



Pro 30f Wide Format Flatbed Printer



Operations Guide

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Operations Guide

1.0 Introduction

1.0 Introduction

This guide describes how your printer operates and provides information about daily printing procedures and maintenance requirements. This chapter contains links to documentation, training, and support materials.

1.1 Before Starting

Operational knowledge of the printer is required. Please refer to these documents:

NOTE: You must read and understand the following documents prior to operating or servicing this printer.

- <http://inkjet.support.efi.com/doc.php?doc=683> - Inkjet Printer Safety Guide
- <https://inkjet.support.efi.com/doc.php?doc=4893> - Pro 30f Maintenance Guide

1.2 Training

Operator training is an essential part of printer installation and operation. EFI Inkjet provides an educational support system that assists new and experienced operators to develop and maintain skills. Go to <http://inkjet.support.efi.com/training/> for training information.

1.3 Welcome

Congratulations! You have purchased the finest super wide format digital ink jet printing system in the world. EFI VUTEk h Series printers are premium digital ink jet printers with vivid full color printing on a variety of media. EFI Inkjet Solutions wants you to get the best possible images from your printer, your printing experience to be safe and profitable.




1.4 Overview

This chapter describes how to safely operate your EFI Inkjet Solutions printer. Before operating the printer, you must:

- Read and understand the EFI Inkjet Printer Safety Guide, <http://inkjet.support.efi.com/doc.php?doc=683>, and adhere to all safety precautions therein.
- Successfully complete an Operator Training class.

1.5 Customer Support Web Site

The EFI Inkjet customer support website contains technical supplements, advisory bulletins, operations and maintenance guides, software, and Safety Data Sheets (SDS) available at <http://inkjet.support.efi.com/index.php>. Customers should log onto the EFI Inkjet Support site regularly to get current information or advisories affecting their printer or accessories.

	North & South Americas		Europe, Middle East, Africa	Asian Pacific (APAC)
	Customer Care			
	U.S	855-EFI-4HLP (855-334-4457)	+31 20 658 8070	+1 650 357 4790
			EuroInk@efi.com	
	Canada Mexico South America	+1 650 357 4790		
	Technical Support https://inkjet.support.efi.com			
	US Canada	855-EFI-4HLP (855-334-4457)	+32 2 749 94 50	+65 6221 2765
	Mexico South America	+1 412 690 4321	DE +49 2102 745 4500 NL +31 20 658 8080/8069 UK +44 12462 98085	
	Order Parts			
	US	Inkjet.Orders@efi.com	EuroParts@efi.com	InternationalOrders@efi.com
	Canada Mexico South America	InternationalOrders@efi.com		

Operations Guide

2.0 Safety

2.0 Safety

This chapter describes how to safely operate your EFI Inkjet Solutions printer. Before operating the printer, personnel must:

- Read and understand the EFI Inkjet Printer Safety Guide at <http://inkjet.support.efi.com/doc.php?doc=683>, and adhere to all safety precautions therein.
- Successfully complete an Operator Training class.

2.1 Main Printer Safety Features

This printer is equipped with multiple safety systems, including:

- Interlocking doors - Opening a door stops all printing and printer movement.
- Emergency Stop Push Buttons - Pushing an Emergency Stop Push Button (estop) stops all printing and printer movement.
- Warning labels - Warning labels are placed on printer in areas of a specific hazard or caution.
- Printer PLC - A system of PLC components allows operators to quickly identify failed components.

2.2 Emergency Stop Push Buttons

Emergency Stop Push Buttons are located at the four corners of the Printer Media Belt. Operators must immediately press an Emergency Stop Push Button in the event of an emergency, such as when an operator is in danger or the carriage is striking the media, for example.

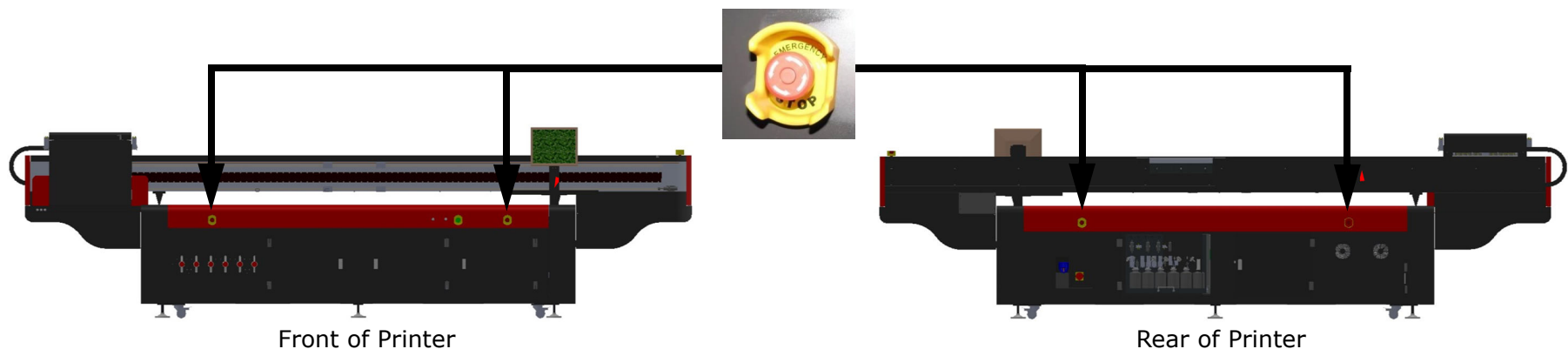


Figure 2-1 Emergency Stop Push Buttons and locations

2.3 Safety Labels

There are safety labels located on the printer to indicate areas of note, caution, or danger. Each safety label is described in the EFI Inkjet Printer Safety Guide, <https://inkjet.support.efi.com/doc.php?doc=683>.

2.4 Safety Labels - Printer Beam

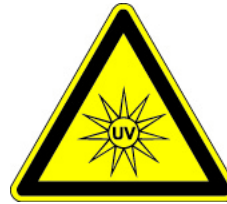
The Printer Beam contains powerful magnets that assist the carriage movement. Persons with implanted medical devices must take extreme caution to avoid being within or contacting these magnets. Operators and Technicians must take extreme caution when using tools or other metal objects within 24" (61 cm) of the Printer Beam Magnets.



Figure 2-2 Magnetic Drive Track

2.5 UV Light Hazards

UV light exposure is hazardous to eyes and skin. Please observe all safety precautions when operating printer.



The front door contains special glass and door flaps that filter out UV light during printing. Rear doors contain flaps to prevent UV light from escaping. Opening doors during printing triggers the interlocks, turning off the lamps, and stopping the carriage, protecting operator from exposure to harmful UV light.

2.6 Ink or Maintenance Fluid Emergency

If an emergency situation involving inks or maintenance fluids arises, contact local emergency services and download any SDS (Safety Data Sheets) and make available to emergency service personnel.

SDS are available on the Inkjet Support Site, <https://inkjet.support.efi.com/main.php> under Documents > SDS (Safety Data Sheets).

2.7 First Aid - Inks and Solvents

Follow first aid directions based on these situations.

Eye Contact

- Immediately flush with cool water (≥ 15 minutes)
- Seek medical attention

Ingestion

- Do not induce vomiting; drink two glasses of water
- Seek medical attention

Skin contact

- Remove contaminated clothing
- Flush with plenty of cool water and non-abrasive soap
- Seek medical attention if irritation develops

Inhalation

- Move person to fresh air
- Seek medical attention if symptoms develop

Operations Guide

3.0 Hardware Overview

3.0 Hardware Overview

The following sections cover the main printer components and features.

3.1 Front Access

This section illustrates the access panels and shields located on the front of the printer.

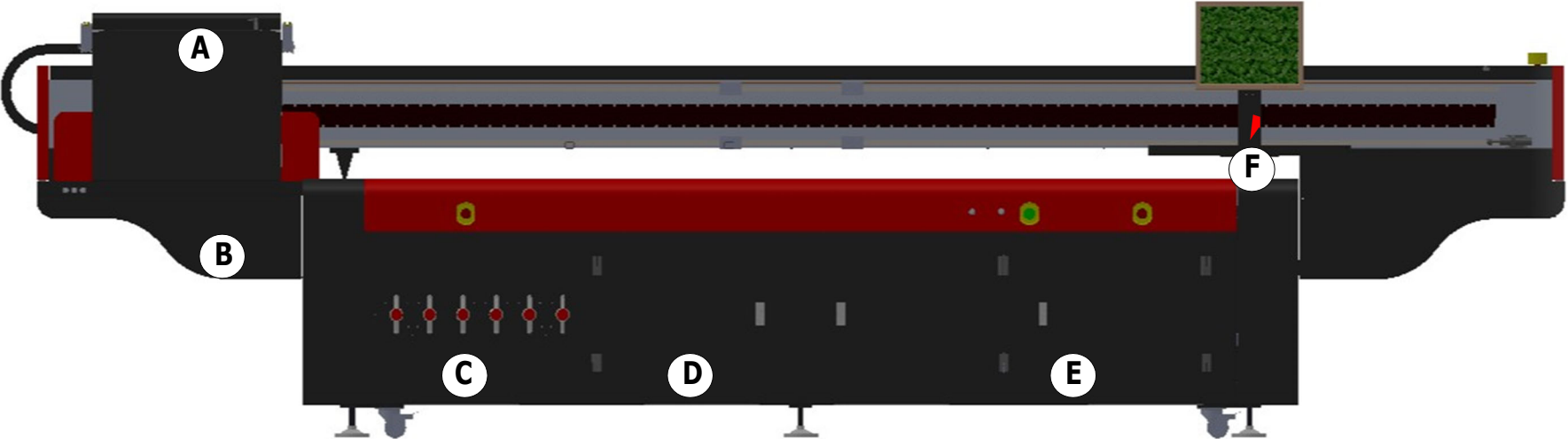



Figure 3-1 : Printer Front Access .

A	Carriage Assembly
B	Sweep Tray and Vacuum Knife
C	Table Vacuum Adjustment Controls
D	Access to Waste Vacuum
E	Electrical Control Cabinet
F	Operator Station Components - Monitor, Keyboard, Mouse

 **Caution:** Keep all safety interlocks, covers, and guards in place and in working order. Do not operate the printer with covers or guards removed or malfunctioning interlocks.

3.1.1 Carriage Assembly

The carriage assembly contains many critical components required for Inkjet printing. These components include print heads and the electronics to control them, ink tanks for the print heads, lamps for curing the ink, and a negative pressure system that controls ink flow. Each system is described in the paragraphs and figures included in this section.

