

*efi* H1625 Wide Format Hybrid Printer



Operations Guide

Copyright © 2002-2019 Electronics for Imaging, Inc. All rights reserved.

All trademarks, registered trademarks, and product names used in this document are the property of their respective owners.

The information contained in this document is confidential and proprietary to Electronics for Imaging, Inc (EFI). This information is provided only to authorized representatives of EFI and EFI customers solely for the purpose of facilitating the use of EFI's products. No information contained herein may be disclosed to any unauthorized person for any purpose whatsoever without the prior written consent of EFI.

EFI makes no representations or warranties with respect to the contents of this document. Further, EFI reserves the right to revise or change this publication and the products it describes without notice.

English is the original language of this document.

This product may be covered by one or more of the following U.S. Patents

5,109,241, 5,150,454, 5,170,182, 5,212,546, 5,260,878, 5,276,490, 5,278,599, 5,335,040, 5,343,311, 5,398,107, 5,424,754,  
5,442,429, 5,459,560, 5,467,446, 5,506,946, 5,517,334, 5,537,516, 5,543,940, 5,553,200, 5,563,689, 5,565,960, 5,583,623,  
5,596,416, 5,615,314, 5,619,624, 5,625,712, 5,640,228, 5,666,436, 5,682,421, 5,729,665, 5,745,657, 5,760,913, 5,799,232,  
5,818,645, 5,835,788, 5,859,711, 5,867,179, 5,937,153, 5,940,186, 5,959,867, 5,970,174, 5,982,937, 5,995,724, 6,002,795,  
6,025,922, 6,035,103, 6,041,200, 6,065,041, 6,081,281, 6,112,665, 6,116,707, 6,122,407, 6,134,018, 6,141,120, 6,166,821,  
6,173,286, 6,185,335, 6,201,614, 6,209,010, 6,215,562, 6,219,155, 6,219,659, 6,222,641, 6,224,048, 6,225,974, 6,226,419,  
6,238,105, 6,239,895, 6,256,108, 6,269,190, 6,271,937, 6,278,901, 6,279,009, 6,289,122, 6,292,270, 6,299,063, 6,310,697,  
6,321,133, 6,327,047, 6,327,050, 6,327,052, 6,330,071, 6,330,363, 6,331,899, 6,337,746, 6,340,975, 6,341,017, 6,341,018,  
6,341,307, 6,347,256, 6,348,978, 6,356,359, 6,366,918, 6,369,895, 6,381,036, 6,400,443, 6,429,949, 6,449,393, 6,457,823,  
6,476,927, 6,487,568, 6,490,696, 6,501,565, 6,519,053, 6,539,323, 6,543,871, 6,546,364, 6,549,294, 6,549,300, 6,550,991,  
6,552,815, 6,559,958, 6,572,293, 6,590,676, 6,599,325, 6,606,165, 6,616,355, 6,618,157, 6,633,396, 6,636,326, 6,637,958,  
6,643,317, 6,647,149, 6,657,741, 6,660,103, 6,662,199, 6,678,068, 6,679,640, 6,687,016, 6,707,563, 6,741,262, 6,748,471,  
6,753,845, 6,757,436, 6,757,440, 6,778,700, 6,781,596, 6,786,578, 6,816,276, 6,825,943, 6,832,865, 6,836,342, 6,850,335,  
6,856,428, 6,857,803, 6,859,832, 6,866,434, 6,874,860, 6,879,409, 6,885,477, 6,888,644, 6,905,189, 6,930,795, 6,950,110,  
6,956,966, 6,962,449, 6,967,728, 6,974,269, 6,977,752, 6,978,299, 6,992,792, 7,002,700, 7,023,570, 7,027,187, 7,027,655,  
7,031,015, 7,046,391, 7,054,015, 7,058,231, 7,064,153, 7,073,901, 7,081,969, 7,090,327, 7,093,046, 7,095,518, 7,095,528,  
7,097,369, 7,099,027, 7,105,585, 7,116,444, 7,177,045, 7,177,049, 7,177,472, 7,204,484, 7,206,082, 7,212,312, 7,229,225,  
7,233,397, 7,233,409, 7,239,403, 7,245,400, 7,248,752, 7,259,768, 7,259,893, 7,280,090, 7,296,157, 7,301,665, 7,301,667,  
7,301,671, 7,302,095, 7,302,103, 7,304,753, 7,307,761, 7,342,686, 7,343,438, 7,349,124, 7,365,105, 7,367,060, 7,367,559,  
7,389,452, 7,396,119, 7,396,864, 7,397,583, 7,397,961, 7,426,033, 7,431,436, 7,433,078, 7,453,596, 7,460,265, 7,460,721,  
7,461,377, 7,463,374, 7,466,441, RE36,947, RE38,732, D341,131, D406,117, D416,550, D417,864, D419,185, D426,206,  
D426,206, D439,851, D444,793.

## EFI Inkjet Solutions

### United States

1 Vutek Place

Meredith, New Hampshire 03253 USA

<http://www.efi.com/products/>

<https://inkjet.support.efi.com/index.php>

Americas	EU, Middle East, Africa	APAC
<b>Customer Care</b>	<b>Customer Care</b>	<b>Customer Care</b>
United States: 855-EFI-4HLP (855-334-4457)	+31 20 658 8070	+1 650 357 4790
412-690-4321		
<a href="mailto:Customer.Care@efi.com">Customer.Care@efi.com</a>	<a href="mailto:Email EuroInk@efi.com">Email EuroInk@efi.com</a>	
Canada/Mexico/South America: +1 650 357 4790		
<a href="mailto:InternationalOrders@efi.com">InternationalOrders@efi.com</a>	<a href="mailto:Part Orders EuroParts@efi.com">Part Orders EuroParts@efi.com</a>	<a href="mailto:Email InternationalOrders@efi.com">Email InternationalOrders@efi.com</a>
<b>Technical Support</b>	<b>Technical Support</b>	<b>Technical Support</b>
North America: 855-EFI-4HLP (855-334-4457)	+32 2 749 94 50	+65 6221 2765
Mexico and South America: +1 412-690-4321	DE +49 2102 745-4500	
	NL +31 20 658-8080/8069	
	UK +44 12462-98085	
	<a href="mailto:Email: EuroSupport@efi.com">Email: EuroSupport@efi.com</a>	
<b>Online Request Support</b>	<b>Online Request Support</b>	<b>Online Request Support</b>
<a href="https://inkjet.support.efi.com">https://inkjet.support.efi.com</a>	<a href="https://inkjet.support.efi.com">https://inkjet.support.efi.com</a>	<a href="https://inkjet.support.efi.com">https://inkjet.support.efi.com</a>

This document is published on-line at <http://inkjet.support.efi.com>.

**Document ID:** OMM-00073 Revision K



## Revision History

E	03/01/2016	Released
F	05/11/2016	<ul style="list-style-type: none"><li>• Expanded and corrected field definitions on Parameters Systems tab, adding separate screens for RS and SD models on pgs. 20-22.</li><li>• Added section 7.1 on using remainder ink</li><li>• Updated call outs and headings to new EFI style throughout</li><li>• Added call outs and link to Fiery XF window/help on pg. 91</li><li>• Fixed callouts to anti-static bars on pg. 23 and added callout to Fiery dongle on pg. 27</li></ul>
G	05/13/2016	Unrecorded changes
H	01/19/2017	Added section on double-sided printing, Section 6.9.
I	07/12/2017	<ul style="list-style-type: none"><li>• Pg 34 - Fig 3-15 fixed callout "5" to Valve Closed and "6" to Valve Open</li><li>• Pg 64 - Updated Fig 4-23 Parameters screenshot;</li><li>• Pg 96 - Adjusted arrow to point at "Skip at blank space"</li></ul>
J	03/14/2019	<ul style="list-style-type: none"><li>• Added note reading, "The front dancer bar has been removed from the design of newer H1625 printers due to improved media handling. Conduct media feeding as always, but go from the front of the machine directly to the front media take-up roller." to pgs. 31 and 77. DR 5587</li></ul>
K	04/22/2019	<ul style="list-style-type: none"><li>• Added note reading, "For newer printers (H1625-LED above SN 1446, H1625-RS above SN 0072, H1625-SD above SN0033), the front dancer bar shown below has been removed, greatly improving media tracking." to pg. 76. DR 5661.</li></ul>



# Table of Contents

Revision History .....	iv
<b>1.0 Introduction .....</b>	<b>9</b>
1.1 About This Guide .....	9
1.2 Objectives .....	9
1.3 Customer Resources .....	10
1.4 Additional Support .....	10
<b>2.0 General Safety .....</b>	<b>11</b>
2.1 Emergency Stop Button(s) .....	11
2.2 Safety Interlock Override Key (Service Key) .....	12
2.3 Front Access Panels and Shields .....	13
2.4 Rear Access Panels and Shields .....	14
2.5 Printer Shield Support System and Locking Mechanism .....	15
2.6 Printer Safety Labels (Front) .....	16
2.7 Printer Safety Labels (Rear) .....	17
2.8 Other Hazards and Precautions .....	18
2.8.1 UV Ink and Solvent Precautions .....	18
2.8.2 UV Light Hazards .....	18
2.8.3 Ventilation .....	18
2.8.4 Storage of Combustible Materials .....	18
2.8.5 Fire or Explosion Risks and Precautions .....	19
2.8.6 Risk of Eye and Skin Irritation .....	19
2.8.7 Printing Media Handling and Precautions .....	19
2.8.8 High Voltage Dangers and Precautions .....	19
<b>3.0 H1625 Printer Overview .....</b>	<b>20</b>
3.1 Front Printer Components .....	20
3.1.1 Carriage Home Compartment .....	21
3.1.2 Carriage Assembly .....	24
3.1.3 H1625 UV Lamps .....	27
3.1.4 Computer Compartment .....	29
3.1.5 Operator Station Components .....	30
3.1.6 Media Handling System - Front .....	31
3.1.7 Vacuum Media Belt .....	32
3.1.8 Cyclonic Vacuum System .....	35
3.1.9 Ink Supply and Pump Compartment .....	37
3.2 Printer Rear Components .....	38

3.2.1 Rear Printing Shield.....	39
3.2.2 Carriage X-Axis Drive Motor Access Panel.....	39
3.2.3 Rear Access Panel for Carriage "Home" Compartment.....	39
3.2.4 Energy Chain.....	40
3.2.5 Main Carriage Beam Assembly.....	41
3.2.6 Media Feed System - Rear.....	42
3.2.7 Rigid Media Fence.....	43
3.2.8 Media Vacuum Foot Pedal.....	44
<b>4.0 EFI Print Control Utility and H1625 Control Screen .....</b>	<b>45</b>
4.1 H1625 Software Operational Overview .....	45
4.2 EFI Print Control Utility .....	46
4.2.1 Print Control Utility Overview.....	47
4.2.2 Settings Menu.....	50
4.2.3 Adding Drives.....	51
4.2.4 Select Files to Print Button.....	52
4.2.5 Image Information and Ink Use Estimates Panes.....	53
4.3 H1625 Control Screen .....	55
4.3.1 Ink System Information.....	56
4.3.2 X, Y Axes and Fence Movement Controls.....	57
4.3.3 Lamp Controls.....	58
4.3.4 Media Controls.....	59
4.3.5 Printer Status Bar.....	59
4.3.6 Printer Tools Bar.....	60
4.3.7 Printer Tests.....	61
4.3.8 Carriage Controls .....	62
4.3.9 Parameters Window.....	63
4.3.10 Printer Status Screens.....	72
4.3.11 H1625 Control Screen "Asleep" .....	73
<b>5.0 H1625 Printer Setup .....</b>	<b>74</b>
5.1 Full Printer Startup From Power Down .....	74
5.2 Printer Startup from Sleep Mode .....	75
5.3 Loading Rolled Media .....	76
5.3.1 Media Alignment.....	77
5.3.2 Media Direction.....	78
5.4 Loading Rigid Media .....	79
5.4.1 Printing Multiple Rigid Media Boards .....	79
5.5 Set Media Margins .....	80
5.6 Setting Media Vacuum Chamber Controls .....	81

5.7 Set the Print Gap .....	82
<b>6.0 Printing on the H1625 .....</b>	<b>83</b>
6.1 Standard Printing Procedure .....	83
6.1.1 Start Up Printer.....	83
6.1.2 Verify Lamp Settings.....	84
6.1.3 Set the Carriage Gap .....	85
6.1.4 Scan the Media Width.....	86
6.1.5 Purge and Sweep Print Heads .....	87
6.1.6 Perform Nozzle Checks .....	88
6.1.7 Set Margins and Choose Media Type .....	90
6.2 Daily White Ink Print .....	90
6.3 Print File from EFI Print Control Utility .....	91
6.4 Print Workflows .....	92
6.4.1 Workflows in Fiery XF .....	93
6.5 Printing Full Bleed .....	94
6.6 Centering a Print .....	95
6.7 Skip Blank Space During Prints .....	96
6.7.1 Sample Images .....	97
6.8 Printing Multiple Rigid Media Boards .....	98
6.8.1 Prints with Margins or White Space on Edges .....	99
6.8.2 Prints Using a Guide Block between Sheets .....	100
6.8.3 Prints Using the Media Fence Ruler .....	101
6.8.4 Set Up Margins in Print Files.....	102
6.9 Printing Double-sided .....	103
<b>7.0 Procedures for Replenishing Ink .....</b>	<b>105</b>
7.1 Use Remainder Ink .....	106
<b>8.0 H1625 Maintenance and Print Head Care .....</b>	<b>107</b>
8.1 Maintenance Documentation .....	107
8.1.1 Maintenance Guide .....	107
8.1.2 Maintenance Log .....	107
8.2 Print Head Care .....	108
8.2.1 Bleeding Print Heads.....	108
8.2.2 Ink Purge Procedures .....	110
8.2.3 Clean Print Heads .....	111
<b>9.0 H1625 Sleep Mode/Shutdown Procedures .....</b>	<b>113</b>

9.1 Overnight Sleep Mode .....	113
9.1.1 Heat and Water Recirculation During Printer Sleep.....	114
9.2 Short-Term Printer Shutdown .....	115
9.3 Long-Term Printer Shutdown .....	116
9.4 E-Stop Conditions .....	117
9.4.1 Activating E-Stop.....	117
9.4.2 Restarting After E-Stop.....	117
9.5 Power Outages .....	118
9.5.1 Power Outage During Printing.....	118
9.5.2 Power Outage While Printer is Idle and Attended .....	118
9.5.3 Power Outage While Printer is Idle and Unattended.....	118
 Index .....	 119

# 1.0 Introduction

*The H1625 Operations Guide provides an overview of the features and functions of EFI's H1625 Wide Format Hybrid printer, an advanced digital printer designed to provide wide-format, full-color printing. The H1625 uses environmentally-friendly UV-curable inks to ensure higher volume production and improved resolution over traditional silkscreen printing.*

*The H1625 can print using roll-to-roll media as well as rigid and flexible media types, including but not limited to foam core, PVC, styrene, corrugated plastic, plywood, MDO, MDF, aluminum, plastic composite, cardboard, paper, acrylic and Plexiglas. The maximum allowable thickness for rigid media is 2 inches [4.6 cm], and maximum rigid media weight is 100 lbs [45.4 kg]. Rolled media can have a maximum diameter of 9 inches [22.9 cm]. The printer can handle media widths up to 65" [165 cm] with an image width up to 64" [162.6] for full-bleed printing.*

## 1.1 About This Guide

*This guide assists trained printer operators in completing daily tasks, including printing, start up/shut down, and operating the printer software. This guide focuses on fundamental skills and concepts vital to successful daily printer operation. It does not cover more advanced operation levels and modes, file ripping, or custom profiles.*

## 1.2 Objectives

*This guide has several objectives:*

- **Learn printer components** - Users are given a physical printer description, including component locations.
- **Manage printer power options** - Users learn basic steps for powering the printer on and off, for putting the printer into sleep modes, and for managing lamp life and lamp power options.
- **Teach safe printer operation** - Users are taught basic safety principles to protect themselves from injury and to protect the printer from damage due to improper use while loading media and conducting other standard tasks.
- **Learn printer control software** - Users are taught fundamentals of the printer's control software and how to complete actions using the H1625 Control screen.
- **Printing BCO File** - Users learn basic printing procedures, including loading media, importing files, setting print options and printing BCO files using the Print Control Utility. RIP to print is discussed in the Fiery Manual.
- **Perform daily maintenance** - Users learn basic maintenance tasks, including ink loading and care, jet pack cleaning and maintenance, and general printer maintenance and care.

## 1.3 Customer Resources

*EFI Inkjet Solutions provides additional resources to help personnel operate and maintain printer.*

- **Customer Support Web Site** - <http://inkjet.support.efi.com/index.php> - Contains **Operations** and **Maintenance Guides**, technical supplements, advisory bulletins, and resources such as software updates and drivers.
- **Printer Safety Guide** - <http://inkjet.support.efi.com/doc.php?doc=683> - The **Printer Safety Guide** contains information critical to safe printer operation for all customers.
- **Training** - <http://inkjet.support.efi.com/training/index.php> - Operator training is an essential part of printer installation and operation. EFI Inkjet Solutions provides an educational support system assisting new and experienced operators to develop and maintain skills.

## 1.4 Additional Support

If you have any questions about your printer or other EFI Inkjet Solutions products, see [EFI Inkjet Solutions](#) for contact information.

## 2.0 General Safety

This chapter explains how to safely use your H1625 printer, including the access panels, shields, and warning labels, as well as how to properly handle printer inks and fluids. Before operating the printer, all personnel must:

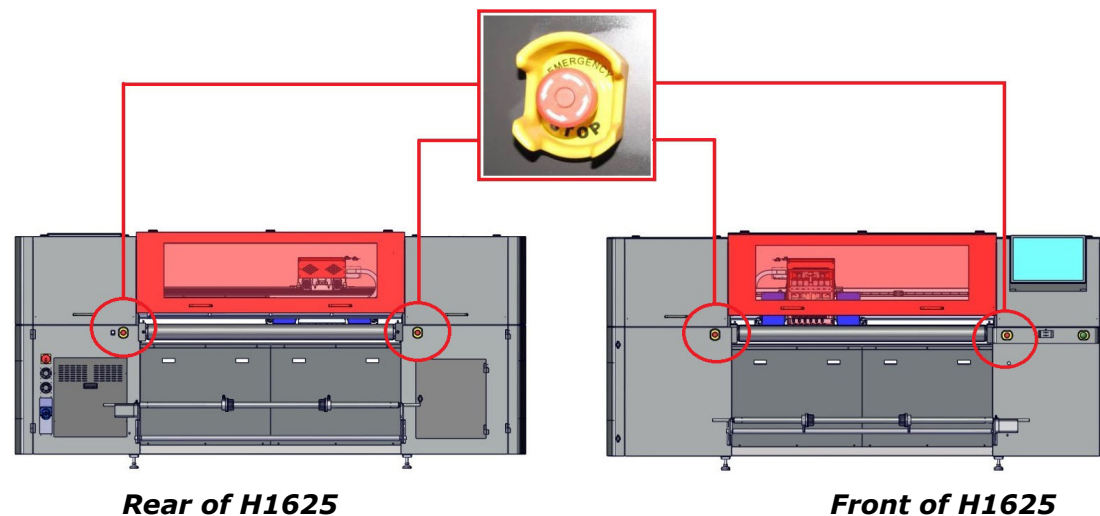
- Be a certified H1625 operator.
- Read and understand the **EFI Ink Jet Printer Safety Guide**, <http://inkjet.support.efi.com/doc.php?doc=683>, and adhere to all safety precautions therein.
- Read and sign the UV Safety Acknowledgement Form.

### 2.1 Emergency Stop Button(s)

In case of an emergency, immediately press any **Emergency Stop** button to stop the printer.

Identify locations and understand operation of emergency stop buttons before operating the H1625 printer. Emergency stop buttons are located on both the right and left sides of the front and rear print areas. When pressed, an emergency stop button does the following:

- Shuts off UV lamps
- Stops all printer mechanical movement
- Stops unwinder and rewinder



**Figure 2-1: Emergency Stop Button Locations**

**Danger!** Pressing an emergency stop button does not disconnect power from the printer or its electronics. Never use emergency stop buttons as an alternative to powering down the printer. The emergency stop buttons are for personal safety and to avoid printer damage during extraordinary circumstances.

## 2.2 Safety Interlock Override Key (Service Key)

The safety interlock override key (or “Service Key”) is located under the operator keyboard tray. This key is not to be used for normal printer operation.



**Warning:** The Safety Access Panels and Shields should ALWAYS be closed during normal printer operations. The key should only be used by qualified service personnel when servicing or troubleshooting the printer.

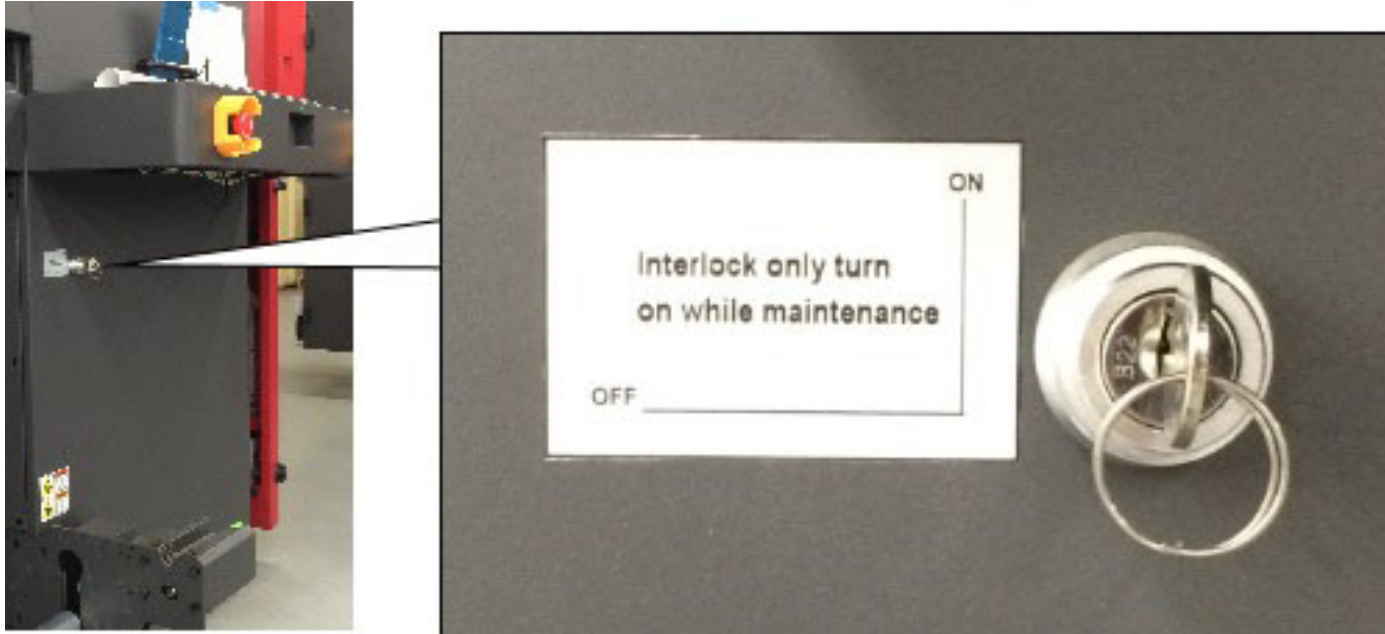
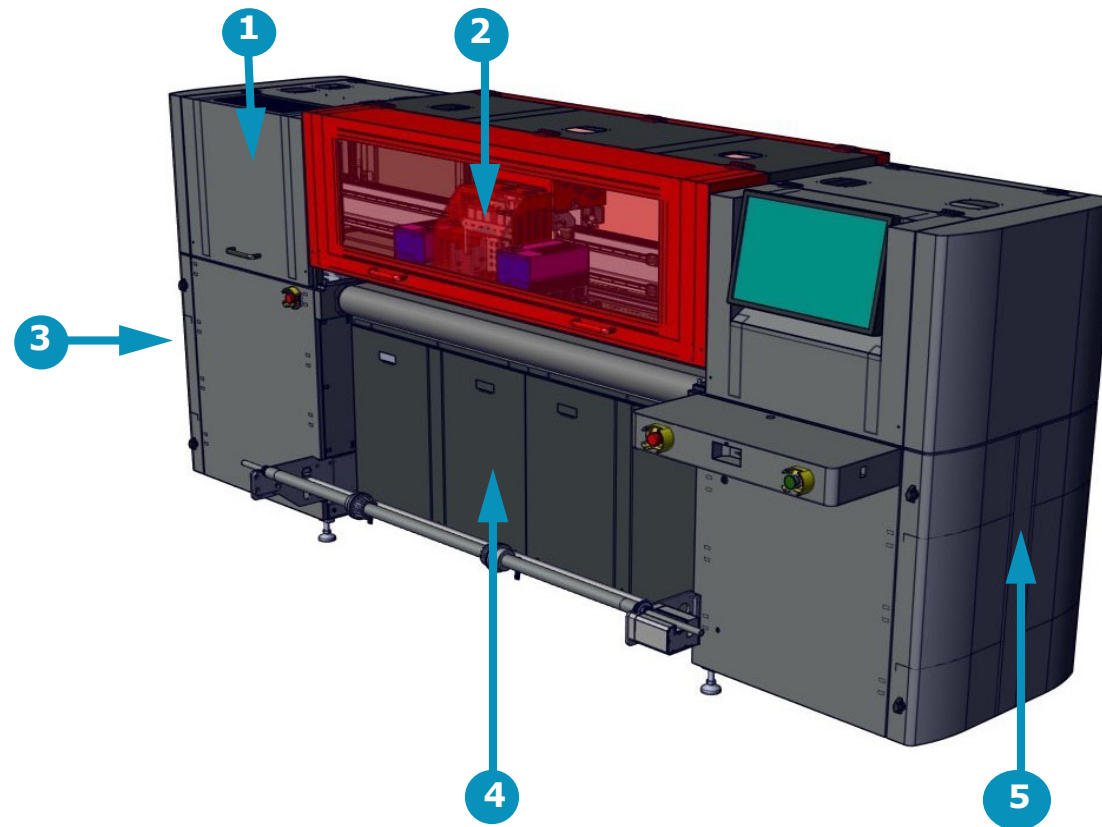


Figure 2-2: Service Key Location and Detail



## 2.3 Front Access Panels and Shields

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



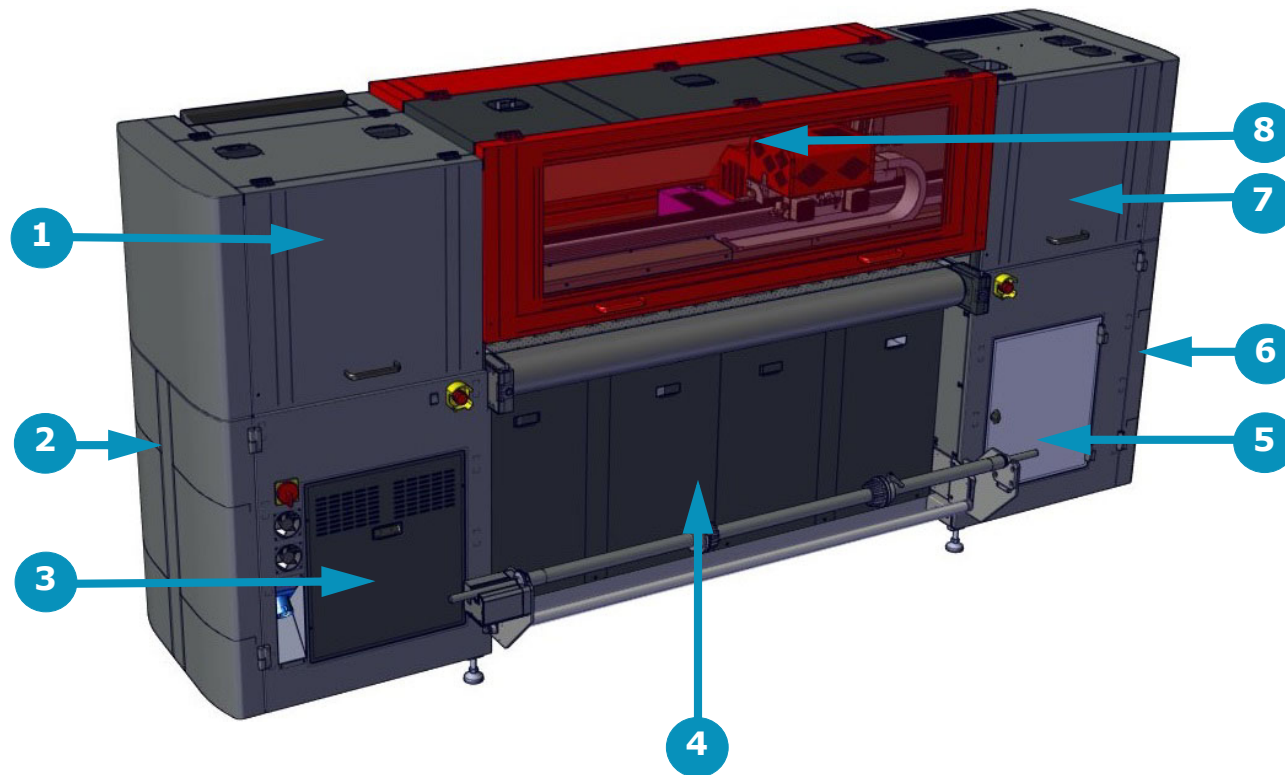
**Figure 2-3: Printer Front Access Panels and Shields**

**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.

Item	Description
1	Access to Carriage "Home" Compartment
2	Front Printing Shield
3	Access to Ink Supply System Compartment
4	Access to Main Vacuum Motors
5	Access to Computer Compartment

## 2.4 Rear Access Panels and Shields

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



**Figure 2-4: Printer Rear Access Panels and Shields**

**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.

Item	Description	Item	Description
1	Access to Carriage X-Axis Drive System*	5	Access to Waste Bottle
2	Access to Computer Compartment	6	Access to Ink Bottles and Pumps
3	Access to Electronic Compartment *	7	Rear Carriage Access (Cooling System)*
4	Access to Main Vacuum Motors	8	Rear Printing Shield

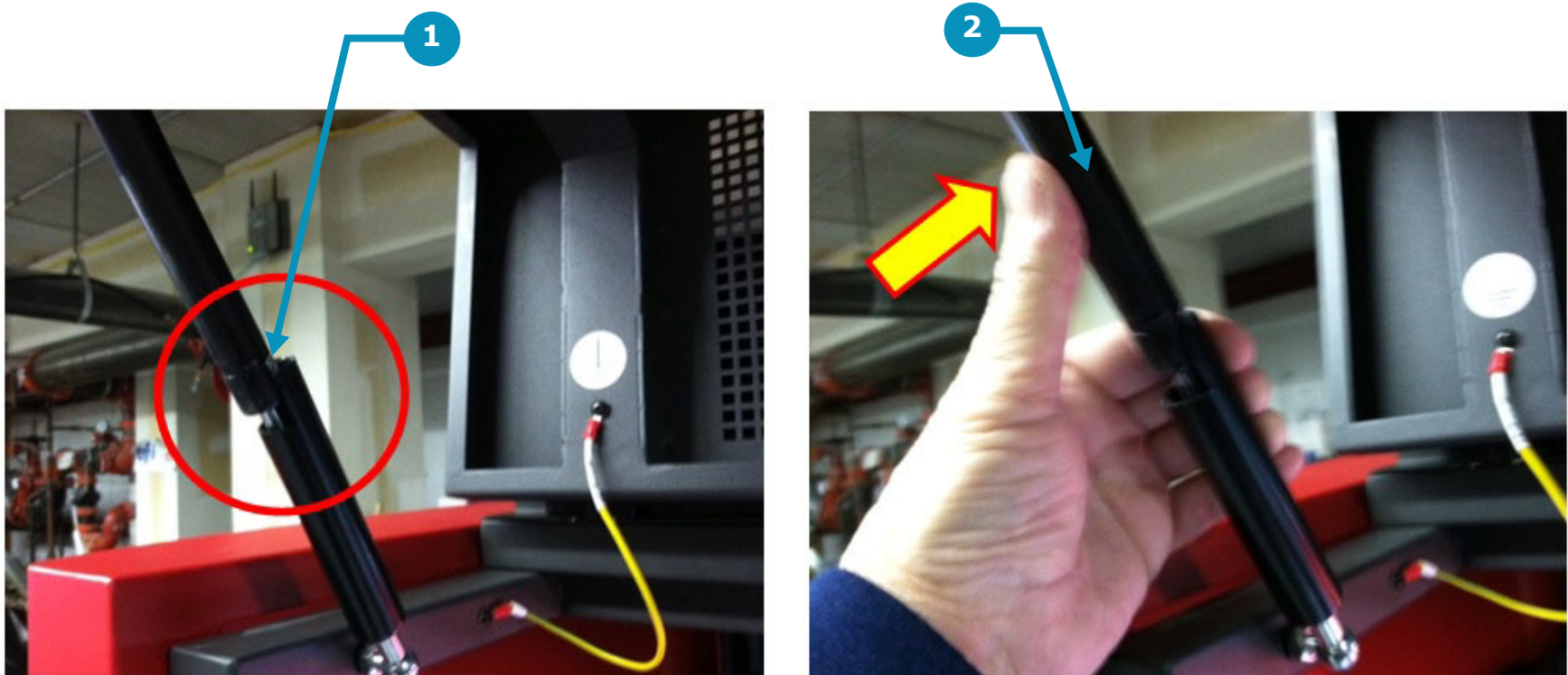
\* Field Service ONLY

## 2.5 Printer Shield Support System and Locking Mechanism

The printer shields are equipped with a support system comprised of cylinders that hold the shields open. Once in the open position, the cylinder on the left side of the shield locks in place. The top section of the cylinder must be depressed to unlock the cylinder before attempting to close the shield.

**Warning:** Ensure that the cylinder is released prior to closing the shield. Failure to do so will damage the cylinder and render the shield support system inoperable and dangerous when shields are opened.

- Unlock the support cylinder as shown in the illustration below, while carefully lowering the printer shield with your other hand.



**Figure 2-5: Printer Shields Cylinder Lock**

Item	Description
1	Cylinder Locking Mechanism

Item	Description
2	Depress to Unlock Before Closing Shield

## 2.6 Printer Safety Labels (Front)

There are numerous labels located on the H1625 printer that indicate safety warnings or cautions. It is important to become familiar with all such labels, their location, and meaning. The following provides the general location of front and rear labels.

See the **EFI Ink Jet Printer Safety Guide** for a list of safety-related symbols used here and affixed to printer. Learn to recognize these and other symbols and the risks that they signify.

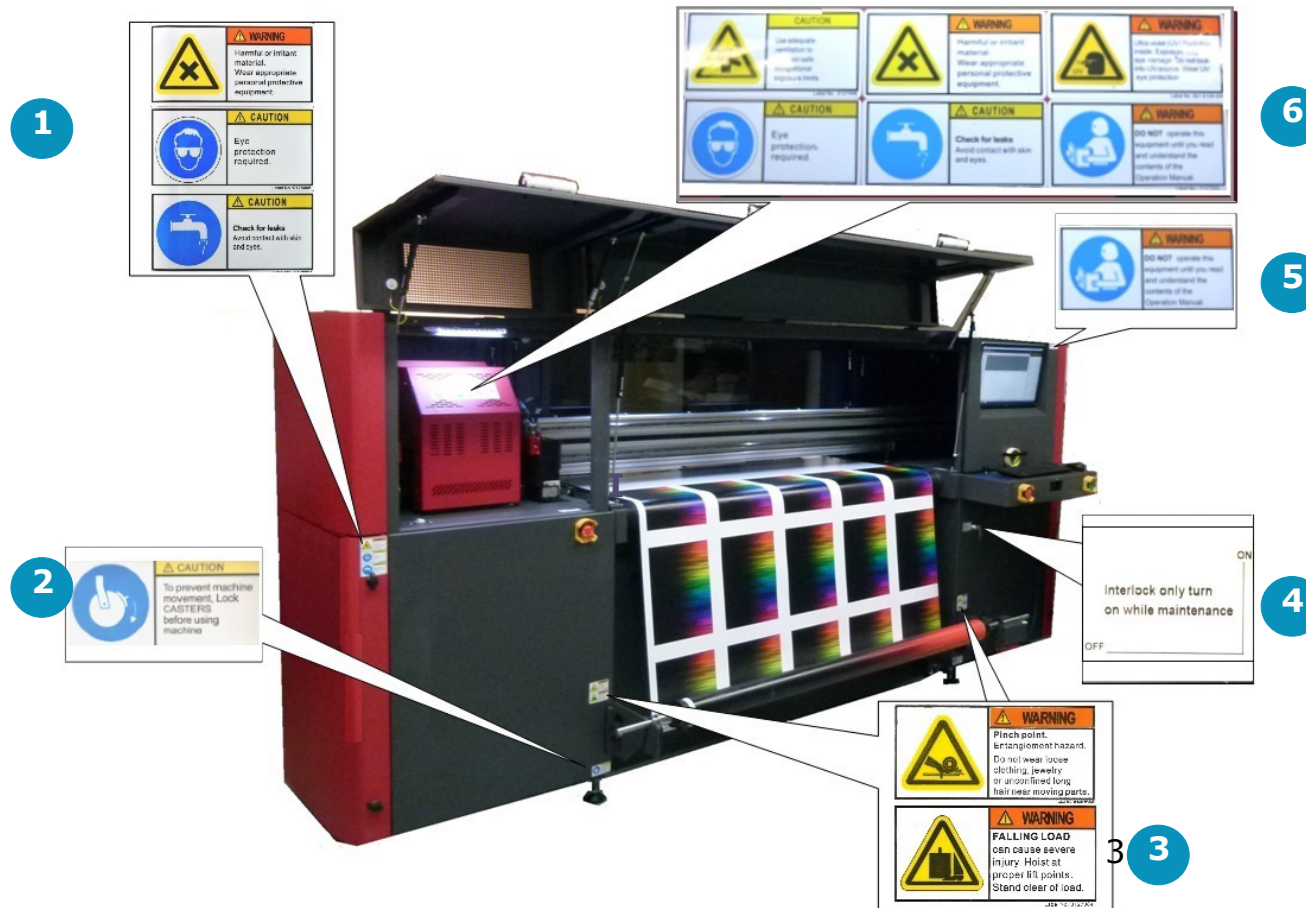


Figure 2-6: Front Safety Labels

Item	Description	Item	Description
1	Ink Compartment Labels	4	Interlock Override Key-lock
2	Wheel Lock Labels	5	Operator Station "Read Manual" Label
3	Media Take-Up System Labels	6	Carriage Labels



## 2.7 Printer Safety Labels (Rear)

The following provides the general location of the rear labels.



