keep spare Ink Tanks on-hand; to avoid down-time due to unanticipated "out of ink" conditions.

Additional Ink Status display conditions:



- "**?**" indicates that the Ink Tank is missing or not recognized (poor/dirty connection). Install Tank and verify that Ink Tank Latch is securly fastened. Try removing and cleaning QA chip contacts on Tank.
- A percentage number shown in red indicates Ink Low. Example: 4%
  Tank replacement will be needed soon.
- **"Out"** indicates that the visitble ink sensor does not see any ink in the Tank's prism or the system calculated that 250ml of ink was drawn from the Tank.

  NOTE: The visible ink sensor is used as a fail-safe for the ink system. It prevents the system from trying to pull ink from an empty Tank, which would pull air into the ink system (ink lines and printhead), causing printing issues and possible printhead nozzle damage. It is possible for Tank to read 10-20% and then suddenly show "Out". It is also possible for the system to toggle in and out of the "Out" condition (visible ink sensor doesn't see ink, then sees ink, then doesn't see ink).

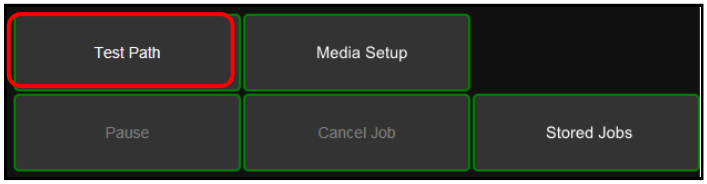
  Tip: Verify that the printer is level. An unlevel printer may give a premature visible ink "Out" condition.

Touchscreen Menu Choices and Features

When you touch the "**Menu Button**" [**B**] a drop-down list of Menu choices appear with the following selections: **Job, Setup**, **Test Print**, **Maintenance**, **Wiper** and **System Test.**
Touch one of these Menu selections to display the corresponding Menu Feature Buttons [**G**].

Job Menu

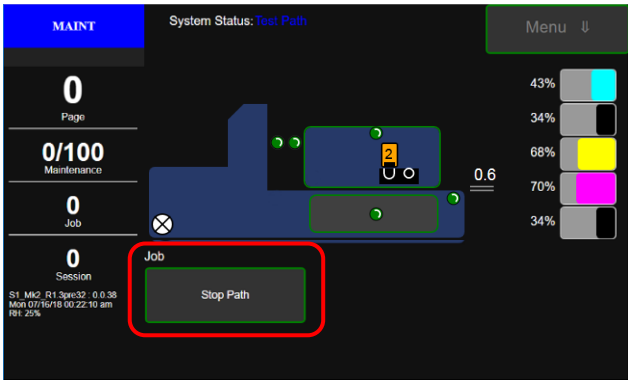
Tap to open the "Media Setup" Menu
Job Menu Buttons provide quick access to common functions needed when printing a Job; such as:
Test Path, Media Setup, Pause, Cancel Job, Stored Jobs



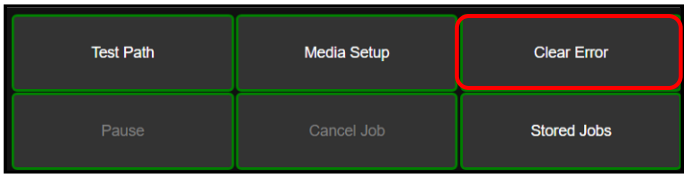
Test Path - Tap to run media through the Printer, without printing, to check the media feed set-up.
CAUTION! Before using this feature you need to make sure the printer has been properly setup to separate and feed the media you are using.
After pressing "**Test Path**" button the printer transport will start and media, if present, will be fed from the feeder section into the print area and though the system.

A "**Stop Path**" button will be displayed at this time.

Tap "**Stop Path**" to stop feeding and transport process.

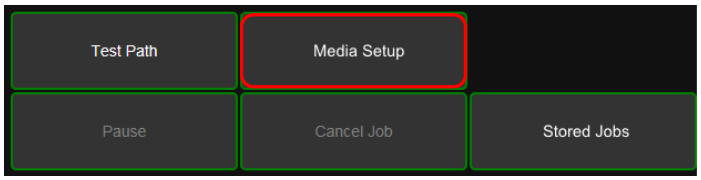


If a paper feed error occurs the "**Clear Error**" button will appear. Remove media from the paper path and tap Clear Error button.



Tip: You can use the "**Run Path**" feature (Menu, Setup and Run Path) to clear media from the printer; while in an error state. Do not use this feature if there is a physical jam. Physical jams must be removed manually. See "***Removing Jammed or Misfed Media***" for instructions.

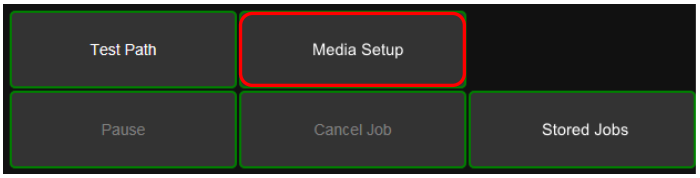
Media Setup - Tap to open the "Media Setup" Menu.
In this menu you can set **Media Thickness** and **Print Height**. Select **Ignore Exit Sensor,** Select **Fast Feeding** and **Feed Gap** options.



Media Thickness - Moves the Clamshell up/down (0.1mm to 10mm) to accommodate media thickness. See section titled "Adjust Media Thickness", within the "Operating Printer" section, for aid in making an appropriate media thickness selection.

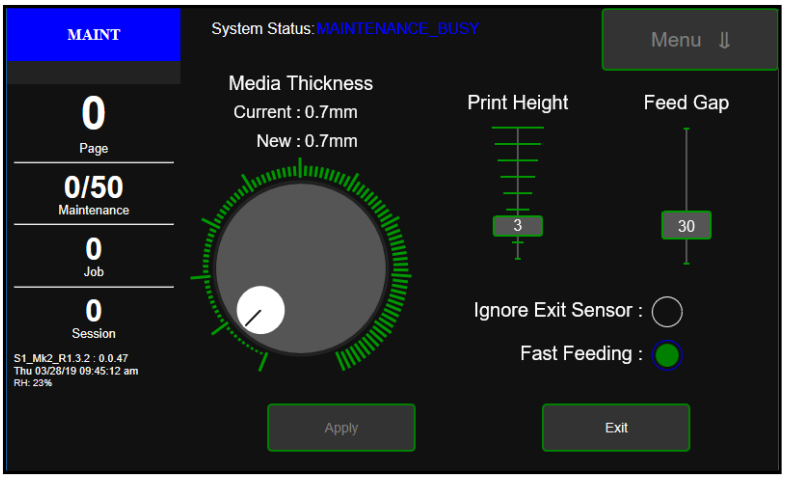
To adjust and set the Media Thickness:

1. Tap the **Media Setup button** to open the **Media Setup** screen.



2. Under **Media Thickness** you will find the **Current** media thickess setting and the **Dial** used to adjust the media thickness.

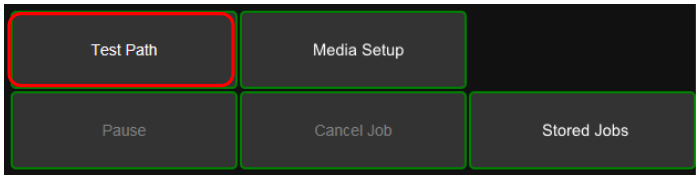
3. To move the **Dial**, press and drag the **Selector** (small white circle) around the circular scale to obtain the desired (**New**) Media Thickness value. Selected value will be shown next to **New.**
NOTE: After making any changes to items on this screen, the **Apply** button will turn RED and the **Exit** button will change to a **Cancel** button; giving you the ability to cancel any changes you have made and close the screen.



4. If **New** value is correct; tap the **Apply** button (currently RED) to confirm the change. The Clamshell will move up or down to the **New** thickness setting. During this time the **Selector** and **New** value will also turn RED. Once the Clamshell reaches the **New** thickness setting the **Selector** will turn WHITE again and the **Apply** button will turn GREEN again. In addition, the **Current** and **New** values will now match.

5. Tap the **Exit** button to exit the Media Setup screen.

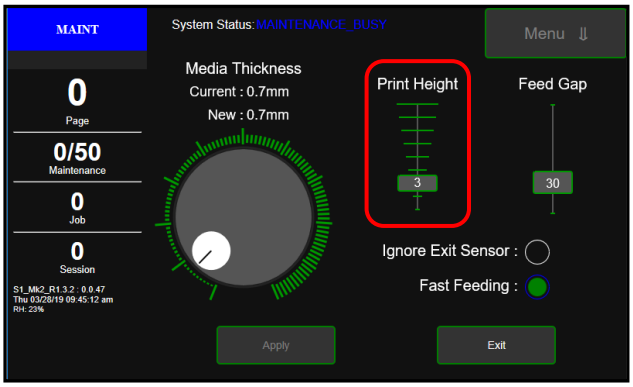
6. You can test for proper setup using the "**Test Path**" button.
Adjust as necessary.



Print Height - Use to raise/lower the Printhead (in small increments) independently from the current Media Thickness setting.
This feature can be useful for helping to avoid media to Printhead surface contact; which can cause "scuff marks" on the media. This feature may also be useful for improving Image Sharpness.

Range: 1 (lowest) to 9 (highest)

NOTE: When using this feature there is a trade-off between image sharpness and reducing head to media contact. You may need to experiment to find an acceptable selection for your particular job/media.

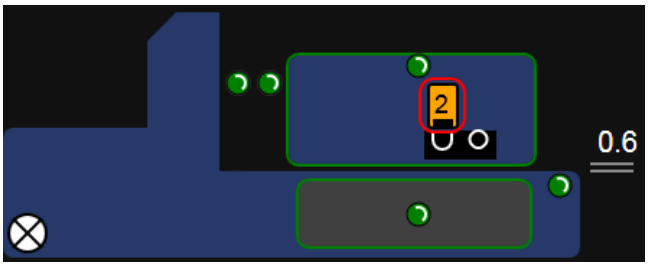


To adjust and set the Print Height:

1. Press and drag the **Selector** (small green box) up or down the scale to the desired value.
   - Set the Print Height to a higher value to help reduce media to Printhead contact (scuff marks).
   - Set the Print Height to a lower value to help improve image sharpness.
   NOTE: After making any changes to items on this screen, the **Apply** button will turn RED and the **Exit** button will change to a **Cancel** button; giving you the ability to cancel any changes you have made and close the screen.
2. Tap the **Apply** button to save the new value.
3. Tap the **Exit** button to exit the Media Setup screen.

The current Print Height value will also be displayed within the Printhead Icon; as shown here.

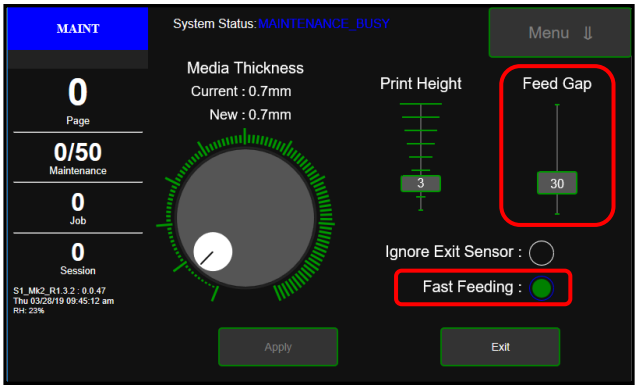
Tip: Media to Printhead contact and image sharpness can also be affected by the Media Thickness setting. Before changing the Print Height value, please be sure the Media Thickness setting is correct. Please see "Media Thickness" found in the section titled "Job Menu" for details.



Fast Feeding & Feed Gap - These features are provided to add control over the feeder section of the printer. By controlling when the feeder starts/stops it is possible to reduce the distance (gap) between pieces, which can increase media throughput (pieces per hour).

When **Fast Feeding** is disabled (off, black), the **Feed Gap** value is <u>not</u> used. The operator has no control over the distance (gap) between pieces.

When **Fast Feeding** is enabled (turned on, green), the **Feed Gap** value (mm) is used. The operator can now control the distance (gap) between pieces.



- A smaller **Feed Gap** value (mm) will reduce the gap between pieces; thereby increasing media throughput (increasing pieces per hour).
  A minimum Feed Gap value of 30 is recommended for most applications. Every print job is different. Some experimentation will be necessary, to find the optimum setting for your particular application.

WARNING: If you set the Feed Gap value too small, you may encounter media feeding and printing issues; such as feeding blanks and image shifting. If this occurs raise the Feed Gap value or turn off Fast Feeding.

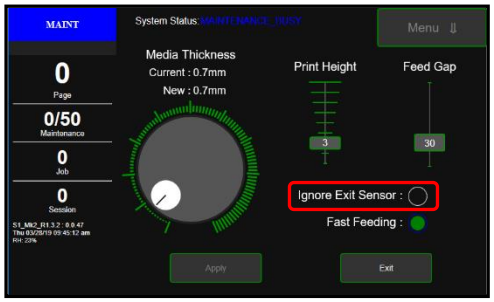
- A larger **Feed Gap** value (mm) will increase the gap between pieces; which may be necessary in order to reduce media feeding/printing issues.

NOTE: Whenever you start or resume a print job the printer must measure the media length to determine when the feeder must be turned off/on, to obtain the selected Feed Gap value. Therefore you will notice that the first few pieces feed with a larger gap before the selected Feed Gap value will take effect.

Ignore Exit Sensor - Printer is equipped with an Exit Sensor that is used to help detect Media feeding issues. In certain conditions the Ignore Exit Sensor feature must be enabled (selected) or disabled (un-selected).

- **Disable** (circle turns black) the **Ignore Exit Sensor** option if the Media and media feed position, meet <u>all</u> of the following points:

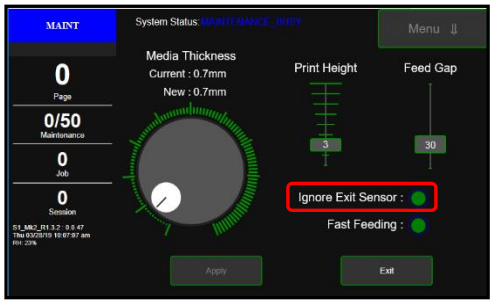
- Media is positioned so the <u>entire</u> length of the Media is passing over Exit Sensor.
- Underside of the Media is white or light in color (reflective to Exit Sensor).
- Media doesn't have any holes, cutouts or dark colors that pass over Exit Sensor.
- Exit Sensor is clean (functioning properly).



Ignore Exit Sensor feature Disabled

- **Enable** (circle turns green) the **Ignore Exit Sensor** option in the following cases:

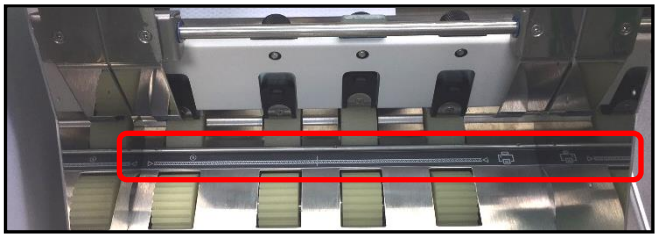
- Media is positioned so it does <u>not</u> pass over Exit Sensor.
- Entire length of Media does not pass over Exit Sensor. Feeding Media that is not square or not rectangular in shape.
- Underside of Media has dark colors that pass over Exit Sensor.
- Media has hole or cutout that passes over Exit Sensor.
- Exit Sensor is dirty (not functioning properly)



Ignore Exit Sensor feature Enabled

Use the **Exit Sensor Position** symbol, on the "**Print Zone Reference Tool**", to identify the position of the Exit Sensor in relationship to where the media (Media Side Guides) are being positioned.

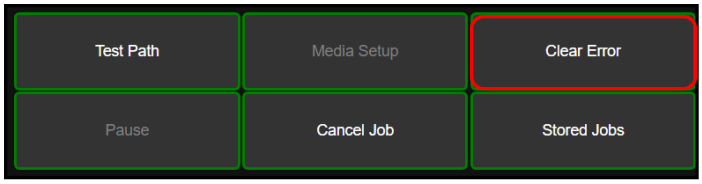
Print Zone Reference Tool is attached to the Feed Table on the printer; near the sheet separation area.



Exit Sensor Position

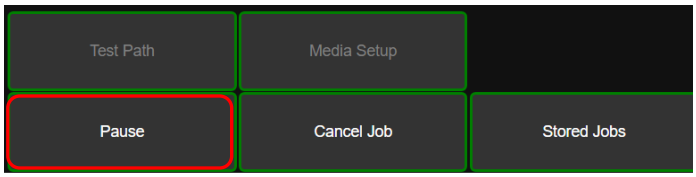
If your Media doesn't fully cover the Exit Sensor Position symbol; you <u>must</u> enable "Ignore Exit Sensor" feature. See section titled "Print Zone Reference Tool" for more details on using this tool.

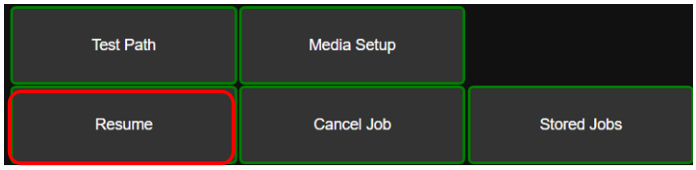
Clear Error - Tap "Clear Error" to clear the current error condition.
NOTE: Button will appear when an Error is detected and will disappear when Error is cleared.
In some cases you will not be able to clear the error until you have fixed the condition. For example; if media is covering any of the Media Sensors; you won't be able to clear the Error until you remove the media from the feed path.



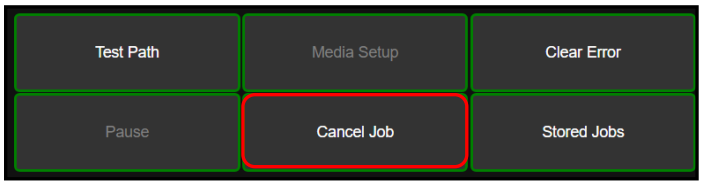
Pause/Resume - Tap "Pause" to pause printing. Button label will change from "Pause" to "Resume".
Tap "Resume" to resume printing. Button label will change from "Resume" to "Pause".

Tip: After you clear an Error during printing; you will need to tap "Resume" to continue printing the job.

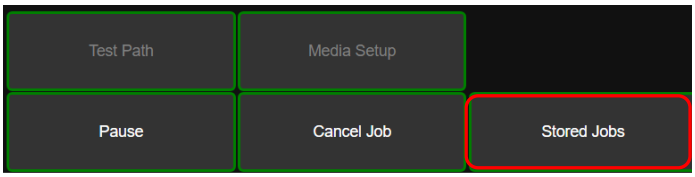




Cancel Job - Cancels the current job from the printer and printing queue. When this button is pressed you will be presented with the "Are you sure you want to continue?" prompt. Tap "Yes" to verify your desire to cancel the job. Tap "No" if you decide you don't want to cancel the job.

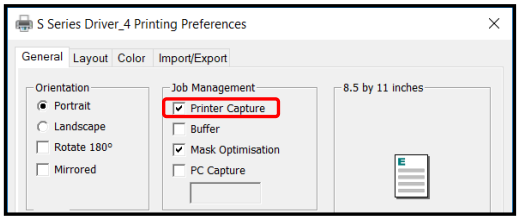


Stored Jobs - Opens the Printer's **Job Library** to access print jobs saved in the Printer's memory.
You can also make changes to the job specifications and delete jobs as needed**.**
See **"Using Stored Jobs"** on next page for details.
NOTE: If no jobs are saved on the Printer, this button will be inactive.



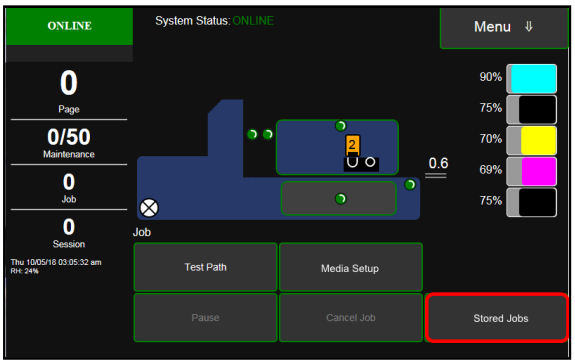
Stored Jobs

Print jobs are saved to the Printer's **Job Library** by selecting the **Printer Capture** option under **Job Management** on the **General Tab** of the **Printer Driver**.



Tip: Don't forget to uncheck the "Printer Capture" feature when sending jobs that you don't want stored on the printer.

You can access jobs saved in the Printer's **Job Library** using the **Stored Jobs** button on the **Job Menu.**
NOTE: If no jobs are saved on the Printer, this button will be inactive.



Using Stored Jobs (Print Job Library)

To view the Printer's **Job Library**, tap **Stored Jobs** on the **Jobs** Touchscreen. The **Jobs Library** opens.

Use the **View** button **[A]** to change the Library view from Icon to List.

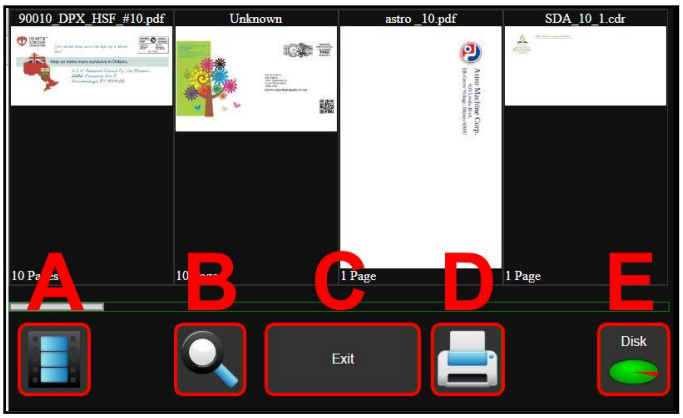
Use the **Search** icon **[B]** to search for a particular print job.

The **Exit** button **[C]** returns you to the **Jobs** (*Status*) screen.

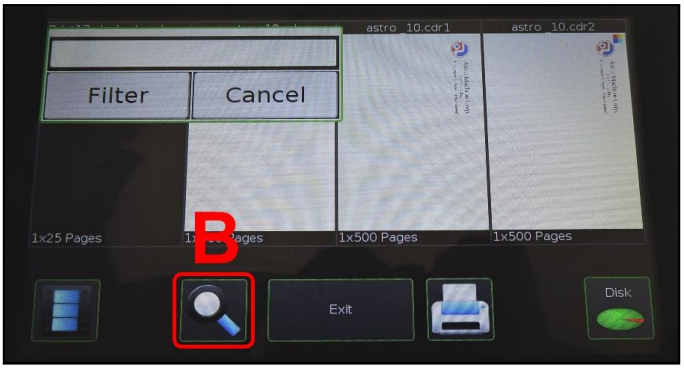
The **Printer** icon **[D]** prints the selected job.

The **Trashcan** icon **[E]** (*List view only*) deletes selected job(s) (*checked in the **Delete** column in the Jobs List*) from the Library.

The **Disk** icon **[F]** displays the available space left in the Printer's Job Library memory.



List View

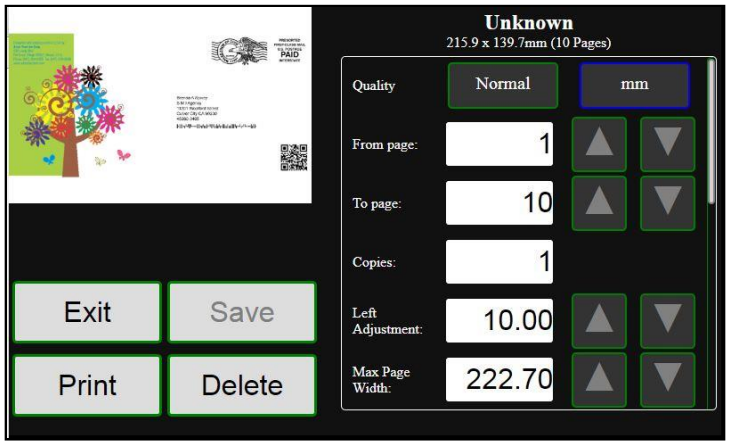


Search

Tap within Search Box to display keyboard. Provide search value and then Tap "Filter" button to display items that meet your search value.

Select a job by tapping the job icon or the list name. The **Job Print Options** screen opens.

Tip: If you tap on the job name, shown here as "Unknown", the "**Rename Print Job**" window will open, allowing you to change the job name.



The (4) **Control** buttons let you **Exit**, **Print**, **Save** or **Delete** the print job. The **Save** button saves any changes you make to the job specifications in the **Print Options** on the right side of the screen. If you do not tap **Save**, the print job reverts to its original settings when you **Exit**.

The **Print Options** allow you to change or adjust print specifications for the print job. Scroll down the screen to access all options.

Quality – Tap the button to toggle between **Normal** (1600 x 800 dpi) or **Best** (1600 x 1600 dpi) print quality.

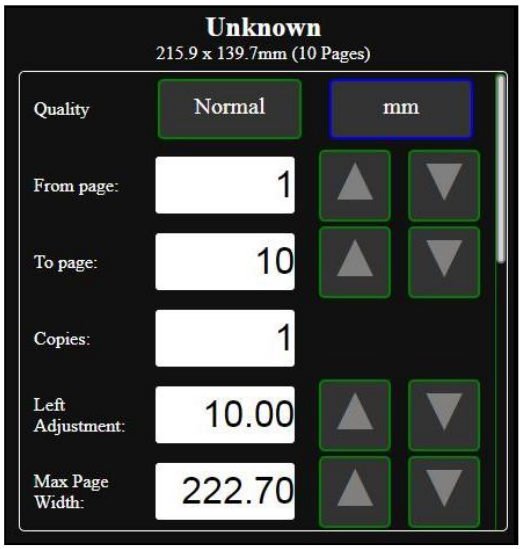
mm or inches – Tap the button to toggle between millimeter (mm) or inch measurement values.

Copies – Enter the number of copies to be printed.

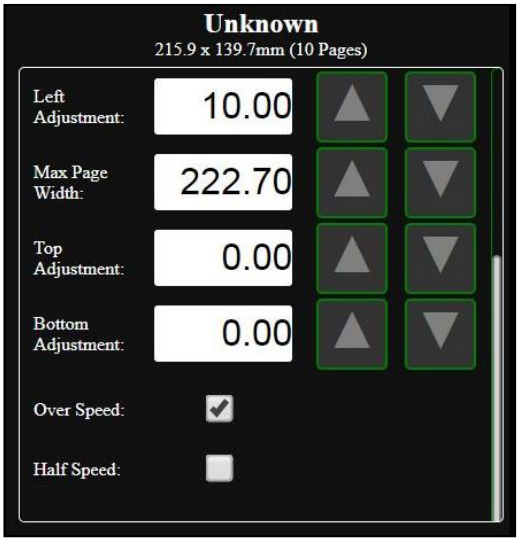
Left Adjustment – Moves the image area away (*-3mm left to +200mm right*) from the left edge of the media. (*Up or down arrows move in 0.1mm increments*)

Max. Page Width – Sets the width of the actual print area. (*Up or Down arrows move in 0.1mm increments*) This shuts off nozzles in the non-printing area (*not used for printing*) and saves ink. **NOTE: Can be no larger than maximum print width for Printer (8.77"/222.8 mm)**

Top Adjustment moves image up or down (*-5mm up to +200mm down*) from top left corner of media used. (*0.1mm increments*)



Bottom Adjustment – In operation, Printhead spits a small amount of ink in gap between pieces to keep nozzles refreshed.
For irregular-shaped pieces (*like an envelope flap*) the Sensor may "read" lower end as the edge and spray on the tip of the flap instead of actual gap between pieces. This feature allows you to manually set gap (*in 0.1mm increments*) to account for extra length needed to reach actual gap.

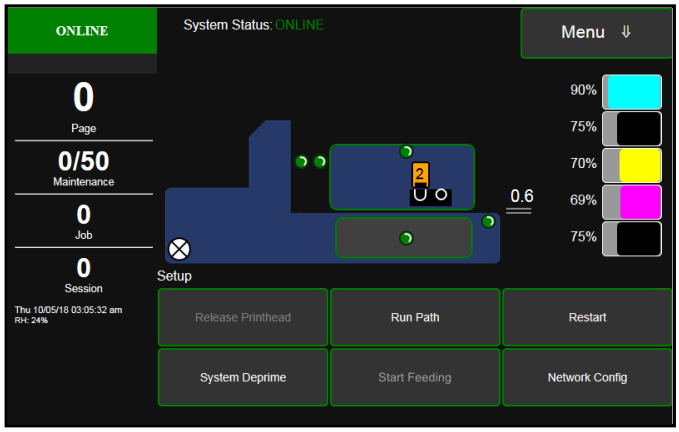


Over Speed – Checking the "Over Speed" box increases media transport speed by ~25%.
Tip: This feature should only be used on print jobs with limited coverage. Printing issues may occur with complex or full coverage print jobs. Try turning this feature off (*unchecked*) if feeding or printing issues occur.
NOTE: If "Over Speed" is selected, "Half Speed" will automatically turn off.

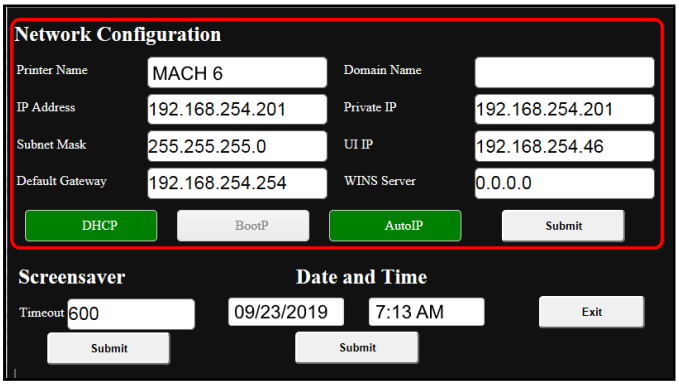
Half Speed – Valid when using "Normal" print quality only. Checking the "Half Speed" box slows media transport speed; to achieve higher dot accuracy and provide more dry-time before media exits printer.
NOTE: If "Half Speed" is selected, "Over Speed" will automatically turn off.

Setup Menu

Tap the **Menu button**, then the **Setup** button to open the **Setup** screen.

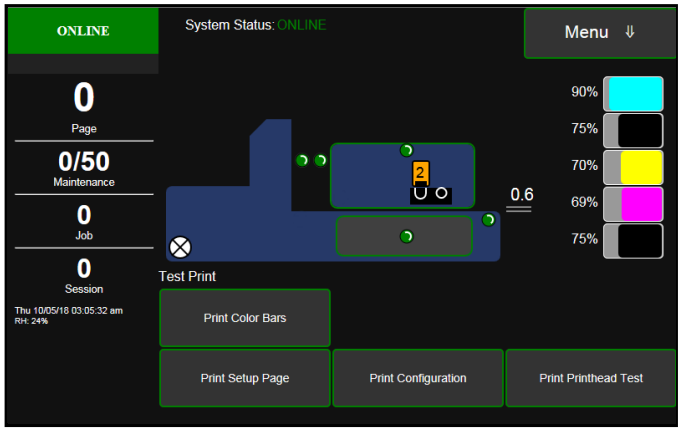


Release Printhead - Press to Releases Printhead Latch.
NOTE: Button is only active when system is in a "deprimed" state.
System Deprime - Pumps ink back into Ink Tanks (deprimes system) and then releases Printhead Latch.
Run Path - Use to clear media from Paperpath (printzone)
without feeding more media.
Start Feeding - Use to "test feed" media. After pressing "Run Path" button, to activate printzone motor, tap "Start Feeding" button to start/stop Feeder.
NOTE: Button is only active after pressing "Run Path" to start printzone motor.
Restart - Shuts-down and restarts the Print Engine and Touchscreen without perform long-term shut-down maintenance routines. Printer will still go through normal startup process at power-up. This feature is useful when a printer re-boot is needed. It takes less time than using the normal Shutdown and power-up features.
Network Config - Click to view, enter or change settings to connect the Printer to your network. See "Connecting Printer via Network (Ethernet Connection)" for more details.
You can also set the **Printer Date and Time**. (*See also **System Settings** in **Using Printer Toolbox***.)



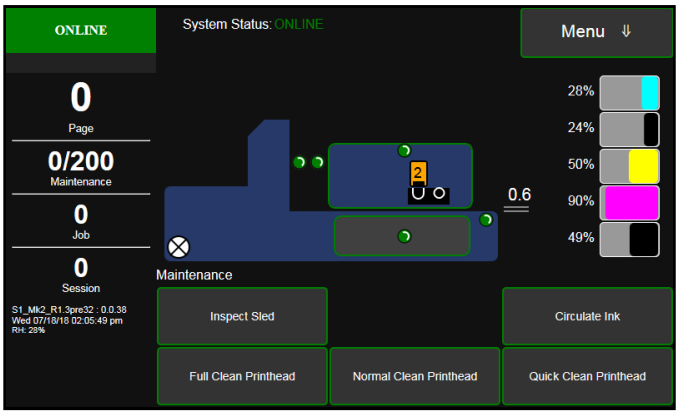
Test Print Menu

Tapping **Menu**, then **Test Print** opens the **Test Print** screen options for printing different reports.



Print Color Bars – Prints a series of 7 color bars (*per Printhead*) to indicate how well the Printhead is mixing colors and printing.
Print Setup page – Prints a printing pattern used for positioning image on the page.
Print Configuration – Prints current Printer configuration including Firmware Version, Network Connection, Printer Serial Number and more for Printer.
Print Printhead Test – Prints color bands, text and patterns. Use to check the condition of the inkjet nozzles in Printhead.
NOTE: Uses less ink than Print Color Bars.

