

MelcoJet FP-125 Printer User Manual (v. 4.0)

# MelcoJet

**FP-125**

**PRINTER USER MANUAL (V. 4.0)**

**PART NUMBER 33854**

# MelcoJet FP-125 Printer User Manual (v. 4.0)

<b>ABOUT THIS MANUAL</b>	<b>4</b>
<b>SECTION 1</b>	<b>6</b>
CHAPTER 1 PRODUCT INFORMATION	6
<i>Figure 1.1 MelcoJet Printer</i>	6
<i>Printer Specifications</i>	6
<i>Figure 1.2 Hygrometer</i>	7
<i>System Requirements</i>	8
<i>Computer Interface Requirements</i>	8
CHAPTER 2 OVERVIEW OF CONTROLS	9
<i>Power Switches</i>	9
<i>Control Panel</i>	9
<i>Keys</i>	10
<i>LED Lights</i>	11
<i>LCD Display</i>	12
<i>Star (★) Menu</i>	14
<i>Ink Cartridge Status LEDs</i>	16
<b>SECTION 2</b>	<b>17</b>
CHAPTER 3 GETTING STARTED	17
<i>Training requirements prior to setup</i>	17
<i>Unpacking</i>	18
<i>Additional Items</i>	19
<i>Setup</i>	19
1. <i>Determine a location for your printer</i>	19
2. <i>Remove remaining packing</i>	19
3. <i>Level the printer</i>	20
<i>Figure 3.1 Leveling near side of printer</i>	20
<i>Figure 3.2 Leveling far side of printer</i>	20
4. <i>Power up (main power)</i>	21
<i>Figure 3.3 plugging in the power cord</i>	21
<i>Figure 3.4</i>	21
5. <i>Installing Bulk Ink Cartridges (deciding what option is right for you)</i>	22
<i>Chart 3.5 Setup/Initial Ink Cartridge</i>	22
<i>Figure 36 Ink Bay LEDs</i>	23
6. <i>Install Printer Software</i>	24
<i>Figure 37 message indicating complete power up of print engine</i>	24
<i>Figure 3.8</i>	25
7. <i>Removal of shipping fluids</i>	26
<i>Figure 3.9</i>	26
CHAPTER 4 PRINTER OPERATION	27
<i>Printing Procedure</i>	27
1. <i>Power up sequence</i>	27
<i>Figure 4.1 Main power on LCD message</i>	27
<i>Figure 4.2 Print engine power up complete</i>	28
2. <i>Select a Garment</i>	28
3. <i>Adjust table height</i>	29
<i>Figure 4.3 Print table positions</i>	29
<i>Figure 4.4 Print table adjustment diagram</i>	30
<i>Figure 4.5 View of print table from tray height</i>	31
4. <i>Ink Test Pattern</i>	32
<i>Figure 4.6</i>	32
<i>Figure 4.7</i>	33
5. <i>Load the garment</i>	34
<i>Figure 4.8 Print table diagram</i>	34
<i>Figure 4.9 Desired origin with 8.5" x 16"</i>	35

# MelcoJet FP-125 Printer User Manual (v. 4.0)

6. Select your graphic	36
7. Adjust print settings	36
Figure 4.10 Print preview window	37
Figure 4.11 Page Setup window	37
Figure 4.12 Print preview window / position	38
Figure 4.13 Printing Preferences Window	39
8. Send print job to printer	40
9. PRINT	40
10. Remove garment from printer	41
11. Set the ink to the garment	41
12. Power down sequence	41
CHAPTER 5 PRINTING ON BLACK GARMENTS	42
Black garment printing process	42
1. Pretreatment	42
2. Drying pretreatment	43
3. RIP software and transparent backgrounds	43
4. EK Print Studio	45
5. Printing with white ink	45
6. Heat press settings	46
7. Dark garment washing recommendation	46
<b>SECTION 3</b>	<b>47</b>
APPENDIX I MAINTENANCE AND TRANSPORTATION	47
Replacing Ink Cartridges	47
Switching from Color to White Ink	50
Cleaning Maintenance Station and Nozzle Plate	51
Waste Ink Bottle and Ink Drip Foam	56
Waste Ink Count Reset	57
Cleaning the Printer	59
Maintenance/White Ink	59
Print Utilities	61
Checking the Nozzle Check Pattern	61
Printhead Alignment	62
Printer Port Test	63
Print Nozzle Purge by Printhead	63
Transporting the Printer	64
APPENDIX II -TROUBLESHOOTING	66
The print engine does not turn on	66
The printer does not print anything	67
Prints are not what you expected	69
Print quality	71
Color image is printing in black only	72
Printing is very slow	73
As soon as the PRINT key is pressed, the obstruction sensor is triggered	73
Print table does not travel all the way to the front or rear	74
Broken LCD display characters or garbled characters	74
The Printhead nozzles are clogged	75
<b>AUTO SYSTM MAINTENANCE or RENEW INK SYSTEM</b>	76
Obstructions during printing	76
Obstruction sensor laser adjustment	77
Communication and USB related problems	78
Cable problems	80
Reseating damper retainer (ink chip holder)	80
Common error codes	81
APPENDIX III GENERAL INFORMATION	82

# MelcoJet FP-125 Printer User Manual (v. 4.0)

## About this Manual

Thank you for choosing Melco for your direct to garment printing needs! This manual is intended to provide you with basic information about your MelcoJet and to be used as a reference in the event that you need quick answers to general questions. **Technical Support is available to you at 1-877-840-5829** and can provide you with assistance on more detailed or advanced technical questions. We encourage you to call us for any of your needs and look forward to helping you!

This manual is broken into three general sections that group related topics of information together for easy reference:

Section 1 - general product overview including technical specs and basic controls

Chapter 1 *Product Information*  
Chapter 2 *Overview of Controls*

Section 2 - basics on general setup and printing operation

Chapter 3 *Getting Started*  
Chapter 4 *Printer Operation*  
Chapter 5 *Printing on Black Garments*

Section 3 - general maintenance, troubleshooting, and consumable goods

Appendix I *Maintenance and Transportation*  
Appendix II *Troubleshooting*  
Appendix III *General Information*

This manual is a great companion to onsite or in-class training but does not replace training. The keys to your success are in having a complete understanding of what your MelcoJet printer is capable of, how to maintain it and how best to approach the printing projects you intend to tackle. In-class and onsite training will get you to where you need to be with the least amount of trouble and Melco encourages you to attend training. Contact us at [www.Melcouniversity.com](http://www.Melcouniversity.com) to learn more about the different training options available to you.

In this manual you will see indicators that inform you of very important tips and critical information. This information will be in bold, caps and be preceded or followed by a cautionary symbol to help you easily identify them.

**!** **TEXT APPEARING IN THIS FORMAT INDICATES CRITICAL INFORMATION AND SHOULD BE CAREFULLY READ AND FOLLOWED.**

# MelcoJet FP-125 Printer User Manual (v. 4.0)

*Section 2* of this manual has been written in a specific format to help you in a step by step approach to perform basic printing functions. Information is presented in an “Overview/Quick Reference” format then more detailed information on each step is provided immediately after. The intent is to give you a functional reference guide in addition to the step by step process. Information in *Section 2* will appear like this:

## EXAMPLE:

### “Overview/Quick Reference:

1. *Determine a location for your printer*
2. *Remove remaining packing materials*
3. *Level printer*
4. *Power up*
5. *Install Ink Cartridges*
6. *Install Software*
7. *Initial Ink Charge*

### Detailed Steps:

1. Determine a location for your printer

*It is important to select the proper location for operating your printer. You should find a room that can be climate controlled (humidity is a key factor in function of your printer), has space for your printer, heat press, humidifier (if applicable) and general work space free of clutter. The printer should be located on a sturdy...*

**!** - **NOTE ON GRAPHICS PROGRAMS** - This manual does not cover the graphics programs that you may have chosen to use with your printer. These programs are an important factor in quality printing and we recommend that you become familiar with your chosen program prior to printing to maximize your print quality.

We are pleased to have you as our customer and we are here for you for all of your needs, whether it be technical in nature or supplies for your business, we care about you and look forward to hearing from you. Thank you for choosing Melco!

**Let's get started!**

## Section 1

### Chapter 1 Product Information

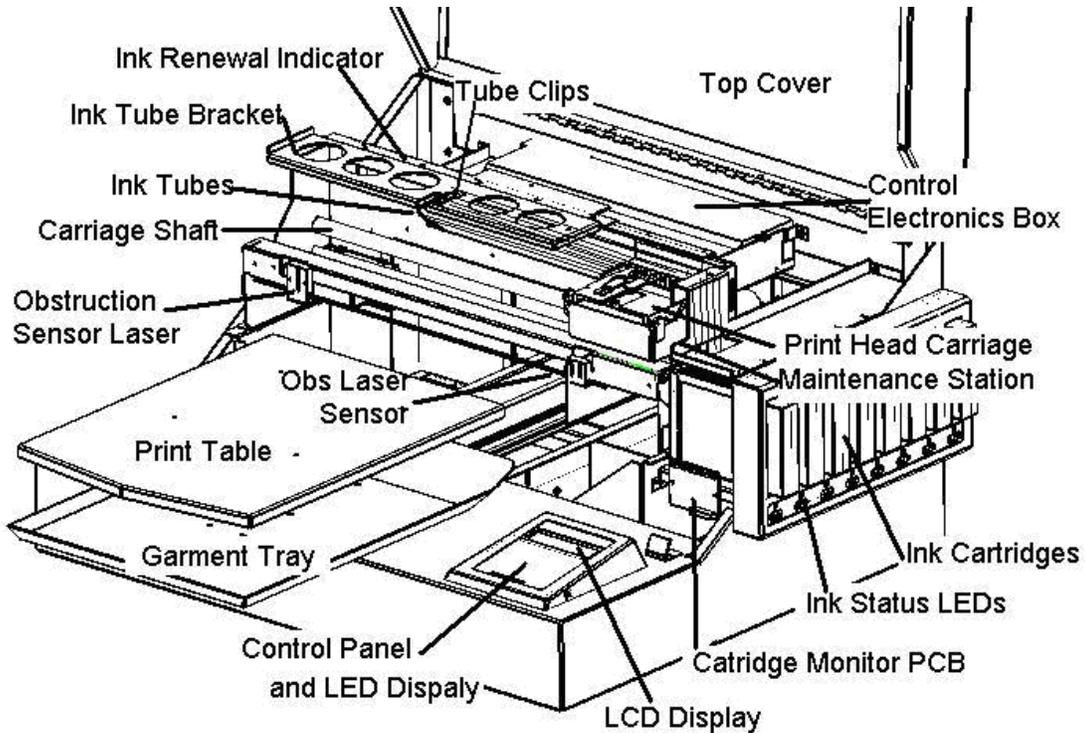


Figure 1.1 MelcoJet Printer

### Printer Specifications

<b>Printing Method:</b>	Direct to Garment Inkjet printing
<b>Print Engine and Printhead Technology:</b>	Epson Print on demand Piezo-electric inkjet
<b>Printing Resolution:</b>	720 dpi x 720 dpi
<b>Number of Ink Channels:</b>	8
<b>Printable area:</b>	12.5" x 16.0" (31.72cm x 40.64cm) Print Table
<b>Mechanical:</b>	
Garment loading method:	Print Table
Garment Path:	Shuttling Print Table
Ink Supply:	Replaceable Bulk Ink Cartridges
Printer Dimensions:	29.8" x 33.7" x 14.9" (76cm x 86cm x 38cm)
Table Height Adjustment:	Up to .6" (1.52cm)
Weight	Approx. 72 lbs (33Kg)

# MelcoJet FP-125 Printer User Manual (v. 4.0)

## Electrical:

	120 V Model (FP125A)	220V Model (FP125B)
Input Voltage Range	110 – 132 V	212 – 245 V
Input Frequency Range	50 – 60 Hz	50 – 60 Hz
Power Consumption	1.0 A (average) .15 A (idling)	.5 A (average) .08 A (idling)

## Environmental:

Temperature (printer): Operation: 61°F to 90 °F (16°C to 30°C)  
Storage (no ink): 14° F to 104° F (-10°C to 40°F)

Temperature (inks): 41°F to 90°F (5°C to 32°C)

Humidity (printer): Operation: 50 to 80% RH, non-condensing.  
Storage: 20 to 85% RH, non-condensing.

It is especially important to meet the Relative Humidity (RH) requirement for good ink flow. If the environment is dry (below 50% RH) the risk of ink drying at the Printhead nozzles subsequently clogging the Printhead is high. (**!** - **A CLOGGED PRINTHEAD DUE TO THIS CONDITION IS NOT COVERED UNDER MANUFACTURERS WARRANTY. IT IS UP TO THE OWNER/USER TO PROVIDE NECESSARY RH CONDITIONS**). Keep an electronic hygrometer close to the printer, preferably on the tray below the print table. Inexpensive electronic hygrometers are available in electronic stores, department stores as well as hardware stores, but they may be inaccurate. Most electronic hygrometers are accurate at mid to high humidity range, but show inaccuracy below 40% RH. It will be necessary to have them calibrated regularly. Figure 1.1 is an example of an electronic Hygrometer.



Figure 1.2 Hygrometer

# MelcoJet FP-125 Printer User Manual (v. 4.0)

## System Requirements

The MelcoJet printer is designed to be used with a PC running Windows XP. That means you must have Windows XP operating system on your PC. The programs needed to run your MelcoJet printer do not work with Apple computers or with any PC on any operating systems other than Windows XP. There are no specific hardware requirements to run the print program, but to run the optional black garment printing RIP program and typical graphics programs used for apparel decoration applications such as Photoshop and CorelDraw, the following hardware specifications are suggested.

<b>Minimum System</b>	<b>Recommended System</b>
Pentium 4, running at 1GHz	Pentium 4, running at 3.0+ GHz, or Pentium Duo Core, running at 2.0+ GHz
500 MB of RAM	1+ GB of RAM
10 GB of free Hard Disk space	20+ GB of free Hard Disk space
VGA Monitor	1024x768 + Resolution Monitor
USB 2.0 ports	USB 2.0 ports

The amount of memory required varies depending on the number and kinds of application programs open. The more memory (RAM) you have the more efficiently your programs will run. Generally speaking, the best payback of your computer investment dollar will come from more memory. In a tight budget situation, allocate more money to memory upgrade. 1GB is desirable, but 2+ GB is ideal for graphics printing applications.

## Computer Interface Requirements

Your computer must have USB 2.0 ports to connect to MelcoJet printer using the provided USB cable.

In the event the firmware in your printer needs updating, firmware programming is also done through a USB 2.0 port. The same USB port on your computer used for running printing operation can be used for firmware programming.

## Chapter 2 Overview of Controls

The intention of this chapter is to provide an overview of MelcoJet controls for reference only. SETUP and initial power up is covered in chapter 3.

### Power Switches

The power is controlled by two switches: The main power switch and print engine power key. The main power switch is on the rear right side. The printer comes configured either as 110V printer (Model FP-125A) or 220V printer (Model FP-125B). Make certain that your printer power specification matches your wall AC outlet power level.

When the main power switch is turned on it will power the printer's mechanical and garment moving system. The control panel LCD will display "MODEL FP-125 Vx.xx / PRESS POWER KEY". This indicates that the main power switch is on however the print engine is not. Press the POWER key below the LCD display on the control panel to turn on the print engine.

The power down sequence is the exact opposite. **!** - **ALWAYS PRESS THE POWER KEY ON THE CONTROL PANEL BEFORE TURNING OF MAIN POWER.** After the print engine is completely powered down, the LCD will display "POWERED OFF". Shortly the display will change to "MODEL FP-125 / PRESS POWER KEY". You can switch off the main power switch in the rear of the printer once this message is displayed.

**!** - **IT IS RECOMMENDED THAT THE PRINTER AND PRINT ENGINE REMAIN ON AT ALL TIMES EVEN WHEN NOT IN USE.** Keeping the power on enables the printer to perform periodic automated maintenance routines that help prevent the Printhead from drying out.

### Control Panel

The MelcoJet FP-125 Control Panel consists of a 20 character by 2 line LCD display, 9 keys and 4 LED indicator lights.



# MelcoJet FP-125 Printer User Manual (v. 4.0)

## Keys

	Turns on or off power to the print engine. The POWER key will not be functional unless the main power switch in the rear of the printer is already turned on.
	Moves the Print Table back and forth. Pressing it while the Print Table is moving will stop the table. Pressing it again will move the table in the opposite direction. The print table will automatically stop when it reaches the home or loading positions.
	Initiates the printing operation. When the green Ready LED above the PRINT key lights up, the printer is ready to print. When the Ready LED is not lit up, pressing the Print key does not perform any function.
	The Up Arrow key is used to navigate the menu displayed in the LCD display.
	The Down Arrow key is used to navigate the menu displayed in the LCD display.
	The Return key is used to navigate the menu displayed in the LCD display. This key is used to print both passes.
	Is only used in one of two menus and confirms the menu item currently displayed in the LCD. Every menu operation at every step requires entering the Enter key.
	Is used to cancel an operation, usually the Print operation.
	The Star key is used to call Star menu on the LCD display. Star menu are generally printer settings, such as Obstruction sensor setting, Audible signal setting, Ink Cartridge Monitor setting, etc.

# MelcoJet FP-125 Printer User Manual (v. 4.0)

## LED Lights

<p>POWER (green)</p> 	<p>ON indicates the power to the print engine is on.</p> <p>OFF indicates the print engine power is off.</p> <p>BLINKING indicates the printer is busy either receiving data from the PC, printing or performing maintenance. When the Power LED is blinking, do not press any key.</p>
<p>WAIT [error] (yellow)</p> 	<p>ON indicates that ink system is being renewed.</p>
<p>INK (red)</p> 	<p>ON if an ink cartridge is improperly installed.</p> <p>BLINKING if one or more ink cartridge is low or empty. Printer will continue to print, but it will give an audible sound and LCD display warning each time a print is completed.</p>
<p>READY (green)</p> 	<p>ON when the printer receives a job and is ready to print. If multiple print jobs are sent the Ready LED will go ON as soon as the next job is ready to print.</p>

# MelcoJet FP-125 Printer User Manual (v. 4.0)

## LCD Display

The LCD display is a 20 character x 2 line Liquid Crystal Display (LCD). It is back-lit for easy reading. Most instructions and messages are shown in this display. For menu items, different texts will be displayed depending on where you are in the menu tree. The basic LCD texts are shown below.

MODEL FP-125 V x.x PRESS POWER KEY	Printer model and firmware version. The print engine is not powered. Press POWER key to turn on the print engine.
PLEASE WAIT SYSTEM INITIALIZING	During print engine power up sequence.
MODEL FP-125 V x.x DOWN ARROW FOR MENU	Printer model and firmware version. The print engine is powered.
BUSY. MOVING TABLE TO LOAD POSITION	When the Print Table is moving to the garment load position (closest to operator).
PRINTER READY SEND JOB/PRINT KEY	Printer is ready to accept a print job from PC.
JOB READY: LOAD MEDIA, PRESS PRINT	When printer receives a job and is ready to print. Load garment and press PRINT key.
BUSY. MOVING TABLE TO HOME POSITION	After PRINT key is pressed, while Print Table is moving back to print start or home position.
PRINTER BUSY CANCEL KEY AVAIL	While printer is actively printing. Pressing CANCEL key will cancel the job. All other keys are non functional while printing.
JOB ABORTED WAIT TIL LED BLINK STOPS	After a job is cancelled by pressing the CANCEL key. Before taking any action, you must wait until the Power LED stops blinking. It can take some time as the print data in the PC has to be cleared.
OBSTRUCTION ERROR PRINT KEY WHEN CLEAR	When an obstruction is detected on the Print Table this display appears. Clear the obstruction on the Print Table and press PRINT key to resume the printing process.
WARMING UP... PLEASE WAIT	When printer is not used for more than 3 minutes, the printer goes into idle mode to save energy. It will take up to a minute for the printer to warm up to resume printing operation.
INK CART MISSING CHECK CARTRIDGES	When one or more of ink cartridges are missing.
CARTRIDGE NORMAL	When all cartridges are properly installed.
WARNING: INK LOW REPLACE CARTRIDGE	One or more ink cartridges are out of ink.

## MelcoJet FP-125 Printer User Manual (v. 4.0)

LOW INK RESOLVED	When the out-of-ink cartridge is replaced.
POWERING DOWN PLEASE WAIT	When POWER key is pressed to power down the print engine. Do not take any action and do not turn off the main power switch until the power down sequence has completed.
POWERED OFF	When the print engine power down sequence is completed.
AUTO SYS MAINTENANCE PLEASE WAIT	The printer is auto renewing its ink system. The Error [Wait] LED will blink.
RENEW INK SYSTEM	When the Error [Wait] LED comes on and LCD displays RENEW INK SYSTEM, you must renew the ink system.
PRESS ENTER AFTER 10 SECONDS	Wait 10 seconds while the printer is renewing ink system, then press the ENTER key.
INK SYS BUSY DO NOT TURN OFF	Do not press any keys until this message is gone and the Power LED stops blinking.
CLEAN PRINthead NOZZLE	A maintenance utility reachable by Down Arrow key. Press ENTER key to activate PRINthead CLEANING sequence.
AUTO PRINthead MAINTENANCE	A maintenance utility reachable by the Down Arrow key. Press ENTER key to access this utility then press the Down Arrow to set the auto Printhead cleaning frequency. (Minimum recommendation, every day)
HEAD CLEANING DO NOT TURN OFF	Do not press any key or turn off the power while Printhead cleaning operation is under way.
JOG PRINT TABLE	A utility reachable by pressing Down Arrow key. Press ENTER key. Then Down or Up Arrow.
JOG TABLE TOWARDS HOME	The Print Table moves toward home (print start) position for the duration of ENTER key press.
JOG TABLE TOWARDS LOAD	The Print Table moves toward load position for the duration of ENTER key press.