3.1.1.1 Front Carriage Assembly

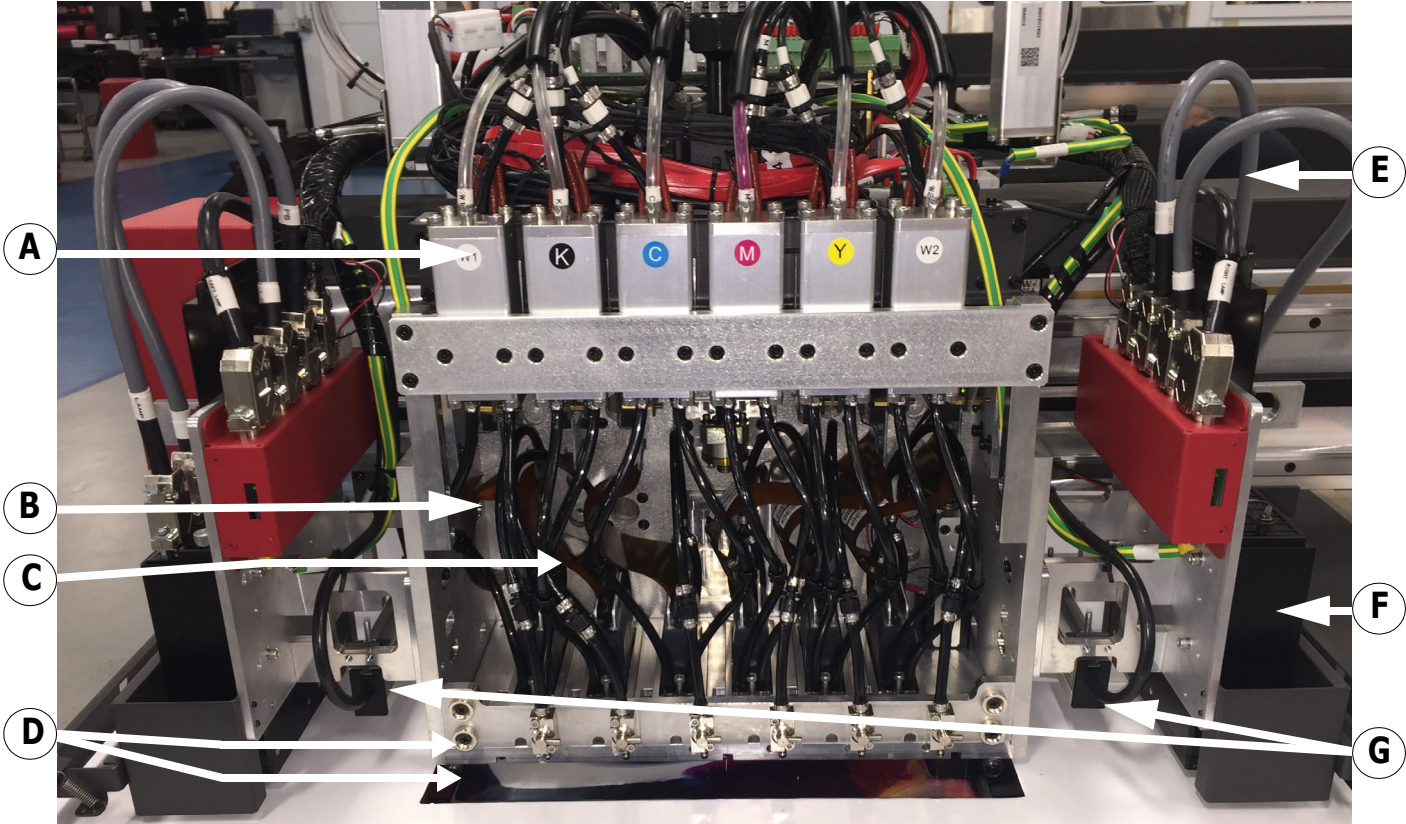


Figure 3-2 : Carriage Front View (No Covers Shown)

A	Secondary Ink Tanks	E	Lamp Cables
B	Ink Bleed Tubes	F	LED Lamps
C	Ink Supply Tubes	G	Antistatic Bars
D	Ink Bleed Valves and Drain Trough		

3.1.1.2 Rear Carriage Assembly

The Rear of the Carriage Assembly contains the following items:

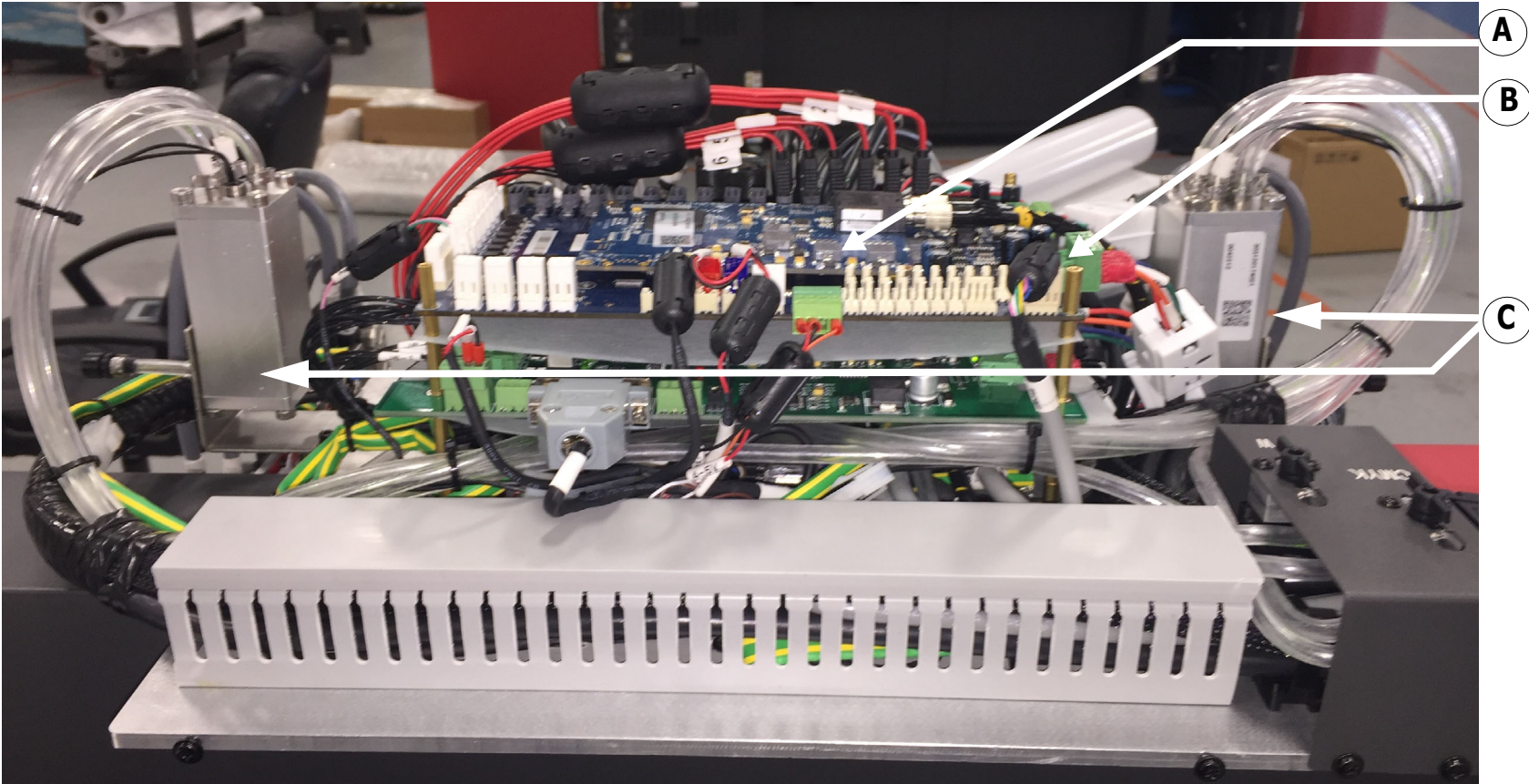


Figure 3-3 : Carriage Rear View (No Covers Shown)

A	Print Head Control Board	B	Voltage Control Board	C	Overflow Tanks
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3.1.1.3 EFI Pro 30f UV Lamps

The EFI Pro 30f is equipped with UV Lamps which provide a superior technology for ink curing.

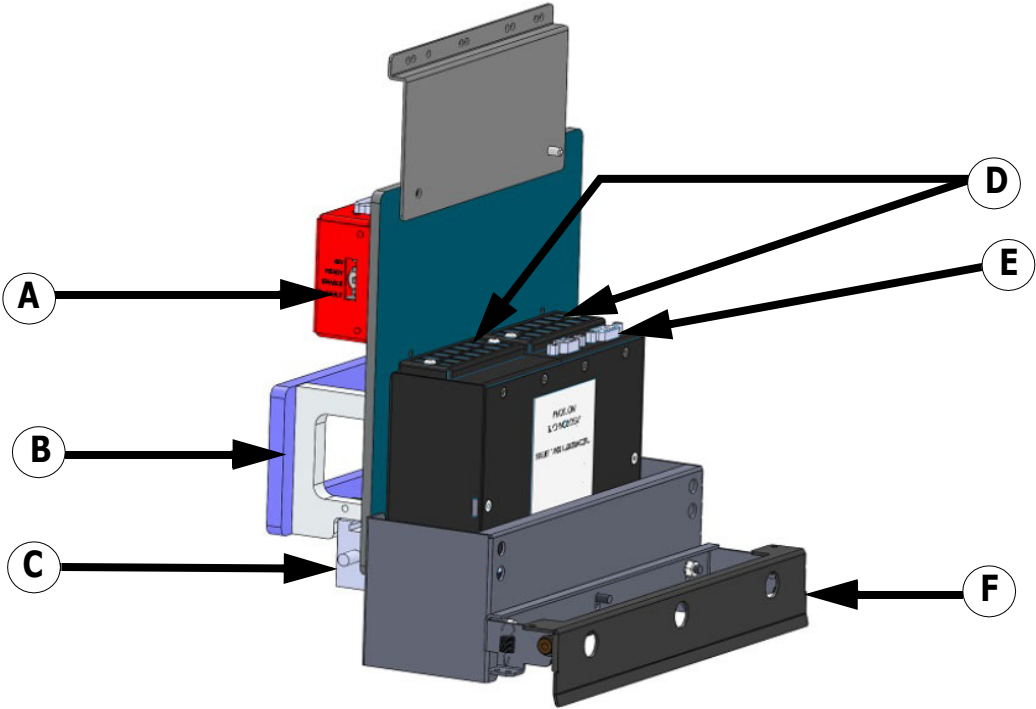


Figure 3-4 : LED Lamp Detail (Right Lamp Shown)

A	Lamp Interface Board Housing	D	Fans & Filter Assemblies
B	Lamp Mounting Bracket Assembly	E	Electrical/Communications Connection Point
C	Anti-static Bar Assembly	F	Carriage Safety Stop Assembly

3.1.2 Sweep Tray and Vacuum Knife

This system operates as follows:



Figure 3-5 : Sweep Tray and Vacuum Knife Detail

- 1. The sweep tray collects all ink drops that accumulate during purging operations. The ink is drained into the ink waste container.
- 2. The sweep tray also contains a trough to collect ink released from the bleed valves. This ink is also drained into the ink waste container.

The vacuum knife uses suction to extract excess ink from the bottom of the print heads during the sweep cycle either automatically via the EFI Pro 30f Control window or manually via the sweep button on the purge button panel. The ink is drawn into the cyclonic vacuum system.

The Ink Purge control panel provides the following manual purge functions:



Figure 3-6 : Ink Purge Panel

A	Purges CMYK
B	Liquid Separator button controls the cyclonic vacuum pump. Drains the contents of the cyclonic vacuum system into the waste container.
C	Purges White

3.1.3 Table Vacuum Adjustment Controls

A detail of the vacuum zones and their control valves is provided in [Figure 3-7](#), below.

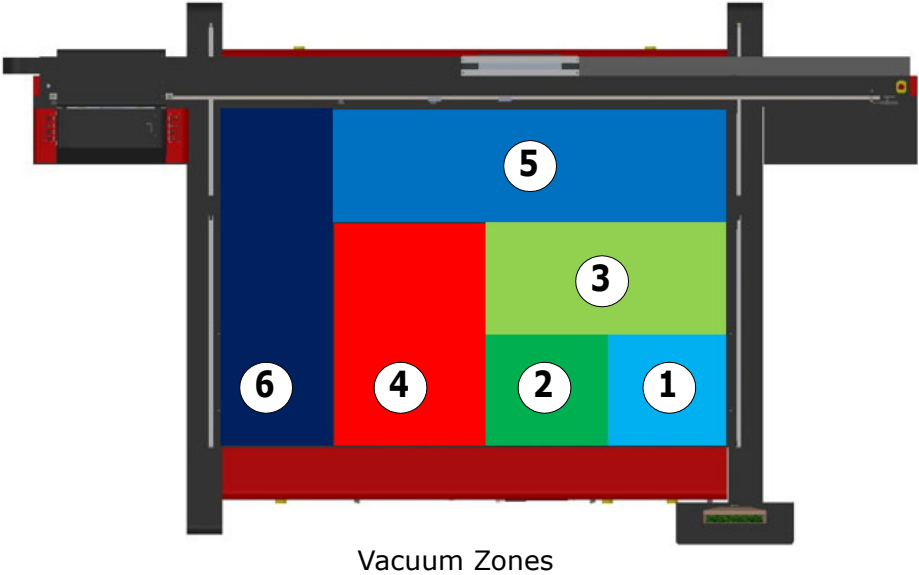


Figure 3-7 : Vacuum Controls

3.1.3.1 Vacuum Foot Pedal

The media vacuum foot pedal controls the media belt vacuum. With the main vacuum breaker in the on position and the vacuum control valves open, stepping on this pedal turns the vacuum motors on and creates the vacuum in the platen that holds media in place when printing.



Figure 3-8 : Media Belt Vacuum Foot Pedal

3.1.4 Operator Station Components

The Pro 30f computer components are attached to the front right of the printer. The components are:

- A 22" flat-panel display
- A full-size keyboard,
- A two-button wheel-mouse.