Maintenance Menu



Tapping **Menu**, then **Maintenance** opens the **Maintenance** screen. These buttons operate functions for Printer and Printhead maintenance.

Inspect Sled – Moves Service Station out for inspection, cleaning or service. Printhead is also presented in Printhead Opening for inspection and manual cleaning.
Tip: Open Printhead Door to stop countdown timer.

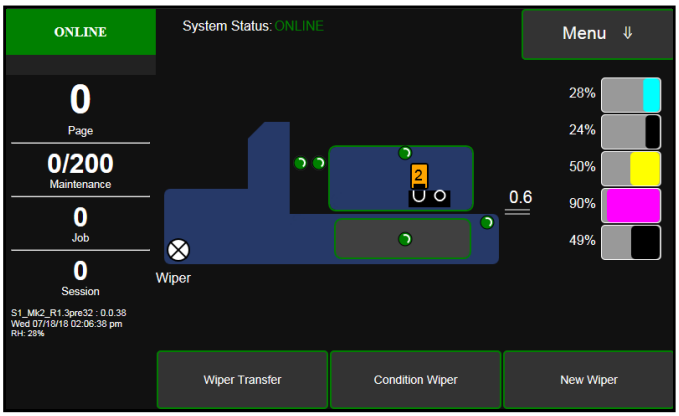
Circulate Ink – Pumps ink through the ink system and Printhead. Use to help fill ink lines and purge air-bubbles from the system.

Full Clean Printhead – Runs a routine, similar to Printhead Priming, to thoroughly flush and clean Printhead.

Normal Clean Printhead – Circulates ink, purges nozzles, wipes/cleans the surface of the Printhead. Use to help clear inkjet nozzles and improve print quality.

Quick Clean Printhead (Wipe Printhead) – Wipes/cleans excess ink from Printhead Surface. No ink is electronically ejected in this process, but ink is still wicked from the head during this process.

Wiper Menu



Tapping **Menu**, then **Wiper** opens the **Wiper** options screen. Selections are **Wiper Transfer**, **Condition Wiper** and **New Wiper**.

Wiper Transfer – Manually initiates a Wiper Transfer instead of waiting for a Transfer to automatically occur during normal operating cycles. Squeegees excess ink off of the Service Station Wiper Roller.

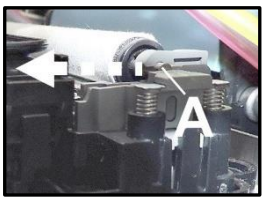
Condition Wiper – Saturates (with ink), conditions and cleans the Wiper Roller to remove dried residue if the Printer is left inactive for long periods of time.

New Wiper – Use this feature only when installing a NEW wiper roller; without installing a New Printhead.

Tip: We recommend installing a new Wiper Roller whenever the Printhead is replaced; that way you don't run the risk of having an old (used) wiper roller possibly causing damage to a new Printhead. If you plan to install a New Wiper Roller and a New Printhead; do them both at the same time using the System Deprime feature. The new Wiper Roller is automatically conditioned during the Printhead Priming process.

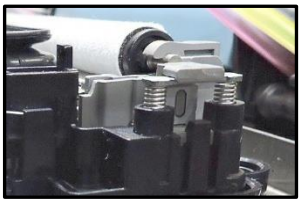
Use Nitrile, powder-free, gloves for this process.

1. Touch **New Wiper** button. Printer will move the Service Station to the Inspect Sled position, providing access to the Service Station components.
2. Open the **Printhead Door.**
   Tip: If you don't open the Printhead Door within 30 seconds, this process is automatically canceled to help reduce Printhead dehydration.
3. **Locate and Remove the current Wiper Roller from the Wiper Motor Assembly.** Grasp the wiper roller towards the operator side of the wiper roller. Push the wiper roller **[A]** to the left to release it from the Wiper Motor Assembly at the operator side. Then pull the roller towards the operator side to release it from the gears at the non-operator side of the Wiper Motor



Assembly. **NOTE:** A used Wiper Roller will be black with ink.

4. Install the New Wiper Roller
   NOTE: IF the new wiper roller has a plastic cover; you must remove the plastic cover before installing the wiper roller.
   Insert the gear-end of the wiper roller into the opening at the non-operator side of the Wiper Motor Assembly so it engages with the drive gears.
   Grasp the new wiper roller near the operator side. Lock the wiper roller into place, onto the Wiper Motor Assembly, by pushing down and to the right.



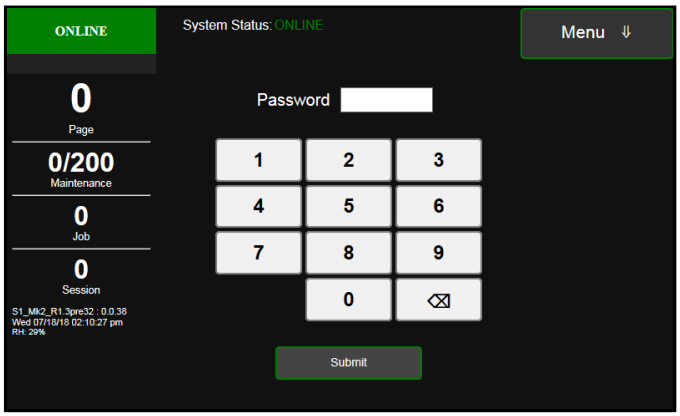
5. Verify that the wiper roller is properly installed.
6. Close the **Printhead Door**.
   The printer will run the "Printhead Prime" routine which will also condition the wiper roller.
7. When Touchscreen shows **Online**; the process is finished.

System Test

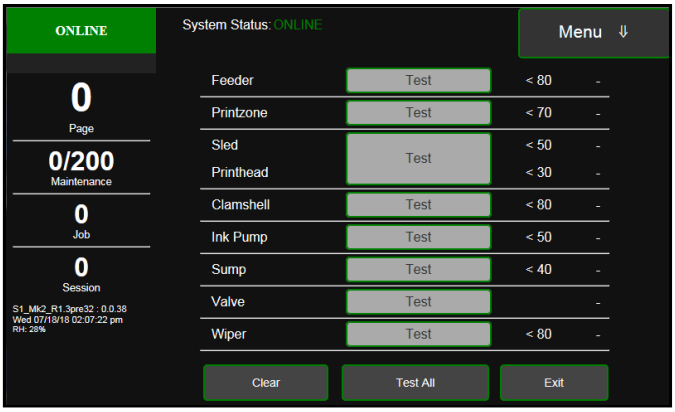
NOTE: These tests should only be performed by authorized service personnel.

System Test allows testing individual or all Printer systems listed to check that they are operating within specifications. It also allows service people to check the Printer after servicing or replacing parts, particularly belts.

Tap **Menu**, then **System Test** to open the **Password** screen. Enter the password and tap **"Submit"** to open the **System Test** screen.



NOTICE:
Prior to running the System Test make sure no media is loaded in the Printer and there are no obstructions in the media path.
The Printhead must be installed and the Printhead Latch must be shut or the "Sled" and "Printhead" (lifter) tests will fail.



CAUTION:
To avoid damaging the wiper motor module, do NOT run "Wiper" test with a dry wiper roller/wiper motor module. Verify wiper roller is black with ink, before running "Wiper" test.
The following events hydrate the wiper roller, and wiper motor module, with ink.
- Printer priming process.
- From Wiper menu, select "Condition Wiper".

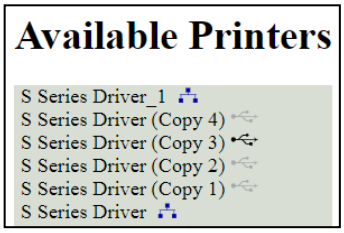
Using Printer Toolbox

Once the "S Series Driver" is installed, you can access the Printer **Toolbox** remotely from a computer. You can check Printer status, monitor ink usage, perform diagnostic checks, print reports and run maintenance tasks on Printer from your computer. The **Toolbox** also has a more extensive list of functions not available on the **Touchscreen** and password protected access to a range of options for qualified service personnel.
For **Touchscreen** functions, see previous Section titled **"Using Printer Touchscreen".**

Opening the Toolbox

1. From you computer, open **Start Menu**.
2. Click on **Toolbox**

3. If prompted, select the desired Printer from the "Available Printers" list

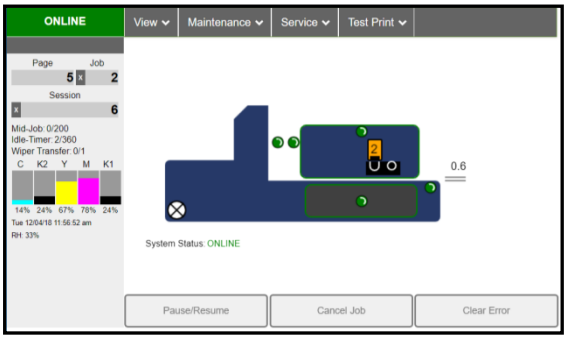


NOTE: If only one "S Series Driver" is installed on your computer, the "Available Printers" list will not be displayed.
If there is more than one "S Series Driver" installed on your computer, you will be prompted with a list of Available Printers.
To open the Toolbox for a particular printer, select the desired printer from this list.

Tip: To help identify the connection type and USB connection status, one of the following symbols will be displayed next to each of the "Available Printers" in the list. Valid for systems that have "S Series Driver" version R1.4.0 and higher installed.

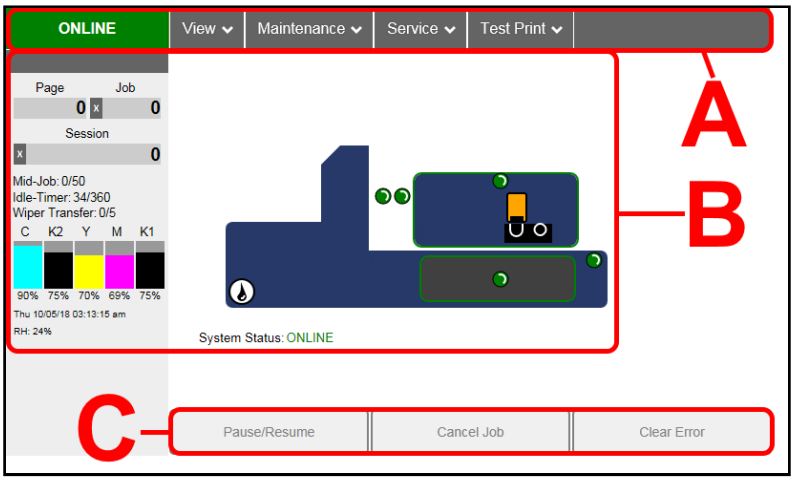
USB – Not Connected
USB – Connected
Network (Ethernet)

4. The **Toolbox** will open in a "web browser" window.



Toolbox Features

[A] System Status Indicator and Drop-Down Menu Options (*at top of screen*).
[B] Check Printer Status (*across middle of screen*).
[C] Three often-used control buttons (*at bottom of screen*).

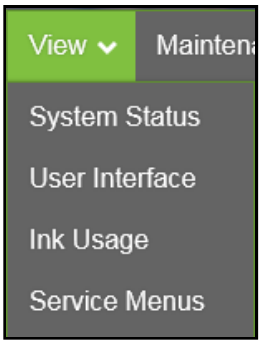


Drop-Down Menu Options

There are four **Drop-Down Menus**: **View, Maintenance, Service** and **Test Print**. The drop-down menus are available on every Toolbox screen allowing you to toggle between menus and select different Printer features and functions.

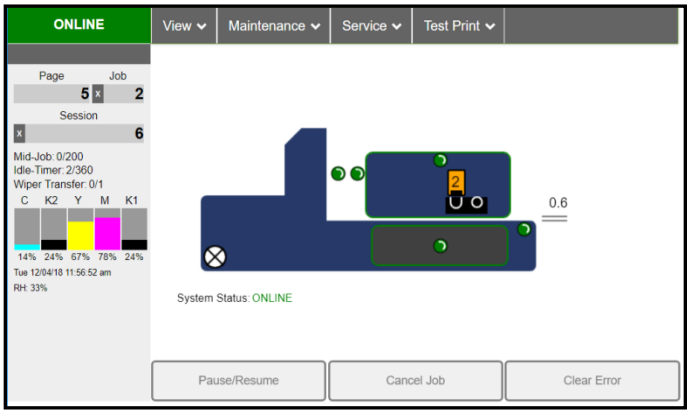
View Drop-Down

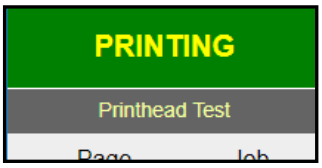
The **View** drop-down gives you four choices:
System Status, User Interface, Ink Usage and **Service Menus.**



System Status

This screen opens when you access the Toolbox. It provides information about the Printer.





Status Indicator *(upper left corner)* shows Printer activity as **ONLINE**, **ERROR**, **MAINT** (maintenance), **PRINTING** or **PAUSED**. When "PRINTING"; the gray box (*below Status Indicator*) shows the name of the job being processed/printed. Example: Printhead Test

Page shows page count for current or most-recent job.

Job shows number of jobs printed. Click on "X" to reset counter.

Session shows total number of pages printed for all jobs. Click on "X" to reset counter.

Mid-Job counts down pages until the next automatic Printhead maintenance will be performed by the Service Station. Value can be adjusted on the User Interface screen, ***Mid-Job Servicing***. In this example, service is performed every 200 pages.

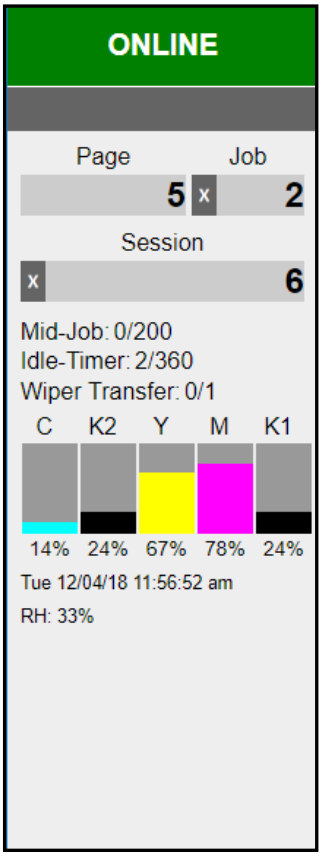
Idle-Timer shows how often automatic maintenance will run when Printer is "Idle" (not being used). In this example "2/360"; 2 = elapsed idle minutes. 360 = preset amount of minutes Printer must be idle before automatic maintenance is performed.
Value (minutes) can be set in the User Interface screen, ***Idle Timeout (min)***.

Wiper Transfer shows how often a Wiper Transfer (*removal of excess ink from Service Station's Wiper Roller*) will be performed, in relation to when a Printhead maintenance is performed.
Value can be set in User Interface screen, ***Wipe Transfer Frequency***.

Ink Levels displays estimated percentage of ink remaining in each Ink Tank.

Date and Time shows currently set date and time. Values can be configured and set in ***Service Menus*** screen, ***System Settings***, ***Date and Time***.

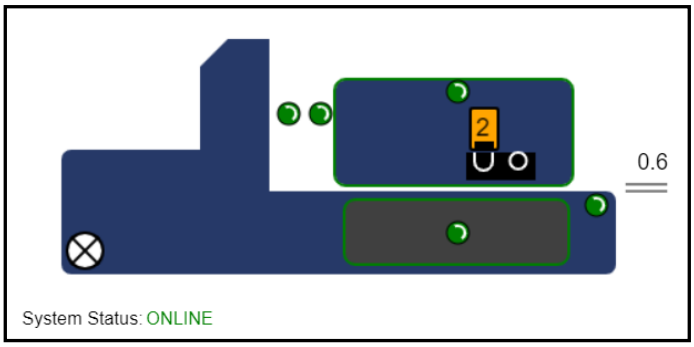
Relative Humidity (RH) displays current RH; detected within printer.



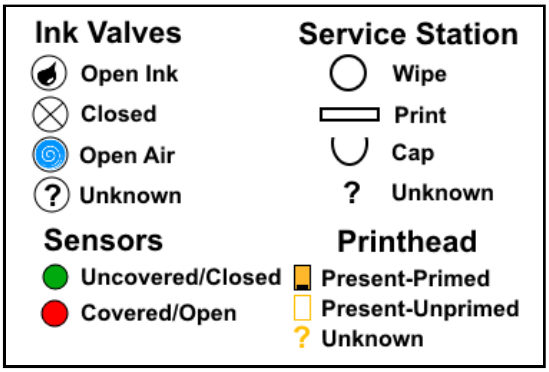
NOTE: Additional **Printer Messages** may appear under ***"RH"*** area**.**

Printer Icon: Shows status of Media Sensors, located in the media feed path of the Printer, as well as status of the Ink Valve, Service Station, Printhead, Print Height, Printhead Door, Ink Tank Door and Media Thickness.

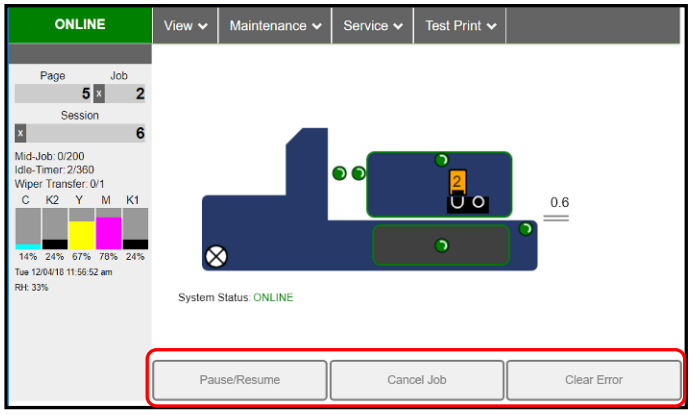
Status icons (*see icon key below*) are used to alert the operator to the type and location of a problem.
Rolling over any of the status icons, with your cursor, pops up a description of that icon.



NOTE: When an error is detected; the "***System Status:***" line may show additional details such as "DOOROPEN_INK".



CONTROL BUTTONS (*located along bottom of screen*): Provide quick access to often-used functions.



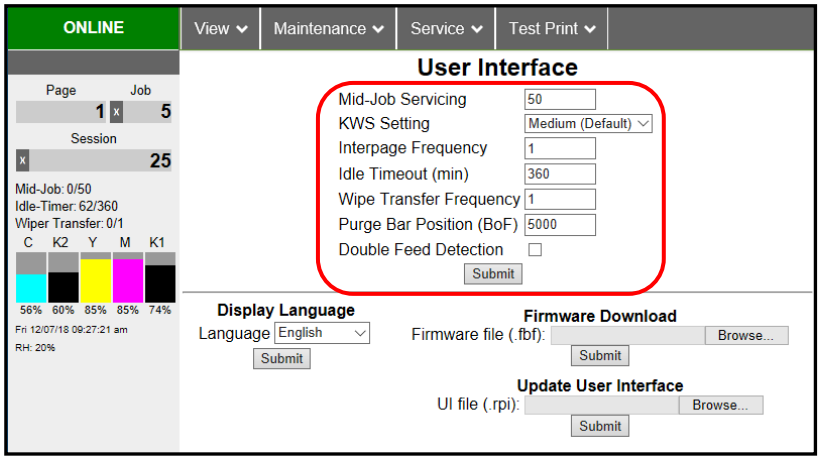
Pause/Resume: Tap to temporarily pause printing. Tap again to resume printing.

Cancel Job: Cancels (deletes) a paused job from the printing queue.
NOTE: "Cancel Job" button is unavailable unless the "Pause" button has been pressed first.

Clear Error. Click this button to clear error messages after you have resolved a Printer problem (*i.e., after clearing a paper jam*).

User Interface

Use the items in this menu to adjust the following features.



Mid-Job Servicing – Sets frequency (number of pages printed) before automatic Printhead maintenance occurs. In this example, maintenance will run after every 50 pages printed. Common range is between 50 and 250 pieces. ***NOTE***: Higher values will increase productivity (less pausing for maintenance), but may also increase print quality issues. Experiment to find an acceptable selection for your application/environment.

KWS Setting – (*Keep Wet Spitting*) Use to help keep all Printhead nozzles hydrated while running a job. This is done by firing all nozzles (dots), in a preset pattern/density, based on selection. ***None*** (turns off KWS), ***Light*** (low density of KWS dots), ***Medium*** (default; medium density of KWS dots), ***Heavy*** (highest density of KWS dots). ***NOTE*:** Setting this feature to "None" will eliminate KWS dots being printed on media, but may increase nozzle dehydration issues (nozzles that intermittently stop firing).

Interpage Frequency – Sets how often the Printhead purges, between pages, to help keep nozzles hydrated. For longer media, a setting of **1** is normal (*between every page*); for short media, a setting of **3** might be preferable (*purge after every third page*). ***NOTE*:** Setting this feature to a higher value may help to reduce ink overspray (ink buildup within printer). However a higher value may also increase nozzle dehydration issues (nozzles that intermittently stop firing). Experiment to find an acceptable selection for your application/environment.

Idle Timeout (min) – Sets how often "Idle Maintenance" will run when Printer is "Idle" (not being used). Commonly set to 360 minutes (6 hours) but can be adjusted as needed. **NOTE:** Idle Maintenance is performed to help keep the Printhead and ink system in good working order; for the next time printer is used.

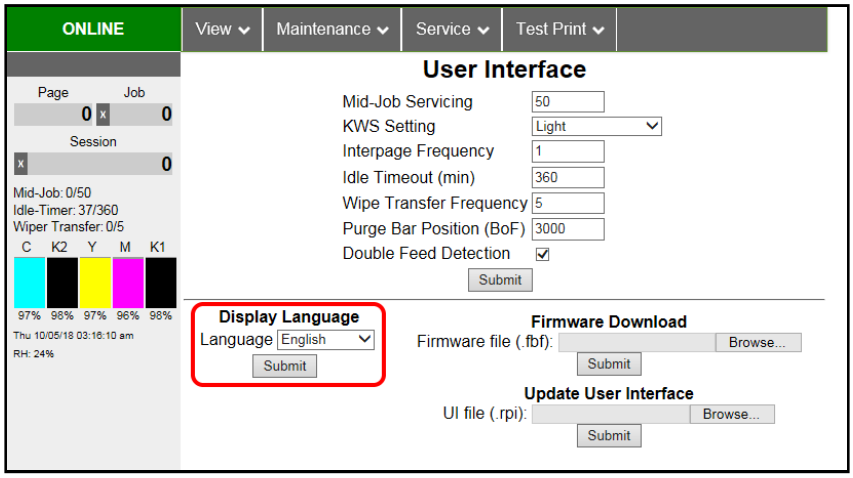
Wipe Transfer Frequency – Sets how often a "***Wiper Transfer***" (*removal of excess ink from Service Station's Wiper Roller*) will be performed, in relation to when Mid-Job Servicing (MJS) is performed. Common range is between 1 and 3. 1= after every time MJS is performed. 3= after every third time MJS is performed. ***NOTE*:** Setting a value of 1 in conjunction with a low MJS value (50 pages), when running short media, may cause "wiper overtemp" issues (wiper motor getting too hot because it is used too frequently). If you experience this issue, try setting Wiper Transfer Frequency value to 3. Experiment to find an acceptable selection for your application/environment.

Purge Bar Position (BoF) – Use to adjust the Bottom of Form (BoF) in micron increments ***(1000 =1mm)***. BoF is where printer identifies trailing edge of media. Adjusting this value also moves the "Purge Bar" position. ***What is a "Purge Bar"?*** To help keep all nozzles hydrated; the Printhead purges (spits) a small amount of ink, from all nozzles, into the gap between pieces. Purge frequency is based on "***Interpage Frequency***" setting. Adjustment to the "Purge Bar Position (BoF)" may be needed when running irregular-shaped pieces (*like an envelope being fed with an open, triangle shaped, flap*). In this case, the Entry Sensor may "read" the lower part of the triangle shaped flap as the trailing edge of the media. This may cause the Purge Bar to be sprayed onto the tip of flap, instead of between pieces.
Tip: Be sure to position the Feeder/Entry Sensor so it sees the longest continuous area of the media length.

Double Feed Detection – When checked (*default*); printer stops feeding media when a double feed condition (*change in media length, due to media overlap*) is detected.

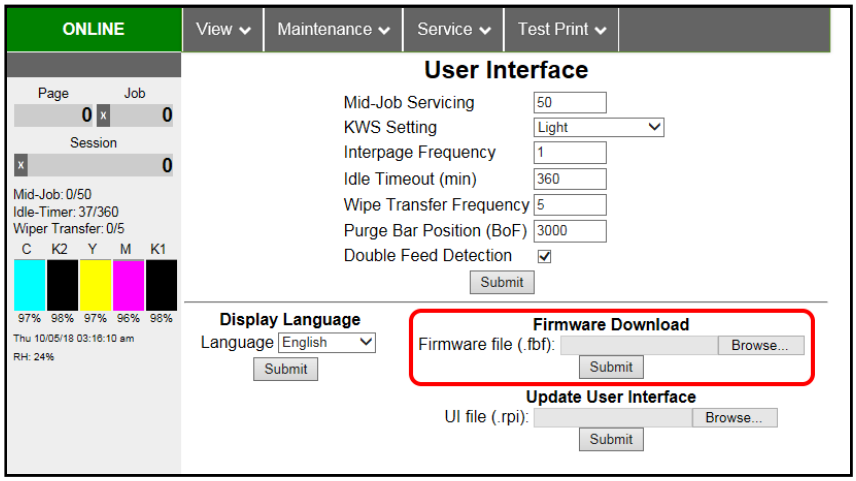
Click **"Submit"** to apply settings.

DISPLAY LANGUAGE:
Selects language **Toolbox** will display. Click **"Submit"** after selecting language.



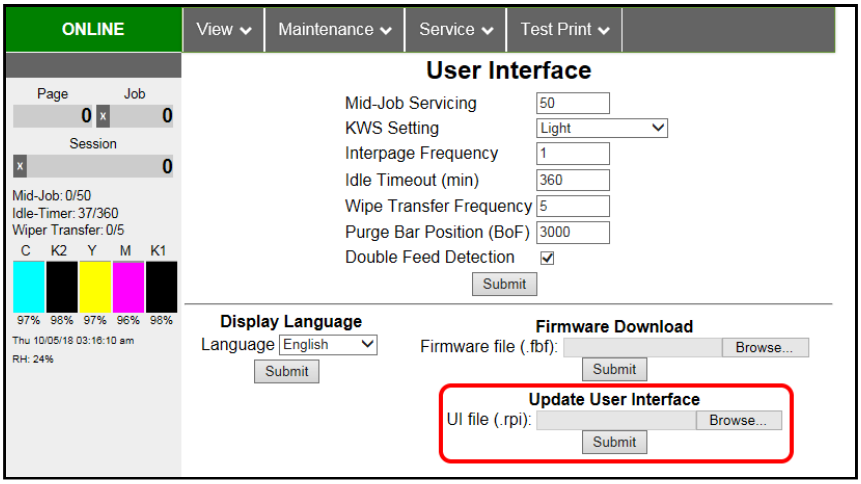
FIRMWARE DOWNLOAD:
This feature is used to update the firmware in the Printer.
NOTE: Firmware and UI updates are normally provided in a set. To ensure compatibility; please be sure to update both items in the set. Printer will reboot after firmware file (.fbf) is sent and update has completed.

WARNING: This procedure should only be performed by qualified service personnel. If this process is not performed properly, Printer could be rendered inoperable.



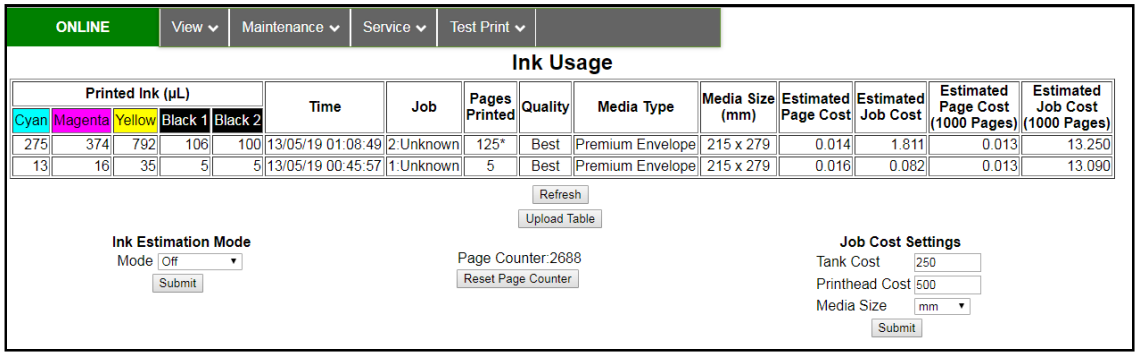
UPDATE USER INTERFACE:
This feature is used to update the User Interface (UI) software for the Printer Touchscreen.
NOTE: Firmware and UI updates are normally provided in a set. To ensure compatibility; please be sure to update both items in the set. UI will reboot after software file (.rpi) is sent and update is complete.

WARNING: This procedure should only be performed by qualified service personnel. If this process is not performed properly, Printer could be rendered inoperable.



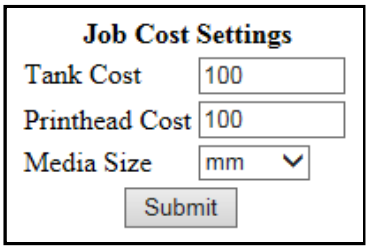
Ink Usage

Displays the estimated amount of ink used along with other information for each job sent to the Printer. Also tracks estimated **Page** and **Job Costs** if information is entered in **Job Cost Settings**.



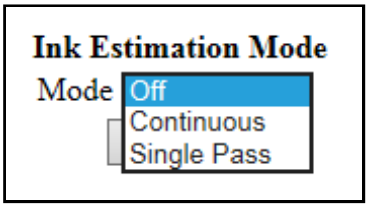
WARNING! These features are provided for estimation purposes only. No guarantee of accuracy is expressed or implied. Actual Ink Usage and Job Costs may vary from estimated values.

JOB COST SETTINGS – Allows you to enter Ink Tank Cost, Printhead Cost and select Media Size preference (*inches or mm*).

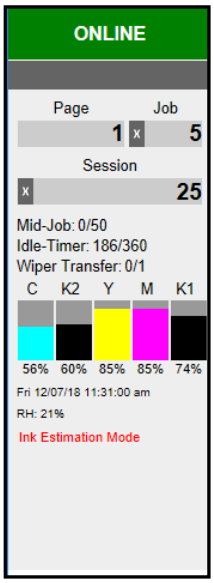


Tank Cost – Enter average cost of single Ink Tank.
Printhead Cost – Enter cost of Printhead.
Media Size – Select how Media Size value is displayed (mm or inches).
Click **"Submit"** button to save values. Once costs are entered and saved, they will remain until changed again; even if Printer is turned OFF.

INK ESTIMATION MODE – Provides the ability to estimate ink usage and job cost without actually printing the job. When this feature is set to "Continuous" or "Single Pass"; job loads and processes, but does not print.



Off – Ink Estimation Mode is disabled. Printer will print job(s). Printer still tracks estimated per page cost and estimated job cost as job is being printed.
Continuous – Use when estimating multiple consecutive jobs. Ink Estimation Mode will stay active. Printer will NOT print until you manually select "**Off**".
Single Pass – Use to estimate a single job. Ink Estimation Mode will automatically turn off after job processing has completed.
Click **"Submit"** button to activate the choice that was selected.



NOTE: The message" Ink Estimation Mode" is displayed in the Toolbox and Touchscreen to alert the user that the printer will not print when this mode is enabled**.**

Tip*:* Send at least 999 pages to obtain a more accurate estimate. It takes just as long to estimate ink usage as it does to print a job. When estimating a large job; you can send a portion of the job and extrapolate the results. For example; send 1,000 pages of 20,000 page job, then multiply "Printed Ink" and "Job Cost" values by 20.

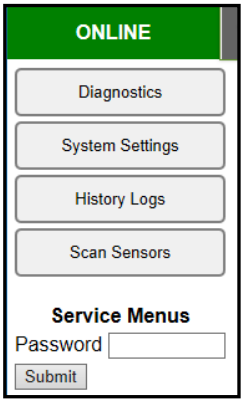
Refresh button - Once a job is processed, click **"Refresh"** button to display results.

Upload Table button – Saves Ink Usage values to a CSV file. File can be opened using Microsoft Excel.

Reset Page Counter button**–** Click this button to reset the Ink Usage Page Counter to zero.
NOTE: This does not affect page counts shown in other areas of the Toolbox or Touchscreen.

Service Menus

Clicking **Service Menus** opens the **Service Menus** (*Diagnostics*) screen and service menu buttons.



Diagnostics button: Click to check the status of the Printer. (*See section titled "**Diagnostics**" for more details.)*

System Settings button: Click to view, enter or change settings to connect Printer to your network. Also configure and set the Printer's Date and Time. And set the level of detail desired for Debug Logs. (*See section titled "**System Settings**" for more details*.)

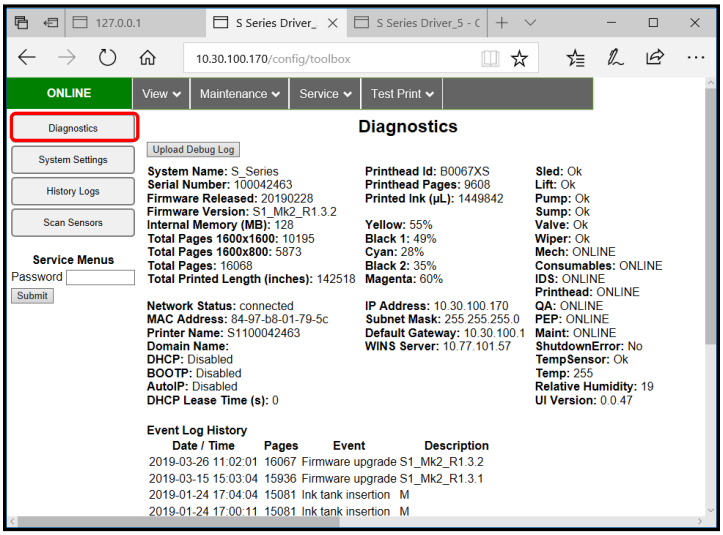
History Logs button (previously Debug Logs button): Click to display a list of available (stored) Debug and Job logs. Then select the Log to be opened or uploaded. (*See section titled "**History Logs"** for more details*.)