# MelcoJet FP-125 Printer User Manual (v. 4.0)

## Star (\*) Menu

The Star Menu is used for operator settings for printer parameters. Press star (\*) key on the control panel to reach star menu. To exit the star menu, press Return (↵) or CANCEL key.

LANGUAGE SELECTION	The LCD can display several languages besides English. Press ENTER key to access language selection. Up and down arrow keys to reach the language of your choice. When the right language is displayed, press ENTER key to set. If the language of your choice is still not implemented in the printer, it will revert to English display. It is planned to implement English, Spanish, German, French, Italian and Portuguese (Br ).
LANGUAGE ESPANOL	For example, if Spanish is the language of your choice, press ENTER key.
*GUARDADO* ESPANOL	The LCD will respond by displaying *SAVED* in native language (GUARDADO in case of Spanish). Exit the Star Menu by pressing Return (↵) key.
OBSTRUCTION SENSOR SETTING	Allows activation and deactivation of Obstruction Sensor. Press ENTER key to access the settings menu.
OBSTRUCTION SENSOR INSTALLED	Press ENTER key to activate Obstruction Sensor. The up or down key will access the Obstruction Sensor Not Installed menu. To exit, press Return or the Cancel key.
OBSTRUCTION SENSOR IN *SAVED*	When Obstruction Sensor is activated, this confirmation will display. To exit, press Return or the Cancel key.
OBSTRUCTION SENSOR NOT INSTALLED	Press ENTER key to deactivate Obstruction Sensor. The up or down key will access Obstruction Sensor Installed menu. To exit, press Return or the Cancel key.
OBSTRUCTION SENSOR OUT *SAVED*	When Obstruction Sensor is deactivated, this confirmation will display. To exit, press Return or the Cancel key.
AUDIBLE SIGNAL SETTING	Allows activation and deactivation of audible signals. Press the ENTER key to access the settings menu.
AUDIBLE SIGNAL ON	Press the ENTER key to activate audible signals. The up or down key will access the Audible Signal Off menu. To exit, press Return or the Cancel key.

## MelcoJet FP-125 Printer User Manual (v. 4.0)

AUDIBLE SIGNAL ON *SAVED*	When audible signals are activated, this confirmation will display. To exit, press Return or the Cancel key.
AUDIBLE SIGNAL OFF	Press the ENTER key to deactivate audible signals. The up or down key will access the Audible Signal On menu. To exit, press Return or the Cancel key.
AUDIBLE SIGNAL OFF *SAVED	When Audible Signal is deactivated, this confirmation will display. To exit, press Return or Cancel key.
INK BOARD SETTING	Allows activation or deactivation of Ink Cartridge status monitoring (i.e., cartridge not installed and cartridge out-of-ink). Press the ENTER key to access the settings menu. <b>!</b> <b>THIS SHOULD ALWAYS BE INSTALLED.</b>
INK BOARD INSTALLED	Press the ENTER key to activate Ink Cartridge status monitoring. <b>!</b> <b>INK CARTRIDGE STATUS SHOULD ALWAYS BE MONITORED.</b> The up or down key will access the Ink Board Not Installed menu. To exit, press Return or the Cancel key.
INK BOARD IN *SAVED*	When Ink Cartridge status monitoring is activated, this confirmation will display. To exit, press Return or Cancel key.
INK BOARD NOT INSTALLED	Press ENTER key to deactivate Ink Cartridge status monitoring. Up or down key will access Ink Board Not Installed menu. <b>!</b> - <b>Not recommended in normal conditions. Running the printer without proper ink supply will damage the printer.</b> To exit, press Return or Cancel key.
INK BOARD OUT *SAVED*	When Ink Cartridge status monitoring is deactivated, this confirmation will display. No recommended operation in a normal situation to avoid printer damage. To exit, press Return or Cancel key.
PRINT COUNTER XXXX	Shows the number of prints completed. The number will return to zero if a new version of firmware is installed.

## Ink Cartridge Status LEDs

When the system detects missing bulk ink cartridges or empty ink cartridges, the control panel Ink LED will turn on (missing ink cartridges) or blink (out-of-ink cartridges). A corresponding warning message will be displayed in the LCD as well.

When the control panel Ink LED is on or blinks, check the Ink Cartridge Status monitoring on the ink bay, which can be found on the right-hand side of the printer, below the ink cartridge bay. You can determine which cartridge needs replacement by checking the corresponding LED. The sequence of the ink cartridge slots in the bay and the ink status monitor LED panel are shown below.

Cart Bays	Bay 1	Bay 2	Bay 3	Bay 4	Bay 5	Bay 6	Bay 7	Bay 8
For White Garments Only	Yellow	Magenta	Cyan	Black	Yellow	Magenta	Cyan	Black
For White and Black Garments	Yellow	Magenta	Cyan	Black	White	White	White	White



The diagram shows a horizontal row of eight LEDs. Each LED is labeled with its color or combination of colors. From left to right: a yellow LED labeled 'YELLOW', a magenta LED labeled 'MAGENTA', a cyan LED labeled 'CYAN', a black LED labeled 'BLACK', a yellow and white LED labeled 'Y W', a magenta and white LED labeled 'M W', a cyan and white LED labeled 'C W', and a black and white LED labeled 'B W'. Each LED has a small red square below it, representing the LED indicator.

When the printer is configured for black shirt printing operations, the rear four bays (Yellow, Magenta, Cyan, Black) will be occupied by white ink cartridges. The red LEDs under each cartridge will light up when the ink cartridge is not installed or is not installed properly. The printer will not print with any missing ink cartridges as it will damage the printer if the Printhead is not supplied with adequate ink. Do not shut off the ink cartridge monitoring function in the star menu to avoid printer damage.

The LED will blink when the ink system detects an out-of-ink cartridge by a mechanical switch. When the system detects out-of-ink cartridge, it will continue to print. But it's the operator's responsibility to replace the empty cartridges as soon as possible. When the out-of-ink status is detected during a print job, there is usually enough ink to complete the current print. It is possible to print one more print, but it can run dry during the print. Do not risk the damage to the printer and replace the ink cartridge as soon as possible.

## Section 2

### Chapter 3 Getting Started

#### Training requirements prior to setup

Melco strongly encourages you to attend training prior to setup of your MelcoJet printer. We want you to experience the most out of your investment and want to provide you with as many options as possible to prepare you for printing with your MelcoJet printer. The best way to have all of your questions answered, prepare for use of your MelcoJet printer and avoid any failures of your equipment is to take advantage of the training available to you.

Training is important for two primary reasons. During training you will get information on important utilities and procedures for the setup process of your printer that cannot be covered to the extent needed in this manual. The manual's intent is for reference and not intended to supplement or replace the training that comes with your purchase.

The second reason we recommend you attend training prior to printing is there is risk related to allowing your printer to sit idle once the shipping fluids have been drained from the ink lines and Printhead. The shipping fluids are designed to retain the integrity of mechanical components and prevent "dry out" and "clogging" of critical and expensive components within your printer. Once removed and replaced with "ink" regular maintenance and use of your printer is required to avoid dry out or clogging of critical components. The ink that you use to print with is not designed to sit idle for long periods of time in your printer. They are designed to adhere to a garment and as such have properties that allow the ink to dry and stick.

Allowing your printer ink lines or Printhead to become clogged as a result of allowing your printer to sit idle without proper preparation or as the result of failure to maintain your equipment properly is not covered under your warranty and can be a costly and time consuming repair. To avoid this situation it is strongly encouraged that you attend training to learn about proper care and use of your printer. Please visit [www.Melcouniversity.com](http://www.Melcouniversity.com) for more information on training options available to you.

# MelcoJet FP-125 Printer User Manual (v. 4.0)

## Unpacking

Your printer is delivered in special packaging designed to protect it from damage during shipping. **!** - **KEEP THIS BOX AND ALL PACKING MATERIALS; SOME REPAIRS MAY REQUIRE YOU TO SHIP YOUR PRINTER TO AN AUTHORIZED DEPOT REPAIR FACILITY AND YOUR PRINTER MUST BE SHIPPED IN PACKAGING DESIGN FOR IT.**

It is recommended that two people remove the printer from its box so the printer can be kept level and upright at all times. Lift the printer from its base and not from its cover or the ink bays to the side of the printer.

Once the printer has been removed from its box, place it on a level surface and remove the remaining packaging material. Do not discard the packaging material. If you lose or dispose of the original shipping materials, new materials can be purchased from Melco.

### Contents

- MelcoJet FP-125 Printer
- Power cord
- USB cable
- Printer Manual
- Print Driver Program CD
- 2 sets of CMYK bulk ink cartridges (a total of 8 carts)
- Gauge Block
- Cleaning Fluid (2 oz. bottle) (for Maintenance Station, Wiper Blade, etc...)
- Cleaning Applicators (1 pack)

If you purchased a printer with the “Dark Garment Printing Option” you will also get the following items.

- RIP Program CD
- 4 cartridges of White Ink
- 8 cartridges of Cleaning Solution
- 1 bottle of White Ink Pretreatment Liquid (64 oz)

All items (other than the printer) are packaged in an “accessory box” found inside the large printer box.

# MelcoJet FP-125 Printer User Manual (v. 4.0)

## Additional Items

The following are recommended and are not included with your printer:

- 12” or 9” bubble level
- Electronic Hygrometer (to monitor the relative humidity for your printer)
- PC Windows XP operating system
- Graphics software such as Photoshop, CorelDraw or Photoshop Elements
- Heat press or textile oven (for heat fixing of the ink)
- Silicon treated parchment paper or Teflon pad (*if a heat press is used*)

*If you are printing on dark colored garments with white ink, you also need the following items.*

- Spray gun or pump type sprayer for pre-treating dark garments

## Setup

### Overview/Quick Reference:

1. Determine a location for your printer
2. Remove remaining packing materials
3. Level printer
4. Power up
5. Install Ink Cartridges
6. Install Software
7. Initial Ink Charge

### Detailed Steps

#### **1. Determine a location for your printer**

It is important to select the proper location for operating your printer. You should find a room that can be climate controlled (humidity is a key factor in function of your printer), has space for your printer, heat press, humidifier (if applicable) and general work space free of clutter. The printer should be located on a sturdy, flat and elevated surface with room to get to the back of the printer as well as the front.

#### **2. Remove remaining packing**

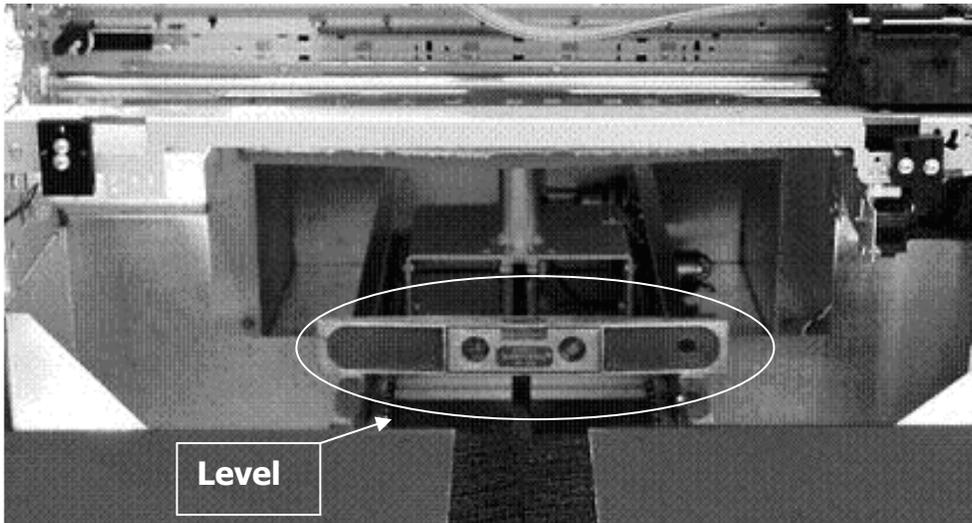
- Open the printer top cover by loosening the two thumbs screws on either side of the cover
- Remove the retaining tape on the “Printhead carriage”
- Check to make sure ink tubes are securely connected to dampers (at the Printhead print) and to ink bays

## MelcoJet FP-125 Printer User Manual (v. 4.0)

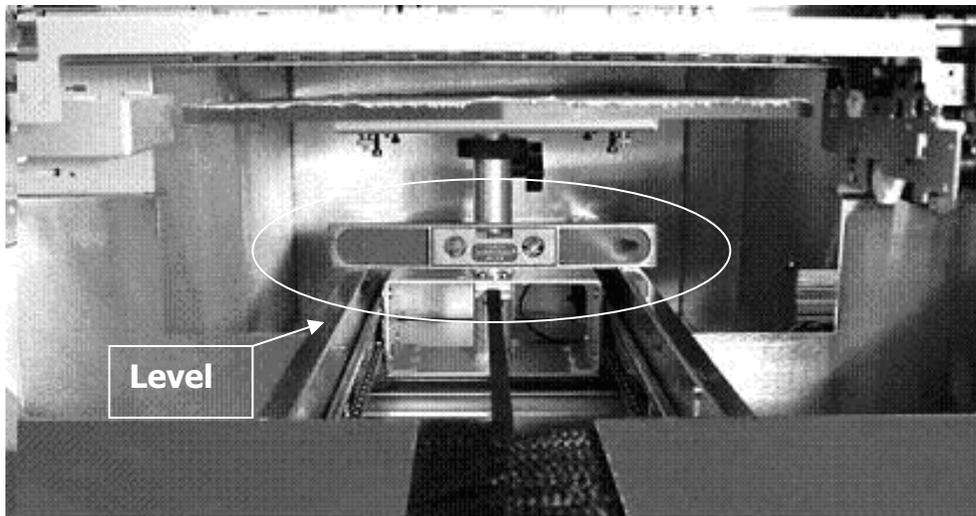
- Remove “table retainer” cardboard  - **DO NOT DISPOSE OF TABLE RETAINING CARDBOARD**

### 3. Level the printer

Gently push the print table inwards until you have reached it's fully retracted position. Place a 9" or 12" bubble level at the “near” side of the rails. Adjust the feet as necessary to obtain a level condition. (See Figure. 3.1) Repeat this process at the “far” side of the rails. (see Figure 2.2)  - **IF NOT ACCURATELY LEVELED THE PRINTER WILL NOT OPERATE PROPERLY, PRINT QUALITY WILL SUFFER.**



*Figure 3.1 Leveling near side of printer*



*Figure 3.2 Leveling far side of printer*

# MelcoJet FP-125 Printer User Manual (v. 4.0)

## 4. Power up (main power)

Plug in the provided power cord to the wall outlet. MelcoJet printers come in two power configurations. Model FP-125A is for 110V for USA, Canada, Mexico and other countries using 110V standards. Model FP-125B is for 220 or 240V for UK, Europe and most other countries using 220/240V standards. Model FP-125B can also be configured for 110V by changing the switch tab settings in the power entry module. Make certain your printer's power setting matches with the voltage of your power outlet.

Next plug the power cord into power entry module in the rear of the printer. (See Figure 3.3) **⚠ – DO NOT PLUG IN USB CABLE AT THIS TIME**

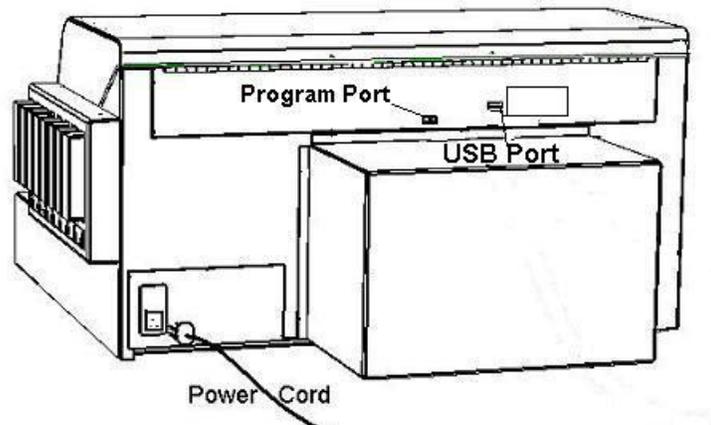


Figure 3.3 plugging in the power cord

Turn on the power switch in the rear of the printer. The printer control panel LCD display will light up, and shows the following display.



Figure 3.4

Since the bulk ink cartridges are not installed yet, all the LEDs under the cartridge bays will turn on, and the printer control panel LCD will display:

*“INK CARTS MISSING  
CHECK CARTRIDGES”*

*This is a normal conditional message that occurs in the event ink carts are not installed.*

# MelcoJet FP-125 Printer User Manual (v. 4.0)

## 5. Installing Bulk Ink Cartridges (deciding what option is right for you)

Before turning on the print engine, it is necessary to install the bulk ink cartridges. The ink cartridge bay is located on the right side of the printer.

A new printer is shipped with 8 ink cartridges, 2 sets of each color (yellow, magenta, cyan and black). If you purchased the “Dark Garment Printing Option” then you will have 2 sets of color plus 4 white cartridges and 8 cleaning cartridges.

Depending on what printer package you purchased, your level of experience with your printer, what you intend to print on and the frequency you intend to print, you may choose to install your cartridges in one of the following ways. It is important to make the selection that will work the best for you as each has different maintenance requirements. Melco recommends one of the following:

	Bay 1	Bay 2	Bay 3	Bay 4	Bay 5	Bay 6	Bay 7	Bay 8
<b>Setup Option 1</b> White Garments Only	Yellow	Magenta	Cyan	Black	Yellow	Magenta	Cyan	Black
<b>Setup Option 2</b> White Garments With (Black Garment Transition)	Yellow	Magenta	Cyan	Black	Clean	Clean	Clean	Clean
<b>Setup Option 3</b> White and Black Garments	Yellow	Magenta	Cyan	Black	White	White	White	White

Chart 3.5 Setup/Initial Ink Cartridge

Which setup option is right for you? This depends first on what package your purchased. If you purchased the standard package then “setup option 1” is the only option available to you. However if you purchased the “Dark Garment Printing Option” then you can decide between any of the three. Consider the following...

**Setup Option 1:** This option is for all owners that purchased the standard printer package or those owners that are new to direct to garment printing. If you purchased the “Dark Garment Printing Option” you can choose to setup up your inks with this option. If you choose to do this then when you are ready to start printing on dark garments you will need to switch to “setup option 3” by thoroughly cleaning out bays 5-8 with cleaning solution.

**⚠ - THIS IS CRITICAL TO ENSURING THAT WHITE INKS DO NOT PRODUCE TAINTED IMAGES FROM THE COLORS THAT WERE PREVIOUSLY INSTALLED IN BAYS 5-8.**

## MelcoJet FP-125 Printer User Manual (v. 4.0)

**Setup Option 2:** This option can be used if you intend to print on dark garments but are not ready to do so immediately after initial setup. The level of experience to print and produce quality images on dark garments is much greater than on light garments and it is recommended that new users do not start printing on dark garments immediately.

However, if you do not want to worry about cleaning out bays 5-8 (your printer will not operate with empty ink bays) you can load cleaning solution in bays 5-8 and print color on light garments using only bays 1-4. This lends to a faster transition when you are ready to print on dark garments after gaining experience on lighter garments. **!! – IT IS**

**IMPORTANT TO NOTE THAT ONLY BAYS 1-4 SHOULD BE USED. ATTEMPTING TO PRODUCE IMAGES ON A GARMENT WITH CLEANING FLUID WILL RESULT IN WASHED OUT PRINTS AND POOR RESULTS. YOU MUST DEFINE BAYS 5-8 AS WHITE INK BY CHOOSING FRONT 4 BAYS ONLY IN EK PRINT STUDIO AND DO NOT ENABLE WHITE INK UNDERBASE.**

**Setup Option 3:** This option is for experienced owners who intend to begin printing on dark garments immediately. **!! – WHITE INKS WILL SOLIDIFY SOONER THAN COLOR AND THEREFORE REQUIRE MORE FREQUENT USAGE TO AVOID CLOGGED PRINthead COMPONENTS.**

Ultimately, it is up to you to decide which option works best for you and any one of the three will meet your specific needs as long as you consider what each option means to you for maintenance and or cost related to cleaning.

Once you have decided on which option to use, remove your ink cartridges from their containers and gently shake a few times before installing them into the ink bays.

The ink bays are not keyed by ink color, so it is very important that the right color ink cartridge gets installed in the right bay as shown below.

