

# User's Guide

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#### Document Information \_\_\_\_\_

B930 User Guide

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# **PREFACE**

Thank you for choosing this printer. This is a guide on operating this printer and the important points to note. To understand the features fully and to use the printer correctly and effectively, please read this guide before using it.

Keep this guide handy for a quick reference on using the printer.

This guide is written with the assumption that you are familiar with the basic knowledge and way of operating your computer environment and the network environment.

In this manual, safety instructions are described with the following symbol:  $\bigwedge$ 

Always read and follow these instructions before performing the required procedure.

This product is a "Class I Laser System" that does not emit dangerous laser beam. Operate the machine according to the instructions in the manual. Do not carry out any operation not mentioned in the manual. Otherwise, it may lead to unforeseen accident or machine breakdown.

# **CONVENTIONS**

- **1.** In this guide, "computer" refers to both the personal computer and workstation.
- **2.** The following headers are used in this guide:

**Important** Indicates important information which you should read.

**Note** Indicates additional information on operations or

features.

**Refer to** Indicates reference sources.

**3.** The following conventions are used in this guide:

**Refer to "xxx"**The cross-reference is within this guide.

**Refer to YYY** The cross-reference is not within this guide.

- [ ] Indicates items displayed on the computer and the printer Operator Panel. Also indicates the title of printed reports/lists from the printer.
- Indicates items such as hard buttons and indicators on the keyboard and printer.

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- Passports and identification cards
- Copyright material or trademarks without the consent of the owner
- Postage stamps and other negotiable instruments

This list is not inclusive and no liability is assumed for either its completeness or accuracy. In case of doubt, contact your legal counsel.

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# **ABOUT THIS MANUAL**

Thank you for selecting the B930n 50 ppm Laser printer. This manual contains all of the information necessary to operate and care for your printer and accessories. It is intended to be used with the pictorial unpacking instructions and the Quick Setup Guide, both included in the printer packaging. If you have not already unpacked and installed the printer, please refer to these documents. This manual does not contain instructions for unpacking and installing the printer.

This printer has the following special features:

Quality printing at a high speed

Print speed is up to 50 pages per minute at either 600x600 or True  $1200 \times 1200$  dpi in 1-sided or 2-sided modes.

Flexible use of paper sources and delivery methods

The B930n printer provides a 100-sheet Tray 5/Multi-Purpose Feeder (MPF) from which specialty media, card stock, custom size large, transparencies, and envelopes are fed. Tray 5 also supports manual feeding.

Two additional trays, Tray 1 and 2, each provide 500 sheets of capacity for paper sizes up to A3 or 11 X 17 inches.

The Standard Top Bin Output Tray holds 500 sheets face down.

Network-readiness

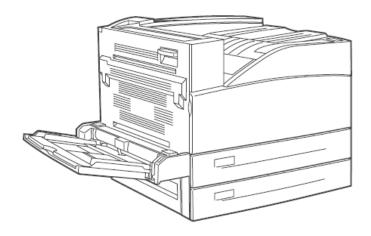
The standard printer includes a 10/100BaseT Ethernet Network Interface for use with TCP/IP, Apple Ethertalk, and Novell communications.

Easy operation

Consisting of two LEDs, a display, and nine function buttons, the easy-to-read Operator Panel display shows the status of printer operation.

Operator Panel push buttons allow you to access and view printer menus and status messages.

The basic printer consists of the print engine main unit, consumables, 100 Sheet Multi Purpose Feeder (MPF) as well as Trays 1 and 2 (500 sheet capacity each).



#### CONVENTIONS

This following conventions are used throughout this manual to emphasize certain procedures or information:

#### NOTE

> A note is a tip or extra information that may be helpful in installing or using the printer.

### **CAUTION**

A caution message provides information that may help you avoid equipment damage, process failure, or inconvenience. Read all caution messages carefully.

## **WARNING!**

WARNING! A warning message indicates the possibility of personal injury if a specific procedure is not performed exactly as described in the guide. Pay close attention to these sections and read them fully to prevent possible injury.

# **SAFETY NOTES**

For your own safety, please read this page carefully before using the machine.



 Do not place the machine in a hot, humid, dusty, or poorly ventilated environment. Prolonged exposure to these adverse conditions can cause fire or electric shock.



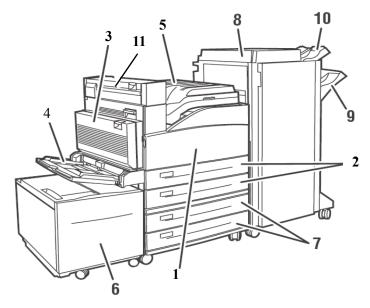
 Do not place the machine near heaters or volatile, flammable, or combustible materials such as curtains that may catch fire.

# **PRINTER ORIENTATION**

Throughout this guide, the four sides of the printer are referred to as front, rear, right, and left. The front of the printer is the side near the Operator Panel, and the rear of the printer is opposite the front. The left and right sides of the printer are defined as the sides to the left and right, respectively, of a person who is facing the front of the printer.