**Figure 2-7: Rear Safety Labels**

Item	Description
1	Do Not Remove Panel
2	Do Not Place Objects
3	Ventilation Warning
4	Electrical Hazard Warning

Item	Description
5	Wheel Lock Labels
6	Crush Hazard and Falling Loads
7	Eye Safety Cautions

## 2.8 Other Hazards and Precautions

*Other Hazards and Precautions are outlined in the following paragraphs.*

### 2.8.1 UV Ink and Solvent Precautions

*Observe the following precautions regarding the printer, ink, and related solvents.*

- Uncured UV inks and cleaning solvents are flammable.
- Uncured UV inks and cleaning solvents can cause severe eye damage.
- Operator should **not** wear contact lenses when operating the printer with insufficient ventilation.
- Operator should wear safety glasses or a face shield.
- Operator should wear Nitrile gloves when flushing print heads, ink tubes, or when working with ink containers.
- UV Inks and solvent vapor can irritate the eyes, throat, and skin.
- The yellow triangle caution symbol represents potential for personnel injury or damage to the printer.

### 2.8.2 UV Light Hazards

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

- Wear UV protective glasses when operating the printer.
- Avoid being too close to the UV lamps during printer operation.
- UV lamps must be off while completing maintenance tasks, especially when working in close proximity to the lamps.
- The printer's front door contains special glass and door flaps that filter out UV light during printing. All doors should be closed when printing to prevent operator exposure to harmful UV light.

### 2.8.3 Ventilation

*Proper ventilation - as described in the Site Preparation Specification - is required in the printer work area. Printer operators must monitor printer settings to ensure that UV inks cure completely. Operators risk exposure to uncured UV ink and related vapors if cure times are not accurately maintained. Follow these precautions:*

- The ventilation system must be on in the printer work area to ensure adequate air circulation.
- Store inks and solvent in a proper cabinet designed for flammable liquid storage.
- Keep ink and solvent containers tightly closed at all times. If a container shows signs of damage or leakage repair or replace the container immediately.
- Clean ink or solvent spillages as soon as possible.
- Only use dry powder or carbon dioxide types of fire extinguishers.

### 2.8.4 Storage of Combustible Materials

*Inks and solvents should be clearly labeled and stored in an area designated for flammable liquids IAW local safety regulations.*

- Ensure that one or more approved fire extinguishers are available near the storage area which are filled, and fully operational.
- Personnel should be trained in using fire extinguishers and techniques for extinguishing chemical fires. .

## 2.8.5 Fire or Explosion Risks and Precautions

*Open flame, heat energy, or sparks around the printer can trigger a fire or an explosion when excessive fumes are present. Follow the precautions listed below:*

- Do not smoke near the printer or ink storage area.
- Do not allow open flame near the printer or ink storage area.
- Do not use heaters or halogen lights within five meters of the printer or ink storage area.
- Do not use spark producing equipment, including devices capable of static electrical discharge, within five meters of the printer or ink storage area.
- Ensure proper use of fire extinguishers.

## 2.8.6 Risk of Eye and Skin Irritation

*Follow these precautions:*

- When ink or solvent comes in contact with your skin, thoroughly wash at once with cold water and designated soap(s).
- When ink or solvent comes in contact your eyes, thoroughly wash at once with cold water.
- Do not drink or swallow solvent, ink, or waste ink.
- Only authorized operators are allowed to handle inks and solvents.
- Keep inks, solvents, waste inks, cloths, paper, media, and other operating materials in covered fireproof containers.
- Place covered fireproof containers at least five meters away from the printer work area.
- Dispose of waste materials in accordance with local, state, province, or/and country government regulations.
- The presence of children or pets is forbidden at all times in or near the printer area.

## 2.8.7 Printing Media Handling and Precautions

*The H1625 is capable of using a wide variety of rigid media as well as roll-to-roll media. Follow these precautions:*

- Wear hand and foot safety protection gear when loading, unloading and handling media to avoid bodily injury.
- Use proper heavy-duty handling equipment if available.

## 2.8.8 High Voltage Dangers and Precautions

*The H1625 is safe to operate in its normal operating configuration. However, with key protective covers opened or removed, electrical components carrying high voltage are exposed. The H1625 carries high voltages that could cause serious injury or death from electrocution. Only **qualified service technicians** may service the H1625 Electrical Systems. Follow these precautions:*

- Verify provisions for emergency power off before connecting the printer to main power supply.
- When printer power is on, do not open any cover panel or touch any electrical components.
- All printer systems should be grounded in accordance with local electrical safety regulations per State, Province, Region, or Country codes. Ground voltage should be less than 3V.
- Set the printer on smooth tile or cement floor.

## 3.0 H1625 Printer Overview

In this chapter we describe the major assemblies and sub-assemblies of the H1625 Wide Format printer, to familiarize you with its most important components.

### 3.1 Front Printer Components

This section illustrates the major components located on the front of the printer. The front of the printer is the side with the computer, where the media comes out after printing.

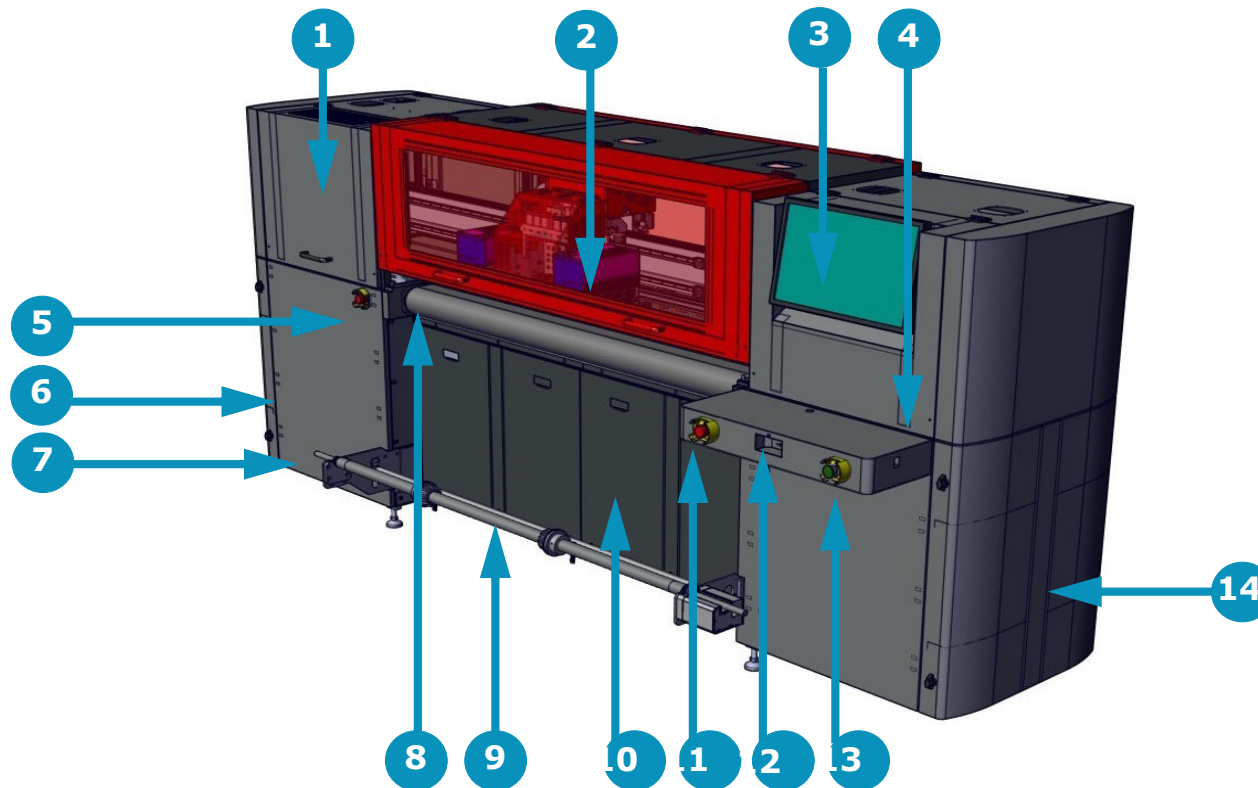


Figure 3-1: Printer Front

Item	Description	Item	Description	Item	Description
1	Carriage Home Compartment	2	Carriage	3	Operator Station Monitor
4	Keyboard and Mouse Tray	5	Secondary Front E-Stop Button	6	Ink Supply Compartment
7	Access to Cyclonic Vacuum Sys.	8	Vacuum Media Belt	9	Front Rolled Media Handling Sys
10	Access to Main Vacuum Motors	11	Operator Station E-Stop Button	12	USB Ports
13	Start Button	14	Computer Compartment		



### 3.1.1 Carriage Home Compartment

The carriage “Home” compartment contains the Ink Purge control panel, the carriage (when not printing), the overhead light, and the sweep tray and vacuum knife. Detailed information on all carriage components is provided in Section [Carriage Assembly](#).



**Figure 3-2: Carriage “Home” Compartment**

<b>Item</b>	<b>Description</b>	<b>Item</b>	<b>Description</b>	<b>Item</b>	<b>Description</b>
1	Ink Purge Control Panel	2	Overhead Light	3	Carriage (Covers Shown)
4	Sweep Tray and Vacuum Knife				

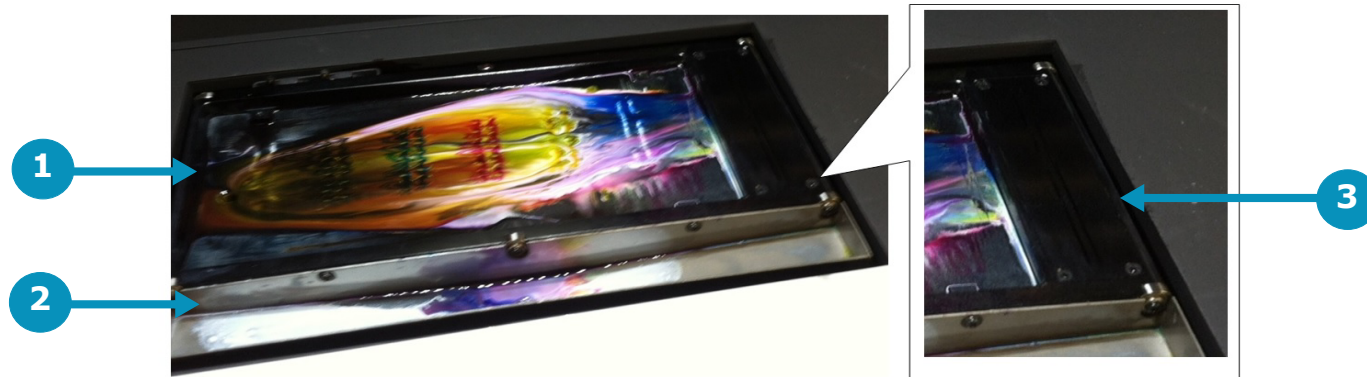
**The Ink Purge control panel provides the following manual purge functions:**



**Figure 3-3: Ink Purge Control Panel**

1. The left purge button controls the CYMK color ink manual purging.
2. The right purge button controls the manual purge for inks other than the CYMK. This may involve tanks such as white or red/blue, depending on the type of H1625 printer involved. The button label changes based on the colors of ink the button purges. White-ink H1625 printer shown above.
3. The Liquid Separator button controls the cyclonic vacuum pump. Pressing this button drains the contents of the cyclonic vacuum system into the waste container

**The Sweep Tray and Vacuum Knife system operate as follows:**



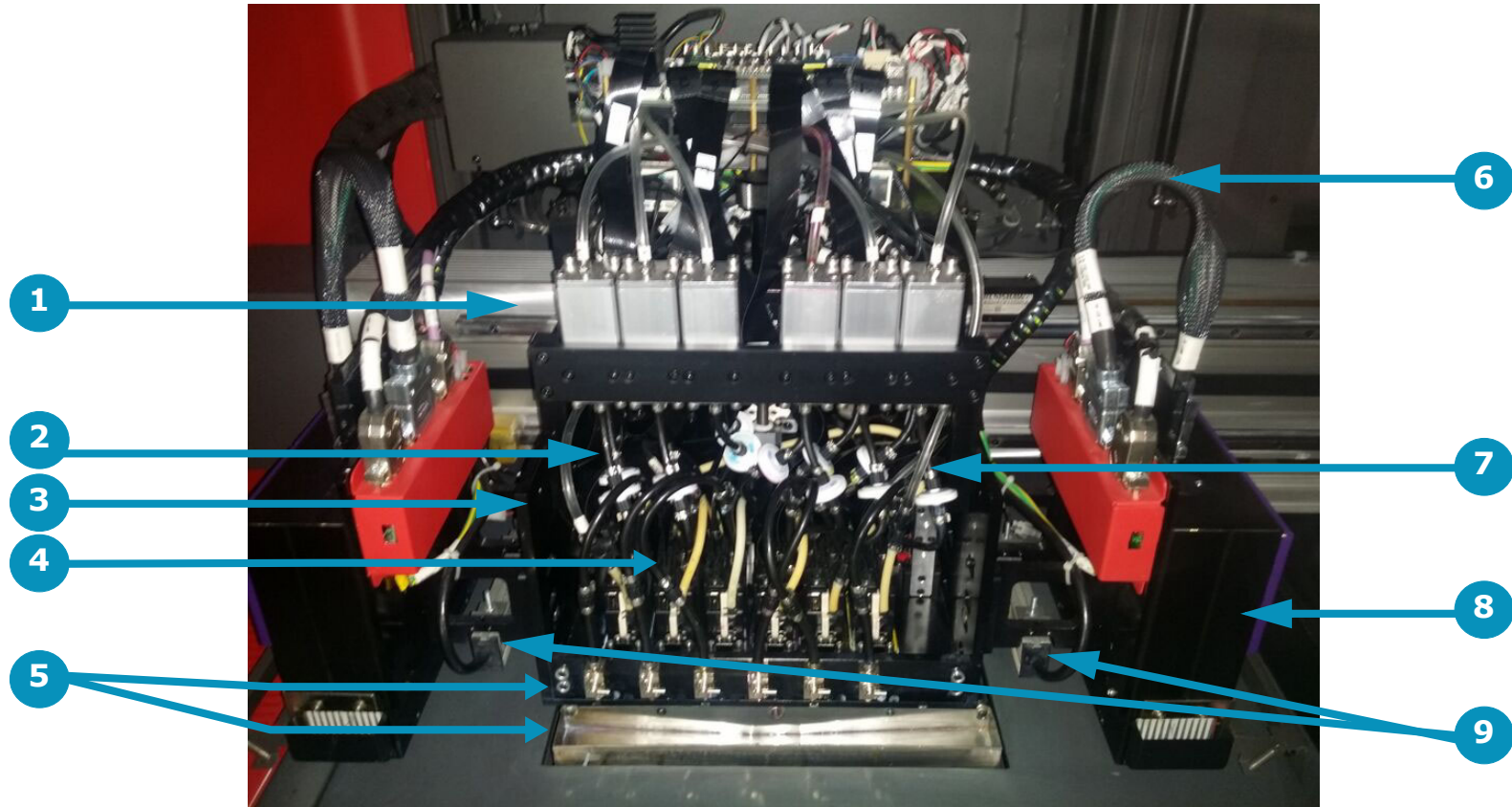
**Figure 3-4: Sweep Tray and Vacuum Knife Detail**

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.
3. The vacuum knife uses suction to extract excess ink from the bottom of the print heads during the sweep cycle either automatically via the H1625 Control screen or manually via the sweep button on the purge button panel. The ink is drawn into the cyclonic vacuum system.

### 3.1.2 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 and coolant 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.

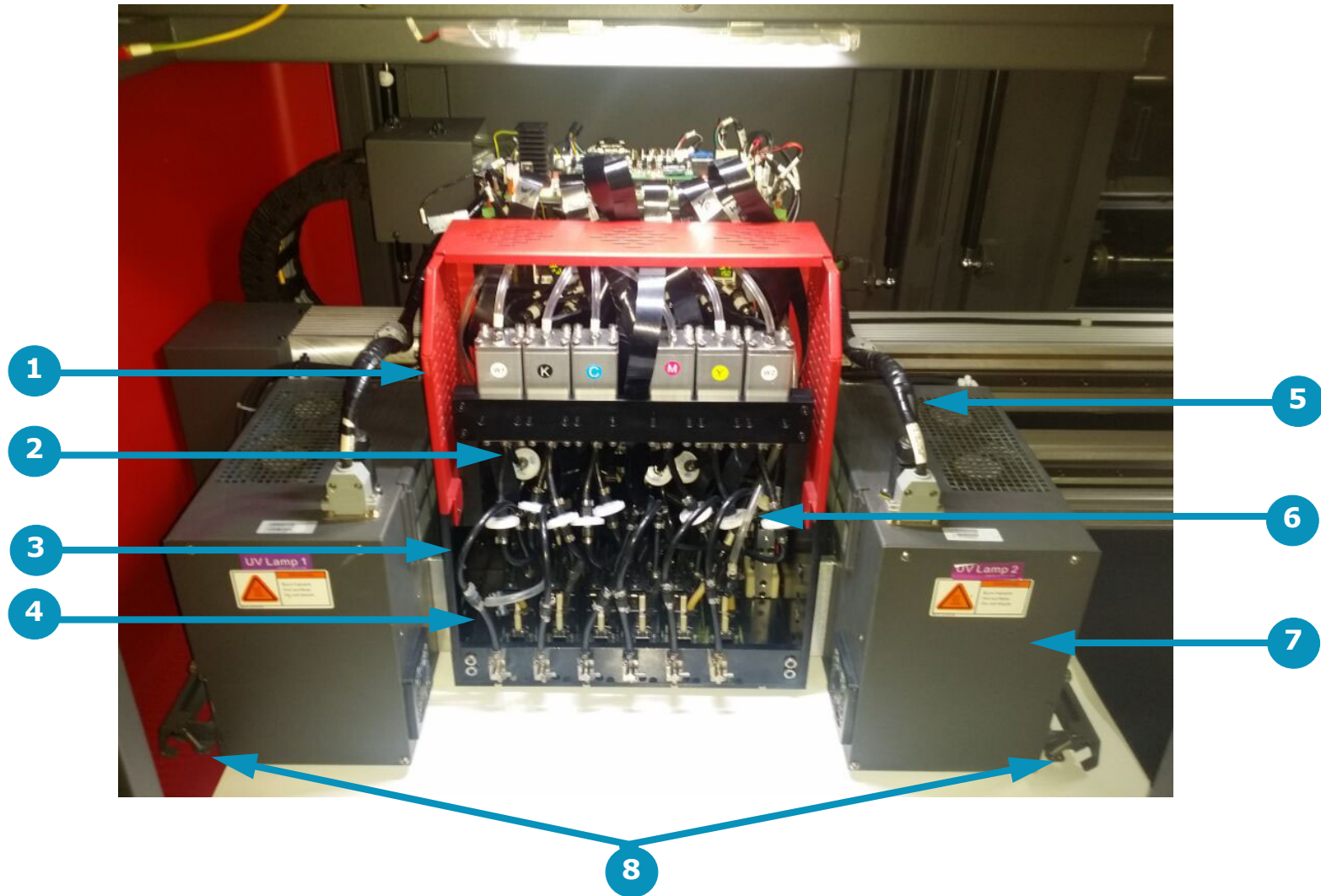
#### H1625 LED Printers - Front Carriage Assembly



**Figure 3-5: Carriage Front View (No Covers Shown)**

Item	Description	Item	Description	Item	Description
1	Secondary Ink Tanks	2	Ink Filters	3	Ink Bleed Tubes
4	Ink Supply Tubes	5	Ink Bleed Valves and Drain Trough	6	LED Lamp Cables
7	Coolant Tubes	8	LED Lamps	9	Antistatic Bars

# H1625 Arc Printers - Front Carriage Assembly



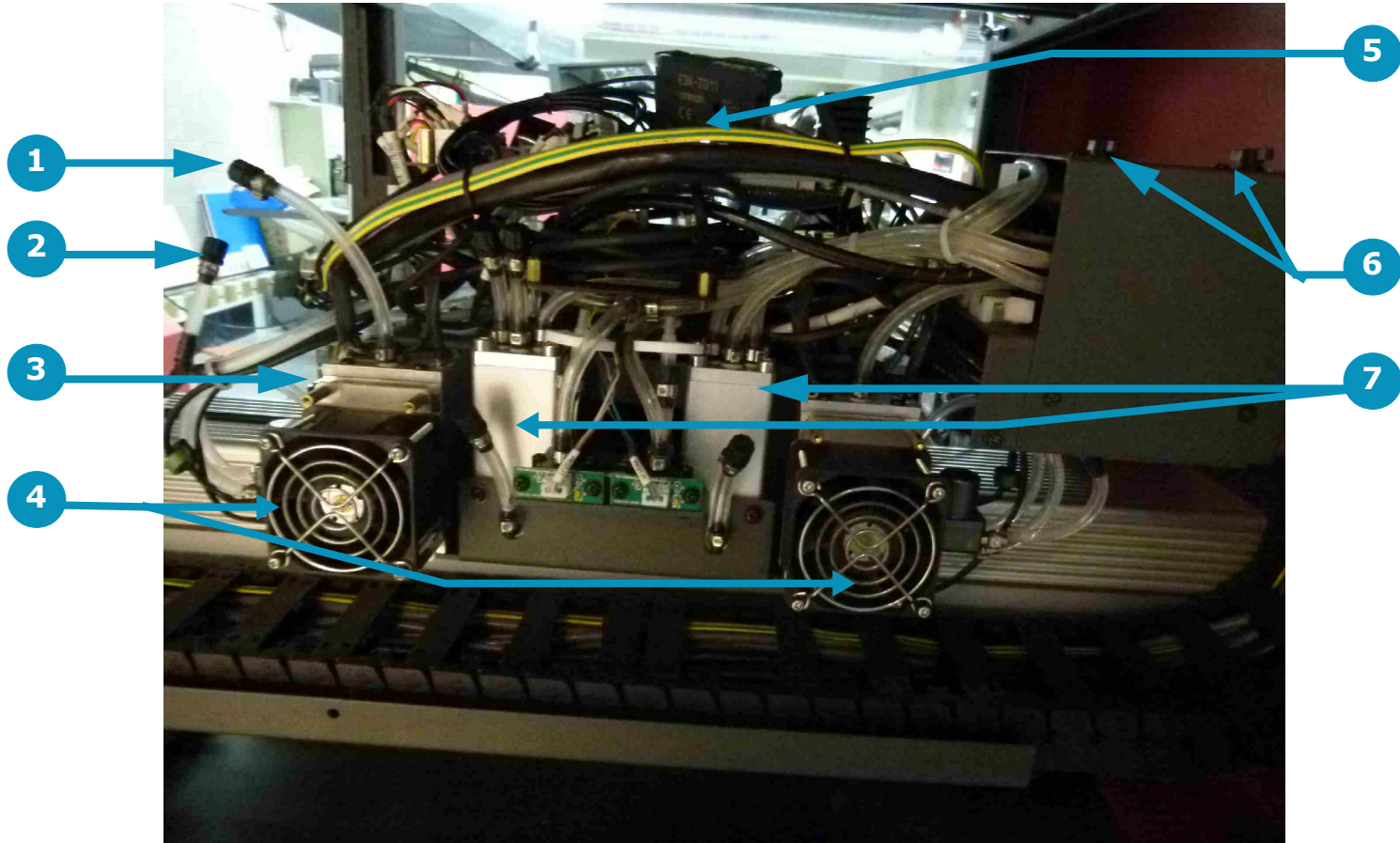
**Figure 3-6: Carriage Front View (No Covers Shown)**

Item	Description	Item	Description	Item	Description
1	Secondary Ink Tanks	2	Ink Filters	3	Ink Bleed Tubes
4	Ink Supply Tubes	5	Lamp Cables	6	Coolant Tubes
7	Arc Lamps	8	Carriage Safety Stop Assembly and Anti-static Bars		



## H1625 LED and Arc Printers - Rear Carriage Assembly

The Rear of the Carriage Assembly contains the following items:



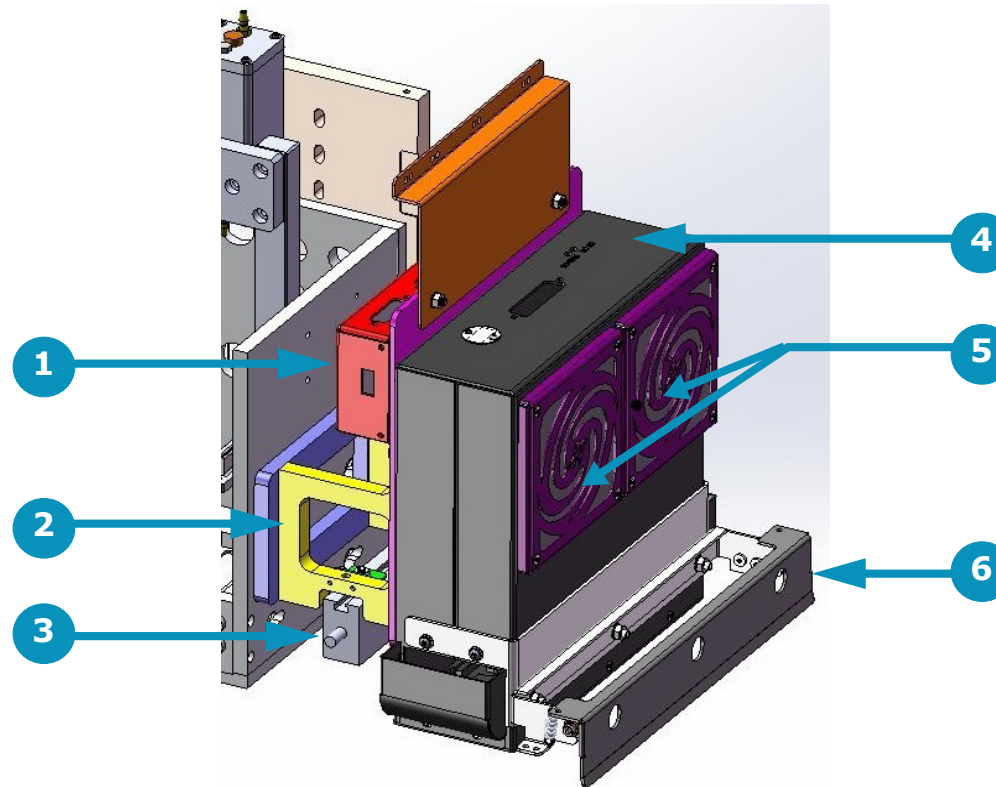
**Figure 3-7: Carriage Rear View (No Covers Shown)**

<b>Item</b>	<b>Description</b>	<b>Item</b>	<b>Description</b>	<b>Item</b>	<b>Description</b>
1	Coolant System Vent Tube	2	Coolant Refill Tubes	3	Coolant Reservoir
4	Coolant Reservoir Fans	5	Print Head Control Board	6	Negative Pressure Valves
7	Overflow Tanks				

### 3.1.3 H1625 UV Lamps

The H1625 is equipped with UV Lamps which provide a superior technology for ink curing. Depending on the type of H1625 printer you have, the lamps use one of the following types of UV bulbs:

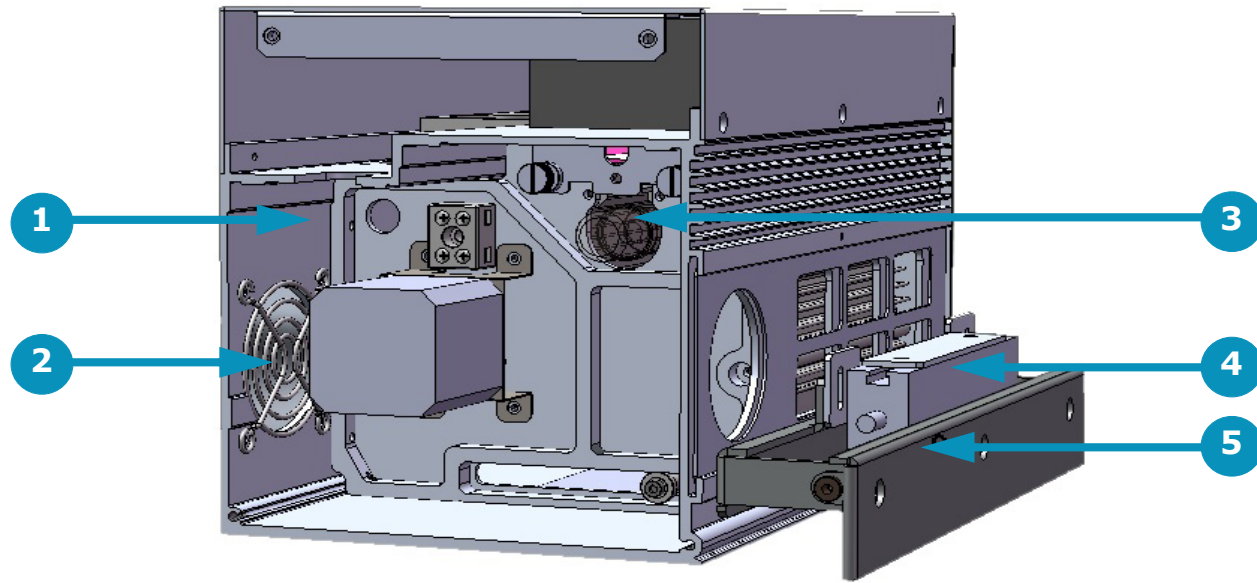
#### LED UV Lamps



**Figure 3-8: LED Lamp Detail (Right Lamp Shown)**

<b>Item</b>	<b>Description</b>	<b>Item</b>	<b>Description</b>	<b>Item</b>	<b>Description</b>
1	Lamp Interface Board Housing	2	Lamp Mounting Bracket Assembly	3	Anti-static Bar Assembly
4	Electrical/Communications Connection Point	5	Fans & Filter Assemblies	6	Carriage Safety Stop Assembly

# Arc UV Lamps



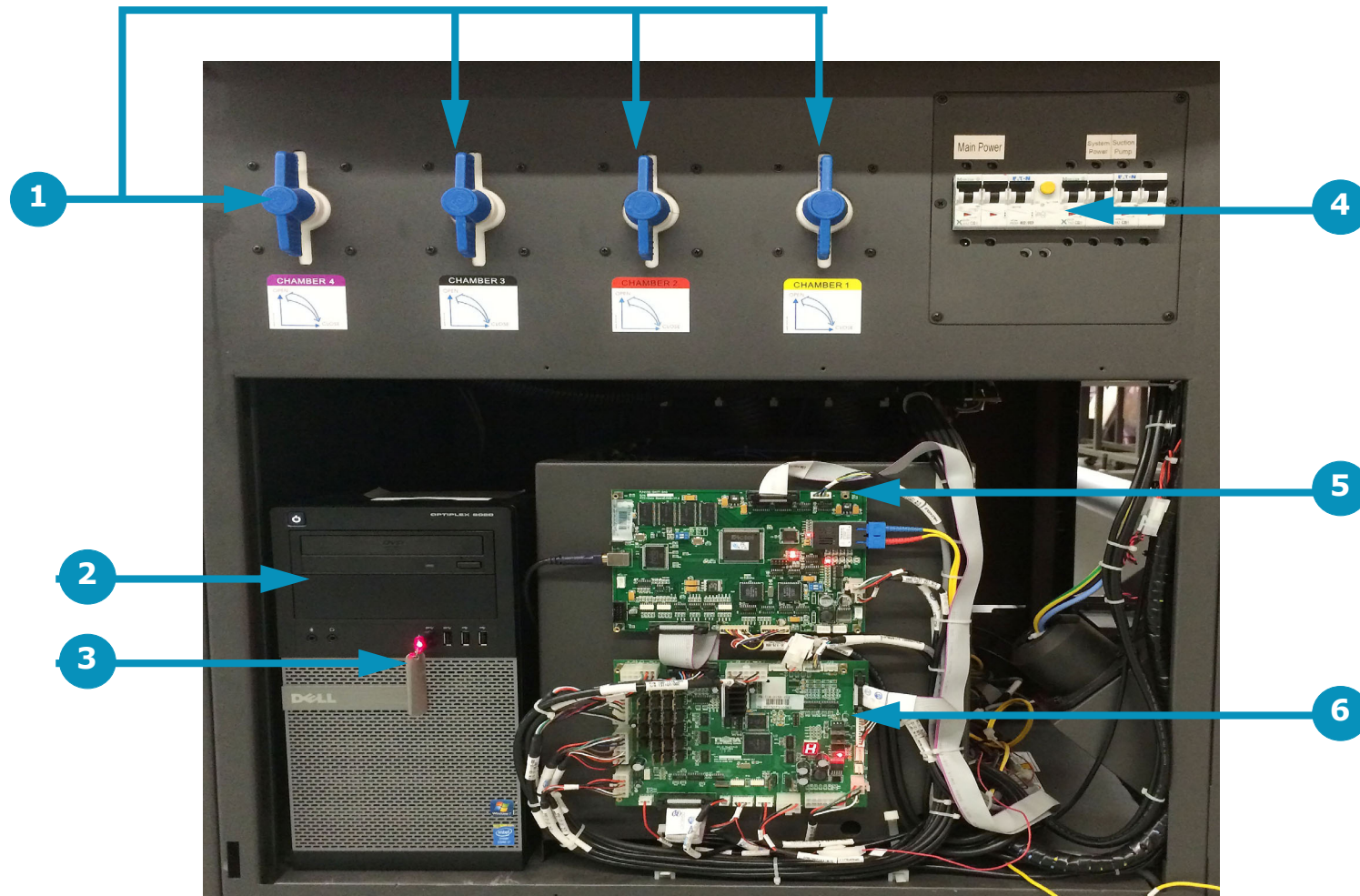
**Figure 3-9: Lamp Detail (Right Lamp Shown)**

<b>Item</b>	<b>Description</b>	<b>Item</b>	<b>Description</b>	<b>Item</b>	<b>Description</b>
1	Lamp Interface Board Housing	2	Fans & Filter Assemblies	3	Arc Lamp Bulb and Housing
4	Anti-static Bar Assembly	5	Carriage Safety Stop Assembly		



### 3.1.4 Computer Compartment

The USB and multifunction board are located in the Computer Compartment. These are protected by a security cover that should not be removed except by a qualified EFI Field Service Engineer. Also in this compartment are the main breaker panel and the media vacuum controls. Operators may access and use these controls.



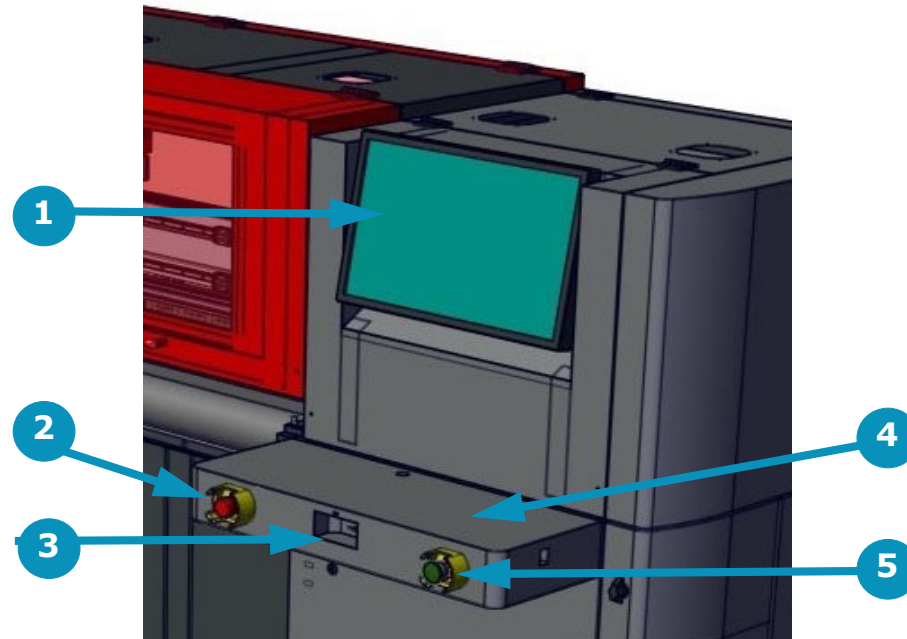
**Figure 3-10: Computer Compartment (Shown with Protective Cover over USB and MFB removed)**

Item	Description	Item	Description	Item	Description
1	Media Vacuum Controls	2	Computer	3	Fiery XF USB Dongle
4	Main Breaker Panel	5	USB Board	6	Multifunction Board

### 3.1.5 Operator Station Components

The Operator Station Components are described in this section. Those components are as follows:

1. A 22" flat-panel display (Key # 1), a full-size keyboard, and a two-button wheel-mouse (Not Shown).
2. The Keyboard Tray is used to support the keyboard and mouse used for printer operation. In addition, this tray contains the following:
  - A. The green start button is located on the right front of the keyboard tray.
  - B. The USB ports are located in the center of the keyboard tray.
  - C. The red and yellow E-Stop button is located on the left front of the keyboard tray.