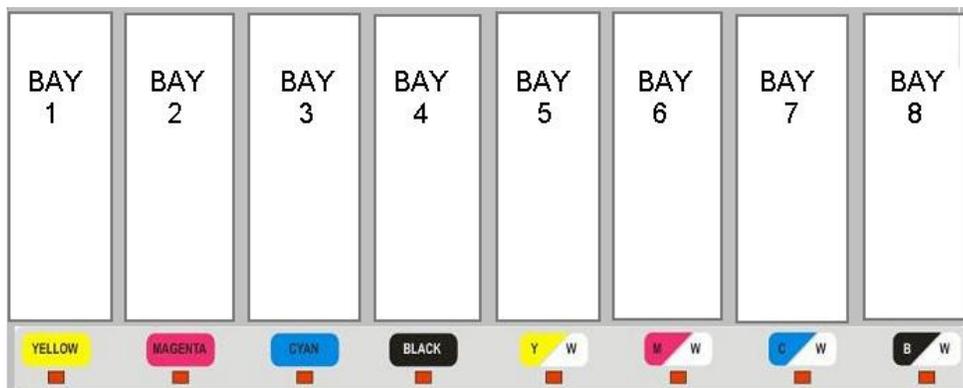


Figure 36 Ink Bay LEDs

Once you insert an ink cartridge, the red LED light below the cartridge bay should shut off indicating the cartridge is installed properly. If the red LED light does not shut off then

# MelcoJet FP-125 Printer User Manual (v. 4.0)

the cartridge is not installed properly. Pull the cartridge out and reinsert it carefully. As mentioned previously without the installation of all eight cartridges, the printer will not print.

If you install a cartridge in the wrong bay, it can contaminate the ink delivery system. Depending on how far your ink traveled in the ink delivery system, you may need to use a Cleaning Fluid cartridge to flush out the wrong color ink from the system to avoid ink contamination. You can observe how far it filled the ink delivery system by looking at the ink tubes, which can be seen by opening the printer cover. If you have inserted the wrong cartridge you should immediately switch to a cleaning cartridge. **!** – **THE LENGTH OF TIME THAT YOU LEAVE A COLOR IN AN INK TUBE WILL EFFECT HOW MUCH CLEANING FLUID IS NEEDED TO REMOVE THAT COLOR.**

## 6. Install Printer Software

Once the ink cartridges are installed, it's time to install the print driver program onto your PC. This requires a basic knowledge of PC operation and Windows XP operating system. If you are not familiar with these, it is recommended that you seek help from someone who is familiar with such technology to set your computer up and make sure that your computer and the MelcoJet printer are communicating properly. The following are the steps required to install the print driver program.

- Power up the print engine by pressing the POWER key on the control panel. It will take about two minutes for the print engine to completely power up. During normal power up the “print table” will move forward into the “loading position”. Once the power up sequence is complete, the following message will display on the control panel (figure 3.7).



*Figure 37 message indicating complete power up of print engine*

- Plug in the provided USB Cable to the USB port in the rear of the printer, (see figure 3.8). **!** – **DO NOT PLUG THE USB CABLE INTO THE PROGRAMMING PORT. DOING SO MAY RESULT IN A PRINTER FAILURE THAT MAY REQUIRE YOU TO RETURN THE PRINTER FOR REPAIR.** Plug the other end of the USB cable into one of the available USB ports on your computer.

## MelcoJet FP-125 Printer User Manual (v. 4.0)

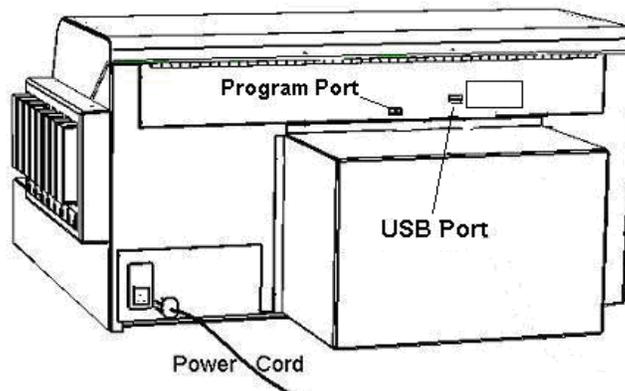


Figure 3.8

- Windows will prompt that new hardware has been detected and will instruct you on how to proceed to install a new printer driver. When windows asks for the location of the “driver program”, insert the driver CD and indicate to windows that the drive can be found on the CD in your CD Drive. If a program starts after inserting the CD, cancel that program and continue with the driver install. Windows XP will automatically find the USB port and set the program for proper communication. It is very important to follow the onscreen Windows instructions properly
- During the installation process, make sure that ANAJET 125 is chosen as your default printer. You will also want to take note of the USB port Windows assigns to your printer, write it down in this manual so you can refer to it later.
- If you purchased an optional RIP program for black garment printing, you can also install the RIP program at this time. This can always be done at a later time if you are not prepared to print on dark garments and may save you initial setup time by waiting until you are prepared. Installation of this software involves inserting the program CD and following the on screen instructions

Follow the windows prompts to install the RIP program

Once installed you will need to register the program

There are two ways in which you can register the software

- IF your computer has an internet connection, open the RIP program, go to the help menu (drop down menu) select the option to “register” and the program will complete the registration
- IF you do not have an internet connection, open the RIP program, go to the help menu, write do the “MAC” address listed in the help file then go to a computer with internet access and go to [www.eukondigital.com](http://www.eukondigital.com) and follow the “request license” link to complete your registration. You will need the serial number for your CD and the MAC address you obtained from the help file.

*These steps are necessary to get a permanent version of your RIP program. When you install the program you are given 30 days to trial and register. This is a piracy protection protocol required by the producers of the RIP software.*

## 7. Removal of shipping fluids

Your printer was shipped with its ink delivery system filled with shipping fluid (clear or pink color), to preserve the integrity of the ink delivery system and prevent the Printhead from drying up. The shipping fluid has to be replaced with printing inks.

- Open the printer's cover so that you can observe the ink tubes running from the bulk ink cartridge bays to the Printhead damper. The ink tubes are transparent, so that you can observe as the inks fill the tubes.
- Open your graphics application program (such as Photoshop, CorelDraw or Paint...etc)
- Load any graphic and select File/Print.
- The printer selection window will open. Select ANAJET 125.
- Click Properties button.
- Click the Utilities tab.

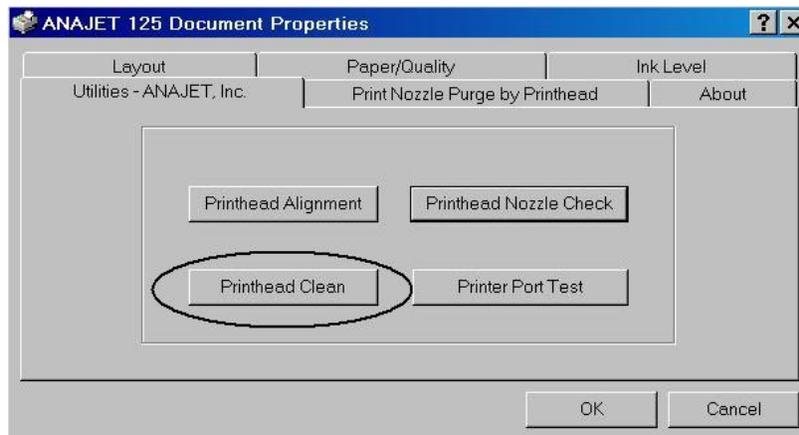


Figure 3.9

- In the Utilities window, click the “Printhead clean” button. The printer will start pumping ink and the cleaning/shipping fluid will start moving. Shortly you will see the ink filling the tubes. When the cleaning operation is completed, the control panel Power LED will stop blinking.
- It will be necessary to repeat the Printhead clean operations several times completely remove the cleaning/shipping fluid. You must make certain that the inks have reached all the way to the dampers in the Printhead carriage for each of the eight ink lines.

## Chapter 4 Printer Operation

### Printing Procedure

#### Overview/Quick Reference

1. Power up sequence
2. Select a garment
3. Adjust table height
4. Ink test pattern
5. Load garment
6. Select your graphic
7. Adjust print settings
8. Send print job to printer
9. PRINT
10. Remove garment from printer
11. Set the ink to the garment
12. Power down sequence

#### Detailed Steps

##### **1. Power up sequence**

The power up sequence consists of turning on your PC and turning on your printer and print engine.

- Turn on the main power switch in the rear of the printer.
- After a few seconds, the control panel LCD will light up and display:



*Figure 4.1 Main power on LCD message*

# MelcoJet FP-125 Printer User Manual (v. 4.0)

- Press the POWER key (  ) key on the control panel to turn on the print engine. It usually takes about two minutes for the print engine to complete its power up sequence. The print table will move forward to the “load position”. When the power up sequence is complete the following display will show in the LCD.



*Figure 4.2 Print engine power up complete*

## **2. Select a Garment**

Selection of a garment is mostly a matter of personal preference. It is however important to keep in mind that you will be printing with water based inks. This means that the garment must be able to absorb water. We recommend cotton or cotton blend garments. Nylon and other fabrics with “wicking” properties (including wool) will most likely not take well to printing and as a result will produce very poor results.

Water sealed garments which may include cotton or cotton blends garments that have received after market treatment with water repelling liquids will also produce poor results.

Old garments that have been worn multiple times and washed multiple times prior to printing may also yield poor results because the textile itself may have deteriorated due to use. It is important to remember that while printing on textiles the condition of the textile will impact the quality of the print.

Garments with buttons, seams or any object that creates an uneven surface when laid flat will impact printing. Table height may need to be adjusted, however, some garments by nature of their construction will interfere with the laser obstruction sensor no matter what you do. This also includes garments that will not fit into the print bay.

### 3. Adjust table height

Pressing the TABLE key ( **TABLE** ) once on the control panel will move the print table in one direction. Pressing it a second time stops it and pressing it a third time will move it in the opposite direction.

The forward most position is referred to as the “load position”. This is position garments are loaded. The farthest most position is referred to as the “home position”. When the printer is shut down the print table will move to the home position. The TABLE key is functional when the main power to the printer is on and functions even if the print engine is off. Figure 4.3 give the relative locations of each table position.

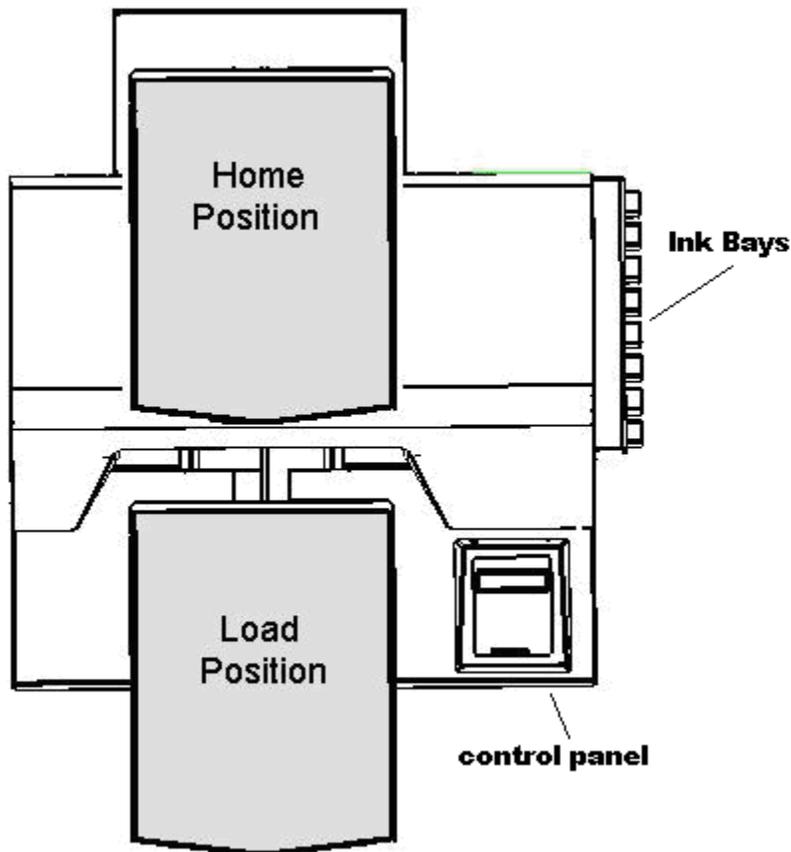


Figure 4.3 Print table positions

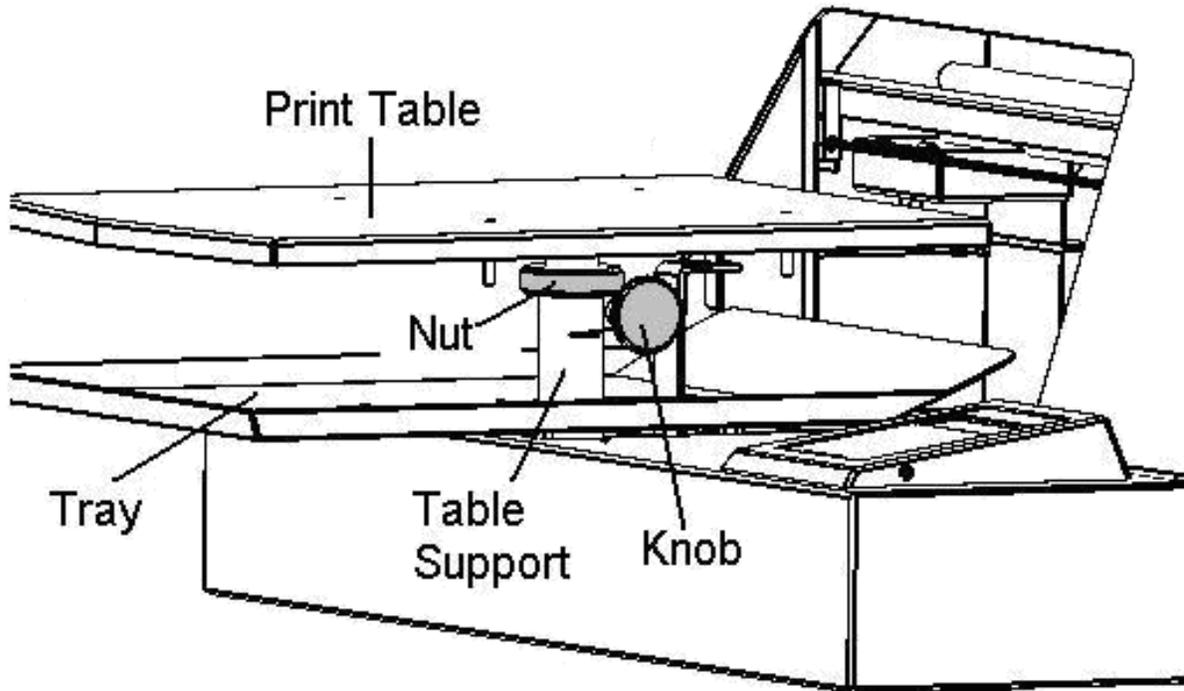
If you followed the “Setup” procedure in chapter 3 you should not have to level the printer but at this time you should check the “print table” level. This can be done at the same time you set table height and it is recommended that you check the level each time you adjust table height.

The print table height is adjustable up to .6 inches. The proper height should be set depending on the thickness of the garment being printed. **!! - PROPER PRINTER TABLE HEIGHT IS CRITICAL TO QUALITY PRINTS AND TO CONTINUED**

## MelcoJet FP-125 Printer User Manual (v. 4.0)

**FUNCTION OF YOUR PRINTER.** If the garment is too far from the nozzle plate (located on the Printhead), the print quality will suffer and ink over spray will be visible. If the garment is too close to the nozzle plate, there is risk of the Printhead touching the garment and scratching the nozzle plate coatings, which makes the Printhead unusable.

The optimal distance for all printing is **.20 to .25 inches (1/5" – 1/4")** between the lowest point of the nozzle plate and the highest point of the garment.



*Figure 4.4 Print table adjustment diagram*

Print table height is adjusted by turning the “nut” on the “table support bar”. The “knob” located beneath the print table must be loosened by turning it counter clockwise prior to any other adjustments (See Figure 4.4). To raise the Table, turn the Nut clockwise (when viewed from the top). To lower the table, turn the nut counter clockwise. Once you have achieved the correct height, tighten the “knob” by turning it clockwise to lock in the table height. The following is a step by step process for setting print table height and checking and adjusting print table level.

## MelcoJet FP-125 Printer User Manual (v. 4.0)

1. Move the print table until the rear edge is under the carriage guide bar (CGB)
2. Loosen the knob under the print table (Figure 4.4)
3. Adjust the table by turning the nut until the “gauge block” fits under the CGB at both sides of the table
4. There is an expected amount of play in the print table, however if one side of the print table at the CGB is more than 1/16 of an inch out of level then you may need to make an adjustment.

**⚠ - PRINT TABLE LEVEL IS SET AT THE FACTORY AND SHOULD NOT REQUIRE ADJSUTMENT, IF THIS APPEARS TO BE OUT OF LEVEL CONTACT TECHNICAL SUPPORT AND REFER TO THE TROUBLESHOOTING APPENDIX IN THIS MANUAL**

5. Move the print table back until the front edge is near the CGB
6. If the gauge block does not just touch the CGB, repeat steps 3 & 4.
7. Move the print table back again so the rear edge is under the carriage guide bar (CGB).
8. Recheck the fit under the CGB & readjust as required (*this is done to ensure that the adjustment you just made to the front of the print table did not impact the first adjustment made on the back of the print table*)

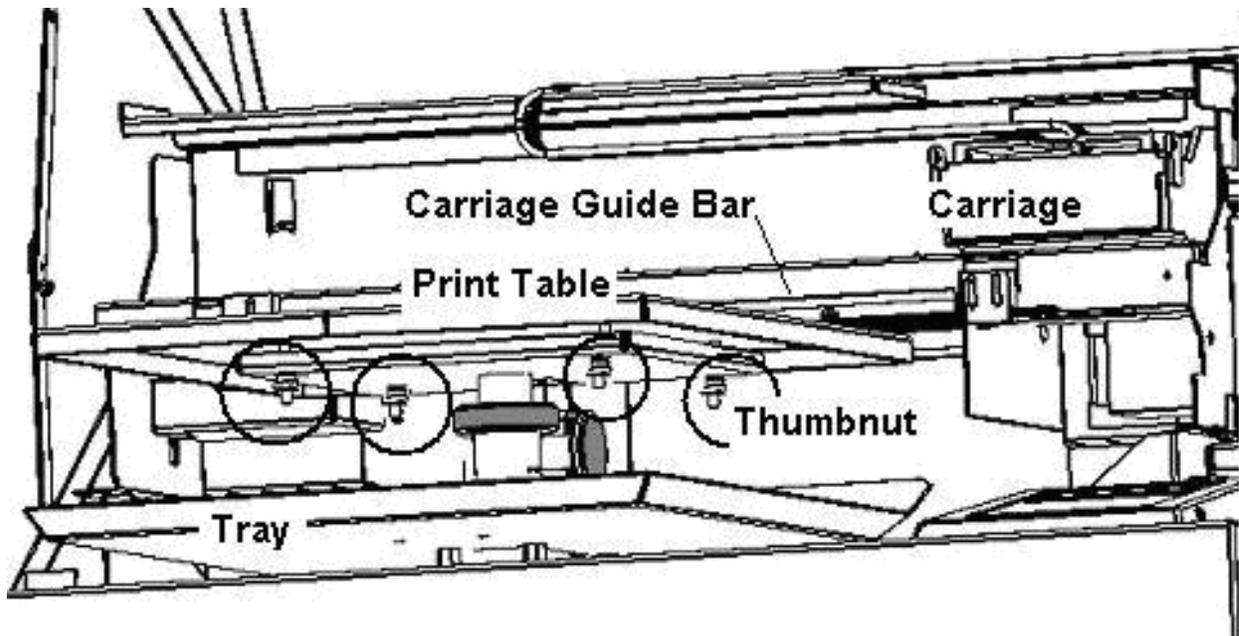


Figure 4.5 View of print table from tray height

## 4. Ink Test Pattern

When you print on a new garment fabric material, it is best to determine the optimal ink specification by printing a Test Pattern. To print an Ink Test Pattern, click the Ink Level tab while in the program properties window.