Figure 3-9 : Operator Station

- A Monitor
- B Keyboard
- C Mouse

3.2 Rear Access

This section illustrates the systems and compartments accessible from the rear of the printer.

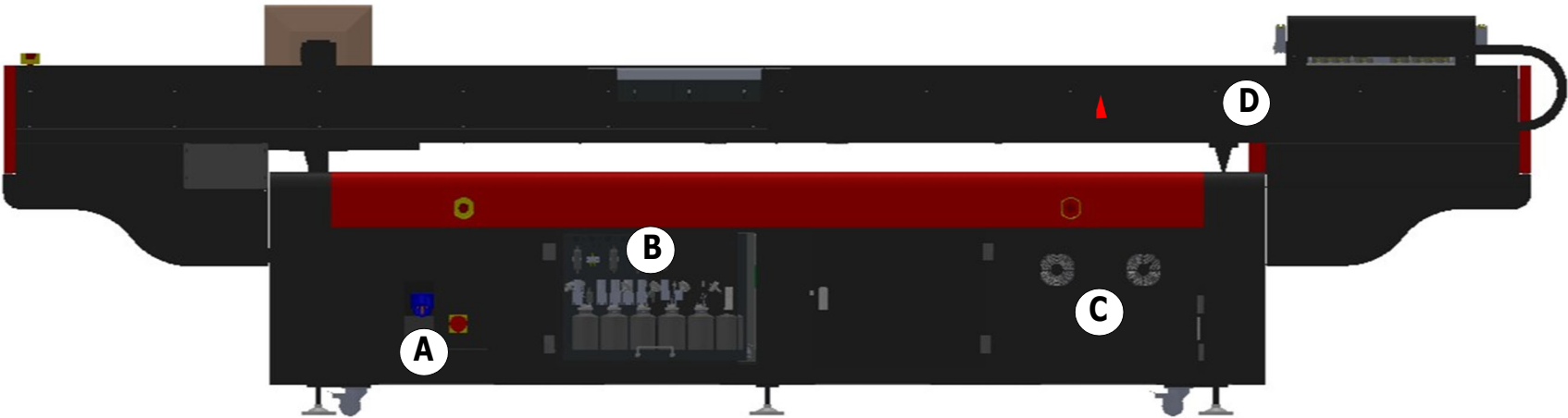



Figure 3-10 : Printer Rear Access

A	Electrical Connector
B	Ink Supply and Pump Compartment
C	Cyclonic Vacuum System
D	Energy Chain

 **Caution:** Keep all safety interlocks, covers, and guards in place and functional. Never operate printer with covers, doors, or guards removed or with malfunctioning interlocks.

3.2.1 Ink Supply and Pump Compartment

The Ink Supply and Pump Compartment contains the following components.

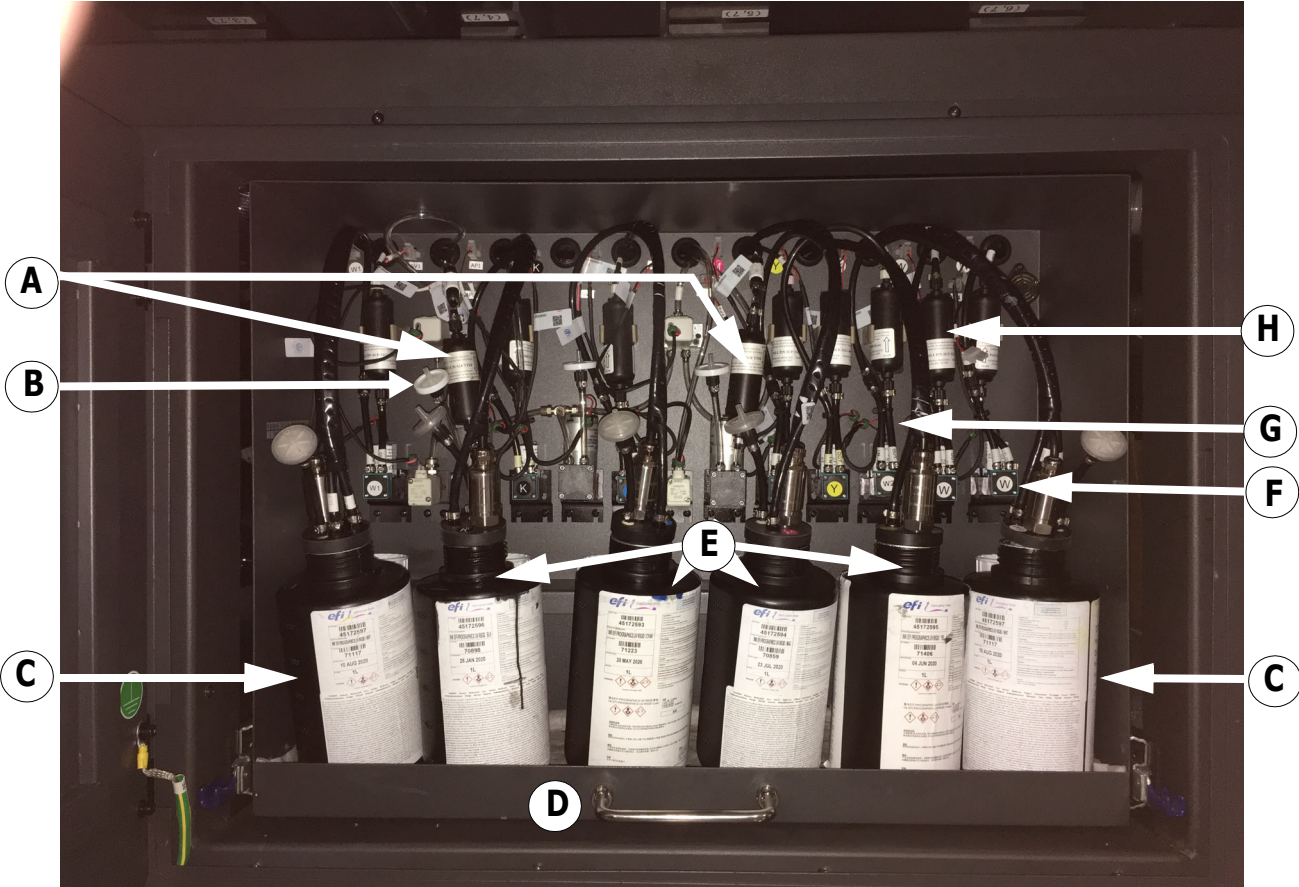


Figure 3-11 Ink Supply and Pump Compartment

A	Negative Pressure Filters	E	CYMK Ink Bottles
B	Air Relief Filter	F	Ink Pump - Labeled C, M, Y, K, W1 or W2
C	White Ink Bottle	G	Ink Tube
D	Pull Handle for Ink Compartment	H	Ink Filter

3.2.2 Cyclonic Vacuum System

The cyclonic vacuum system is located in the waste compartment (behind the carriage rear access panel). This compartment contains the cyclonic vacuum container, vacuum canister, and ink waste container. The design allows for the removal of most of the ink from the vacuum system before it enters the vacuum canister. This function greatly decreases or eliminates the need for excessive cleaning and replacing of filters in the vacuum canister.

The cyclonic vacuum system allows the operator to empty the ink vacuum canister without having to remove the canister from the printer. This system operates so that the cyclonic vacuum container can be emptied into the ink waste container by means of the Liquid Separator button located in the carriage Home compartment. The waste container can then be removed from the ink compartment and emptied.



Figure 3-12 Ink Waste Container



Figure 3-13 Liquid Separator - Empties Cyclonic Container

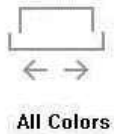


Figure 3-14 Head Sweep

3.2.3 Carriage X-Axis Drive Motor Access Panel

The Carriage X-Axis drive motor provides the power to move the carriage via the carriage belt. This motor is located at the left end of the carriage beam (when viewing printer from the rear) and is accessed by lifting the rear door behind the operator station.

NOTE: Belt tension adjustments and motor servicing should be done by qualified Field Service Engineers ONLY.

3.2.4 Energy Chain

The Energy Chain (E-Chain) is attached to the back side of the carriage and moves with the carriage when it is in motion during printing operations. The E-Chain continuously supplies the moving carriage with the following:

- White Ink
- CMYK Ink
- Electrical Power
- Positive and Negative Pressure
- Communication Signals
- Printing Data

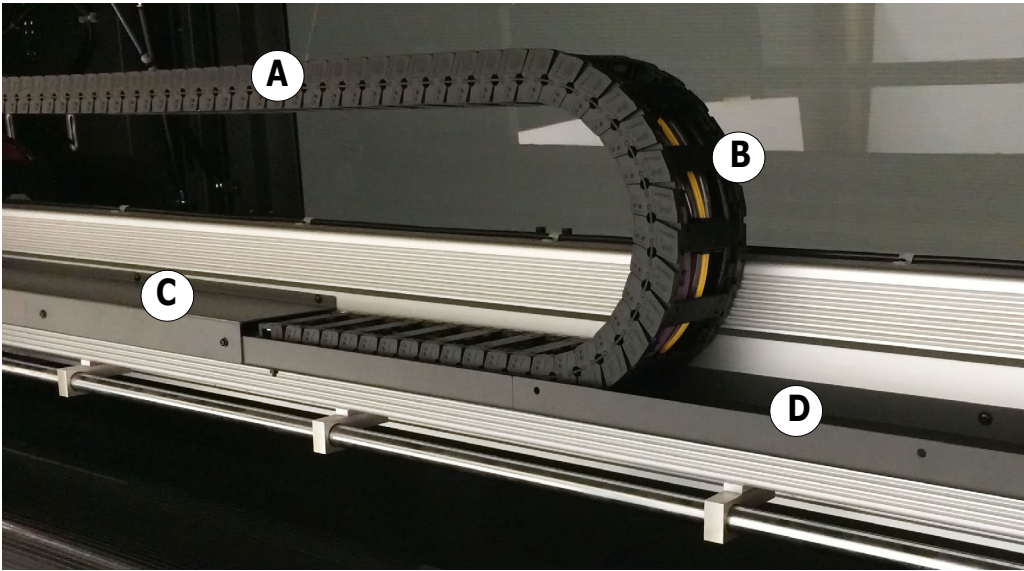


Figure 3-15 : Energy Chain (E-Chain)

- A E-Chain
- B Internal Tubes and Wiring
- C E-Chain Trough Cover
- D E-Chain Trough

3.2.5 Main Carriage Beam Assembly

The main carriage beam assembly supports the carriage. The carriage travels across the media via a rail and bearing system. The carriage contains a set of bearings that ride along the rails attached to the main beam. Information about carriage position is supplied via the linear encoder strip attached to the beam. The main component are shown in [Figure 3-16](#).

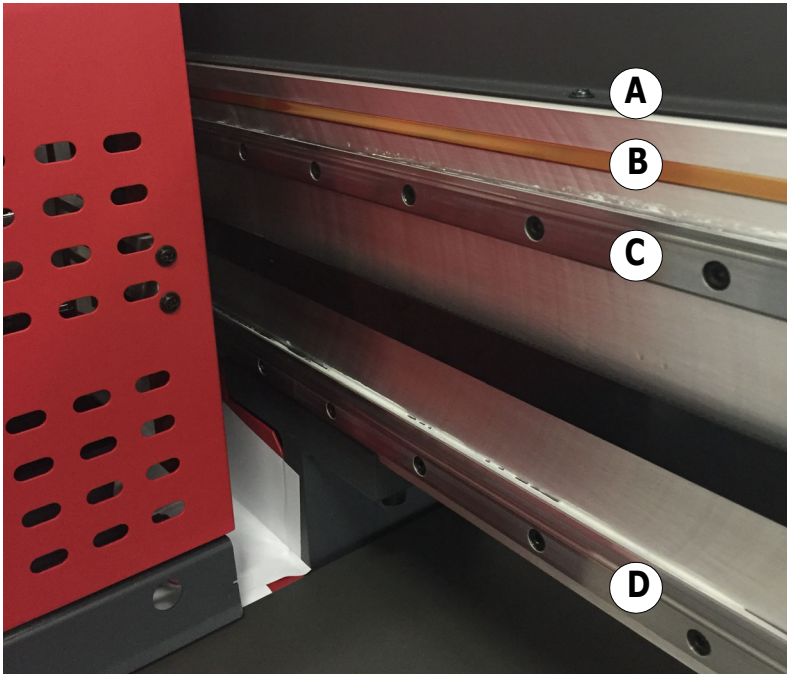


Figure 3-16 Main Beam

A	Carriage Main Beam
B	Linear Encoder Strip
C	Top Rail
D	Bottom Rail

NOTE: The encoder strip and rails require periodic maintenance. Refer to OMM-00175, EFI Pro 30f Maintenance Guide for details.