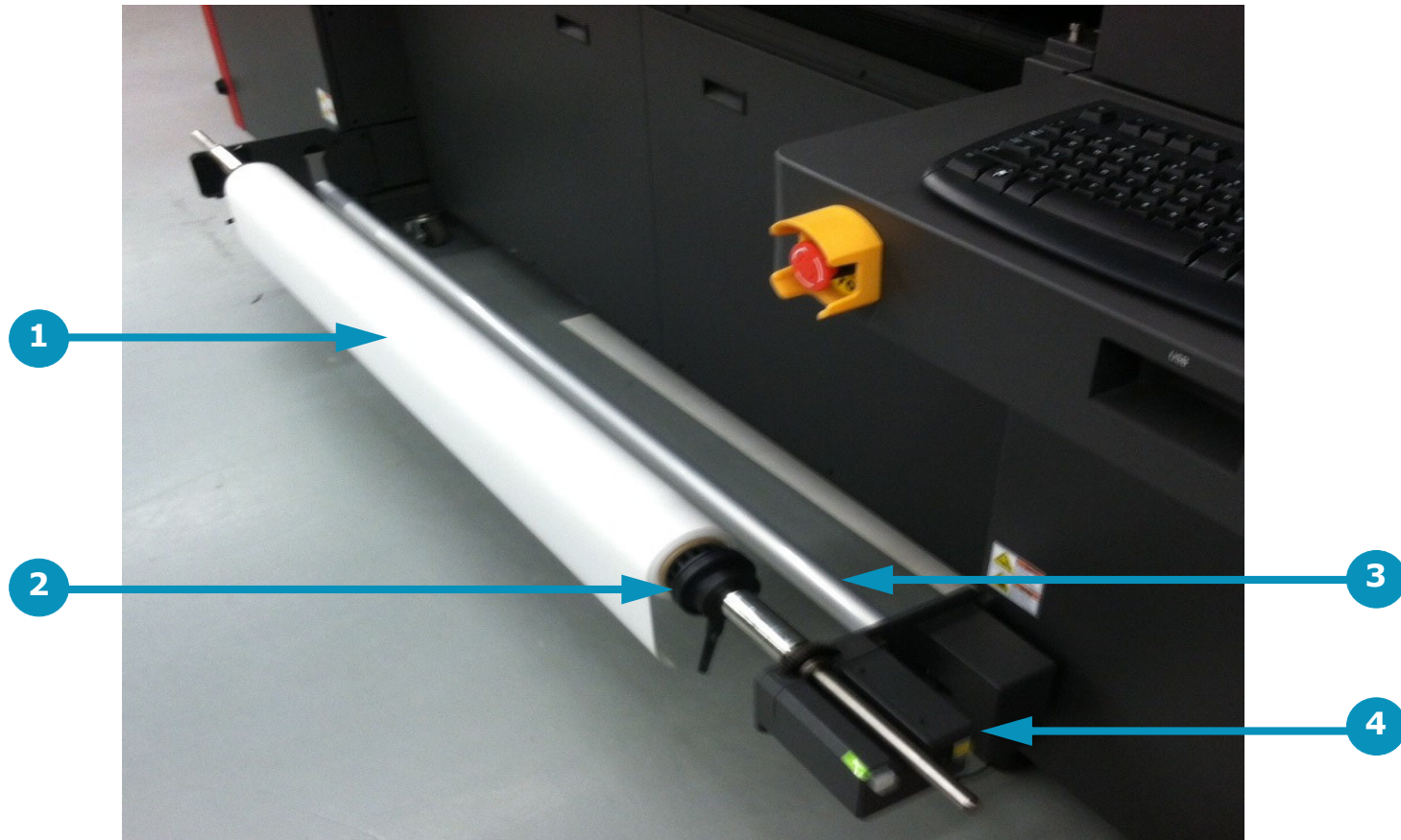


**Figure 3-11: Operator Station Monitor**

<b>Item</b>	<b>Description</b>
1	Monitor
2	E-Stop Button
3	USB Ports
4	Keyboard Tray
5	Start Button

### 3.1.6 Media Handling System - Front

The media handling system on the front of the printer holds the rolled media after it is printed. The media is loaded onto this take-up roll until printing operations are completed. Media direction is controlled by the switch and light on the motor (as described in section [Media Direction](#)).



**Figure 3-12: Media Handling System - Front**

Item	Description
1	Media Roll
2	Media Chucks
3	Dancer (see Note, below)
4	Motor and Direction Controls

**Note:** The front dancer bar has been removed from the design of newer H1625 printers due to improved media handling. Conduct media feeding as always, but feed from the front of the machine directly to the front media take-up roller.

### 3.1.7 Vacuum Media Belt

The H1625 uses a conveyor belt system to move media over a perforated platen (not shown). The platen is divided into 4 vacuum chambers across the width of the platen to allow for control of vacuum pressure across the width of the media belt.

The vacuum grips the media through the vacuum zones and holds the media in place during printing operations. The vacuum pressure in each zone is selectable from 25% to 100% of the media belt width (See [Figure 3-14](#) and [Figure 3-15](#)).

As the carriage completes each pass, the media belt is stepped forward until the printed image is complete. The belt should be kept clean in accordance with the maintenance schedule.

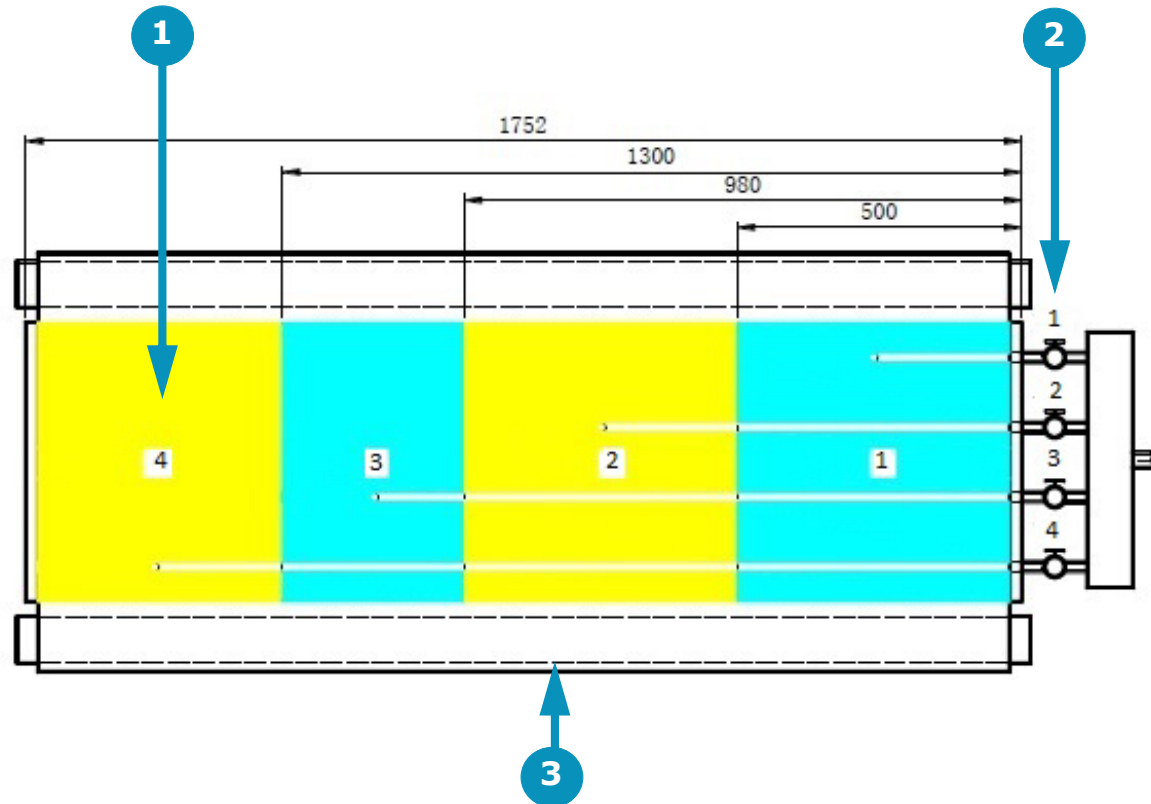
The belt system has no user-serviceable parts and should be replaced only by a qualified service engineer.



**Figure 3-13: Vacuum Media Belt and Rigid Media Fence**

Item	Description	Item	Description	Item	Description
1	Media Belt	2	Zone 4	3	Zone 3
4	Zone 2	5	Zone 1		

The vacuum zones are shown in [Figure 3-13](#), above. Additional information on zone location and control is shown in [Figure 3-14](#) and [Figure 3-15](#).

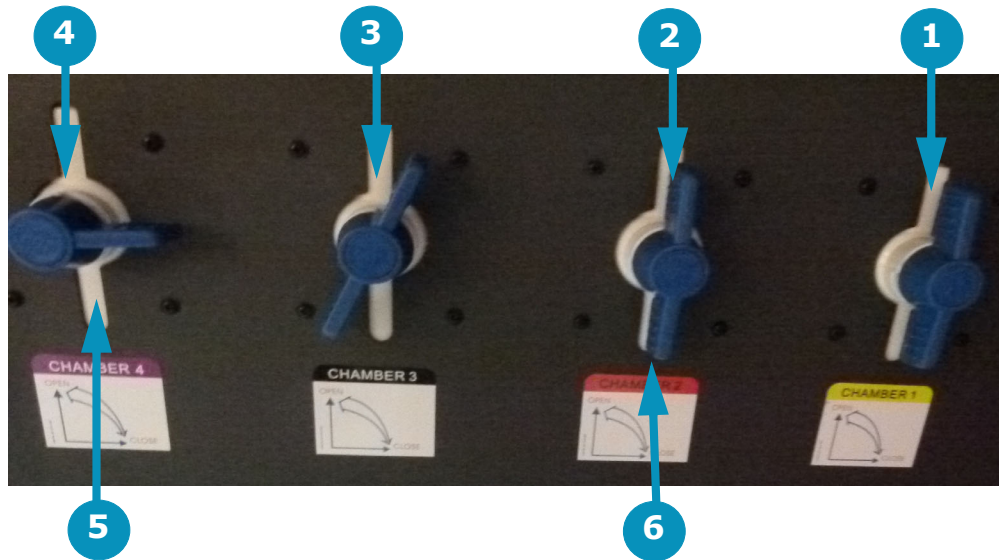


**Figure 3-14: Vacuum Media Belt and Platen Vacuum Chamber Layout (Top View)**

Item	Description	Item	Description	Item	Description
1	Chambers	2	Valves	3	Front of printer

Vacuum chambers and related control valves are numbered 1 through 4 and are identified in [Figure 3-14](#), above. A detail of the control valve layout is provided in [Figure 3-15](#), below.





**Figure 3-15: Platen Vacuum Control Knob Layout**

<b>Item</b>	<b>Description</b>	<b>Item</b>	<b>Description</b>	<b>Item</b>	<b>Description</b>
1	Valve 1	2	Valve 2	3	Valve 3
4	Valve 4	5	Valve Closed	6	Valve Open

### 3.1.8 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 as shown in [Figure 3-16](#). 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 3-16: Waste Compartment (Cyclonic Vacuum System, Vacuum Canister and Ink Waste Container)**

Item	Description	Item	Description	Item	Description
1	Cyclonic Vacuum Container	2	Vacuum Canister	3	Ink Waste Container



**Figure 3-17: Liquid Separator -Empties Cyclonic Container**



**Figure 3-18: Head Sweep Button**

**Warning:** Do NOT attempt to drain the cyclonic system (using the Liquid Separator button) and an automatic head sweep (using Head Sweep icon on the H1625 Control screen) simultaneously as this may seriously damage the printer.



### 3.1.9 Ink Supply and Pump Compartment

The Ink Supply and Pump Compartment contains the following components.

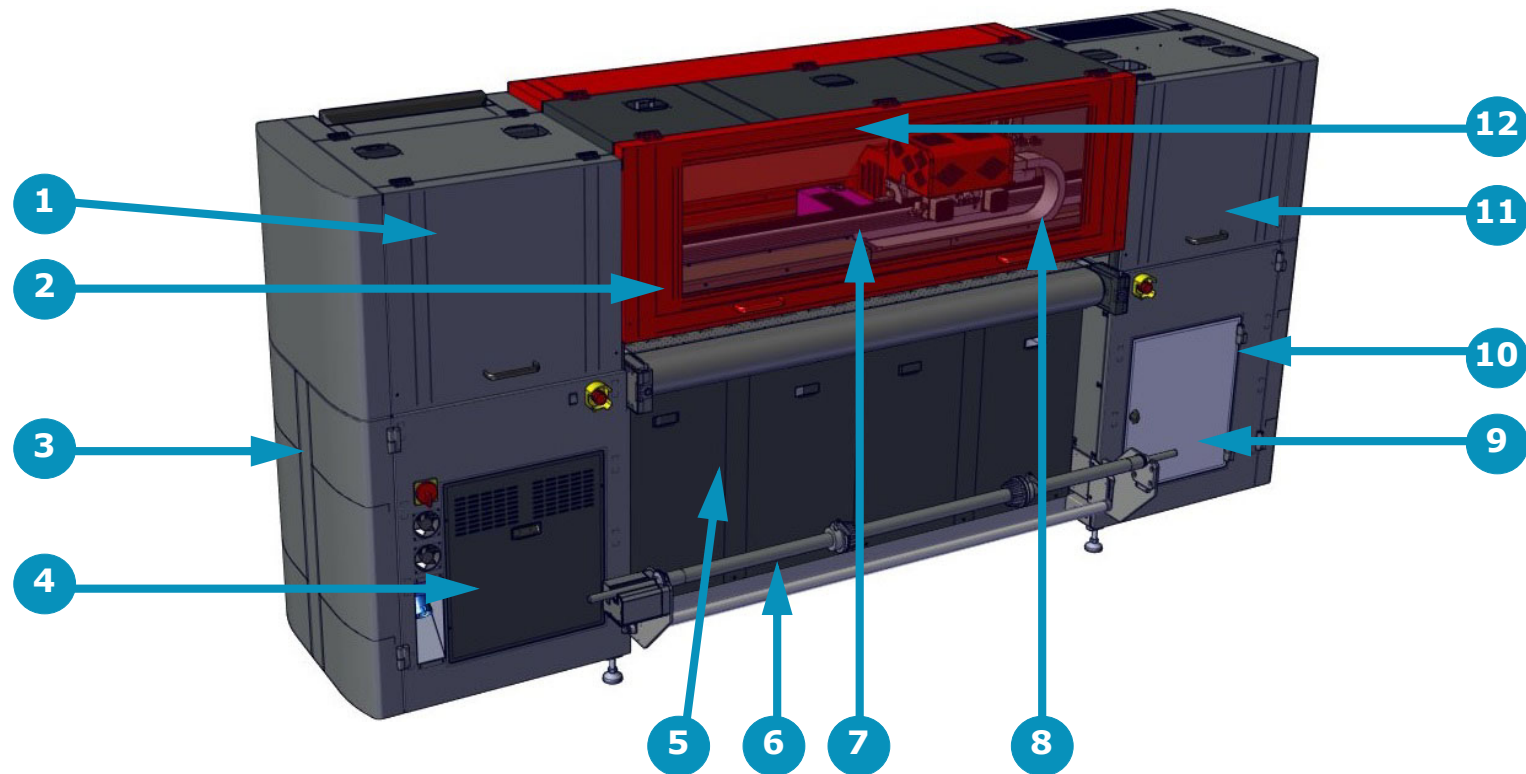


**Figure 3-19: Ink Supply and Pump Compartment**

Item	Description	Item	Description	Item	Description
1	Ink Filters	2	Ink Pumps	3	Non-CYMK Bottles (such as white)
4	CYMK Ink Bottles	5	Air Relief Filter	6	Ink Tubes

## 3.2 Printer Rear Components

This section illustrates the major components located on the rear of the printer.



**Figure 3-20: Printer Rear (Feed Side)**

**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.

Item	Description
1	Access to Carriage X-Axis Drive System
2	Rigid Media Fence
3	Access to Computer, USB, and MFB
4	Access to Power Supplies and Relays*
5	Access to Vacuum Motor Compartment
6	Rear (Feed) Media Handling System

Item	Description
7	Main Beam (Carriage Beam)
8	Energy Chain
9	Access to Main Vacuum Canister
10	Access to Waste Bottle
11	Access to Rear Carriage Home Compartment
12	Rear Printing Shield

\* Field Service ONLY

### 3.2.1 Rear Printing Shield

The Printing Shields are constructed of special glass that protects against exposure to UV Light. The printer should never be operated with the front or rear printing shields open.

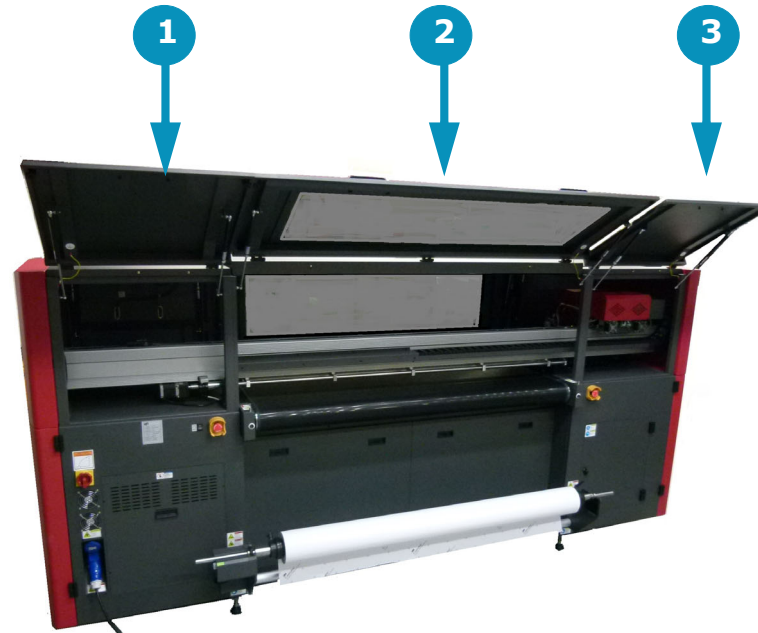


Figure 3-21: Rear Printing Shield

Item	Description	Item	Description	Item	Description
1	Carriage X-Axis Drive Motor Access Panel	2	Printing Shield	3	Home Compartment Access Panel

**Note:** No access panels or shields should be opened or left open at any time during printer operation.

### 3.2.2 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.

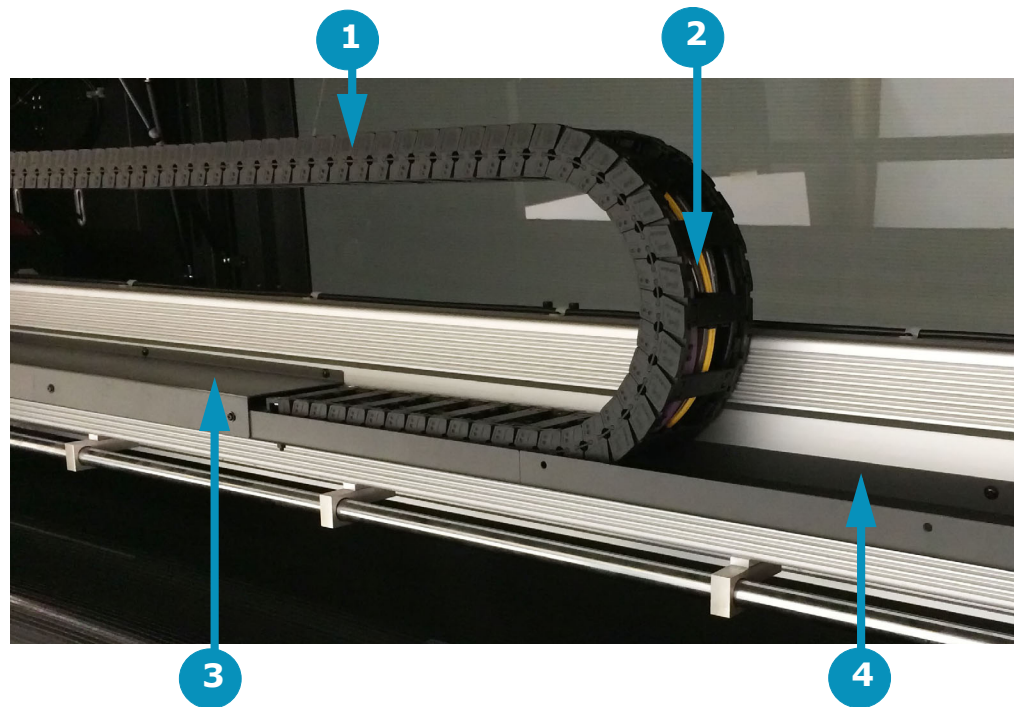
### 3.2.3 Rear Access Panel for Carriage "Home" Compartment

The rear access panel at the carriage "Home" compartment allows for ease of access to the carriage rear components.

### 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 (or non-CYMK ink in H1625 printers without white ink)
- CMYK Ink
- Electrical Power
- Positive and Negative Pressure
- Communication Signals
- Printing Data



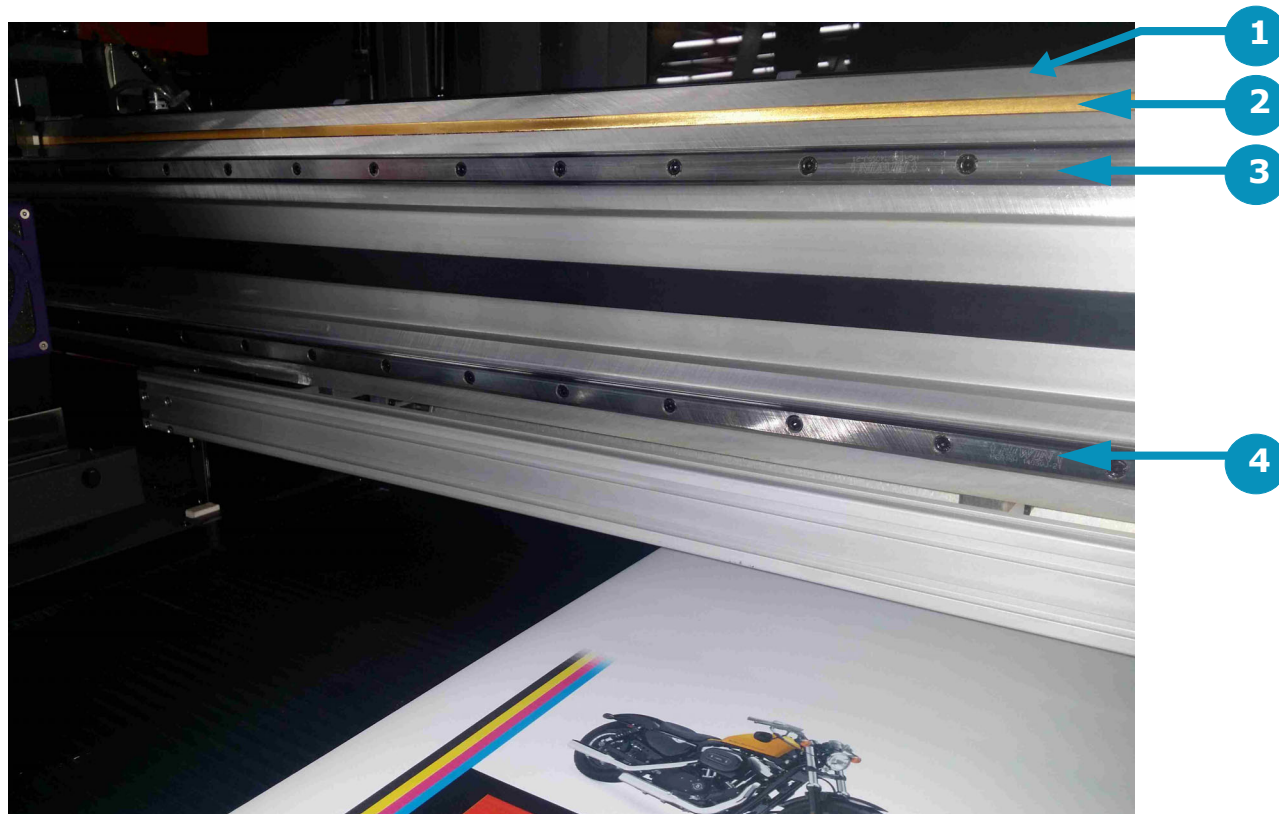
**Figure 3-22: Energy Chain (E-Chain)**

Item	Description
1	E-Chain
2	Internal Tubes and Wiring
3	E-Chain Trough Cover
4	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 3-23](#) and [Figure 3-24](#), below.



**Figure 3-23: Main Beam**

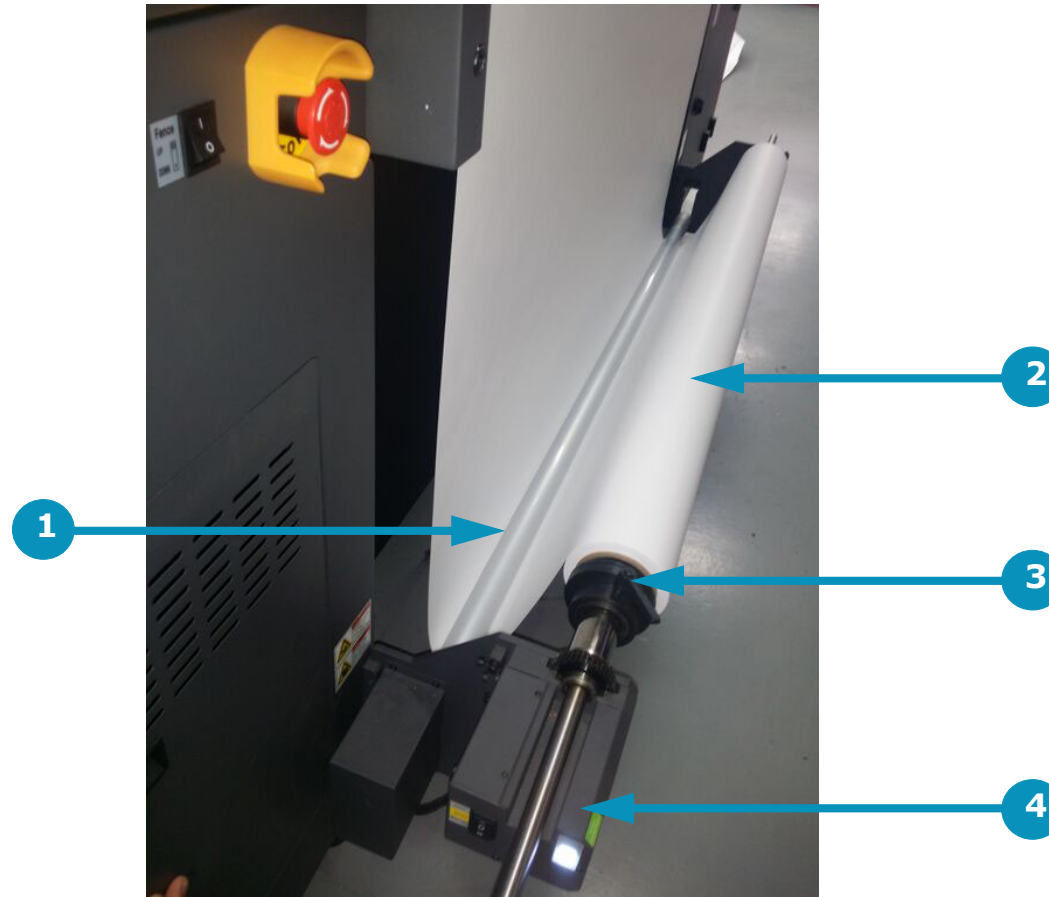
Item	Description
1	Carriage Main Beam
2	Linear Encoder Strip
3	Top Rail
4	Bottom Rail

**Note:** The encoder strip and rails require periodic maintenance. Refer to the Basic Maintenance Guide (*OMM-00074, H1625 Maintenance Guide* at <https://inkjet.support.efi.com/doc.php?doc=2388&id=49>) for details.



### 3.2.6 Media Feed System - Rear

The media feed system at the rear of the printer holds the blank media to be printed. The media is loaded such that the belt pulls the media from the rear of the printer across the belt and out the front of the printer. Media direction is controlled by the switch and light on the motor. See section [Loading Rolled Media](#) for complete instructions on the operation of this system.



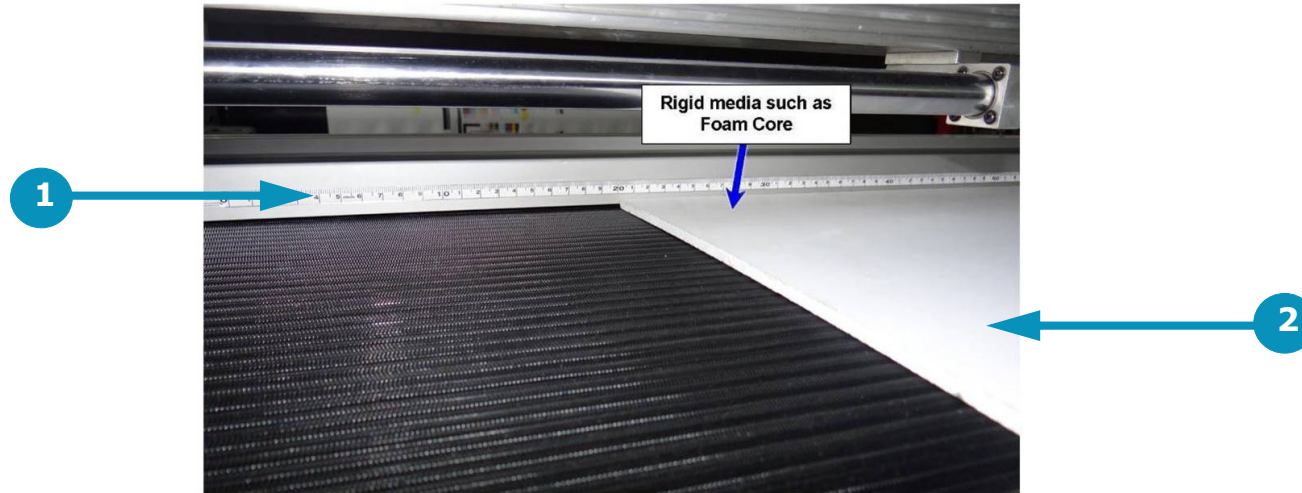
**Figure 3-24: Media Feed System**

Item	Description
1	Dancer
2	Media Roll
3	Media Chucks
4	Motor and Direction Controls



### 3.2.7 Rigid Media Fence

The rigid media fence is used to align rigid media so the it is square to the carriage. The fence is deployed by means of the fence up/down switch located on the feed side of the printer or by using the Fence Movement Controls on the H1625 Control screen.



**Figure 3-25: Media Feed Handling System**

<b>Item</b>	<b>Description</b>
1	Fence
2	Rigid Media

### 3.2.8 Media 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.



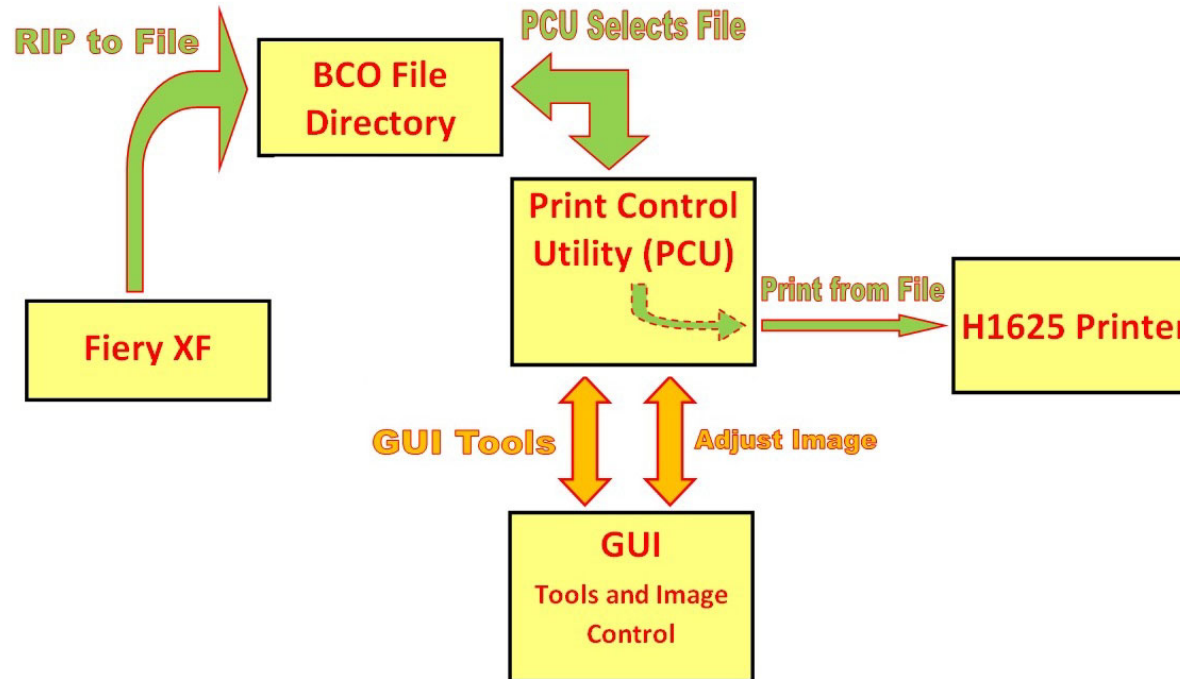
**Figure 3-26: Media Belt Vacuum Foot Pedal**

## 4.0 EFI Print Control Utility and H1625 Control Screen

This chapter covers the EFI Print Control Utility and the H1625 Control screen.

### 4.1 H1625 Software Operational Overview

This section provides a general overview of the H1625's Print Control Utility software and how to use it when printing.



**Figure 4-1: H1625 Printing Data Flow**

The H1625 printer is operated directly using the EFI H1625 Print Control Utility. The system data flows as follows:

1. Fiery XF is used to rip images to a .bco file. This file contains all the printing information and is stored on the H1625 computer.
2. The Print Control Utility is used to select and open pre-ripped .bco files and to print the files.
3. The Print Control Utility is also used to open the H1625 Control screen to use tools, adjust parameters, or adjust image information.

## 4.2 EFI Print Control Utility

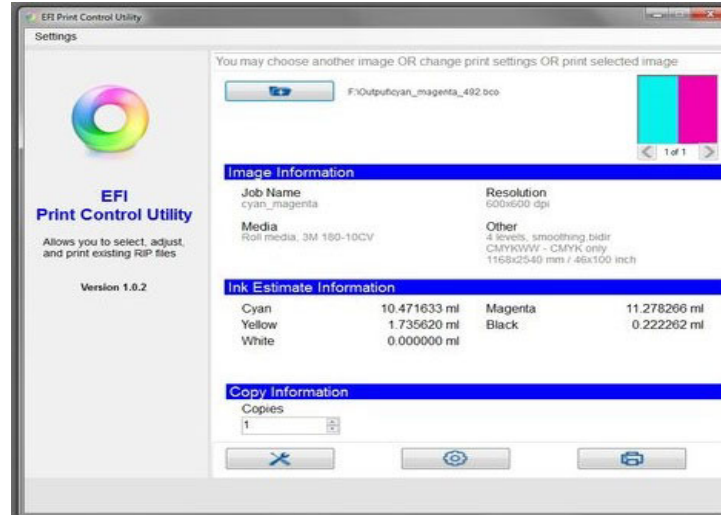
The H1625 printer is operated by using the H1625 Print Control Utility. The printer operator imports the image source files to be printed to the H1625 printer via a network connection in the appropriate file format (pdf, eps, etc.). Fiery XF RIP software is then used to process the source file and create the required bco file to be printed. The Print Control Utility is used to select the appropriate bco file, select the number of copies and initiate the printing process. Additionally, the Print Control Utility can be used to initiate the Control Screen which can be used to access more advanced printer settings and controls.

- Click the EFI Print Control Utility icon.

The Print Control Utility (see [Figure 4-3](#)), allows the user to select, adjust, and print existing RIP (.bco) files. The H1625 Control screen is launched from the PCU.