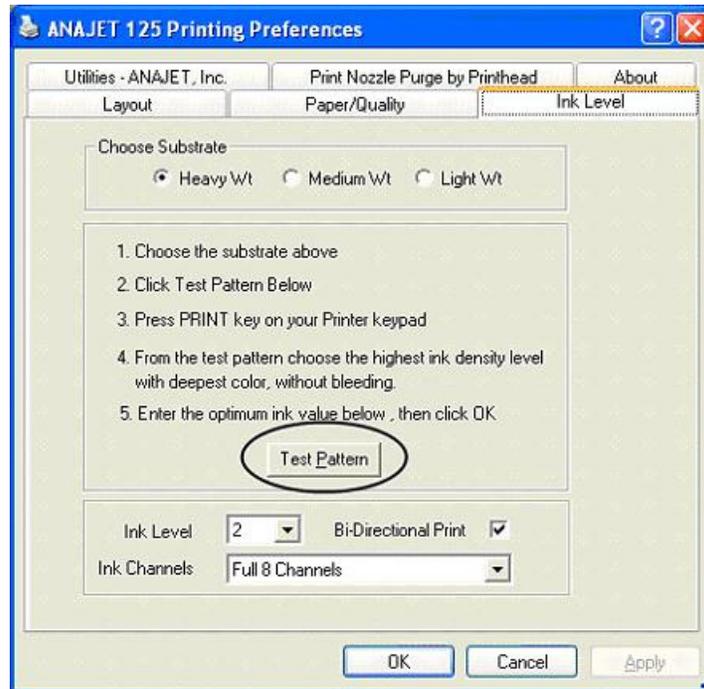


Figure 4.6

- First choose the substrate based on your fabric and design. Again it does not have to exactly match the nature of your fabric. Even if your fabric is medium weight, you can choose to use “Light Wt” for delicate designs or vice versa.
- Click the Test Pattern button. Load the exact fabric you plan to print on the Print Table. The test pattern will be printed in the lower right corner of the Print Table. When the Ready LED on the control panel lights up, press the PRINT key. When the print is completed, fix the ink onto the fabric using a heat press. After the heat fix, the robustness of ink will usually decline slightly.
- Closely examine the printed test pattern. Choose the ink level which has the desired print effect with deepest and the most robust colors, without bleeding.



Figure 4.7

# MelcoJet FP-125 Printer User Manual (v. 4.0)

## 5. Load the garment

### Placement

Load the garment on the print table by laying it flat against the print table with the head of the garment positioned at the front of the print table. If the garment is not flat, the printer “obstruction sensor laser” will detect it and will stop printing until the obstruction or wrinkles are removed.

The garment should be centered on the print table using the area of the garment to be printed upon as your point of reference for center. Tuck any loose portion of the garment under the print table but above the print tray being careful not to leave any part of the garment hanging in a place where it may catch on the printer during print table movement. You should be able to easily relate the position of the printing area with what you see in the application program print preview window. The maximum printable area is 12.5” x 16.0” which is the size of the print table. (See Figure 4.8)

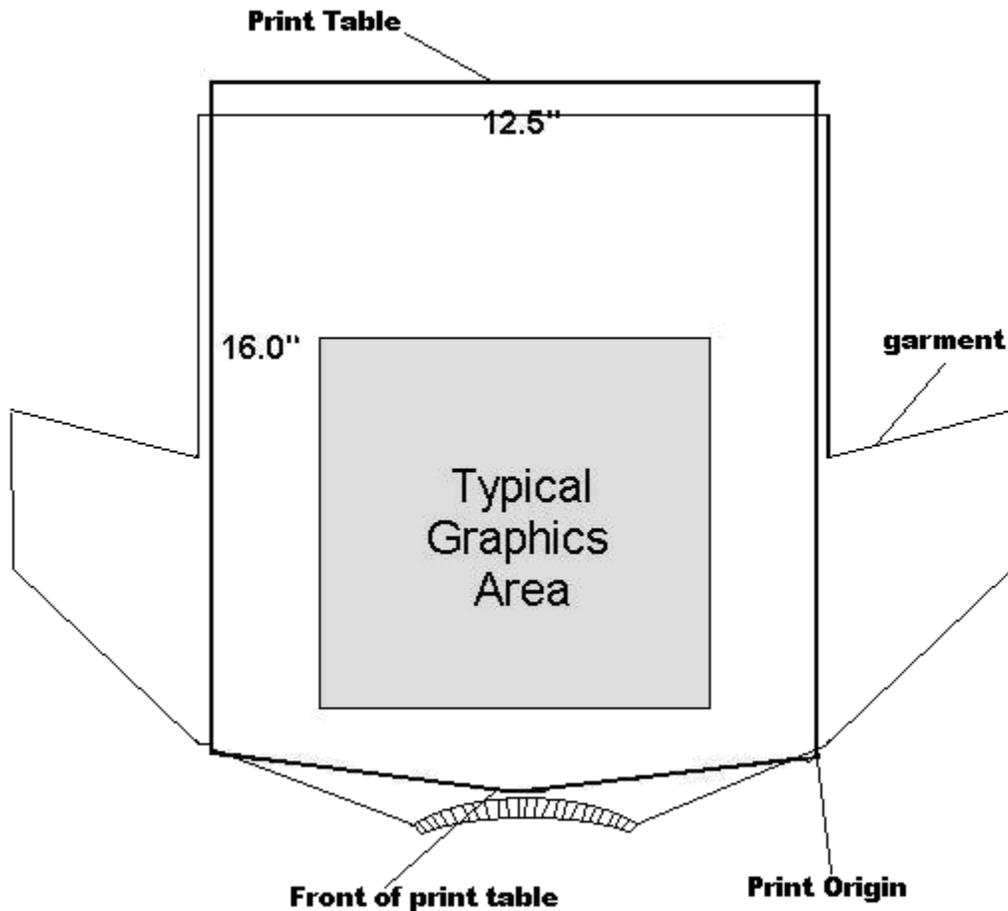
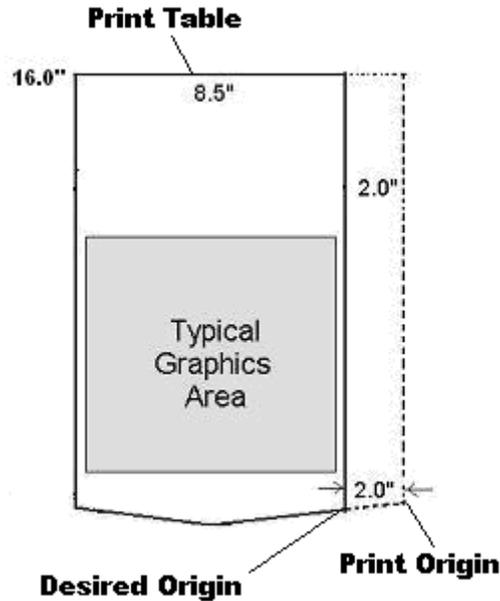


Figure 4.8 Print table diagram

You can change tables to the 8.5”x16.0” (Melco PN#17215) for youth sized shirts. When using the 8.5”x16.0” table it is necessary to center the graphics in a 12.5” x 16.0”

## MelcoJet FP-125 Printer User Manual (v. 4.0)

page and adjust the graphic to the right 2” to compensate for the narrow sized table. This adjustment in the graphics program will result in the “desired origin”. Even though you have changed the table on the printer the origin will not change for the youth table automatically.



*Figure 4.9 Desired origin with 8.5" x 16"*

### Loading methods

- Dressed – loading the garment around the print table as though the table were wearing the garment
- Undressed – laying a garment on top of the print table so that both the front and back of the garment are above the print table

You have two options for loading your garment. Either “dressed” or “undressed”. These two options require slightly different table height adjustments however yield the same result. The only difference between the two is that you may be able to save time on table height adjustment when changing garment types by switching between dressed and undressed loading styles. For example, if you intend to print on t-shirts AND sweatshirts you may be able to do so, WITHOUT adjusting table height by setting the table height for your t-shirts first and loading your t-shirt using the “undressed method”. This will decrease the distance between the nozzles and the garment because of the additional material sitting on top of the printer table. When you are ready to switch to sweatshirts, you may be able to use the “dressed” method and not have to change the table height as the thickness of one layer of sweatshirt material is similar to two layers of t-shirt material.

## 6. Select your graphic

The following are a few items to consider when selecting a graphic. It is important to keep in mind that depending on the type of graphic you choose printer settings may need to be adjusted to reach an optimal print quality.

- Make sure that graphics selected for printing are in RGB mode. Changing this setting varies from graphics program to graphics program. Consult your user manual for the program you are using.
- When you select a graphic to be printed on light colored shirts, the color of the shirt will impact the color of the CMYK inks. It may be necessary to alter the color in the graphic to compensate for the color of the shirt. There is no specific rule for this and requires some experience with your printer, graphic and the garment you are printing on.
- Because you are printing on fabric (textile) resolutions higher than 400 DPI will not result in a higher quality print. Remember that garment printing is fundamentally different than photo printing or printing to paper.
- Keep in mind that the size of the graphic you choose may play a role in print quality especially if you have to resize it in order to fit on the garment.
- Some graphics will never translate well to garment printing. Graphics with high detail, low contrast or small size/resolution will likely yield a poor print. Always try to use high contrast, simplified detail and reasonable size for printing. We recommend that you take advantage of “Action Illustrated” if you purchased that option with your MelcoJet garment printer.
- Some colors do not translate well to print, for example, neon colors do not always print as expected. It is important to keep in mind that the graphic “on-screen” will likely appear different as a computer monitor can resolve millions of colors while a garment printer cannot. The more you can keep with graphics specifically created for garment printing (Action Illustrated) the better your results will be.

Once you have selected your graphic in your graphics program, you will need to set your printer settings prior to sending your job to your printer.

## 7. Adjust print settings

Accessing the printer driver and page setup are slightly different depending on the application software you are using. Here the process is explained using the Photoshop Elements graphics program. The principles are the same with most programs.

When the graphic is setup the way you intend to print it click on the “file” drop down menu and select “print preview”. (See Figure 4.10)

# MelcoJet FP-125 Printer User Manual (v. 4.0)

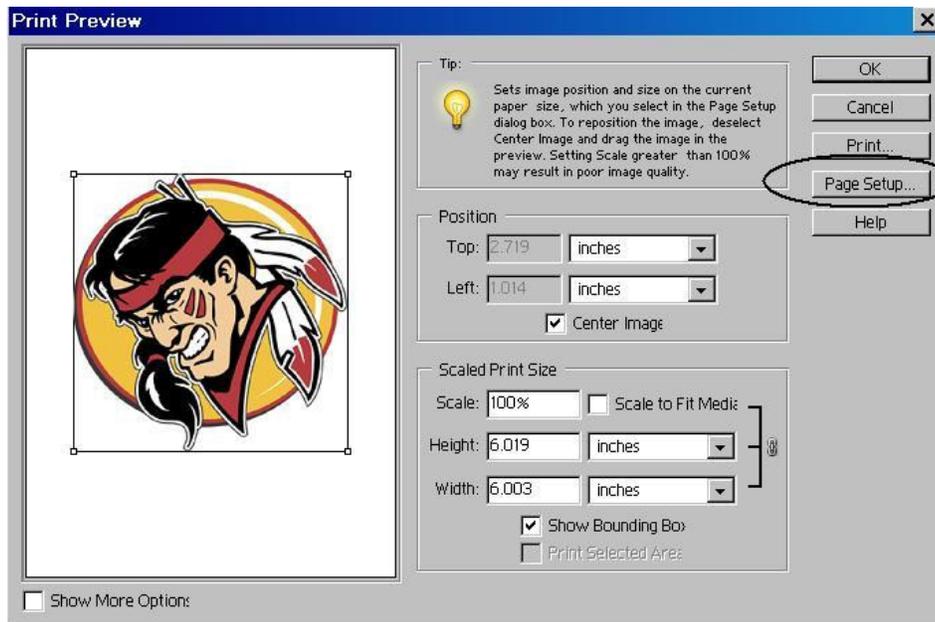


Figure 4.10 Print preview window

Once the print preview window has opened, click on the “page setup” button. Make sure that the paper size is set as 12.5 x 16.0. (See Figure 4.11)

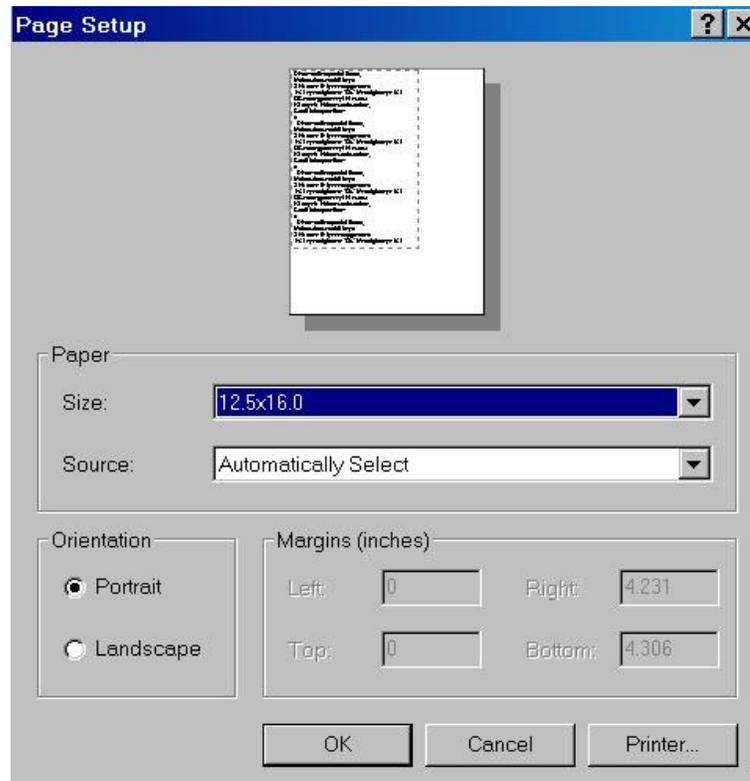


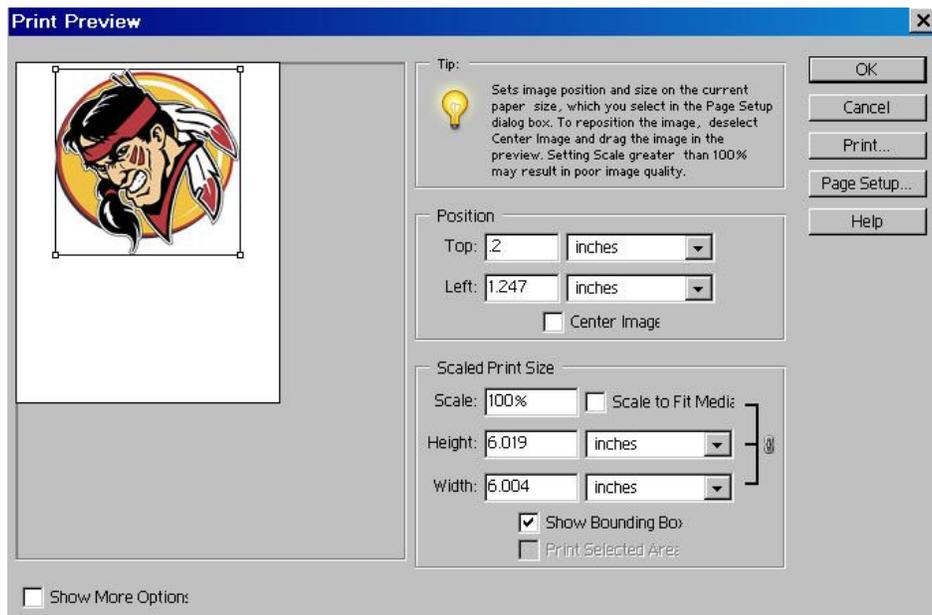
Figure 4.11 Page Setup window

## MelcoJet FP-125 Printer User Manual (v. 4.0)

Click the OK button to return to the Print Preview window. Here you have a number of options as to the size and position of the graphic. The size of the print is indicated in the “height” and “width” boxes. You can scale print size up or down however by doing so you may deteriorate the print quality as discussed in the previous section on “selecting a graphic”.

The white preview box corresponds to the print table and so, the position of your graphic in the box will correspond to location of the print on the garment. By clicking on the “center image” box you can automatically center the graphic. It is important to note, that being centered on screen does not necessarily mean being centered on the garment, this is also dependant on how you loaded the garment. After centering the image you can further define the position of the image by making entries in the position boxes. Increasing or decreasing the values in these boxes AFTER centering will allow you to move the image from the table center to the garment center.

An alternate way of positioning is to check the “show bounding box” and then you may move the graphic around with the mouse in the preview window. This is a less precise method but can also save you time when trying to position your graphic for print.

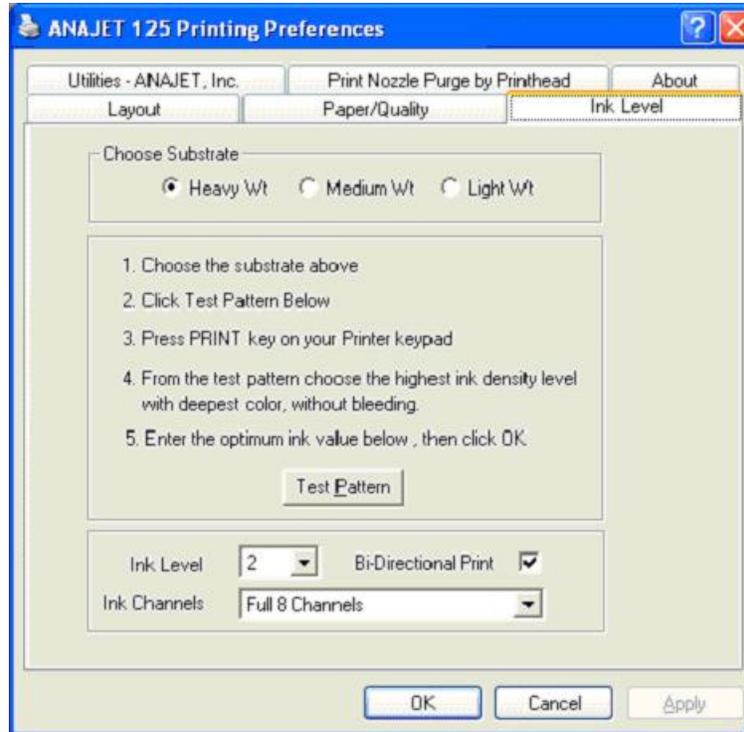


*Figure 4.12 Print preview window / position*

When the sizing and positioning are completed click the “print” button and you will get the “print” window. Then click on the “preferences” button.

## MelcoJet FP-125 Printer User Manual (v. 4.0)

When the “preferences” button is pressed from the “print” window the “printing preferences” window will open. You have two tabs from which to adjust your printing preferences. (See Figure 4.13)



*Figure 4.13 Printing Preferences Window*

- Paper/Quality tab - Choose the appropriate material for the garment you are printing on. For example “Cotton, knitted” for a tee shirt.
- Ink Level tab – In the Ink Level tab you can set the optimal ink flow for the garment you are printing on. There are two factors that impact the optimal ink flow:
  - Ink drop size (controlled by the “choose substrate” area)
  - Ink level (controlled by the “ink level” drop down menu)

The ink drop size and the ink level will determine the overall ink flow. Adjusting the ink drop size up you will increase the volume of ink. Ink level determines the number of passes of the print head. You can increase your resolution by reducing ink drop size and increasing ink level. Conversely you can increase the speed of your prints by increasing the ink drop size and reducing the ink level. These adjustments are subject to the user’s preference or print requirements.

- Ink Drop Size (Choose Substrate): Your choice determines the average ink drop size. “Light Wt” generally jets smaller ink drops and “Heavy Wt” generally jets larger ink drops.

# MelcoJet FP-125 Printer User Manual (v. 4.0)

- Light weight or fine fabrics should use the light option (many fine polyester materials or fine woven cotton fall into this category)
- Medium weight fabrics such as cotton tee shirt material should use the medium option
- Heavier fabrics such as sweat shirts should use the heavy option

- Ink Level (Choose Ink Level): For each of the selected substrates, there are seven ink levels. Level 0 (none) is smallest amount of ink and level 6 is largest amount of ink.

The combination of substrate choice and ink level is not absolute. You can use any combination of these two to attain optimal ink flow, for example “medium / ink level 2” can be substituted for “light / ink level 4”. This is a matter of preference and what your specific printing requirements are.

- Bi-Directional Print: Keep the Bi-Directional Print box checked to print fast bi-directional print. Uncheck it for unidirectional printing which is slower. In certain cases the unidirectional printing may help keep crisp printing when the distance between the Printhead and fabric is farther than optimal.

- Ink-Front 4 Channels ONLY:

**!** - THIS SECTION MAY BE CRITICAL TO PRINTING DEPENDING ON HOW YOU CHOOSE TO SETUP YOUR INITIAL INK CARTRIDGES. CHECK YOUR SETUP AND ENSURE YOU SELECT THE PROPER SETTING!

- If your printer is equipped with 8 colored ink cartridges (YMCK + YMCK ink cartridge configuration), select full 8 channels.
- If your printer is equipped with YMCK + WWWW ink cartridge configuration for dark garment printing, and if you wish to print on white or light colored garments using the front four channels of colored inks, you should select the Ink-Front 4 Channels ONLY box.
- If your printer is equipped with TMCK + CCCC (clean) you should select the Ink-Front 4 Channels ONLY box.

## 8. Send print job to printer

In your graphics program click on the “Print” button to send the job to the printer

## 9. PRINT

Once the job has successfully loaded to the printer the green ready light on the control panel will illuminate. Press the “PRINT” key to start the printing process.

## 10. Remove garment from printer

Once the print job has completed the print table will return to the load position providing you with access to remove the garment. When you remove the garment it is recommended that you grab the garment at both shoulder using two hands and slide it from the printing table in a smooth and even motion to avoid wrinkling or bunching the print.