Operations Guide

4.0 Software Overview

4.0 Software Overview

There are two types of software for the Pro 30f printer: ripping software (Fiery XF) and printer controller software (GUI). The two types of software are installed on the same computer. The printer controller software (GUI) must be installed on the computer that is connected to the printer. There are six (6) functional areas to support all operator functions and assist in maintaining the printer.

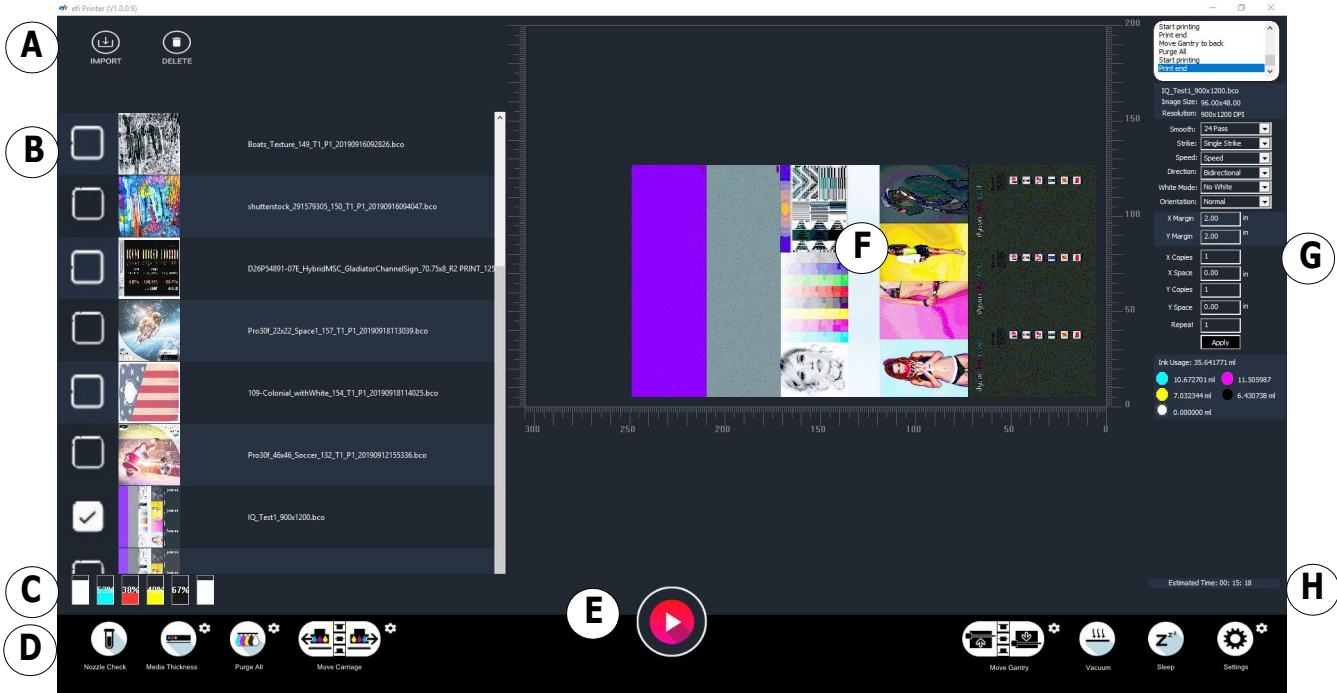


Figure 4-1 : Main Interface

A	Import job to Job Task Queue.	E	Print button.
B	Job Task Queue: Lists all jobs in the queue. Select job(s) to print and click the print button.	F	Job Preview Pane: Positions job in correct print location on the flatbed.
C	Displays ink quantity.	G	Printing Setting Pane: Sets the print pass, direction, speed, white mode, and print height.
D	Tool Bar : Controls printer movement, conducts prints nozzle checks and other calibrations.	H	Displays estimated printing time.

4.1 Tool Bar

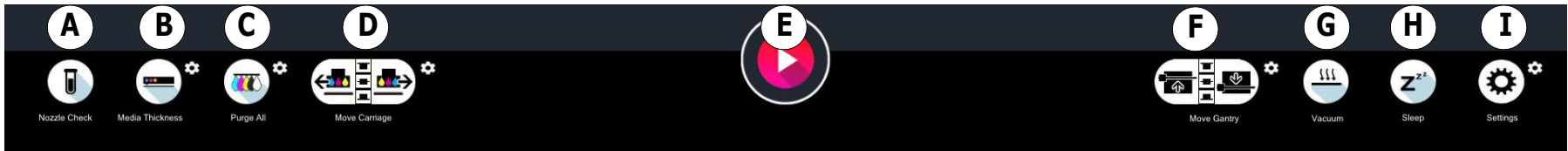


Figure 4-2 Tool Bar

A	Print a nozzle test.	D	Move the carriage to the left/right or up/down.	G	Engage vacuum.
B	Click button for auto media thickness detection.	E	Print job selected in the queue.	H	Toggle printer from sleep status to wake status and back.
C	Purge and sweep all print heads.	F	Move gantry to front/back of printer.	I	Open the Test Printer settings window.

4.2 Test Printer Settings Window

Click the Settings button in the EFI Pro 30f Control window's tool bar to open the Test Printer settings window..

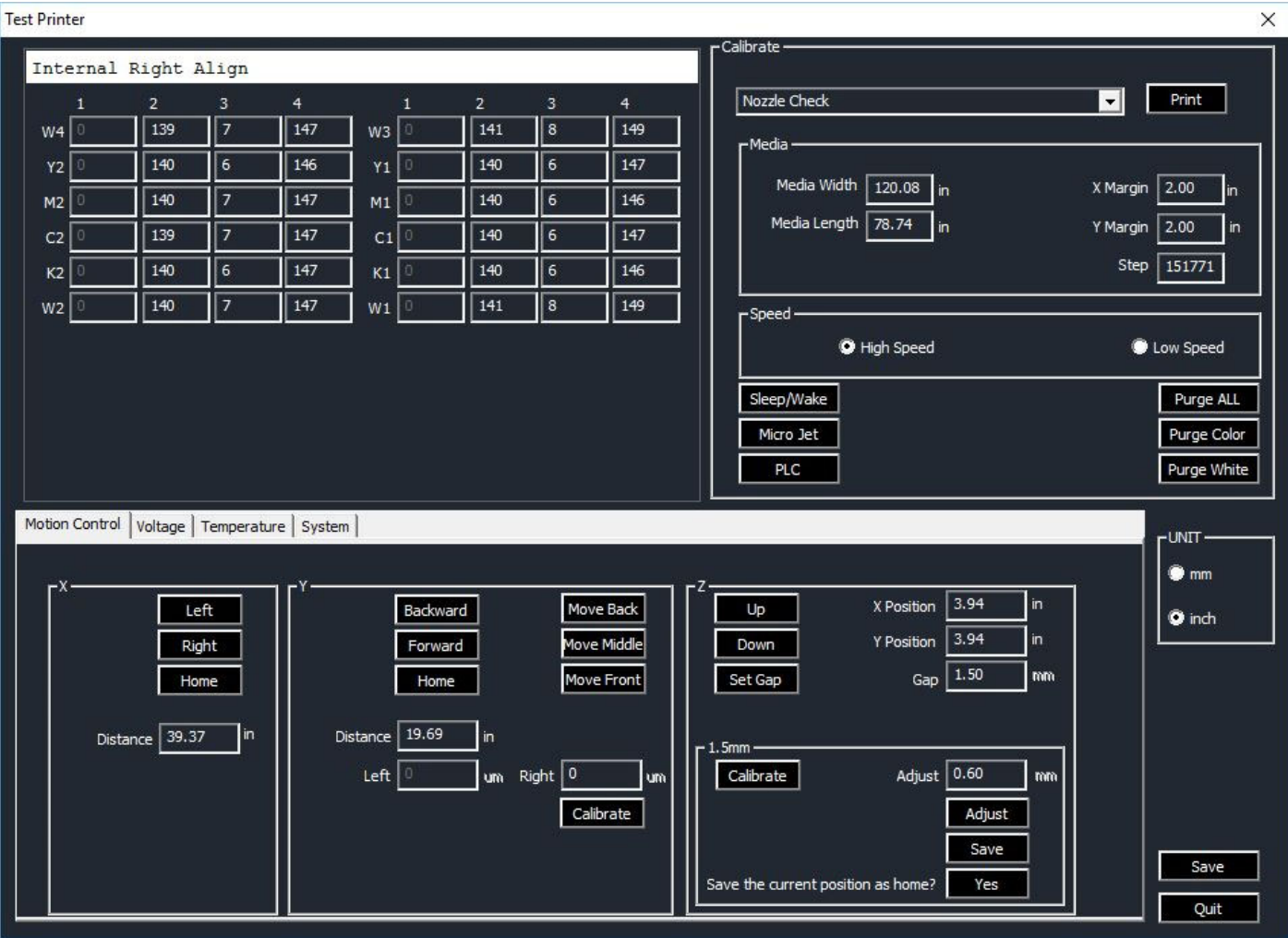


Figure 4-3 : Test Printer Settings Window

4.2.1 PLC GUI (Controls/Ink) Window

The PLC GUI (Controls/Ink) window enables the operator to set up sub-tank temperature, light density, and negative pressure. It also indicates ink level status.

There are two ways to open PLC (Controls/Ink) window. The first is to choose Setting on the main interface to open the Test Printer window and then select the PLC button. Second, the window can be directly opened from the folder containing the whole Pro 30f driver location.

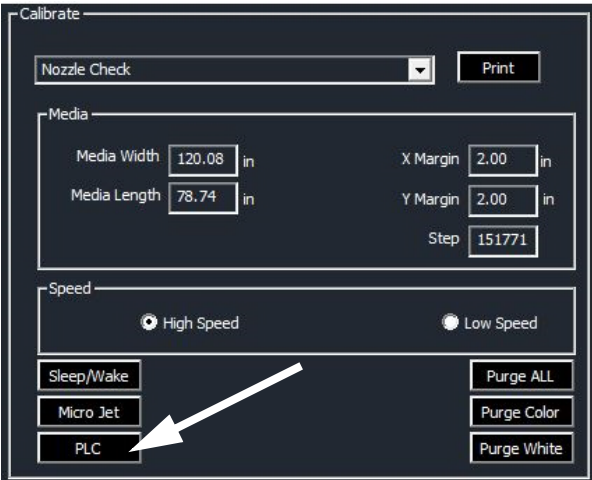


Figure 4-4 PLC Button on Test Printer window



Figure 4-5 : Ink System Information

A	Restores Ink Tank Temp Factory Settings (Cyan, Magenta to 41° C; 42° C for White, Black, and Yellow)	G	Supply: Fills All Secondary Ink Tanks
B	Secondary Ink Tank Current Temperatures - View Only	H	Click Apply after every adjustment. System displays modification confirmation messages.
C	Secondary Ink Tank Temperatures to be Set	I	During initial set up, select PLC connection port.
D	Negative Pressure - CMYK and White	J	Displays status and alarm messages. Alarm buzzer sounds until you choose Reset.
E	Ink Tank Status. Green = OK; Gray = Low/Empty	K	LED Lamp Power Adjustment
F	Level Indicator for Each Ink Tank and the Waste Bottle		

Operations Guide

5.0 Printer Setup

5.0 Printer Setup

This chapter describes set-up procedures for the EFI Pro 30f Wide Format Printer. Perform the tasks in this chapter when setting up the EFI Pro 30f Wide Format printer for operation.

EFI highly recommends conducting all routine maintenance before starting up the machine. This helps improve the quality of the output as well as the safety of the operator. Below is a check list of activities that operators should do prior to operation of the machine.