**Figure 4-2: EFI Print Control Utility Icon**

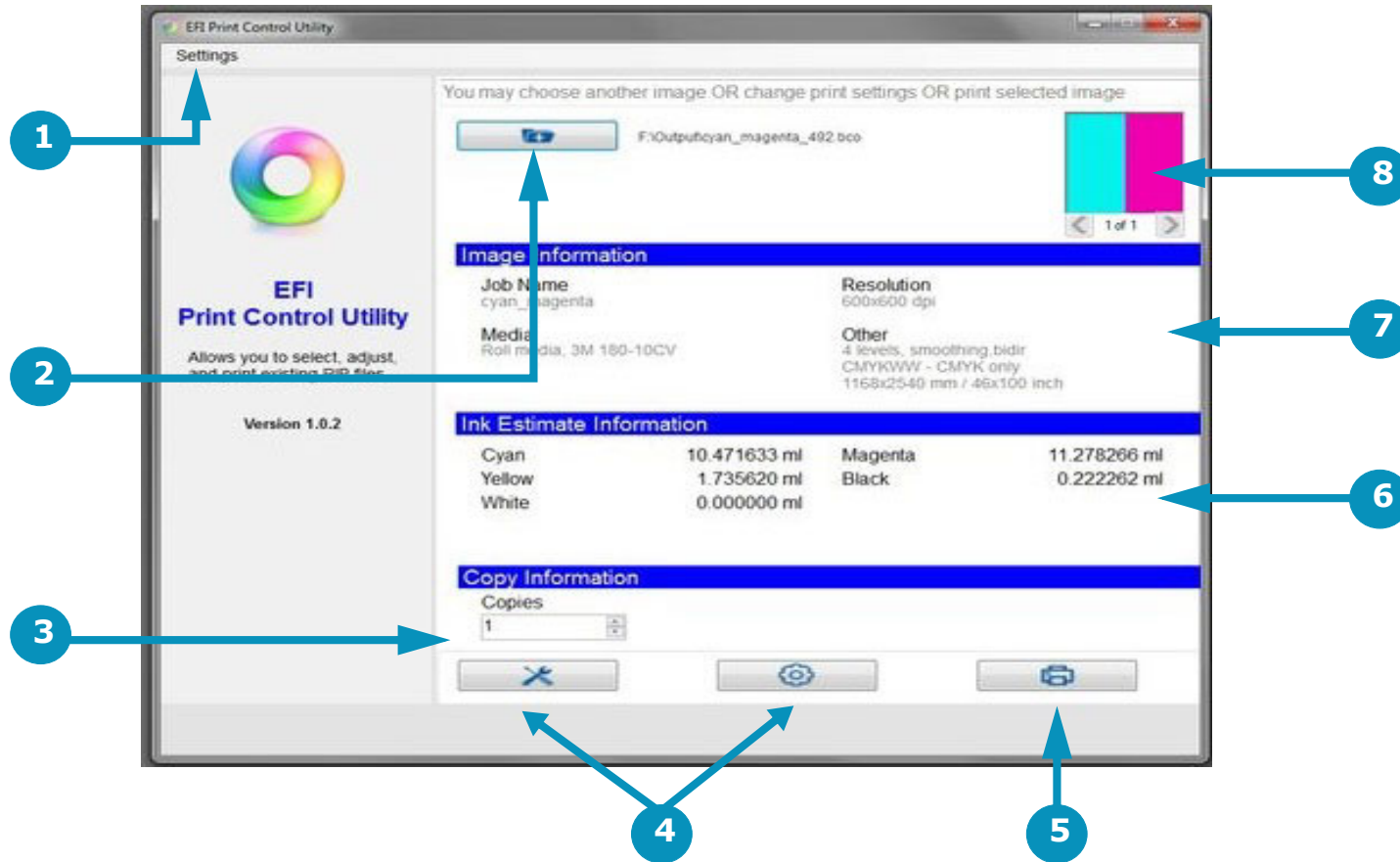


**Figure 4-3: EFI Print Control Utility**

## 4.2.1 Print Control Utility Overview

Open and run the Print Control Utility as described in this section.

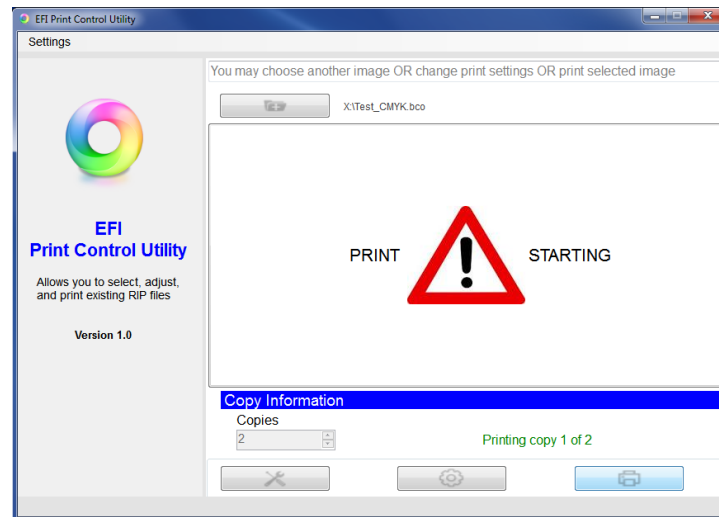
1. Click on the Print Control Utility (PCU) icon located on the desktop.  
The PCU screen opens.



**Figure 4-4: EFI Print Control Utility Overview**

Item	Description	Item	Description	Item	Description
1	Settings Menu	2	Select File to Print Button	3	Number of Copies to Print Window
4	Open H1625 Control screen	5	Print Button (Prints Selected File)	6	Display Ink Usage Estimates
7	Displays Image Information	8	Image Preview Thumbnail		

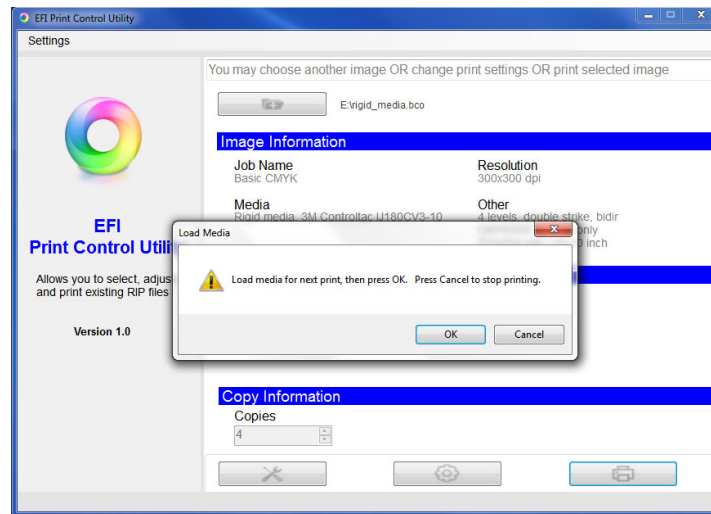
2. Select the Settings menu in the upper left corner of the screen and select the default image folder. This opens the folder containing the pre-ripped .bco files.
3. From the default image folder, select the desired file. The PCU screen displays the following (if the information is contained in the file):
  - Image information
  - Ink estimate information
4. Use the Copies Control on the PCU screen to adjust the number of copies to be printed.
5. Click the Print button in the lower right hand corner of the PCU screen to print the selected image.
6. If printing on rolled media, the "Print Starting" notification screen pops up, the printer makes several audible beeps, and the printing operation begins. The "Print Starting" notification screen appears for each copy of the print. The operator does not need to acknowledge or take any action. This is just a notification that printing is starting.



**Figure 4-5: "Print Starting" Screen**



7. If printing on rigid media, the Load Media prompt appears first, instructing the operator to load the media. This prompt appears for every copy of the print. The operator must acknowledge the prompt each time, signaling that the media has been loaded



**Figure 4-6: "Load Media" Screen**

## 4.2.2 Settings Menu

The Print Control Utility Settings menu has the following options:

1. **Default Image Folder** - Allows the operator to set/change the default image folder. When the user presses the "Select Files to Print" button, the default image folder is opened. The default image folder should be set to "F:\XF Output".
2. **Local Drives (C:\)** - Adds or Removes other local Drives. (Image shown below)
3. **Always Copy Non-local Files To Default Image Folder (F\XF Output)** - Sets the Utility to always copy non-local files to the default image folder (without prompting the operator) before printing.
4. **On Top** - Keeps the Print Control Utility screen on top of other windows (with the exception of some H1525 Control screens).

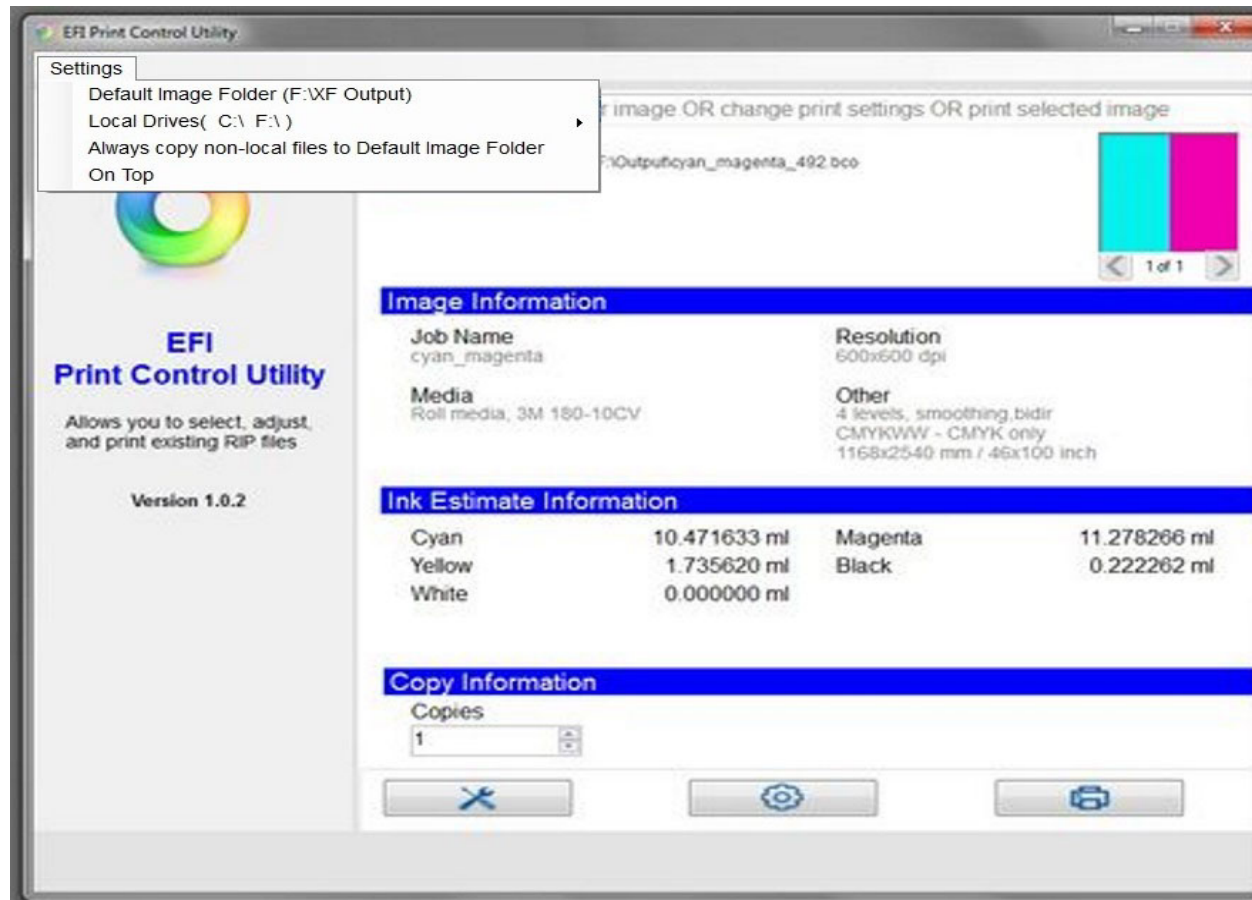
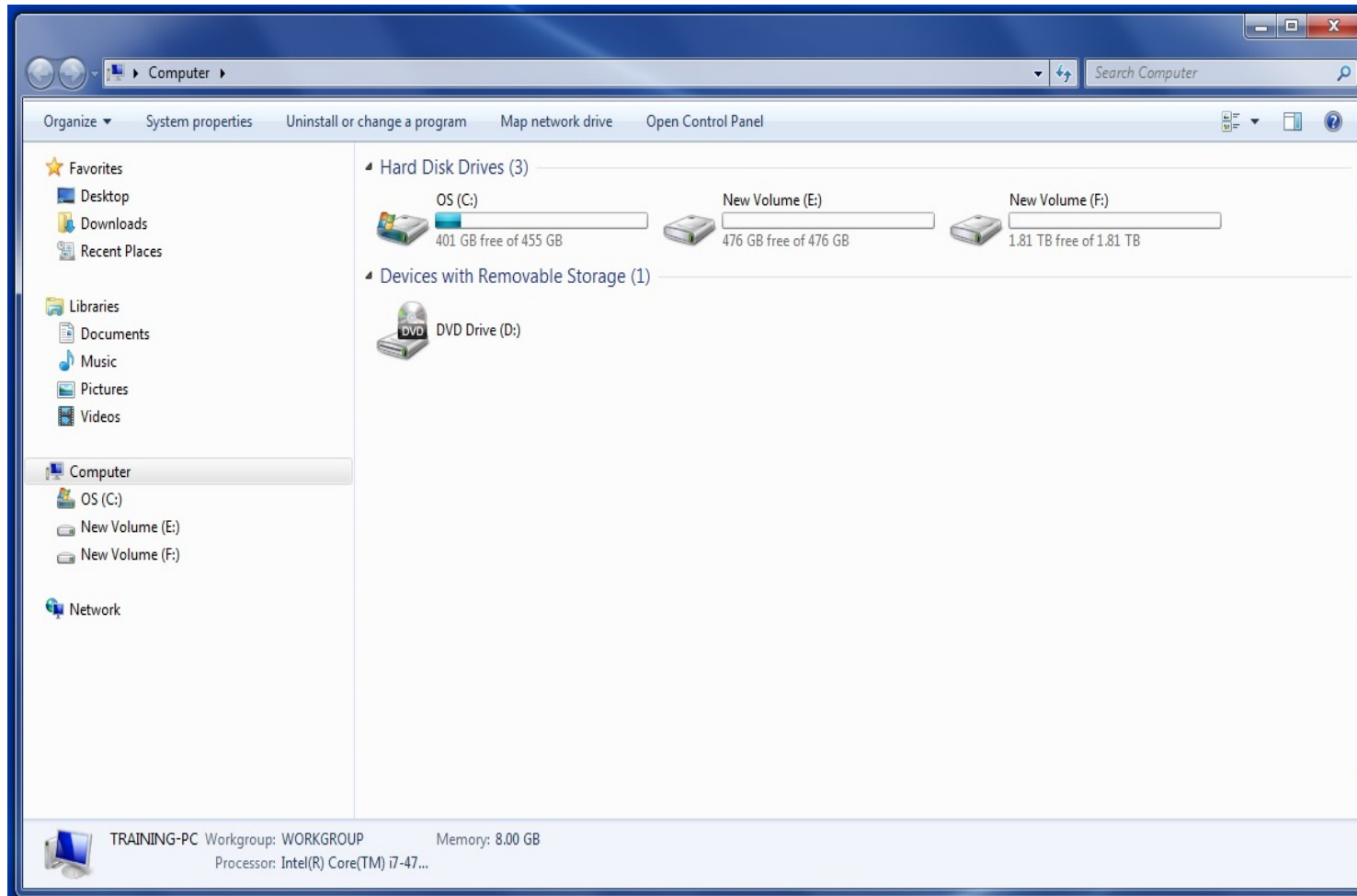


Figure 4-7: Print Control Utility Settings Menu

## 4.2.3 Adding Drives

The Print Control Utility “Add Drives” function operates as follows:

1. Click on the Local Drive button.
2. Navigate to the desired drive. and select it.



**Figure 4-8: Print Control Utility Select Drive**

## 4.2.4 Select Files to Print Button

The Print Control Utility Select File to Print menu operates as follows:

1. Click on the button to open the file folders.
2. Navigate to the desired file.
3. Select the file to print.

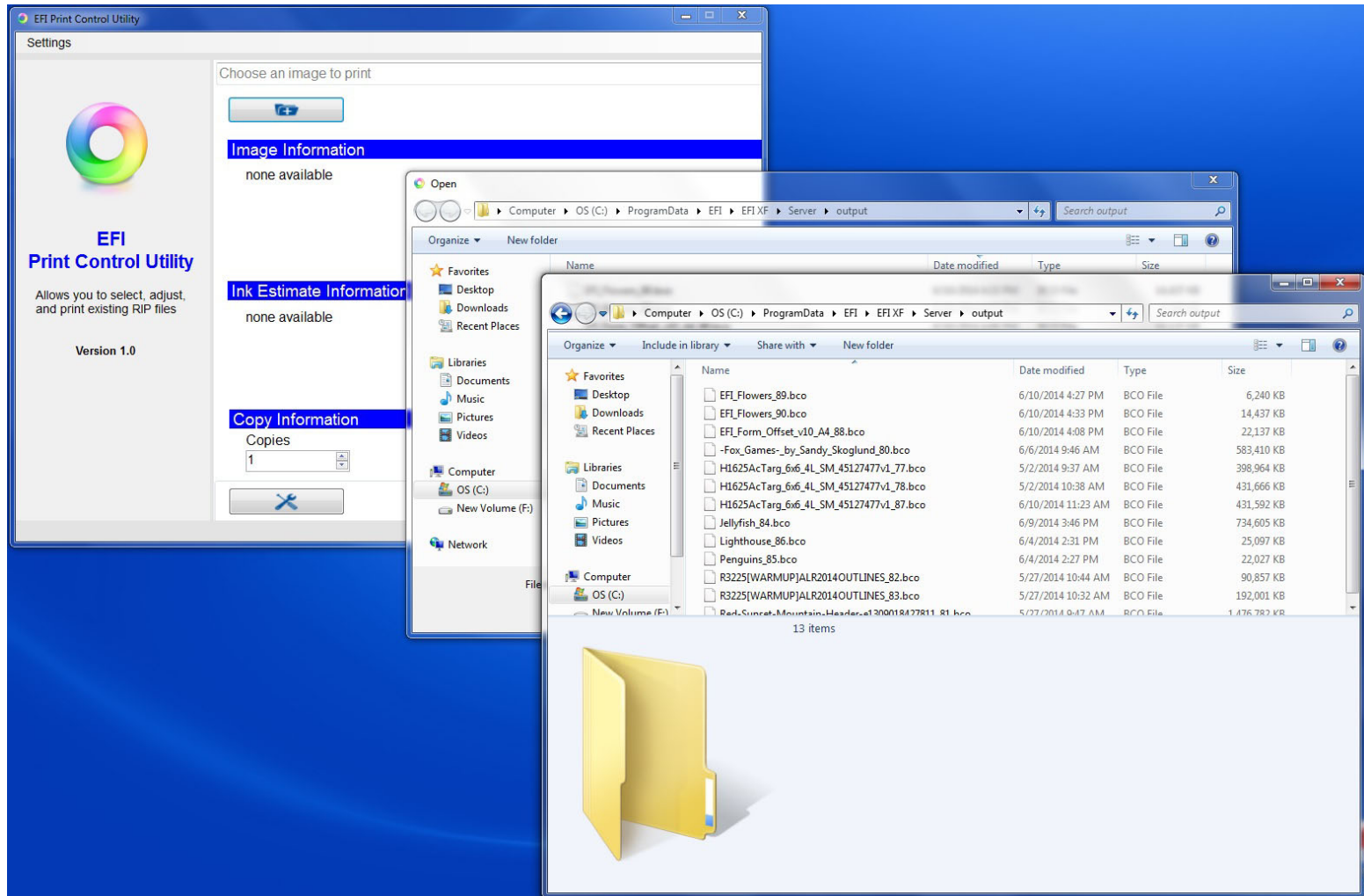
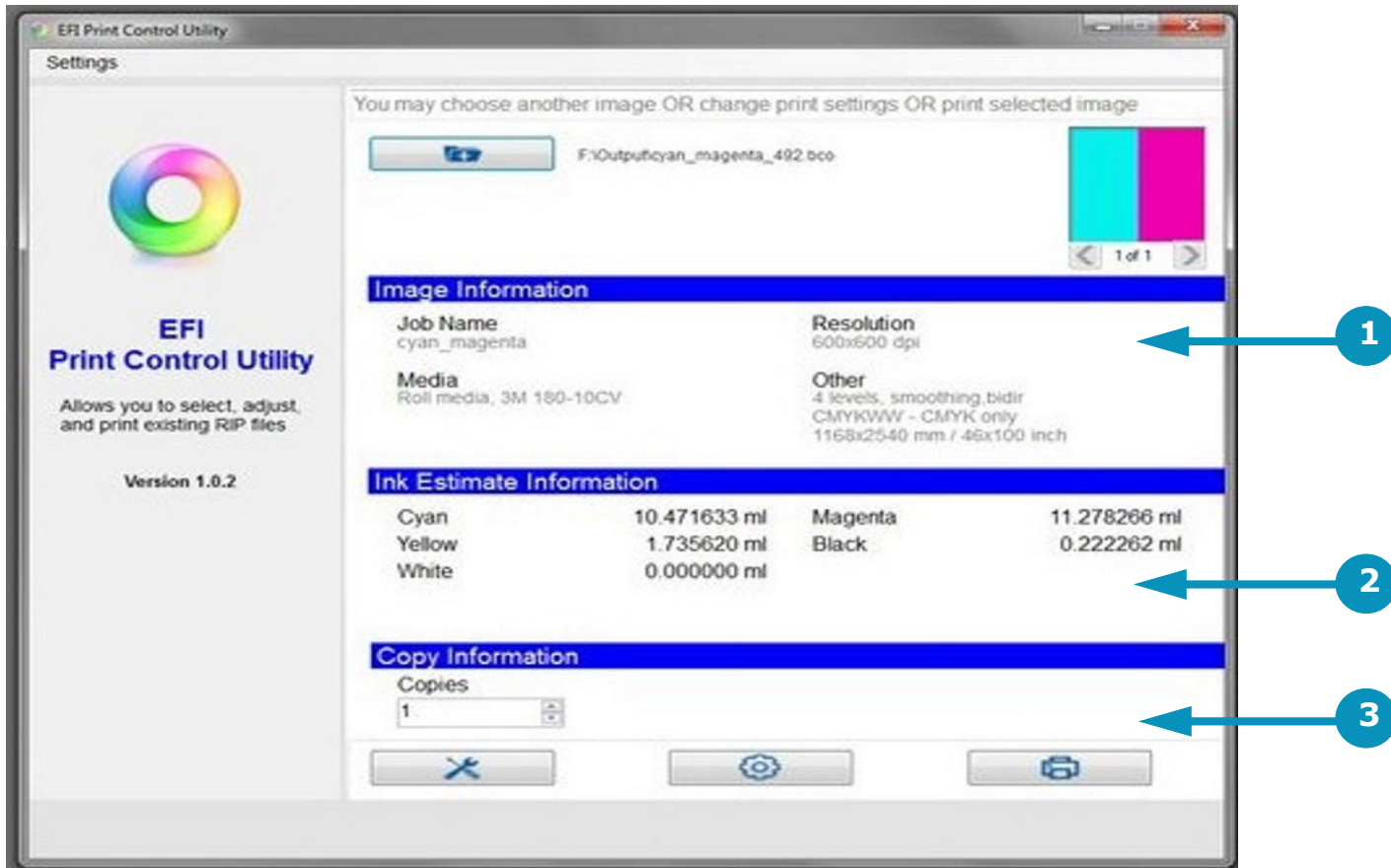


Figure 4-9: Print Control Utility Select File to Print Button

## 4.2.5 Image Information and Ink Use Estimates Panes

The Print Control image Information and Ink Usage Estimates panes display data as follows:

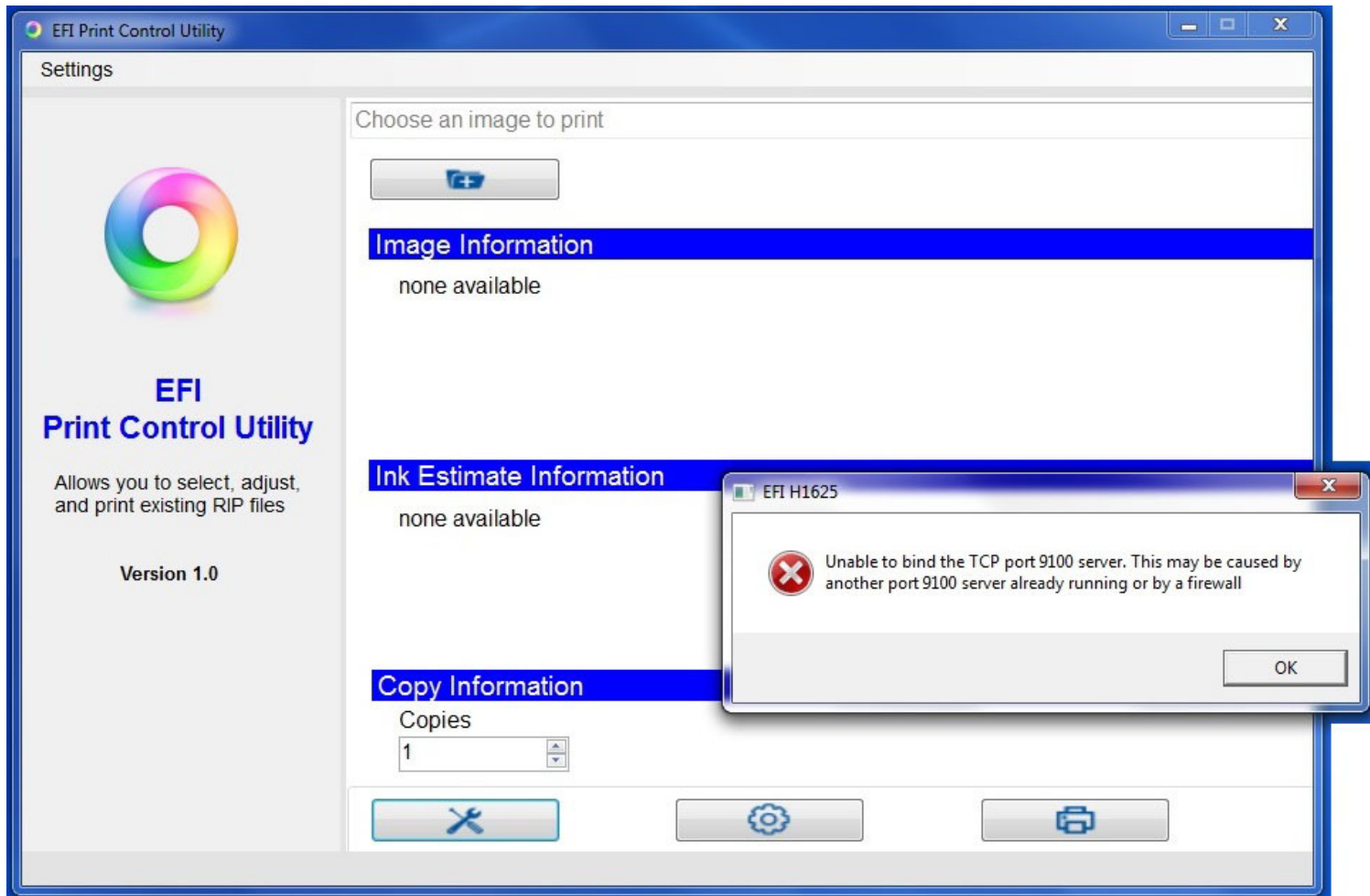


**Figure 4-10: Print Control Utility Image Information and Ink Use Estimates**

1. Displays Image information to include:
  - Job Name
  - Resolution
  - Media Type and Profile
  - Other (Printing Selections including 4 level/8 level, smoothing or non-, unidirectional or bidirectional, colors used from the file, and file print dimensions.)
2. Displays Ink Usage Estimates for the job selected.
3. When finished, the "Print Completed" message will appear in the "Copy Information" section

## Conflict Screen

The previous Print Control and the Print Control Utility (PCU) cannot run together. If the previous Print Control is running, the error shown below appears when you start the PCU. If the error occurs, shut down the previous Print Control and reopen the PCU.

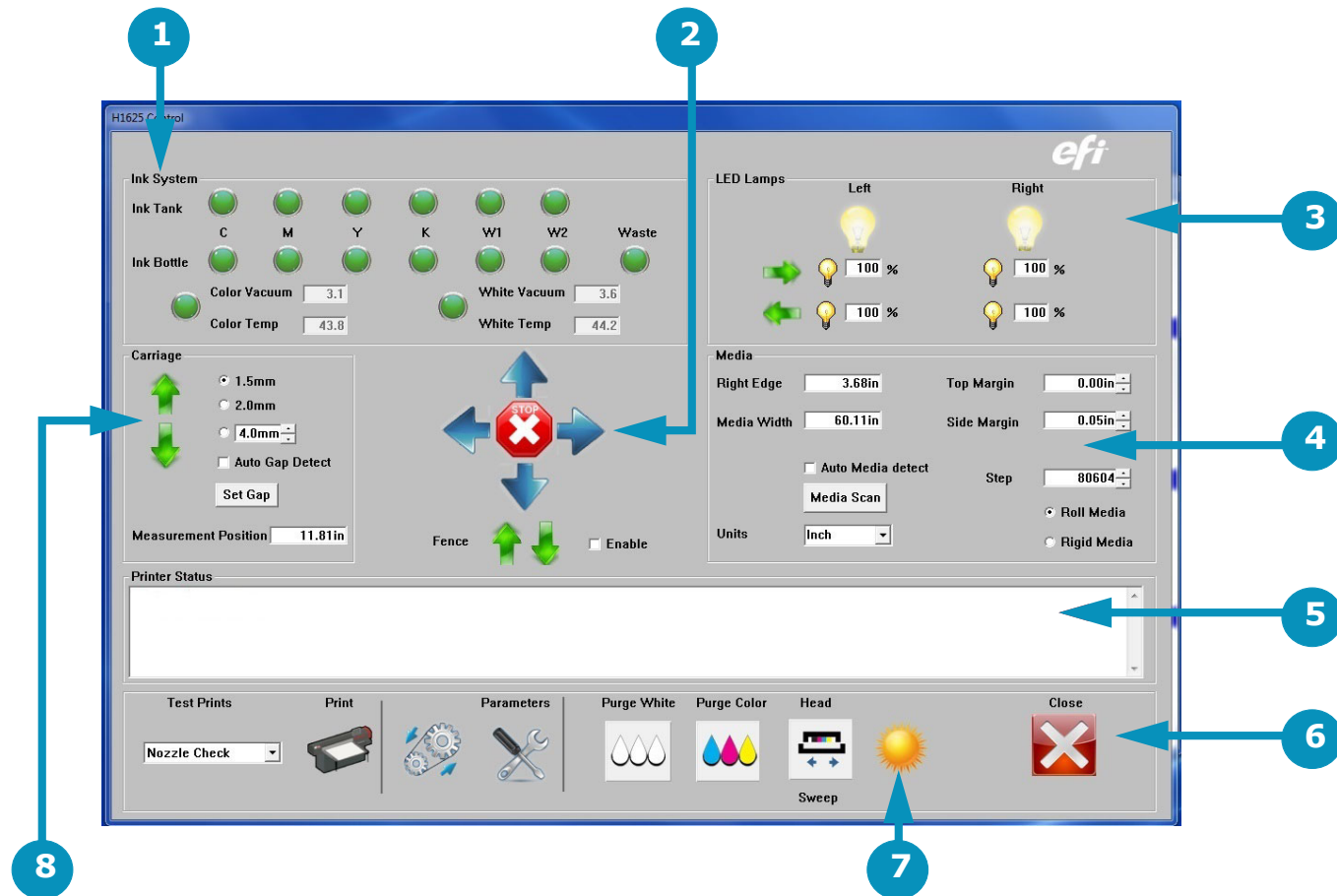


**Figure 4-11: PCU / Print Control Error Screen**



## 4.3 H1625 Control Screen

The Print Control Utility launches the H1625 Control Screen by clicking on the “Tools” Button or the “Adjust Image Settings” button. The H1625 Control screen defines printing parameters, print options, and printer status information.



**Figure 4-12: H1625 Control Screen (H1625 White Ink Printer Shown)**

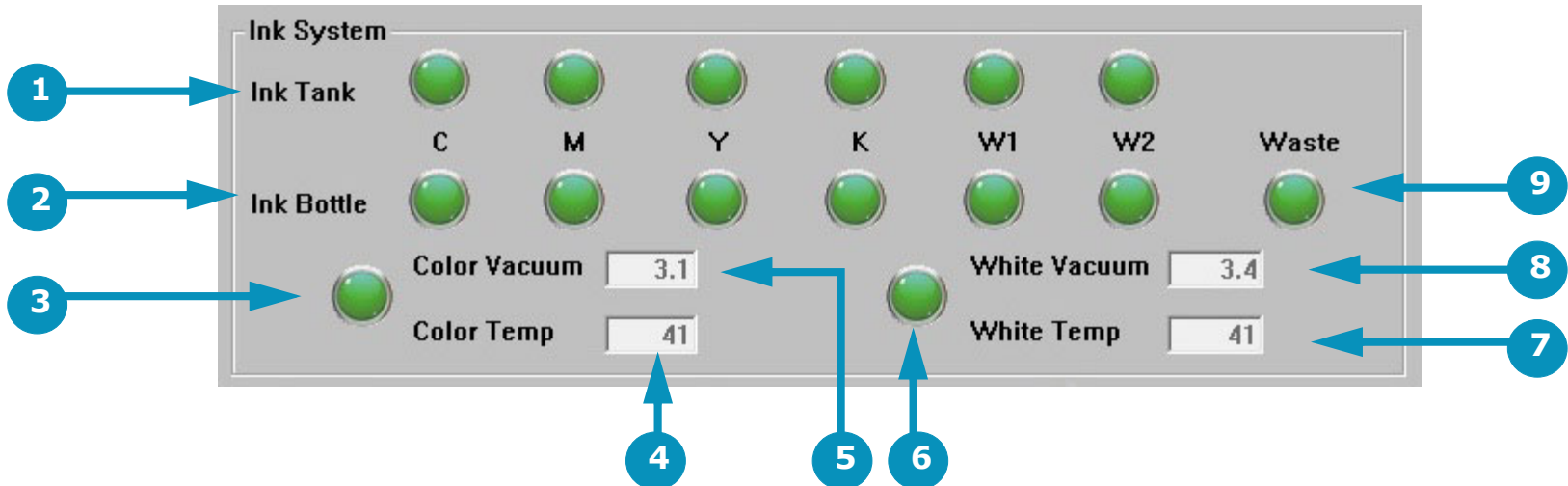
Item	Description	Item	Description	Item	Description
1	Ink System Information	2	X-Y Axes Movement Controls	3	Lamp Controls
4	Media Controls	5	Printer Status Bar	6	Printer Tools Bar
7	"Awake" or "Sleep" Button	8	Carriage Controls		

### 4.3.1 Ink System Information

The Ink System Information section of the H1625 Control screen provides information on the following Items:

- Secondary Ink Tank Level (Green = OK, Yellow Warning = Low or Empty)
- Ink Supply Bottle Level (Green = OK, Yellow Warning = Low or Empty)
- Color Ink Vacuum and Temperature Status
- White Ink Vacuum and Temperature Status (For H1625 printers without white ink, other ink colors, such as red/blue are shown.)
- Waste Container Status (Green = OK, Yellow Warning = Full)

Refer to [Figure 4-13](#) and [Figure 4-13](#) below for details.



**Figure 4-13: Ink System Information (H1625 White Ink Printer Shown)**

Item	Description	Item	Description	Item	Description
1	Secondary Ink Tank Level	2	Ink Supply Bottle Level	3	Color Ink Status
4	Color Ink Temperature	5	Color Ink Vacuum	6	White Ink Status
7	White Ink Temperature	8	White Ink Vacuum	9	Waste Bottle Level

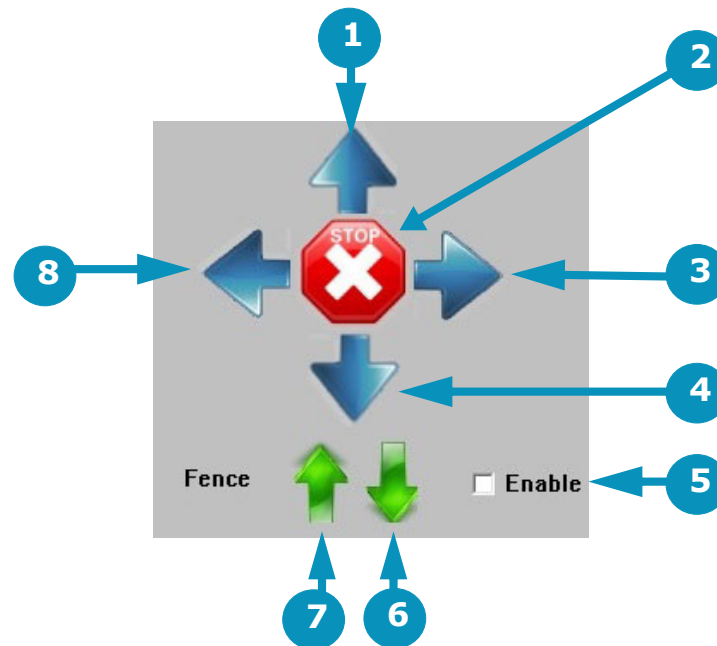


**Figure 4-14: Ink Tank Status Indicators)**

Item	Description	Item	Description
1	Indicates Ink Level OK	2	Indicates Low or Empty Ink Level

### 4.3.2 X, Y Axes and Fence Movement Controls

The X, Y Axis movement controls the following functions:



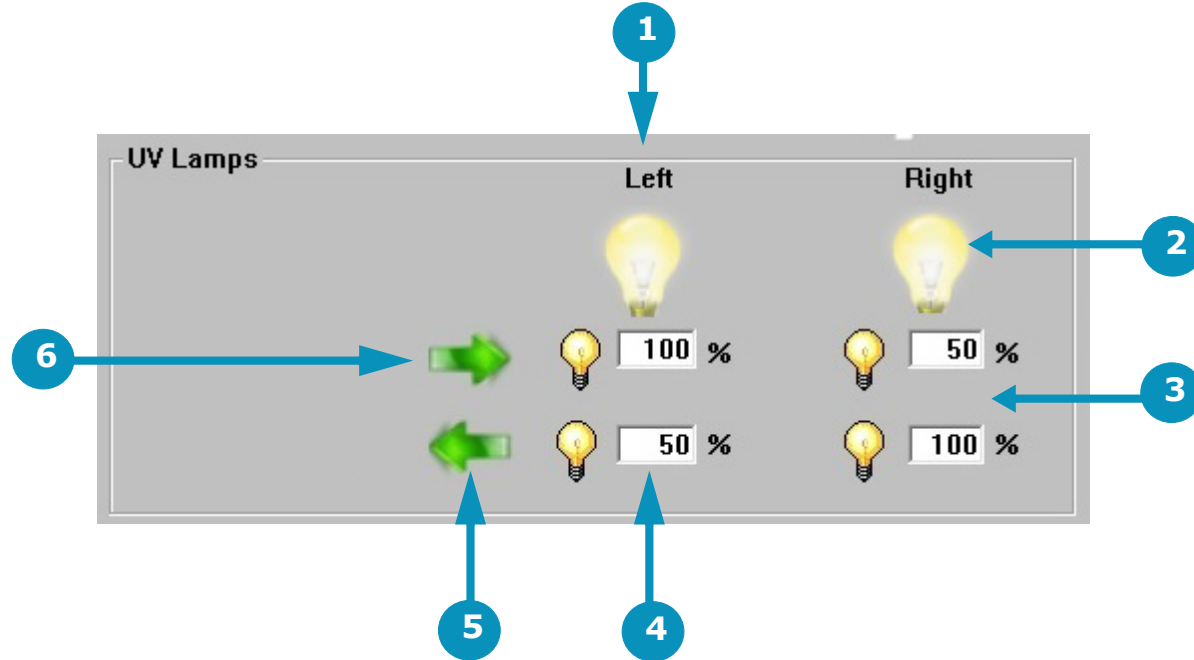
**Figure 4-15: X-Y Axes and Fence Movement Controls**

Item	Description	Item	Description	Item	Description
1	Jogs Media Incrementally	2	STOPS all motion	3	Steps Carriage RIGHT
4	Jogs Media Incrementally	5	Enables Fence Movement	6	Fence DOWN
7	Fence UP	8	Sends Carriage HOME		

**Note:** Item number 5 -- the "Enable" check box -- when checked, enables fence movement via the H1625 Control screen and disables the manual fence button. When unchecked, software-controlled fence movements are disabled and the fence button is enabled.