## 11. Set the ink to the garment

Place the garment on a heat press. Cover it with a sheet of silicone treated parchment paper. Set the heat press at 330 degrees and press for 90 seconds with medium to high pressure. When the heat press upper platen is opened, remove the parchment paper immediately. The parchment paper can be reused a few times. Instead of parchment paper, you can use Teflon pad. But the use of Teflon pad leaves semi-glossy look to the prints. If you are using a conveyor dryer, cure it for two minutes at 325 degrees.

## 12. Power down sequence

The power down sequence is the reverse of the Power up sequence.

- Press the control panel POWER key first. The print engine will go through the power down sequence. When power down sequence is completed, the LCD will display:



- The display will soon be replaced by “MODEL FP-125 PRESS POWER KEY”.
- Next you can switch off the main power switch in the rear of the printer.
- **Never turn off the main power switch without powering down the print engine first.**

**!** - **CAUTION!** *It is recommended that the print engine be powered on at all times, even if the printer is not used for a while. Keeping the printer powered on prevents the Printhead from drying. A minimal amount of ink is used to keep the Printhead wet. If the Printhead dries up, the head cleaning operation will consume much more ink than necessary to keep the Printhead wet during idle times. The dried Printhead may never recover, requiring replacement.*

## Chapter 5 Printing on Black Garments

### Black garment printing process

Black and dark colored garment printing is essentially the same as white garment printing with a couple added procedures. Complete understanding of chapter 4 is required prior to proceeding, if you did not purchase the optional dark garment printing package, the chapter can be skipped.

#### Overview/Quick Reference

1. Pre-treat garment
2. Dry pretreatment
3. RIP software
4. White ink settings
5. Printing
6. Heat press
7. Washing

### Detailed Steps

#### 1. Pretreatment

In dark garment printing the most critical process is proper pretreatment of the garment. Spotty or improper application of the pretreatment liquid or improper drying will result in white ink not bonding properly with the garment resulting in poor image quality and image fading during wash. You should have a well ventilated room, a large flat surface for prep and a sprayer (either a garden sprayer or an HVLP, power sprayer) in order to pre-treat.

- Dilute the pretreatment liquid with an equal amount of water (50/50 mix)
- Fill the sprayer reservoir with the mixture
- Lay the garment flat on the spray table
- Spray the pretreatment evenly on the garment with the sprayer
- Only spray on the areas that will be printed on
- Use a plastic squeegee to help spread the pretreatment evenly if necessary

## 2. Drying pretreatment

The most common ways to dry the pretreatment are air drying or using the heat press. Allowing the pretreatment to air dry visually blends the pretreated area into the rest of the garment. Air drying will leave the garment a little wrinkled, and usually requires a quick press before it is printed. Use untreated parchment paper to press the garment to remove any wrinkles.

If you choose to use the heat press to dry the pretreatment, it will dry more quickly, but may leave a discolored area on the front of some lighter garments. To dry pretreatment using the heat press:

- Lay the garment on the press
- Lay untreated parchment paper on the garment
- Lower the heating element and allow it to rest against the garment
- After about 90 seconds the steam will stop rolling out from under the press and the garment should be dry enough to print
- Lift the press and remove the garment

## 3. RIP software and transparent backgrounds

RIP stands for Raster Image Processing. EK Print Studio will accept a variety of raster formats. It is not possible to use a vector file in this software. If you are using a graphic program that creates vector images, you will need to export the image into a raster file.

When opening images in your RIP software it is important to keep in mind that the image that you see on screen is the image that is going to print. Opening a graphic in a RIP program will transfer the graphic to the program this includes the background settings for the graphic.

If you have a transparent background then a transparent background will appear in the RIP program. If you have a “colored” background (commonly white) then a “colored” background will appear in the RIP program. We recommend that you set your background to transparent (this may be done various ways depending on the graphics software you are using) however keep in mind that the following will apply when using EK Print Studio:

- EK Print Studio can open the following file formats: TIF, GIF, JPG, BMP, PNG, and EXIF
- A transparent background cannot be created in EK Print Studio
- A transparent background must be created in your graphics software and then opened into EK Print Studio using one of the file formats that support transparent backgrounds
- The two file formats that support transparent backgrounds are TIF and PNG

## MelcoJet FP-125 Printer User Manual (v. 4.0)

- Figure 5.1 is an example of an image that has been “opened” in EK Print Studio without a “transparent” background – THIS IS INCORRECT

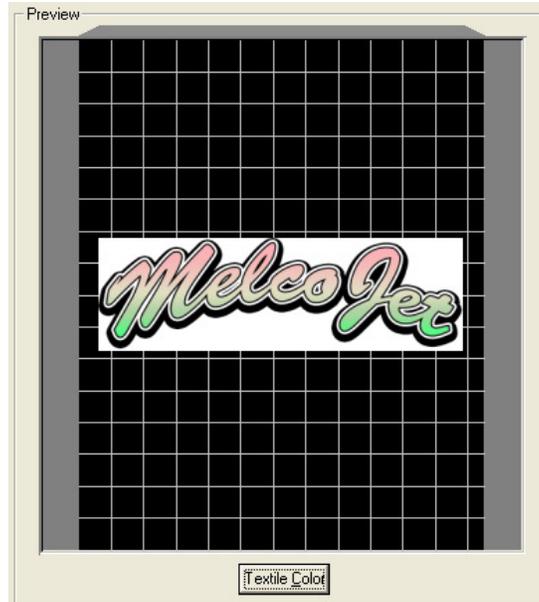


Figure 5.1 - no transparent background

- Figure 5.2 is an example of an image “opened” in EK Print Studio with a “transparent” background – THIS IS CORRECT

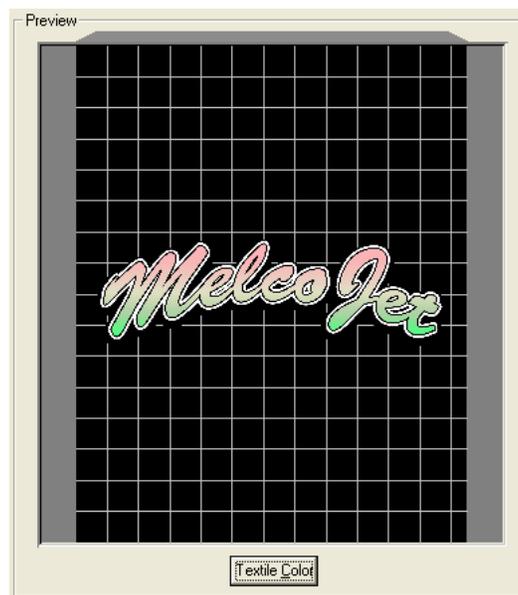


Figure 5.2 – transparent background

- Transparent backgrounds allow the use of white ink under the colored areas of the design without a white box

## 4. EK Print Studio

EK Print Studio is included with your MelcoJet printer if you purchased the dark garment printing option. It is a RIP program (Raster Image Processing) that allows the use and manipulation of white ink which is critical for printing on dark garments. As mentioned previously in this manual, the color of a garment can impact the brilliance and color of a print. This means, that the color on screen in a graphic may not look precisely as it will on the garment (depending on the color of the garment). This is a fundamental problem when printing on a dark garment as the dark color skews the appearance of some ink colors once transferred to the garment. This is very similar to painting in that an undercoat of primer can help to control the color of the final coat of paint.

RIP programs allow you to apply an “undercoat” of white ink on a dark or colored garment. This will give you the ability to more accurately control the color of the final print. EK Print Studio comes with a user’s manual that covers all of its functions and you will need to read and become familiar with that manual.

## 5. Printing with white ink

Once the settings have been adjusted, the graphic can be sent to the printer by clicking the “print” button in EK Print Studio. A progress bar will appear on screen. On the MelcoJet control panel, the ready light (green light above the print button) will light when the job is ready.

Since white ink and color inks are printed in separate passes you can choose to either allow the white ink to dry slightly or you can allow both passes to print sequentially. You can do this by pressing one of two buttons when you are ready to print.

If you are printing on a garment that doesn’t require a lot of white under base or your graphic is such that its color will not be impacted by a heavy or light under base you can simply press the return key when you are ready to print and both passes will run sequentially.

If you are printing on a garment that requires a heavy white under base you may want to allow the heavy white under base a little time to dry prior to putting down the color. This may be needed because a heavy white under base will likely puddle or pool slightly and if you run both passes sequentially, the color pass will bleed into the white. To avoid this, when you are ready to print, press the print button. This will allow the white ink pass to complete and leave the print table in the load position so you can observe the state of the white ink. When you feel the garment is ready for the color pass, press the print button a second time. While the print table is in the load position (after printing the white ink pass) **DO NOT** touch the print table or the garment as you will create registration problems.

## **6. Heat press settings**

Fixing ink to garments when using white inks is essentially the same as with colored inks. Recommendations for temperature settings and different finishes are listed below.

- 320 degrees for three minutes produces the best cure
- 356 degrees for 90 seconds will produce an acceptable cure
- Treated parchment paper for a matte finish
- Teflon paper for a shiny finish

## **7. Dark garment washing recommendation**

- Turn the shirt inside out
- Wash in cold water
- Dry on delicate cycle

## Section 3

### Appendix I Maintenance and Transportation

#### Replacing Ink Cartridges

The control panel ink LED and LCD display indicate when an ink cartridge needs replacement. When the Ink LED blinks and LCD display prompts you to replace an ink cartridge check the ink bay ink LED panel to find which cartridge needs to be replaced. Replace the cartridge as soon as the printer indicates to replace it.

When the ink in a cartridge reaches approximately 5 – 10 milliliters, the ink out switch will be activated causing the ink LED to blink. The cartridges are designed to provide 110ml of usable ink. It is not possible to extract all of the ink from the cartridge, and the cartridge is slightly over-filled to allow for it. The ink cartridge should be replaced as soon as the ink LED starts blinking. If the LED starts blinking during a print job, the current job can be finished without any problem. **!** - **CONTINUED USE OF A LOW CARTRIDGE WILL ALLOW AIR INTO THE INK DELIVERY SYSTEM AND CAUSE DAMAGE TO THE PRINTER.**

If an ink LED remains on steady, either the ink cartridge is not installed or installed improperly. If improperly installed, pull out the cartridge and insert it carefully but fully until it stops. Do not force the cartridge to avoid damage to the printer. Without installing all eight cartridges, the printer will not print.

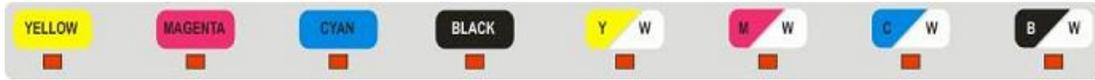
When all cartridges are present, the printer will operate and print even if one or more cartridges are low in ink or out of ink. It is the operator's responsibility to replace the ink cartridges when the ink out LED blinks.

Even when you do not use the printer for an extended period of time, do not remove the ink cartridges from the printer. Even if the ink cartridges are empty, keep the cartridges installed to help keep the ink delivery system from drying. For storage for extended time period, it is recommended to replace the inks with cleaning fluid.

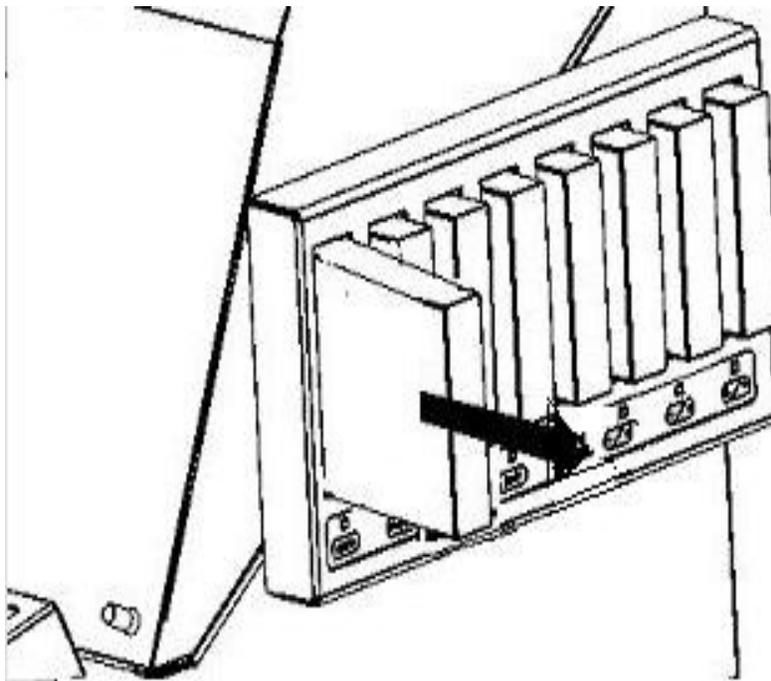
## MelcoJet FP-125 Printer User Manual (v. 4.0)

To replace ink cartridges:

- Determine which cartridges need replacement by reading the LED indicator lights on the cartridge bay. Those which require replacement will blink.



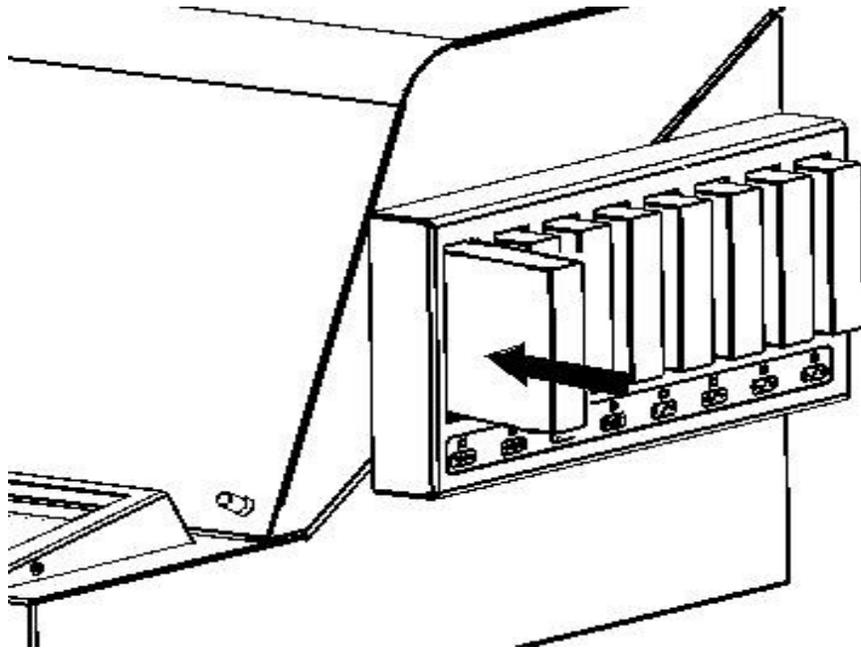
- Carefully pull the empty cartridge straight out of the ink bay. The LED will turn solid on and the printer will beep indicating a cartridge is missing.



- Make sure the replacement ink cartridge is of correct color and is not expired. Colored inks expire in one year after the indicated manufacturing date and white ink six months from the indicated manufacturing date. Expired inks can clog the ink delivery system and may produce incorrect and less vibrant colors. Cleaning solutions expire three years after the manufacturing date.
- Gently shake the ink cartridge a few times. Shaking an ink cartridge that has previously been installed may cause the ink to leak. It is recommended that the white inks are covered with a paper towel while shaking to prevent the ink from spattering.

## MelcoJet FP-125 Printer User Manual (v. 4.0)

- Hold the cartridge in the proper orientation. There is an “up arrow” on the front-side of the cartridge and “insert-this end” arrow on the side of the cartridge. Carefully insert it into the proper ink cartridge bay. Push it in all the way with a firm motion. Do not force it to avoid damage to the printer. When it reaches the proper position, the indicator LED will turn off and you will also hear a beep. If the LED does not turn off, the cartridge may not have been installed correctly. Remove the cartridge and reinsert as described above.



- Discard the used cartridges per your local regulations. Never dismantle, tinker with, or attempt to refill the used ink cartridges. Refilled ink cartridges can clog the ink delivery system and Printhead.

## Switching from Color to White Ink

A printer with all colored ink cartridges for white garment only printing can be reconfigured to color and white inks for white and black garment printing. The first four ink channels must always have Y M C K colored ink cartridges. The white ink cartridges must be installed in channels five through eight if desired.

Ink Bay	Bay 1	Bay 2	Bay 3	Bay 4	Bay 5	Bay 6	Bay 7	Bay 8
For White Garments Only	Yellow	Magenta	Cyan	Black	Yellow	Magenta	Cyan	Black
For White and Black Garments	Yellow	Magenta	Cyan	Black	White	White	White	White



The diagram below the table shows the physical layout of the ink bays. Bays 1-4 are labeled YELLOW, MAGENTA, CYAN, and BLACK. Bays 5-8 are labeled with a diagonal split: Bay 5 is Y/W, Bay 6 is M/W, Bay 7 is C/W, and Bay 8 is B/W. Each bay has a small red square below it.

- Replace the color ink cartridges in ink bays five through eight with Cleaning Fluid cartridges.
- Perform several Printhead Cleaning operations from the program utilities window. You can see the cleaning fluid replacing the colored ink in the ink tubes if you open the printer top cover. The cleaning fluid does not have to reach all the way to the damper area.
- Remove the cleaning fluid cartridges from ink bays five through eight and install the white ink cartridges in their place. Make certain you shake the white ink cartridges gently several times before installation.
- Perform Printhead cleaning operations from the program utilities window several times until you observe the white ink reaching the damper.
- Print a Printhead nozzle check to verify the patterns exceed 80% for color and 90% for white. If not, Use the Printhead Clean function. Repeat this process until the Printhead nozzle check reaches the desired results. If the Printhead nozzle checks start to deteriorate, there may be foam in the Printhead. It may be necessary to let the printer rest overnight if any air foams need to be settled. You may also choose to perform an ink charge using the Epson utility to clear the Printhead. This pushes a large volume of ink.

# MelcoJet FP-125 Printer User Manual (v. 4.0)

## Cleaning Maintenance Station and Nozzle Plate

Inkjet printers used for apparel printing require higher level of maintenance than those used for document printing. Greater rate of ink flow, lint from garments, ink pigments and chemicals from pretreatment liquid all contribute to accumulation of foreign elements in the maintenance station, wiper blade and Printhead areas. If not cleaned out regularly, these residues will interfere with ink flow, resulting in lower quality prints and shorter life of the Printhead.

It is recommended to clean the maintenance station, wiper blade, and around the Printhead every week for printers with colored inks only. If white ink cartridges are installed, the ink residues will accumulate at a faster rate. It may be necessary to perform this maintenance more frequently when using white ink.

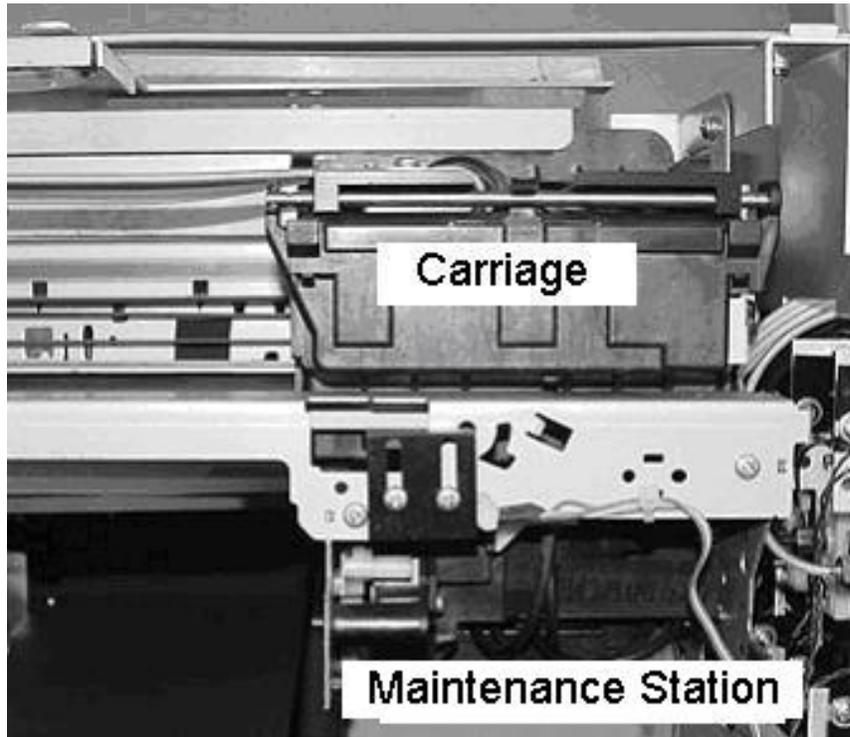
You will need cleaning applicators for this maintenance procedure. These are low lint urethane cleaning swabs made for the MelcoJet. You will also need a long flathead screwdriver, cleaning fluid, and gloves.