- Turn on the ventilation and lighting systems inside the printing room.
- Check for and clear any traces of ink spillage on the machine and the floor.
- Check whether the waste container is already full and empty it if necessary
- Make sure there is no media or material on top of the print bed, specifically along the path of the carriage during printing.

5.1 Printer Power On

1. Ensure that all E-Stops are OFF. The printer is in an alarm state until/unless the E-Stops are deactivated.

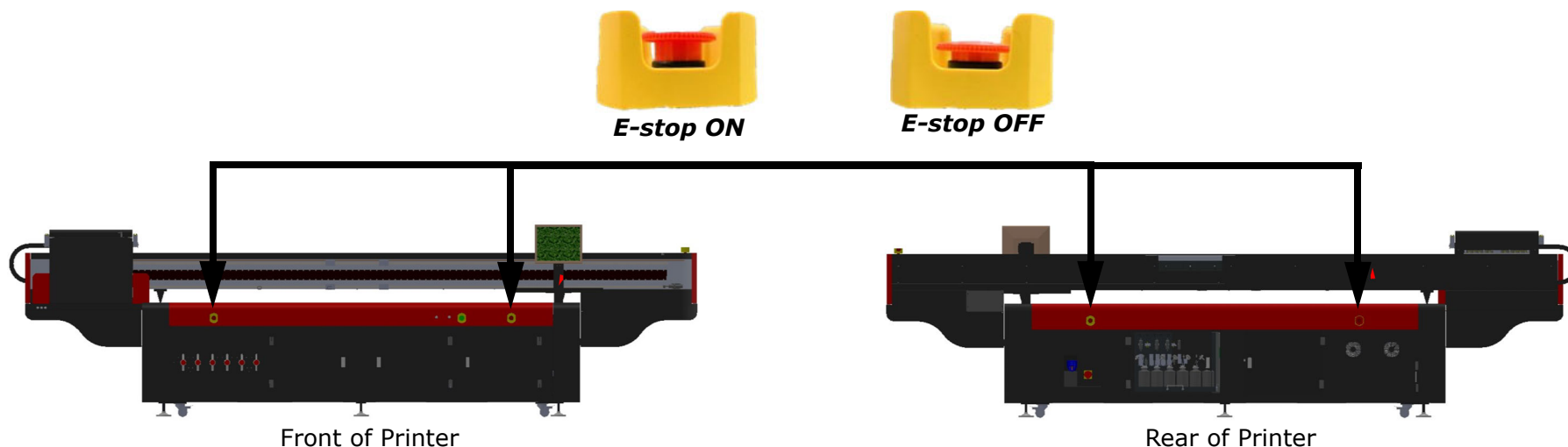


Figure 5-1 Emergency Stop Push Button Positions and Locations

- Turn on the main power switch located at the rear of the printer.

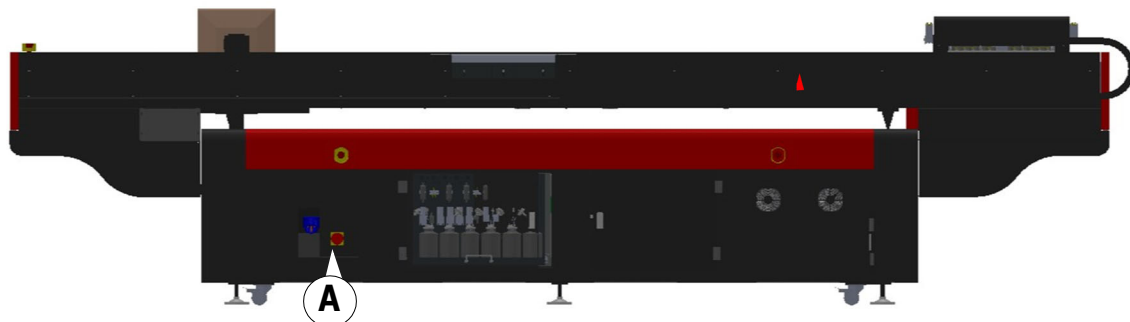


Figure 5-3 Main Power Switch Location at Rear of Printer

A	Main Power Switch Location
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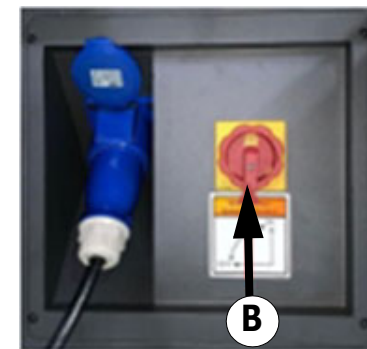


Figure 5-2 Main Power Switch

B	Main Power Switch
---	-------------------

- Turn on the printer's e400 ProServer computer and let it boot completely.



Figure 5-4 Printer PC in Cabinet

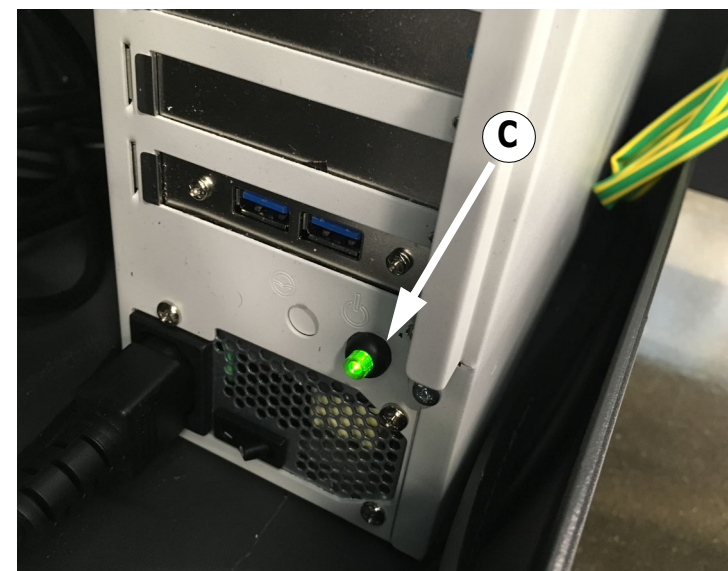


Figure 5-5 Printer ProServer Computer

C	Computer Power Switch
---	-----------------------

4. Turn on system power breakers located in the electrical cabinet.

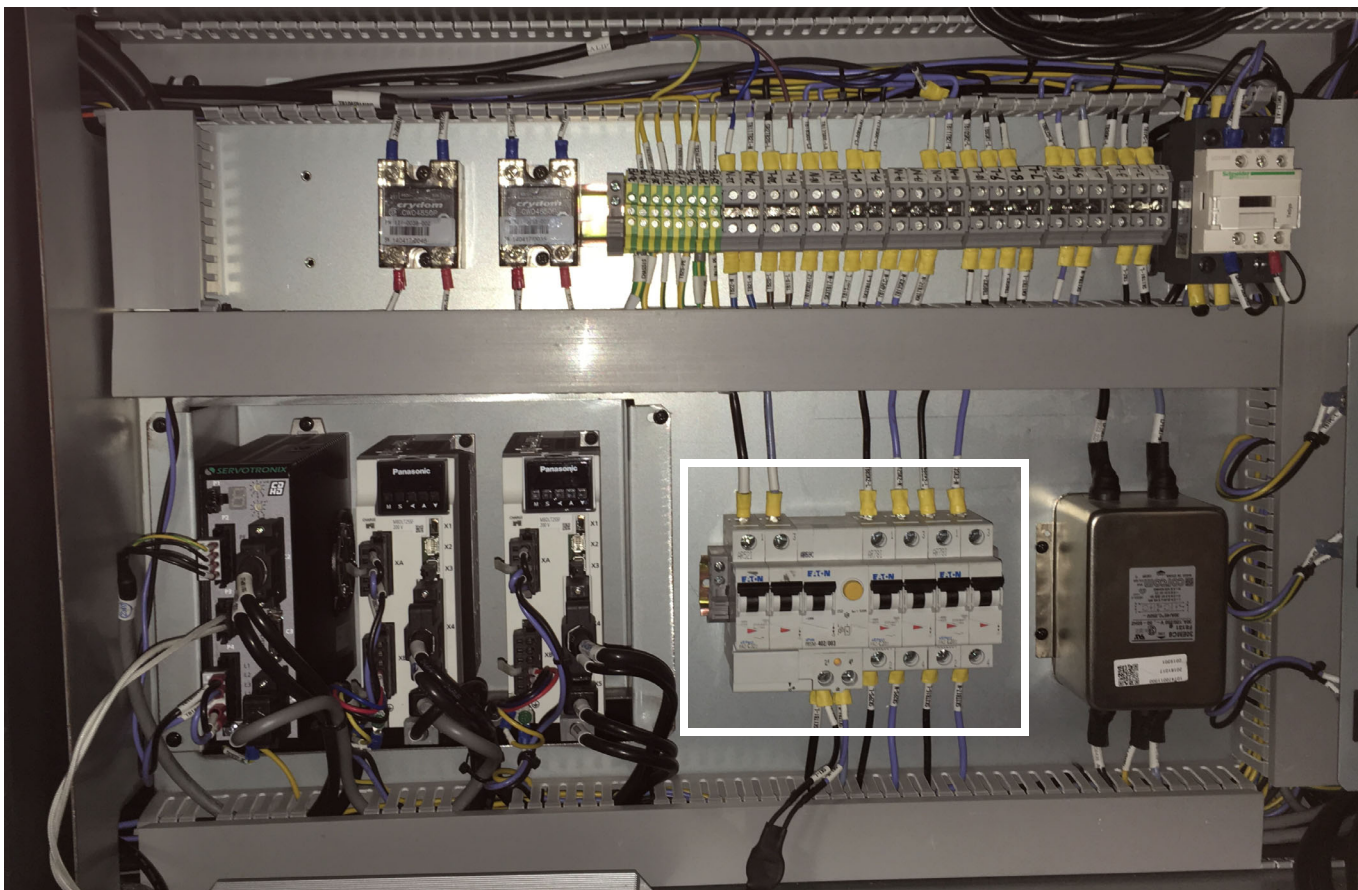


Figure 5-6 Circuit Breakers Located in Electrical Cabinet at Front Right of Printer

5. Press the green start button on the front of the printer.




Figure 5-7 Front of Printer

D	Green Start Button
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6. Start the EFI Pro 30f GUI software

NOTE: Printer initialization will begin. Print carriage moves up, down, and forward, then returns to home position. When complete, see status window for "Printer is ready" message.

 **Caution:** Gantry moves forward during printer initialization sequence. Take care to prevent contact between gantry and foreign objects.