### 4.3.3 Lamp Controls

The Lamp Controls provide the following functions:



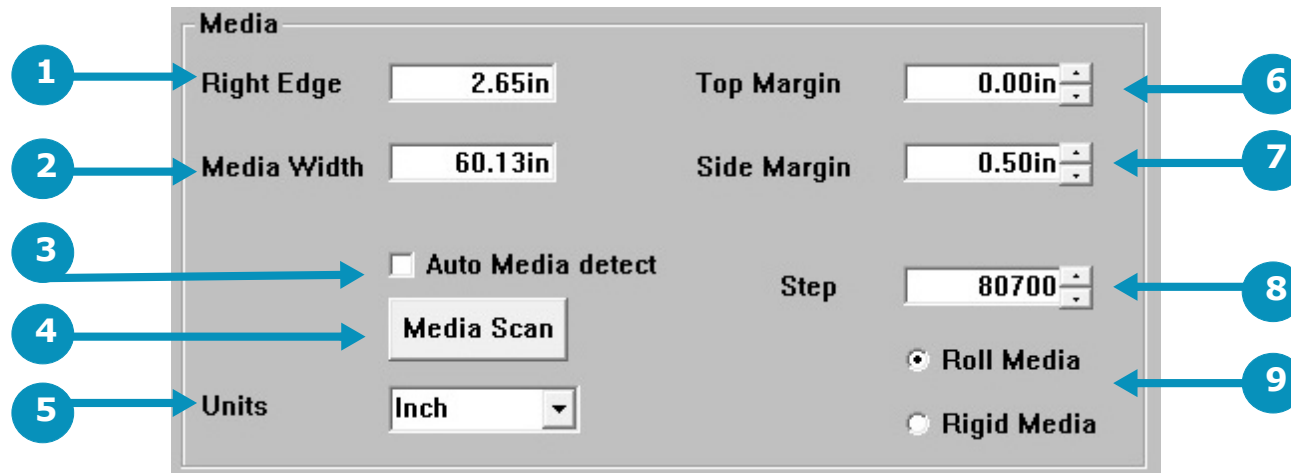
**Figure 4-16: X-Y Lamp Controls**

Item	Description	Item	Description	Item	Description
1	Left Lamp Control (ON/OFF)	2	Right Lamp Control (ON/OFF)	3	Right Lamp Percentages
4	Left Lamp Percentages	5	Left Lamp Motion	6	Right Lamp Motion

**Note:** Items 3 and 4 are not required for H1625 LED Functions. The Lamp Percentages set Lamp Power for each motion (while moving left, while moving right).

### 4.3.4 Media Controls

Media Controls provide the following functions:

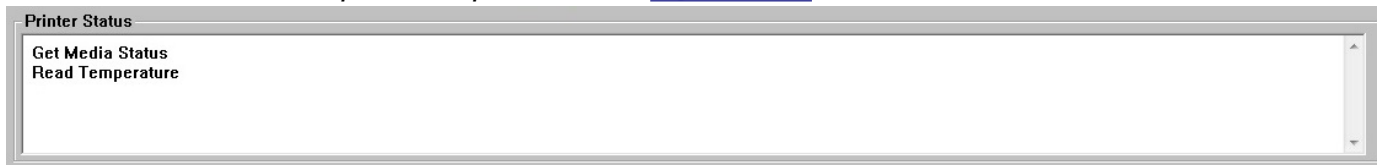


**Figure 4-17: X-Y Media Controls**

Item	Description	Item	Description	Item	Description
1	Sets Media Right Edge	2	Sets Media Width	3	Sets Auto Media Detect (On/Off)
4	Initiates Media Scan	5	Sets units of Measurement	6	Sets Top Margin
7	Sets Side Margin	8	Sets STEP Distance	9	Selects Rolled or Rigid Media

### 4.3.5 Printer Status Bar

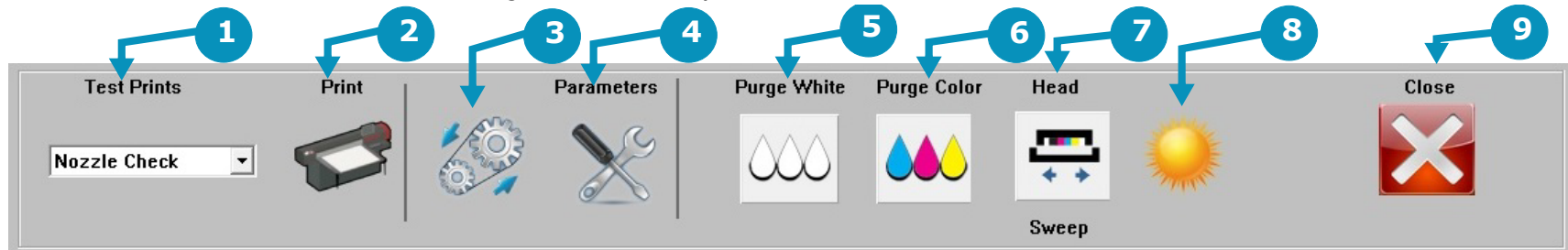
The printer status bar displays one-line messages that detail printer status. The messages indicate what the printer is doing at any given point in time. Some examples are provided in [Figure 4-18](#).



**Figure 4-18: Printer Status Bar**

### 4.3.6 Printer Tools Bar

The printer tools bar contains the following tools. Description, function, and location of the tools are described below. .



**Figure 4-19: Printer Tools Bar**

Item	Description	Item	Description	Item	Description
1	Test Print Menu	2	Print a Test Button	3	Media Belt Continuous Movement
4	Parameters Menus	5	Purge White Ink	6	Purge Color Ink
7	Sweep Print Heads	8	Sleep / Wake Button	9	Close H1625 Control screen

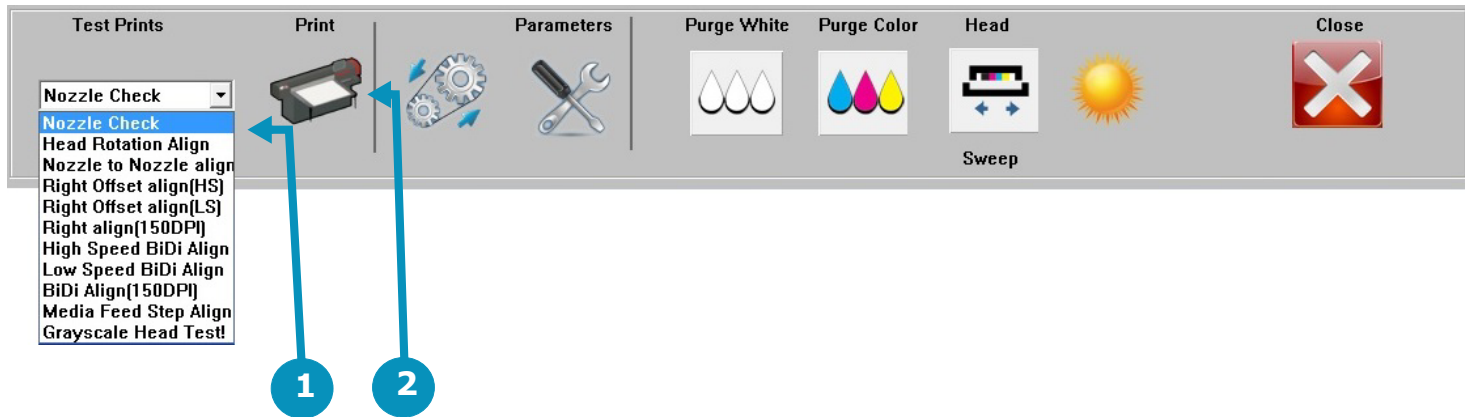
- Test Prints** - Provides a list of all the test print types. Descriptions of operator-used tests are provided in Section [4.3.11](#).
- Print** - Prints the test print highlighted in the Test Prints list.
- Media Belt** - This button causes the media belt to go into a continuous movement until the button is pressed again.
- Parameters** - Opens the Parameters screen described in Section [4.3.9](#).
- Purge White** - Purges the white print heads and conducts a head sweep. On H1625 printers without white ink, this button purges other non-CYMK ink colors, such as red/blue, and is labeled accordingly.
- Purge Color** - Purges the CYMK color print heads and conducts a head sweep.
- Head Sweep** - Sends the carriage "Home" to perform a head sweep of all print heads.
- Awake/Sleep** - Toggle icon indicates the printer's current mode.
- Close** - Shuts down the H1625 Control screen

**Note:** After clicking the Media Belt Continuous Movement button, stop the belt movement by clicking either the STOP button from [Figure 4-15](#) or clicking the Media Belt Continuous Movement button again.



### 4.3.7 Printer Tests

To run printer tests, open the H1625Control screen and select a test print from the menu and choose the Print icon to conduct that test print.



**Figure 4-20: Print Icon**

Item	Description	Item	Description
1	Select test in list	2	Choose Print icon to print selected test

### Printer Test List and Test Description

A list of tests and the related description of each test is provided below. Operators only use the Nozzle Check test. Other Print Tests are used by Field Service Engineers.

#### **TEST NAME**

Nozzle Check

Right Offset Alignment (HS)

Right Offset Alignment (LS)

Right Alignment (150 DPI)

High Speed Bi-Directional Alignment

Low Speed Bi-Directional Alignment

Bi-Directional Alignment (150 DPI)

Media Feed Step Alignment

#### **TEST DESCRIPTION**

The Nozzle Check test provides a test print that will show if all jets are firing properly

Right Offset Alignment (HS) (*High Speed*)

Right Offset Alignment (LS) (*Low Speed*)

Right Align (150 DPI)

High Speed BIDI Alignment (*BIDI = Bi-Directional*)

Low Speed BIDI Alignment (*BIDI = Bi-Directional*)

BIDI Align (150 DPI) (*BIDI = Bi-Directional*)

Allows the operator to check Step Alignment

### 4.3.8 Carriage Controls

The Carriage controls perform the following functions:

1. Moves carriage up on the Z-Axis to the upper limit.
2. Moves carriage down on the Z-Axis to the lower limit.
3. Selectable carriage height settings.
4. Allows the carriage to automatically set the Gap.
5. Sets the carriage gap measurement positive distance from the Media Positive Value.
6. Sets Measurement Position.

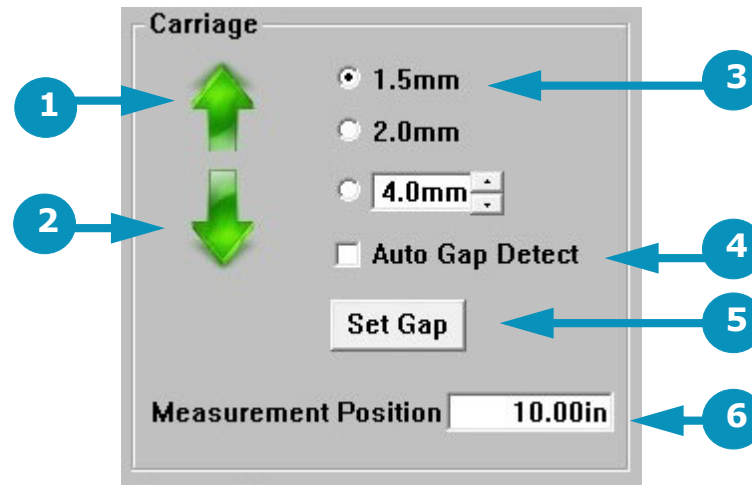


Figure 4-21: Carriage Controls

Item	Description	Item	Description	Item	Description
1	Carriage UP	2	Carriage DOWN	3	Gap Settings
4	Auto Gap Detect	5	Click to set Gap	6	Sets Measurement Position

### 4.3.9 Parameters Window

Click the *Parameters* button in the H1625 Control screen's tool bar to open the Set Parameters window. A description of each tab on the Parameter's window is provided in the following sections. Select the tab you wish to view.

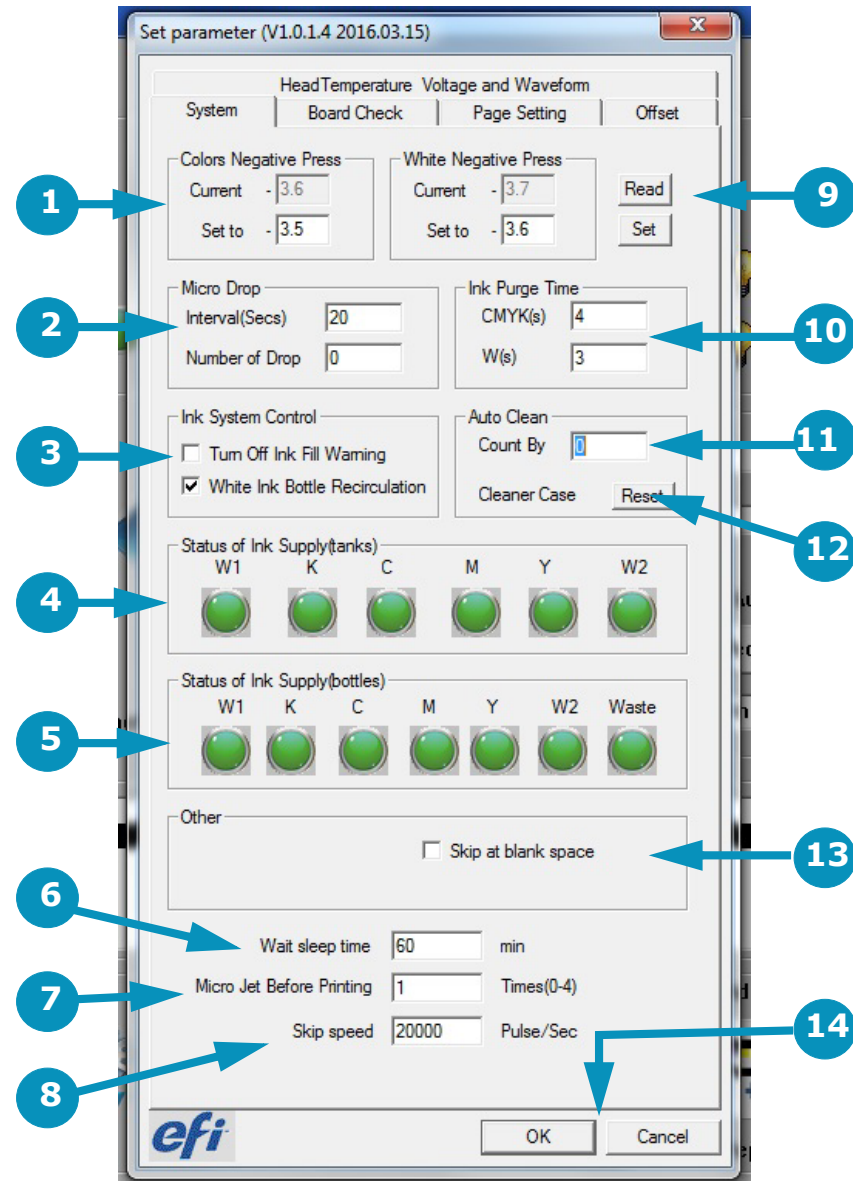


**Figure 4-22: Parameters Button on Tool Bar**

## System Tab - LED Printer

The Systems Tab contains the following items:

1. Reads and Adjusts the negative pressure for color.
2. Micro Drop Interval and drop times for the "misting" of print heads during sleep mode. This is not required for UV inks, so Interval and Drop Times can be set to zero.
3. Ink System Control.
4. Status of CMYK and White Ink Secondary Tanks.
5. Status of CMYK and White Ink Bottles.
6. Sets Sleep Mode Timer
7. Mists the print heads before printing. Should be set to 1.
8. Sets speed of media advancement when "Skip at blank space" is checked. Should be set to 40000 Pulse/Second.
9. The Read button updates the "Current" value in Negative Pressure. The Set button updates the Negative Pressure to the "Set to" value.
10. Ink purge time - Controls CMYK, White, and Head Sweep purge times.
11. Auto Clean: sets number of passes until printer operation pauses for automatic purge and sweep, then resumes printing. This number does not reset between prints. It only resets when printer is powered down.
12. Resets Cleaner Case (Vacuum Canister)
13. If checked, printer advances media through blank/white space. See [6.7 Skip Blank Space During Prints](#).
14. OK to save and exit. Cancel to exit without saving.



**Figure 4-23: Parameters System Tab on H1625 LED**

## System Tab - RS Printer

The Systems Tab on the H1625-RS contains the following items:

1. Reads and Adjusts the negative pressure for color.
2. Micro Drop Interval and drop times for the "misting" of print heads during sleep mode. This is not required for UV inks, so Interval and Drop Times can be set to zero.
3. Ink System Control. On H1625-RS the White Ink Recirculation check box is disabled.
4. Status of CMYK and Red/Blue Secondary Ink Tanks.
5. Status of CMYK and Red/Blue Ink Bottles.
6. Sets UV Lamp Alarm.
7. Sets Sleep Mode Timer
8. Mists the print heads before printing. Should be set to 1.
9. Sets speed of media advancement when "Skip at blank space" is checked. Should be set to 40000 Pulse/Second.
10. The Read button updates the "Current" value in Negative Pressure. The Set button updates the Negative Pressure to the "Set to" value.
11. Ink purge time - Controls CMYK, Red/Blue, and Head Sweep purge times.
12. Auto Clean: sets number of passes until printer operation pauses for automatic purge and sweep, then resumes printing. This number does not reset between prints. It only resets when printer is powered down.
13. Resets Cleaner Case (Vacuum Canister)
14. If checked, printer advances media through blank/white space. See [6.7 Skip Blank Space During Prints](#).
15. OK to save and exit. Cancel to exit without saving.

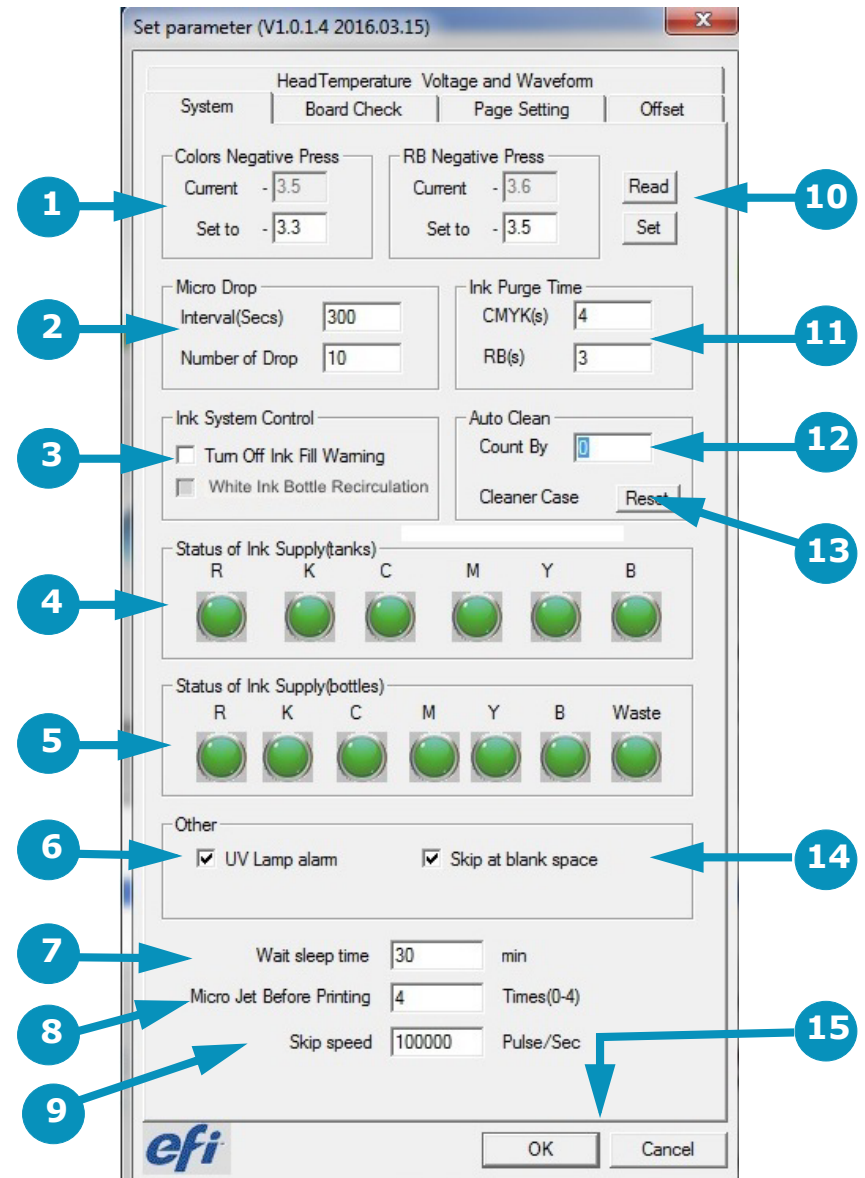
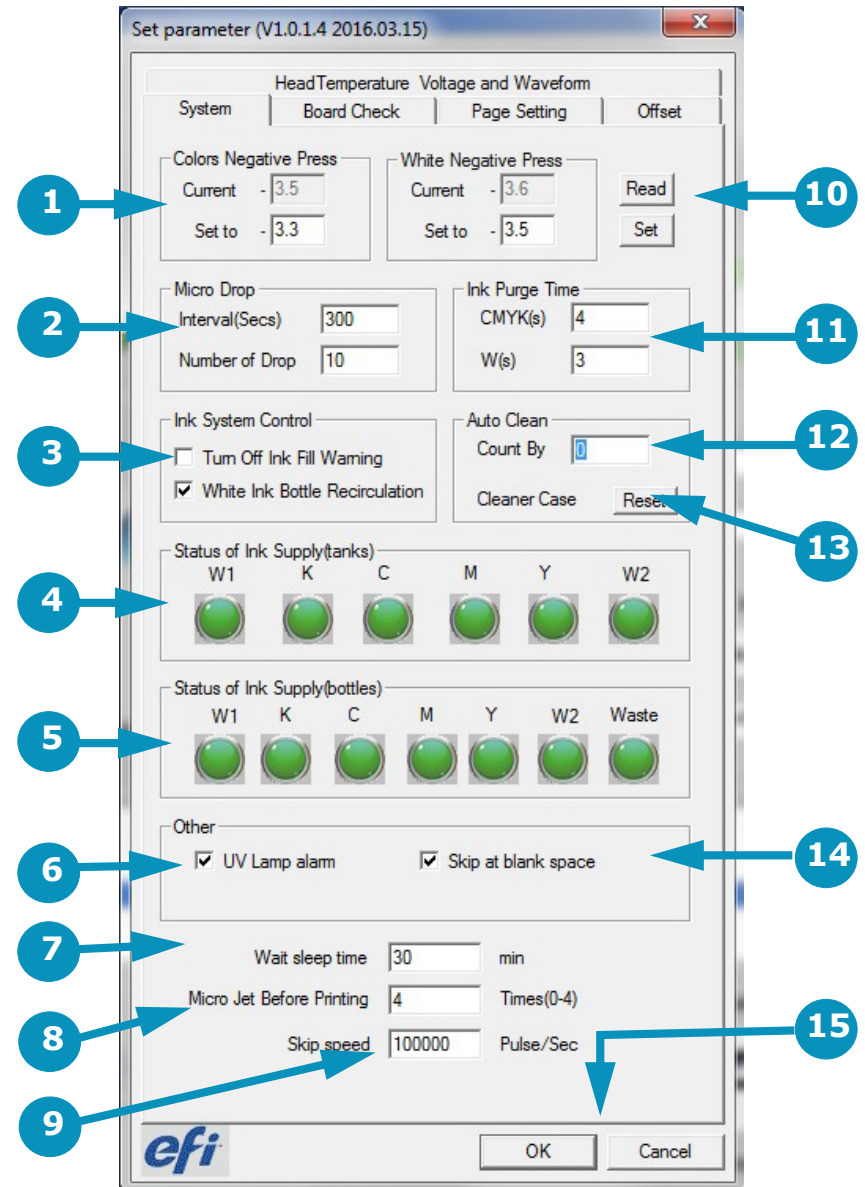


Figure 4-24: Parameters System Tab on H1625 RS

## System Tab - SD Printer

The Systems Tab on the H1625-SD contains the following items:

1. Reads and Adjusts the negative pressure for color.
2. Micro Drop Interval and drop times for the "misting" of print heads during sleep mode. This is not required for UV inks, so Interval and Drop Times can be set to zero.
3. Ink System Control.
4. Status of CMYK and White Ink Secondary Tanks.
5. Status of CMYK and White Ink Bottles.
6. Sets UV Lamp Alarm.
7. Sets Sleep Mode Timer.
8. Mists the print heads before printing. Should be set to 1.
9. Sets speed of media advancement when "Skip at blank space" is checked. Should be set to 40000 Pulse/Second.
10. The Read button updates the "Current" value in Negative Pressure. The Set button updates the Negative Pressure to the "Set to" value.
11. Ink purge time - Controls CMYK, White, and Head Sweep purge times.
12. Auto Clean: sets number of passes until printer operation pauses for automatic purge and sweep, then resumes printing. This number does not reset between prints. It only resets when printer is powered down.
13. Resets Cleaner Case (Vacuum Canister)
14. If checked, printer advances media through blank/white space. See [Skip Blank Space During Prints](#).
15. OK to save and exit. Cancel to exit without saving.



**Figure 4-25: Parameters System Tab on H1625 SD**



## Board Check Tab

The Board Check tab displays warnings and information for any of the boards that might have an error. Those boards are listed below:

1. USB Board
2. Multifunction Board
3. Print Head Control Board
4. Error Display Area

If an error occurs, the board that has the error becomes highlighted, and the area in red noted in the illustration displays the error(s).

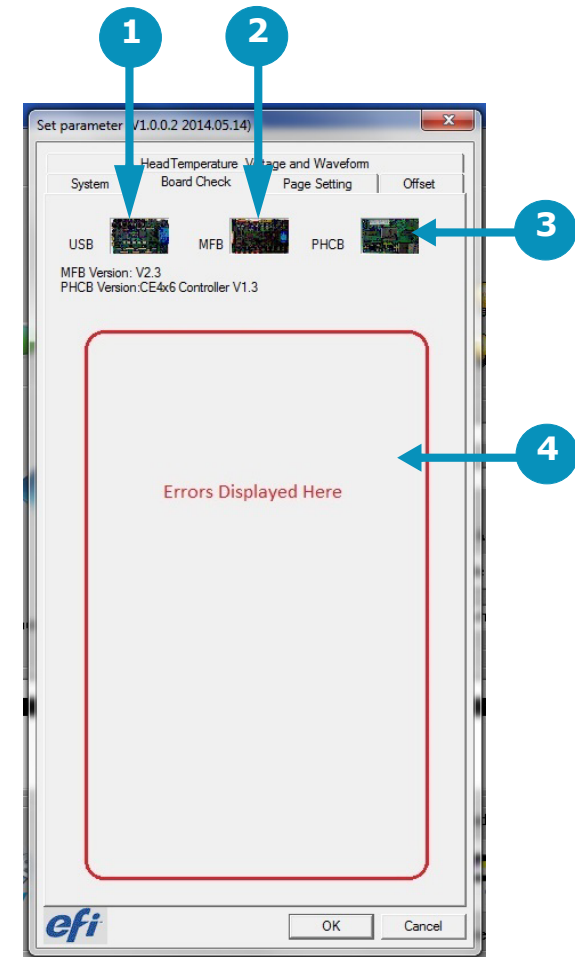
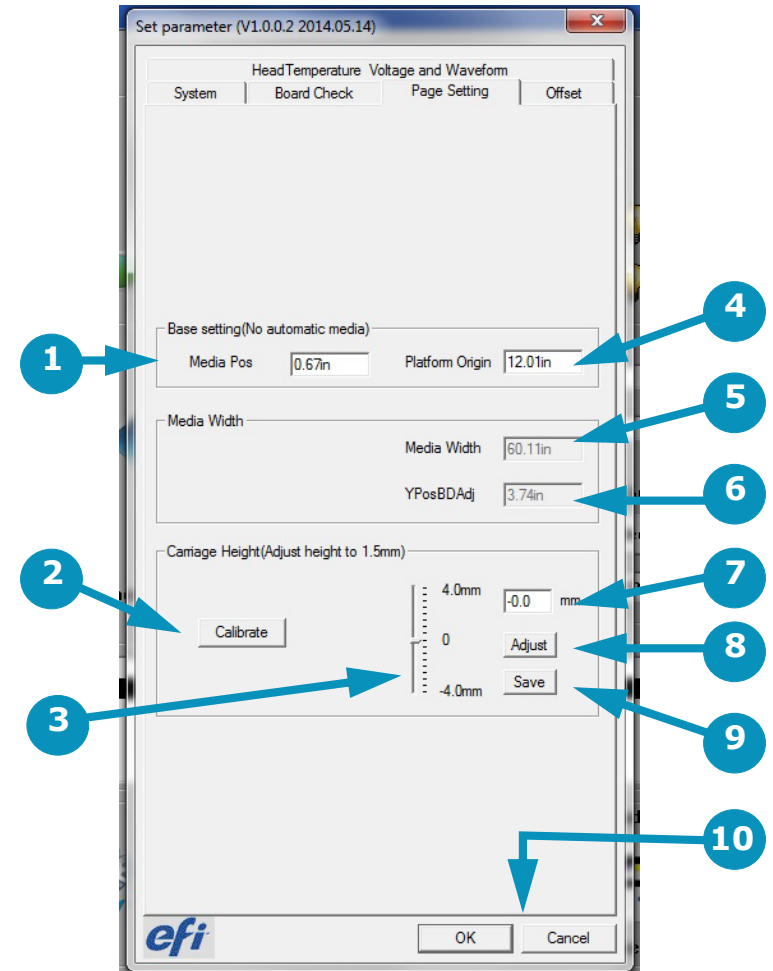


Figure 4-26: H1625 Board Check Tab

## Page Settings Tab

The Page Settings tab is generally used only during printer set up. Operators are likely to use only the Carriage Height Calibration Tool (item 2). The full tab contains the following items:

1. Identifies Media Position.
2. Carriage Height Calibration Tool.
3. Slide Bar Adjustment
4. Identifies Platform Origin.
5. Identifies Media Width.
6. Identifies Y Position Board Adjustment when Rigid Media is selected.
7. Sets Value in mm.
8. Adjust button
9. Save button
10. OK to save or Cancel to exit.



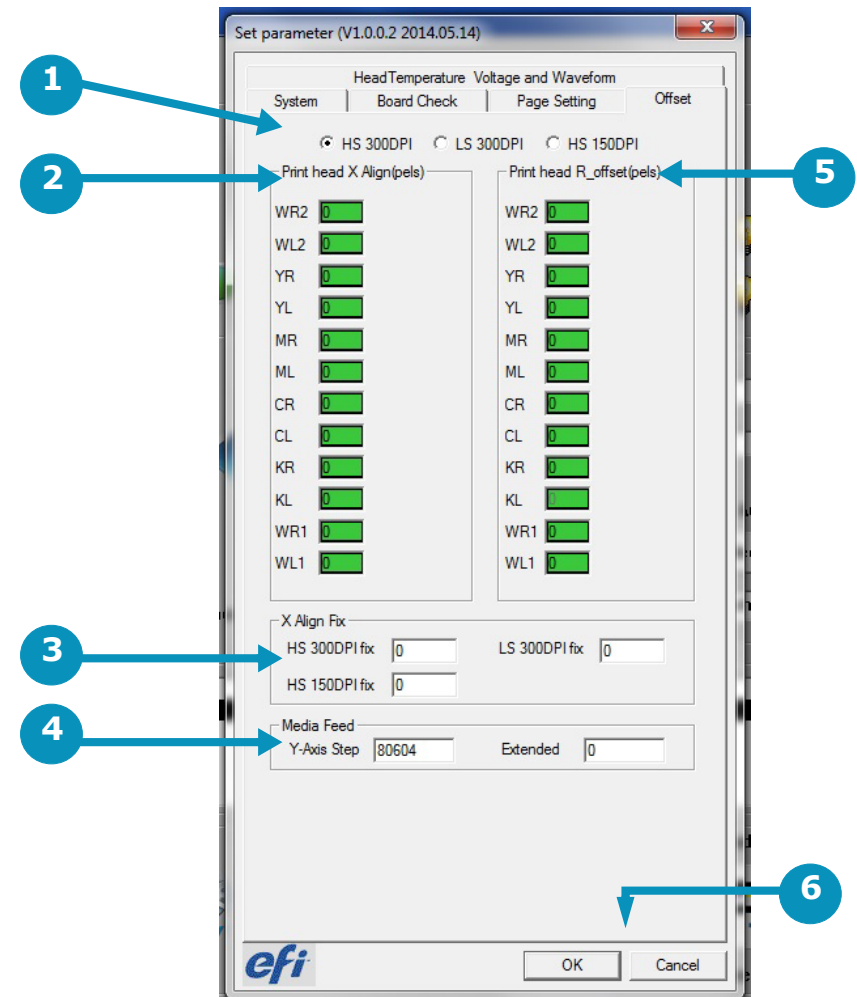
**Figure 4-27: Page Settings Tab  
(H1625 White Ink Printer Software Shown)**

## Offset Tab

The Offset tab is generally used only by Field Service Engineers and contains the following items:

1. Sets Selection for High Speed 300DPI, Low Speed 300 DPI or High Speed 150 DPI. Each selection shows different values.
2. Displays Print Head X Alignment Values.
3. Sets X-alignment fix values.
4. Sets media feed Y-axis step values.
5. Displays print head R offset values.
6. OK to save or Cancel to exit.

**Note:** This tab is used only by Field Service Engineers.



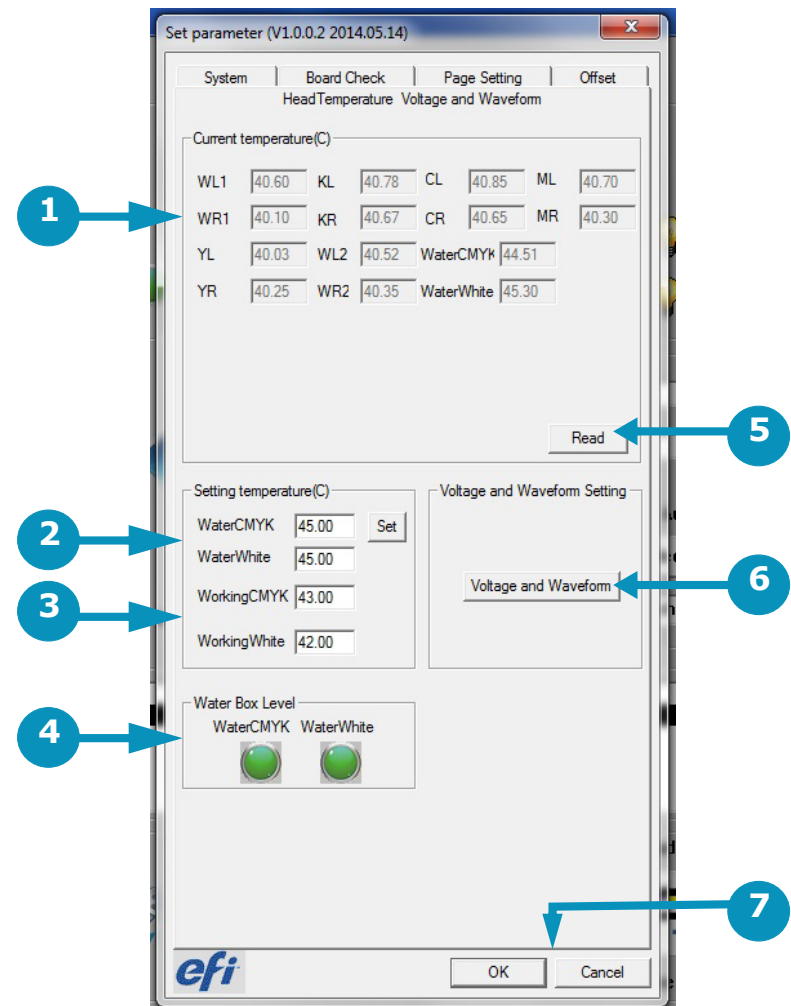
**Figure 4-28: Parameters Offset Tab (White Ink Printer Shown)**

## Head Temperature, Voltage and Waveform Tab

The Offset tab is generally used only by Field Service Engineers and contains the following items:

1. Displays current temperatures.
2. Sets coolant temperatures. Set the value and click "SET" to save.
3. Displays working temperatures
4. Displays coolant reservoir levels.
5. Click READ to update readings for temperatures.
6. Opens Voltage and Waveform screen.
7. OK to save or Cancel to exit.