## MelcoJet FP-125 Printer User Manual (v. 4.0)

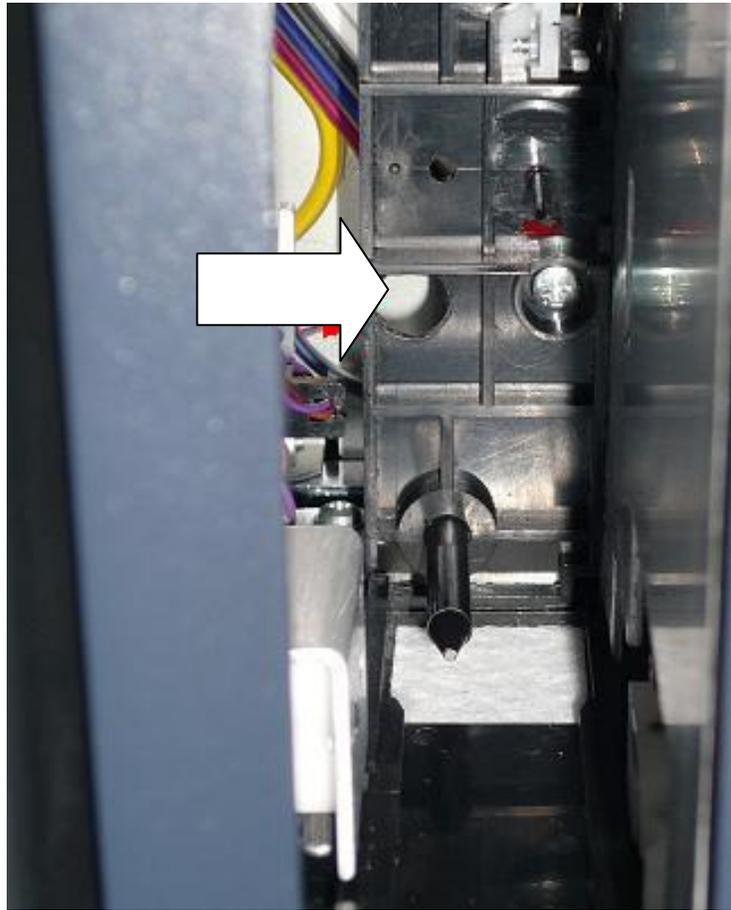
### Cleaning Procedures:

- Power off the print engine and the main power switch. Open the printer top cover
- Locate the maintenance station below the Printhead carriage



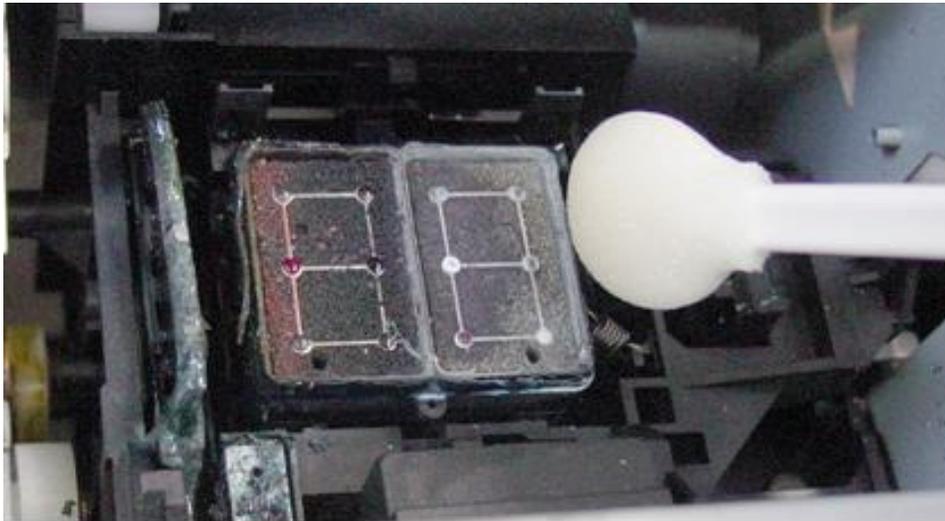
*Carriage and Maintenance Station*

- Remove the ink cartridge from ink bay four (fourth from the far left)
- Locate the carriage-release access hole located in the bay
- With a flathead screw drive about 8 inches or longer, rotate the carriage-release counterclockwise until the carriage is freed from the maintenance station.
- Push the carriage to the left to allow access to the maintenance station from the top side.
- Continue rotating the carriage-release until the wiper becomes accessible.



*Carriage Release Access Hole*

- Using Cleaning Applicators, gently clean around the maintenance station and the wiper blade. It is important to clean the edges of maintenance station which couples with the Printhead nozzle plate to form an airtight seal during cleaning operations. Clean both sides and top of the wiper blade, with care so that surrounding items will not be damaged. Remove as much of the accumulated ink residues as possible. The Cleaning Applicator can be dipped in MelcoJet Cleaning Fluid if there are dried ink deposits in the area. Never dip soiled Cleaning Applicators in the Cleaning Fluid bottle to avoid contamination. Always use a new applicator. Do not use any sharp objects to remove dried ink deposits.



**Cleaning the Maintenance Station**



**Wiper Blade      Cleaning Wiper Blade**

- The Printhead nozzle plate is located below the Printhead carriage. While the carriage is still out to the left, gently clean the nozzle plate edges with a new cleaning applicator. Clean the residue accumulated only on the edges of the nozzle plate. Do not touch the nozzle plate itself. **⚠ Extreme care must be exercised when cleaning the nozzle plate edges so as not to scratch the nozzle plate.** The nozzle plate has delicate thin coating which can be scratched. If the coating is scratched, the Printhead becomes unusable.

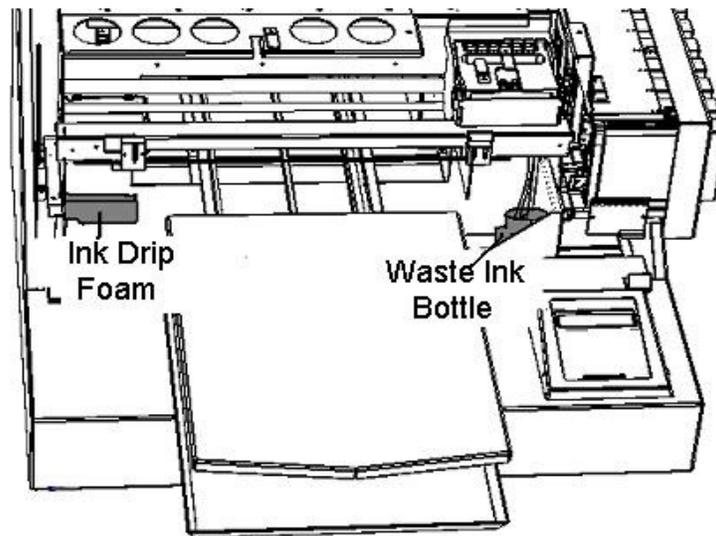


**Print Head Nozzle Plate Viewed from Bottom**

- Once all the cleaning is completed, replace the Black Ink cartridge in the ink bay four.
- Leave the Printhead carriage pushed over to the left before turning on the print engine.
- Press the control panel POWER key. The printer will automatically place the release gear in the right position and park the carriage in the maintenance station. Do not attempt to place the release gear by hand.

## Waste Ink Bottle and Ink Drip Foam

- The printer's waste inks are collected in the Waste Ink Bottle which needs to be emptied periodically. It is accessible when the printer top cover is open. It is located on the right-hand side below the Printhead maintenance station. Wear a glove if desired.
- Carefully remove the two waste ink tubes going into the bottle, as to not spray waste ink. Remove the waste ink bottle, and pour the waste ink into a glass or plastic jar.
- Replace the waste ink bottle and the two waste ink tubes.
- Dispose the jar containing the waste ink according to your local rules. Do not discard the waste ink into the city sewer.
- Check the waste ink accumulation every time you open the top cover. **⚠ It is very important to empty the waste ink bottle before transporting or shipping the printer.**



*Empty Waste Ink Bottle and Ink Drip Foam*

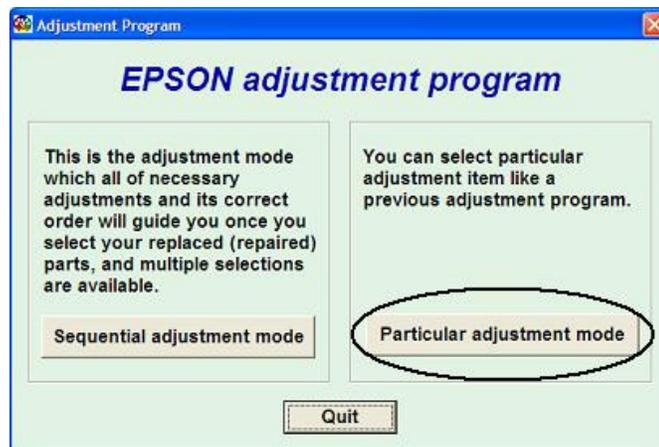
- Check the Ink Drip Foam located on the left-hand side regularly. Replace them as needed when it is soaked or excessive ink residue builds up. If you use a lot of white ink, you will have a rapid build up of residues. Replace the foam as necessary so that the white ink residue build up will not touch the Printhead nozzle plate. If you do not have a new Ink Drip Foam to replace, you can re-use the Ink Drip Foam after washing. Dry the foam thoroughly before reinstalling it.
- There are two other foams used to catch waste inks: one surrounding the Waste Ink Bottle, the other under Ink Drip Foam. These foams are larger, and most ink will evaporate. Depending on the usage pattern of the printer, they can get soaked with waste ink. Replace or wash them as needed. If washed, dry them thoroughly before reinstallation.

## Waste Ink Count Reset

When the print engine waste ink count reaches its maximum value, the waste ink count has to be reset using Epson print engine Adjustment Program before the printer can be used again. When it is necessary to reset the waste ink count, the printer LCD may give “ERROR: RESET WASTE INK PAD” message during system initialization. Depending on your printer usage pattern, it may be necessary to reset the counter every few months. The Adjustment Program can be downloaded from Epson website. Open the program in the computer you normally use to run the MelcoJet printer. This procedure must be performed with the print engine fully turned on, with proper USB cabling to the computer.

- First turn on the MelcoJet printer fully, including print engine.
- Open the Epson Adjustment Program (APSPR1800\_Ver10.exe).
- Click the particular adjustment mode button. Do not use any functions other than the waste ink pad counter initialization in the program as explained here. 

**Improper use of some of the features will make your printer unusable. Obtain assistance from Melco Technical Support if needed.**

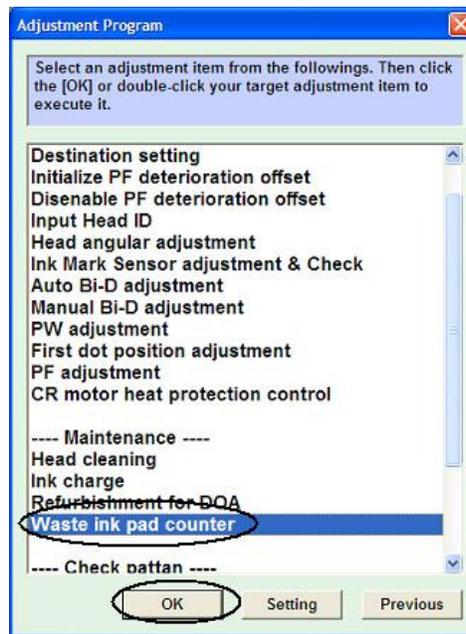


- In the Port Selection window, choose Auto Selection and click OK.

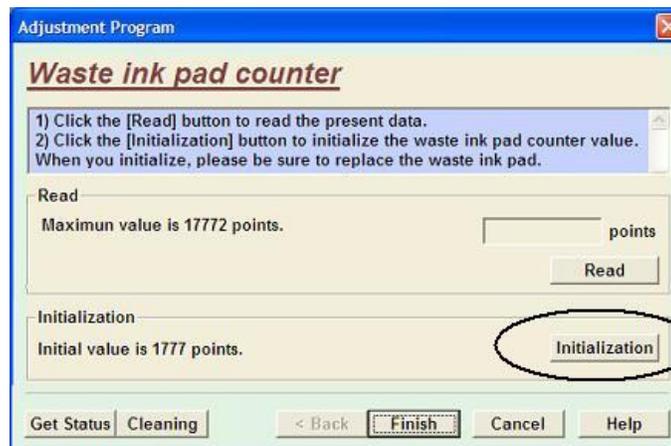


- When the menu page appears, select Waste Ink Pad Counter in the Maintenance section of the menu. Click OK.

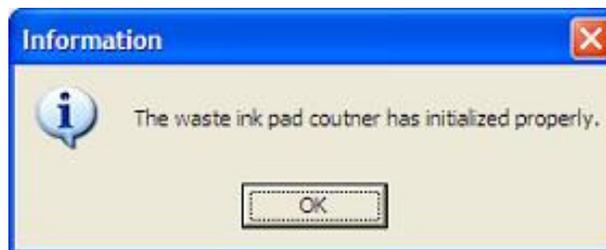
# MelcoJet FP-125 Printer User Manual (v. 4.0)



- Click Read button to see the current waste ink counter value. It will be close to the maximum value of 17772 points. Click Initialization button to reset the value.



- When you see the following confirmation window, the waste ink counter is reset properly. Click OK, and restart the printer.



## Cleaning the Printer

Clean the printer a few times a year to keep the printer operating properly.

**⚠ While cleaning, be careful not touch or soil any of the gears and the carriage encoder strip behind the carriage movement space.**

**⚠ Never use alcohol or thinner to clean the printer. These chemicals can damage the printer components.**

**⚠ Do not use a hard or abrasive brush.**

**⚠ Do not lubricate the inside of the printer. Unsuitable oil or lubricants can damage the mechanisms.**

1. Turn off the print engine power with the POWER key on the control panel. When the print engine power down sequence is completed, turn off the main power switch in the rear of the printer.
2. Open the printer cover.
3. Using a soft brush, clean away any dust and dirt inside the printer.
4. Clean the maintenance station, wiper blade and around the nozzle plate.
5. Empty the waste ink bottle.
6. Replace or wash the ink drip foam as well as the two lower waste ink foams.
7. Close the printer top cover.
8. If the outer cover is dirty, clean it with a soft damp cloth with mild detergent. Make sure the water does not seep into the printer's mechanisms.
9. Using a damp cloth, clean the print table with mild detergent.

## Maintenance/White Ink

Due to higher concentration of solids and heavier white ink pigments, white ink can clog the ink delivery system and print heads. When white ink cartridges are installed in the printer, more frequent head cleaning and regular maintenance operations are necessary. The garments should never touch the print head or nozzle plate as it can scratch the nozzle plate coating or cause clogging of the nozzles. This is particularly true when printing with black garments sprayed with pretreatment liquid. Adjust the print table height so that the garments will not touch the print head nozzle plate.

The periodic printer maintenance takes an added importance when the printer is used for black garment printing. The white ink contains a higher percentage of solids than colored inks, resulting in more ink residues accumulating on and around the print head, wiper blade and maintenance station. When white ink is used, the white residues accumulating around the maintenance station and nozzle plate cause the maintenance station not to seal properly during cleaning cycles. The pretreatment applied to the garments also leaves residues on the print head area. All these accumulation of foreign materials will tend to clog the print head and shorten its life unless the residues are removed regularly.

# MelcoJet FP-125 Printer User Manual (v. 4.0)

For those printers with white ink installed, it is very important to follow the printer maintenance schedule below on a regular basis. If continually neglected, it will be necessary to ship the unit back to Melco and go through an extensive rehabilitation process.

## DAILY:

- Remove all 4 white ink cartridges and shake them gently. Do not shake the cartridges vigorously. If there is any air trapped inside the cartridge, vigorous shaking may cause aeration of the ink resulting in poor ink flow. Replace them in the same ink bays.
- Using the Printer Driver utility, perform the print head clean at the end of each day. Do not use the print head clean function too many times consecutively, as it will cause development of air foam, blocking ink flow.
- Using the printer driver utility, perform the print head nozzle check, printing directly on the print table surface to check for blocked nozzles.
- Each color block should meet or exceed 80%
- Each white block should meet or exceed 90%
- If the print head nozzle check is not satisfactory, repeat the print head clean and print head nozzle check as needed until the pattern is acceptable.
- Clean the ink from the print table.

## WEEKLY:

- Using a cleaning applicator, clean the maintenance station, wiper blade as well as the edges of the print head nozzle plate.
- Place 2 drops of cleaning solution into each pad in the maintenance station

## MONTHLY:

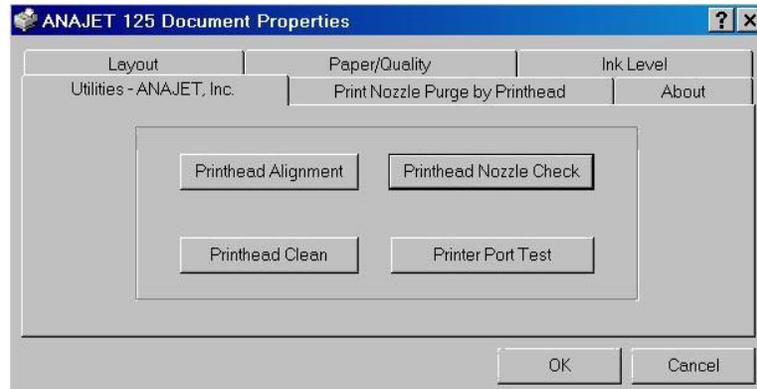
- Replace the white ink cartridges with cleaning cartridges and perform the print head clean until the white ink in the tubes is replaced by cleaning solution.
- Reinstall the white ink cartridges and perform the print head clean until the cleaning solution is completely replaced by white ink in the tubes.
- Check the left drip pan ink drip foam for excessive buildup and replace or clean as necessary.
- Check the waste ink bottle and empty as required.

If the printer will be left unused for a weekend, make sure that the print engine is on, and that the auto Printhead maintenance is running at regular intervals.

If the printer will not be used for an extended period of time, remove all of the ink cartridges and replace with the cleaning fluid cartridges. Purge the ink lines and replace with cleaning fluid.

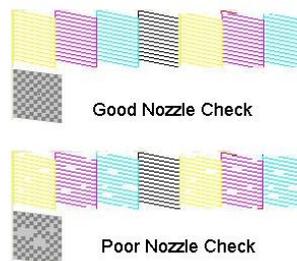
## Print Utilities

From the print program, click Utilities tab. There are four utilities available for the printer.



### Checking the Nozzle Check Pattern

To check the Printhead nozzles, click the Printhead Nozzle Check button. When the "Nozzle Check" dialog box opens, click "Print" button. Place an 8.5x11.0 or larger size paper at the lower right corner of the Print Table. Press PRINT key on the control panel when the Ready LED lights up. Examine the printed Nozzle Check pattern carefully. In the Nozzle Check print pattern shown below, the seven colored patterns correspond to ink channels 1 through 7. The pattern below the first yellow is for the eighth channel.



If the printed Nozzle Check pattern is not satisfactory, it is necessary to perform Printhead cleaning operation. Click Printhead Clean button. The system will take over and clean the Printhead which takes about 1 to 3 minutes, depending on the status of the printer. It is a good idea to print the Nozzle Check pattern again, after each Printhead cleaning.

**⚠ Never perform more Printhead cleaning operations than absolutely necessary. Do not clean Printhead more than two or three times consecutively. Over cleaning will introduce air into the ink delivery system, and air foam will develop near the Printhead, blocking good ink flow.** It takes time for the air foam to settle and allow ink flow again. Instead of additional head cleaning, you can use Purge Print utility explained below.

# MelcoJet FP-125 Printer User Manual (v. 4.0)

If you continue to have poor nozzle check pattern after one or two Printhead cleaning operation, or if you need frequent Printhead cleaning operation, there may be other issues. You may need to clean the maintenance station or the Printhead nozzle plate. The humidity in the MelcoJet room may be too low, which will dry out the Printhead nozzles. Refer to the relevant section of maintenance and trouble shooting in this manual.

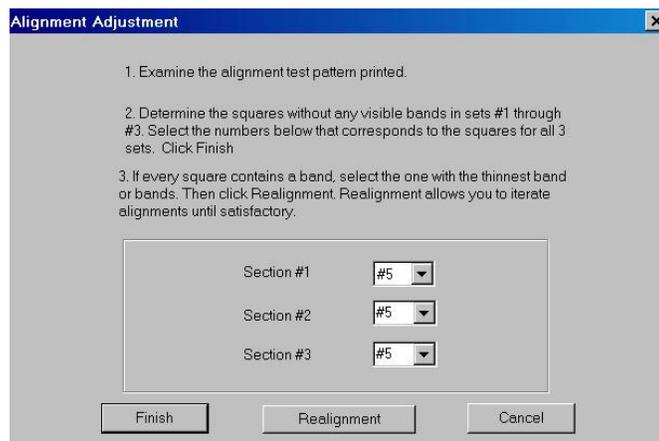
Never send a print job from the computer or press control panel keys until the Printhead cleaning operation is completed. The printer can lock up and you may have to reboot the printer.

## Printhead Alignment

When the Printhead is out of alignment, you will experience poor print quality or the prints may become “fuzzy.” When you change the distance between the print material surface and the Printhead nozzle plate, you will also need to re-align the Printhead. When you notice print quality decline without any apparent reason, perform the Printhead alignment.