Scan Sensors button: Provides status and a log of sensor activity on sensors located throughout the Printer. (*See section titled "**Scan Sensors**" for more details*.)

Service Menus, Password: Entering the **Service Menu password** provides access to more advanced Printer control and maintenance menus. For authorized service personnel only.

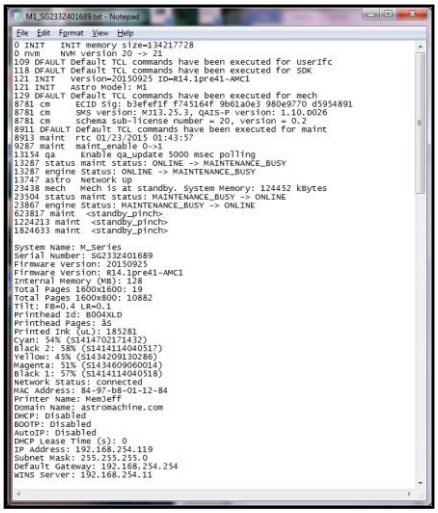
Diagnostics

This is the screen that opens when you select **"Service Menus"**.
From this screen you can see current status of the Printer and its internal components; including page counts, Ink Tank status, Printhead status, Network status and Event Log History.

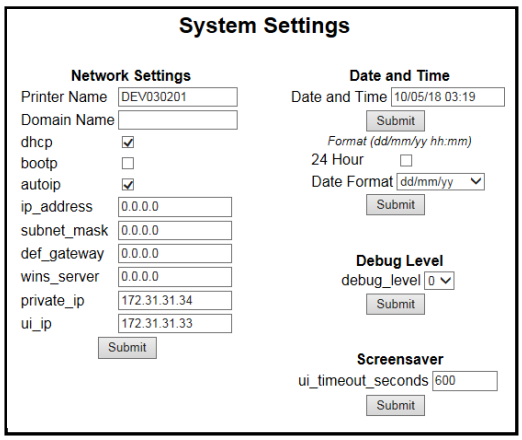


Event Log History – Displays major events that have occurred on the Printer (*Such as Printhead or Ink Tank insertions and Firmware upgrades.*)

Upload Debug Log – Clicking this button creates a text file that contains a snapshot of recent printer events, as well as current printer configuration and settings. (*See Sample Log below right.*) **NOTE**: If a persistent problem arises, that you can't identify, click the Upload Debug Log button after recreating the problem but before powering-down the printer. This information is lost once the printer is powered down. Provide this log file to the technician to help them identify the problem. Include information on what happened just before problem occurred; including screenshot of Toolbox "System Status".



System Settings

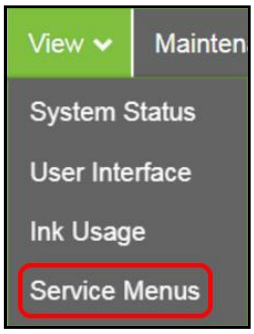


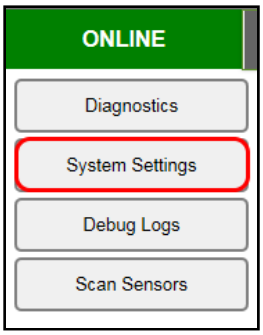
Allows you to change the Printer's network settings, set the **Date and Time**, set the **Debug Log Level** and set the **Screensaver** timeout.

Network Settings – Permits you to view, enter or change the Printer's internal and external network settings.

NOTE: Please use the Printer's Touchscreen features, when initially connecting the Printer to a network.
See section titled "Connecting Printer via Network (Ethernet Connection)".

To view or change Printer Network Settings:
NOTE: This process assumes that you have already loaded the printer driver and have already established a working Toolbox connection to the printer.





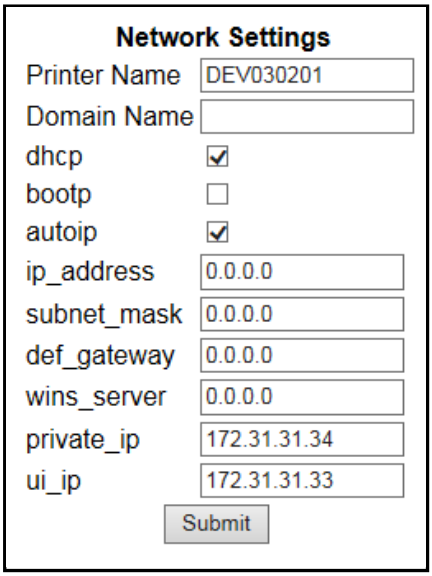
1. From the **Toolbox,** select **"View"** drop-down menu, click **"Service Menus"** and then click **"System Settings"**.

2. **"System Settings"** screen opens. Use **Network Settings** to view or change settings for your network.

   WARNING: If you are currently connected to the printer via a network connection; you may lose Toolbox and printer driver communication if you make changes to your current Network Settings.

   NOTE: If manually changing the **ip_address**, make sure the **"dhcp" and "autoip" boxes are unchecked**. (*Default is checked*.)

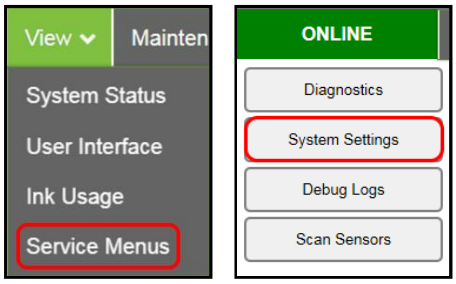
3. Enter changes in the appropriate boxes. Click **"Submit"**.



private_ip and **ui_ip** – These IP addresses are for the Printer's internal communication; between the MPCA (main board) and Printer Touchscreen (UI). They don't commonly need to be manually changed, but they may change automatically. These values may vary, but the last two characters (shown as 34 and 33, in this example) should always be one digit off from each-other; as shown here.

Date and Time – Set the date and time or change the format of how the date and time will appear in the Toolbox and Touchscreen.

To set or format Date and Time:



1. **From the Toolbox,** select **"View"** drop-down menu, click **"Service Menus"** then click **"System Settings"**.

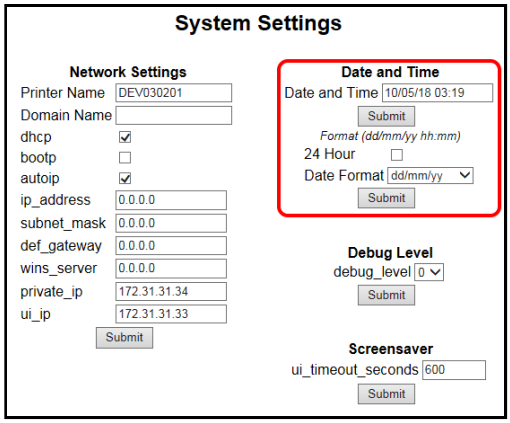
2. **"System Settings"** page opens. Use the following **Date and Time options** to enter, edit and format the Date and Time for the Printer.

   Date and Time – set/adjust date and time here.
   NOTE: This field is always displayed as "dd/mm/yy hh:mm". Hours and minutes always displayed as "24 Hour" clock. Format for this field will **not** change when you change the choices below.

   24 Hour – Select (check) this box for 24 Hour clock.
   Un-check this box for 12 Hour clock.

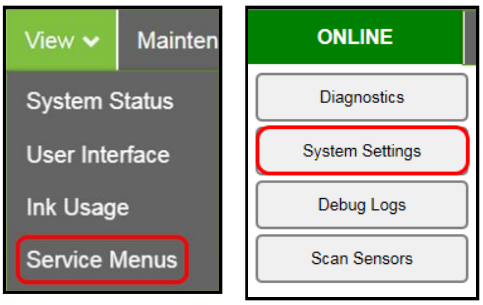
   Date Format – Select between the following date formats. dd/mm/yy, dd-mmm-yy, mm/dd/yy, mmm-dd-yy, yy/mm/dd, yy-mmm-dd

3. Click **"Submit"**.



Debug Level – Set the detail level of the Debug Logs.
NOTE: If experiencing a persistent issue; you may be asked to provide a Debug Log from your printer. A technician may ask you to set the Debug Level to 1 or 2, and reproduce issue, before providing them with the Debug Log file.

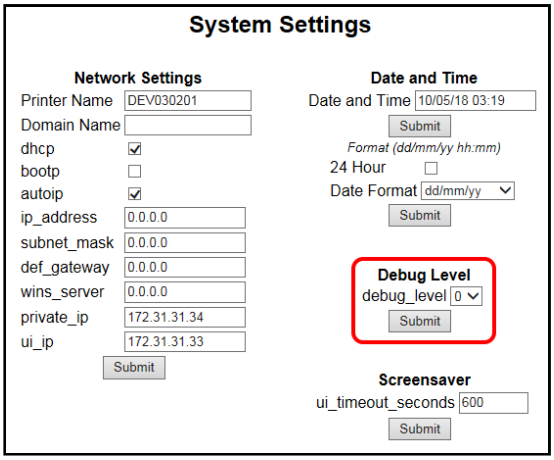
To change the Debug Level:



1. **From the Toolbox,** select **"View"** drop-down menu, click **"Service Menus"**, and then click **"System Settings"**.

2. **"System Settings"** page opens. Go to **Debug Level** options and select 0, 1, or 2 to set the desired detail level for the Printer. (0 = least detailed, 2 = most detailed).
   NOTE: Because of the amount of data collected and stored; the **Debug Level** should <u>not</u> be left at a setting above 0 (zero), unless asked to do so by a service technician. Please set the **Debug Level** back to zero after providing the requested Debug Log file.

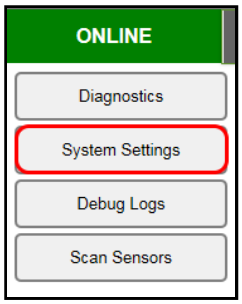
3. Click **"Submit"**.

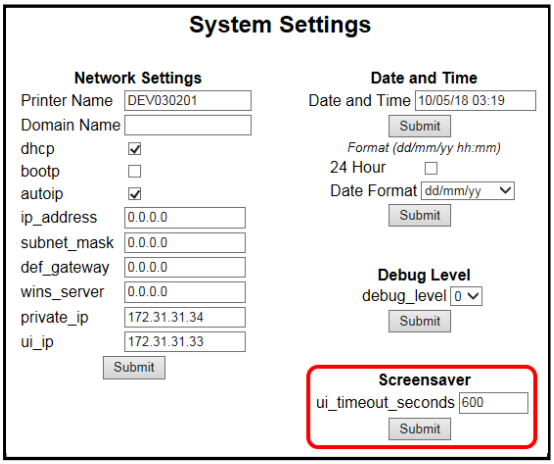


Screensaver – Set the amount of time (seconds) the Touchscreen will remain ON, when there is no user input, before going to "sleep mode".

NOTE: Touchscreen will go to "sleep mode" (black) when it has not been touched for the length of time (seconds) defined by the value for "***ui_timeout_seconds***". Default = 600 seconds (10 minutes).
Once in "sleep mode", the screen will automatically wake-up (turn ON) if it is touched.

1. **From the Toolbox,** select **"View"** drop-down menu, click **"Service Menus"**, and then click **"System Settings"**.
2. **"System Settings"** page opens. Under **Screensaver**, in the field next to "***ui_timeout_seconds***", enter the number of seconds the Touchscreen will remain idle before going to "sleep mode".
3. Click **"Submit"**.





History Logs (formerly Debug Logs)

Use to access/open Printer Debug and Job logs.
These files are valuable for diagnosing and troubleshooting problems.

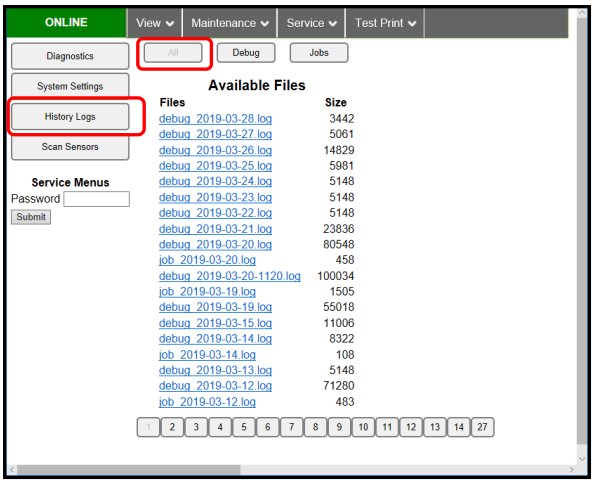
NOTE: If experiencing a persistent issue; you may be asked to provide a Debug Log from your printer. A technician may ask you to set the **Debug Level** to 1 or 2, and reproduce issue, before providing them with the Debug Log file.

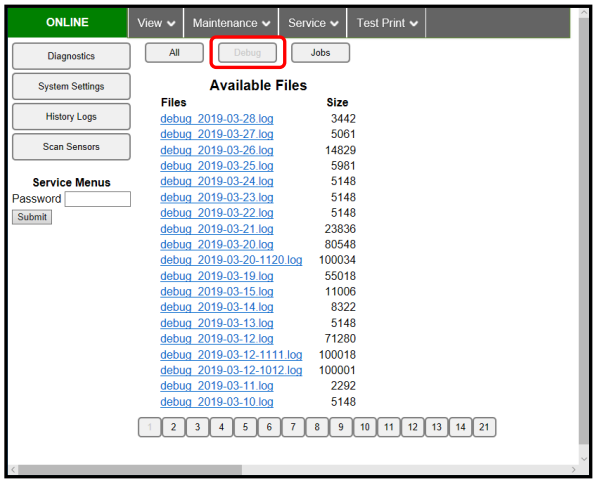
All – Shows all (Debug and Jobs) log files available.

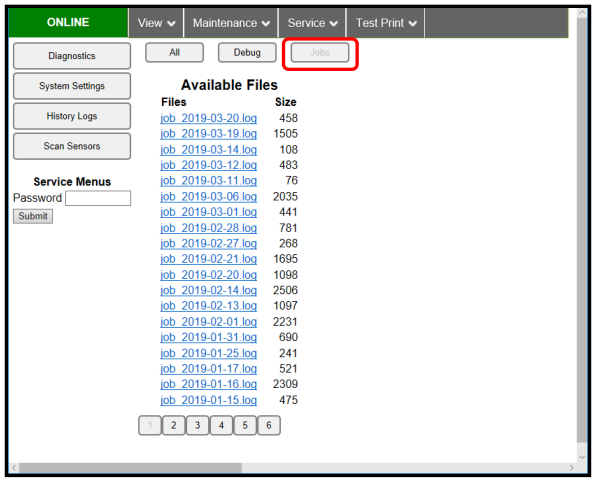
Debug – Shows only **Debug** log files.

Jobs – Shows only **Jobs** printed log files.

NOTE: In general, each day, a separate Debug and Job log is saved to UI memory; for future reference. Log files are saved with the following formats.
"debug_yyyy-mm-dd.log"
"job_yyyy-mm-dd.log"

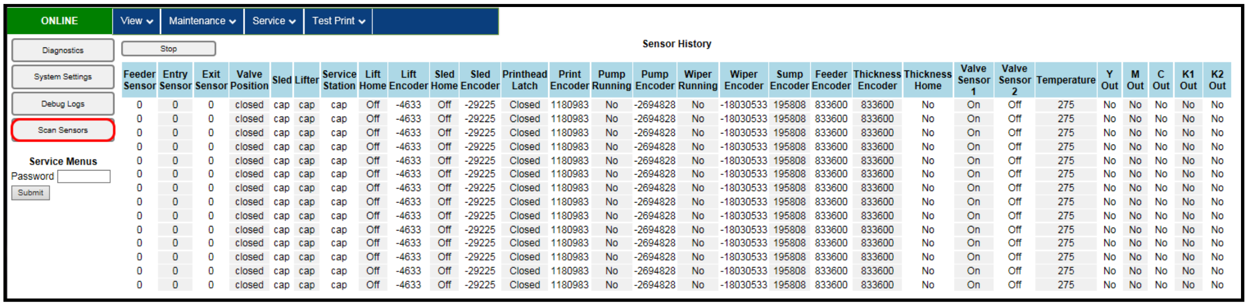






Scan Sensors

Displays status for Sensors and Encoders, located throughout the Printer. (*See chart below*)
Sensors are polled, and a new status line is provided, every few seconds.



Sensor History

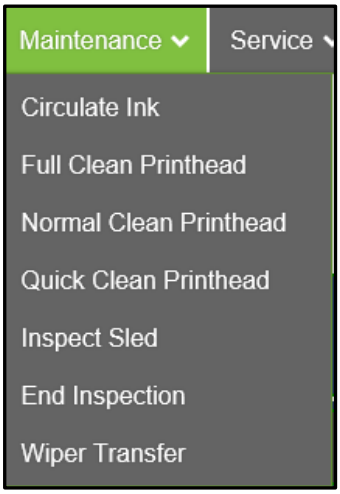
Feeder Sensor	Entry Sensor	Exit Sensor	Valve Position	Sled	Lifter	Service Station	Lift Home	Lift Encoder	Sled Home	Sled Encoder	Printhead Latch	Print Encoder	Pump Running	Pump Encoder	Wiper Running	Wiper Encoder	Sump Encoder	Feeder Encoder	Thickness Encoder	Thickness Home	Valve Sensor 1	Valve Sensor 2	Temperature	Y Out	M Out	C Out	K1 Out	K2 Out
0	0	0	closed	cap	cap	cap	Off	-4633	Off	-29225	Closed	1180983	No	-2694828	No	-18030533	195808	833600	833600	No	On	Off	275	No	No	No	No	No
0	0	0	closed	cap	cap	cap	Off	-4633	Off	-29225	Closed	1180983	No	-2694828	No	-18030533	195808	833600	833600	No	On	Off	275	No	No	No	No	No
0	0	0	closed	cap	cap	cap	Off	-4633	Off	-29225	Closed	1180983	No	-2694828	No	-18030533	195808	833600	833600	No	On	Off	275	No	No	No	No	No
0	0	0	closed	cap	cap	cap	Off	-4633	Off	-29225	Closed	1180983	No	-2694828	No	-18030533	195808	833600	833600	No	On	Off	275	No	No	No	No	No
0	0	0	closed	cap	cap	cap	Off	-4633	Off	-29225	Closed	1180983	No	-2694828	No	-18030533	195808	833600	833600	No	On	Off	275	No	No	No	No	No
0	0	0	closed	cap	cap	cap	Off	-4633	Off	-29225	Closed	1180983	No	-2694828	No	-18030533	195808	833600	833600	No	On	Off	275	No	No	No	No	No
0	0	0	closed	cap	cap	cap	Off	-4633	Off	-29225	Closed	1180983	No	-2694828	No	-18030533	195808	833600	833600	No	On	Off	275	No	No	No	No	No
0	0	0	closed	cap	cap	cap	Off	-4633	Off	-29225	Closed	1180983	No	-2694828	No	-18030533	195808	833600	833600	No	On	Off	275	No	No	No	No	No
0	0	0	closed	cap	cap	cap	Off	-4633	Off	-29225	Closed	1180983	No	-2694828	No	-18030533	195808	833600	833600	No	On	Off	275	No	No	No	No	No
0	0	0	closed	cap	cap	cap	Off	-4633	Off	-29225	Closed	1180983	No	-2694828	No	-18030533	195808	833600	833600	No	On	Off	275	No	No	No	No	No
0	0	0	closed	cap	cap	cap	Off	-4633	Off	-29225	Closed	1180983	No	-2694828	No	-18030533	195808	833600	833600	No	On	Off	275	No	No	No	No	No
0	0	0	closed	cap	cap	cap	Off	-4633	Off	-29225	Closed	1180983	No	-2694828	No	-18030533	195808	833600	833600	No	On	Off	275	No	No	No	No	No
0	0	0	closed	cap	cap	cap	Off	-4633	Off	-29225	Closed	1180983	No	-2694828	No	-18030533	195808	833600	833600	No	On	Off	275	No	No	No	No	No
0	0	0	closed	cap	cap	cap	Off	-4633	Off	-29225	Closed	1180983	No	-2694828	No	-18030533	195808	833600	833600	No	On	Off	275	No	No	No	No	No

NOTE: The information shown in the "**Scan Sensors**" screen is meant for use by a technician.
You may be asked to capture a screenshot of this screen, and send it to a technician, to aid in troubleshooting.

Click "**Stop**" button to stop scanning; to make screen capture easier.

Click "**Start**" button to start scanning sensors again.

Maintenance Drop-Down



Perform maintenance tasks on the Printer/Printhead.
The printer automatically performs maintenance tasks to keep the printhead and ink system performing properly. The following features can be used, as needed, to provide supplemental maintenance.
CAUTION: Over-use of these features can negatively affect print quality and printer performance.

Circulate Ink –Pumps ink through the ink system and Printhead.
Use to help fill ink lines and purge air from the system.

Full Clean Printhead – Runs a routine, similar to Printhead Priming, to thoroughly flush and clean the Printhead. Use to clear air from the system, clear inkjet nozzles, hydrate the wiper roller and improve print quality. In general, this feature should NOT be used more than once a day. If used too often, wiper roller oversaturation may occur which can cause print quality issues.

Normal Clean Printhead – Circulates ink, purges nozzles, wipes/cleans the surface of the Printhead. Use to help clear inkjet nozzles and improve print quality.

Quick Clean Printhead (Wipe Printhead) – Wipes/cleans excess ink from Printhead Surface. No ink is electronically ejected in this process, but ink is still wicked from the head during this process.

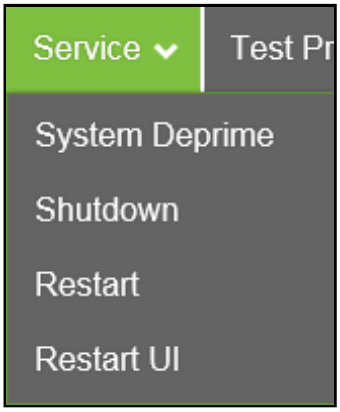
Inspect Sled – Moves Service Station to an accessible position, out from under the Printhead, to allow for inspection, cleaning or service. Printhead is also presented in Printhead Opening for inspection and manual cleaning using a lint free cloth dampened with DI water.

End Inspection – Gives printer back control over Service Station; so printer can perform Printhead maintenance and capping.

Wiper Transfer – In this process the wiper roller is rotated to transfers any debris and excess ink from the Wiper Roller to the Squeegee Roller within the Service Station. This process is also used to maintain proper Wiper Roller moisture content. If Wiper Roller gets too dry; it cannot remove the ink and debris from the Printhead surface. If Wipe Roller gets too wet; it may leave debris and ink behind, when attempting to clean the Printhead surface.

Service Drop-Down

The following features can be found under the Service drop-down list.



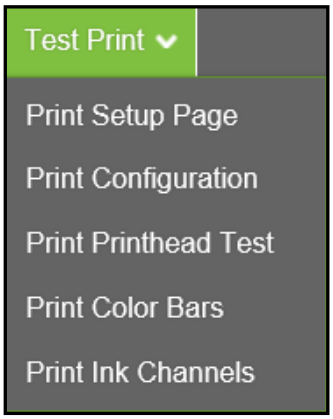
System Deprime – Pumps ink from Printhead and ink system, back into Ink Tanks. Use this feature before replacing the Printhead Cartridge or transporting the Printer.

Shutdown – Powers-down the Print Engine and Touchscreen.
Same as using Soft-Power Button.
When this feature is selected, the printer will perform head maintenance and then cap the Printhead before powering-down the Print Engine.
NOTE: For best system performance, it is recommended to keep Print Engine powered-up (*Soft-Power light illuminated*) at all times.

Restart – Shuts-down and restarts the Print Engine and Touchscreen without perform long-term shut-down maintenance routines. Printer will still go through normal startup process at power-up. This feature is useful when a printer re-boot is needed. It takes less time than using the Shutdown feature.

Restart UI – Shuts-down and restarts the Printer's Touchscreen Display without perform any Print Engine maintenance or Print Engine startup routines. This feature is useful if the Touchscreen becomes unresponsive.

Test Print Drop-Down



Use to printout Printer Configuration values and Test Patterns.
Test patterns are useful for troubleshoot printhead and print quality issues.

Each printout displays information about the Printer.

Print Setup Page – Prints a pattern that can be used to check printing alignments with the page. Designed for use with Letter and A4 sized media.

Print Configuration – Prints current Printer configuration including Firmware Version, Network Connection, Printer Serial Number and more.

Print Printhead Test – Prints color bands, text and patterns. Use to check condition of inkjet nozzles in Printhead.

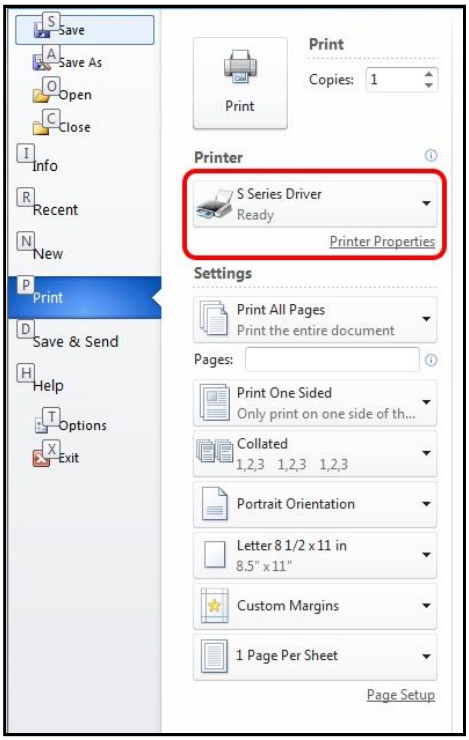
Print Color Bars – Prints a series of 7 color bars, showing mixed ink colors.

Print Ink Channels – Prints a separate block from each individual ink channel (CMYKK), showing how well each channel is working.

Printer Driver Properties

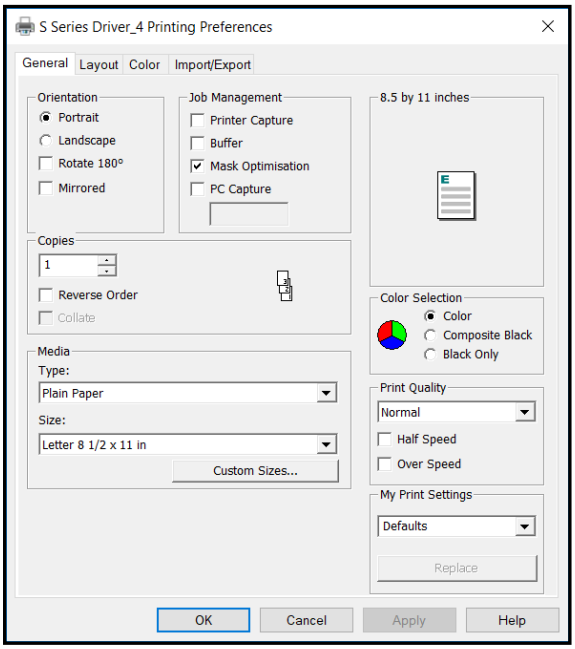
Printer Driver works the same as any other Printer Driver for Windows. It does have some enhancements to help maximize the Printer's ability to print variable addressed pieces quickly and efficiently.

Windows 8, 8.1, and 10: Once job is set up, click **File**, then **Print**. Window at right opens. Make sure **S Series Driver** is the selected Printer. Clicking **Printer Properties** opens **"General" Tab** window.



General Tab

General tab lets you select:



- **Orientation:** ***Portrait*** (*default*), ***Landscape***, ***Rotate 180***° and ***Mirrored***.
  Tip: Instead of changing this setting from "Portrait" to "Landscape"; experiment with the drop-down list of Media "Size" selections (i.e. "6 x 9 in – Portrait" or "6 x 9 in – Landscape") to match the printed image orientation to the actual orientation of how the media is being fed into the printer.

- **Job Management:**
  ***Printer Capture* –** When selected, the printer captures and stores the print job it is currently printing. Once the job has completed; it will be available in the Touchscreen Menu under Job, Stored Jobs. This feature should only be selected for jobs you want to store and repeat at the printer.
  Tip: Use this feature for jobs that you routinely reprint; such as printing your company logo onto envelopes. Use this feature when printing copies of a single record. In this case the job can be sent to the printer as a single piece and then the operator can print the desired number of copies at the printer. If more pieces are needed, at the end of the run, then the operator can simply select this job and select additional copies to be printed. No need to resend job from PC.
  ***Buffer* -** If checked the entire print job will be spooled before it is sent to the printer. This will increase the time it takes for printing to start, but it may help to reduce chance of printer pausing to wait for data.
  ***Mask Optimization* -** (*checked is default*) optimizes images for printing in most applications.
  NOTE: Some applications (*like Flex Mail*) may display image boundaries when printed; un-checking **Mask Optimization** box eliminates these lines. (*Remember to check box when changing applications*.)
  PC Capture – When selected, saves a Print File (*.prn) on the PC (C:\Windows\Temp) for possible troubleshooting purposes at a later time. (*Unchecked is default*.)
  NOTE: Use the box below the selection to name the file; otherwise the Printer assigns the current date and a numerical name.

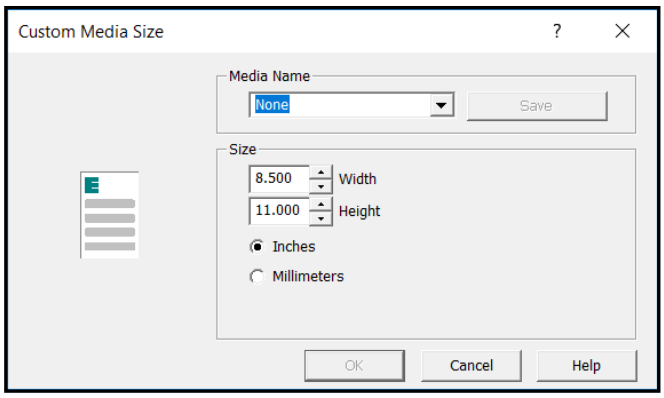
- **Copies:** Enter the number of copies to be printed.
  ***Reverse Order* –** When un-checked (default), job starts printing from first page. Printing starts as soon as fits page loads. When checked, job starts printing from last page. Since entire job must load into Printer Driver before printing starts, large jobs will take longer to start.
  ***Collate* -** When printing multiple copies of multi-page documents, checking the box allows all pages of the document to be printed in proper order before printing the next copy.

- **Media**: Choose a type of media or different size media than document was originally designed for.
  ***Type* -** Chart at right lists media profiles associated with type of media chosen.
  ***Sizes* -** 21 sizes are available. Document is automatically resized to fit new media.

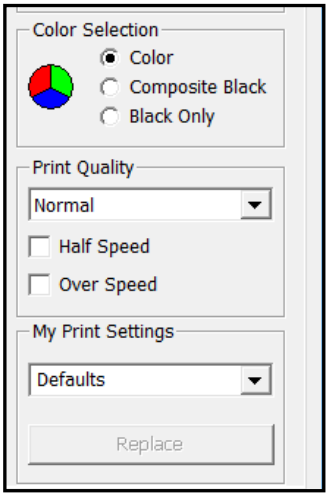
MEDIA PROFILE	MEDIA TYPE
Plain Paper	Plain Paper Bright White Paper
Matte Coated Paper	Presentation Paper Postcards Matte Brochure Matte Labels Matte Other Inkjet Paper Matte
Premium Glossy Paper	Premium Photo Paper Glossy
Glossy Paper	Photo Paper Semi-gloss Photo Paper Glossy Labels Glossy Postcards Glossy Brochure Glossy
Premium Matte Coated Paper	Premium Inkjet Paper Premium Photo Paper Matte

- ***Custom Sizes*** **-** Click on the "Custom Sizes" button to create and save additional media sizes to suit your needs.
  Max Width = 8.77"
  Max Height = 40"
  NOTE: Do not exceed maximum paper size for Printer.

  Displayed value can be set for "Inches" or "Millimeters".



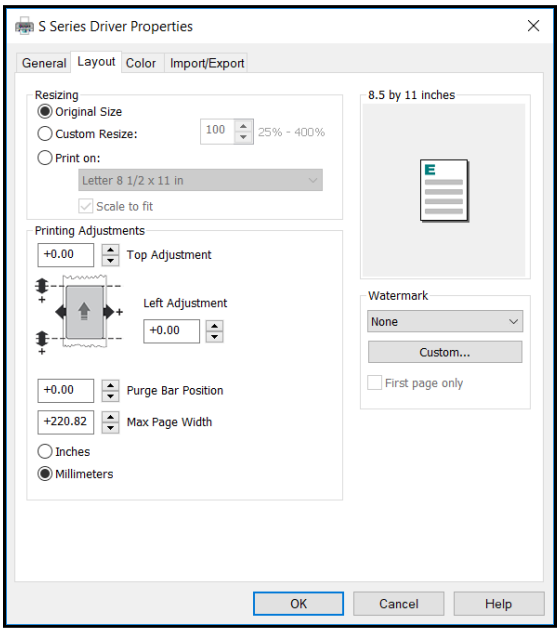
- **Color Selection:** Set Printing for ***Color***, ***Composite Black*** (*uses all colors to print Black*), or ***Black Only*** (*uses only Black ink*).
- **Print Quality:**
  Normal (default) - 1600 x 800 dpi.
  Best - 1600 x 1600 dpi. For use when high quality images are required.
  Half Speed - Checking the "Half Speed" box slows media transport speed; to achieve higher dot accuracy and provide more dry-time before media exits printer. This feature is not available when using Best print quality.
  Over Speed – Checking the "Over Speed" box increases media transport speed by ~25%. This feature is not available when "Half Speed" is selected.
  NOTE: If you experience feeding or printing issues with this feature enabled, please try running with this feature disabled (un-checked).
  Tip: The "Over Speed" feature may not be enabled/available on all printers. Even if feature is enabled within printer, proper Printer Driver and Toolbox communication must be established before this feature will be displayed in S Series Driver.