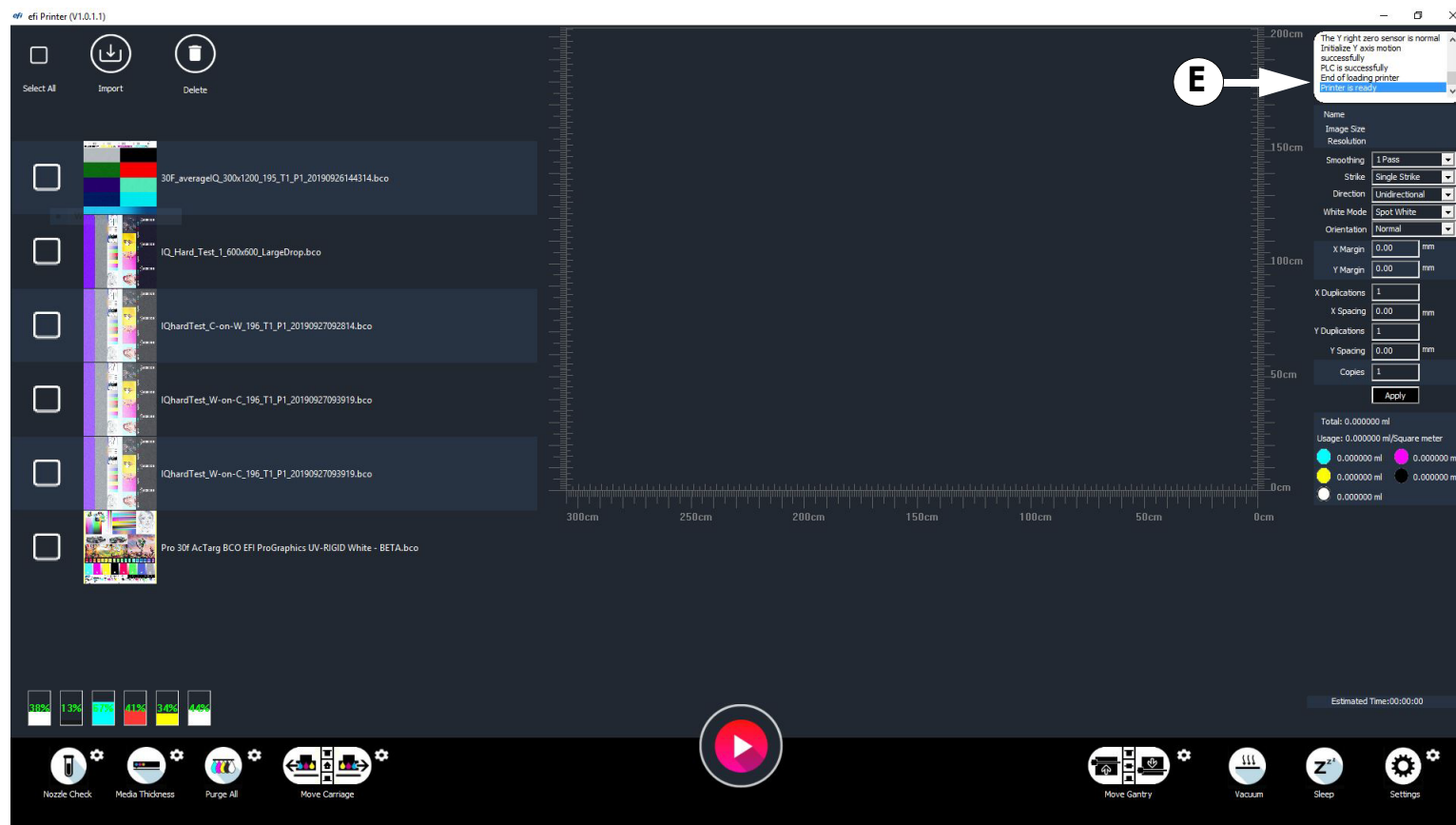


Figure 5-8 EFI Pro 30f GUI Software

E	"Printer is Ready" Status Message
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7. Check the negative pressure to verify that it is normal. If not, use the PLC GUI (Controls/Ink window) to set it to the correct values (-3.3 kpa for CMYK and -3.6 kpa for White).



Figure 5-9 : PLC GUI (Controls/Ink Window)

F	Negative Pressure values
---	--------------------------

8. Clean the print heads one by one with a lint-free wipe soaked with flush. See [8.0 Print Head Care](#).
9. Purge the CMYK ink by pressing the CMYK ink purge button. See [Figure 5-10](#) Then repeat for W. Ink drops will be observed on the nozzles of the print heads.



Figure 5-10 : Ink Purge Panel

G	Purges CMYK
H	Purges White

10. If air bubbles come out of the print heads during purging, conduct an ink bleed by opening the bleed valves and pressing the associated ink purge button. Continue until no air bubbles come out. Then close the bleed valves.
11. Choose **Settings** to open the **Test Printer** window, and then choose **Purge All** to perform a purge and sweep to clean the print heads. The carriage moves from left to right during sweeping and returns to the home position. Waste ink is then exhausted by the vacuum plate.

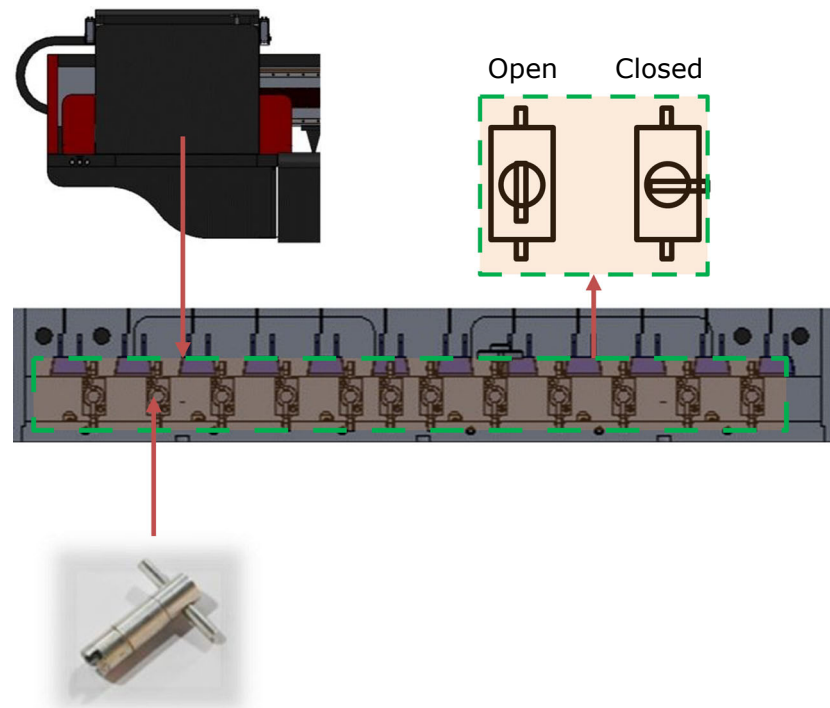


Figure 5-11 Conduct an Ink Bleed

12. Test the movement of carriage and gantry using the operation panel.

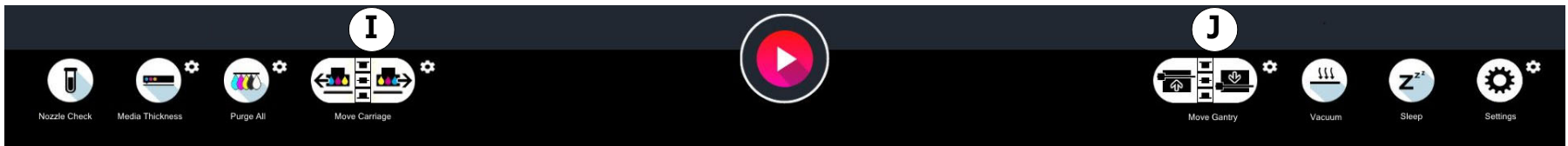


Figure 5-12 Tool Bar

I	Move carriage to the left, right (X-axis). Move carriage up or down on Z-axis.	J	Move gantry front/back (Y-axis)
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NOTE: The LED lamps turns on when the machine is powered up, and automatically work once printing starts.

5.2 Load Media

1. Turn off the vacuum.
2. Press the **Media Guide** button on the front of the printer (close to the start button) to raise the media registration pins.

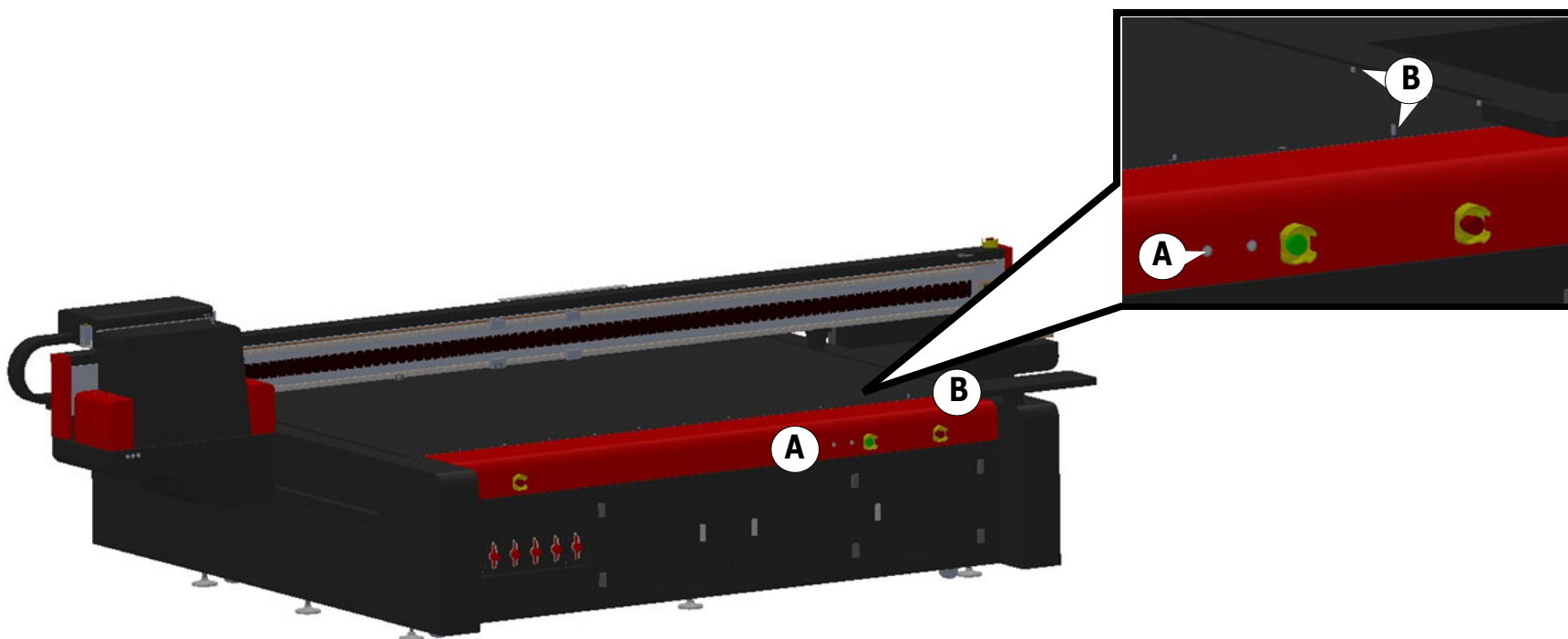


Figure 5-13 Raise Media Registration Pins

A	Media guide button	B	Media registration pins
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3. Load the media aligned against the registration pins.

- Open the vacuum valves for the appropriate zones.

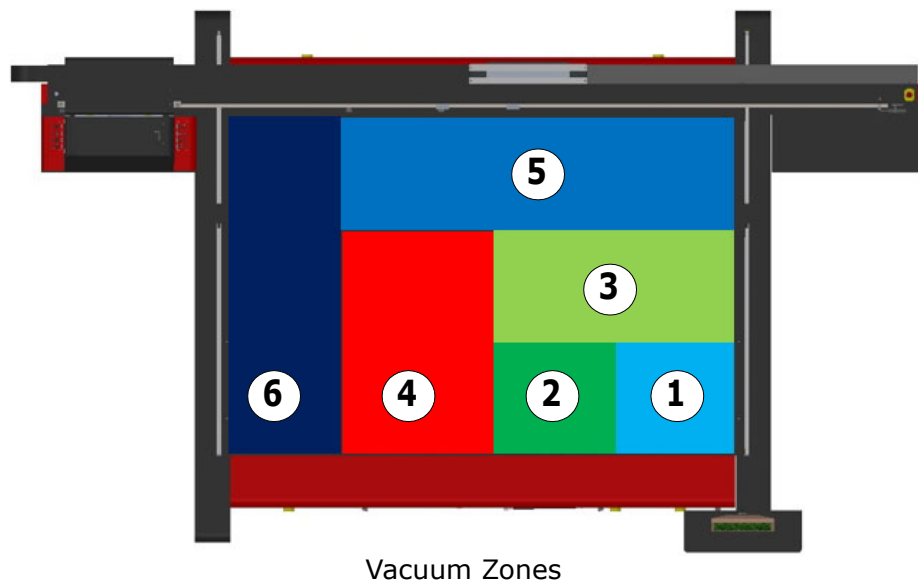


Figure 5-14 : Vacuum Controls

- Use the foot pedal to turn on the vacuum.

NOTE: If the media size does not match the vacuum zone, mask the area around the media to create a closed vacuum system. Use vinyl or other material less than the thickness of the print media to mask the table.

- Lower the media registration pins.
- Set margins in the software, then send the job to print.



Figure 5-15 : Media Belt Vacuum Foot Pedal

5.3 Purge and Sweep Print Heads

- From the MOTION tab on the GUI, purge white print heads, CMYK print heads, or all colors, as shown in [Figure 5-16](#). A sweep is also performed.