**Note:** This tab is used only by Field Service Engineers.



**Figure 4-29: Head Temperature Tab  
(H1625 White Ink Printer Software Shown)**

## Voltage and Waveform Screen

**Note:** This screen should ONLY be accessed and edited by a qualified Field Service Engineer.

The Voltage and Waveform screen is used only by Field Service Engineers and displays the following:

1. Displays and sets print head voltage.
2. Displays and sets print head AL number.
3. Displays and sets ink type.
4. Enables channel.
5. Displays CFG state.
6. Click "Cancel" to close the window without saving any unsaved changes. Click "Write" to save entries without closing the window. Click "Exit" to close the window..

The screenshot shows the 'Voltage and Waveform Setting' dialog box. It contains a table with columns for 'Voltage', 'AL#', 'Ink Type', 'Enable Channel', and 'CFG State'. Below the table is a text area for 'Data from file' and 'ROM version', and three buttons: 'Cancel', 'Write', and 'Exit'. Numbered callouts 1-6 point to the Voltage field, AL# dropdown, Ink Type dropdown, Enable Channel checkbox, CFG State checkbox, and the Write button, respectively.

	Voltage	AL#	Ink Type	Enable Channel	CFG State
WL1	24.9	AL04	HR-Series W	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
WR1	24.6	AL05	HR-Series W	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
KL	25.4	AL06	HR-Series CMYK	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
KR	25.4	AL05	HR-Series CMYK	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
CL	24.5	AL06	HR-Series CMYK	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
CR	24.0	AL05	HR-Series CMYK	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
ML	24.2	AL06	HR-Series CMYK	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
MR	25.6	AL04	HR-Series CMYK	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
YL	24.5	AL05	HR-Series CMYK	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
YR	24.4	AL05	HR-Series CMYK	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
WL2	24.9	AL05	HR-Series W	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
WR2	25.4	AL05	HR-Series W	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Data from file 'SRG-SI-0013 DCWN009 vs CA4.pdf' which provided by Toshiba

ROM version\_V2.0

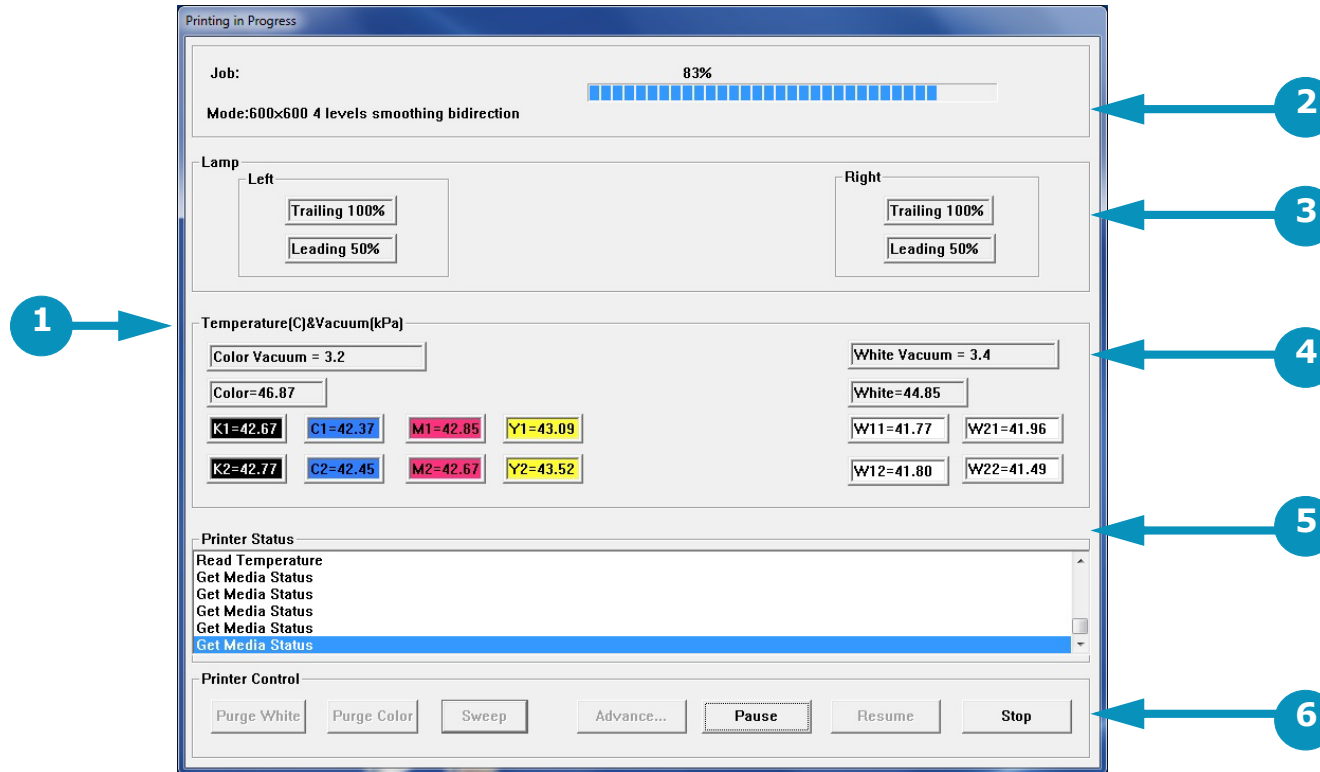
Cancel Write Exit

**Figure 4-30: Voltage and Waveform Settings Screen (H1625 White Ink Printer Software Shown)**

### 4.3.10 Printer Status Screens

During printing operations, the H1625 displays Printing In Progress screens. These screens provide data on the following:

- Job Status
- Lamp Status
- Temperature and Vacuum Status
- Printer Status
- Printer Control



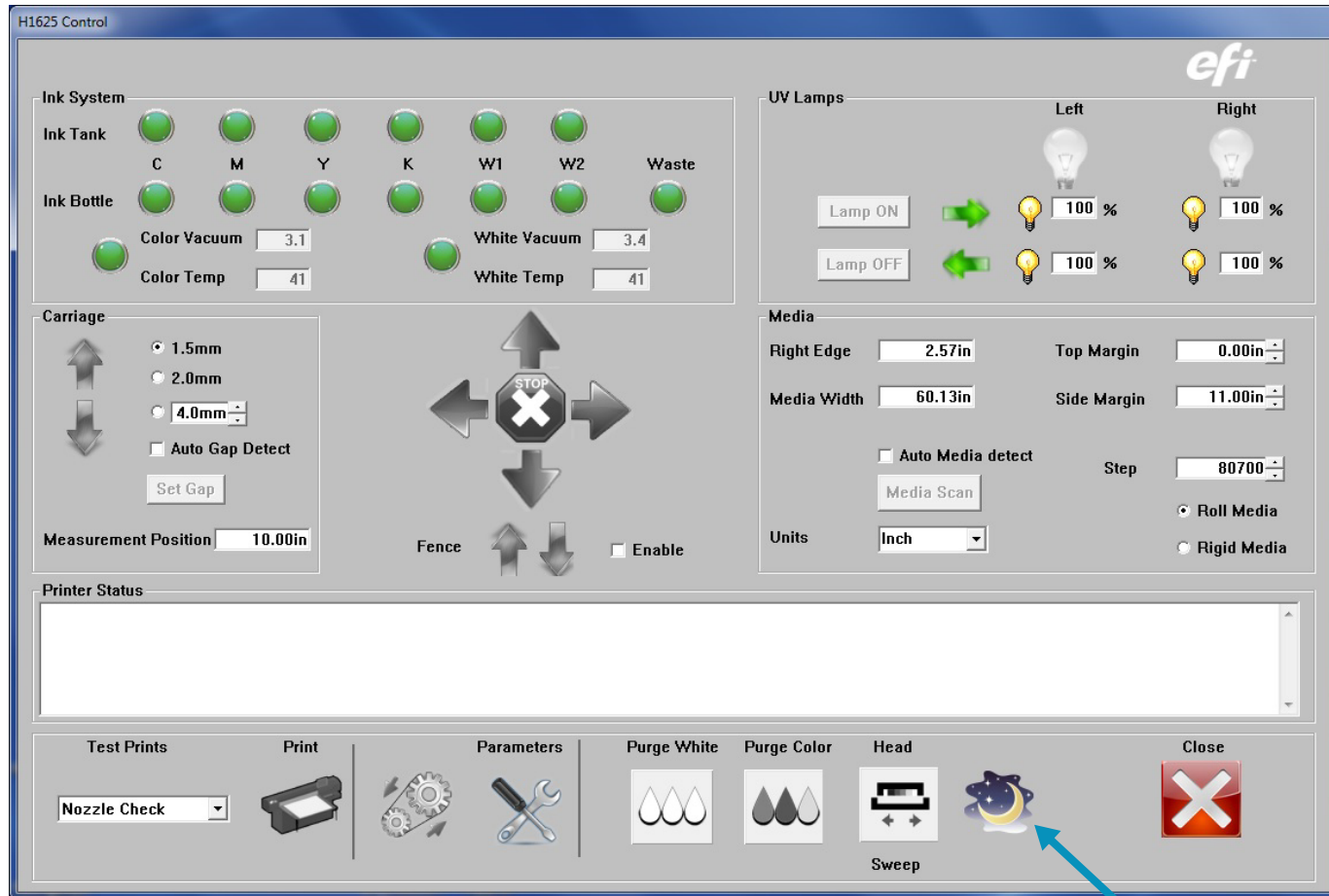
**Figure 4-31: Printing in Progress Window**

Item	Description	Item	Description	Item	Description
1	Temperature Status	2	Job Status	3	Lamp Status
4	Vacuum Status	5	Printer Status	6	Printer Controls



### 4.3.11 H1625 Control Screen "Asleep"

When the printer is put into sleep mode, the H1625 Control screen becomes grayed-out. A moon icon appears in place of the normal sun icon, and the screen does not operate until placed back into the "awake" mode. This is accomplished by clicking the moon icon to wake the system.



**Figure 4-32: Control Screen "Asleep"**

Item	Description
1	"Moon" icon

# 5.0 H1625 Printer Setup

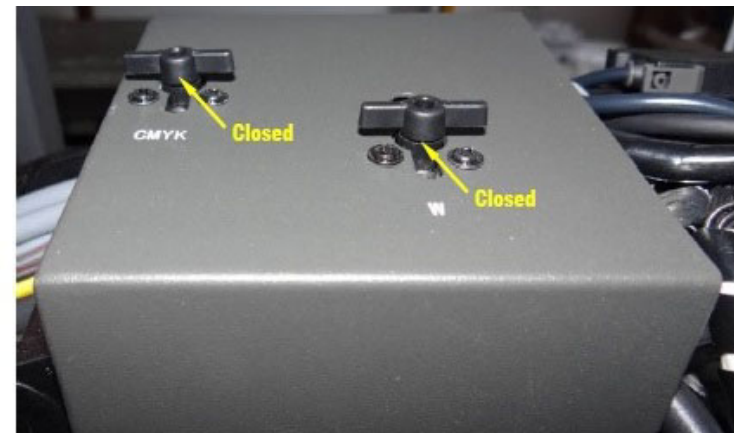
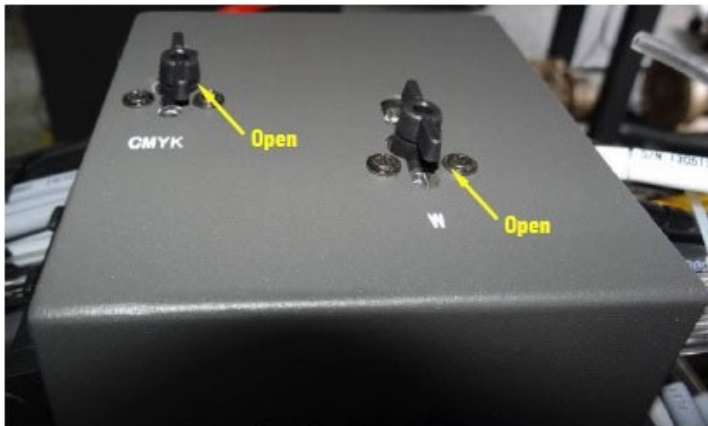
This chapter describes set-up procedures for the H1625 Wide Format Printer. Perform the tasks in this chapter when setting up the H1625 Wide Format printer for operation.

## 5.1 Full Printer Startup From Power Down

After a period when the printer has been completely shut down (see sections [9.2](#) and [9.3](#)), perform the startup procedure as described below.

**Note:** When the printer is in daily use, it is left in sleep mode rather than being powered down. Use section [Printer Startup from Sleep Mode](#) to wake the printer from sleep mode.

1. Ensure that all E-Stops are deactivated. The printer is in an alarm state until/unless the E-Stops are deactivated.
2. Ensure that negative pressure valves are open.



3. Ensure that main power to the printer is on and that the main power cable is properly connected.
4. Turn on all main breakers.
5. Turn on the printer's computer and monitor.
6. Press the green start button on the operator station keyboard tray.

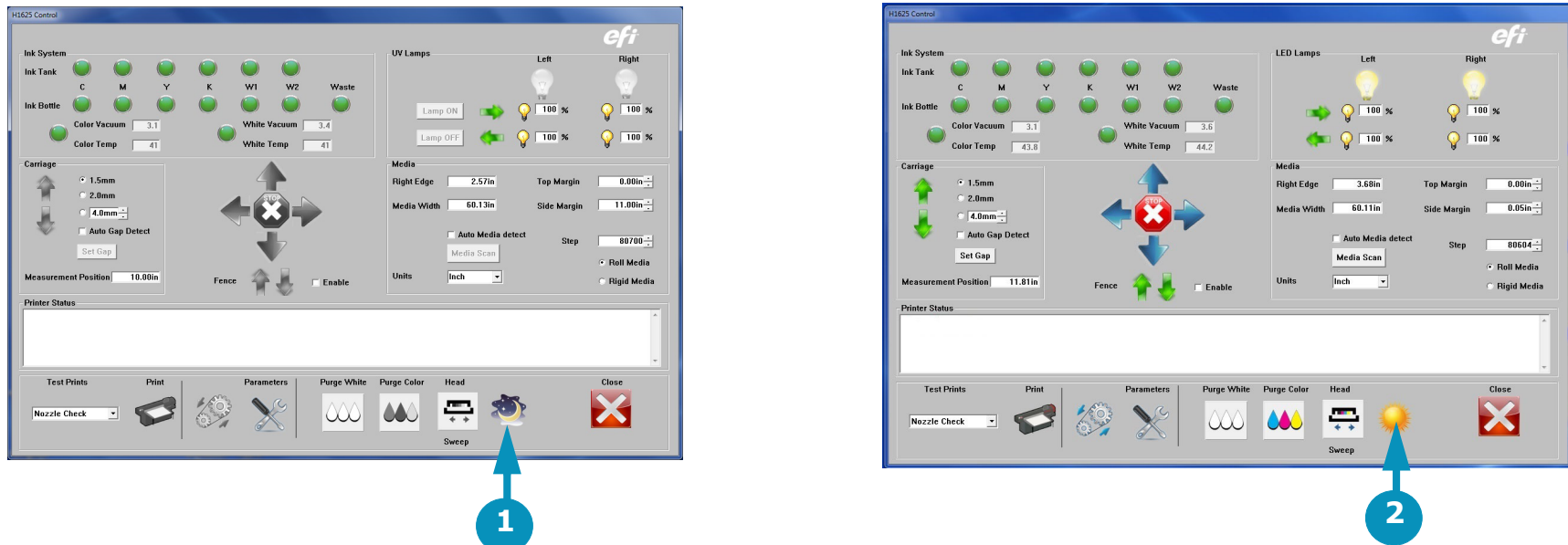
The printer is now ready for normal startup steps. See section [Printer Startup from Sleep Mode](#).

## 5.2 Printer Startup from Sleep Mode

When the printer is in daily use, it is not shut down, but instead is left in sleep mode between shifts. To bring the printer out of sleep mode and back to a normal operational state, follow the procedure below.

1. Open the EFI Print Control Utility (PCU) on the printer's computer.
2. On the PCU window, launch the H1625 Control screen and click the "Moon" icon.

The H1625 Control screen lights up and the "Sun" replaces the moon icon. The printer is now in "Awake" mode. Allow 2-3 minutes for print heads and coolant to come to the required temperature and the ink pumps to fill the secondary tanks before printing.



**Figure 5-1: H1625 Control Screen Printer Mode (Asleep/Awake) Icon**

Item	Description	Item	Description
1	"Moon" icon = Printer is Asleep	2	"Sun" icon = Printer is Awake

3. Perform daily maintenance tasks as outlined in the H1625 Maintenance Guide. <https://inkjet.support.efi.com/doc.php?doc=2388&id=56>
4. Clean jet plate and print heads. (See section [Clean Print Heads.](#))
5. Sweep print heads.
6. Load rolled media in accordance with section [5.3](#) or load rigid media in accordance with section [5.4](#).
7. Run a nozzle test (see section [Perform Nozzle Checks](#)).

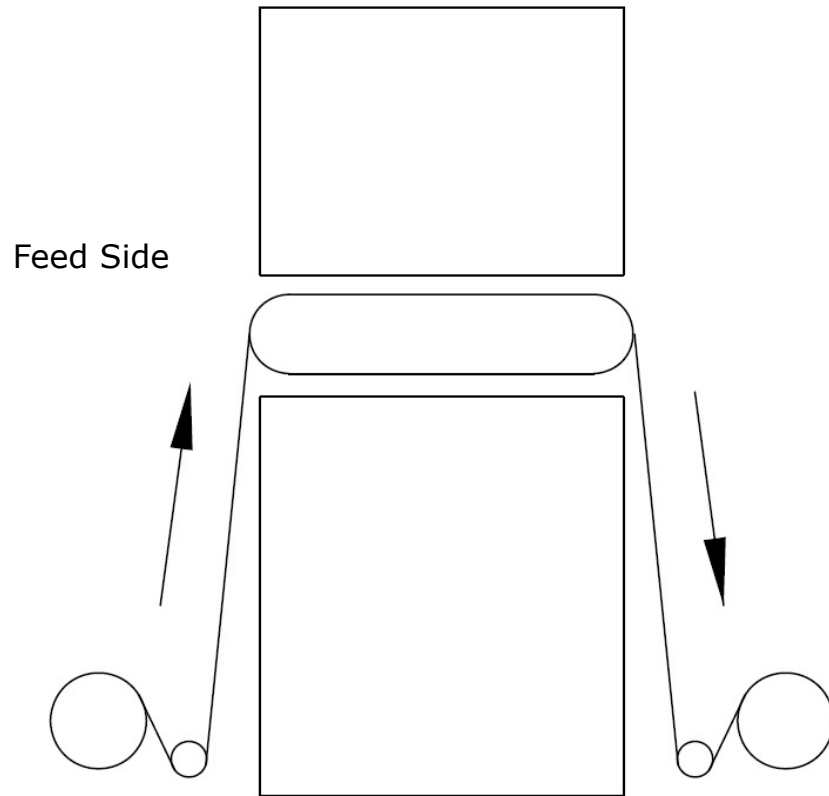
Printer is ready for setup and operation.

## 5.3 Loading Rolled Media

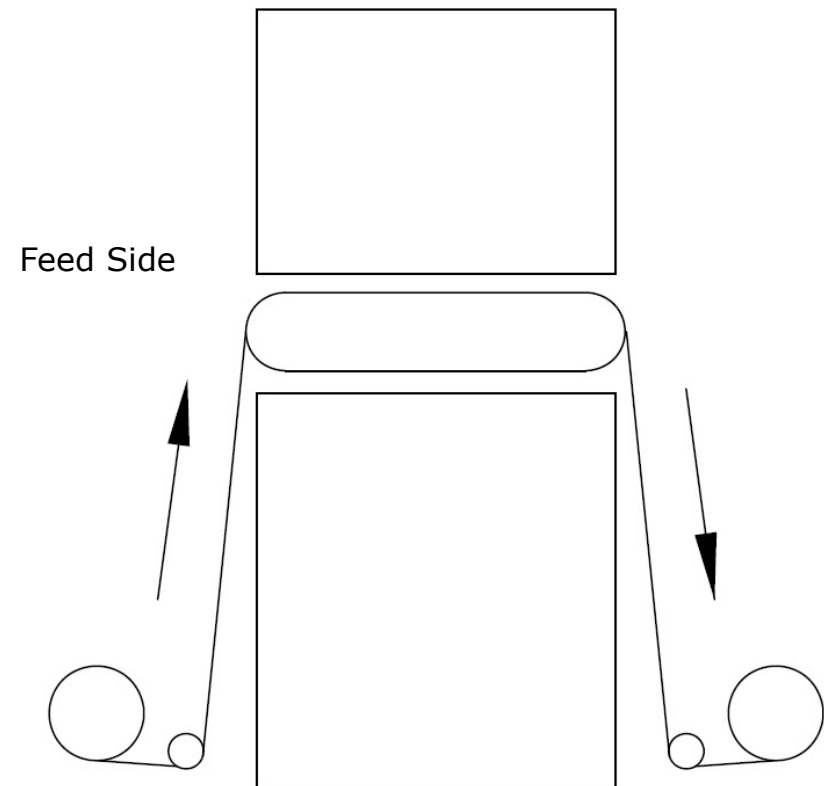
This section illustrates the proper method for loading rolled media onto the printer. Media Path(s)  
Rolled Media Paths are as follows:

1. If the Image surface of the media is on the outside of the roll, load as shown in [Figure 5-2](#).
2. If the Image surface of the media is on the inside of the roll, load as shown in [Figure 5-3](#).

**Note:** For newer printers (H1625-LED above SN 1446, H1625-RS above SN 0072, H1625-SD above SN 0033), the front dancer bar shown below has been removed, greatly improving media tracking.



**Figure 5-2: Image Surface on Outside of Media Roll**



**Figure 5-3: Image Surface on Inside of Media Roll**

**Note:** The arrows indicate media direction.

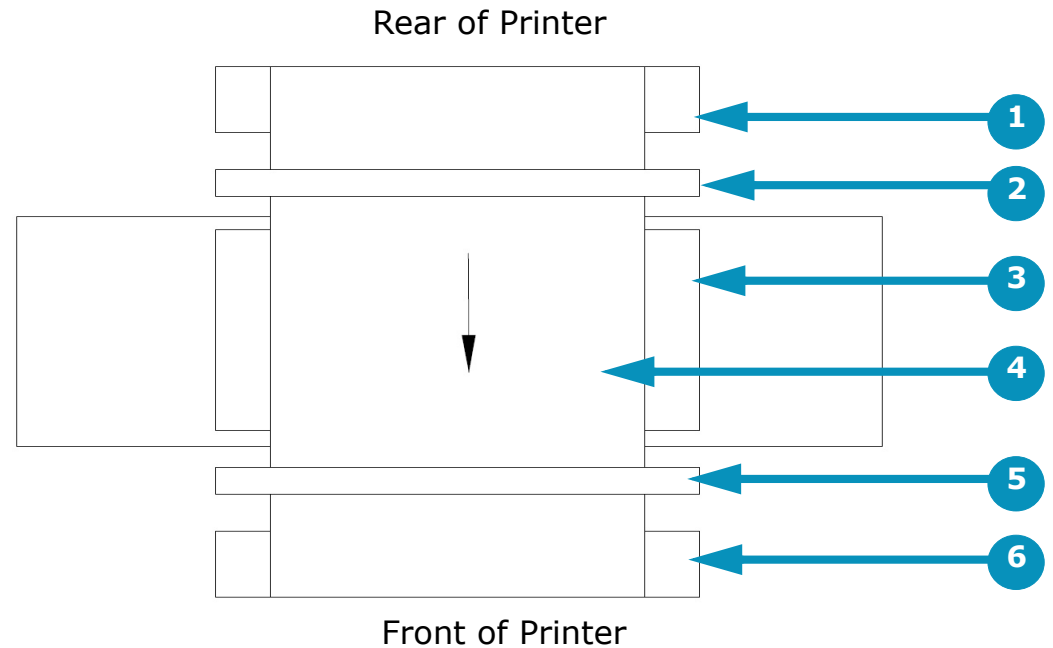
### 5.3.1 Media Alignment

Align the media such that it is in the center of the media belt and evenly centered on both the feed and take-up rolls.

1. Place roll media onto the rear core.
2. Center the roll and lock into place with Media Chucks.
3. Feed media under the feed dancer and up through the printer so that enough is available at the front of the machine to web and secure.

**Note:** The front dancer bar has been removed from the design of newer H1625 printers due to improved media handling. Conduct media feeding as always, but go from the front of the machine directly to the front media take-up roller.

4. At the front of the machine apply tension to the media while moving it slightly side to side to straighten the media.
5. Place a core onto the take-up roller and secure the core in place with Media Chucks where it will collect the media correctly.
6. Feed the media under the take-up dancer and to the core.
7. At this point again apply tension to the media and move it slightly side to side to ensure it is straight.
8. Attach the media to the take-up core with tape and advance media so it wraps around media core.



**Figure 5-4: Rolled Media Loading**  
**(Top View - Printing Surface Outside of Roll)**

Item	Description	Item	Description
1	Feed Media Roll	2	Feed Dancer
3	Media Belt	4	Media
5	Take-Up Dancer	6	Take-Up Media Roll

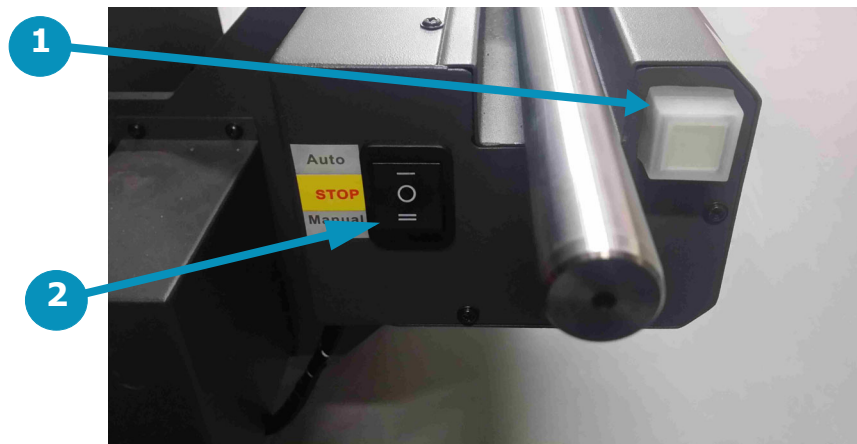
### 5.3.2 Media Direction

The buttons and lights on the media feed and take-up motors determine the media direction (rolling toward the front or toward the rear of the printer).

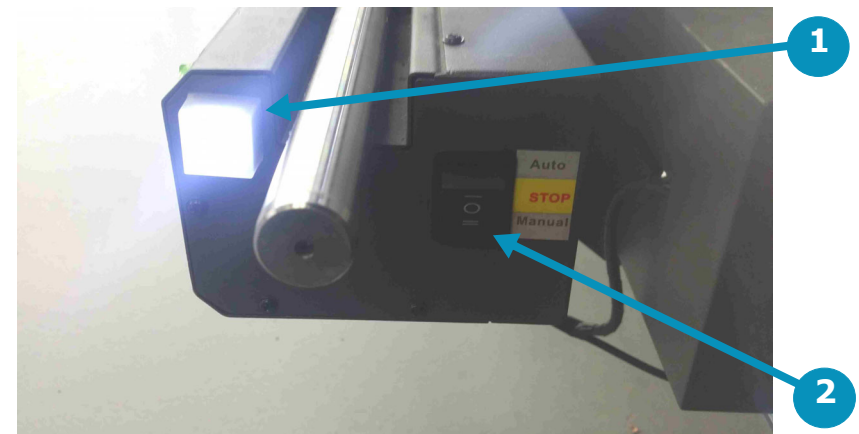
The Auto/Manual switch has three positions:

- Up - Automatic. When printer operation begins, the switch should be in the up/automatic position.
- Middle - Stopped/Off. Put the switch in the middle (Stop) position for printer set up.
- Down - Manual. Use the switch's manual position to run media through the machine.

The media direction light/button toggles the direction that the media is rolling, toward the front or toward the back of the printer. The light toggles on or off when the media direction is changed.



**Rear Feed Motor**



**Front Take-Up Motor**

**Figure 5-5: Media Directional Switches**

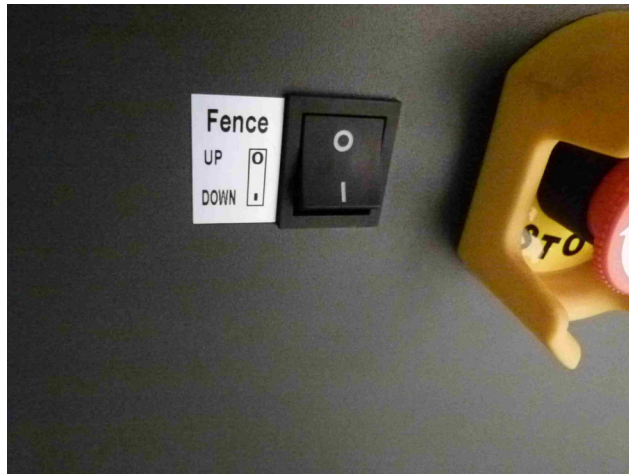
Item	Description	Item	Description
1	Media Direction Button/Light	2	Auto/Stop/Manual Switch



## 5.4 Loading Rigid Media

*This section provides basic instruction for working with rigid media. Load the media from the rear (feed side) of the printer.*

1. Set vacuum chamber controls as described in Section [5.5](#).
2. Ensure media vacuum is off.
3. Lower the media fence using the fence up/down switch or the fence movement controls on the H1625 Control screen.
4. Turn on vacuum.
5. Place a piece of rigid media onto the media belt and push it so that it is in contact with the fence and the left side angle bracket. This ensures that the media is parallel to the media belt.
6. Turn on media vacuum using the foot pedal.
7. Raise the fence.



**Figure 5-6: Media Fence Switch**



**Figure 5-7: Media Fence**

### 5.4.1 Printing Multiple Rigid Media Boards

*The revised media fence on the H1625 can be used to align rigid boards in preparation for printing. This new fence helps to keep a common and consistent zero point, which allows for greater accuracy when guillotine-cutting and double-sided printing. Another benefit of having this solid, square fence with spacers is the ability to easily combine multiple boards across the belt. This feature results in better print speeds by utilizing the entire print zone and reducing carriage turn-around time.*

## 5.5 Set Media Margins

In the Main Control Screen, set the desired margins as shown.

1. Set Top Margin.
2. Set Side Margin.

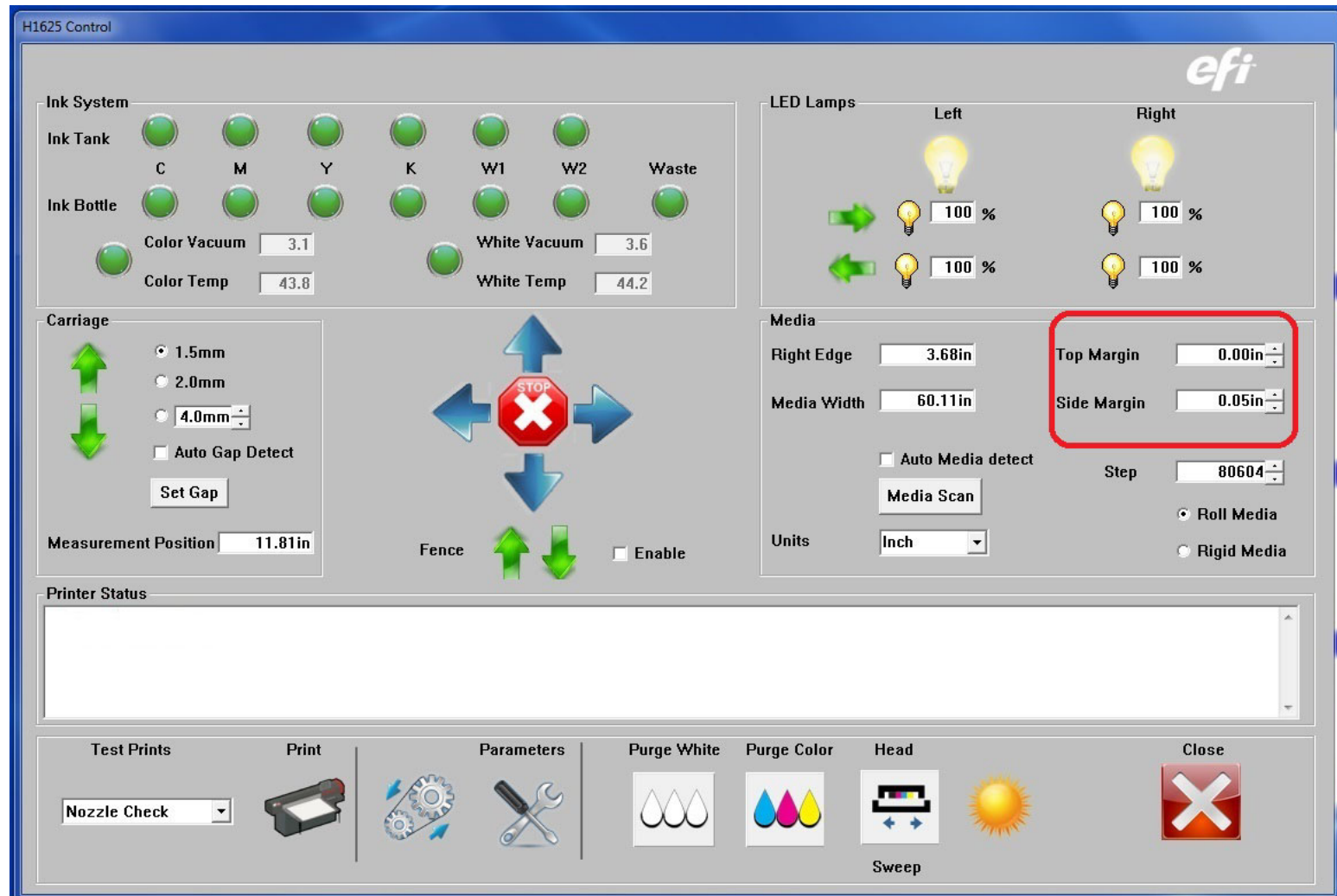
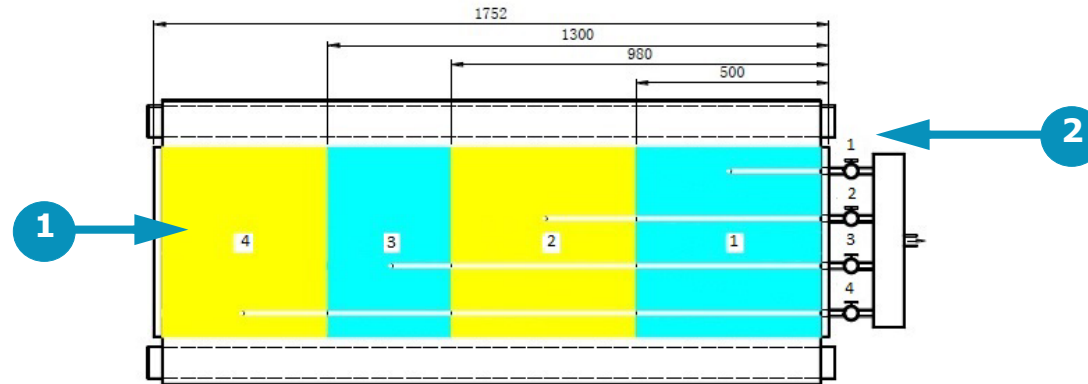


Figure 5-8: Rolled Media Directional Switches

## 5.6 Setting Media Vacuum Chamber Controls

This section illustrates how to set the media vacuum chamber controls.

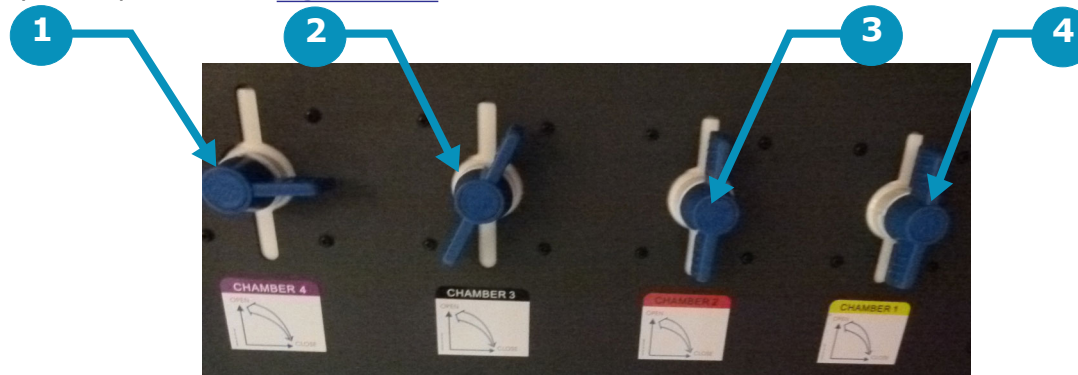
The vacuum zones are shown in [Figure 5-9](#), above. Additional information on zone location and control knobs is provided in [Figure 5-10](#) and the related paragraphs.