- **My Print Settings:** Use to Save and Access your saved custom print settings for various jobs.

Layout Tab

Layout allows you change how document prints without changing original document.



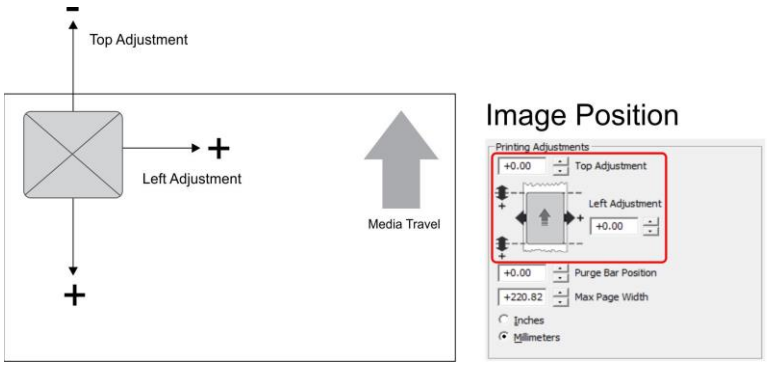
- **Resizing:**
  Original Size – No change to size.
  Custom Resize **-** Resizes original as a % of normal size. Printer prints document in size you selected regardless of paper size selected.

  Print on **-** Specify particular size of paper to print on regardless of size of original document. Checking **"*Scale to Fit*"** automatically resizes document to fit on new page size.

- **Printing Adjustments:** Make minor positioning changes to print area, in relation to media,(if needed).
  Values can be shown in ***Inches*** or ***Millimeters***. Please see "***Using Layout Tab Printing Adjustments***" on next page for details.

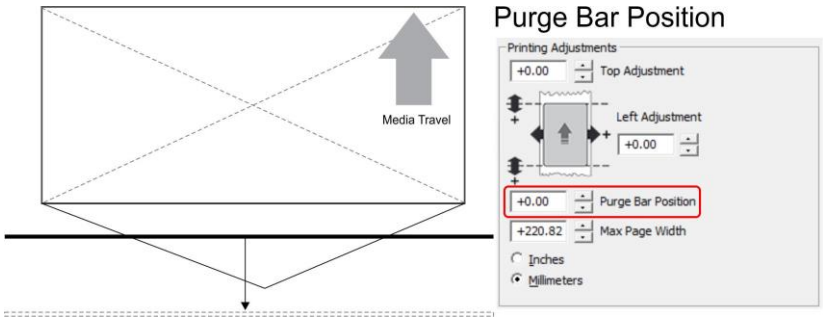
- **Watermark:** A watermark appears as lightly printed "text", such as the word "DRAFT" that is added to and printed with the original job being sent / printed.
  Select "***None***" (default); if you don't want a "watermark" to be printed. All other choices will print the selected "watermark".
  Custom **-** button lets you create a new watermark or edit an existing watermark, including font selection, color, size and printing angle.
  First page only – Unchecked (default) prints selected water mark on all pages. Selecting (checking) prints watermark on first page, but not subsequent pages.

Using Layout Tab Printing Adjustments



Top Adjustment moves image vertically (*-4.98mm up to +200.02mm down*) from top (leading edge) of media. (*0.1mm increments*)

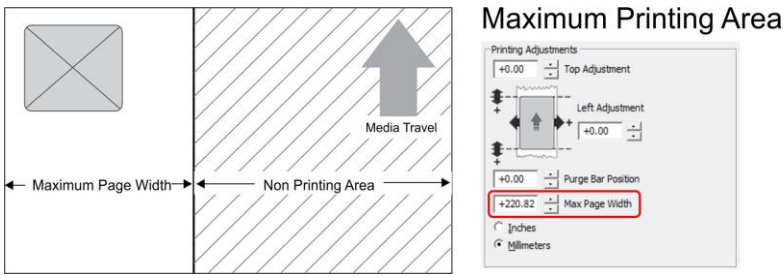
Left Adjustment moves image horizontally (*+200.02mm right*).



Purge Bar Position* – In operation, Printhead spits a small amount of ink into gap between pieces to keep nozzles refreshed (hydrated). For irregular-shaped pieces (*like the open envelope flap, shown above*) sensor may "read" bottom of form early; causing purge bar to be sprayed (printed) onto flap. This feature allows you to adjust the purge bar position (*in 0.1mm increments*) to account for extra distance needed to reach actual gap between pieces.

Tip: To determine Purge Bar Position value; measure the distance from the purge bar (*black line printed on flap*) to the trailing edge of the media (*end of flap*) and add 3mm.

* See also **"Purge Bar Position"** in **Printer Toolbox** section.

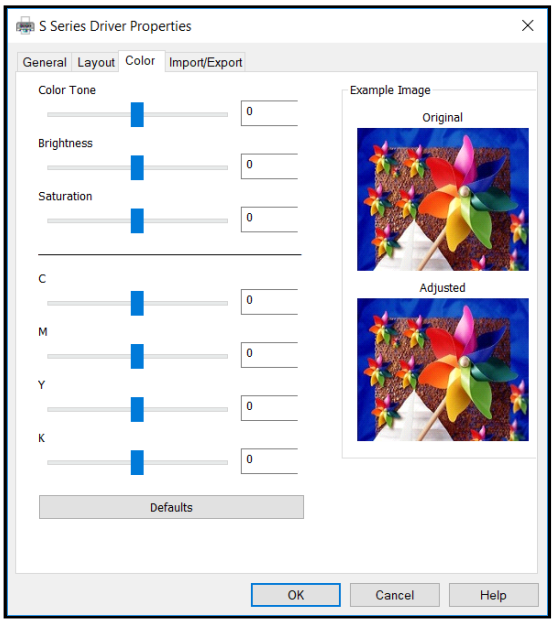


Max Page Width – Sets width of actual print area. (+0.50mm to 222.75mm in *0.1mm increments*). Can be used to cut-off unwanted data or data that may be printed off right side of media.

NOTE: Setting a value lower than 222.75mm reduces the maximum print width of the printhead.

Color Tab

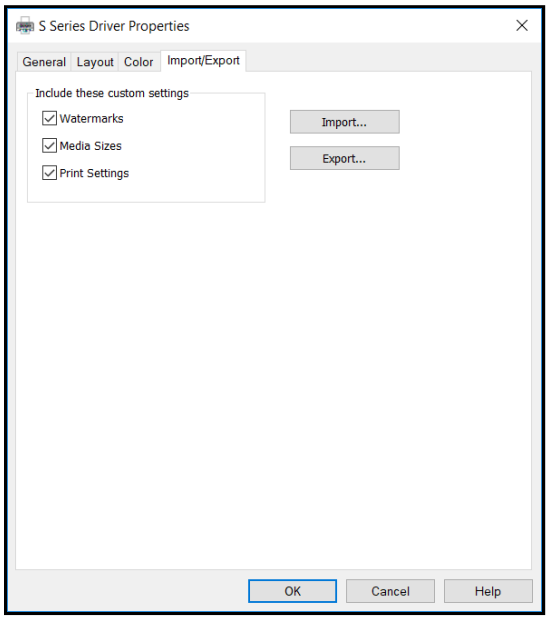
Color is used to adjust the color output of the Printer. Use the sliders to adjust **Color Tone, Brightness** and **Saturation.** The **C, M, Y, K** sliders adjust individual colors. Use **Defaults** to reset to **0** settings.



Import/Export Tab

Import/Export is used to preserve any custom Media Sizes, Watermarks and/or Print Settings you may have developed and saved for various jobs. This is useful if you need to remove and reload the Printer Driver on the current computer or load the Printer Driver onto a new computer.

- **Export –** Saves custom Printer Driver settings to a holding file.
- **Import –** Use to select the holding file that contains your custom Printer Driver settings.



IMPORTANT!

BEFORE REMOVING or UPDATING PRINTER DRIVER, REMEMBER TO FIRST EXPORT ANY CUSTOM MEDIA SIZES, WATERMARKS OR PRINT SETTINGS YOU HAVE ADDED TO AN OUTSIDE HOLDING FILE. THIS PREVENTS THE LOSS OF YOUR CUSTOM SETTINGS.

SECTION 4 – *Software Setup Information*

General Software Setup Info

Do NOT exceed the Min or Max media specifications of the printer:

- **Minimum paper size** printer can feed: 3" wide x 4" height (length).
- **Maximum paper size** printer can feed: 10.5" wide x 17" height (length).
- **Maximum print area** for the printer: 8.77" wide x 40" height (length).
  NOTE: The printer driver and firmware will accept up to a 40" height (length), but the Rear Media Support Guide/Sled is not designed to support media of this length.

Software/Driver Setup for media that is 3" to 8.77" wide:
Select a matching "Media Size" from the pull-down list within the driver or use the "Custom Sizes" (Custom Media Size) button, within the driver, to set the paper width and height (length) to the dimensions of the media. Then set the paper size, within your software, to the same selection/dimensions set within the driver.

Examples:
8.5" x 11" document: Select "Letter", or set a Custom Media Size of 8.5" wide by 11" height (length), in software and S Series Driver. Set top, bottom, left and right margins to minimum values, or any margin you require. Set Portrait orientation in software and driver.

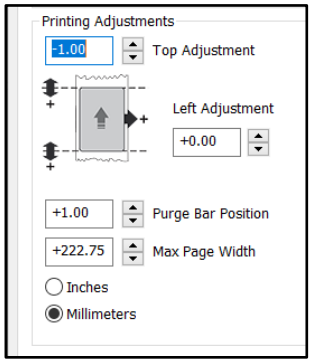
10 envelope (4.13" W x 9.5" L) feeding short-edge first: Select "Env. Com10 4 1/8 x 9 1/2 in – Portrait", in software and driver. Set top, bottom, left and right margins to minimum values, or any margin you require. Set Landscape orientation in software and Portrait orientation driver.

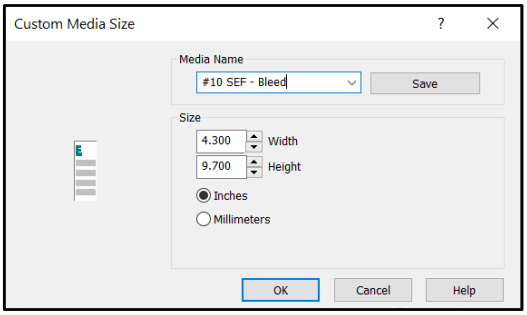
Software/Driver Setup for media that is 8.78" to 10.5" wide:
Select a matching "Media Size" from the pull-down list within the S Series Driver or use the "Custom Sizes" (Custom Media Size) button, in the driver, to set the paper width to 8.77" (max print width) and the paper height (length) to the actual length of your media. Then set the paper size, within your software, to the same selection/dimensions set within the driver.

Examples:
10" x 13" document: Set a Custom Media Size of 8.77" W by 13" H (length) in driver and software. Set top, bottom, left and right margins to minimum values, or any margin you require. Set Portrait orientation in driver and software.

10 envelope (9.5" W x 4.13" L) feeding long-edge first: Select "Env. Com10 4 1/8 x 9 1/2 in – Landscape", in the software and driver. Set top, bottom, left and right margins to minimum values, or any margins you require. Set Landscape orientation in the software and Portrait orientation in the driver.

If you plan to print a "full bleed" image, make sure the PDF file (artwork) is slightly larger than the media you plan to print onto.
Be sure to create a Custom Media Size, in the driver, to accommodate the bleed area. You will also need to use the driver Layout feature (Top Adjustment) to move the image off the top of the media (set to a negative value) and set the "Purge Bar Position" to a larger positive value to allow the image to bleed off the trailing edge.





Adobe® Acrobat/Reader Setup Tips

In general, printing a PDF from Adobe Acrobat/Reader is straight-forward and easy. However there are a few limitations and quirks that you should be aware of.

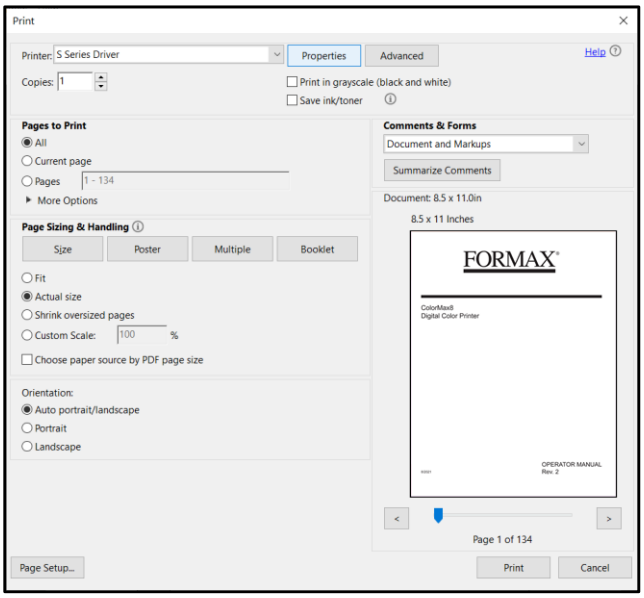
1. **Original PDF should be designed for the piece size and orientation you plan to use.**
   Adobe Acrobat has some nice controls for changing orientation and adjusting the image size to fit the media size you select; but there are limits.
   For example, if you plan to print an image that covers the entire area of a #10 envelope (9.5" x 4.13"); make sure the original document (PDF) was designed to print an image of this size, or slightly larger if doing a full bleed, and in the proper orientation. If the image is designed to print on a #10 envelope in landscape orientation (feeding long-edge first); the image will be limited to 8.77" in width. If you rotate this image, via Adobe, to print in the portrait orientation (feeding short-edge first); you will not be able to make the image fill the entire length (9.5") of the envelope.

2. **Copies are limited to 999 in Adobe.**
   To print more than 999 copies, duplicate your original PDF to increase the number of pages in the document. For example; If you create ten pages of the same image in the document, the number of pieces you can print in one job are increased to 9,990.

3. **If you select "Print in grayscale (black and white)",** from the Adobe print dialog box, ***this will cause everything to be printed in "grayscale"***, even if the driver preferences are set to "color".

4. **If you select "Save ink/toner",** from the Adobe print dialog box, this will reduce the amount of ink being used. However ***it will also make all images print dull (lighter)***.

5. **If you don't want to change the size of the original PDF (artwork),** be sure to select "Actual size" from the adobe Print dialog box.



6. **If you select "Auto portrait/landscape",** in the Adobe print dialog box, Adobe will automatically rotate the image to the orientation that it thinks works best and it will also centered the image on the Media Size that you have selected in the driver. In some cases, using Portrait or Landscape selections may be a better option.

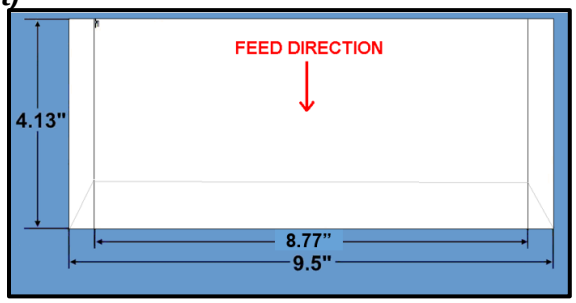
Setting Up a Job in Bulk Mailer®

Printer Driver Limitation: The developer of Bulk Mailer commonly develops printer drivers for use with their software product. However, in the case of the COLORMAX8 printer; they have not developed a driver for this model. Therefore, you will need to use the features within the "S Series Driver" to control print quality, orientation, etc.

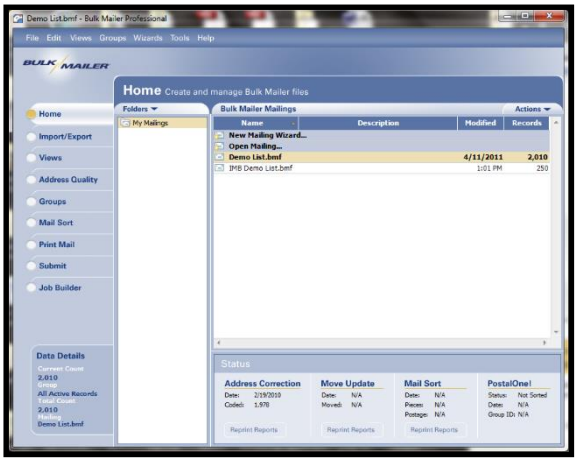
The following are descriptions of how to setup and print from Bulk Mailer on #10 envelopes.

#10 Envelope, Feeding Long-Edge First (Flap First)

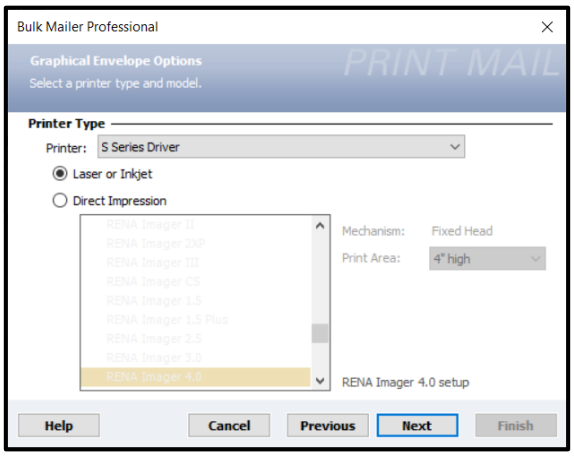
NOTE: Keep in mind that you will not be able to print the full width of a #10 envelope when feeding it long edge first. You are limited to 8.77 inches, which is the maximum print width of the Memjet Printhead. If you need to print the full area of a #10 envelope, it will need to be fed short edge first. For details, see "#10 Envelope, Feeding Short-Edge First".



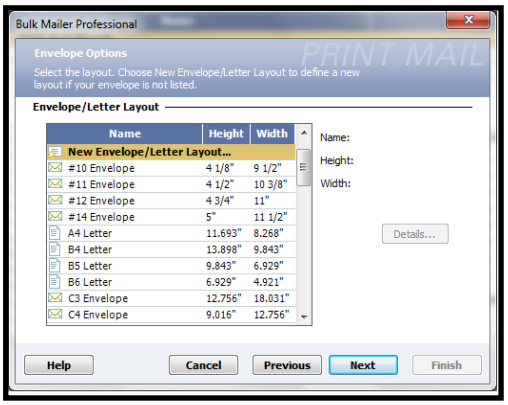
1. Open Bulk Mailer.
2. From the "Home" tab, select (double click) on the "mailing" of your choice.
3. Select the "Print Mail" tab (left side of screen).



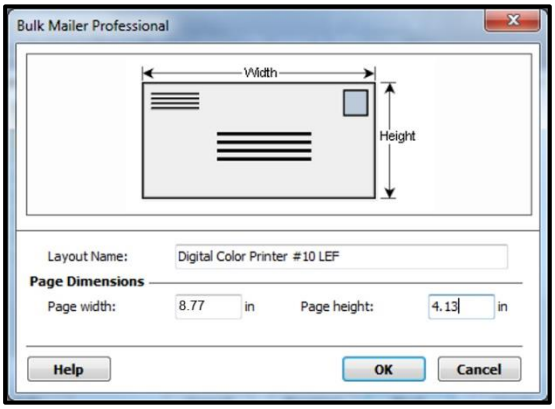
4. From the "Print Mail" screen; double-click on the "Print Mail Wizard" which will guide you through the template (layout) setup process.
5. When the Welcome screen appears click on Next.
6. The "Print Mail Template Type" window will open. Select "Envelopes – Graphical Output" and Click on Next.
7. The "Graphical Envelopes Options" window will open.
   Select the "S Series Driver" from the Printer pull-down list.
   Then select "Laser or Inkjet"
   Click on Next



8. The "Envelope Options" window will open.
Double-click on "New Envelope/Letter Layout"



9. An envelope design window will open.
Type a name (example: Digital Color Printer #10 LEF) into the Layout Name window.
Enter these values:
Page Width: 8.77 in.
Page Height: 4.13 in
Click on OK and the envelope layout window will close.

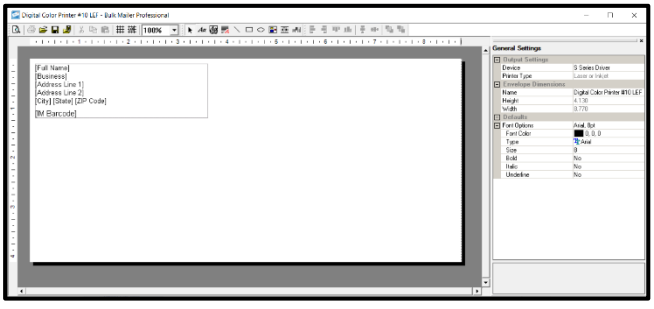


10. Click Next in the "Envelope Options" window.

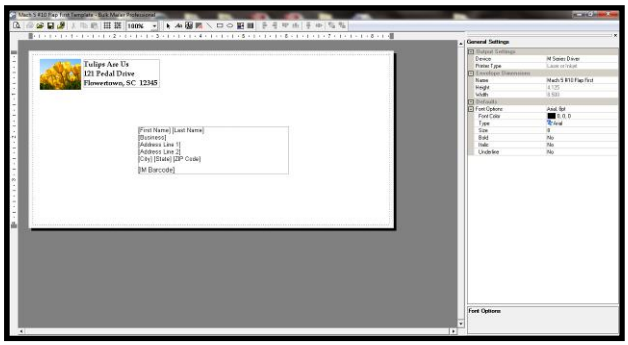
11. The "Address Block Options" window will open.
Select your Address Block option (example: Add a basic address block with barcode)
Select your Barcode Type option: POSTNET or Intelligent Mail.
Click Next.

12. The "Summary" window will open.
Under Template Options select "Preview labels based on settings" and "Save settings as a new template".
Type a name (example: Digital Color Printer #10 LEF Template) for your new template.
Then click on Finished.

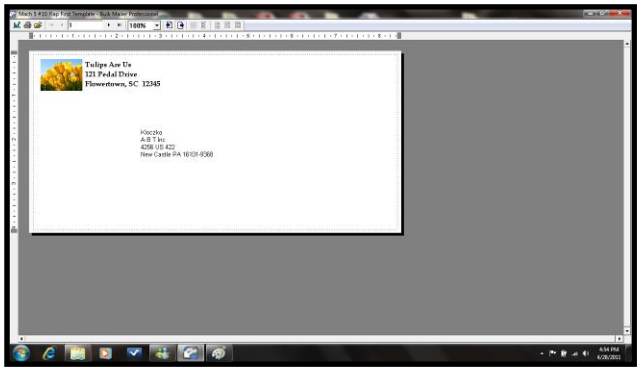
13. The template will be displayed for you to edit (add, remove, position data).
Your envelope design (layout) should look similar to the one shown here.



14. Add any additional items that you want printed to the “designer” screen.
Drag and drop the items onto the layout, wherever you want them to be printed on the envelope.
Click on Save.



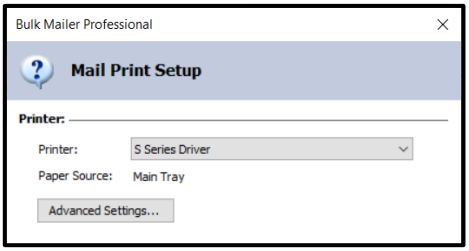
15. Click on the "Go to Preview Mode" icon  , located at the upper left-hand corner of the “designer” screen. The envelope preview will be displayed.



Note: The Intelligent Mail Barcode (IMB) will not be displayed or printed unless you have “cleaned up” the mailing using the Address Quality, Address Correction (CASS) feature in Bulk Mailer. Your Bulk Mailer subscription must be current for this feature to work.

Tip: If you need to change the layout; Click on the "Go to Designer Mode" icon  , to return to the "designer" screen.

16. Click on the printer icon  , to open the "Mail Print Setup" dialog box.
Make sure the “S Series Driver” is selected as your "Printer".



17. From the “Mail Print Setup” window;
Click on the “Advanced Settings” button.
The “S Series Printer Driver Properties” window will open.

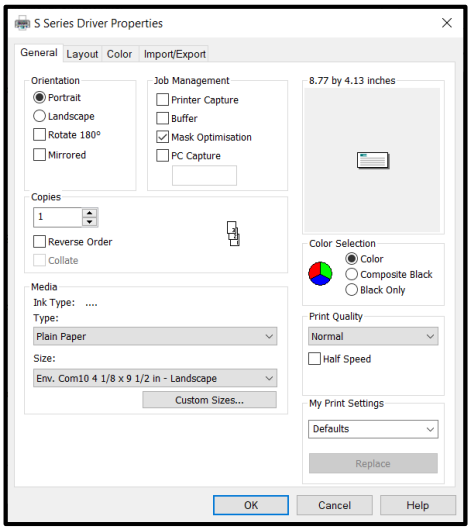
18. From the “S Series Printer Driver Properties” window

Under **Media Size** select
“**Env. Com10 4 1/8 x 9 1/2 in – Landscape**”.

Under **Orientation** select **Portrait**.

Select your other desired choices
Print Quality, Copies, etc.

Then Click on OK to close this window.

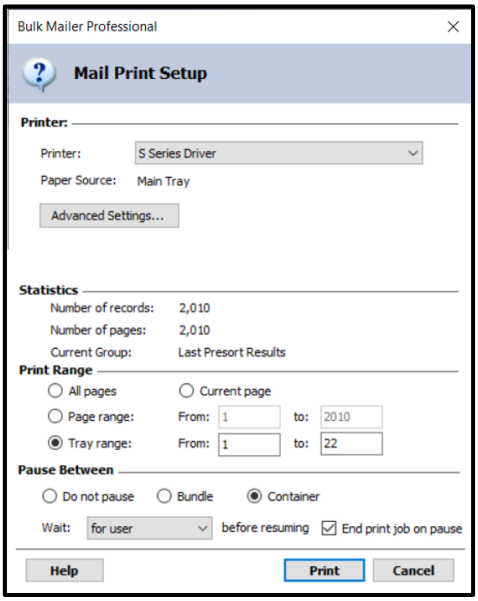


19. In the “Mail Print Setup” window select “all pages” or the range of addresses you want to send to the printer.

IMPORTANT!
If you plan to select “**Tray range”** and use the “**Pause Between**” features, to pause the printer after each Bundle/Container, please be sure to select “**Wait: for user**” and “**End print job on pause**”.

20. When ready to print, make sure the printer is ready (ON/OFF button is illuminated), then click on the "Print" button.

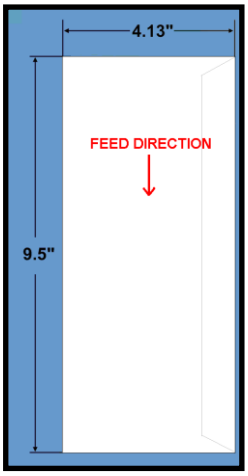
Note: The Intelligent Mail Barcode (IMB) will not be displayed or printed unless you have “cleaned up” the mailing list using the Address Quality, Address Correction (CASS) feature in Bulk Mailer. Your Bulk Mailer subscription must be current for this feature to work.



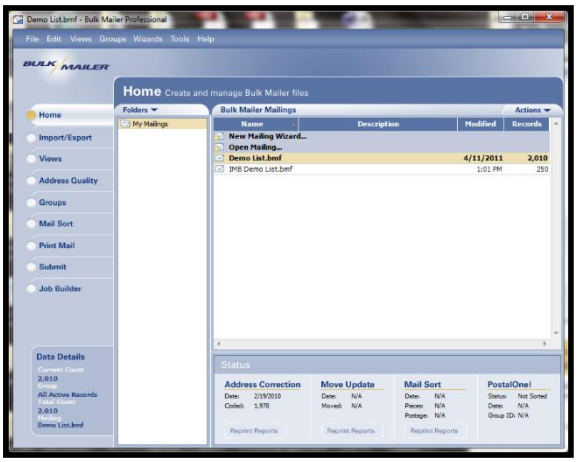
Please contact BCC Software for additional information. www.bccsoftware.com

#10 Envelope, Feeding Short-Edge First

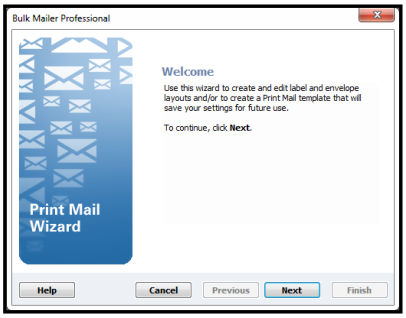
TIP: This is the direction a #10 envelope needs to be fed if you want to print on the full area of the envelope.

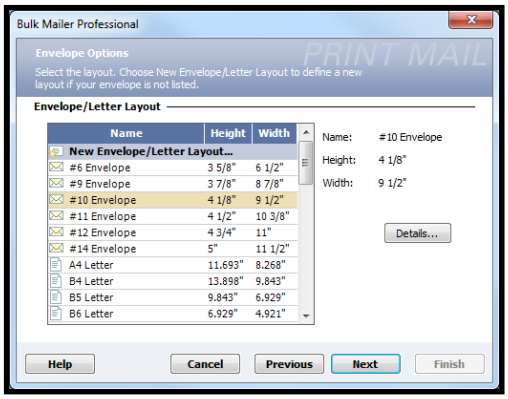


1. Open Bulk Mailer.
2. From the "Home" tab, select (double click) on the "mailing" of your choice.
3. Select the "Print Mail" tab (left side of screen).

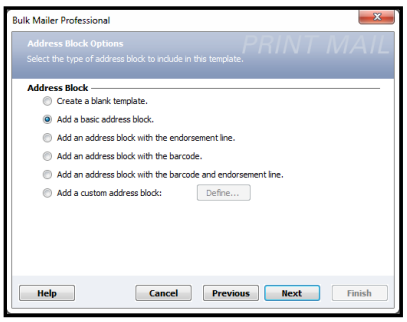


4. From the "Print Mail" screen; double-click on the "Print Mail Wizard" which will guide you through the template (layout) setup process.
5. When the Welcome screen appears click on Next.
6. The "Print Mail Template Type" window will open.
   Select "Envelopes – Graphical Output" and
   Click on Next.
7. The "Graphical Envelopes Options" window will open.
   Select the "S Series Driver" from the Printer pull-down list.
   Then select "Laser or Inkjet"
   Click on Next
8. The "Envelope Options" window will open.
   Select "#10 Envelope" (4 1/8"H x 9 ½"W) from the list.
   Click Next.



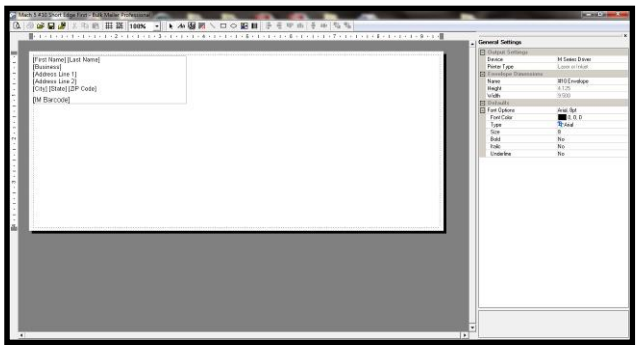


9. The "Address Block Options" window will open.
Select your Address Block option (example: Add a basic address block with barcode)
Select your Barcode Type option: POSTNET or Intelligent Mail.
Click Next.

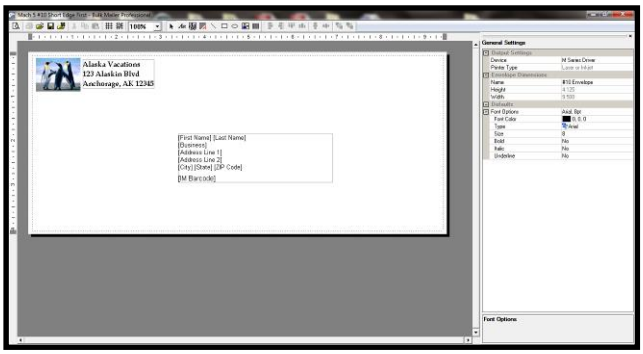


10. The "Summary" window will open.
Under Template Options select "Preview labels based on settings" and "Save settings as a new template".
Type a name (example: Digital Color Printer #10 SEF Template) for your new template.
Then click on Finished.

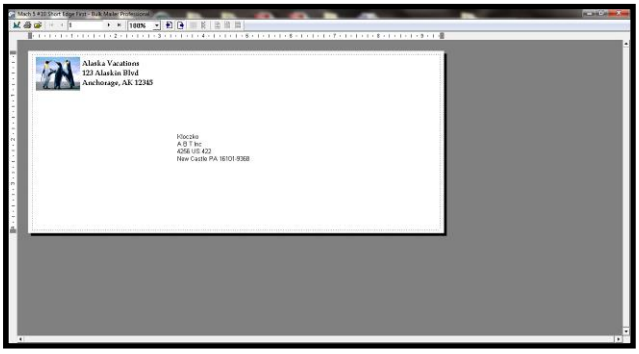
11. The template will be displayed for you to edit (add, remove, position data).
Your envelope design (layout) should look similar to the one shown here.