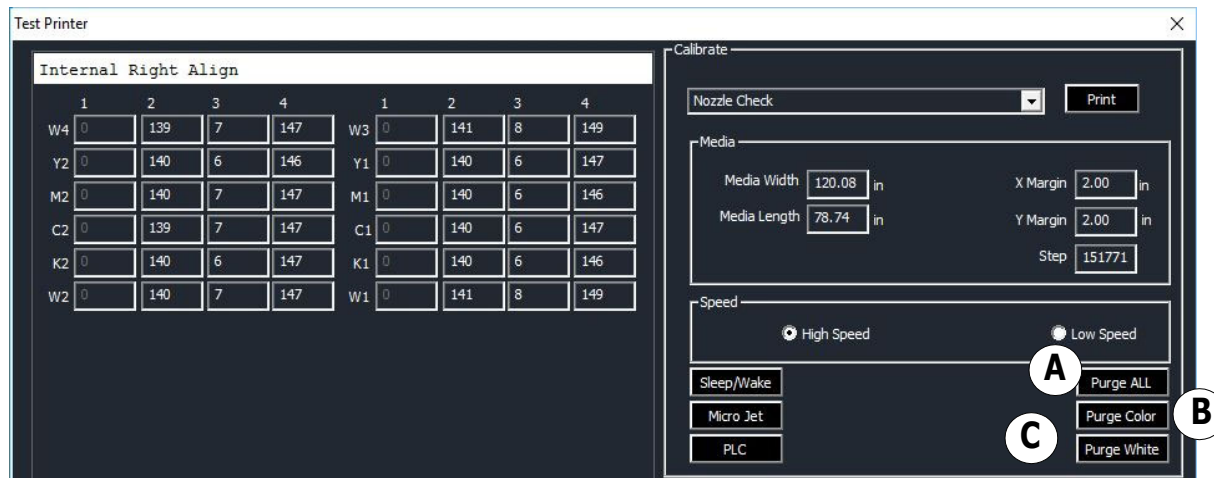


Figure 5-16 GUI Purge Buttons

A	Purge and Sweep All Print Heads	B	Purge and Sweep CMYK Ink Only	C	Purge and Sweep White Print Heads
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5.4 Perform Nozzle Checks

- Perform a Nozzle Check prior to beginning normal printer operations, in order to ensure that all print heads are firing properly.

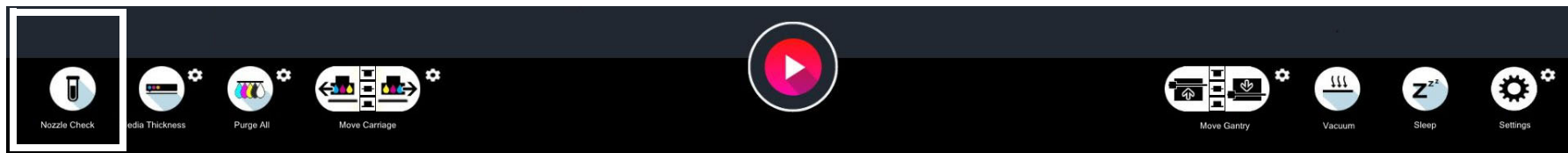


Figure 5-17: Nozzle Test Button

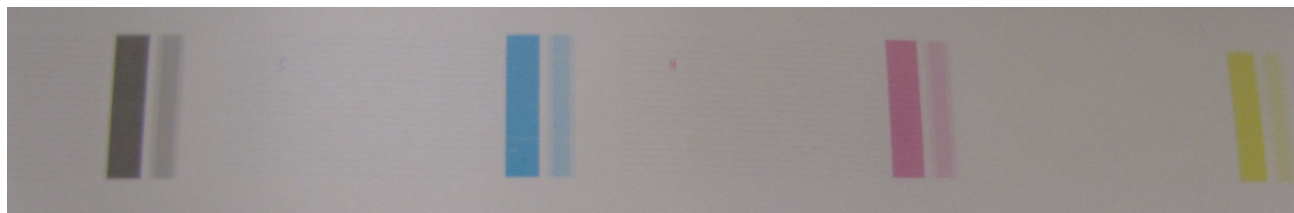


Figure 5-18: Nozzle Check Print Overview

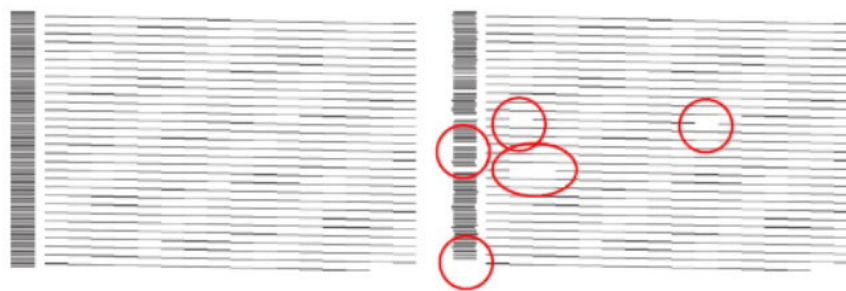


Figure 5-19: Nozzle Check Test Print (Circles Indicate Dropout)

Operations Guide

6.0 Printer Operations

6.0 Printer Operations

This chapter covers the process for printing on the EFI Pro 30f, including the steps for standard print jobs and recovering from errors.

6.1 Print File from Pro 30f Main Interface

1. Click **Import** to load the file to print. (See [Figure 6-1](#), item A.)

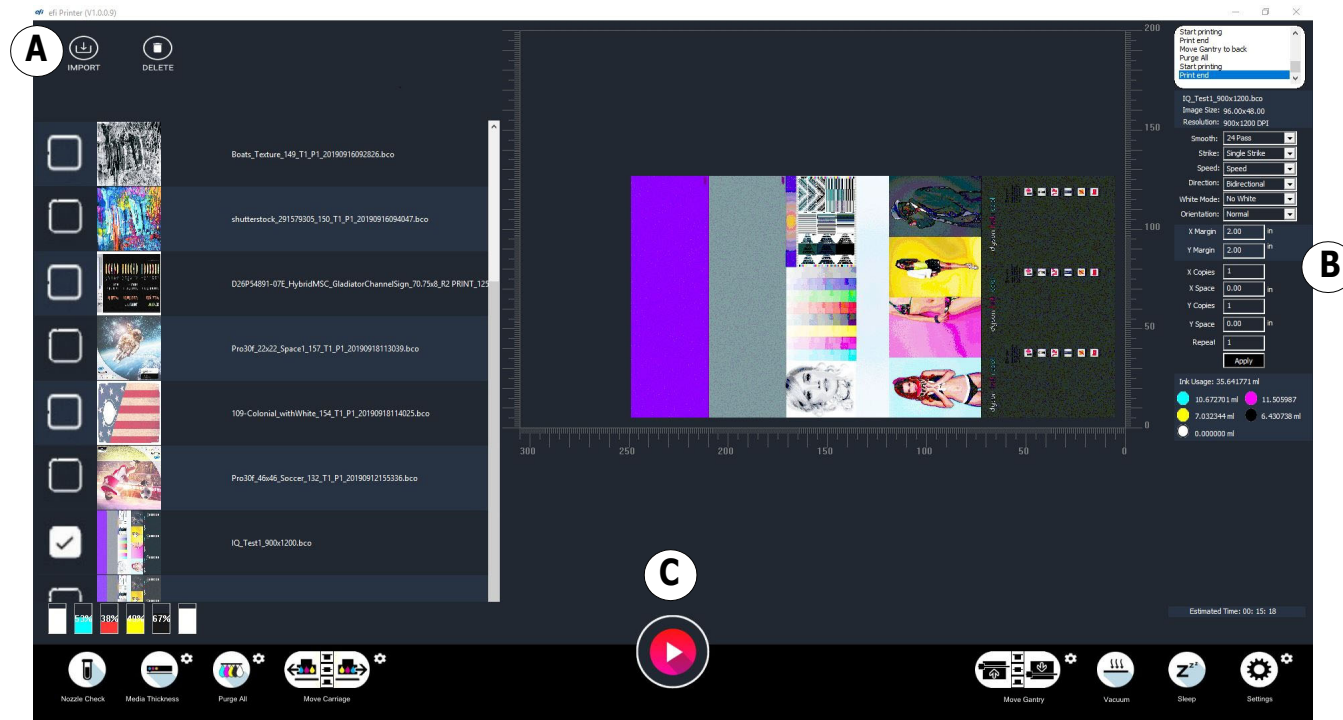


Figure 6-1 Print File from EFI Main Interface

A	Import Button	B	Number of Copies	C	Print Button
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2. Browse to and select the *.BCO file to be printed, then click OK.
3. Enter the number of copies. (See [Figure 6-1](#), item B.)
4. Click **Print** button to print. (See [Figure 6-1](#), item C.)

6.2 Printing with Fiery XF

The EFI Pro 30f printer has many different resolutions and options for creating bco files for printing at different speeds and output qualities. With experience the selection of these options will become clearer. When selecting a work flow for file preparation in the Fiery XF software, be aware that different options result in different printer output speeds and can have different output qualities as well.

The charts below contain several work flows that EFI has found useful in day to day operation of the EFI Pro 30f printers.

NOTE: Different printer modes have different intended viewing distances for the printed output. In general, the faster output speeds are intended to be used in creating prints that are viewed from larger distances.

Standard Workflows

Output Mode	Up to Sq. Ft (Sq.m)/Hr.	Printer Settings
Express	2130 (197.91)	CMYK 300x600 1 pass
Distant View/Outdoor	1264 (117.48)	CMYK 600x600 2 pass
Production	512 (47.55)	CMYK 600x600 6 pass
POP Quality	394 (36.61)	CMYK 600x600 8 pass
High Quality	273 (25.37)	CMYK 900x600 12 pass
Ultra Quality	166 (15.41)	CMYK 1200x1200 24 pass

6.3 Recovering from an Error

Occasionally, a software error may occur. The following message may be displayed:

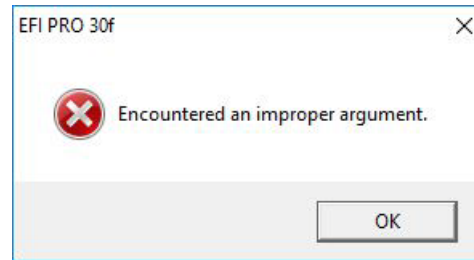


Figure 6-2 Software Error Message

Alternatively, if the Carriage Safety Stop Assembly is activated, the following message will be displayed:

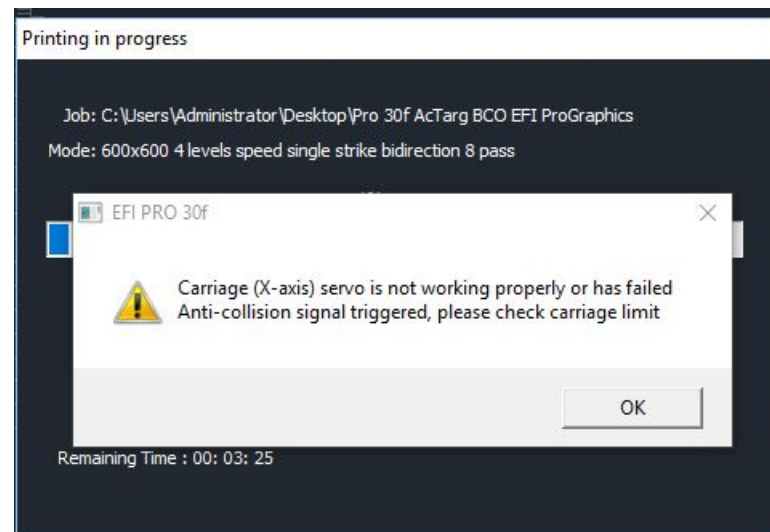


Figure 6-3 Carriage Safety Stop Assembly Message

To recover from these errors, perform the following:

1. Remove the safety stop obstruction, if applicable
2. Ensure all red e-stops are released
3. Close the EFI Pro 30f GUI software

NOTE: If required, use Windows Task Manager to force close "Print UI for EFI Printer"

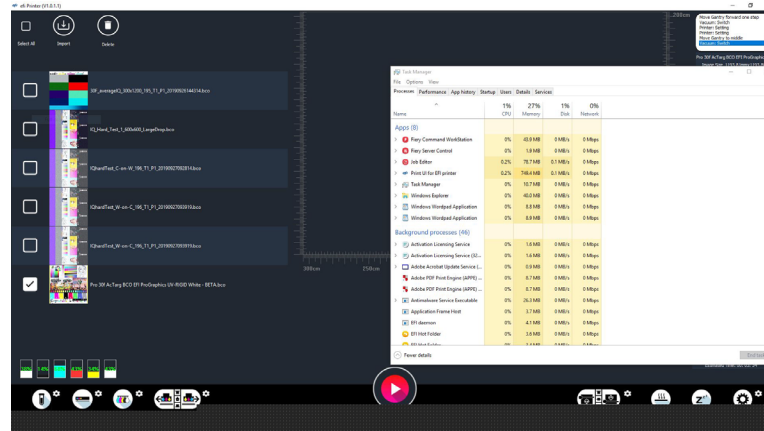


Figure 6-4 Close EFI Pro 30f GUI Software

4. Push an e-stop.
5. If applicable, manually move the carriage (by hand) to the home position, above the purge tray.
6. Release the e-stop.
7. Push the green reset button.
8. Start the EFI Pro 30f GUI software.