**Figure 5-9: Vacuum Media Belt and Platen Vacuum Chamber Layout (Top View)**

Item	Description	Item	Description
1	Chambers	2	Valves

A detail of the control valve layout is provided in [Figure 5-10](#), below.



**Figure 5-10: Platen Vacuum Control Knob Layout**

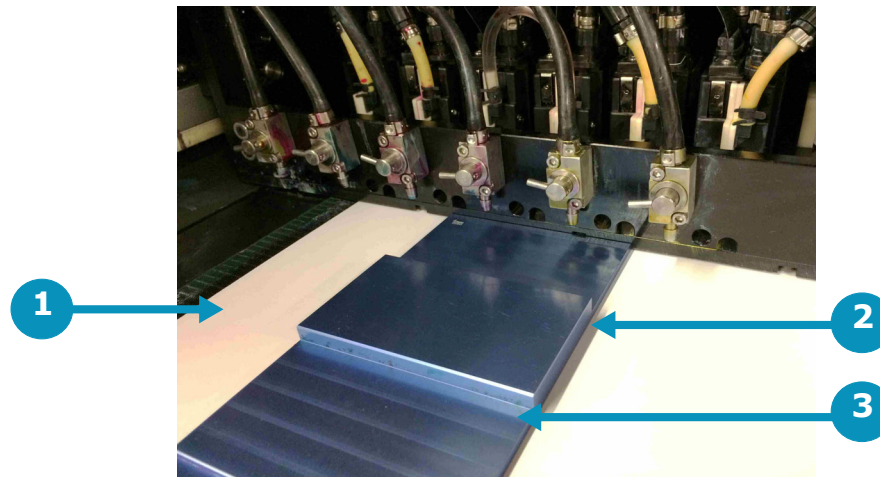
Item	Description	Item	Description
1	Valve 4	2	Valve 3
3	Valve 2	4	Valve 1

Open the vacuum valves for the desired chambers. Use vacuum only for chambers covered by the media and close vacuum valves for all other chambers.

## 5.7 Set the Print Gap

Manually lift the carriage using the Z-Axis lift knob or automatically by using the Carriage Movement Controls on the H1625 Control screen.

1. Move the carriage over the media belt (to the middle of the belt).
2. On the H1625 Control screen:
  - A. Clear the Auto-Gap check box.
  - B. Set carriage gap to 1.5mm.
  - C. Press the Set Gap button.
4. On the H1625 Control screen's Parameters tab:
  - A. On the Page Setting tab, press the Calibrate button.
  - B. Enter a Correction Value. (This is the amount needed + or - to achieve the 1.5mm.)
  - C. Press Adjust.
  - D. Physically check the gap with the gauge. (See [Figure 5-11](#).) Check the gap on all four corners of the carriage.
  - E. Press Save and then OK.
  - F. When satisfied with a proper gap of 0.060" [1.5mm], return the carriage to the HOME position.
7. Carriage Home:
  - Press Gap again with different media, and the carriage moves to 1.5mm. Gap does not have to be reset again unless there is a system error or a complete printer power down.



**Figure 5-11 Physically Checking the Carriage Gap**

Item	Description	Item	Description	Item	Description
1	Media on belt	2	Check the gap	3	Shim

# 6.0 Printing on the H1625

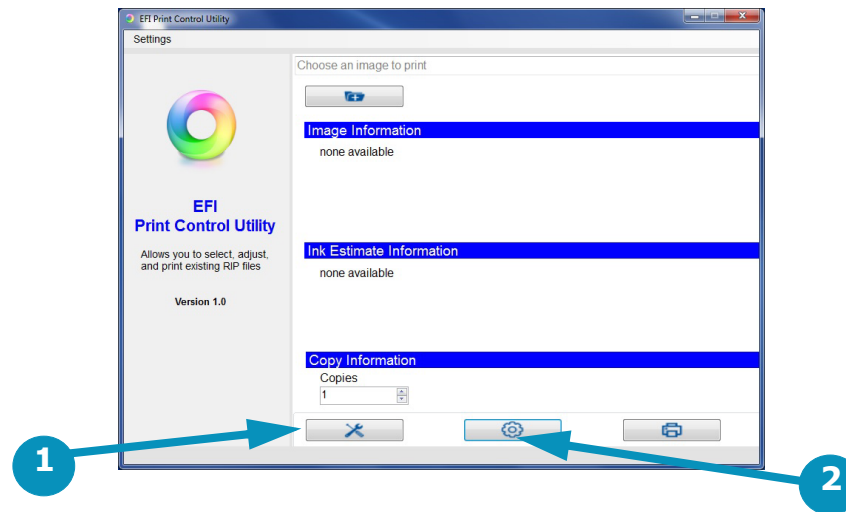
This chapter covers the process for printing on the H1625, including the steps for standard print jobs, conducting a daily white print, printer workflows, full-bleed printing, centering a print on the media, skipping blank space to increase print speeds, and methods for printing multiple rigid media boards.

## 6.1 Standard Printing Procedure

Use the following steps to conduct a standard print job on the H1625.

### 6.1.1 Start Up Printer

1. Load the media. (See section [5.3](#) or [5.4](#).)
2. Launch the EFI Print Control Utility.



**Figure 6-1: EFI Print Control Utility**

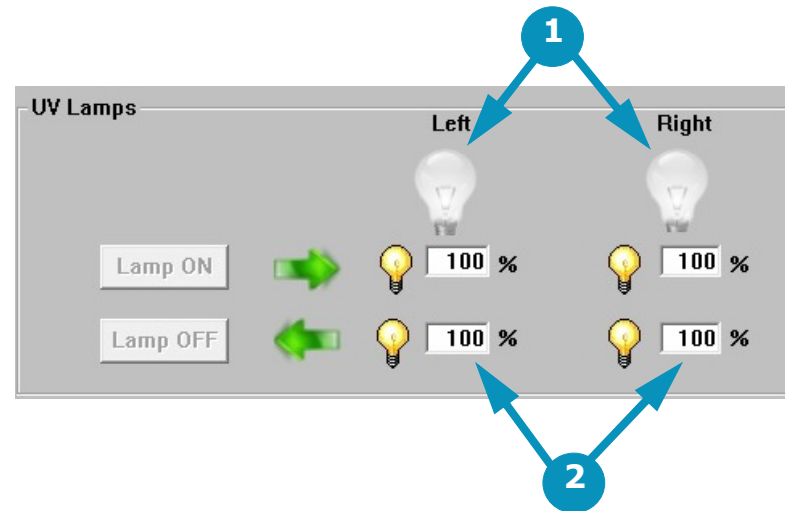
Item	Description	Item	Description
1	Tools button	2	Gear button

3. Click the “Tools” or “Gear” button. (Either button opens the H1625 Control window.)
4. Click the “Moon” icon on the H1625 Control window to bring the printer out of sleep mode.



## 6.1.2 Verify Lamp Settings

1. In the **UV Lamps** box (upper right) on the H1625 window, verify that the cure lamps are on by checking that the light bulb icons are yellow.
2. Click any light bulb that isn't yellow, to toggle it to yellow/on.



**Figure 6-2: Lamps Box**

Item	Description	Item	Description
1	Light bulb icons	2	Lamp intensity setting

3. Set the lamp intensity appropriate to the LED or Arc lamp of your H1625 printer type. See the settings, below.

	LED Printer	RS Arc Printer	SD Arc Printer
<b>Lamp Intensity Setting</b>	100%	75% max.	50% max.

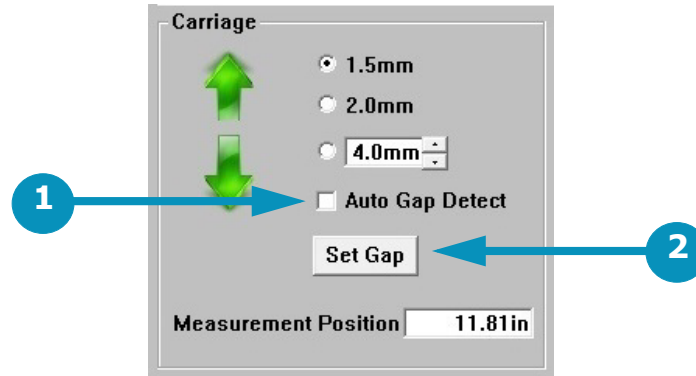
**Note:** Arc lamps produce heat which could damage the substrate. Use caution when printing on new substrates that may yield unpredictable results.



### 6.1.3 Set the Carriage Gap

1. In the H1625 Control window's Carriage box, click the Set Gap button.

The printer carriage raises in home zone, advances over the media, lowers to measure the media thickness, and then returns to the home zone.



**Figure 6-3: Carriage Box**

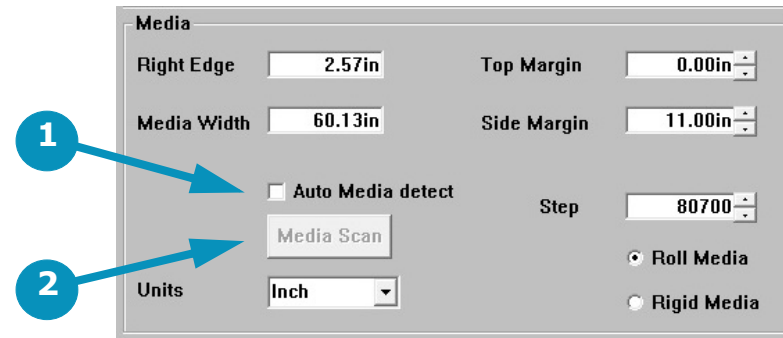
Item	Description	Item	Description
1	Auto Gap Detect check box	2	Set Gap button

2. Check the Auto Gap Detect box to measure media thickness with every print

## 6.1.4 Scan the Media Width

1. In the H1625 Control window's Media box (middle right), click the Media Scan button.

Print carriage advances over the media, measuring the start point and width of the media. This process sets the Right Edge and Media Width values.



**Figure 6-4: Media Box**

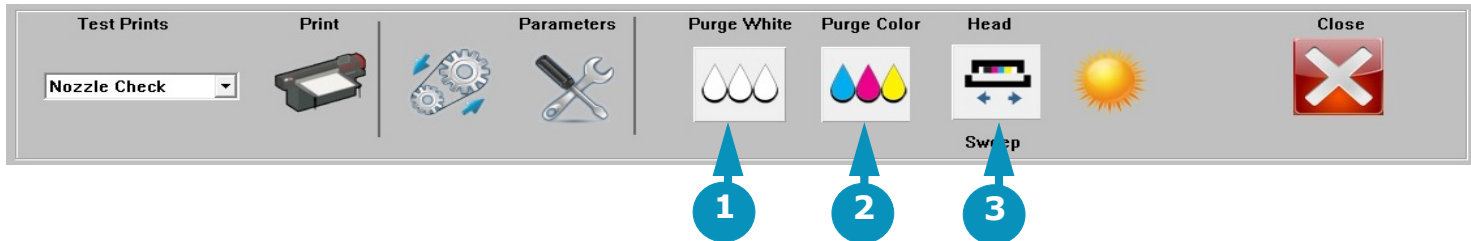
<b>Item</b>	<b>Description</b>	<b>Item</b>	<b>Description</b>
1	Auto Media Detect check box	2	Media Scan button

2. Check the Auto Media Detect box to measure the media width before every print.
3. Examine the Nozzle Check print for quality.
4. Repeat the Head Sweep if necessary.

## 6.1.5 Purge and Sweep Print Heads

To ensure the best print quality, EFI recommends that operators purge and clean print heads prior to each print run. At minimum, a purge and sweep should be run at start-up and every 8 hours of operation. The print heads should be purged and a head sweep should be performed in one of two ways:

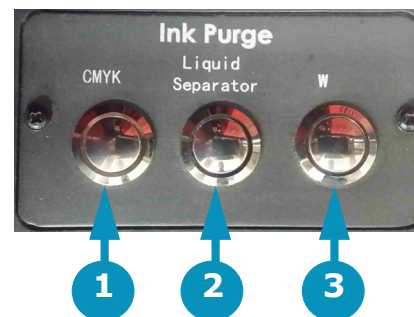
1. a. From the H1625 Control screen, choose the Purge White icon to white print heads (or alternate non-CYMK colors on H1625 printers without white ink). The system automatically follows this up with a head sweep.
- b. From the H1625 Control screen, choose the Purge Color icon to purge the CMYK print heads. The system automatically follows this up with a head sweep.



**Figure 6-5: Purge and Sweep Icons on H1625 Control Screen**

Item	Description	Item	Description	Item	Description
1	Purges white (or other non-CYMK) ink and conducts a head sweep	2	Purges CMYK ink and conducts a head sweep	3	Conducts head sweep

2. Use the manual Ink Purge buttons located in the carriage HOME compartment (See [Figure 6-6](#)). Then follow up with a head sweep performed from the H1625 Control screen.



**Figure 6-6: Manual Ink Purge Buttons (H1625 White Ink Printer Image Shown)**

Item	Description	Item	Description	Item	Description
1	Purges CMYK ink	2	Liquid Separator: empties the cyclonic vacuum system	3	Purges white (or other non-CYMK) ink. (Label changes for non-white ink printers.)

## 6.1.6 Perform Nozzle Checks

The Nozzle Check test provides a test print that shows whether all print heads are firing properly. Perform a Nozzle Check prior to commencing printer operations to ensure all print heads are firing properly.

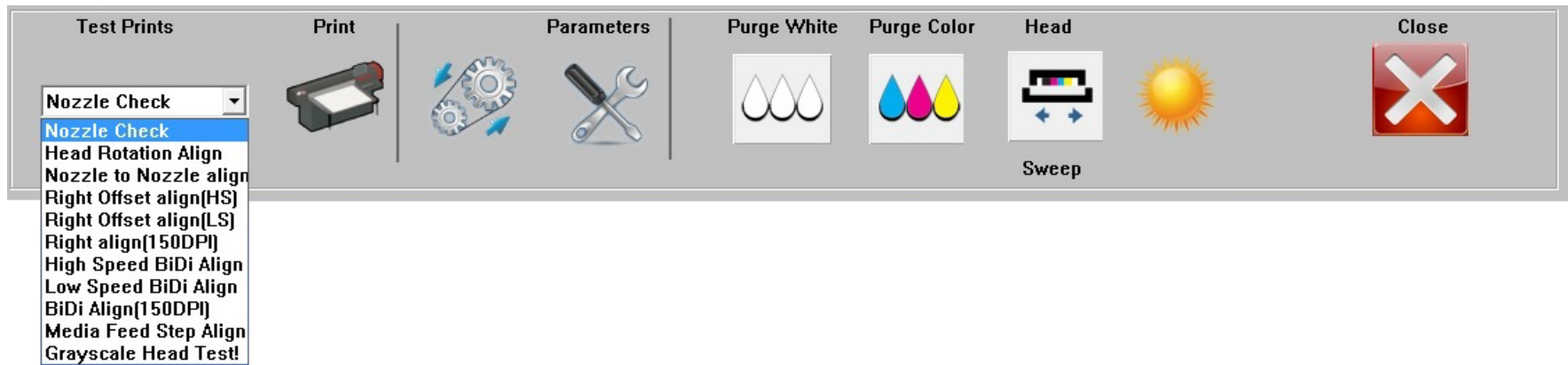


Figure 6-7: Nozzle Check Selection

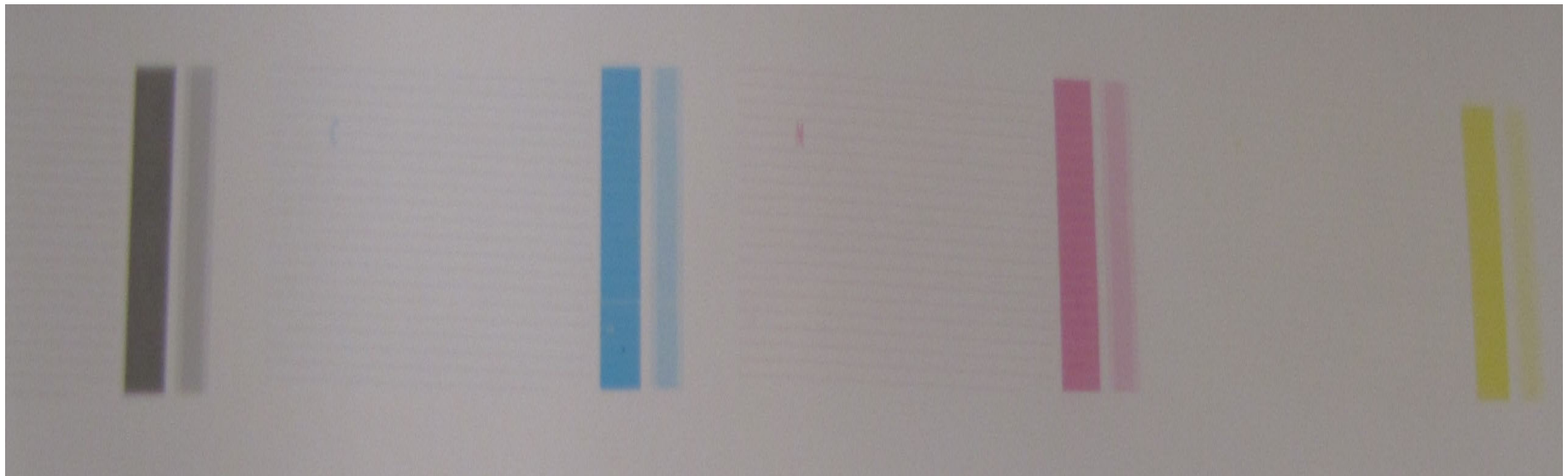
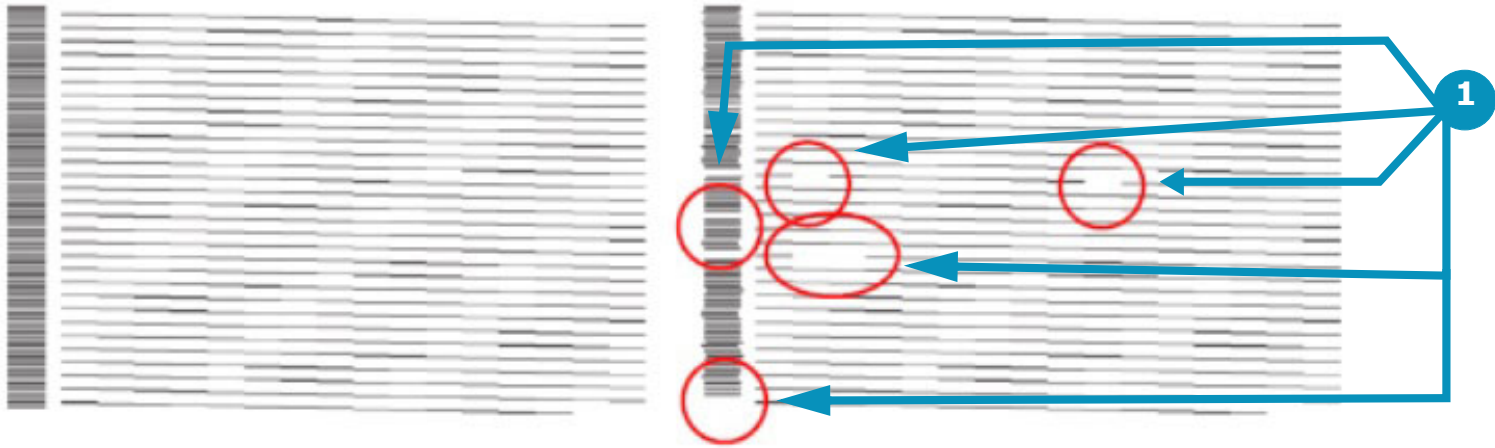


Figure 6-8: Nozzle Check Test Print



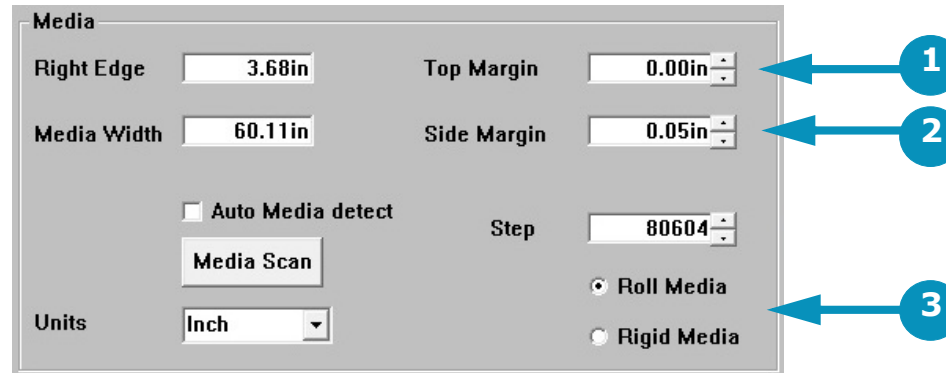
**Figure 6-9: Nozzle Check Test Print Comparison**

<b>Item</b>	<b>Description</b>
1	Indicates drop out

## 6.1.7 Set Margins and Choose Media Type

1. In the Media Box (middle right), set the Top Margin and the Side Margin.

**Note:** Top Margin adds white space above print, advancing the media further before printing. Side Margin adds white space to the left of the print.



**Figure 6-10: Test Prints List and Print Button**

Item	Description	Item	Description	Item	Description
1	Top Margin Setting	2	Side Margin Setting	3	Roll/Rigid Media Options

2. Choose Roll or Rigid Media.

**Note:** Roll Media advances media approximately 1 inch before printing. Rigid Media advances media approximately 5 inches before printing

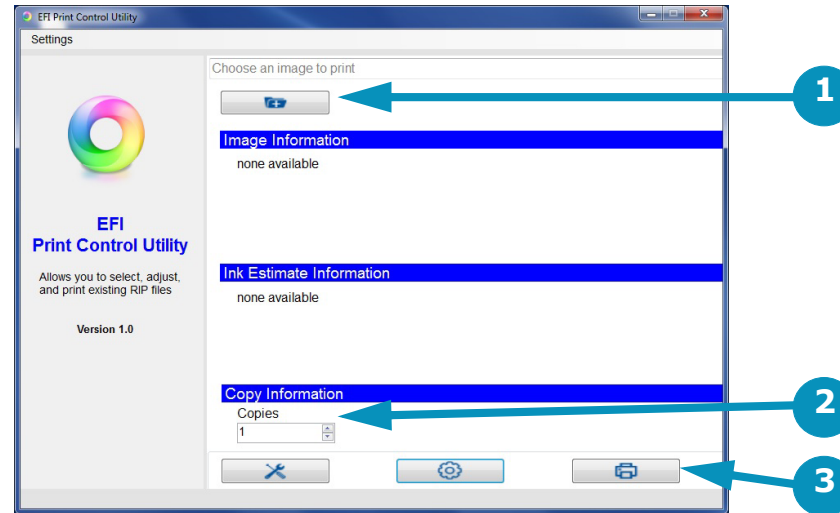
## 6.2 Daily White Ink Print

*On H1625 printers with white ink heads, it is important that at least an 11 x 17 white print be run daily. If the white heads are not used daily, the ink settles in the heads, causing clogged nozzles.*

- Run a daily white print to keep white ink moving through the heads, prevent clogged nozzles, and increase the life of the heads.

## 6.3 Print File from EFI Print Control Utility

1. Click the Close button on the H1625 Control window to return to the EFI Print Control Utility
2. Click the "+" (plus) folder button to load the file to print. (See [Figure 6-11.](#))



**Figure 6-11: Print File from EFI Print Control Utility**

Item	Description	Item	Description	Item	Description
1	Plus (+) Folder Button	2	Number of Copies	3	Print Button

3. Browse to and select the \*.BCO file to be printed, then click OK.
4. Enter the number of copies. (See [Figure 6-11.](#))
5. Click "Printer" button to print. (See [Figure 6-11.](#))



## 6.4 Print Workflows

The H1625 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 H1625 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

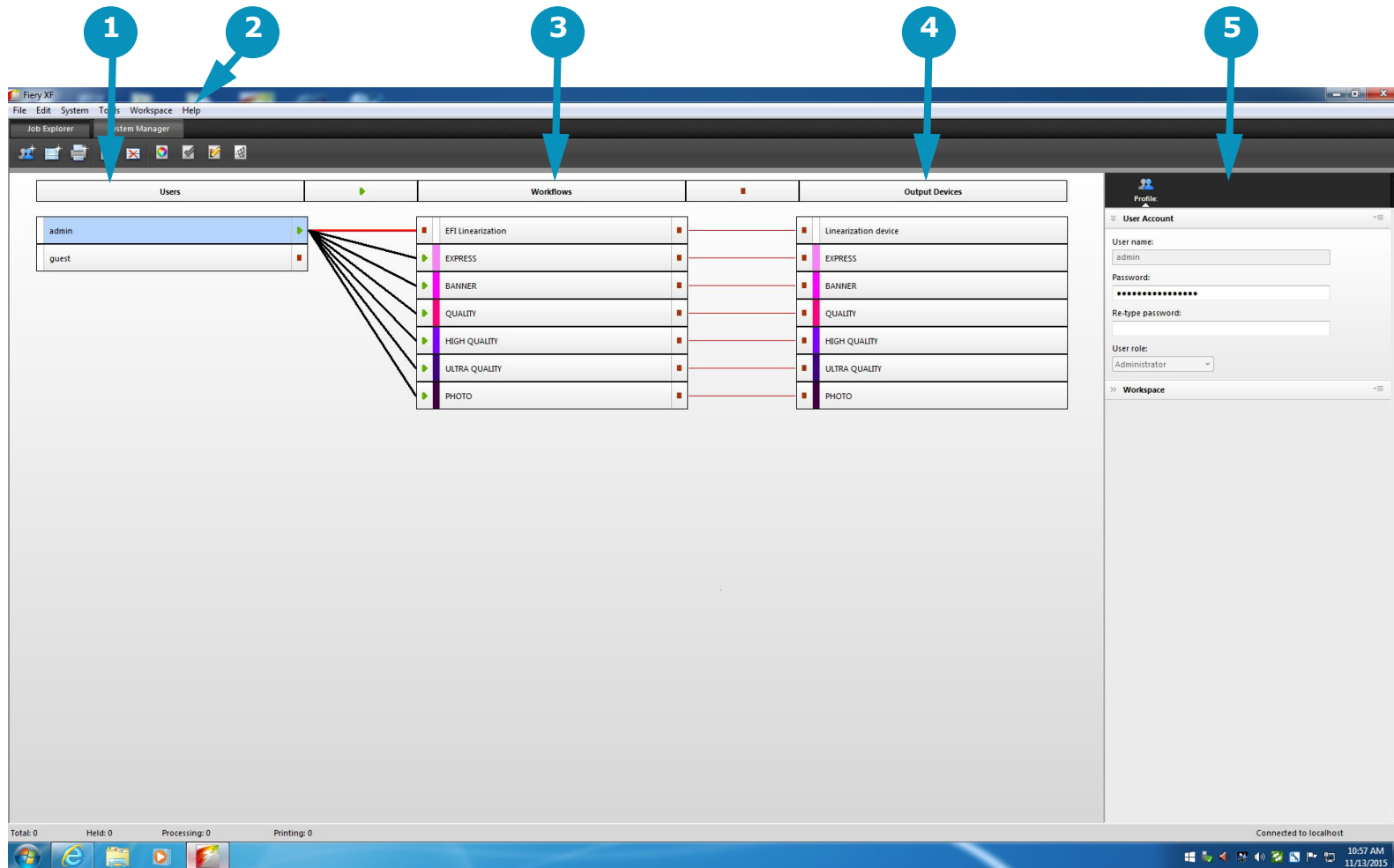
Mode	Resolution	Color Mode	Grayscale Level	SQFT(SQM)/HR	Smoothing	Viewing Distance
Ultra Quality	900x900	CYMK	8	35 (3)	Smoothing On	0-3 Feet
POP Quality	600x600	CYMK	8	80 (7)	Smoothing On	3-6 Feet
Productivity	600x600	CYMK	4	133 (12)	Smoothing On	6-15 Feet
Distant View	600x600	CYMK	4	247 (23)	No Smoothing	15+ Feet
Express	600x300	CYMK	4	458 (43)	No Smoothing	

### Road Sign Workflows

Mode	Resolution	Color Mode	Grayscale Level	SQFT(SQM)/HR	Smoothing
3M Warranted Traffic Sign Fast Mode	600x600	CYMK	4	209	No Smoothing
3M Warranted Traffic Sign High Resolution	600x600	CYMK	4	113	Smoothing On

## 6.4.1 Workflows in Fiery XF

Workflows set up in the Fiery XF software appear as in the image below:



Item	Description
1	Users
2	Help menu; Help docs and supplemental knowledge database can also be accessed at: <a href="http://help.efi.com/fieryxf/">http://help.efi.com/fieryxf/</a> <a href="http://help.efi.com/fieryxf/KnowledgeBase/index.html">http://help.efi.com/fieryxf/KnowledgeBase/index.html</a>

Item	Description
3	Workflows
4	Output Devices
5	Output Configuration options

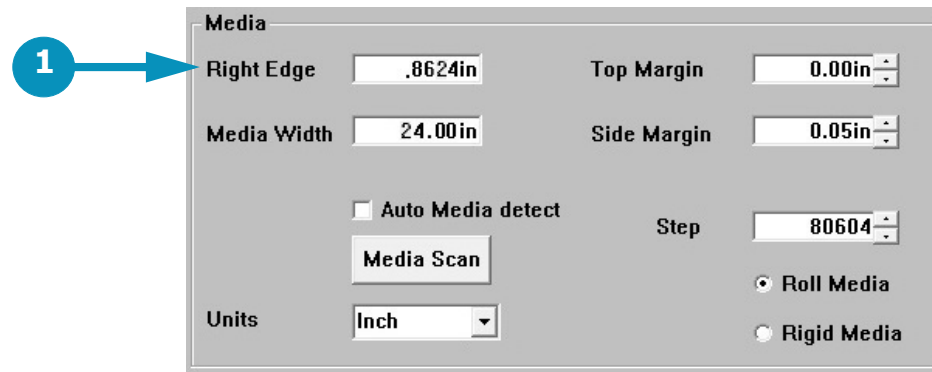
## 6.5 Printing Full Bleed

Use this process to print the full width of the media with no white space on either side edge.

1. Load media and set-up printer as described in section [6.0](#).
2. Ensure that the .BCO file to be printed is larger than media.

**Example:** If the media is 24" x 24", create a \*.BCO file that is 24.125" x 24.125".

3. After scanning the media width (see [6.1.4](#)), subtract half of the increased size from the Right Edge value.



**Figure 6-12: Media Box on H1625 Control Window**

Item	Description
1	Right Edge field

**Example:** If the media is 24" x 24", and the \*.BCO file is 24.125" x 24.125", subtract half of .125" (or .0625") from the Right Edge value. This creates a .0625" bleed on all sides.

4. Click "Printer" button to print.

## 6.6 Centering a Print

Use this process to center the width of a printed image on the width of the media.

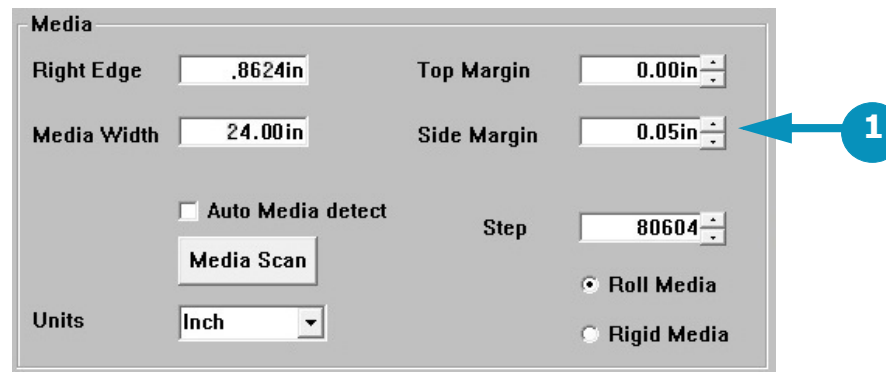
1. Load media and set-up printer as described in section [6.0](#).
2. After scanning the media width (see [6.1.4](#)), check the Media Width value on the H1625 Control window.
3. Subtract the width of the \*.BCO print file from the width of the media to calculate the remainder of the media width that won't be covered by the print.

**Example:** If the media width is 24" and the print file width is 23", the difference equals 1", which is the remainder of the media width that the print will not cover.

4. Divide this remainder number by 2, in order to calculate the width to leave on each side of the print.

**Example:** If the remainder is 1", divided by 2 equals .05" on each side of the print.

5. Enter this value in the Side Margin field.



**Figure 6-13: Media Box on H1625 Control Window**

Item	Description
1	Side Margin field

6. Click "Printer" button to print.

## 6.7 Skip Blank Space During Prints

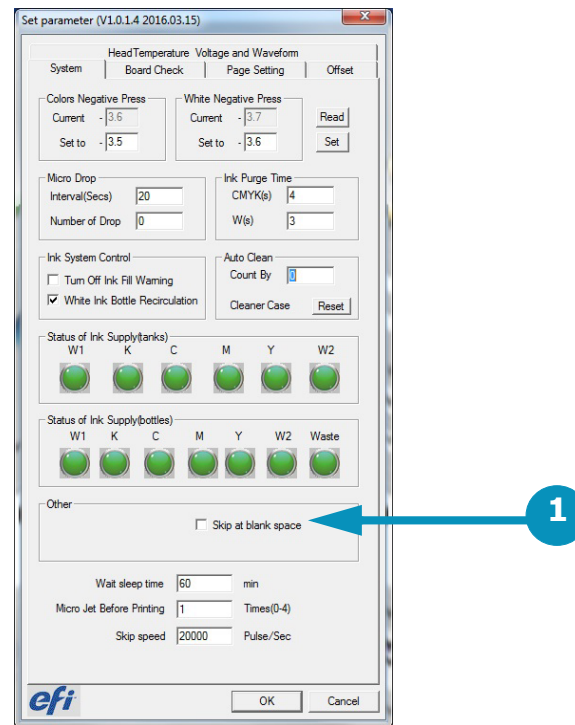
The *Skip Blank Space* feature enables the H1625 printer to advance media quickly through blank spaces in an image or in a group of nested or step-and-repeat images. With *Skip Blank Space* enabled, the printer quickly advances the media through blank spaces, in order to provide faster printing.

In order for the *Skip Blank Space* feature to work, the printed files must:

- Include true blank Space sometimes referred as “white space,” as opposed to a white fill blank field
- Include blank space that runs all the way across the image(s)

### To Enable Skip Blank Space

1. On the H1625 Control Screen, use the Parameters icon to open the Set Parameter window, displaying the Systems Tab.
2. Ensure that the Skip at Blank Space check box is checked.



**Figure 6-14: Set Parameter Window's System Tab**

Item	Description
------	-------------

- |   |                               |
|---|-------------------------------|
| 1 | Skip at Blank Space check box |
|---|-------------------------------|

## 6.7.1 Sample Images

Note that the following images include one with a white fill background and one with true blank space (represented by check boxes) that runs the full width of the image.



Figure 6-15: Image With White Field/White Fill

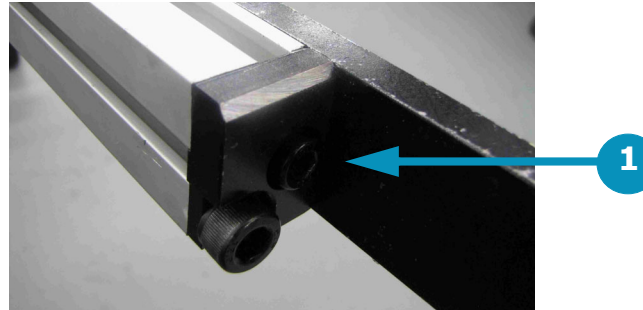


Figure 6-16 Image With Blank Space/White Space

Item	Description	Item	Description
1	Rows of Blank Space Running the Width of the Image(s)	2	Check Boxes Represent True Blank Space in Image

## 6.8 Printing Multiple Rigid Media Boards

*The H1625's square media fence (as opposed to the rectangular fence) can be used to align rigid boards in preparation for printing. The square fence helps to keep a common and consistent zero point, which allows for greater accuracy when guillotine-cutting and double-sided printing. Another benefit of having this solid, square fence with spacers is the ability to easily combine multiple boards across the belt. This feature results in better print speeds by utilizing the entire print zone and reducing carriage turn-around time.*



Item	Description
1	Square-ended Fence

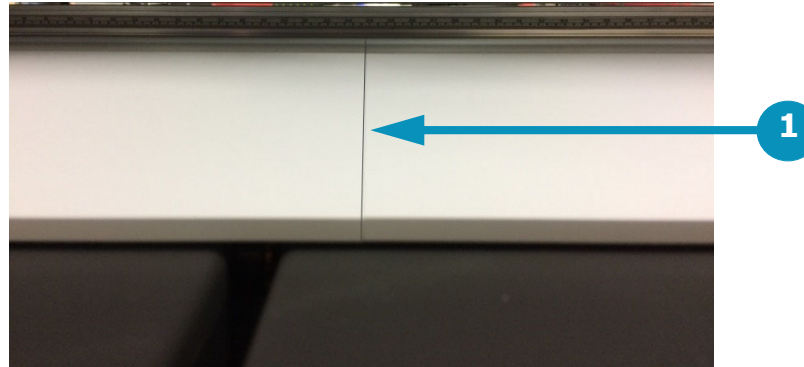
There are 3 similar methods of printing multiple boards with the square-ended fence. Each method works better for certain types of printing, as described in the sections below.