12. Add any additional items that you want printed to the "designer" screen.
Drag and drop the items onto the layout, wherever you want them to be printed on the envelope.
Click on Save.



13. Click on the "Go to Preview Mode" icon  , located at the upper left-hand corner of the "designer" screen. The envelope preview will be displayed.

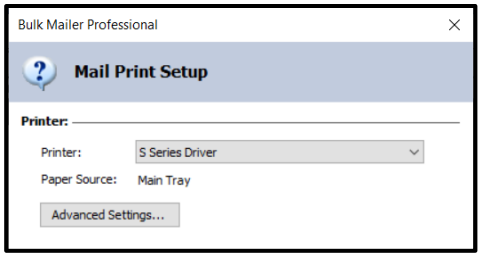


Note: The Intelligent Mail Barcode (IMB) will not be displayed or printed unless you have "cleaned up" the mailing using the Address Quality, Address Correction (CASS) feature in Bulk Mailer. Your Bulk Mailer subscription must be current for this feature to work.

Tip: If you need to change the layout; Click on the "Go to Designer Mode" icon  , to return to the "designer" screen.

14. Click on the printer icon  , to open the "Mail Print Setup" dialog box.
Make sure the “S Series Driver” is selected as your "Printer".

15. From the “Mail Print Setup” window;
Click on the “Advanced Settings” button.
The “S Series Printer Driver Properties” window will open



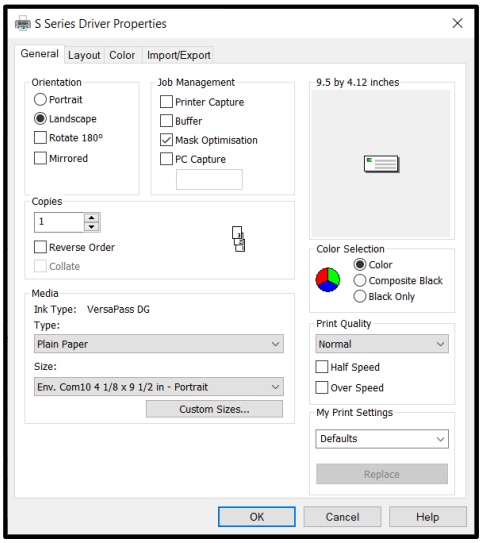
16. From the “S Series Printer Driver Properties” window

Under **Media Size** select
“**Env. Com10 4 1/8 x 9 ½ in - Portrait**”.

Under **Orientation** select **Landscape.**

Select your other desired choices
Print quality, Copies, etc.

Then Click on OK to close this window.

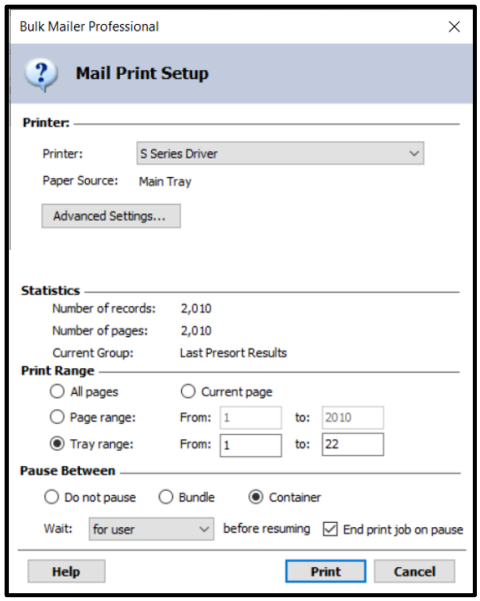


17. In the “Mail Print Setup” window select “all pages” or the range of addresses you want to send to the printer.

IMPORTANT!
If you plan to select “**Tray range”** and use the “**Pause Between**” features, to pause the printer after each Bundle/Container, please be sure to select “**Wait: for user**” and “**End print job on pause**”.

18. When ready to print, make sure the printer is ready (ON/OFF button is illuminated), then click on the "Print" button.

Note: The Intelligent Mail Barcode (IMB) will not be displayed or printed unless you have “cleaned up” the mailing list using the Address Quality, Address Correction (CASS) feature in Bulk Mailer. Your Bulk Mailer subscription must be current for this feature to work.



Please contact BCC Software for additional information. www.bccsoftware.com

SECTION 5 – *Maintenance*

General, periodic maintenance is needed to keep Printer in good working order. This section covers how to care for the Printer and Printer Components (Ink Tanks, Printhead Cartridge, Service Station, etc.). It also covers Ink Tank, Printhead and Sheet Separator replacement.

Cleaning Printer and Printer Components

WARNING!

PRINTER IS A PRECISION MACHINE. CLEAN REGULARLY TO INSURE MANY YEARS OF SERVICE. BEFORE PERFORMING ANY MAINTENANCE, DISCONNECT MACHINE FROM ITS POWER SOURCE!

DO NOT REMOVE SIDE COVERS! HIGH VOLTAGES PRESENT.

Clean Printer regularly to remove accumulated paper dust and ink. Depending on types of media run, paper dust may accumulate inside Printer and on Transport.

1. Turn Printer OFF and unplug it from power receptacle.
2. **Interior** (feed table, media transport and Print Engine areas): Use a vacuum with a soft brush attachment or a can of compressed air to help loosen dust particles.

   CAUTION: Be careful around Print Platen & Drip Tray Assembly, as accumulated ink may splash onto other parts of Printer and cause damage to the system.
3. **Exterior** (doors, covers and frame): Wipe clean with a lint-free cloth using any standard nonabrasive household cleaner that does not contain plastic-harming solvents.

CAUTION

NEVER SPRAY OR POUR CLEANERS DIRECTLY ON OR INTO PRINTER. EXCESS LIQUID COULD HARM ELECTRONIC PARTS. DAMPEN A LINT-FREE CLOTH WITH THE CLEANER AND APPLY IT TO PARTS TO BE CLEANED.

Cleaning Feed Rollers and Forwarding Rollers

Feed, Forwarding and Transport Rollers can become glazed with paper lint and ink from media.
Clean regularly with a mild abrasive household cleaner on a damp lint-free cloth.

NOTE: Avoid using solvents on Rubber Rollers.

Cleaning Print Engine

Areas in Print Engine can become glazed with a buildup of dust, paper lint and accumulated ink and have to be cleaned regularly. Open Printhead Door. Open Ink Tank Door. Release the Clamshell Latch to open the Clamshell. Use a vacuum to pick up any loose debris.

NOTE: Be careful around Drip Tray and Capping Station in Print Engine area as accumulated ink may splash onto other parts of Printer. Take care not to damage PC Boards or electrical wiring.

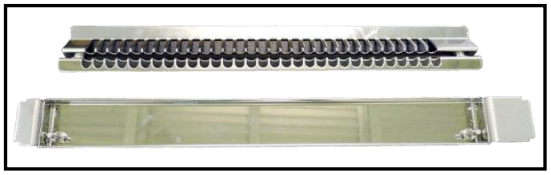
CAUTION

USE ONLY DISTILLED WATER TO CLEAN PRINT ENGINE COMPONENTS. AVOID CONTAMINATING PRINTHEAD WITH CLEANERS, LUBRICANTS OR OTHER CHEMICALS.

[A] Media Sensors: Paper lint and dust may build up on Media Sensors. Use a can of compressed air to remove dust. Use a damp (*not wet*) foam or lint-free cotton swab to gently clean ink from Sensor surfaces. Take care not to drip water into electronics. Use a clean, dry swab to dab surfaces dry.

[B]. **Rubber Rollers and Transport Belts.** Clean as needed using distilled water with a damp, lint-free cloth. **NOTE:** Be careful not to splash or drip ink on other parts of Printer.

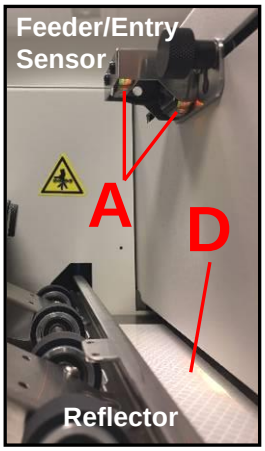
[C] Printing Surfaces & Print Platen. Wipe using distilled water and a damp, lint-free cloth. Pat dry with a lint-free cloth. **Drip Tray:** Carefully remove Print Platen & Drip Tray assembly from printer. Remove Print Platen from Drip Tray. Drip Tray can be rinsed out with Tap water. Pat dry with cloth, then re-install Print Platen into Drip Tray before reinstalling Assembly into printer. See "Installing Print Platen and Drip Tray Assembly" for details.

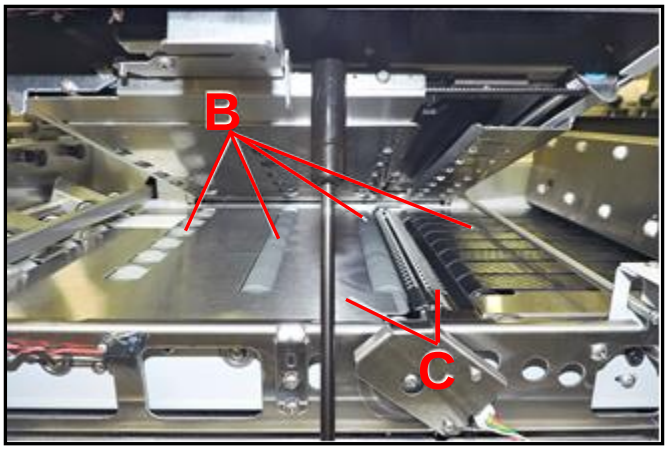


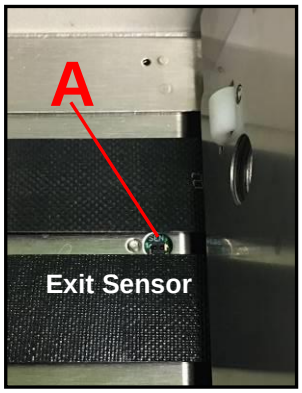
CAUTION

WHEN REMOVING "PRINT PLATEN and DRIP TRAY ASSEMBLY" FROM THE PRINTER; DO NOT TIP THE DRIP TRAY! IF TIPPED, INK MAY SPILL INTO PRINTER OR ONTO OTHER SURFACES; CAUSING DAMAGE. THIS ASSEMBLY MUST BE REMOVED AND CLEANED ROUTINELY TO AVOID INK OVERLOW AND DAMAGE TO SYSTEM.

[D] Reflector: Paper lint and dust may build up on Reflector. Use a damp (*not wet*) cloth to gently clean the reflector surface.





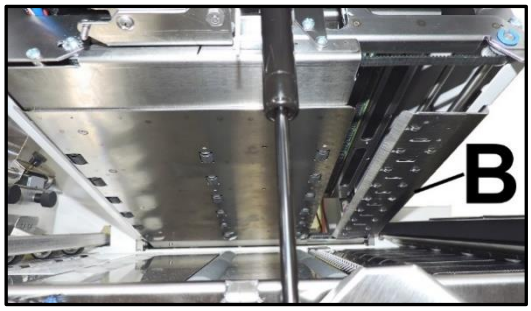


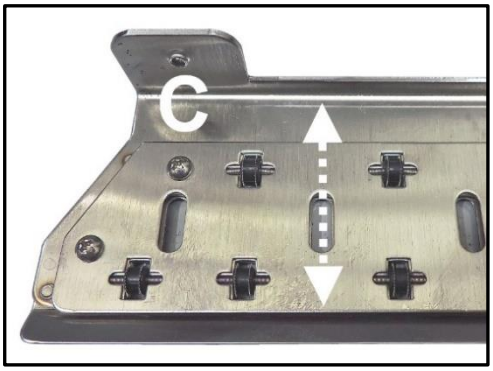
Cleaning Clamshell Star Wheels

As the printed media travels from the print area towards the exit end of the printer, it travels under the Star Wheel Assembly [B]. This assembly contains many pointed (starred) rollers/wheels that are designed to keep the printed media from making contact with anything that could smudge the wet image. The Star Wheels are designed so they can travel over the wet image with minimal ink offset results. In some cases, Star Wheel contact may produce a pattern of small dots, in the direction of media travel. Over time these Star Wheels will gather ink and debris, reducing their performance. They will need to be cleaned routinely.

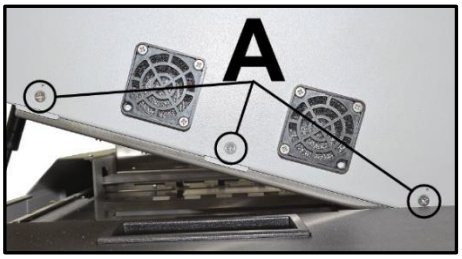
Routine Operator Maintenance:

1. Open the Clamshell to access the Star Wheel Assembly **[B]**
2. Using a damp cloth, carefully wipe the Star Wheels and plate.
   IMPORTANT: Only wipe Wheels in the direction they roll [C]; never across the Wheels.
3. Dry the Star Wheels and plate with a clean, lint-free cloth**.**
4. Close the Clamshell.





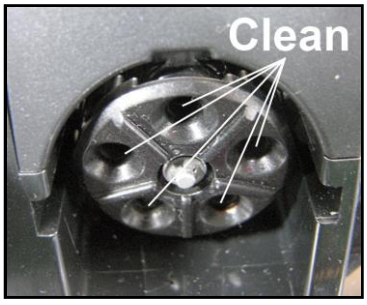
Periodic Thorough Cleaning of Star Wheel Assembly:
NOTE: This procedure should be performed by a qualified Service person or operator who has been trained on how to properly perform this procedure.



1. Remove 3 screws **[A]** securing the Star Wheel Assembly to the Clamshell.
2. Remove Star Wheel Assembly **[B]**.
3. Soak the Assembly for 20 minutes in clean, warm water. Rinse off with clean water.
4. Thoroughly wipe and dry the Star Wheels with a clean, lint-free cloth**.**
   IMPORTANT: Only wipe Wheels in the direction they roll [C]; never across the Wheels.
5. Install in reverse order.

Cleaning Ink Revolver Couplings

To reduce the chance of coagulated ink and debris entering the Ink System, causing possible ink flow and nozzle clogging issues, clean the Ink Revolver Couplings before installing/reinstalling the Printhead.



1. With the Printhead Cartridge removed, moisten a foam tipped swab in distilled water.
2. Insert the swab into one of the ink revolver openings (ink channels) and rotate swab to clean chamber.
3. Use a new swab for each of the remaining ink revolver opening until all 10 openings are clean. (*5 on each side.*)
   CAUTION: Do NOT reuse the same swap in multiple ink revolver openings, as this may cause color mixing.

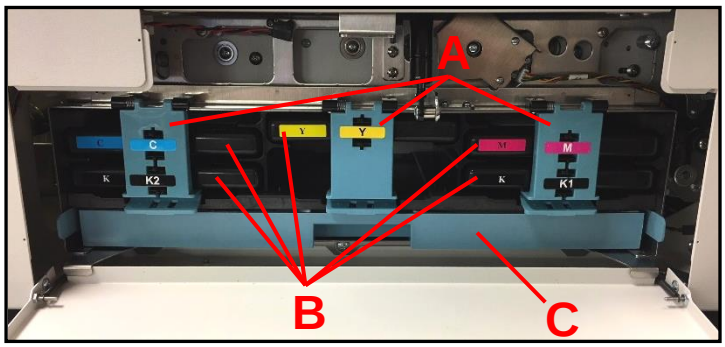
Cleaning Ink Tank Contacts & Prism

After reinstalling or replacing Ink Tanks the Ink Level indicators on the Touchscreen may not refresh. This may be due to a dirty Ink Tank Level Prism and/or QA Chip contacts on that Ink Tank(s).

Clean contacts and prism as follows:

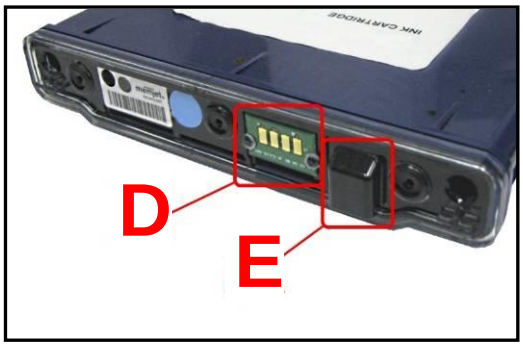
1. **Remove Ink Tank(s).** Open Ink Tank Door. Release Ink Tank Latch(s) **[A]**. Remove Ink Tank(s) **[B]** that did not refresh.

   Tip: This would be a good time to inspect the Waste Ink Tray **[C]**. Replace if full or near full (white pad all or mostly black with ink). Make sure that it is securly installed, tabs locked into frame at both sides.



2. Clean QA Chip contacts **[D]** with a clean, dry, lint-free cloth. Contacts may also be lightly cleaned with a pencil eraser to remove oxidation.

3. Clean Ink Level Prism **[E]** with a cloth that has been dampened with distilled water.
   CAUTION: Do NOT get QA Chip contacts wet. If you accidently get them wet, make sure they are dry before re-installing Ink Tank.



4. Reinstall Ink Tank(s) (*labels up*), close and Lock Ink Tank Latch(s) **[A]**. Make sure the bottom of the Latch is locked at both sides.

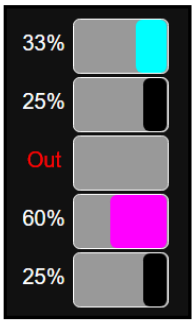
5. Close Ink Tank Door.

WARNING!

Ink in Ink Tanks may be harmful if swallowed. Keep new and used Ink Tanks out of reach of children. Discard empty Ink Tanks immediately.

Replacing Ink Tanks

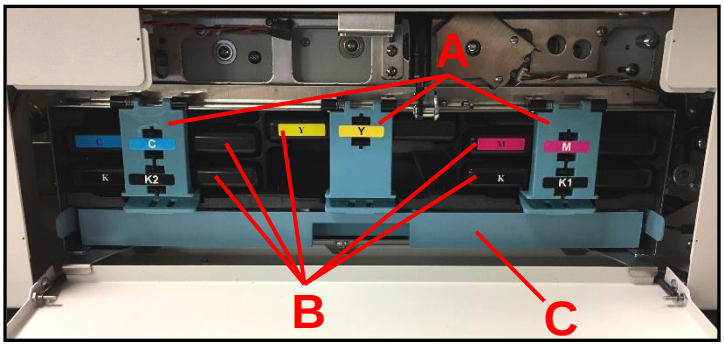
Replace Ink Tanks when ink is low or runs out.



1. **Look at the Touchscreen Display.**
   Ink Tank Status information appears on the right side of the Touchscreen.
   Note that some or all of ink boxes may be low or empty.

2. **Open Ink Tank Door** (*hinged at bottom*).
   NOTE: Opening the Ink Tank Door automatically disconnects Printer communication with Ink Tanks, allowing safe Ink Tank removal and replacement.

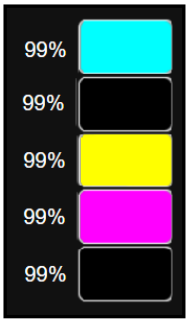
3. **Open Ink Tank Latches [A].** Pull up on bottom of Latch to release and swing Latch open (hinged at top).



4. **Remove desired Ink Tank(s) [B]** from Printer.
   Tip: This would be a good time to inspect the Waste Ink Tray **[C]**. Verify that it is not full and that it is securely installed. Latched into frame at both sides.

5. **Remove new Ink Tank(s) from packaging.**

6. **Insert Ink Tanks (*label side up*) into their appropriate color slots [B]**
   INSTALLATION TIP:
   Make sure Ink Tanks seat properly.
   Insert Ink Tank into appropriate color slot. Push Ink Tank forward firmly and then pull back about an inch. Then push Ink Tank forward firmly again. This helps to insure that Septum Needles penetrate seals on Ink Tank.



7. **Close and Lock Ink Tank Latches [A]**. Make sure bottom of Latch is securely locked at both sides.

8. **Close the Ink Tank Door.** Ink Tank colors should appear in Ink Tank Status area.
   NOTE: Image shows all <u>new</u> Ink Tanks, which will display as 99%.
   If ink colors do not fill-in after a few seconds, open the Ink Tank Door, remove and reinstall the related Ink Tank(s).

NOTE: If Ink Tank is properly installed, but Ink Tank indicator still does not refresh, see section titled “Cleaning Ink Tank Contacts & Prism”.

Ink Tank Storage

Ink Tank storage should take place, in the original/sealed packaging, under the following conditions:

Storage Temperature Range:	**Long Term:** 41°F to 113°F (5°C to 45°C) **Short Term:** -13°F to 158°F (-25°C to 70°C) **NOTE:** Cumulative storage duration below 41°F (5°C) or above 113°F (45°C) must not exceed 72 hours.
Humidity Range:	5% to 95% Relative Humidity, non-condensing
Atmospheric Pressure Range:	70 kPa to 106 kPa
Electrostatic Discharge:	8 kV air discharges or 4 kV contact discharges* ***When tested in accordance with IEC 61000-4-2**

- Store Ink Tanks with contacts (septum seals and QA chip) facing up.
- Exposure to conditions that are not permissible may lead to damage which is not externally visible.

Opened Ink Tanks should be installed and remain in the Printer until they are empty and need to be replaced. If you find it necessary to remove Ink Tanks from the printer, for an extended period of time, it would be best to place them in individual, sealed plastic bags. This will help to seal the Ink Tanks and protect people/property from any ink that may drip from the septum seals.

Ink Tank Disposal

Safely dispose of Ink and Ink Tanks in accordance with local/national regulations.

Clean up spills with soap and water. Abrasive soap is effective in cleaning ink off your hands.

Cleaning the Printhead

The Printhead is cleaned automatically during shut-down, power-up, Mid Job Servicing and other circumstances. If necessary you can also force a printhead cleaning using the Quick/Normal/Full "**Clean Printhead**" features. These features can be accessed from the **Toolbox,** under the **"Service" Tab,** or from the **Touchscreen**, under the "**Maintenance"** Menu drop-down.

If running these Cleaning Levels doesn't help improve image quality, the Printhead surface can be cleaned manually; as described below.

Tip: Before you begin this process you may want to set the Media Thickness to 10 mm. This will give you more room to get your hand under the Printhead. Be sure to make a note of your current setting, so you can reset this value after you have completed the cleaning process.

1. From the **Touchscreen**, tap "**Menu**", then tap **"Maintenance"** from the drop-down list.
   Tap **"Inspect Sled"** and then Yes.
   The Service Station Sled moves out from under the printhead and the Printhead lowers to the print position.
2. Open the **Printhead Door**. ***This will stop the "Inspect Timeout" countdown timer***.
   NOTE: If you don't open the Printhead Door within 30 seconds, to stop the countdown timer, the Printhead will automatically raise and the Service Station Sled will return to the cap position when the "Inspect Timeout" value reaches zero.
3. Open the **Ink Tank Door**.
4. Release the **Clamshell Latch** to open the **Clamshell.**
5. Using a lint free cloth, dampened with distilled water, carefully reach in towards the back of the Printhead surface and wipe the Printhead surface in the direction shown (red arrow). Repeat as needed to remove ink/debris.

CAUTION

Avoid contact with the Starwheels, shown circled in red. If they get bent this will cause feeding issues. Avoid contact with the Print Platen (silver metal grate), to avoid scraping (injuring) the back of your hand.

6. Carefully **Close the Clamshell,** while supporting the open **Printhead Door,** to be sure the Printhead Door doesn't slam closed.
7. Close the **Ink Tank Door**.
8. Close the **Printhead Door**. The Printhead will raise and Service Station Sled will return to the cap position.

Tip: If you find that you need to clean the printhead surface frequently (more than a few times a day), to fix color-mixing or nozzle firing issues; this may be an indication that there is a problem with automatic printhead maintenance or capping. Please contact your service representative to have them inspect the printer.

In General, if the image quality remains poor (fuzzy/missing print, in same location), even after verifying that all ink lines are filled with ink, running "**Full Clean Printhead**" and manually cleaning Printhead; this is an indication that the Printhead may need to be replaced. It is recommended to replace the Wiper Roller when replacing the Printhead.

Remove/Replace Printhead Cartridge

IMPORTANT

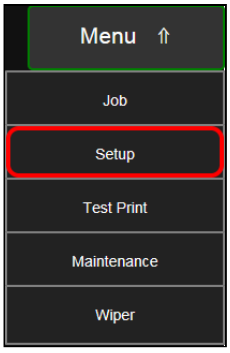
TO ENSURE OPTIMUM PRINTING PERFORMANCE, IT IS RECOMMENDED TO REPLACE THE WIPER ROLLER WHEN REPLACING THE PRINTHEAD.

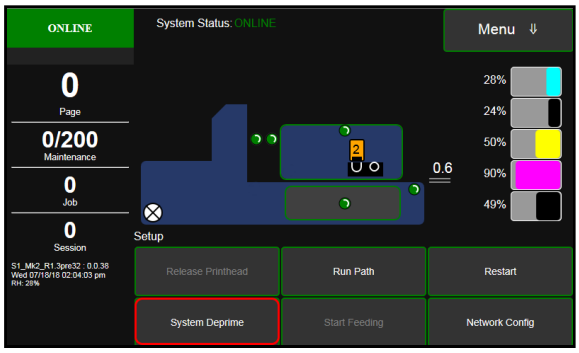
Use this procedure to remove and or replace a Printhead that is currently installed in the Printer. If the printer does not have a Printhead installed at this time; please refer to the section titled "Install Printhead Cartridge". Printhead Cartridge is a delicate precision device. Handle with extreme care to avoid damage and issues that could degrade print quality.

CAUTION

- **Use electrostatic discharge (ESD) protection when handling.**
- **Hold Printhead Cartridge by handles ONLY.**
- **DO NOT touch ink couplings, nozzle surface or electrical contacts.**
- **DO NOT unpack Printhead Cartridge until Printer is ready for installation. Once unwrapped, delay in installing Printhead can compromise print quality due to dehydration.**
- **DO NOT place an unwrapped Printhead on any surface before installing. Protect Printhead from scratches, dust, fibers, dirt and other contaminants at all times.**

1. **Deprime System.**
On the **Touchscreen**; tap **Menu** then tap **Setup** from dropdown list. Then tap **System Deprime** from the choices provided at the bottom of the Touchscreen. The Printer pumps any ink in Printhead and Ink System back into Ink Tanks. Then Printhead Latch **[1]** will release so it can be opened. This process may take a few minutes.





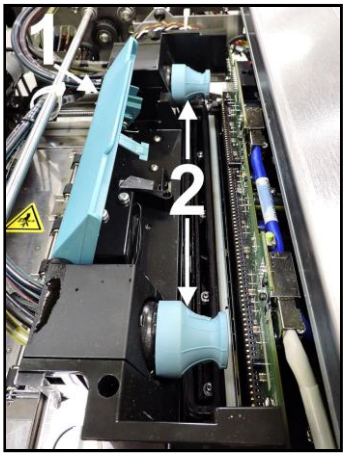
2. Open the **Printhead Door.**
3. **Fully Open** released **Printhead Latch.** This will fully retract the Ink Revolver Couplings.

CAUTION

IF PRINTHEAD LATCH IS NOT RELEASED; DO NOT PRY OR MANUALLY LIFT LATCH OR LATCH WILL BREAK. USE "SYSTEM DEPRIME" or "RELEASE PRINTHEAD" BUTTONS, FROM THE TOUCHSCREEN OR TOOLBOX, TO RELEASE PRINTHEAD LATCH.

4. **Carefully remove Printhead.** Rock the Printhead back to detach it from the electrical contacts. Then lift the Printhead up at a slight angle to remove it.

5. Once the old Printhead Cartridge has been removed; please refer to the section titled “Installing Printhead Cartridge”; to reinstall a Printhead or install a new Printhead Cartridge.



If you plan to replace the Wiper Roller, please do this before installing the Printhead and priming the system.
See section titled “Service Station Maintenance”.

If you plan to discard the current Printhead; place the Printhead into the old protective packaging and discard according to local code.

If you plan to reuse the current Printhead; place the Printhead into its protective packaging and then into a resalable plastic bag along with a cloth dampened with distilled water.
Reinstall the Ink Revolver Caps **[2]** to protect the ink system.

Printhead Storage

Printhead storage should take place, in the original/sealed packaging, under the following conditions:

Storage Temperature Range:	**Long Term:** 41°F to 113°F (5°C to 45°C) **Short Term:** -13°F to 140°F (-25°C to 60°C) **NOTE:** Cumulative storage duration below 41°F (5°C) or above 113°F (45° C) must not exceed 72 hours.
Humidity Range:	5% to 95% Relative Humidity, non-condensing
Atmospheric Pressure Range:	70 kPa to 106 kPa
Electrostatic Discharge:	8 kV air discharges or 4 kV contact discharges* ***When tested in accordance with IEC 61000-4-2**

- Store the printhead with the printhead nozzles facing down. This helps to ensure that the shipping fluid, within the printhead, keeps the nozzles hydrated during printhead storage.
- Exposure to conditions that are not permissible may lead to damage which is not externally visible.

Once the vacuum sealed packaging has been opened, the printhead should be immediately installed and it should remain in the printer until it is determined that printhead replacement is required.
If you find it necessary to remove the printhead from the printer, it must be properly protected and sealed to help reduce damage, nozzle dehydration and clogging.

- Follow the "Replacing the Printhead Cartridge" procedure to remove the Printhead Cartridge.
- Install the protective cover on the Printhead. Be careful to avoid ink spills (drips) and stains during this process.
- Store Printhead Cartridge in a sealed plastic bag, along with a small lint-free cloth that has been lightly dampened with distilled water. This will create a humid atmosphere to help prevent nozzle dehydration.
- Reinstall the "Cap Protectors" onto the Ink Revolver Couplings to protect the ink system from dust and debris.
- The Printhead should be re-installed as soon as possible.
  Please see the section titled "Install Printhead Cartridge".
  CAUTION: Make sure the cartridges electrical contacts are dry before re-installing Printhead.

Printhead Service Life

Manufacturer's estimated rating: ~125,000 linear inches of continuous printing.
For example; if printing a #10 envelope (9.5"W x 4.13"H), feeding long-edge first, at best print quality, with 100% ink coverage (each nozzle firing at 1600 dpi down length of media); the printer is depositing 4.13 liner inches of print per piece. At this rate, you can expect a yield of approximately 30,000 envelopes before head replacement may be needed.
If printing a typical logo (1" high) you can expect a yield of approximately 125,000 envelopes before head replacement may be needed.

NOTICE: **Individual results will vary.**
The estimations provided above are NOT an expression of Warranty. This information is being provided for informational purposes only. The decision on when a Printhead is no longer producing acceptable output varies greatly from customer to customer; since this decision is based upon the customer's expectations (what they consider to be acceptable output).
Printhead degradation will depend on the make-up of the images printed, the operating environment, servicing, media characteristics (*including cleanliness*) and other factors. The Printhead has a total of 70,400 nozzles (14,080 per color channel, 5 color channels). Since every print job is different, most do not use the entire width of the Printhead nor do they require that every nozzle be fired. Therefore some nozzles do not fire as often as others. The most frequently used nozzles will begin to fail (nozzle "end-of-life") before nozzles that are used less often. Noticing the effects of failing nozzles depends partly on the relative position of those nozzles to each other.

Printhead Disposal

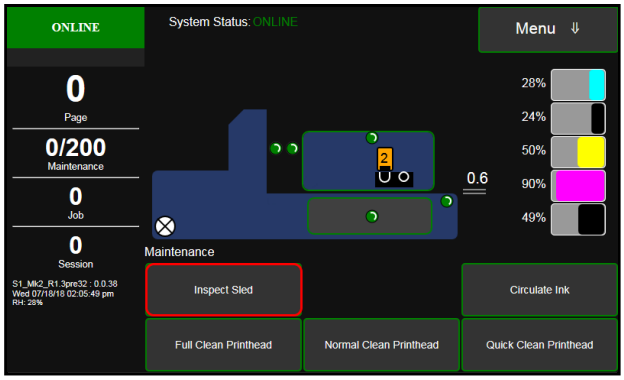
The Printhead Cartridge should be disposed of in a safe manner in accordance with local/national regulation. To help avoid ink spills; place the Printhead Cartridge back into its original packaging, before disposal. Clean up spills with soap and water. Abrasive soap is effective in cleaning ink off your hands.

Inspecting the Service Station

The Service Station cleans Printhead Cartridge of excess ink and debris, keeps Printhead hydrated and protected when not in use, and captures and removes ink used to keep nozzles clear. It moves out of the way of the Printhead during printing. With proper periodic maintenance; it is designed to provide a long service life.

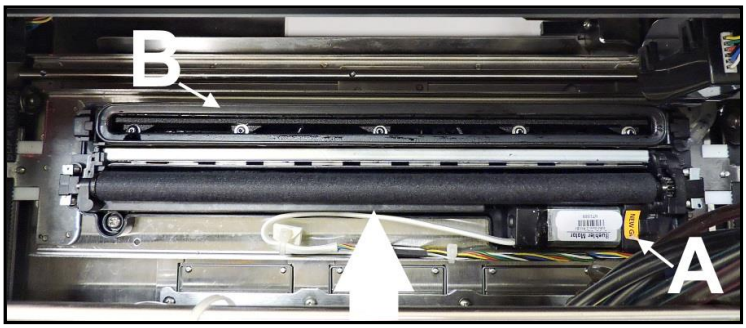
To access the Service Station for inspection and cleaning:

1. Using the **Touchscreen**, select **"Menu"** then tap **"Maintenance"** from the drop-down menu. Tap **"Inspect Sled"**. The Service Station moves out from under the Printhead Assembly.