Click the Printhead Alignment button while in the Utilities window. Load an 8.5x11.0” or larger size paper at the lower right corner of the Print Table. When the Ready LED lights up on the control panel press the PRINT key.

Upon printing the alignment pattern, examine the alignment pattern carefully. For each of the three sets of test patterns, select the square without visible white band or least amount of band. Enter the value in the corresponding dialog box. Follow the on-screen instructions. If the selected squares have no band, and you are satisfied, click the Finish button. Otherwise click the Realignment button to re-align the head. You can realign as many times as necessary. If the Printhead is badly out of alignment, it may take several iterations.



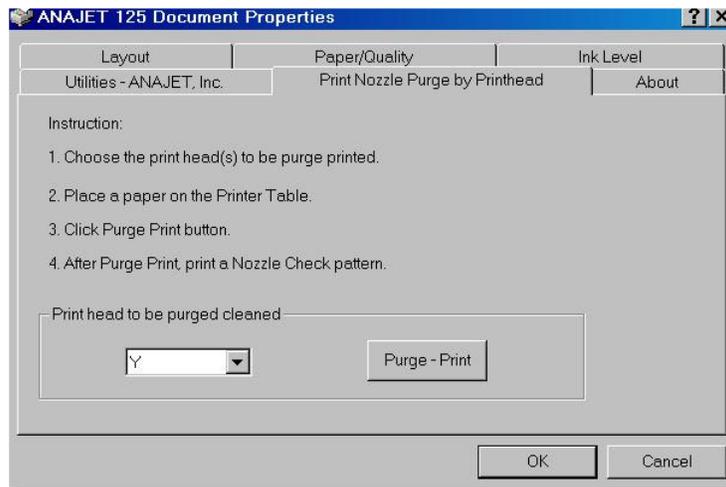
## Printer Port Test

The Printer Port Test is used to test the communication between the computer and MelcoJet printer. Click the Printer Port Test button, while watching the printer control panel The Power LED will blink a few times if the communication is established. If it doesn't blink, refer to the troubleshooting appendix.

## Print Nozzle Purge by Printhead

Click the Print Nozzle Purge by Printhead tab. Follow the on screen instructions. The drop down menu lists Y, M, C, K, Y/W, M/W, C/W, K/W, to choose from. Select the channel or channels that need to be purged, then click Purge-Print button.

Load an 8.5x11.0" or larger size paper at the lower right corner of the Print Table. When the Ready LED lights up on the control panel press the PRINT key.



## Transporting the Printer

### Short Distance:

To move the printer a very short distance, with the printer remaining at a horizontal position, follow the steps below. Examples of such a move will be moving the printer within the same building or within a few city blocks under your supervision. If you are transporting the printer in a vehicle, the actual travel time should not take more than an hour or two. If traveling through a high temperature or very low humidity area, or if there is a large altitude change, replace the ink with cleaning/shipping fluid following the instructions in the Long Distance section. If you are placing the printer in the printer box, you will also have to replace the ink with cleaning fluid as the cartridges cannot remain in place for the printer to be boxed.



- Turn off the print engine by pressing the POWER key in the control panel. When the print engine completes its power down sequence, switch off the printer main power switch in the rear of the printer.
- Empty the Waste Ink bottle.
- Remove both the power cord and USB cable.
- The ink cartridges should remain in place. Removing ink cartridge may cause ink to dry-out in the ink delivery system.
- Restrain the Print Table in place with the Table Retainer.
- Move the printer carefully (two people are required). Keep the printer horizontal.
- When it reaches the destination, make certain the printer is placed on a stable, sturdy and level table. Make sure the printer is level.
- Make sure that the inks are not exposed to temperatures beyond what is recommended on the label.
- Perform a Printhead nozzle check and clean the Printhead as needed to restore good ink flow. Leaving the printer for a long time without restoring good ink flow may cause difficulties with the ink flow later.

# MelcoJet FP-125 Printer User Manual (v. 4.0)

Long Distance:

**!! The MelcoJet needs to be on for the following procedure, including the print engine.**

- Replace all of the ink cartridges with Cleaning Fluid cartridges.
- Open the printer cover.
- Using the print program utilities, perform the Printhead cleaning operation several times. The cleaning fluid will be visible in the ink lines. Continue the Printhead cleaning operation until the clear cleaning fluid reaches the damper area for all ink lines.
- Empty the Waste Ink Bottle.
- Close and secure the printer cover using the screws at the bottom corners of the front cover.
- Turn off the print engine with the control panel POWER key. When the print engine completes its power down sequence, switch off the printer main power in the rear of the printer.
- Remove all of the cleaning fluid cartridges.
- Insert the table retainer.
- Remove both the power cord and USB cable.
- Package the printer in the original shipping containers before shipping. Handle the printer with the help of a second person to avoid damage. **DO NOT PLACE ANY OTHER ITEMS IN THE PRINTER BOX. IF NECESSARY, USE A SECOND BOX FOR ACCESSORY ITEMS.**
- Keep the printer level while handling and transporting.
- When it reaches the destination, make certain the printer is placed on a stable, sturdy and level table. Make sure the printer is level.
- Install the ink cartridges as soon as possible after the transporting the printer. To avoid ink contamination, make sure that the ink cartridges are installed in the correct ink bays.
- After attaching the power and USB cable, power up the main switch, then the print engine.
- Perform Printhead cleaning operation several times using the utility in the program to replace the cleaning fluid with printing inks. Make sure the ink in each of the 8 tubes reach the damper and Printhead area by observing the ink tubes under the printer cover.
- Perform a Printhead nozzle check and clean the Printhead as needed to restore good ink flow. Leaving the printer for a long time without restoring good ink flow may cause difficulties with the ink flow later.

**!! The printer box must be secured onto a pallet and shipped via a trucking or air freight company with FRAGILE instructions. DO NOT USE UPS OR FEDEAL EXPRESS small package service, as they will put the printer onto conveyor belts tumbling the printer many times. It will severely damage the printer.**

## **Appendix II -Troubleshooting**

### **The print engine does not turn on**

During the print engine power up sequence, the control panel Power LED will blink and LCD will display for two or three minutes:

*PLEASE WAIT  
SYSTEM INITIALIZING*

When the print engine properly completes the powered up sequence, the blinking Power LED becomes steady on, the Print Table will move forward to the Load Position. The LCD displays:

*PRINTER READY  
SEND JOB/PRINT KEY*

If the Power LED continues to blink and the LCD display is hung at PLEASE WAIT SYSTEM INITIALIZING for more than 4 or 5 minutes, try one or more of these solutions.

- Turn off the main power switch in the rear of the printer. Turn off your PC. Wait two minutes. Turn on the printer main power switch, and wait until the LCD displays MODEL FP-125 V x.x DOWN ARROW FOR MENU. Push the Print Table all the way back until it stops. Then press the POWER key on the control panel. If the print engine turns on properly, you will see PLEASE WAIT SYSTEM INITIALIZING display being replaced by BUSY. MOVING TABLE TO LOAD POSITION. You will also notice that the Print Table is moving forward to the load position. When the power up sequence is completed, you will see PRINTER READY SEND JOB/PRINT KEY. Turn on your PC.
- One or more print job may be in queue in the PC, confusing the print engine. Power off the printer. Then purge the print job from the computer by turning it off and on or by deleting the job from Windows print spooler.
- Perform the Waste Ink Count Reset procedure.
- Make sure the power outlet works and is not controlled by a wall switch or timer.
- Make sure the AC power supply voltage matches the rated voltage range, and the AC power cord is securely plugged in. If the supplied voltage and rated voltage do not match, do not plug the printer back in again. It may damage the printer.

# MelcoJet FP-125 Printer User Manual (v. 4.0)

## The printer does not print anything

### Printer not connected to PC properly

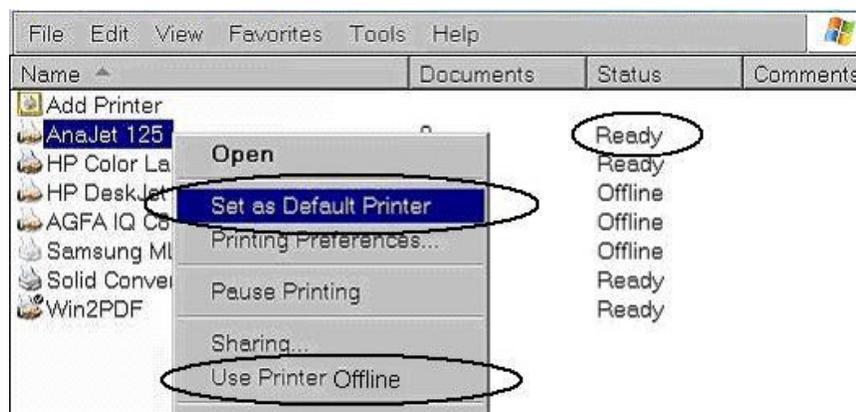
When a job is sent from the PC, the control panel Power LED blinks. When the job is loaded, the Ready LED turns on. If these do not happen, the printer did not receive the job or did not receive a job properly. The problems likely lie in the computer or communication.

- Perform a Printer Port Test using Printer Utilities. If there is no communication between the printer and computer, proceed to the following process.
- Make sure that MelcoJet printer is selected as the default printer in your PC and the job is sent to MelcoJet Printer.
- Make sure the proper USB port is selected.
- Turn off the printer and computer. Make sure the USB cable is securely plugged into both the computer and printer.
- Make sure the cable is shielded USB cable meeting specifications.
- Make sure the cable is directly connected to the computer without passing through other devices.

### MelcoJet printer not selected or offline

MelcoJet printer may not have been selected as the printer to be used, and the print job may have been sent to a different device. To select the MelcoJet as the default printer, click Start/ Control Panel/ Printers and Faxes. You will see Windows Printers and Faxes dialog box as below. Right click AnaJet 125, the click Set as Default Printer.

Next make sure the status is “Ready” in the Status column. If it is indicated “Offline,” click “Use Printer Online.” You will see its status changing to “Ready.” If it is offline, there is also a good chance that the Port Selection is incorrect.

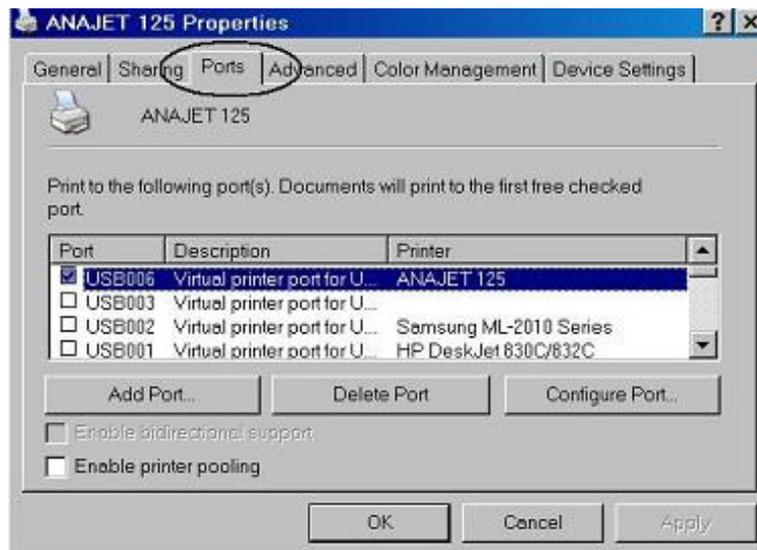


# MelcoJet FP-125 Printer User Manual (v. 4.0)

## Incorrect USB port selection

Incorrect USB Port specification is one of the most common problems. Perform a Printer Port Test. If there is no communication between the printer and computer, it is likely that the printer is assigned to the wrong USB COM port.

To assign the proper USB port to MelcoJet printer, click Start / Control Panel / Printers & Faxes. From the Printers & Faxes dialog box, double click the MelcoJet driver, then click on the Ports tab. Select the proper USB port if you know it (in this illustration, it is USB006), then click OK. Proceed to the Printer Port Test in the Utilities window to confirm. If you do not know which port is assigned to MelcoJet, you may have to try each of the USB ports listed in the Ports tab dialog box until you make the proper connection.



Once all of the above problems are resolved, perform a Printer Port Test in the utilities window to make sure the computer and MelcoJet are communicating properly.

## Reinstalling the printer driver

Try reinstalling the printer driver program. Before reinstalling the driver, first uninstall the printer driver using the Printers and Faxes utility of the Windows Control panel.

# MelcoJet FP-125 Printer User Manual (v. 4.0)

## Prints are not what you expected

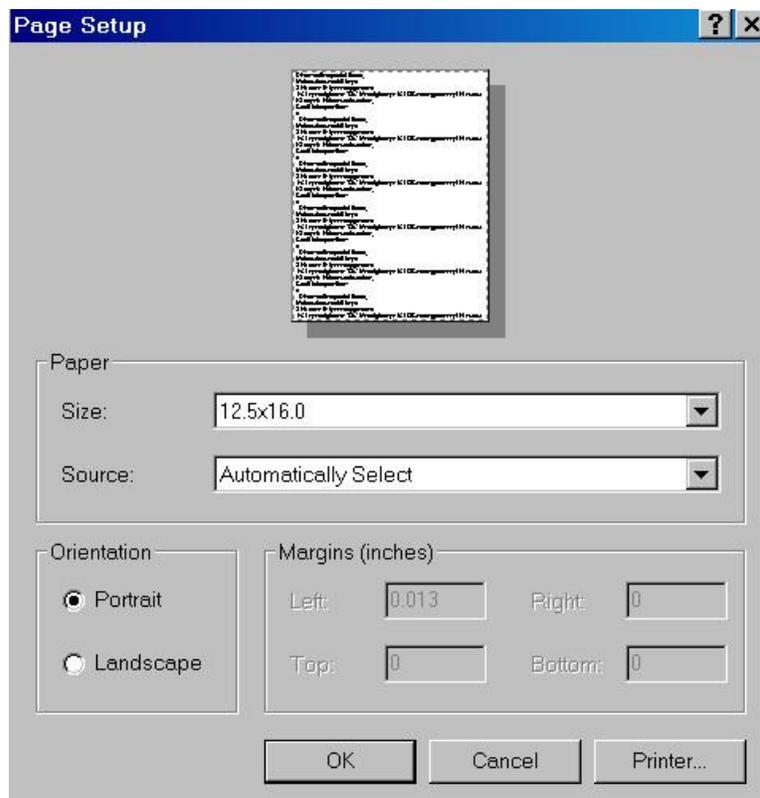
### Incorrect or garbled characters

Try one or more of these solutions.

- Select MelcoJet as the default printer.
- Turn off the printer and PC, and then reboot both the printer and PC. It will clear any jobs stacked in the printer spooler.
- Make sure the graphics application program is for Windows XP.

### Partial print of the design

Make sure the Page Setup is correct in the application program. For example, for Photoshop Elements, click Files/Page Setup. Make sure that orientation is set for **portrait** and the Paper Size for **12.5x16.0**, and Source is **Automatically Select**.

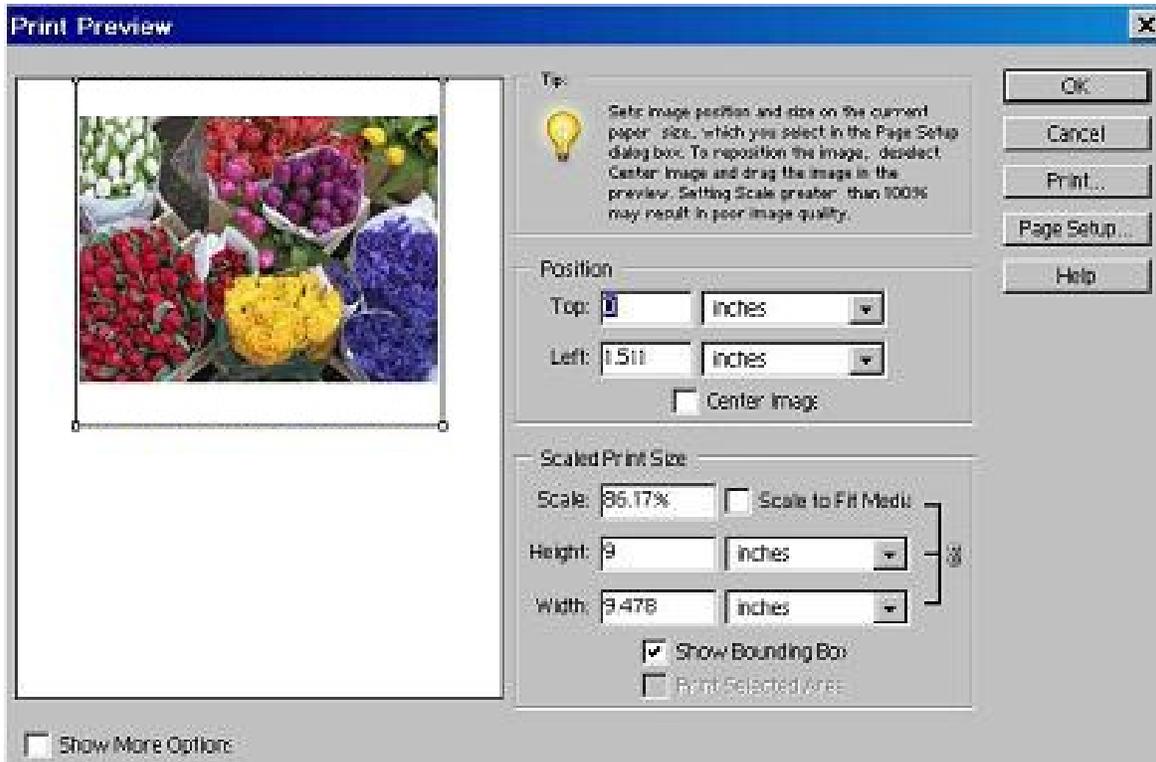


# MelcoJet FP-125 Printer User Manual (v. 4.0)

## Printing in wrong place of the table or partial print of the design

Make sure the margin is set correctly in the application program. For instance, in Photoshop Elements, click File/Print Preview. In the Print Preview window, the white rectangular area on the left represents the 12.5x16.0 Print Table, with the top being the top (closest to you) of the Print Table. Left margin on this rectangle is the right side edge of the Print Table if you are standing in front of the printer. Make sure Scale to Fit Media box is unchecked. Then check and uncheck Center Image box.

Now the design is positioned in the center of the preview area. To move the design closer to the top of the preview area (that is the top of the Print Table); enter .1 or 0 in the Position/Top box. If Show Bounding Box is checked, you can even drag your design within the preview area with the mouse.



## Blank page is printed

- Select MelcoJet printer as the default printer in Windows
- Make certain the Margin is set correctly. (*see above*)
- Make certain the Page Setup is correct. (*see above*)

# MelcoJet FP-125 Printer User Manual (v. 4.0)

## Printed color is different from the color on the monitor screen

- Since the monitors and printers produce colors by different methods, the printed colors will not always match on screen colors exactly.
- Make sure the color specification in the application is correct. For results we recommend that your color mode be RGB and that no ICC profiles are applied.

## Prints are fuzzy or there are smears on the images

- If you notice that there are fine ink sprays around the printed graphics, the Print Table height is too low and needs to be adjusted.
- It may be due to improper Printhead alignment. Perform Printhead alignment using the utilities in the print driver program.

### **Print quality**

There are many causes of poor print quality. Following are some examples of print quality issues.

## Horizontal banding



Try one of these solutions.

- Run the Nozzle Check utility. If any clogged nozzle is found, try Printhead Cleaning operation.
- Check the Bulk Ink Cartridge LED indicators. Replace the cartridges if any is out of ink. If this is the case, air may have been introduced into the ink delivery system. Open the printer cover, and check the ink tubes. If any of the tubes have air in them, it will be necessary to do several Printhead Cleaning operations after installing a new cartridge to purge the air in the system as well.
- Adjust the Print Table height to correct level.

## Printhead misalignment problem or banding

If you observe vertical misalignment or banding, it may be due to Printhead misalignment. Run the Printhead Alignment function from the Print utility.

## Incorrect or missing colors

# MelcoJet FP-125 Printer User Manual (v. 4.0)

Try one of more of these solutions.

- Run the Printhead Nozzle Check utility and perform Printhead Cleaning Operation as necessary.
- Check if any of the bulk ink cartridge is out of ink. Replace them if necessary.
- Check if all the bulk ink cartridges are installed correctly with the right color in the right cartridge bay.
- Adjust the color settings in your graphics application programs and printing program.

## Prints are faint and there are gaps

Try one or more of the following solutions.

- Make sure that ink level setting is not too low for the media being printed on. Run the Ink Level Test Pattern to determine the optimal level of ink for the garment being printed.
- Make sure that the ink cartridges do not exceed expiration date.
- Run the Printhead Nozzle Check utility to verify that all of the colors are 80% or better. Run Printhead Cleaning operation if needed.
- Check the Printhead Alignment utility and align the Printhead if necessary.
- Make sure the Print Table height adjustment is correct.

## Blurry or smeared prints

Try one or more of these solutions.