NOTE: If software errors appears or printer does not respond to GUI commands, repeat this process.

6.4 Shutting Down Printer

This chapter describes EFI Pro 30f Wide Format Printer sleep and shutdown procedures for the overnight, short term (1 - 3 days), and long term (4+ days).

6.4.1 Overnight Sleep Mode

EFI recommends that sleep mode be used for overnight shutdown. Set the printer into sleep mode as follows:

1. Shuttle the carriage twice so that it sits over the table.
2. Clean the bulk of the ink in the drip pan with a lint free wipe.
3. Use a lint free wipe with flush to finish cleaning the tray and wiper.
4. Return the carriage to the home position.
5. Raise the carriage.
6. Wipe each head with a clean, lint free wipe.
7. Wipe the jet plate.
8. Lower the carriage.
9. Put the printer in sleep mode.

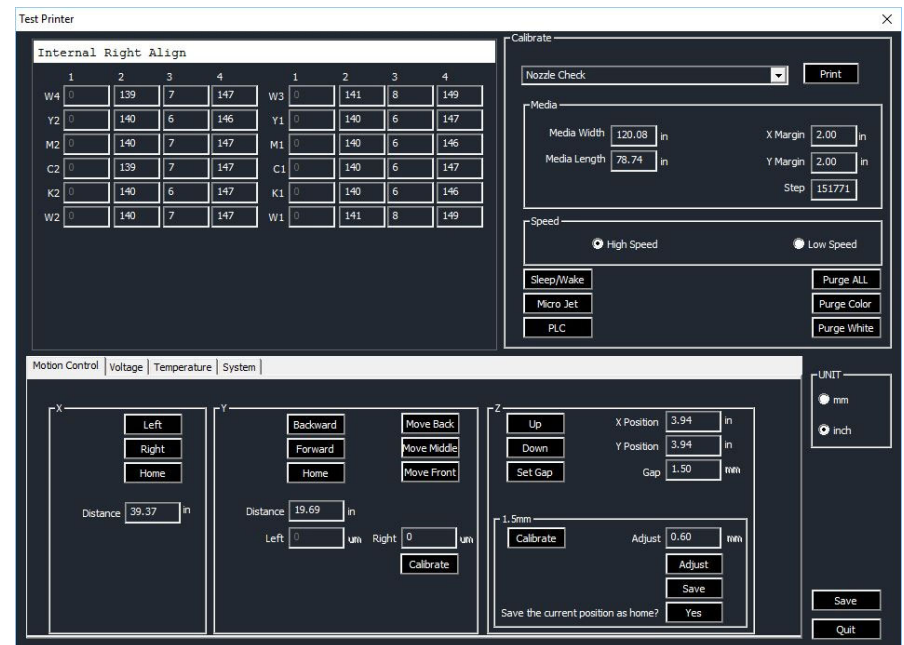


Figure 6-5 Test Settings Window

6.4.2 Short-Term Shutdown

It may be necessary to power off the printer for longer periods of time when it won't be in use. Use the long-term shutdown procedure when shutting the printer down for 4-14 days.

1. Clean the print heads and carriage faceplate with wide-format flush.
2. Cut Coroplast to a size to fit the purge tray. This will cover all print heads and ensure that the lamps do not sit on damp wipes.
3. Layer (EFI) clean white wipes on the Coroplast (forming a "diaper").
4. Dampen wipes with some wide-format flush.
5. Bring the carriage all the way down to the diaper.
6. Close the software and power down the printer.

NOTE: Invert all inks prior to restart, especially the white.

6.4.3 Long-Term Shutdown

It may be necessary to power off the printer for longer periods of time when it won't be in use. The printer should be flushed of all inks for these long-term shutdowns. Please contact EFI Service for assistance performing this procedure.

Operations Guide

7.0 Ink System

7.0 Ink System

This chapter describes basic ink replenishing procedures for the EFI Pro 30f Wide Format Printer.

1. Carefully remove the ink container cap and ensure that no ink spills into the ink supply compartment.

NOTE: It may be necessary to clean the tubes and float connected to the cap.



Caution: Wear protective gloves and eye protection when replenishing ink.



Caution: When replenishing White Ink ensure that the "White Ink Bottle Recirculation" box is UNCHECKED on the Test Printer System tab prior to removing the ink line from the ink container. Failure to do so will cause a quantity of white ink to spray from the recirculation line. Recheck the "White Ink Bottle Recirculation" box after replenishing white ink. (See [Figure 7-1](#))

2. Carefully remove the empty ink container from the compartment and dispose of it in the appropriate manner.

NOTE: If planning to transfer and use remainder ink in the future, tighten the cap on the old bottle and store it until there is space for the remainder ink in the newly installed ink bottle.

3. Open a new container and put it in place of the spent container.

- Carefully reinstall the ink container cap and ensure it is properly secured.

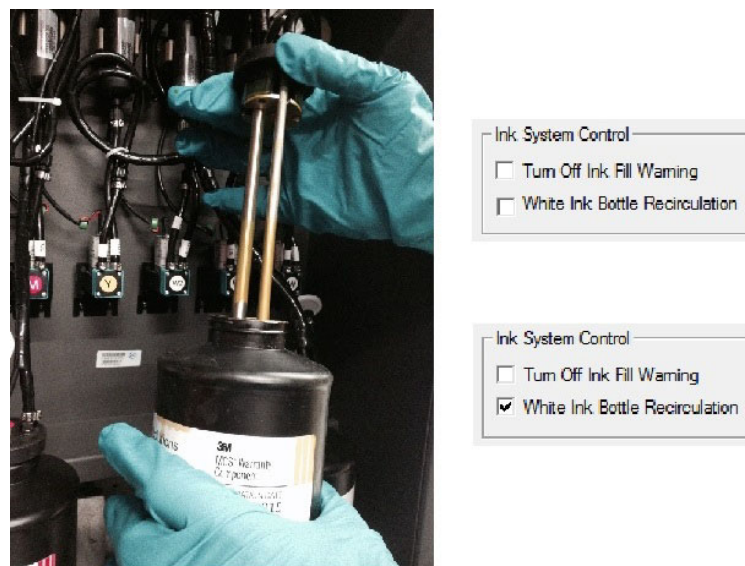


Figure 7-1 Replenishing Ink

7.1 Use Remainder Ink

When an installed ink bottle level gets to half full, you can transfer remainder ink from a carefully stored bottle to refill the installed bottle.

Important: Check the expiration date on the old bottle. Do not use if it is past the expiration date.

- Agitate the old ink bottle.
- Pour the remaining ink from the old bottle into the ink bottle currently installed on the machine.
- Agitate the ink bottle installed on the printer.
- Properly dispose of the empty bottle.

NOTE: Do not ever pour more than one remaining bottle into an operating bottle. Any bottle with a small amount of ink that is not used for two weeks or longer should be disposed of.

Operations Guide

8.0 Print Head Care

8.0 Print Head Care

This chapter describes the process to clean and care for print heads.

8.1 Preparing to Print

Operators must prepare for printing by performing [Print Head Maintenance](#), next, and [Perform Nozzle Checks](#).

8.1.1 Print Head Maintenance

Nitrile Gloves; Safety Glasses; Lint-free wipes; Print Head Cleaning fluid in Plastic Squirt Bottle.

1. Fold a lint-free wipe in half, and in half again and dampen with print head cleaning fluid.
2. Position the wipe between your fingers, [Figure 8-2](#), and place wipe parallel to the Print Head Plate at the Carriage rear.

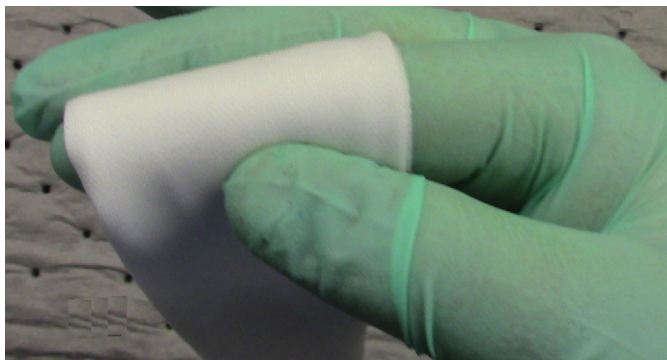


Figure 8-2 Holding wipe between fingers

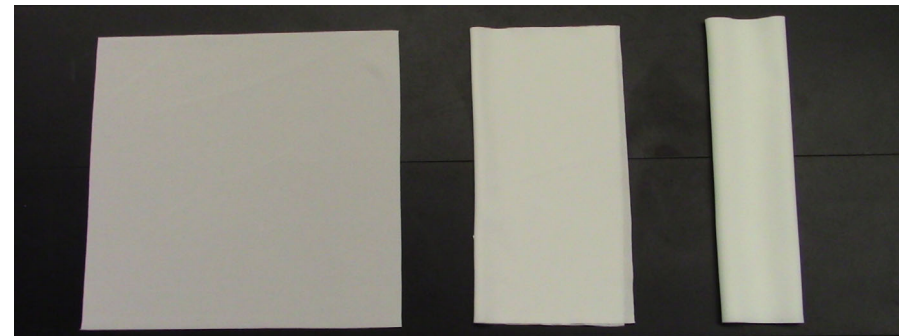


Figure 8-1 Three stages of folding wipes

- Wipe the print head faces of one color in one motion toward the carriage front. Take care to wipe only one print head at a time; to prevent contamination do not allow the wipe to contact the adjacent print heads.



Caution: Do not apply excessive pressure. Do not try to insert the corners of the wipes into the Print Head nozzles.

Pull the used portion of wipe through your fingers as ink accumulates on the wipe. When no clean portion remains, discard the wipe.

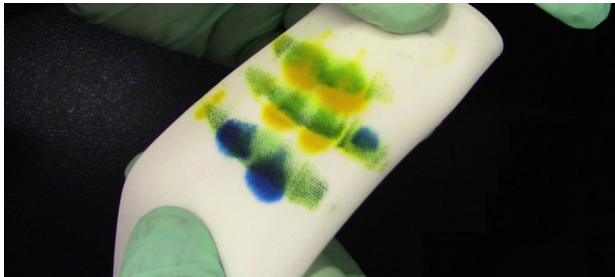


Figure 8-3 Advancing to clean portion of wipe, Left, and discarded wipe, Right

- Repeat steps 1 through 4 for the remaining colors.
- Click **Purge All** on the Test Printer window. (See [Figure 8-4](#))
- Fold a DRY wipe and position parallel to the print head plate, and repeat wiping.

NOTE: The second wiping must be with a DRY wipe to prevent print head cleaning fluid from potentially entering the print head.

- Load a piece of test media.
- In the **Default Print Options** dialog, select **Center**.
- Print a **Nozzle Check** test and analyze the print quality to identify missing nozzles.
 - If the Nozzle Check test is not acceptable, go to step [1](#).
 - If the Nozzle Check test is acceptable, the procedure is complete.

NOTE: Never wipe the print heads if the Nozzle Check test is acceptable!



Figure 8-4 Purge All on Test Printer Window.)

8.2 Recovering Print Heads

Follow the Print Head Out Troubleshooting Guide, <http://inkjet.support.efi.com/doc.php?doc=1464>, to recover missing nozzles.

8.3 Printing and Analyzing the AcTarg

Refer to Analyzing the AcTarg - Print Quality, <https://inkjet.support.efi.com/doc.php?doc=3713>, for instructions on Printing and Analyzing the AcTarg to determine current Print Quality.