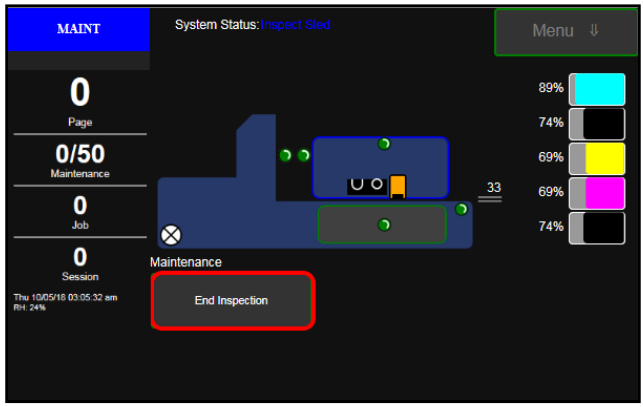
2. Open the **Printhead Door**.
NOTE: If you don't open the Printhead Door within 30 seconds, to stop the countdown timer, the Printhead will automatically raise and the Service Station Sled will return to the cap position when the "Inspect Timeout" value reaches zero.

4. The Service Station can now be inspected. Visually inspect Service Station for possible cleaning or service needs.



Use a dry, lint-free cloth to soak up any excess ink from the Wiper Motor Assembly **[A]** and Capping Station **[B]**.
Don't wipe or rub the Wiper Roller. Damage to the wiper roller surface may result.

CAUTION: Be sure to keep the Printhead Door open during inspection. This will pause the "Inspect Timeout" count-down timer. Once the Printhead Door is shut, the system will automatically End Inspection.
Be careful that you <u>don't accidently press</u> "End Inspection", with the Printhead Door open. Doing so may cause damage or injury if your hands are not clear of this area.



5. Close the **Printhead Door.** The printer will automatically End Inspection and move the Service Station back under the Printhead Assembly.

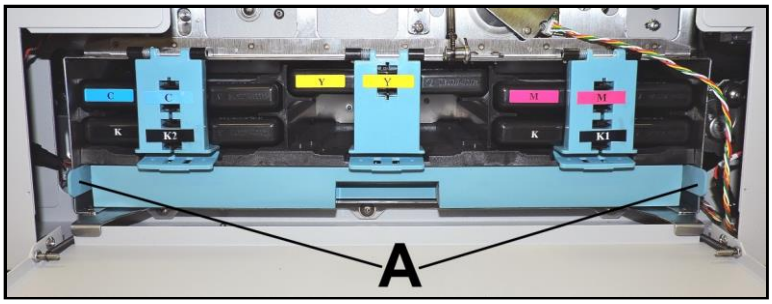
NOTE: If you see anything wrong with any of the Service Station components (Wiper Roller, Wiper Motor Assembly or Capping Station) or you continue to experience image quality issues (missing nozzles, color mixing, etc.), please contact your service representative so that they can perform Service Station maintenance.
See section titled "**Service Station Maintenance**" for details.

Inspect/Replace Waste Ink Tray

Waste Ink Tray catches and absorbs the waste ink produced by the system. This tray is filled with absorbent material. This Tray, or the absorbent material within the Tray, must be replaced when it becomes saturated. Please inspect routinely.

The tabs **[A]**, located at the left and right sides of the Tray, secure the Tray to the frame.
When re-installing the Waste Ink Tray; please be sure the tabs "click" into the frame, to secure the Tray's position.

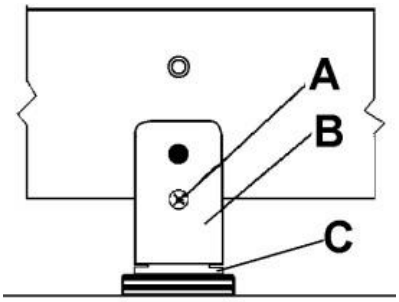
Procedure:



1. Open Ink Tank Door.
2. Pull on Tabs **[A]** to release and slide Waste Ink Tray out of Printer.
3. Inspect absorbent material within Tray. If nearly or completely black with ink, it is time to replace Waste Ink Tray or absorbent material within Tray.
4. Install Waste Ink Tray; making sure the tabs **[A]** "click" into the frame, to secure the Tray's position.

Replace Sheet Separators

Sheet Separators ensure separation of pieces as they are being fed. If experiencing double sheet feeding and cannot adjust Separators to prevent it, replace Separators.



Procedure:

1. Turn Printer OFF and unplug it from power source.
2. Move Media Side Guides to maximum open position.
3. Release Separator by loosening Locking Knob. Then lift and lock separators at highest position.
4. Remove screw **[A]** and Separator Cover **[B]**.
   Remove Separator **[C]** by prying it out of Holder.
   Tip: You will need to move Media Side Guides to access some separators.
5. Install a new Separator and reinstall Separator Support and screw.
   DO NOT over tighten screw to prevent distorting or damaging Separator.

Preparing Printer for Transport

Please use this procedure if you ever need to transport the printer to a new location or ship the printer. Please refer to the appropriate sections in the manual for details on installing/removing items from the printer.

Local relocation

Transporting the printer from one room to another in the same building is considered a local relocation.
Local relocation does not normally require that the printer be repackaged before transportation.
To move your printer locally:

1. Switch the printer off using the ON/OFF button and wait until all lights turn off.
2. Turn off the Main Power Switch. Then disconnect the power cable from the printer and wall outlet. *IMPORTANT!* Do NOT switch off the power at the power outlet or remove the power cable until all lights are off. Failure to do so may damage your printer.
3. Disconnect the USB or Ethernet cable from your printer.
4. Two people are required to lift the printer; keeping it as level as possible during this process. *IMPORTANT!* The printer should remain semi-level at all times during transportation and storage. Failure to do so may cause the printer to leak ink.
5. Take care to avoid sharp bumps and strong vibrations during the relocation process.
6. Be sure to select an appropriate location; as described in the “Choosing the Location” section.

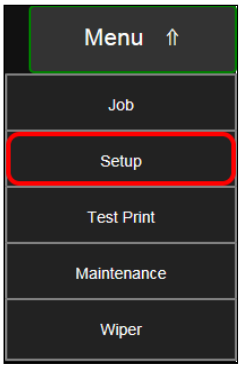
Remote relocation or shipping

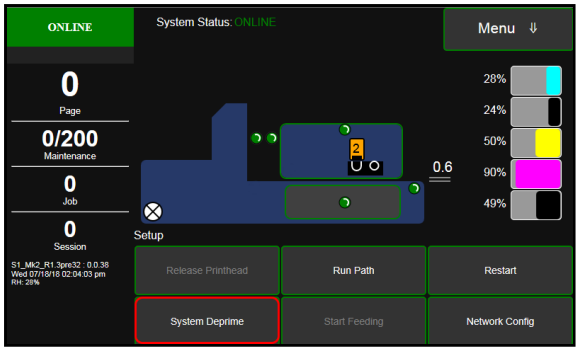
If you need to ship or transport the Printer to a different building, you will need to prepare the printer; as described below.
Once Printer is prepared, carefully package Printer, Printhead Cartridge, Service Station and Ink Tanks in original packaging.

When transporting your printer to a remote location, your printer will need to be disassembled and repackaged, as set out below:
NOTE: This procedure should be performed by a qualified technician. We suggest the use of protective gloves during this process.

A. Remove Printhead Cartridge

1. **Deprime System.**
   On the **Touchscreen**; tap **Menu** then tap **Setup** from dropdown list.
   Then tap **System Deprime** from the choices provided at the bottom of the Touchscreen.
   The Printer pumps any ink in Printhead and Ink System back into Ink Tanks. Then Printhead Latch **[1]** will release so it can be opened.
   This process may take a few minutes.





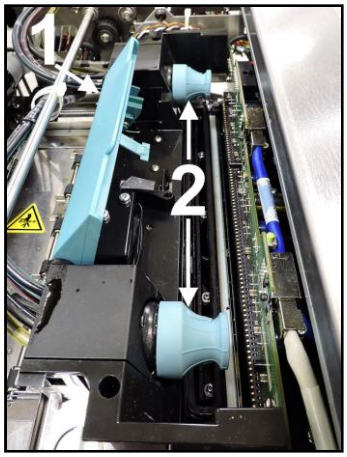
2. Open the **Printhead Door.**

3. **Fully Open** released **Printhead Latch.** This will fully retract the Ink Revolver Couplings.

CAUTION

IF PRINTHEAD LATCH IS NOT RELEASED; DO NOT PRY OR MANUALLY LIFT LATCH OR LATCH WILL BREAK. USE "SYSTEM DEPRIME" or "RELEASE PRINTHEAD" BUTTONS, FROM THE TOUCHSCREEN OR TOOLBOX, TO RELEASE PRINTHEAD LATCH.

4. **Carefully remove Printhead.**
   Rock the Printhead back to detach it from the electrical contacts. Then lift the Printhead up, at a slight angle, to remove it.



5. **Carefully repack Printhead Cartridge.**
   Place Printhead into original protective packaging (orange, plastic clip). Than place Printhead into re-sealable plastic bag, along with a lint free cloth dampened with distilled water.

6. **Install Ink Revolver Caps [2]** to protect the ink system.

B. Empty and Clean Print Platen & Drip Tray

1. **Open Ink Tank Door and release (open) Clamshell.**

2. Carefully lift the two tabs out of the slots in the Print Engine Frame and remove Print Platen & Drip Tray Assembly **[A]** from printer.

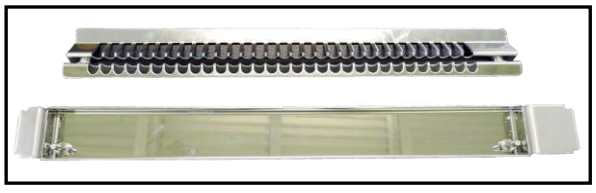
CAUTION

WHEN REMOVING "PRINT PLATEN & DRIP TRAY ASSEMBLY" FROM THE PRINTER; DO NOT TIP THE DRIP TRAY! IF TIPPED, INK MAY SPILL INTO PRINTER OR ONTO OTHER SURFACES; CAUSING DAMAGE.

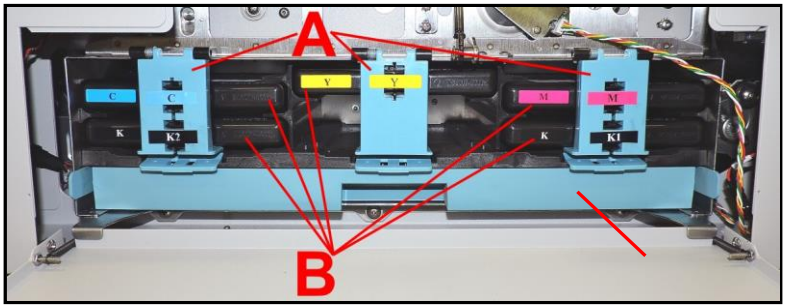
3. Carefully remove Print Platen from Drip Tray. Clean Print Platen with damp cloth and distilled water, then pat dry.

4. Empty ink from Drip Tray. Drip Tray can then be rinsed out with tap water. Pat dry with cloth.

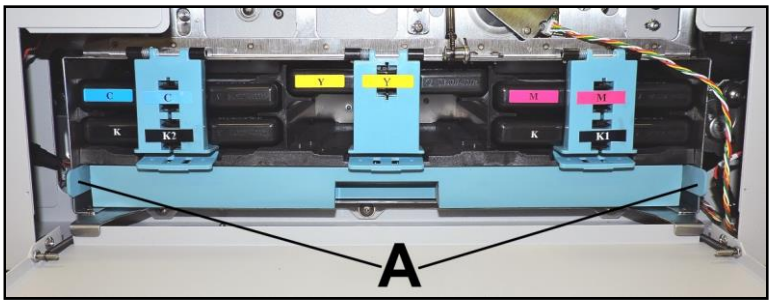
5. Wrap **Print Platen & Drip Tray** in paper towels and store in re-sealable plastic bag then place in accessories box for shipping. If moving just a short distance **Print Platen & Drip Tray** may be placed back into the printer. See "Installing Print Platen and Drip Tray Assembly" for details.



C. Remove Ink Tanks and Check/Replace Waste Ink Tray



1. Open **Ink Tank Door** (*hinged at bottom*). Open the **Ink Tank Latches [A]** and pull Ink Tank(s) **[B]** out of Printer.
2. Carefully package Ink Tanks. Place into individual, re-sealable plastic bags and then place into original foam packaging.
   IMPORTANT: Make sure ink septum's (seals) on Ink Tanks face up to prevent leakage.
3. Pack Ink Tank bays with absorbent towels to catch any ink drips or spills.
4. Remove and inspect **Waste Ink Tray [C]**. Pull on Tabs [D] to release and slide Waste Ink Tray out of Printer.



5. Inspect absorbent material (pad) within Tray. If nearly or completely black with ink, replace Waste Ink Tray or pad within Tray.
6. Install **Waste Ink Tray [C]**.
   The tabs **[D]**, located at the left and right sides of the Tray, secure the Tray to the frame.
   When re-installing the Waste Ink Tray; please be sure the tabs "click" into the frame, to secure the Tray's position.

D. Power-Down Printer and Disconnect Cables (Power cord, USB, Network).

CAUTION

WHENEVER POWERING-DOWN PRINTER, ALWAYS:

1. **PRESS SOFT-POWER BUTTON.**
2. **WAIT FOR PRINTER TO STOP PROCESSING. TOUCHSCREEN AND SOFT-POWER LIGHT WILL GO OUT.**
3. **THEN TURN OFF MAIN POWER SWITCH ON REAR PANEL.**

PRINTER MAINTENANCE SCHEDULE

General, periodic maintenance is needed to keep Printer in good working order. Many tasks can be performed by operators with basic supplies, no special tools needed. Other tasks should only be performed by trained service personnel. **NOTE:** High volume usage may require more frequent maintenance.

COMPONENTS/TASKS	MAINTENANCE TYPE				
	DAILY	BI-WEEKLY	MONTHLY	YEARLY	AS NEEDED
PERFORMED BY OPERATOR					
Ink Tank Replacement					**REPLACE**
Printhead Replacement					**REPLACE**
Wiper Roller Replace with Printhead		**INSPECT**	**INSPECT**	**INSPECT**	**REPLACE**
Ink Revolver Couplings Inspect/Clean with every Printhead Removal					**INSPECT** **CLEAN**
Printhead (Manual Wiping)					**WIPE**
Residue and Debris Removal (Printer Body & Media Path)	**CLEAN**	**CLEAN**	**CLEAN**	**CLEAN**	**CLEAN**
Optical Sensors (Media Path), Clamshell Star Wheel Assembly		**CLEAN**	**CLEAN**	**CLEAN**	**CLEAN**
Rollers & Belts (Feeder & Media Path)		**INSPECT**	**INSPECT**	**INSPECT**	**CLEAN**
Print Platen & Drip Tray Assembly		**INSPECT**	**INSPECT**	**INSPECT**	**CLEAN**
Capping Station		**INSPECT**	**INSPECT**	**INSPECT**	**CLEAN**
Wiper Motor Module			**INSPECT**	**INSPECT**	**CLEAN**
Waste Ink Tray & Pad			**INSPECT**	**INSPECT**	**REPLACE**
PERFORMED BY SERVICE TECHNICIAN					
Lubrication: Sled, Lifter and Clamshell Assemblies				**INSPECT**	**APPLY**
Pen Driver PCA Contacts: Cleaning				**INSPECT**	**CLEAN**
Moving Parts/Motors				**TEST**	**REPLACE**
Service Station Sled & Components Capping Station, Wiper Motor Module, Tray, Side Brackets and Siphon Hose				**CLEAN**	**REPLACE**
Ink Tank Latches/Ink Bay				**INSPECT**	**REPLACE**
Ink Tubing, Couplings, Components				**INSPECT**	**REPLACE**
Printhead Lifter Motor Belts, Service Station (Sled) Motor Belts, Feed Motor Belt, Paper Path Motor Belt, Media Thickness Adjustment Belts				**INSPECT**	**REPLACE**
Check Firmware Version				**INSPECT**	**UPDATE**

Maintenance Schedule is Subject to Change Without Notice

WARNING!

ALWAYS POWER DOWN PRINTER BEFORE CONNECTING OR DISCONNECTING ANY WIRING HARNESSES OR CABLE CONNECTIONS TO AVOID SERIOUS SHOCK OR INJURY.

CAUTION

- **ALWAYS USE APPROPRIATE PERSONAL PROTECTION EQUIPMENT (PPE).**
- **USE ELECTROSTATIC DISCHARGE (ESD) PROTECTION WHEN MAINTAINING EQUIPMENT.**
- **DISPOSE OF ALL MAINTENANCE WASTE IN ACCORDANCE WITH LOCAL REGULATIONS.**

SECTION 6 – *Troubleshooting Guide*

Troubleshooting Guides are provided to assist in solving any problems that might occur with Printer. We tried to make them as complete as possible. The best advice we can offer is to make sure that system is set up properly, before attempting to troubleshoot any problem.

Identifying & Solving Print Quality Issues

The following section provides possible reasons and possible solutions for common Print Quality Issues

Incompatible Paper Type

The type of material you choose to print on can make a big difference in output quality and color vibrancy.

- Media that is non-porous may not allow the ink to dry quickly, causing image offset and ink smearing issues. Ink can even puddle or pool on some non-porous surfaces.
- Media that is too porous may absorb a lot of the ink, reducing color vibrancy.
- Media that is too grainy (contains heavy fibers) may cause the ink to bleed making images fuzzy.

For best performance, use Inkjet suitable materials such as:

- Inkjet coated stocks - all types (recommended for best color output).
- Copier Paper
- Card Stock
- Kromekote
- Coated Paper - Gloss finish
- Coated Paper - Satin finish
- Coated Paper - Matte finish

Avoid using the following paper types.

- Color Laser Gloss
- Digital Printer Gloss
- Any Post Print Coated Substrate (aqueous, gravure or UV)

Low Resolution Images/Graphics

For best image quality, be sure to choose and use images with a high resolution when designing and creating your print jobs. Keep in mind that the printer cannot improve the resolution of an image.
In general; scalable, vectorized art will produce the best images and color.
Avoid using low resolution images, such as images you copied and pasted from a web site.
If you choose/use an image with low quality, the printer will produce (print) a low image quality output.

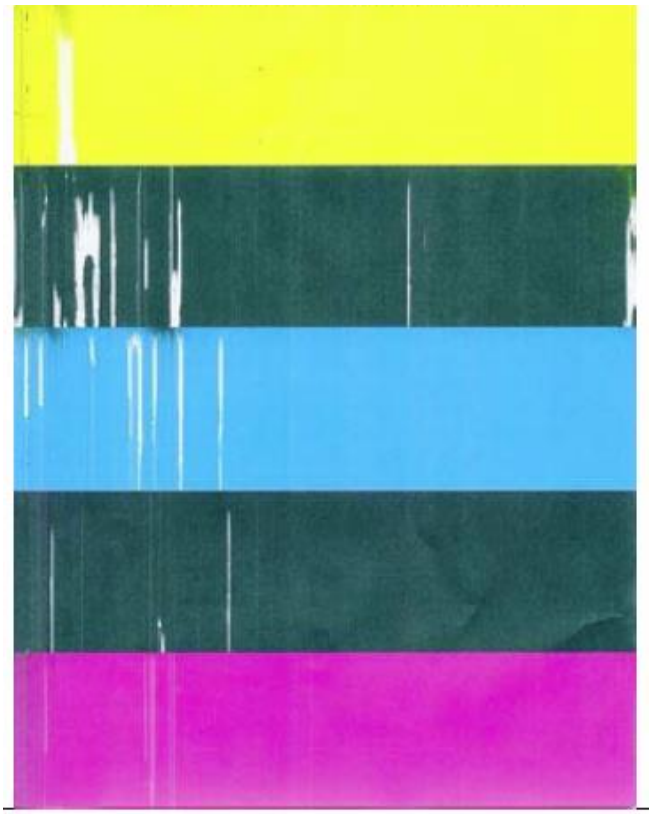
Compatible Graphic Types
The printer and S Series Driver do NOT have any influence on the graphic type (png, jpg, tiff, etc.) that you can select and print. Compatibility is based on the software program being used to create and send the print job to the printer. Check software specifications for the types of graphics that your software program can handle.

Air in Printhead Nozzle Area:

Air in the printhead nozzles will show as jagged, irregular shaped lines of missing color. Lines are normally wider than one nozzle.

Possible Solutions:

- Press the "Full Clean Printhead" button, located in the Maintenance Menu. This can help dislodge, purge and remove air bubbles within the Printhead and Ink Tubes.
- Deprime and Reprime the system.
- Contact Service person to have them inspect the system for possible air leaks (damage to ink tubes or ink revolver couplings).
- Instead of powering the printer off, when not in use, leave the print engine powered-up; so it can perform automatic maintenance routines.



NOTE: A similar print pattern, to the one shown above, can be performed using the "Print Ink Channels" button, located in the Toolbox, "Test Print" drop-down menu.

Clogged/Damaged/Dead Nozzles:

The Memjet printhead cartridge contains 70,400 inkjet nozzles. These nozzles are divided into ten rows; two rows of nozzles for each color channel. Due to the extremely high number of nozzles; it is not uncommon for some nozzles to become contaminated, dehydrated or clogged.

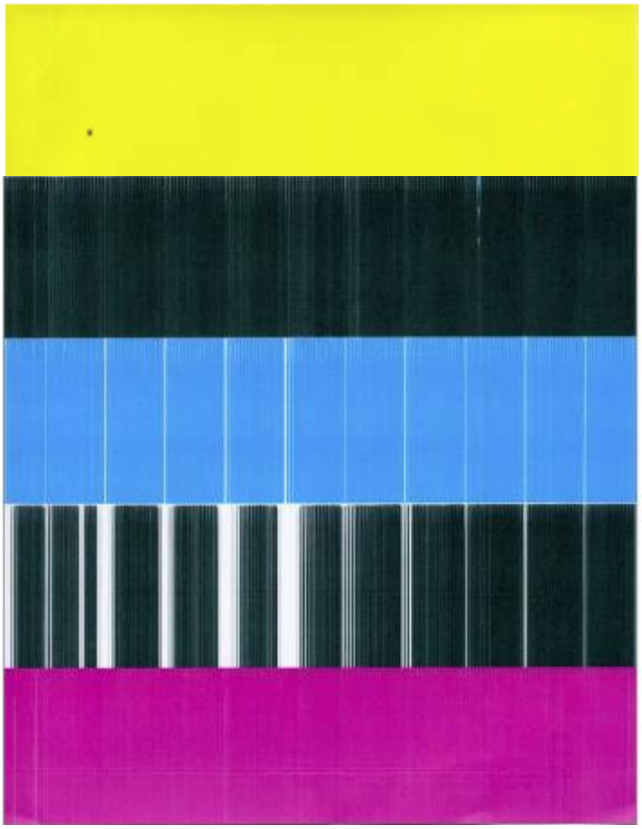
Clogged/damaged/dead/ nozzles will show as thin, crisp, vertical lines of missing color.
Multiple adjacent nozzles, with same issue, will show as wider, crisp, vertical lines of missing color.

Clogged nozzles - normally due to Printhead nozzle dehydration or partial contamination.
Damaged nozzles - normally due to improper cleaning or debris on wiper roller causing damage to Printhead.
Dead nozzles - normally due to the nozzles reaching their "end of life" (printed over 125,000 linear inches).

Possible Solutions:

- Press the "Full Clean Printhead" button, located in the "Maintenance Menu".
- Manually clean the printhead nozzles using distilled water and a lint free cloth.
- Set the following Toolbox features as follows, to see if increased head maintenance will reduce this type of issue during print jobs. KWS Setting (Medium) and Mid-Job Servicing (50).
- Replace the Printhead cartridge and Wiper Roller.

Tip: To help reduce nozzle dehydration, caused by long periods of printer sitting idle, print multiple (4-6) "Print Color Bars" test pages to exercise nozzles and keep nozzles hydrated.



NOTE: A similar print pattern, to the one shown above, can be performed using the "Print Ink Channels" button, located in the Toolbox, "Test Print" drop-down menu.

Color Mixing Issues:

Color mixing will show as muddy, mottled or distorted (grainy) colors.
Color mixing occurs when the ink from one color channel crosses over into another color channel. Since the inkjet nozzle rows are located very close to one another (ten rows of 7,040 nozzles, located within a 0.8 mm space), it is easy for partials or fibers to create bridges across color channels. These bridges allow ink to flow (wick) from one color channel to another; resulting in a "localized" color mixing event; as shown in the examples below.

Color mixing can occur for a number of reasons (here are some common ones)

Possible Causes:

- Printhead Cartridge just installed. It is common to see some color mixing immediately after the system is primed with ink.
- Ink wicking due to fibers (dust) bridging inkjet nozzles.
- Wiper roller too dry. Ink coagulated on roller. Installed new Wiper Roller but it was not "conditioned".
- Wiper roller saturation (too much ink on wiper roller). This can occur if the cleaning features (Quick/Normal/Full Clean Printhead) or "Condition Wiper" are run too frequently.
- Ink flooding on the nozzle plate; due to printer not being level.
- Ink flooding on the nozzle plate; due to excessive back-pressure in the ink system.
- Wiper Roller is not being cleaned properly by the system. This can occur if there is a problem with the Wiper Motor Module (Wiper Roller not turning, Damaged Squeegee Blade).
- Incompatible Media.

Possible Solutions:

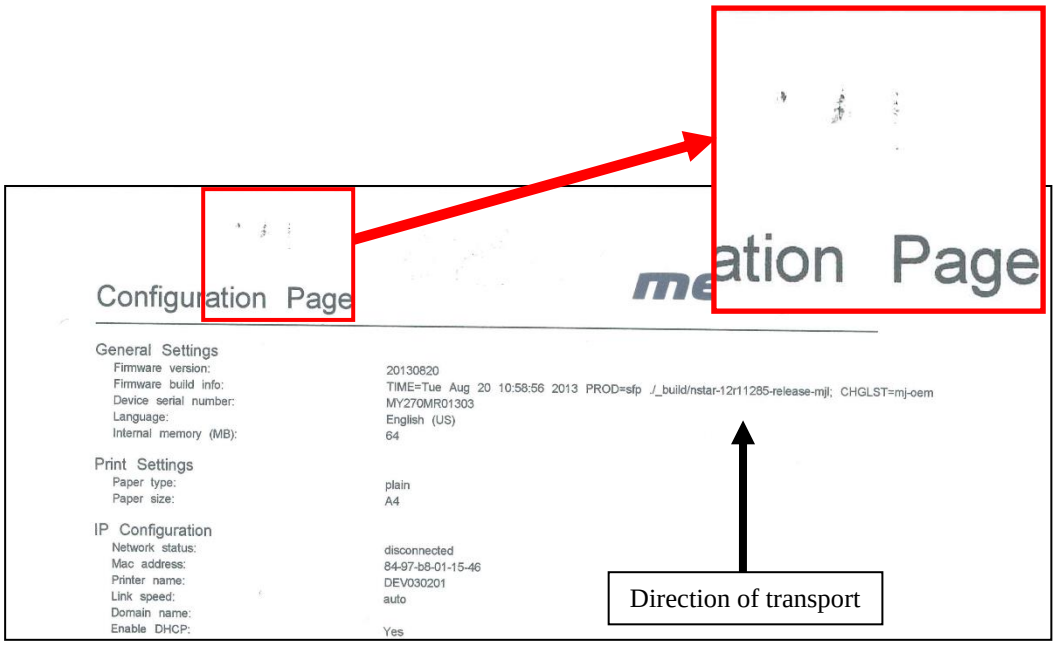
- Wipe printhead using a lint-free cloth, dampened with distilled water.
- Print a few Color Bars or Ink Channels Test Pages to clear color contamination within nozzles.
- Run "Condition Wiper", in Wiper Menu, to hydrate Wiper Roller.
- Run "Wiper Transfer" in Wiper Menu, to reduce ink (moisture) on Wiper Roller.
- Make sure printer is on a sturdy, level table.
- Instead of powering the printer off, when not in use, leave the print engine powered-up; so it can perform automatic maintenance routines. This also allows the pressures in the system to be routinely equalized.
- Test the printer, using a compatible "inkjet suitable" media, to determine if this could be the cause.
- Contact Service Support representative to have them inspect/clean/adjust the service station. If necessary; they may need to replace the wiper roller and or wiper motor assembly.

NOTE: The "Print Color Bars" test print pattern, shown here, can be performed using the "Print Color Bars" button, located in the "Test Print Menu" on the Printer's Touchscreen.

Scuff Marks

Scuff Marks occur when the media makes contact with something (most commonly the Printhead) that has ink on it.

Here is an example of "scuff marks" that occurred when the high points (thicker/puffier areas) on this #10 envelope made contact with the printhead.



Possible Solutions for Reducing Scuff Marks:

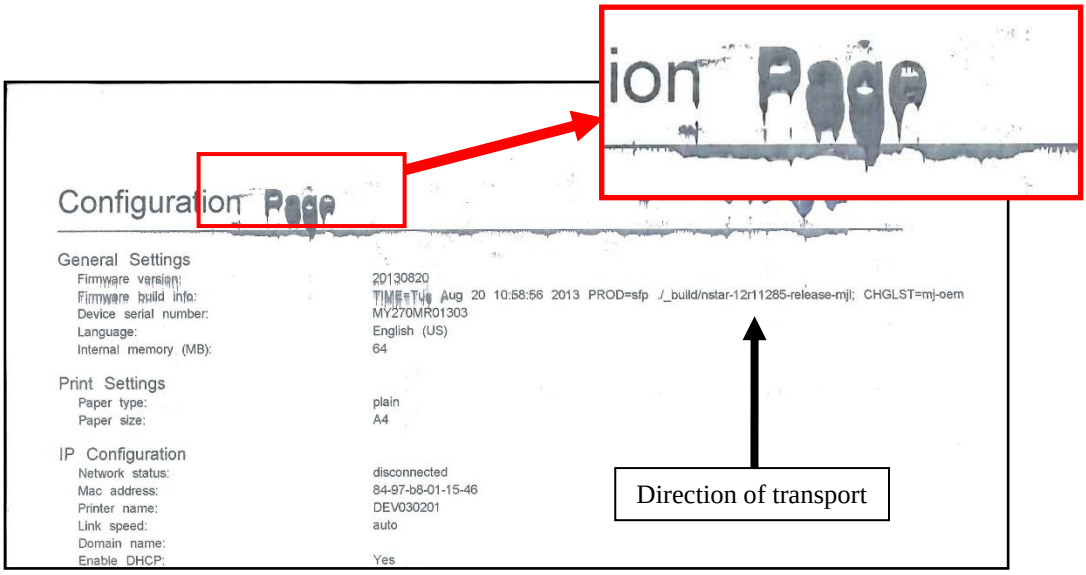
- Increase the "Print Height" value, in Media Setup.
- Make sure media is as flat as possible and folds are as tight as possible.
- Manually wipe the printhead surface, using a lint-free cloth dampened with distilled water to remove excess ink.
- If possible; rotate the media and image 90, 270 or 180 degrees. Sometimes the direction of feed and the mechanics of how the media is driven through the printer can have an effect.
- Run "Wiper Transfer" in Wiper Menu, to reduce ink (moisture) on Wiper Roller.
- Contact your support representative to have the wiper roller replaced.
- Use a more suitable media (flat and uniform in thickness).

NOTICE! It is OK to run the "Quick Clean Printhead" routine once, to see if this has any effect on improving this issue. However, if it doesn't help, you shouldn't repeat this process or use a higher level cleaning routine. Over-use of the "…Clean Printhead" routines will normally increase this issue, because the wiper roller will become more saturated with ink with each cleaning routine; if done too frequently. An over-saturated wiper roller will leave more ink behind on the printhead.

Smudging Issues

Smudging occurs when the wet image, on the media, makes contact with something (most commonly the printhead or upper exit rollers) before it is dry. This issue will also increase the chance for scuff marks.

Here is an example of "smudging" that occurred when an area of this page, with a wet image, made contact with the printhead or something else as it exits printer.
Note: There are also scuff marks in this example. As mentioned previously; smudging will increase the chance for scuff marks; by deposition ink onto other areas of the printhead.



Possible Solutions to Reduce Smudging:

- Check to be sure the Print Platen & Drip Tray are properly installed.
- Make sure media is as flat as possible and folds are as tight as possible.
- If possible; rotate the media and image 90, 270 or 180 degrees. Sometimes the direction of feed and the mechanics of how the media is driven through the printer can have an effect.
- Reduce the amount of ink being sprayed onto the media by setting the print quality to "Normal". Spraying less ink will improve the drying time.
- Reduce the print speed to provide more drying time. If you are already printing in Normal Print Quality, you can select (check) the "half speed" box; located under the Print Quality selection in the S Series Driver. If you are using "Over Speed" feature, try turning this off.
- Use a more inkjet suitable media.

NOTICE! It is OK to run the "Quick Clean Printhead" routine once, to see if this has any effect on improving this issue. However, if it doesn't help, you shouldn't repeat this process or use a higher level cleaning routine. Over-use of the "…Clean Printhead" routines will normally increase this issue, because the wiper roller will become more saturated with ink with each cleaning routine; if done too frequently. An over-saturated wiper roller will leave more ink behind on the printhead.

Fuzzy/Distorted Print

Fuzzy/distorted print can occur for a number of reasons; listed/shown below.

Problem: Print Height value, in Media Setup, is set too high.
Solution: Reduce Print Height value.