- Make sure the Print Table height adjustment is correct.
- Check the Printhead Alignment utility and align the Printhead if necessary.
- The ink level may be too high. Run Ink Test Pattern utility and set the ink level correctly for the garment being printed.
- Make sure the garment being printed is dry.
- Ink may have leaked inside the printer. Open the printer cover and wipe the inside of the printer with a soft, clean and lint free paper or cloth.
- Run the Printhead Nozzle Check utility to verify that all of the colors are 80% or better. Run Printhead Cleaning operation if needed.

## **Color image is printing in black only**

- Make sure the color data setting in the graphics application program is correct.
- Make sure the Color Mode is not set to be Black & White image.

## Printing is very slow

The printing program is preset for optimal printing on garments. An 8.0x10.0" average image printing at ink level setting of Ink Level 2 should print in about 60 to 75 seconds from the time you press the PRINT key. If it takes longer, try one or more of the following solution.

- Do not run too many programs in your computer at the same time. Close any application programs not related to running the MelcoJet printer.
- Delete unnecessary files to make room on your hard disk drive.
- Check your graphics application programs if there is any setting which may slow down. Close graphic files you are not currently printing.
- If you are using a RIP program to run MelcoJet printer, check the RIP program to determine if the data is generated too slow.
- Reboot your computer.
- The computer may not have enough memory. If the problem persists, consider increasing the RAM in the computer if it is determined that there is insufficient memory to run the application programs.
- The computer may not have sufficient capacity to run the application and/or RIP program if you use one. If this is the case, consider upgrading your computer to one with higher speed and capacity.

## As soon as the PRINT key is pressed, the obstruction sensor is triggered

Remove everything on the Print Table, and send a short print job from the computer. When the "Ready LED" lights up press PRINT key; if the obstruction sensor is triggered immediately, obstruction sensor may be faulty or the Print Table may be set too high. Try one or more of the following solutions.

- Adjust Print Table height low enough so that it will not trigger the obstruction sensor improperly.
- Adjust the obstruction sensor laser so that the laser will beam directly into the laser sensor.
- Disable the obstruction sensor using the \* Menu (Star Menu), and contact Melco Technical Support. Disabling obstruction sensor will allow you to use the printer until the sensor problem is resolved. **⚠ - CAUTION BY TURNING OFF THE OBSTRUCTION SENSOR YOU RUN THE RISK OF DAMAGING YOUR PRINT HEAD AND THIS SHOULD ONLY BE DONE IF NO OTHER REPAIR OPTIONS ARE AVAILABLE TO YOU. IF YOU DAMAGE YOUR PRINthead AS A RESULT OF SHUTTING OFF THIS SENSOR THE DAMAGE IS NOT COVERED UNDER MANUFACTURERS WARRANTY.**

## **Print table does not travel all the way to the front or rear**

Try to pull the print table by hand all the way to the front (Load Position) then push it all the way to the rear (Home Position). Pull and push firmly but do not force it. Push and pull several times until the table moves smoothly for the entire span of its travel. The problem will most likely be resolved by this action. If lubrication is needed, do not attempt to lubricate it without the assistance of Melco Technical Support.

## **Broken LCD display characters or garbled characters**

It may be due to static in the room the printer is operating. Try one or more of the following solutions.

- Turn off the printer completely (first the print engine, then the main power switch). Spray anti-static spray in the area printer is located. If the printer table is located on carpeted area, spray on the carpet. Then turn on the printer.
- Check the power outlet to make sure the wiring is correct. A complete check of the shop wiring by a licensed electrician is recommended, but a temporary quick check can be made using a simple wiring tester like the one illustrated below. Make sure the ground wire is correctly installed. If incorrect, the wiring must be corrected before turning on the power again to prevent damages to the printer.



- If the humidity is too low, the static problem may increase. Install a humidifier to increase the humidity. Adequate humidity also helps prevent the Printhead nozzles drying up.
- Make sure the chassis of the printer is grounded correctly. If necessary, reinforce the chassis grounding.

## **The Printhead nozzles are clogged**

MelcoJet printer with its closed loop ink delivery system and sealed bulk ink cartridges should operate without excessive nozzle clogging. But occasional nozzle clogs are inevitable with any inkjet apparel printers. Depending on the environment and pattern of printer usage, it will be necessary to perform occasional Printhead cleaning, more frequently if white ink cartridges are installed.

Under optimal conditions, the printer can run with perfect nozzle test patterns even if the printer is not used for several days. It is however recommended that the printer be used at least once a day for optimal nozzle maintenance. It is also recommended that the print engine not turned off even if it is not used for extended time. The printer self-maintains to keep the nozzles wet at all times. The ink usage is minimal.

If your printer nozzle clogging is excessive, try one or more of the following solution.

- Check and make sure the inks, particularly white ink, did not expire. Expired inks tend to clog the ink delivery system and give dull or incorrect colors. The colored inks expire in one year after the indicated manufacturing date, and white ink in six months.
- The white ink used for dark garment printing tends to settle more easily. If the nozzle clogging problem is mainly for white inks, try to gently shake the installed white ink cartridges once a day. You need to pull the white ink cartridges out of the cartridge bay. Shake them gently and reinsert them. Make sure that the ink does not spill all over while shaking by wrapping the cartridges in a paper towel.
- Keep the maintenance station, wiper blade and Printhead nozzle plate clean by regular cleaning.
- When the humidity is low, the ink evaporates from the nozzles, and they may tend to clog. Make sure that the room humidity level is 50% or more. Increase if necessary.
- For unused white ink cartridges in storage, try to turn them over once every few days until they are used. You can also gently shake the unopened white ink cartridges every few days. This will prevent the white ink components from settling.

# MelcoJet FP-125 Printer User Manual (v. 4.0)

## **AUTO SYSTM MAINTENANCE or RENEW INK SYSTEM**

### AUTO SYSTM MAINTENANCE

The printer is programmed normally to automatically renew ink system when necessary. During this time, the LCD will display AUTO SYSTEM MAINTENANCE and the Error [Wait] light will blink. Once the auto renewal process is complete, you will be able to print normally.

### RENEW INK SYSTEM

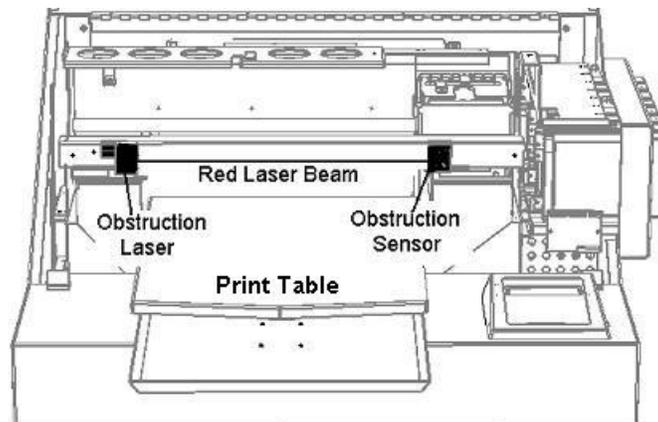
With an earlier version of printer firmware, the LCD may display to RENEW INK SYSTEM. It is necessary to renew the ink system manually, but this feature has been replaced with Auto System Maintenance. If you see this message in LCD, contact Melco technical support to update the printer firmware.

Ink System Renewal will normally address any issues associated with the Error [Wait] LED indicator and LCD message of RENEW INK SYSTEM. If the Error [Wait] LED continues to display solid ON, and the printer will not print any more jobs, it may be necessary to reboot the printer.

### **Obstructions during printing**

The Obstruction Sensor detects any obstruction on the Print Table, such as wrinkles on the shirts. Such obstructions can be mangled under the Printhead carriage, which can damage the printer. The Obstruction Sensor is installed so that the red laser beam will be just below the lowest point of the carriage. On the left-hand side of the printer, there is an Obstruction Laser Diode, which generates the laser. On the right-hand side, there is the Obstruction Laser Sensor.

**WARNING:** Although the laser used for the obstruction sensor is low power, exercise care so that the laser does not shine directly into any sensitive areas of your body such as eyes.



## MelcoJet FP-125 Printer User Manual (v. 4.0)

Obstruction Sensor is active only during print operations after PRINT key is pressed. Normally the Obstruction Laser Diode is off. It will first become active as the Print Table starts retracting to Home Position after the PRINT key is pressed. It will turn off when the current print job is completed and Print Table moves to the load position.

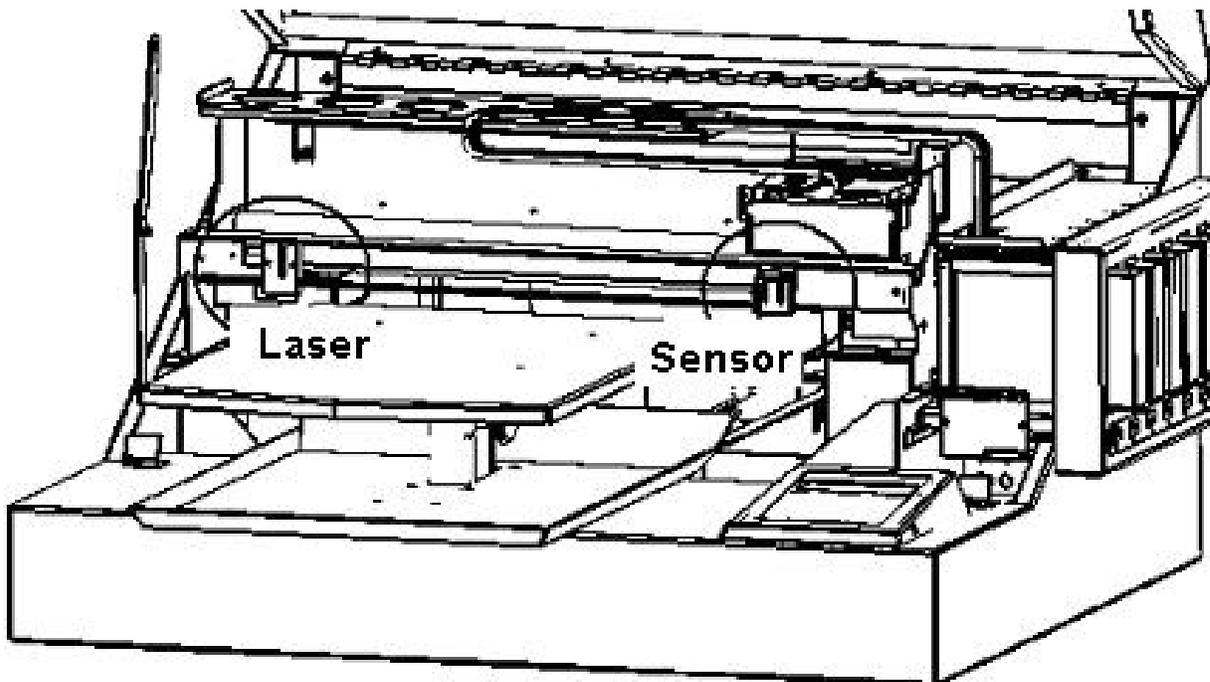
- If any obstruction is detected while the Print Table is moving to the Home Position (Print Start position), the Print Table stops. An audible warning signal as well as the following LCD display will appear. At this point the job will not be cancelled.

**OBSTRUCTION ERROR  
PRINT KEY WHEN CLEAR**

- Clear the wrinkles or other obstructions on the garment. Press PRINT key. The Print Table will resume its travel to Print Start position. If necessary you can use the TABLE key to bring back the Print Table to load position so that you are able to clear obstructions.

### **Obstruction sensor laser adjustment**

If the Obstruction Sensor Laser and its Sensor become misaligned, follow the procedure below to correct it.



# MelcoJet FP-125 Printer User Manual (v. 4.0)

1. Perform table adjustment
2. Turn the laser on from the Obstruction Sensor Setting in the Star (\*) Menu.
3. Place the Gauge Block on the table
4. The alignment lines should intercept the laser beam
5. Adjust the laser vertically until the laser dot is on the alignment line
6. Move the Gauge Block to the right side of the table repeat steps 4 and 5
7. Recheck the alignment at the left side
8. Remove the Gauge Block
9. Adjust the sensor block so that the laser is hitting the center of the sensor
10. Turn on the audible signal to allow you to properly align the sensor
11. Loosen the retaining screws for the sensor and adjust until you hear an audible tone (this indicates proper alignment)
12. Tighten the screws on the sensor

## **Communication and USB related problems**

### Operating System

Make sure that your computer is a PC, running on Windows XP operating system. Your MelcoJet printer does not support Apple computers, nor does it support any PC operating system other than XP. Windows XP Home Edition, Professional Edition, Media Center Edition all should work well with MelcoJet.

### Support of USB 2.0

Your USB must support USB 2.0 protocol. Older computers may only support USB 1.0. Your computer also must be a Windows XP pre-installed model with USB 2.0. You may not be able to run the MelcoJet USB Printer Driver on a computer which is not equipped with a USB port or which is upgraded from Windows 95, 98 or 2000. For details about your computer, contact a computer consultant.

### Printer Settings

Make sure that the MelcoJet print driver is loaded, and the status is “ready”. Make sure that the MelcoJet is the default printer. Right click on the printer and choose “Set as Default Printer”.

# MelcoJet FP-125 Printer User Manual (v. 4.0)



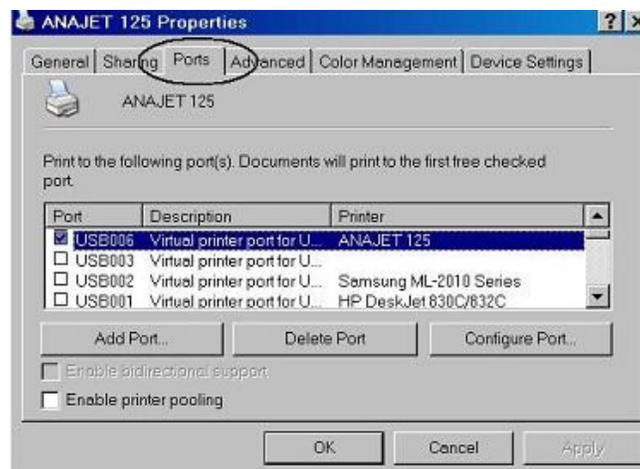
If the MelcoJet does not appear under the Name column, your driver is not installed properly. Notice the Status of MelcoJet. If it is “Offline”, your printer may not be turned on, the USB cable may not be installed correctly, or the printer may have been switched Offline.

To change the printer status to “Ready”, right click and select “Use Printer Online” from the dropdown menu. Notice the status changes to “Ready”.

## USB Port Selection

Incorrect USB Port specification is one of the most common problems. Perform a Printer Port Test. If there is no communication between the printer and computer, it is likely that the printer is assigned to the wrong USB COM port.

To assign the proper USB port to the MelcoJet printer, click Start / Control Panel / Printers & Faxes. From the Printers & Faxes dialog box, double click MelcoJet driver, then click on the Ports tab. Select the proper USB port if you know it (in this illustration, it is USB006), then click OK. Proceed to the Printer Port Test in the Utilities window to confirm. If you do not know which port is assigned to MelcoJet, you may have to try each of the USB ports listed in the Ports tab dialog box until you make the proper connection.



# MelcoJet FP-125 Printer User Manual (v. 4.0)

## Printer Port Test

Once all of the above problems are resolved, perform a Printer Port Test in the utilities window to make sure the computer and MelcoJet are communicating properly.

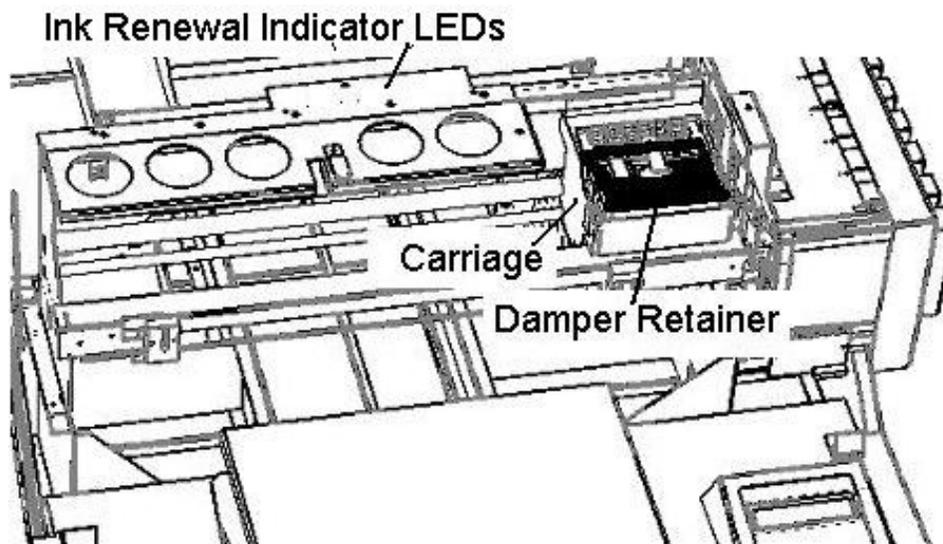
### **Cable problems**

If the communication problems persist, it may be related to the USB cable.

- Use the recommended shielded USB cable no longer than 6 feet.
- If you use a USB hub, try connecting the printer to the computer's USB port directly. If this solves the problem, you may need to use the first port of the hub for the printer, or try a different hub.

### **Reseating damper retainer (ink chip holder)**

Note: It is not likely that the operator needs to reseat damper retainers. Contact Melco Technical Support before attempting damper retainer reseating. When any of the Ink Chip Holder ink chips have gone bad, or the damper retainers need to be resealed, the control panel Error [Wait] LED will turn on. One or more of the ink chip monitoring LEDs (Ink Renewal Indicator LEDs) above the Ink Tube Bracket will also light up.



1. Turn off the print engine by pressing the POWER key on the control panel.
2. Open the printer top cover.
3. The damper retainers are on top of the Printhead carriage.

## MelcoJet FP-125 Printer User Manual (v. 4.0)

4. Release the ink tubes from the ink tube brackets by loosening the screws on the brackets and rotating them aside. Push aside the ink tubes to allow access to the damper retainers. Be careful not to disconnect the ink tubes from the dampers)
5. Remove the top damper retainer by first removing the shaft retaining rings. Then slide the shaft to the left until the retainer is free.
6. Remove the front damper retainer (Ink Chip Holder). Then, replace it carefully back in its place so that it will make solid contacts. Make sure you do not touch the green electronic chips on the Ink Chip Holder. **CAUTION: THIS PART IS STATIC SENSITIVE. MAKE SURE YOU ARE PROPERLY GROUNDED BEFORE HANDLING THIS PART.**
7. Replace the top damper retainer and then re-secure the ink tubes with the ink tube brackets.
8. Turn on print engine by pressing the POWER key on the control panel.
9. If the Ink Chip Holder was properly resealed, the Error [Wait] LED will not come on.

### Common error codes

The following table shows possible LCD error codes and the corresponding corrective procedures. Some but not all Error Codes are accompanied with the Error [Wait] LED lights.

INK CART MISSING CHECK CARTRIDGES	One or more bulk ink cartridges are missing or are incorrectly installed. Printer will not print unless all 8 cartridges are installed properly.
WARNING: LOW INK REPLACE CARTRIDGES	One or more bulk ink cartridges are out of ink. Replace them as soon as possible. Usually sufficient amount of ink remains to complete the current print. Running the printer with a cartridge that is out-of-ink can damage the printer.
OBSTRUCTION ERROR PRINT KEY WHEN CLEAR	An obstruction is detected on the Print Table. Clear the obstruction from the table. If this error code appears while there is no obstruction on the table just after PRINT key is pressed, the sensor may be out of alignment. You can continue to use the printer by temporarily disabling the Obstruction Sensor function in the * Menu.
ERROR: RESET WASTE INK PAD	Most likely, it requires waste ink count reset.
PLEASE WAIT SYSTEM INITIALIZING	This is not an error. If the printer is hung with this display for longer than 5 minutes, the print engine cannot complete initialization.

## Appendix III General Information

MelcoJet Consumables		
Description	Melco PN	Recommend Stock Level
Ink Cartridge – Yellow	17216	2 cartridges or two week supply
Ink Cartridge - Magenta	17217	2 cartridges or two week supply
Ink Cartridge – Cyan	17218	2 cartridges or two week supply
Ink Cartridge - Black	17219	2 cartridges or two week supply
Ink Cartridge - White	17220	8 cartridges or two week supply
Cleaning Fluid Cartridge	17221	8 cartridges or two week supply
Cleaning Fluid bottle	17223	1 bottle
Pretreatment Liquid	17222	2 bottles or two week supply
Cleaning Applicator - wide	17224	1 bag
Cleaning Applicator - narrow	17225	1 bag
Gauge Block	17226	no recommendation
Youth Print Table	17215	1 table
Waste Ink Bottle	17360	1 bottle (reusable)
Tube- Damper Sub Assembly	17353	no recommendation
Damper	17352	4 spares
Wiper Blade	17357	1 spare
Wiper Foam	17361	1 spare set
Drip Pan Foam	17358	1 replacement
Right Foam	17359	1 replacement
Shipping Box	17365	1 shipping box
Shipping Foam Set	17366	1 shipping box

- Colored ink useful life: one year after the indicated manufacturing date
- White ink useful like: six months after the indicated manufacturing date
- Cleaning solution: three years after the indicated manufacturing date