## 6.8.1 Prints with Margins or White Space on Edges

*Use this technique for prints with margins or white space on the edges.*

1. Align boards to the media fence.
2. Push each board up against the previous board until the print area is filled.



**Figure 6-17: Media Boards Pushed Together**

<b>Item</b>	<b>Description</b>
1	No Gap Between Boards

3. Determine the margin needed on each board, if any, to be set in the software (see section [6.8.4](#) for options to set up print files margins).

## 6.8.2 Prints Using a Guide Block between Sheets

Use this method when setting guide blocks between media sheets.

1. Align boards to the media fence with a guide block between the boards. (The H1625 printer arrives with 4 guide blocks for up to 4 board printing).



**Figure 6-18: Loosen Screws on Guide Blocks**



**Figure 6-18: Place Guide Blocks Against Boards**

2. Push each board up against the blocks until the print area is filled.



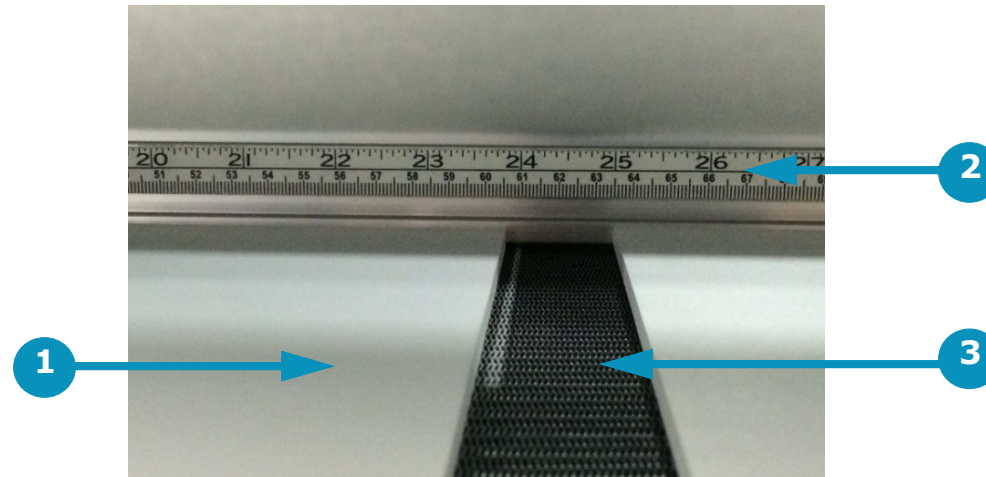
**Figure 6-19: Press Each Board Against a Guide Block**

3. Determine the margin needed on each board, if any, to be set in the software (see section [6.8.4](#) for options to set up print files margins).

### 6.8.3 Prints Using the Media Fence Ruler

*Use this method to measure a specific distance between board using the media fence ruler.*

1. Align boards to media fence using the ruler to place each edge.
2. Use the ruler until the print area is full, and determine a gap measurement between each board.
3. Determine the margin needed on each board, if any, to be set in the software (see section [6.8.4](#) for options to set up print files margins).



**Figure 6-20: Measure the Gap Between Boards**

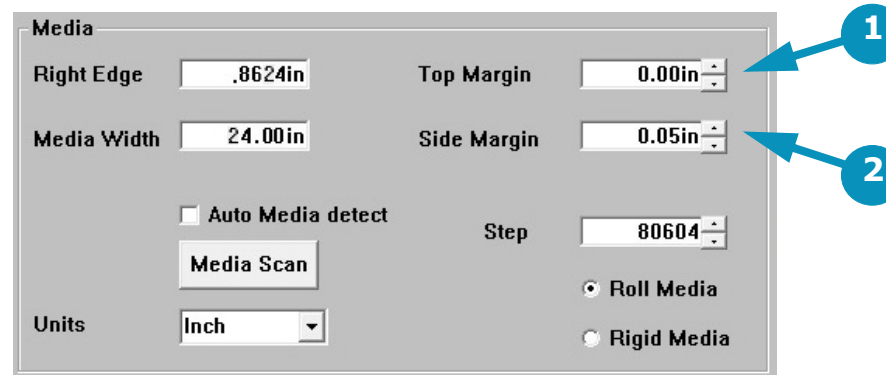
## 6.8.4 Set Up Margins in Print Files

There are two ways to set up the margins in the print file, using settings in both the H1625 Control window and in the Fiery software. See the options for print file margin set ups, as described below.

### Print File Margins Setup 1

In this method of margin set up, margins are set in both the H1625 Control window and in the Fiery software.

1. Set the needed Top and Side Margins in the H1625 Control window. (See [Figure 6-21](#).)



**Figure 6-21: Media Box on H1625 Control Window**

Item	Description	Item	Description
1	Top Margin field	2	Side Margin field

2. Use Fiery to set the spacing needed between each image in the file.

### Print File Margins Setup 2

In this method of margin set up, margins are set only in the Fiery software. The H1625 Control margins are set to zero.

1. Set both the Top Margin and the Side margin in the H1625 Control window to "0". (See [Figure 6-21](#).)
2. Use Fiery to set the spacing and margins needed both around and between each image in the file.

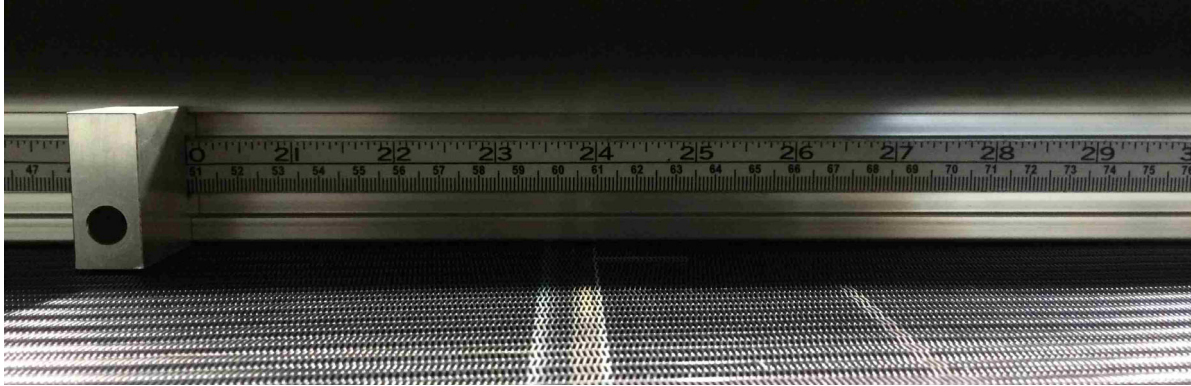
## 6.9 Printing Double-sided

*Double-sided printing on a Hybrid style printer has never been an exact application. There are many factors that effect placement of an image on your to-be-printed media. This section can help guide you to easily produce acceptable double-sided prints. Although not perfect, if done correctly, you can produce double-sided prints at an accuracy of up to 1/32" side-to-side.*

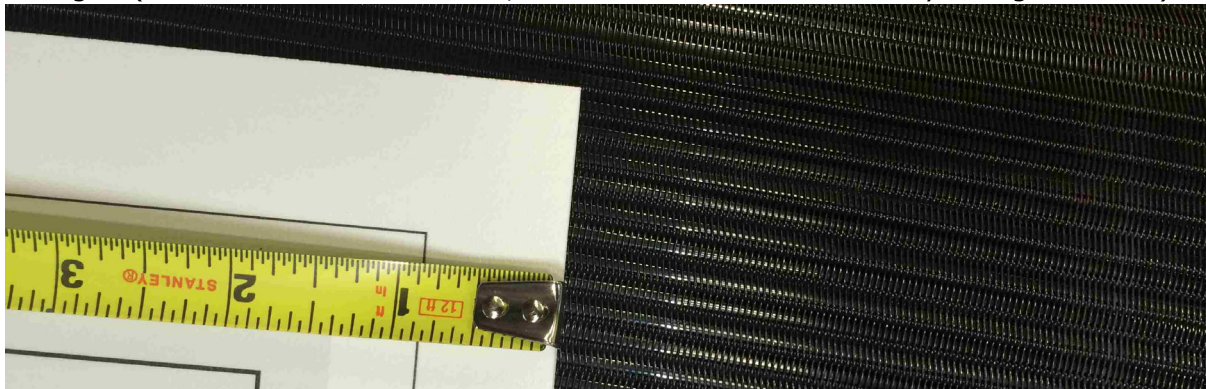
1. Find the media size and image size to be printed on your selected media.
2. Lower the fence and align the media to the center of belt. For example, if the media is 24" wide, align the left edge to 20" on the fence. This puts the center of your media at 32", which is the center of the belt.



- Slide your alignment block to the left edge position (in this case the 20" mark) and use this as your stable left edge guide.



- Set your media gap.
- Scan your media. This gives the exact size of the media and the exact left edge position.
- Change your margins to center your image onto your board. For example, a 22"x22" image on a 24"x24" board would be a 1" top and 1" side margin.
- Print your first side.
- Measure each side margin. (Boards are never cut exact, so we must know how far off your right side is.)



- Flip your board and carefully load it in the same place as the first side.
- Change your margin to reflect the difference measured on the first side. For example, if your right edge on the first side came up as 1.03", add that 0.03" to your margin setting.
- Print the second side.

If all of your math was accurate and everything was loaded correctly, your second side print should be aligned up to  $1/32$ ". EFI always recommends adding bleeds to compensate for any skew or shift. Cut media is never perfectly sized, so you must allow for some differences. The operator always has control of the accuracy of double-sided prints and will learn to master this process the more it is utilized.



# 7.0 Procedures for Replenishing Ink

This chapter describes basic ink replenishing procedures for the H1625 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 Parameters 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](#)) On H1625 Printers without white ink, the Recirculation check box is disabled.

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. (See [7.1 Use Remainder Ink.](#))

3. Open a new container and put it in place of the spent container.
4. Carefully reinstall the ink container cap and ensure it is properly secured.

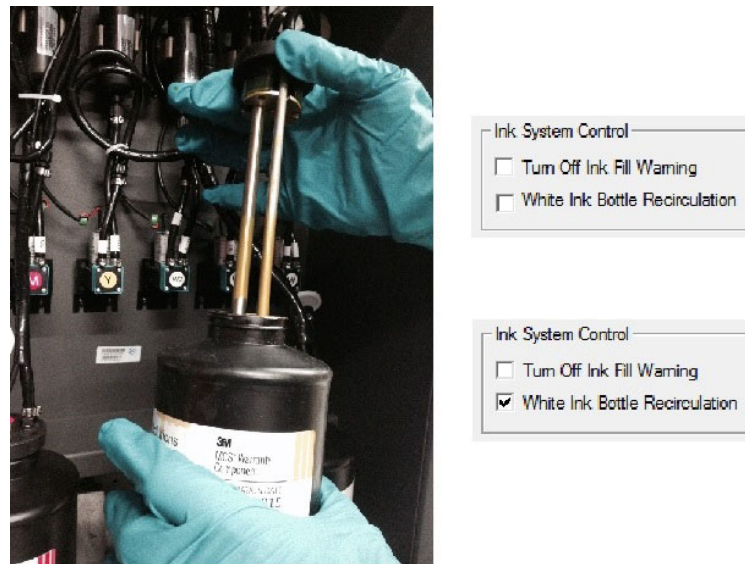


Figure 7-1: Replenishing Ink



## 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.

1. Agitate the old ink bottle.
2. Pour the remaining ink from the old bottle into the ink bottle currently installed on the machine.
3. Agitate the ink bottle installed on the printer.
4. 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.

## 8.0 H1625 Maintenance and Print Head Care

*This chapter contains descriptions of some key maintenance procedures that operators are required to perform on the H1625 Wide Format Printer. Complete descriptions of the maintenance items are provided in the Maintenance Guide (OMM-00074, H1625 Maintenance Guide) at: <https://inkjet.support.efi.com/doc.php?doc=2388&id=49>*

### 8.1 Maintenance Documentation

*The Maintenance Guide provides a comprehensive list and complete descriptions of the maintenance items required to properly maintain the printer.*

#### 8.1.1 Maintenance Guide

*The maintenance guide contains maintenance procedures that are performed every 4 hours of operation, or are daily maintenance, weekly maintenance, monthly maintenance, quarterly maintenance, semi annual maintenance, and annual maintenance items.*

#### 8.1.2 Maintenance Log

*The maintenance log provides a means for tracking the performance of each task. The log must be kept current. If a service visit is required, the field service engineer reviews the log to ensure proper maintenance has been conducted.*

## 8.2 Print Head Care

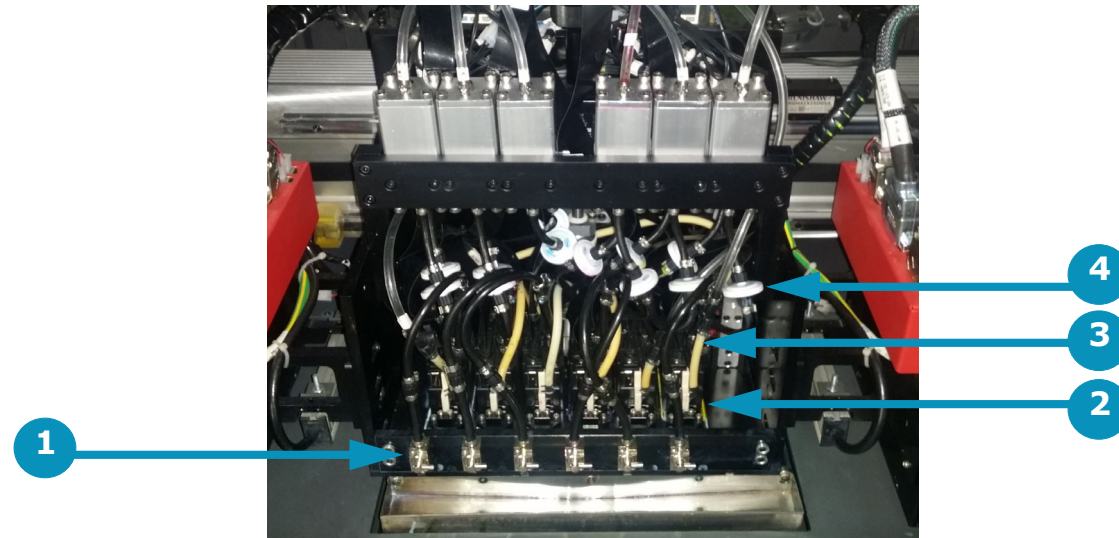
*Print head care for the H1625 Printer is limited. The print heads should function properly at all times if they are kept clean and properly bled of any air that might enter the print head. To ensure proper operation of print heads, follow the print head care procedure defined below:*

### 8.2.1 Bleeding Print Heads

*Bleed print heads only as needed.*

1. Raise carriage, wipe carriage plate.
2. Wait approximately 10 minutes for heads to come to temperature.
3. Lower carriage and perform a “bleed” procedure.
4. Purge the print heads manually at the carriage home station or automatically using the printer software.
5. Run a nozzle check. If print heads function properly, bleed process is complete. If ink drop out appears in the test print, there may be air in the lines or print heads. Continue with steps 6-10, below.

**Note:** If printer has not been used for a day or longer, repeat above procedure, Run prints with lots of colors to exercise print heads. Repeat above process again. Print heads should then operate properly.



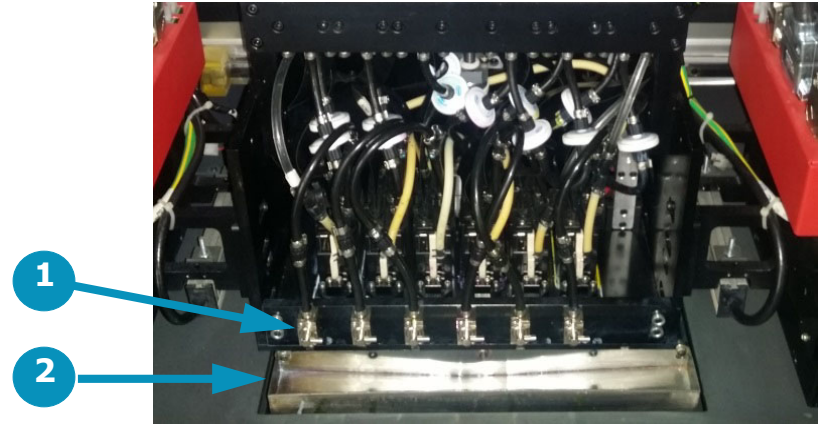
**Figure 8-1: Typical Print Head Configuration**

Item	Description	Item	Description	Item	Description
1	Ink Bleed Valves	2	Typical Print Head	3	Coolant Line
4	Secondary Filter and Ink Feed				

6. Using the special bleed valve tool (P/N 45117492), open the bleed valves, press the Purge button, and bleed print heads one at a time.
7. Allow the ink to run until it shows no sign of air bubbles. Ink runs into the trough and down into the cyclonic vacuum system.
8. After completion, ensure all valves are tightly closed.
9. Perform another purge and sweep the heads.
10. Re-run the Nozzle Check test print until satisfied that the print heads are firing properly.



**Figure 8-2: Bleed Valve Tool (P/N 45117492)**



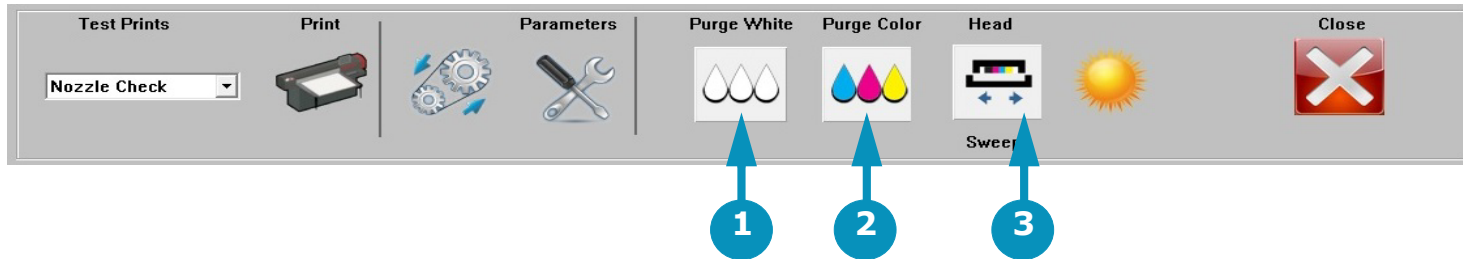
**Figure 8-3: Bleed Valve and Trough**

Item	Description
1	Bleed Valve
2	Trough

## 8.2.2 Ink Purge Procedures

The print heads should be purged and a head sweep should be performed in one of two ways:

1. a. From the H1625 Control screen, choose the Purge White icon to white print heads (or alternate non-CYMK colors on H1625 printers without white ink). The system automatically follows this up with a head sweep.
- b. From the H1625 Control screen, choose the Purge Color icon to purge the CMYK print heads. The system automatically follows this up with a head sweep.



**Figure 8-4: Purge and Sweep Icons on H1625 Control Screen**

Item	Description	Item	Description	Item	Description
1	Purges white (or other non-CYMK) ink and conducts a head sweep	2	Purges CMYK ink and conducts a head sweep	3	Conducts head sweep

2. Use the manual Ink Purge buttons located in the carriage HOME compartment (See [Figure 8-5](#)). Then follow up with a head sweep performed from the H1625 Control screen.



**Figure 8-5: Manual Ink Purge Buttons (H1625 White Ink Printer Image Shown)**

Item	Description	Item	Description	Item	Description
1	Purges CMYK ink	2	Liquid Separator: empties the cyclonic vacuum system	3	Purges white (or other non-CYMK) ink. (Label changes for non-white ink printers.)

## 8.2.3 Clean Print Heads

*Print Heads should be cared for and cleaned at the end of each shift or after each 8 hours of printer operation, to remove any ink that is curing on the jets.*

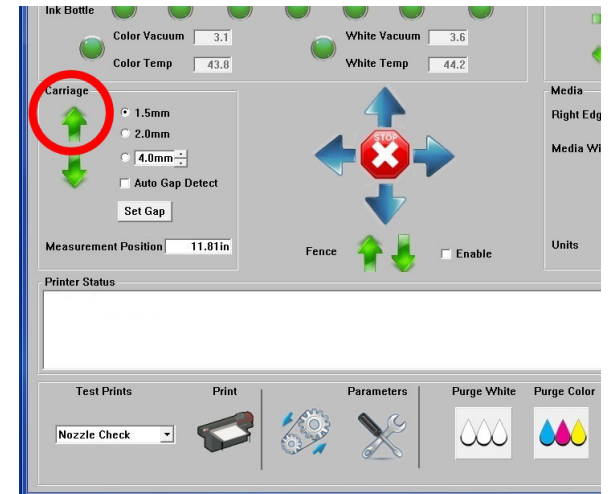
1. Use the Up arrow on the H1625 Control screen to raise the carriage.
2. Put on nitrile protective gloves.

**Note:** Be certain to clean the jet plate prior to cleaning print heads. The jet plate should be cleaned before you wipe the print heads in order to avoid pulling ink from the jet plate onto the heads. Alcohol should not be applied anywhere in the vicinity of the jets or jet plate as it will immediately destroy jets.

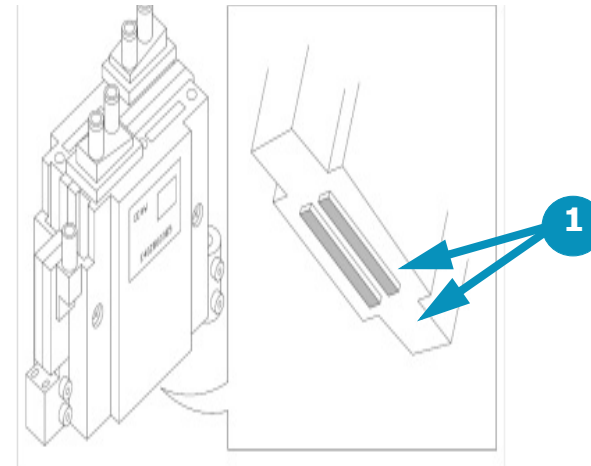
3. Prepare a set of 6 clean wipes (for 6 print heads) and uncontaminated flush to use for print head cleaning..

**Caution! Any contamination of wipes or flush can damage your print heads. When cleaning print heads, be sure to:**

- Use only wipes that have been double-bagged or sealed for cleanliness.
- Only use flush that is completely free of contaminants.
- Use a new wipe for each print head.

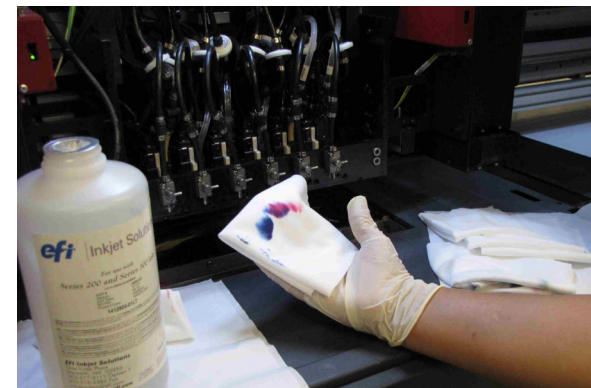


4. Fold a lint-free wipe in quarters and saturate with clean flush. Then reach under the carriage jet plate to locate the back of the print head to be cleaned.
5. Align two fingers with the jet bottom and press gently against the jets.



Item	Description
1	Jet Surfaces to Contact

6. Pull the wipe forward across the bottom of the jets in ONE motion, cleaning the jet surface.



**Caution! Do NOT RUB the jets.** One smooth wipe forward should be all that is required. If print head requires additional cleaning, use a new clean wipe, saturate it with flush, and repeat the single-wipe process. Rubbing will damage the jets.

7. Discard each used wipe and pick up a new one before continuing to the next Print Head.
8. Repeat process for each print head.

**Note:** Clean jet plate again after all print heads have been wiped, to remove any ink that may have transferred to the plate during head cleaning.



# 9.0 H1625 Sleep Mode/Shutdown Procedures

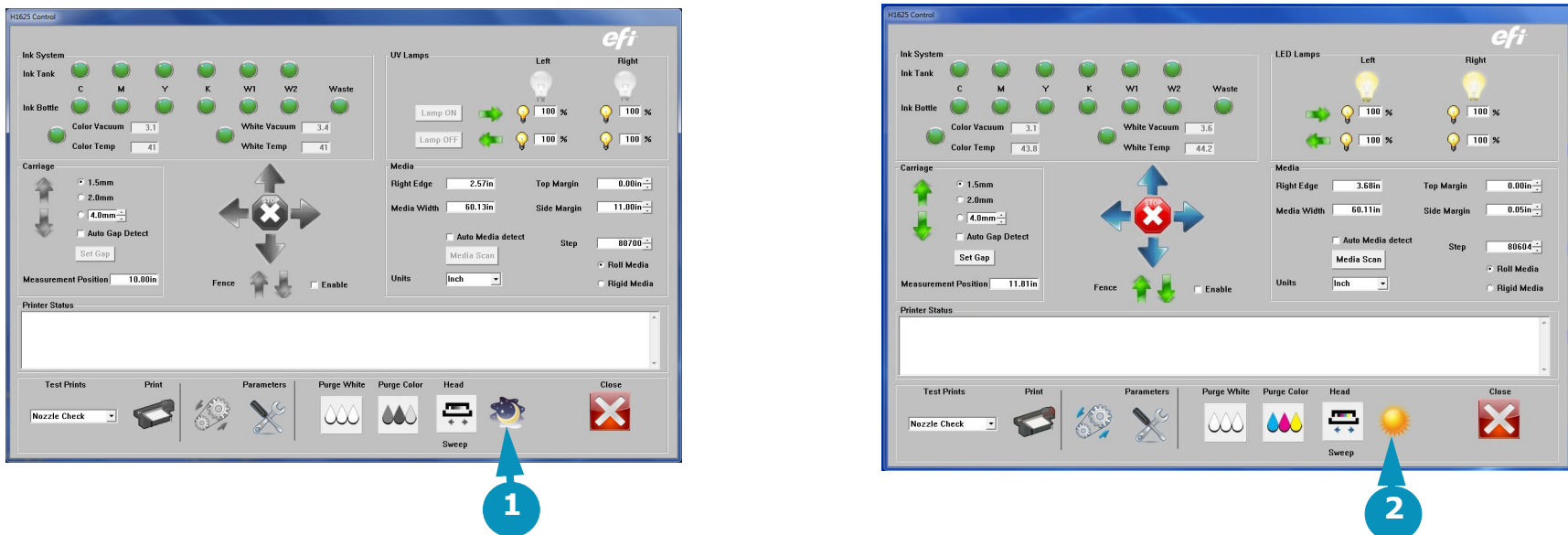
This chapter describes H1625 Wide Format Printer sleep and shutdown procedures for the overnight, short term (1 - 3 days), and long term (4+ days). Those procedures are described in the sections that follow:

## 9.1 Overnight Sleep Mode

EFI recommends that sleep mode be used for overnight shutdown of the H1625. Set the printer into sleep mode as follows:

1. Send Carriage to "Home" position. LED lamps shut off automatically.
2. Turn off platen vacuum using the vacuum foot pedal.
3. Ensure rolled media handling systems are off.
4. From the H1625 Control screen, click on the sun icon.  
The Control screen becomes grayed-out and the moon appears. The printer is now in sleep mode.
5. Turn monitor off.

**Note:** When suspending print operations for the night or the weekend, it is recommended that the daily maintenance procedures be performed prior to shutdown. See the H1625 Maintenance Guide for daily maintenance procedures.



**Figure 9-1: H1625 Control Screen Printer Mode (Asleep/Awake) Icon**

Item	Description	Item	Description
1	"Moon" icon = Printer is Asleep	2	"Sun" icon = Printer is Awake

### 9.1.1 Heat and Water Recirculation During Printer Sleep

*H1625 printers go to sleep either automatically when the timer expires in idle mode or manually when a user puts the printer into sleep mode. (See steps in section [9.1 Overnight Sleep Mode](#))*

When the printer goes into sleep mode, the heater and water circulating pumps continue to run normally. They constantly maintain the water temperature that was set in the printer software, throughout whole sleep period, except when the printer software is not minimized, in which case the printer maintains the working temperature setting, not the water temperature setting.

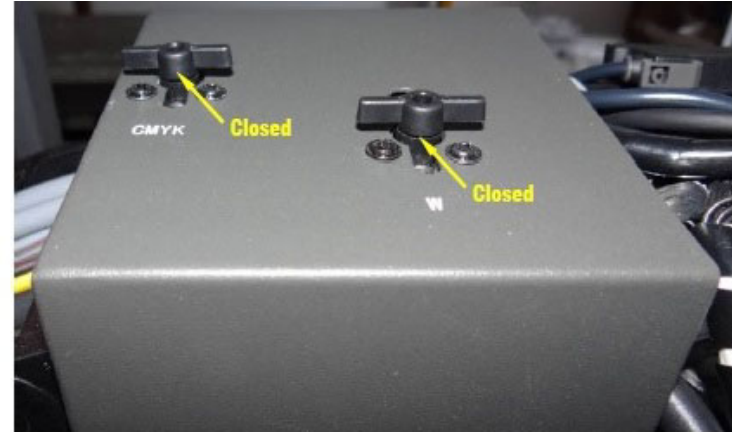
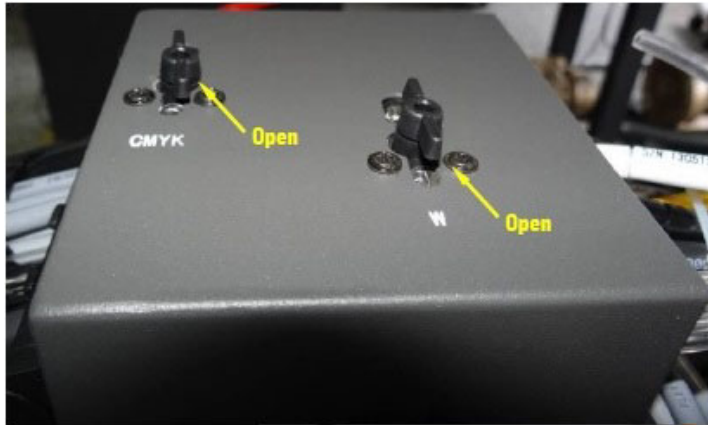
Automatic Sleep Mode minimizes the printer software after about 3 minutes, while Manual Sleep Mode automatically minimizes the software screen after about 3-9 minutes.

## 9.2 Short-Term Printer Shutdown

*It may be necessary to power off the printer for short periods of time (1-3 days) to perform maintenance.*

**Caution!** Power off the printer only when necessary.

1. Power off the media vacuum blower using the switch located in the computer compartment of the printer.
2. Ensure that the H1625 Control screen has been closed.
3. Turn off both the CMYK and white negative pressure valves located on the top left side of the carriage. This prevents the ink from dripping from the heads while the power is off.



**Figure 9-2: Negative Pressure Valves**

**Note:** If power will be left off for longer time periods, additional startup steps will be required.

4. Power off the printer using the main breaker switch in the computer compartment of the printer.
5. Turn off the other breakers in the computer compartment of the printer.
6. The printer is now powered off.

**Note:** Optional- Turn off the computer and monitor or restart the computer as needed.

## 9.3 Long-Term Printer 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 or more days. Power off the printer only when necessary.*

1. Use the H1625 Control screen to raise the carriage.

### Negative Pressure

2. Shut down the printer leaving the negative pressure valves open.
3. Open the ink protect tank LUER fitting covers to release the negative pressure.
4. Allow the ink to drain completely from the secondary ink tanks.

### Print Heads

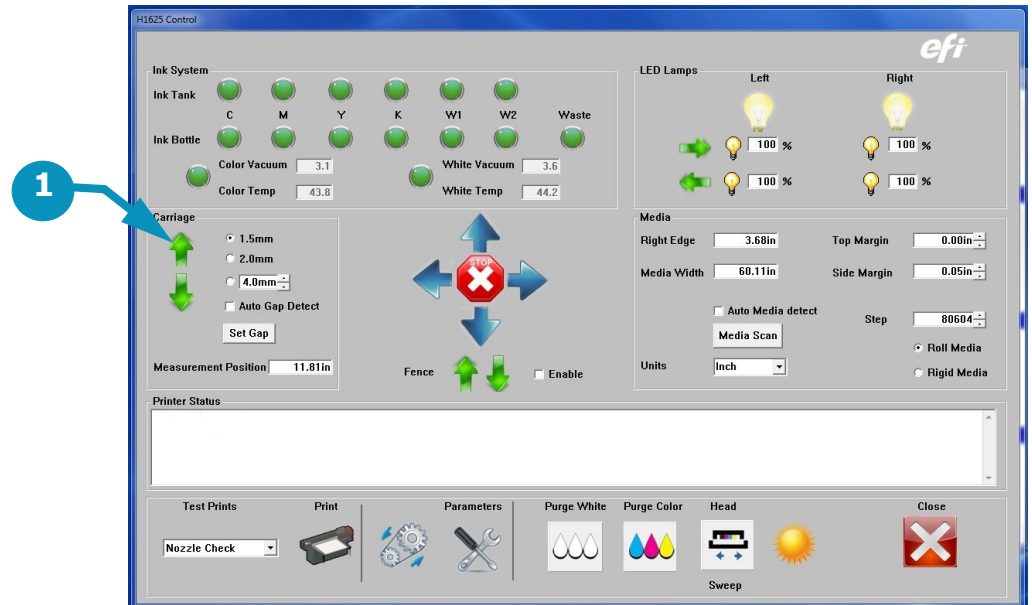
5. Flush the print heads.
6. Clean the carriage plate and print heads with flush and lint free wipes. (See [8.2.3](#) for the procedure.)

### Coroplast

7. Cut a piece of coroplast to the size of the carriage plate.
8. Cover the piece of coroplast with lint free wipes at least 4 deep and soak with flush.
9. Place this piece under the carriage and use the manual knob to lower the carriage so the carriage contacts the wipes at all points.

### Waste Container

10. Ensure that the waste bottle is empty.



Item	Description
1	Up Arrow Raises Carriage

## 9.4 E-Stop Conditions

Emergency stops are installed at each end of the H1625 printer. These should be used **only** when there is an emergency condition. E-Stops should not be used to shut off the machine under normal conditions.



Figure 9-3: Typical E-Stop

### 9.4.1 Activating E-Stop

To activate an E-Stop, press any red E-Stop button ([Figure 9-3](#)). This shuts off power to all printer systems. Then do the following:

1. Resolve E-Stop condition.
2. Move carriage to the "Home" position.
3. Shut off main breaker.
4. Reset all E-Stops. (To reset an E-Stop, press down and rotate the knob counter-clockwise. Release the downward pressure and let the red knob spring up)
5. Turn main breaker back on.

### 9.4.2 Restarting After E-Stop

Perform the steps below to restart the printer after an E-Stop.

1. Ensure the condition that caused the emergency is resolved.
2. Manually return the carriage to the "Home" position if it is not there.
3. Reboot the computer and turn on the monitor.
4. Make sure the Printer Control Utility has restarted.
5. Check each E-Stop switch and release the knob if it is engaged.
6. Power on the printer main breaker.
7. Power on the system switch.

**Warning:** Ensure that there is no one in the way of the printer mechanics.

## 9.5 Power Outages

*If power outages occur frequently at the printer site, it is advisable to install a UPS system. The UPS system must be installed on the main power to the printer and must conform to Printer Power Requirements.*

### 9.5.1 Power Outage During Printing

1. Turn the CMYK and White air valves to the **OFF** position.
2. Reposition the carriage over the maintenance station, making sure that the carriage is positioned properly at the carriage home position.
3. Turn **OFF** the media vacuum switch, the system switch and the printer main breaker.

### 9.5.2 Power Outage While Printer is Idle and Attended

1. Turn **OFF** both the CMYK and White air valves.
2. Power **OFF** the media vacuum switch, the system power switch, and the printer main breaker.

### 9.5.3 Power Outage While Printer is Idle and Unattended

*If a power outage occurs while the printer is idle and unattended, the printer may drip ink into the maintenance tray. If the power is restored while the printer is unattended, the printer reboots but remains in the idle position. Refer to Initial Startup Procedures for start-up instructions (section [Full Printer Startup From Power Down](#)).*

# Index

## A

About This Guide 9  
Active Safety Dialog 38  
Additional Support 10

## B

Bleed and Purge Print Heads 108

## C

Customer Resources 10

## E

EFI Print Control Utility 46  
Emergency Stop 20, 107  
Emergency Stop Push Button(s) 11  
E-Stop Condition and Reboot 117

## F

Front Access Panels and Shields 12

## G

General Safety 11, 20, 74, 83, 105, 107, 113  
Guide Conventions 10

## H

H1625 Control Screen (GUI) 55  
H1625 Shutdown /Startup Procedures 113

## I

Initial (Morning) Startup 115  
Introduction 9

## L

LED UV Lamps 27

## M

Main Carriage Beam Assembly 41  
Main Screen 46

## O

Objectives 9  
Operator Station Components 30  
Other Hazards and Precautions 18  
Overnight Sleep Mode 113

## P

Platen Vacuum Controls 29

Print 47

Print Head Care 108

Printer Front Components 20

Printer Overview 20

Printer Rear Components 38

Printer Safety Labels (Rear) 17

Printer Shutdown and Cold/Warm Start – Short Term 115

## R

Rear (Feed) Rolled Media Handling System 42

Rear Access Panels and Shields 14, 15

Rigid 43

Rigid Media Fence 43

## S

Safety Interlocks, Covers and Guards - Rear 38

## U

UV Light Hazards 19