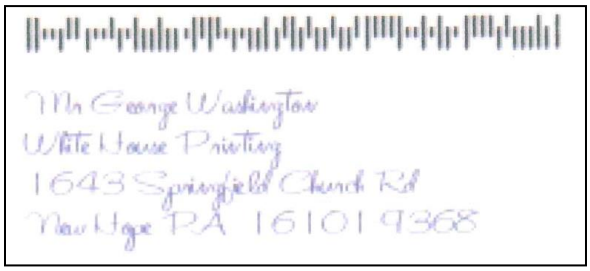
Problem: Paper is buckling or bowing during the time of printing.
Solution: Check that Print Platen and Drip Tray Assembly is proper installed. Try printing on a thicker piece of media (i.e. 40lb paper) If problem does not occur on heavier material the media you are feeding may be too flimsy.

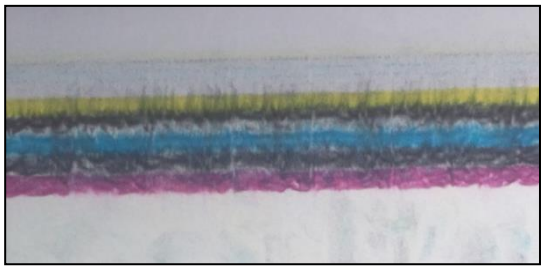
Problem: Poor original image quality (less than 300 dpi).
Solution: Use high quality images.

Problem: Choosing to print image in low resolution from software application.
Solution: Set image to highest resolution possible from software application.

Problem: Damaged Printhead nozzle surface; scratched from improper manual cleaning, or dirty/damaged wiper roller.
Solution: Only use distilled water and a non-abrasive, lint free cloth to manually clean the printhead. Replace the wiper roller at the same time the printhead is replaced. Keep dust/debris from entering the printer.

Fuzz/Distorted Print Examples:





Good Print Examples:

Ink Tank(s)

NOTICE: To avoid problems caused by an Ink Channel (ink tube) running dry; the Ink Tank will be flagged as "Out" before it is totally dry. Therefore, it is common for a small amount of ink to be left within the Ink Tank when the "Out" condition is reached.

CONDITION	PROBLEM	SOLUTION
Installed New Ink Tank and shortly after the related Ink Channel (color) stopped printing and or the related color tube went empty. **CAUTION!** Do NOT continue printing in this condition. Damage to the Printhead will result.	One or more of the "septum needles" didn't fully puncture the septum seals on the new Ink Tank. Defective Ink Tank.	Try removing and re-installing the Tank. See "Install Ink Tanks". Replace defective Ink Tank. Please contact your support representative to report issue.
Ink Level status was displayed 1% and then it changed to "Out". System Status is displaying "Ink_Out_X" (X = color or multiple) Example: Ink_Out_Magenta	Printer has calculated that it has used 250 ml of ink from the Tank.	Replace Ink Tank.
Ink Level status was displaying 5% or more and then it suddenly changed to "Out". System Status is displaying "Ink_Out_X" (X = color or multiple) Example: Ink_Out_Magenta	Visible ink level sensor does not see the presence of ink in the Tank. Printer is not on a stable, level surface; causing ink level sensor to give a premature "Out" condition. System underestimated ink usage. Tank is Empty.	Clean prism on Tank. See section titled "Cleaning Ink Tank Contacts & Prism". Place printer on stable, level surface. Replace Ink Tank. **NOTE**: Although the system is very good at estimating ink usage, it will never be perfect. To help improve Ink Level estimation accuracy; make sure the firmware is up-to-date and try to minimize de-priming/re-priming system, manually cleaning printhead.
Installed New Ink Tank and Ink Level status is displayed as "?". System Status is displaying "Cartridge_Missing_X" (X = color or multiple) Example: Cartridge_Missing_Y	Poor connection between Ink Tank (QA Chip contacts) and printer. Un-authorized Ink Tank installed. Defective Ink Tank.	Clean contacts. See section titled "Cleaning Ink Tank Contacts & Prism". Purchase/install Authorized Tank. Replace defective Ink Tank. Please contact your support representative to report issue.

Memjet® Printhead

CONDITION	PROBLEM / CAUSE	SOLUTION
Missing parts of letters or text.	Air or debris blocking Nozzles.	Clean Printhead using "**Normal Clean Printhead",** found on the **Printer Touchscreen** or in **Printer Toolbox**. If problem persists run "**Full Clean Printhead**". Manually try to rehydrate Printhead by wiping with lint-free cloth, which has been wet with distilled water.
	Printhead damage or end of nozzle life.	Replace Printhead.
Misdirected nozzles (fuzzy print)	Print Height too high.	Reduce "**Print Height**" value in Media Setup.
	Debris on Printhead.	Run "**Normal Clean Printhead".** If problem persists run "**Full Clean Printhead**".
	Printhead damage or end of nozzle life.	Replace Printhead.
Ink mixing – Mixed or muddy colors.	Wiper Roller is too dry and may need to be conditioned (hydrated). Wiper Roller is too wet (oversaturated) or is not turning. Using "Clean Printhead" features too often can over-saturate wiper roller.	Print 5 or more "Print Color Bars" test pages to clear color mixing. If problem returns after printhead maintenance occurs than the Wiper Roller may be oversaturated (run **Wiper Transfer**) or too dry (run **Condition Wiper**) or the Service Station may need maintenance.
No print or crisp, 20 mm wide, blocks of missing print.	Printhead failure or poor electrical connection to Printhead.	Remove Printhead, check contacts and re-install Printhead. Replace Printhead.
Color change in an area of print.	Time between Mid Job Servicing intervals may be too long. Nozzles from one area of a color channel not firing due to dehydration or blockage (air, debris, etc.).	If Mid Job Service or temporarily fixes issue then you need to reduce Mid Job Service value so it occurs more often. Check for air/air-bubbles in ink lines. Circulate ink. Perform "**Full Clean Printhead**". Replace Printhead.

WARNING!

DO NOT REMOVE SIDE COVERS OF PRINTER!
HIGH VOLTAGES PRESENT BEHIND COVERS!

Printer

CONDITION	PROBLEM / CAUSE	SOLUTION
Printer won't Power-up	Power cord disconnected. Power switch OFF. Didn't press Soft-power button. Blown fuse.	Check AC Power Cord connections, Main Power Switch, and Soft-Power Button. Check wall outlet for proper power. Press Soft-power button. If still not powering-up; unplug and check fuse.
No communication	Printer not turned ON. Cable disconnected. Improper Printer Driver Port settings or improper Printer Network settings.	See "Printer won't Power-up", above. Check USB/Network cable connections Check Driver, Port, settings. Check Printer Network Settings. Re-install driver.
Job is sent to printer but printer does not feed or print.	Printer Offline (in Pause or Error state). One of the Media Sensors sees paper present.	Open Clamshell and remove media. Check/Clean Sensors Tap Clear Error and Resume Job
Printer feeds and counts pieces, but does not print. *No Error displayed.*	Print position missing media or media missing print position. Misfed Media is blocking printhead.	If unsure of print position; setup printer to feed 8.5" x 11" media, centered in the "***Print Zone***". If printer is printing, image should show on 8.5" wide media. Once you see where image is located; adjust media or print position as needed. Open Clamshell and check "***Printhead Opening***". Media may have traveled up into this area and is blocking printhead. Remove misfed media.
Improper output (*address information out of order, miss-feeding, etc.*)	Wrong interface settings. Static electricity. Dirty Media Sensor.	Check software or database on PC. Close software, then turn Printer OFF and ON. Clean Media Sensor.
Ink Tank installed, no Ink Level indication in Toolbox	Ink Tank contacts dirty, preventing Printer/Ink Tank communication.	Remove Ink Tank(s). Clean prism and QA Chip contacts; see **Maintenance**, *Cleaning Ink Tank Contacts & Prism*.
Media jams/skews	Double feeding. Media is curled or bent. Media is too thin. Media Thickness not set properly. Using wrong Print Platen or not installed properly.	Adjust Sheet Separators. Uncurl media. Check that media meets thickness specs. Check/adjust ***Media Thickness***. Try using low (3 dot) Print Platen. Verify that Print Platen & Drip Tray Assembly are installed properly; sitting level.
System will not re-prime ink after replacing Printhead Cartridge	Printhead nozzles dry. Ink Tanks may be 1/3 full or less.	Wipe Printhead manually with distilled water and a wet, clean, lint-free cloth. Replace Ink Tanks.

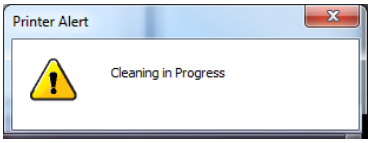
Printer (continued)

CONDITION	PROBLEM / CAUSE	SOLUTION
Intermittent missing dots (lines, in direction of media travel) **or changes in color, that temporarily improve after Mid-Job Servicing (MJS) occurs.**	Automatic Printhead Maintenance features need to be adjusted.	Set "***Mid-Job Servicing***" to a lower value. Set "***KWS***" to a higher level. Set "***Interpage Frequency***" to lower value.
Persistent missing dots (crisp or jagged lines, in direction of media travel)	Clogged or dirty Printhead. Air in printhead/ink lines	Clean Printhead using "***Maintenance***" features. Run "***Full Clean Printhead***". Replace Printhead and Wiper Roller.
Blurry/wavy images	Printhead too far from media surface. Printhead needs maintenance or replacement.	Reduce Media Thickness and or Print Height values to bring Printhead closer to media. Clean Printhead using Maintenance features (*Quick/Normal/Full Clean*) from Printer Touchscreen or Toolbox. Clean Printhead manually using distilled water and a wet, clean, lint-free cloth. Replace Printhead and Wiper Roller.
Black bar/line printed near trailing edge of media	Purge Bar hitting trailing edge of media.	Check/adjust "***Purge Bar Position***".
Feeding problems and or image distortions	Double sheets. Misfeeds. Media hesitating or skewing.	Adjust Sheet Separators. Check adjust Media Thickness. Try using low (3 dot) Print Platen. Verify that Print Platen & Drip Tray Assembly are installed properly; sitting level. Try unlocking, but not opening, the Exit Transport Cover.
Image smudging or offset occurring	Wet image/media making contact with something that is causing image to smudge. Wet image traveling under exit rollers is being picked up by rollers, causing part of image to be repeated in direction of media travel.	Increase Print Height value to move Printhead farther from media surface. Try unlocking, but not opening, the Exit Transport Cover. If "Over Speed" is selected, Turn it OFF. Reduce Print Quality. If using "Normal" print quality, try selecting "Half Speed". Use inkjet suitable media.
Print position shifting in direction of media travel and or not printing on some pieces.	Printer not able to consistently detect lead edge of media. Media hesitating after it reaches the Media Sensor. Media being delivered too fast for system to get next image ready to print.	Reposition Feeder/Entry Sensor Assembly, so paper passes under sensors. Avoid windows or holes in media. Some media surfaces are very reflective and may not be compatible. Check/adjust Media Thickness. If "Over Speed" is selected, Turn it OFF. If using "Normal" print quality, try selecting "Half Speed".

Errors and Warnings

Printer Alert Window Messages

Messages sent from Driver and displayed on PC screen in a small popup window.

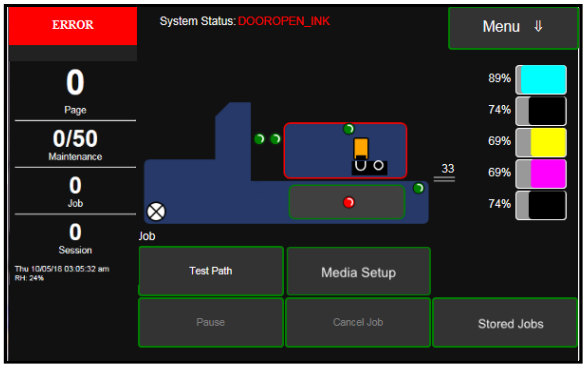


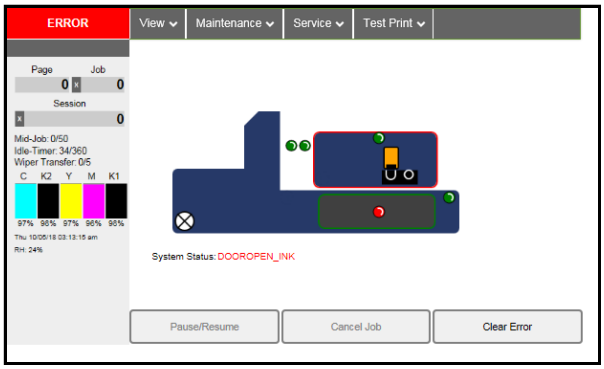
MESSAGE	SOLUTION
Cleaning in Progress	Wait until message disappears. Printer will start printing your job once cleaning process is complete.
Incompatible Printhead	Remove and reinsert your Printhead Cartridge. Replace Printhead. Printhead Cartridges must be purchased from authorized supplier for this printer model.
Incorrect … Ink Tank	Replace Ink Tank. Ink Tanks must be purchased from authorized supplier for this printer model.
…. Out of Ink Example: Cyan Ink Out	Replace empty Ink Tank.
Load Paper	Out of Paper. Load media into Printer, tap **Clear Error** and then tap **Resume** button, from Job Menu, to resume printing.
Mechanical Jam	Check for and remove obstruction, then tap **Clear Error** and then tap **Resume** button, from Job Menu, to resume printing. Check/Clean Sensors. If problem persists, contact technical support.
Missing Printhead	Remove Printhead Cartridge. Check/clean electrical contacts. Reinsert Printhead. Replace Printhead. If problem persists, contact technical support.
Multiple Inks Low	Reorder Ink.
Multiple Ink Tanks Out	Replace empty Ink Tanks.
Multiple Ink Tanks are missing	Insert missing Ink Tanks. Clean electrical contacts and reseat Ink Tanks.
Multiple Unauthorized Ink Tanks	Remove and reinsert Ink Tank. Replace Ink Tank. Ink Tanks must be purchased from authorized supplier for this printer model.
Paper Jam	Remove jammed media. Check for proper feed setup, then tap **Clear Error** and then tap **Resume** button, from Job Menu, to resume printing. Check/Clean Sensors. If problem persists, contact technical support.
Printhead Latch Open	Ensure that Printhead Cartridge is inserted properly, then close Printhead Latch so that it locks.
Print Zone Assembly (Clamshell) Open	Check to be sure Clamshell is completely closed and latched.
The … Ink Tank is missing	Insert missing Ink Tank. Clean electrical contacts and reseat Ink Tank.
Unauthorized … Ink Tank Installed	Replace Ink Tank. Ink Tanks must be purchased from authorized supplier for this printer model.
Unauthorized Printhead	Replace Printhead Cartridge. Printhead Cartridges must be purchased from authorized supplier for this printer model.

Toolbox System Status Messages

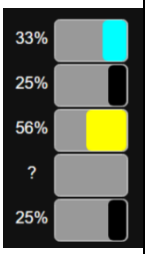
Use the **Touchscreen** or **Toolbox** screen to quickly determine and locate a problem in the Printer.

- When a problem is detected, the **Status Indicator** will show **ERROR** in a red box.
- **System Status** will display the basic problem (*in red*).
- **Printer Graphic Icon** will highlight item (*sensor/switch position in red*) and or systems that are affected.
- **Ink Levels** displays ink status. Ink Tank errors will be shown as "out" or "?" (not recognized, missing).

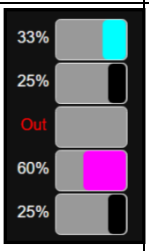




Listed below are some of the messages that may appear in **System Status** along with problem/cause and solution.

SYSTEM STATUS	PROBLEM / CAUSE	SOLUTION
System Status: **CARTRIDGE_MISSING_X** Example: CARTRIDGE_MISSING_M **or** **CARTRIDGE_MISSING_MULT** 	? = Ink Tank is missing or not recognized (*obtained from an unauthorized reseller*). **X** = color (C M Y K1 K2) **MULT** = more than one Tank color.	Insert missing Ink Tank or pop Ink Tank in and out to improve connection. Check/clean Ink Tank contacts. Tap **Clear Error** and then tap **Resume** button, from Job Menu, to resume printing.
System Status: **[Crit 63 03-phead offline cancelpage restart]**	Dirty/damaged Printhead contacts at Printhead or board.	Try rebooting (*restarting*) printer. Try replacing Printhead. If problem persists call for Service.
System Status: **DATA_PATH_UNDERRUN**	Media is not moving from Entry to Exit Sensor with expected timing.	Check/clean Sensors and Reflector. Try selecting "Ignore Exit Sensor".
	Media is being delivered faster than printer can get image ready to print.	Try slowing transport. Turn off "Over Speed". If using Normal print quality, select "Half Speed". Try increasing media gap. Turn off "Fast Feeding" or set "Feed Gap" to a higher value (30 or greater). Reduce complexity of print job.
	Possible issue with format or orientation of job being sent.	Try changing orientation setting in software/driver or setting a different media size.
	Encoder Signal Issue	If problem persists contact technical support. They should check/clean Encoder Wheel.

Toolbox System Status Messages *(continued)*

SYSTEM STATUS	SOURCE	SOLUTION
System Status: **DOOROPEN_INK**	Indicates that Ink Tank Door is open. Door Switch damaged.	Verify that Ink Tank Door is closed. Make sure that Ink Tank Door switch (*located at the upper right corner of the door*) is activated when the Ink Tank Door is open and closed. Use **Scan Sensors** in the Printer **Toolbox** to check that the Ink Tank Door switch is functioning.
System Status: **DOOROPEN_PRINTHEAD**	Indicates that Printhead Door is open. Door Switch damaged.	Verify that Printhead Door is closed. Make sure that Printhead Door switch (*located at the back center of the door*) is activated when the Printhead Door is open and closed. Use **Scan Sensors** in the Printer **Toolbox** to check that the Printhead Door switch is functioning.
System Status: **INK_OUT_X** Example: INK_OUT_YELLOW **or** **INK_OUT_MULT** 	One or more Ink Tanks are out of ink. **X** = Color. **MULT** = more than one Tank color. "**Out**" = System calculated that 250ml of ink was drawn from Tank or visible ink sensor sees no ink in Tank prism.	Open the Ink Tank Door. Replace empty Ink Tank(s). Verify that Ink Tanks are seated firmly and latches are fully closed. Close the Ink Tank Door and tap "**Clear Error**". The ink levels should fill in. **Tip**: A premature visible ink "**Out**" condition can occur if the printer is not on a sturdy, level surface.
System Status: **MAINTENANCE_BUSY**	Machine is performing maintenance. "Media Setup" menu may be open.	No action required. Wait for printer to finish. Exit out of the "Media Setup" menu.
System Status: **MAINTENANCE_BUSY** **Tip:** To define issue; check Touchscreen to see if it displays the following message. **WIPER OVERTEMP**	Wiper Motor is overheated due to performing a Wiper Transfer (*removing excess ink off Service Station Wiper*) too often or for multiple or extended periods. Printer will continue maintenance after Wiper Motor cools down. Message will disappear once the temperature returns to operating range.	**Wait for Wiper Motor to cool down,** Printer will automatically resume operation. **Tip:** To reduce this issue; set **Mid-Job Servicing** interval to a higher number of pages. **NOTE:** If the value is set too high, print quality issues may occur; caused by clogged or dehydrated nozzles. Run **"Condition Wiper"** from Touchscreen Wiper Menu. This will rehydrate wiper roller and wiper motor module which may help to reduce energy it takes to turn motor.

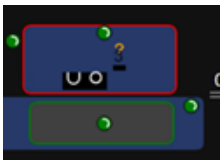
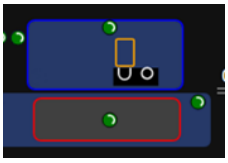
Toolbox System Status Messages *(continued)*

SYSTEM STATUS	SOURCE	SOLUTION
System Status: **MAINTENANCE_JAM** **Tip:** To define error; check Touchscreen to see if it displays one of the following messages. **Pump Error** – Ink Circulation Pump **Sump Error** – Sump Pump for waste ink	Motor that drives component has detected a problem or movement is hindered.	Restart Printer. If problem persists call for Service.
System Status: **MAINTENANCE_JAM** **Tip:** To define error; check Touchscreen to see if it displays one of the following messages. **Sled Error** – Service Station Sled **Lift Error** – Printhead Carriage Lifter	Printhead or Ink Tank Door opened during process. Motor that drives component has detected a problem or movement is hindered.	Close doors (Printhead and Ink Tank) and tap **"Clear Error"**. Check for anything that may be hindering movement of item (Sled, Lifter). If **"Sled Error"** or **"Lift Error"**; check/clean the Sled and Lifter Home Sensors. If problem persists call for Service. **CAUTION**: After pressing **"Clear Error"** the system will try to drive the sled, lifter or wiper motor again. If the same error comes up again, after trying the above solutions, call for service. Pressing **"Clear Error"**, more than a few times in a row, may cause system damage.
System Status: **MAINTENANCE_JAM** **Tip:** To define error; check Touchscreen to see if it displays the following message. **WIPER ERROR** – Wiper Motor	Wiper Roller is not turning or it is too hard to turn. **Possible causes:** 1. Ink coagulation making motor hard to turn. 2. Wiper Motor cable is broken or disconnected. 3. Wiper Motor Module failure.	1. Run **"Condition Wiper"** from Touchscreen Wiper Menu. This will rehydrate the wiper roller and wiper motor module. 2. Check cable and connections. 3. Replace Wiper Motor Module. If problem persists call for Service.
System Status: **MECH_CANCELPAGE**	Job was cancelled by user pressing Cancel Job button.	Wait until the print job has cleared from Printer. Then manually clear the job from the computer's print queue. Send a new print job.

Toolbox System Status Messages *(continued)*

SYSTEM STATUS	SOURCE	SOLUTION
System Status: **MECH_FAIL_PERMANENT** **ERROR** on **System Status** screen. Check the **Printer Graphic** to determine what component has a problem or failed: **Ink Valve**, **Printhead**, etc., (usually indicated with a steady **"?"**)	Mechanical error One of Printer's mechanical components was not properly registered at expected position. Mechanical failure or Sensor failure.	Visually inspect component stated as a "Reason" for failure. Using **Scan Sensors** page in the Printer **Toolbox**, perform toggle test on Sensor responsible for registration of failed mechanical component position. Try rebooting (*restarting*) printer. If problem persists call for Service.
System Status: **ONLINE**	Printer Ready	System is ready to accept jobs and print.
System Status: **PAPERPATH_FEED_TIMEOUT**	Out of Paper Hesitation in media feed. Media Thickness set too high. Media not passing under Feeder/Entry Sensors.	Load media into Printer and tap **Clear Error** and then tap **Resume** button, from Job Menu, to resume printing. If media is present; check/adjust Media Thickness, Guides and Separators. Reposition media or Feeder/Entry Sensor Assembly, so paper passes under sensors.
System Status: **PAPERPATH_PAPERJAM**	Paper/Media jam detected. Printer has detected that one (*or more*) Media Sensors are blocked (*interrupted*).	Carefully remove jammed media from Printer and close Print Engine. System Status message in **red** should go away. Touchscreen and Toolbox **Paperpath Sensor indicators** should change from red to green. **After jam is cleared, you can:** Check/adjust sheet separation. Tap **Clear Error** and then tap **Resume** button, from Job Menu, to resume printing.
System Status: **PAPERPATH_EXIT_SENSOR**	Exit Sensor does not see media. Media not passing over Exit Sensor or Underside of media is dark in color.	Check/clean Exit Sensor Reposition media so paper passes over Exit sensor or select "Ignore Exit Sensor" from "Media Setup" menu.
System Status: **PAPERPATH_PAGE_SEQUENCE**	Change in media length detected. Shinny media surface or hole in media. Hesitation or skew in media feed. Overlapping pieces.	Remove media from the Printer transport. Check/adjust sheet separation. Reposition media or Feeder/Entry Sensor Assembly, so paper passes under sensors. Avoid windows or holes in media. Turn off "Double Feed Detection" Tap **Clear Error** and then tap **Resume** button, from Job Menu, to resume printing.

Toolbox System Status Messages *(continued)*

SYSTEM STATUS	SOURCE	SOLUTION
System Status: **PRINTHEAD_MISSINGQA** 	? = Printhead missing or not recognized (not an authorized supply) Printhead not making proper connections.	Install Printhead. Remove the Printhead, clean contacts and reinstall the Printhead. Replace Printhead. Refer to appropriate sections in this manual for removing and installing Printhead Cartridge Try rebooting (*restarting*) printer. If problem persists call for Service.
System Status: **PRINTHEAD_UNPRIMED** 	Printhead unprimed. Printhead Latch is open and or Door open. Printhead priming process has failed.	After installing Printhead you must close Printhead Latch and close all doors to start priming process. Remove Printhead Cartridge, wet print nozzles using distilled water and reinstall Printhead Cartridge. Refer to appropriate sections in this manual for removing and installing Printhead Cartridge. If you continue to have trouble priming Printhead; check for kinked or pinched color tubes. Try rebooting (*restarting*) printer. If problem persists call for Service.
System Status: **PAPERPATH_GAP_SERVO_ERROR** (Thickness motor) **PAPERPATH_FEED_SERVO_ERROR** (Feeder motor) **PAPERPATH_SERVO_ERROR** (PrintZone motor)		Check for anything that may be hindering movement of item (Thickness/Clamshell, Feeder, Media Transport system) If problem persists call for Service.

Appendix A – Printer Specifications

PRINT RESOLUTION	**Best:** 1600 x 1600 DPI **Normal:** 1600 x 800 DPI
SPEED (color or mono)	Up to 3,600 letter size pages per hour Up to 8,000 #10 envelopes per hour
MEDIA SIZE	**Minimum:** 3" W x 4" L (76 mm x 102 mm) - optional accessories available for smaller media sizes **Maximum:** 10.5" W x 17" L (267 mm x 432 mm) - up to 14.25" L (362 mm) for rigid material - optional accessories available for longer media lengths
PRINT AREA	8.77" W x 40" L (222.8 mm x 1016 mm) - including bleed area
MEDIA THICKNESS	**Minimum:** 0.004" (0.1 mm) **Maximum:** 0.4" (10 mm) - electronic thickness control via Touchscreen
FEEDER CAPACITY	Up to 500 single sheets or 750 #10 envelopes
SOFTWARE	Printer Drivers for Windows ™ 7, 8, 8.1, 10 RIP & Workflow software available
INTERFACE	USB 2.0 and Ethernet
DISPLAY	7" Color Touchscreen Display - monitor and control printer via Touchscreen
DATA STORAGE	Up to 60 GB of onboard Printer storage for Job Library - reprint stored jobs via Touchscreen
PRINT TECHNOLOGY	Memjet® Thermal Inkjet - Memjet® Printhead (70,400 nozzles) - Memjet® water-based dye inks
INK CAPACITY	Five individual 250 ml Ink Tanks (CMYKK) Cyan (250 ml), Magenta (250 ml), Yellow (250 ml), Black (500 ml)
FEEDER	Top Load Friction Feeder Built-in
TRANSPORT	Pressure Roller Transport System with Starwheels
ELECTRICAL	100-240 VAC, 50/60 Hz, 2.5 A
DIMENSIONS (approximate)	22" W x 32.25" L x 14.75" H (55.9 cm x 81.9 cm x 37.5 cm) - printer body (no guides installed) 22" W x 40" L x 22" H (55.9 cm x 101.6 cm x 55.9 cm) - with standard guides/accessories attached and fully extended
WEIGHT	109 lbs (49.4 kg) printer only; 145 lbs (65.8 kg) with packaging
CERTIFICATIONS	UL Listed. CE Declared. RoHS Compliant.
OPTIONS	Conveyor/Stacker, IR Dryer Extended Rear Media Support Guide Small Media Guide Kit RIP & Workflow Software

All Specifications Subject To Change without Notice

Appendix B – Supplies and Optional Hardware

The following supply items and optional hardware are available from your Distributor:

SUPPLIES	PART #
Printhead Cartridge	CJ-20
Black Ink Tank (printer requires 2)	CJ-24
Cyan Ink Tank	CJ-21
Magenta Ink Tank	CJ-23
Yellow Ink Tank	CJ-22

OPTIONAL HARDWARE	PART #
Conveyor/Stacker with Drop Tray	CJ-10
Catch Tray	CJ-05

Appendix C – Backup/Transfer Port

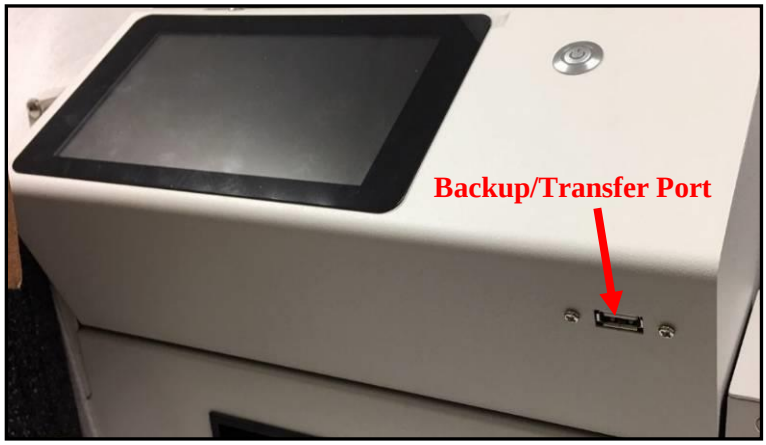
NOTE: This port may NOT be present on all COLORMAX8 Printers.

The USB port, located on the front of the printer, can be used to backup stored Print Jobs.
Backed-up Print Jobs can then be transferred (uploaded) to another COLORMAX8 printer.

NOTE: Stored Print Jobs are jobs that have been saved to printer memory for future use. See "Stored Jobs", for more details on saving and using stored Print Jobs.

ATTENTION: Do NOT attempt to load Print Jobs, such as PDF files, using this Port. System damage will occur.

A technician may use this port to retrieve all system/job/debug Log files from the printer, so they can be archived for future troubleshooting purposes.
Tip: Individual Job and Debug Log files can be accessed from the printer's Toolbox (Service Menus).



NOTE: Backed-up Print Jobs will be located under the \prns directory on the USB Flash Drive. Backed-up Log files will be located in the root directory. Log files are in a zipped (*.tgz) format. These files can be opened/unzipped using a zip file utility, such as "7-Zip".

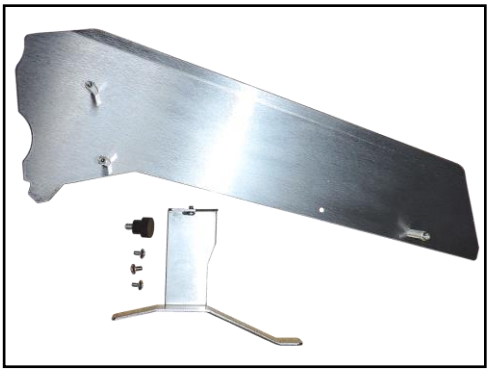
This port is compatible with USB Flash Drives that have been formatted as "FAT32".

CAUTION: Do NOT connect devices, other than USB Flash Drives, to this port.

When a compatible USB Flash Drive is connected to this port, you will be presented with the following "USB Storage Device Detected" screen.

Backup Logs – Use this feature to backup all system/job/debug Log files to the USB Flash Drive.
Backup Print Jobs – Use this feature to backup all "stored jobs" to the USB Flash Drive.
Upload Print Jobs – Use this feature to transfer all "stored jobs" from the USB Flash Drive to the printer.
Quit – Tap to exit/close this menu. It is now safe to remove the USB Flash Drive.

Appendix D – Small Media Guide Kit



The Small Media Guide Kit is an optional accessory. It allows for feeding of smaller, narrower media such as business cards (2” W x 3.5" L; 50.8 mm W x 88.9 mm L).
NOTE: 3.5” minimum length may not work with all applications. 3.75” is minimum media length for positive roller to roller contact.

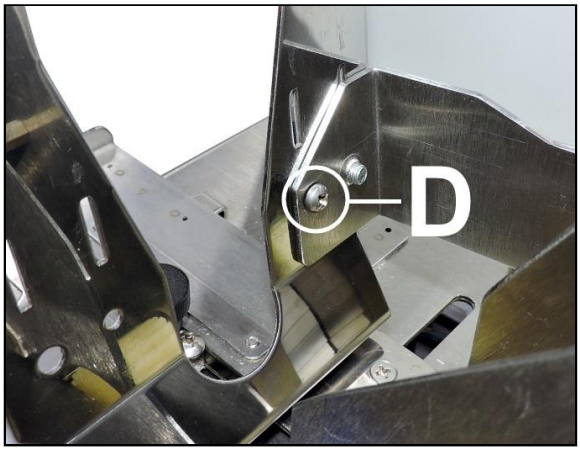
Recommended Printer Settings:
Fast Feeding OFF. Over Speed OFF. Print Quality Best or Print Quality Normal with Half Speed ON.

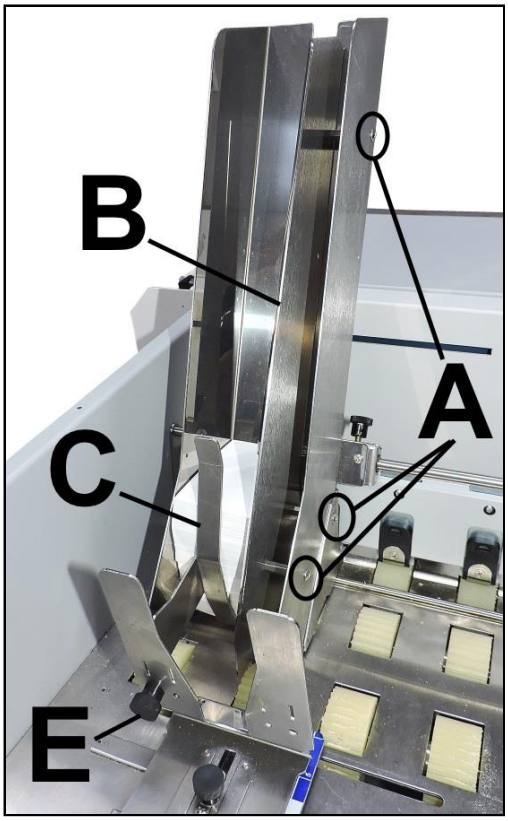
The Kit includes:
(1) Side Guide Extension Assembly
(1) Narrow Rear Guide
(1) Thumbscrew
(3) Phillips head screws

Tools Needed: #2 Phillips screwdriver

How to Install the Small Media Guide Kit

1. **[A]** Use the three (3) screws (*included*) to attach the Side Guide Extension Assembly **[B]** to the inside of the right-hand Side Guide using the (3) predrilled holes in the Guide.
2. Install the Narrow Rear Media Guide **[C]** by aligning the screw/pin with the hole on the left-hand side of the Rear Guide **[D]**.
3. Secure the Narrow Guide to the Rear Guide using the Thumbscrew Knob **[E]** included in the kit.

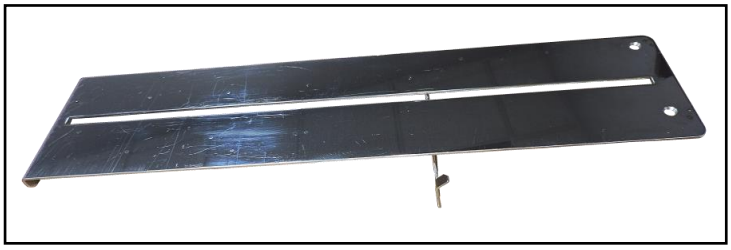




Appendix E – Extended Rear Media Support Guide

The Extended Rear Media Support Guide is an optional accessory.

It extends the support range of long media up to 19” (482.6 mm) for stiff media and up to 22" (558.8 mm) for flexible media.

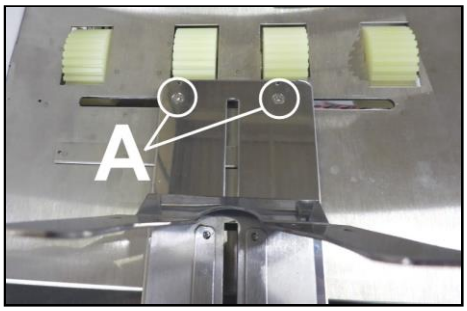


Included:
(1) Extended Rear Media Support Guide plate

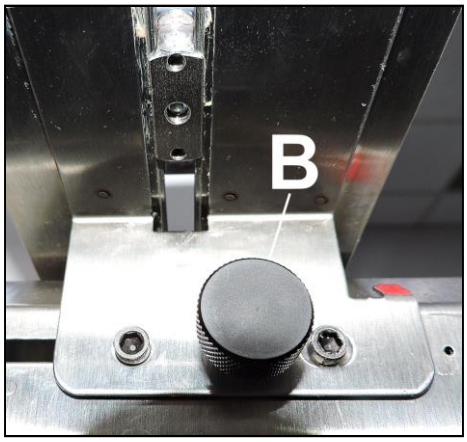
Tools Needed:
Phillips screwdriver

How to Install the Extended Rear Media Support Guide

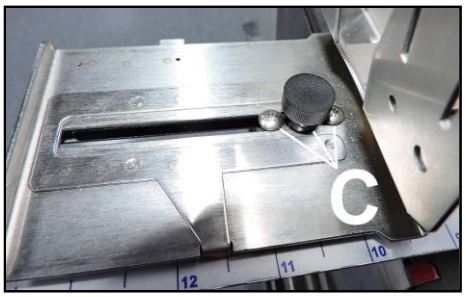
1. Remove (2) screws **[A]** securing the original Rear Media Support Guide/Sled Assembly to the Center Plate.

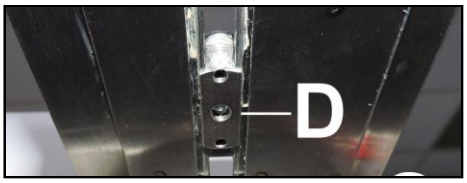


2. Remove the Locking Knob **[B]** to finish removing the Rear Media Support Guide/Sled Assembly from the printer.



3. Remove the Locking Knob and (2) screws **[C],** securing the Sled and Support Nut **[D]** to the original Rear Media Support Guide. Be careful not to drop and loose the Support Nut.

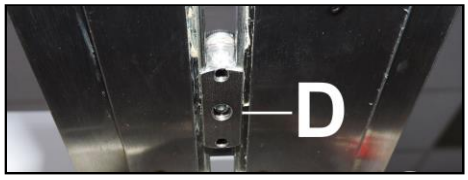


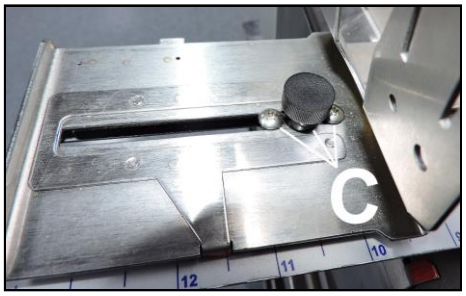


4. **Install the Sled onto the Extended Rear Media Support Guide.**

   a. Install the Support Nut **[D]** from below.

   b. While holding the Support Nut **[D]** into position; secure the Sled to the Support Nut using the Locking Knob and (2) screws **[C]**; that were removed in **Step 3.**

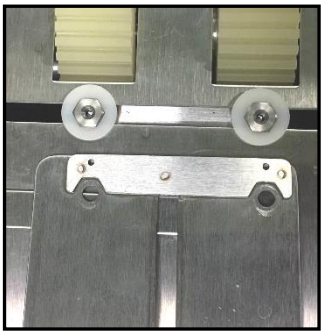


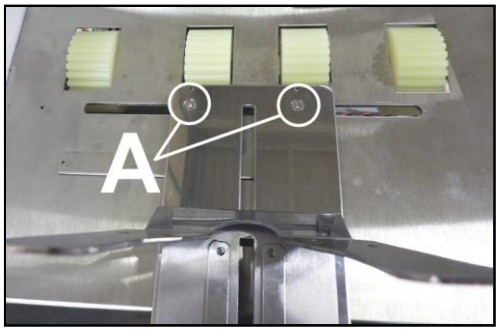


5. **Install the Extended Rear Media Support Guide/Sled Assembly onto the Printer.**

   a. Align the two outside holes, in the Rear Media Support Guide/Sled Assembly, over the posts (Allen screws). Then loosely install the Locking Knob; removed in **Step 2**.

   b. Install (2) screws **[A]**, removed in **Step 1,** to secure the front of the Assembly to the Center Plate. **IMPORTANT**: Be sure to align the Nuts on Mounting Block, with the cut-outs in the bottom of the Guide, before installing and securing screws.





6. Finished. Adjust Extended Rear Media Support Guide/Sled as needed.

Tip: Once the Extended Rear Media Support Guide (47-116-06) is installed, there shouldn't be any need to remove it from the printer. You can store your "original" Rear Media Support Guide plate for possible future use.

Appendix F – Magnetic Media Support Assembly

The Magnetic Media Support Assembly is an optional accessory.

The Magnetic Media Support Assembly fits over the Center Plate Support Bar. A strong magnet holds it tight against the Center Plate. Allows feeding of envelopes bottom edge first (*i.e., flap is on the on trailing edge*) to prevent the flap from opening, catching or skewing the envelope. Helps prevent misprints and media jams.

Use 1, 2 or more as needed for your print job.
NOTE: It is strongly recommended that the Assembly be used in pairs.

Magnetic Media Support Assembly (47-116-25) consists of one (1) of the items shown to the right. If you need two, please order two (2).

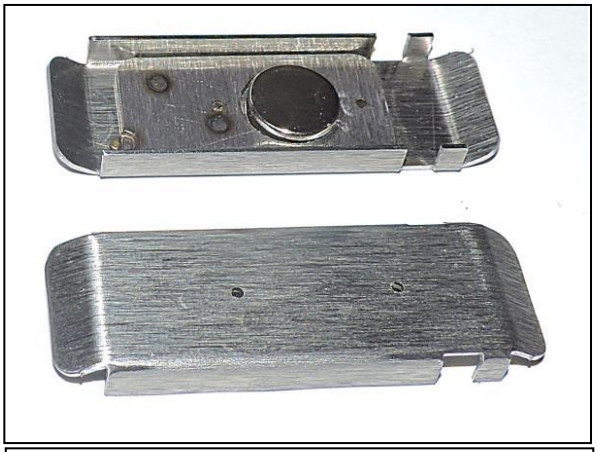


Image above shows two (2) Assemblies (one up-side-down and one right-side-up)

Tools Needed: None

To Install:

Place the Assembly between Feed Rollers and over the Center Plate Support Bar, as shown below.

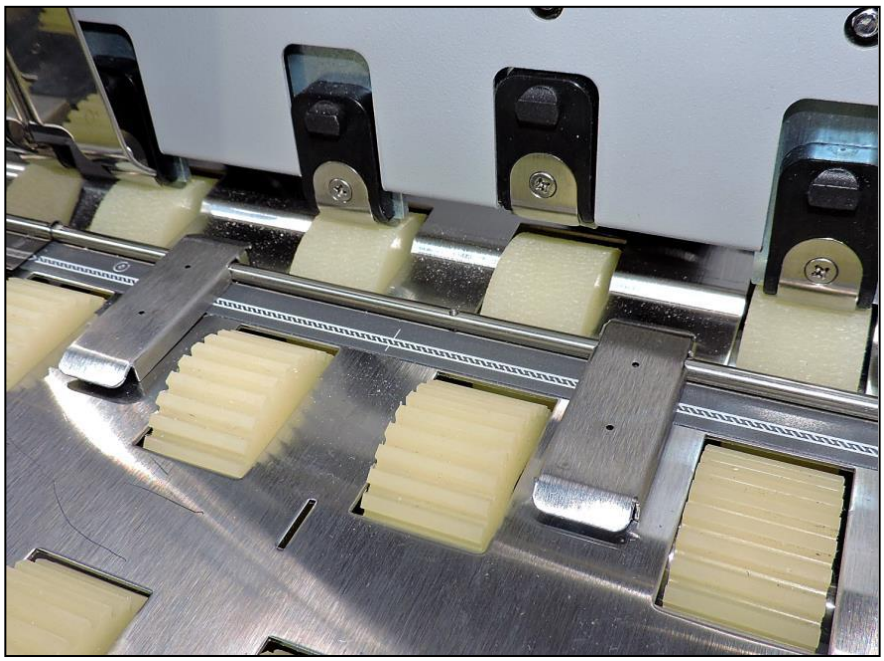


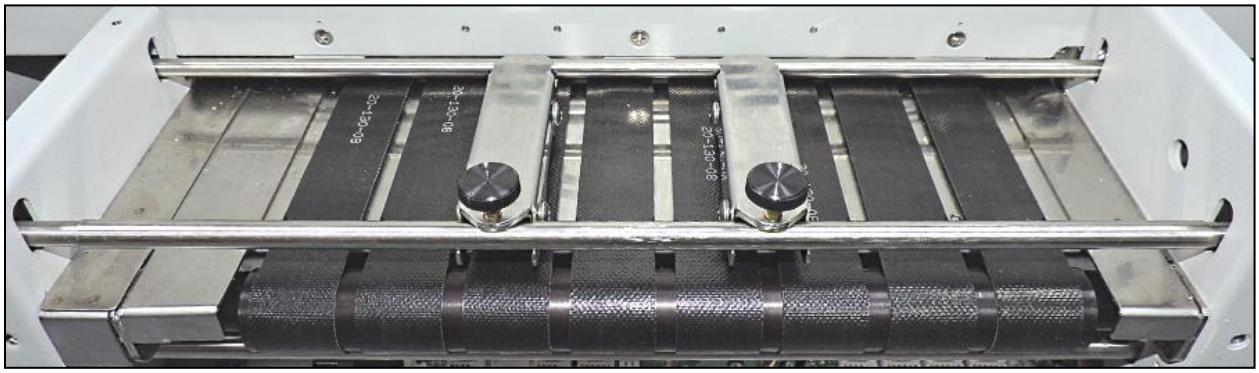
Image above shows two (2) Assemblies

Appendix G – Adjustable Exit Wheels Assembly

The Adjustable Exit Wheels Assembly is an optional accessory that must be installed by a qualified service technician.
It permanently replaces the existing “Exit Transport Cover”.

47-900-10 Exit Wheel Assembly Kit includes:
(1) Right-hand Wheel Assembly
(1) Left-hand Wheel Assembly
(1) Exit Wheel Shaft
(2) Mounting screws

This optional accessory provides the ability to position the Wheel Assemblies so they avoid rolling over freshly printed surfaces, which can reduce or eliminate ink tracking and smearing.

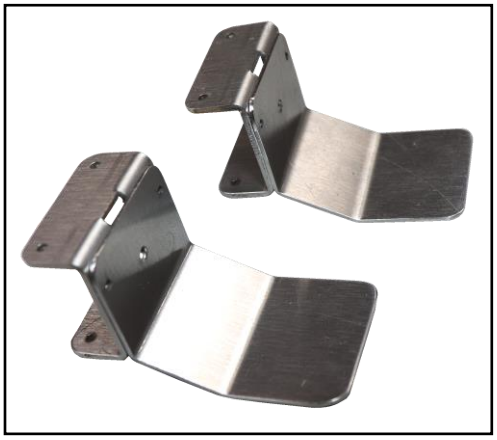


NOTICE: You may NOT need this accessory. You may be able to avoid ink tracking and smearing by unlocking (unlock, don’t open) the “Exit Transport Cover”. Unlocking the “Exit Transport Cover” may NOT work for all applications, without causing feeding issues, which is why this accessory was designed and made available.

Appendix H – Media Retainer Guide Kit

The Media Retainer Guide Kit is an optional accessory.

Media Retainer Guides can be used to hold down uneven or wavy media as it feeds into the Printer, to help prevent media jams. They attach to the Media Thickness Cross Bar and adjust to fit media width.



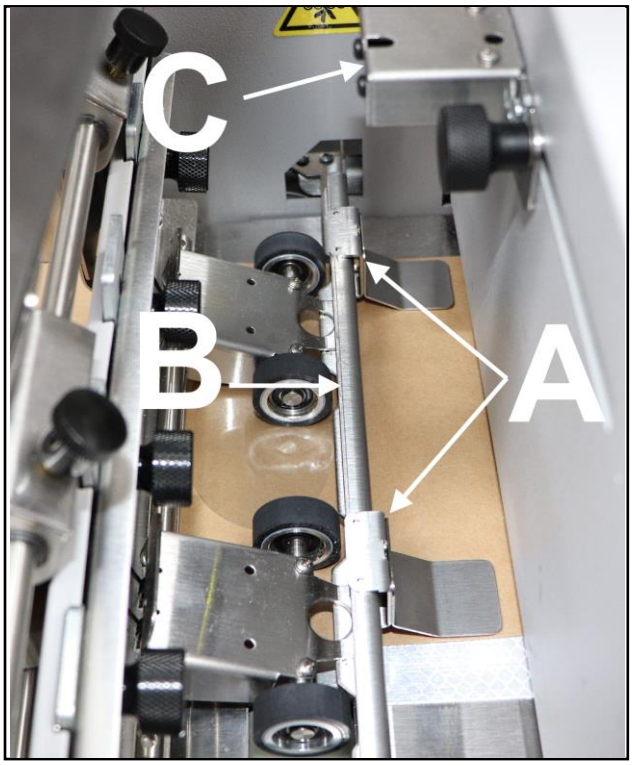
Media Retainer Guide Kit includes:
(2) Media Retainer Guides.

Tools Needed: None

To Install:

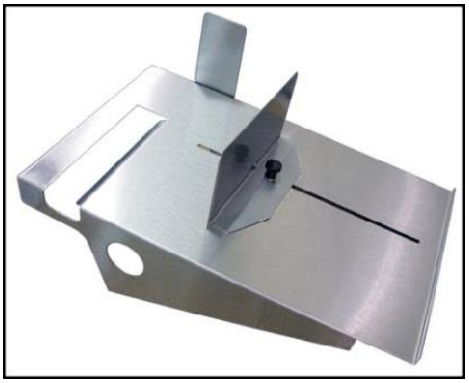
1. Attach the Guides **[A]** to the Media Thickness Cross Bar **[B]** as shown.
2. The Guides should be spaced so they cover the outer edges of the media being fed.

   ATTENTION: Make sure the Guides **[A]** do NOT obstruct the Media Sensors, located within the Feeder/Entry Sensor Assembly **[C]**. If they do, move the Guides and/or the Feeder/Media Entry Sensor Assembly.



Appendix I – Catch Tray

The Catch Tray (part # CJ-05) is an optional accessory.



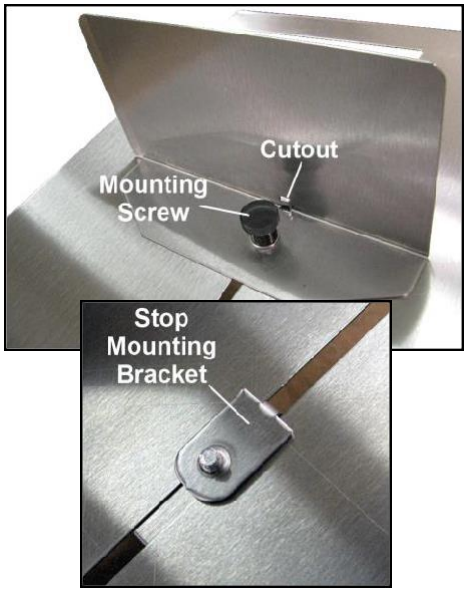
DT-420 Catch Tray includes:

- Catch Tray
- Stop (Media Stop)
- Stop Mounting Bracket
- Mounting Screw (Thumb Screw)

Tools Needed: None

Attach Media Stop and Position Catch Tray

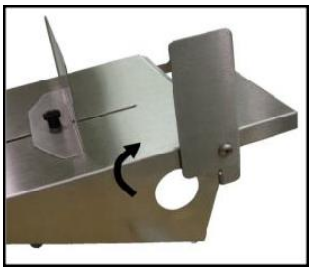
1. With Catch Tray upright, reach under high side of Catch Tray with Stop Mounting Bracket. Position tab on Stop Mounting Bracket so it is at the high side of the Catch Tray and sticking through slot in Catch Tray, as shown.
NOTE: Picture of Stop Mounting Bracket is from under-side of Catch Tray.



2. While holding Stop Mounting Bracket in position, align Media Stop so tab on Mounting Bracket fits into Cutout in Media Stop. Align hole in Media Stop with threaded hole in Mounting Bracket.

3. Secure Media Stop using Mounting Screw (Thumb Screw) as shown.

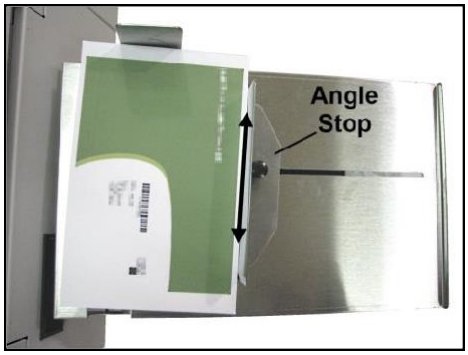
4. Swing Side Guide up into position.



5. Place Catch Tray at exit end of Printer.

6. Loosen the Mounting Screw (Thumb Screw) and adjust Media Stop to accommodate Media length.

Tip: For best performance, Media Stop should be set at a slight angle as shown.



Appendix J – Service Station Maintenance

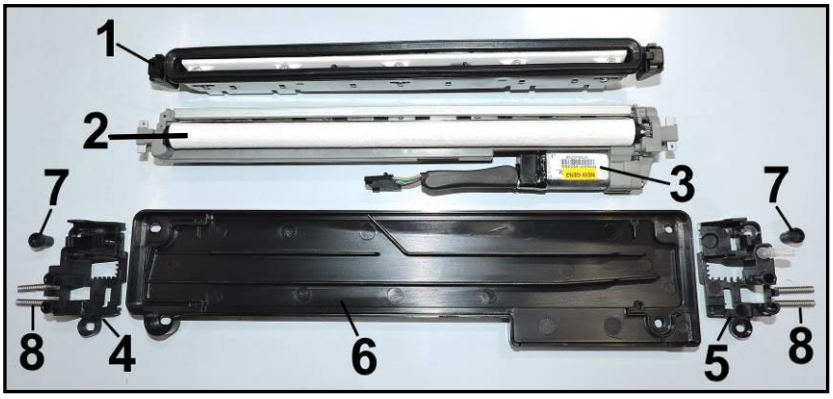
NOTICE
Service Station Maintenance and Wiper Roller Replacement should only be performed by a qualified/trained person. Please contact your service representative to obtain training or to have them perform this service for you.

It is very important that the components within the Service Station receive proper, routine maintenance.
If not you may experience image quality issues and reduced Printhead life.
Service station maintenance may include removing and cleaning the Capping Station and Wiper Motor Assembly.
Cleaning the Service Station Tray and replacing the Wiper Roller.

Service Station Component Identification:

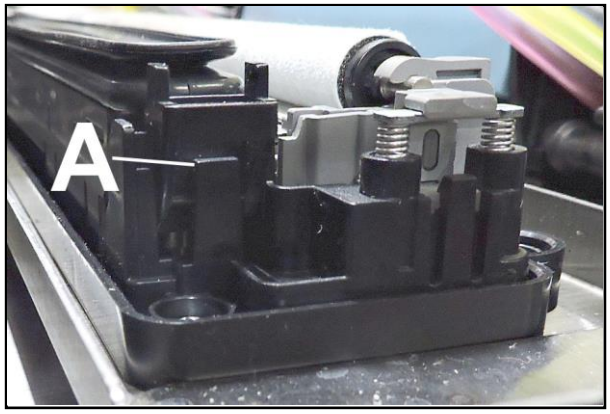
The Service Station consists of three major components. The Capping Station **[1]**, Wiper Motor Assembly **[3]** and Service Station Tray **[6]**. The Capping Station **[1]** keeps the Printhead hydrated and protected when not in use. The Wiper Roller **[2]**, attached to the top of the Wiper Motor Assembly **[3]**, removes excess ink and debris from the Printhead. The Service Station Tray **[6]** captures and removes waste ink that is produced during the Printhead maintenance processes. The Non-Operator Side Bracket **[5]** contains a Siphon Hose that is attached to a pump that is used to remove the waste ink from the Tray **[6]**. It is important that all of these components are routinely and properly maintained in order to ensure proper Printhead performance.

1. Capping Station
2. Wiper Roller
3. Wiper Motor Assembly
4. Operator Side Bracket
5. Non-Operator Side Bracket
6. Service Station Tray
7. Capping Station Inserts (2)
8. Wiper Motor Assembly Springs (4)

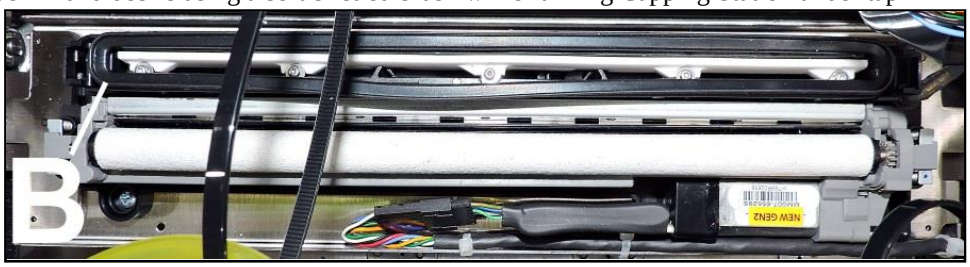


Removing and Cleaning Service Station Components

Removing & Cleaning Capping Station:



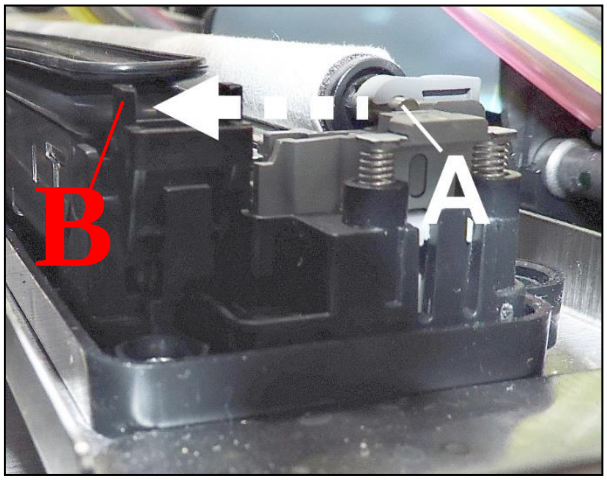
1. Using the **Touchscreen**, select **"Menu,"** and tap **"Maintenance"** from the drop-down menu. Tap **"Inspect Sled"**. The Service Station Sled moves out from under the Printhead Carriage.
2. Open the Printhead Door.
3. Press the Soft Power button to power-down the printer. Then turn OFF the Main Power Switch.
4. Gently release the tabs **[A]** (*one located at each end*) securing the Assembly to the Service Station Tray.
5. Lift the Capping Station **[B]** out of the Printer.
   NOTE: Be careful, watch for dripping ink.
   Do not lose the (2) inserts the Capping Station rests on (*located behind the release tabs*).
6. **Cleaning:** Remove ink and debris using a soft bristled brush while running Capping Station under tap water. Then wipe lip of cap using distilled water and a lint free cloth.



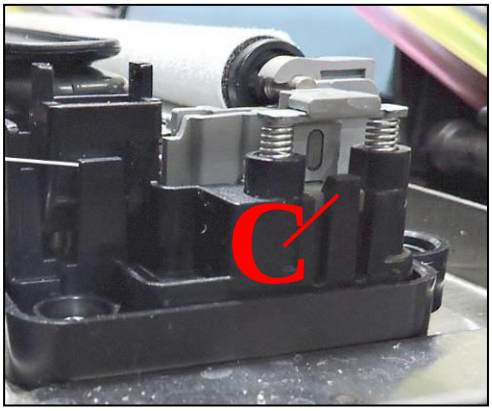
7. If you plan to clean additional service Station Components continue to next item/section.
   If not, reinstall the Capping Station into the Service Station Tray making sure that two inserts are present and that the Capping Station locks fully into position.
8. Close the Printhead Door.
9. Turn ON the Main Power Switch.
10. Press the Soft Power button to power-up the printer.

Removing & Cleaning Wiper Motor Assembly:

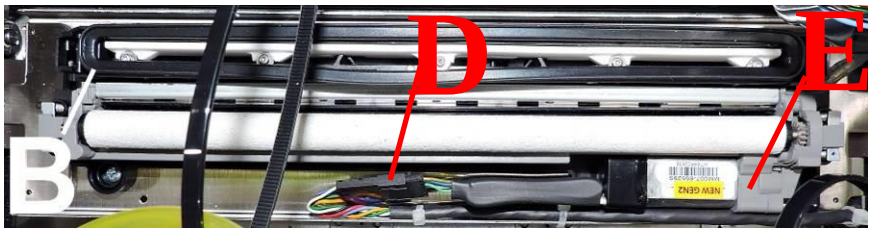
1. Using the **Touchscreen**, select **"Menu,"** and tap **"Maintenance"** from the drop-down menu. Tap **"Inspect Sled"**. The Service Station Sled moves out from under the Printhead Carriage.
2. Open the Printhead Door.
3. Press the Soft Power button to power-down the printer. Then turn OFF the Main Power Switch.
4. Remove the Wiper Roller, from the Wiper Motor Assembly. Release the Wiper Roller [**A**] by pushing the non-geared end toward the Capping Station **[B]**.
   This will pop it out of the bracket.
   Then lift the Wiper Roller out of the Wiper Motor Assembly.



5. Gently release the tabs **[C]** (*one located at each end*) securing the Wiper Motor Assembly to the Service Station Tray.



6. Carefully disconnect the Wiper Motor's electrical connection **[D].**
7. Lift the Wiper Motor Assembly **[E]** out of the Printer. **NOTE: Be careful, watch for dripping ink. Do not lose the (4) springs that the Wiper Motor Assembly rests on.**



8. **Cleaning:** Remove ink and debris using a soft bristled brush while running Wiper Motor Assembly under tap water. Then rinse the assembly using distilled water and pat dry with a lint free cloth. **CAUTION:** Do NOT submerge the motor during cleaning. Try to keep the motor and gear box as dry as possible while performing this task.
9. Remove protective covering from new Wiper Roller.
10. Install new Wiper Roller.
    Make sure gear on Roller engages gear in Wiper Motor Assembly. Carefully snap Roller back into place.
11. If you plan to clean additional Service Station Components continue to next item/section.
    If not, reinstall the Wiper Motor Assembly**[E]** into the Service Station Tray making sure that the four springs are present and that the Wiper Motor Assembly locks fully into position.

12. Reconnect the Wiper Motor's electrical connection **[D]** and make sure the connector and wiring are positioned inside the Sled and as low as possible.
    WARNING: If connector or wiring is not positioned properly it may contact the Printhead Carriage which may damage the Printhead or cause "Maintenance Jam" (Sled Error) conditions.
13. Close the Printhead Door.
14. Turn ON the Main Power Switch.
15. Press the Soft Power button to power-up the printer.
16. If a new Wiper Roller was installed during this process; please proceed to the section titled "Condition New Wiper Roller".

Cleaning Service Station Tray and Siphon Hose:

1. Using the **Touchscreen**, select **"Menu,"** and tap **"Maintenance"** from the drop-down menu. Tap **"Inspect Sled"**. The Service Station Sled moves out from under the Printhead Carriage.
2. Open the Printhead Door.
3. Press the Soft Power button to power-down the printer. Then turn OFF the Main Power Switch.
4. Remove Wiper Motor Assembly and Capping Station as described in previous sections.
5. Remove the Non-Operator Side Bracket **[B]** (secured using two Philips head screws). Clean the opening of the Siphon Hose using a clean, damp, lint-free cloth or foam-tipped swab.

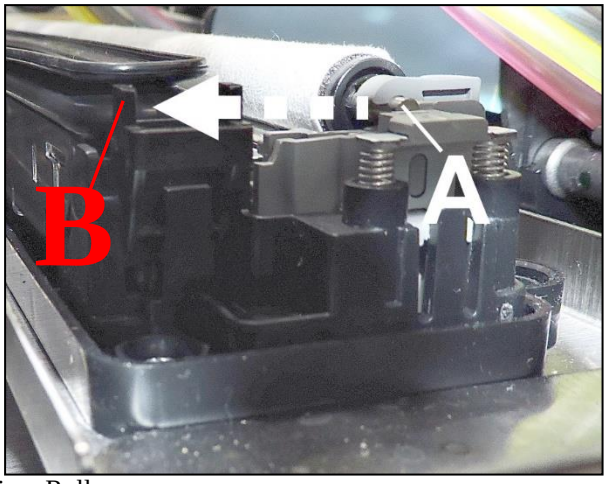
6. Wipe Tray **[A]** with a clean, damp, lint-free cloth.
   CAUTION: Be careful not to get any nearby electrical connections or PC Boards wet**.**
7. Install and secure the Non-Operator Side Bracket **[B]**.
8. If you plan to clean additional service Station Components continue to next item/section.
   If not, reinstall the Capping Station into the Service Station Tray, making sure that the two inserts are present and that the Capping Station locks fully into position. Reinstall the Wiper Motor Assembly into the Service Station Tray; making sure that the four springs are present and that the Wiper Motor Assembly locks fully into position.
9. Close the Printhead Door.
10. Turn ON the Main Power Switch.
11. Press the Soft Power button to power-up the printer.
12. If a new Wiper Roller was installed during this process; please proceed to the section titled "Condition New Wiper Roller".

Replacing Wiper Roller:

This procedure should only be used if you plan to replace the Wiper Roller without replacing the Printhead.
NOTE: When a Printhead is replaced, it is assumed that a new Wiper Roller is also installed at that time. During the printhead priming process the new Wiper Roller is automatically conditioned (hydrated).

If you replaced the Wiper Roller as part of the service station component removal and cleaning process; please follow the "Condition New Wiper Roller" procedure.

1. Using the **Touchscreen**, select **"Menu,"** and tap **"Wiper"** from the drop-down menu. Tap **"New Wiper"**. The Service Station Sled moves out from under the Printhead Carriage.
   NOTE: This will also reset the Wiper Roller service life count to **"0"**.
2. Open the Printhead Door.
3. Release the Wiper Roller **[A]** by pushing the non-geared end toward the Capping Station **[B]**. This will pop it out of the bracket. Then lift the Wiper Roller out of the Wiper Roller Assembly.
4. Remove protective covering from new Wiper Roller.
5. Install new Wiper Roller.
   Make sure gear on Roller engages gear in Wiper Motor Assembly. Carefully snap Roller back into place.
6. Close the Printhead Door.
   The printer will run a "printhead priming" routine which will condition (hydrate) the new Wiper Roller.



Condition New Wiper Roller

If you installed a new Wiper Roller during the Service Station Maintenance process, please use the following process to condition (hydrate) the new wiper roller; so it performs properly.
NOTE: This process also resets the wiper rollers service life count to zero.

1. Using the **Touchscreen**, select **"Menu,"** and tap **"Wiper"** from the drop-down menu.
   Tap **"New Wiper"**. The Service Station Sled moves out from under the Printhead Carriage.
2. Open the Printhead Door.
   NOTE: Normally you would use this opportunity to remove the old Wiper Roller and install a new Wiper Roller. However, since the new Wiper Roller is already installed, you can just proceed to the next step.
3. Close the Printhead Door. The printer will run a "printhead priming" routine which also conditions (hydrates) the new Wiper Roller. .

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