# **GETTING TO KNOW YOUR PRINTER**

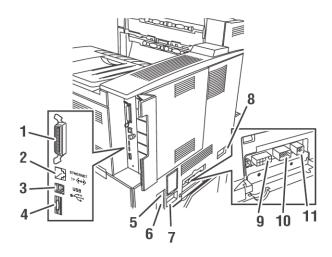
# **FRONT VIEW**



No.	Name			
1	Front Door			
2	Two 500-sheet feeders (Trays 1 and 2)			
3	Optional Duplex Unit			
4	Multi Purpose Feeder Tray 5			
5	Standard top bin output tray and transport to finisher			
6	Optional 2000-Sheet Feeder (Tray 6)			
7	Optional 2x 500-sheet A3 trays (2TM) or 2000-sheet A4/Letter dual input trays (TTM)			
8	Optional 3500-Sheet Finisher (3 possible configurations)			

No.	Name
9	Stacker Main Bin (3000 Sheets)
10	Stacker Upper Bin (500 Sheets)
11	Exit 2 is used in conjunction with duplex unit and finisher, comes with the Duplex unit.

# **REAR VIEW**

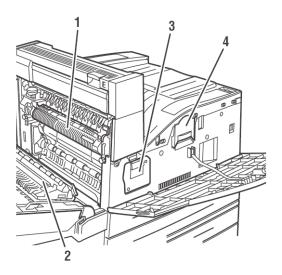


No.	Name		
1	Parallel Port, IEEE 1284		
2	Ethernet 10/100 BaseT connection		
3	USB 2.0 connection		
4	Serial RS232 port		
5	Ground Fault Interrupt (GFI) reset		
6	Power cord connection		

No.	Name			
7	Finisher power cord connection			
8	2000-Sheet Feeder (Tray 6) connection			
9	Finisher connection			
10	1000-Sheet Feeder (Trays 3 and 4) connection			
11	Duplex Unit connection			

Data I/O connector settings can be configured via the Operator Panel's Interface Menu. There are settings for Ports, Parallel Setup, USB Setup, and Serial Setup See "Operator Panel" on page 194 for a detailed description of each setting.

# **INTERNAL COMPONENTS**



No.	Name
1	Fuser
2	Transfer Roll

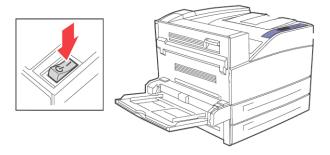
No.	Name
3	Drum Unit
4	Toner Cartridge

## TURNING THE PRINTER ON AND OFF

Switch on the power before operating the printer. When you have finished using the printer for the day or you do not intend to use it for a long period of time, switch off the power.

#### **TURNING THE PRINTER ON**

 Press the power switch to the <I> position to turn the power on.



### **TURNING THE PRINTER OFF**

- **1.** Make sure that the printer is not processing a print job.
- Press the power switch to the <O> position to turn the power off.

Remember to turn off the printer at the end of day or when the printer will not be used for an extended period of time.

#### NOTE

> When the printer is turned off, all print data still in memory will be erased

## **AVAILABLE PRINTER DRIVERS**

Drivers are available for the following Microsoft operating systems: Vista 32/64, XP 32/64, Server 2003 32/64, Windows 2000, NT 4, Windows 98, Windows Me, and Windows 95. Drivers for the following PDLs are available for each of the above operating systems:

- PostScript 3 Driver
- PCL5e
- PCL6

The printer emulates PCL5c, PCL6, and has a native Adobe processor for PostScript 3. Configuration options for these emulations are available via the Operator Panel PS and PCL Menus.

PPDs are provided for Mac OSX (10.2 and later). The installation CD contains PPDs for use with standard internal Mac drivers.

The installation CD contains PPDs for use with most current Unix CUPS drivers.

## UNDERSTANDING PRINTING OPTIONS

The printer offers many ways to modify printing options. The Operator Panel provides an interface at the printer. The Embedded Web Server (EWS) provides remote access via HTML. You can access features of the printer driver through your application or through your Printers and Faxes menu (on Windows). When accessing the driver through your Printers and Faxes Menu, you reach the Printing Properties window and are setting global options. When accessing the driver through an application, the Printing Properties entered apply only to documents printed through the application. Printing Properties set through an application supersede settings entered in any other way.

Certain printer settings, such as number of copies, duplexing, and collating may be set from the Print window provided by your application. These settings may be used instead of similar settings accessed via the driver. The settings from your application's Print window are reflected in the Printing Properties accessed from the driver.

# **OPERATOR PANEL FEATURES**

The Operator Panel is located on the front of the printer. It contains the display, indicators, and push buttons that allow you to view and change global printer settings. All features of the printer are accessible through the Operator Panel. These changes affect all documents printed unless instructions are provided through your applications printer settings.



#### NOTE

> If there is a conflict between settings in the Operator Panel, Printing Preferences, or Embedded Web Server and printer settings set via your application, the application settings supersede any other setting.

#### LCD DISPLAY

The LCD display shows status and error messages that inform you of the current status of the printer, and also displays menus, submenus, and printer settings when you are in the menu system. The display contains two lines of text, each with a maximum of sixteen characters.

#### **LED INDICATORS**

The LED indicators also indicate printer status. The three indicators can each be on, off, or blinking, indicating different phases of printer operation. The table below explains two of the LED indicators.

LED	COLOR	WHEN OFF	WHEN ON	WHEN BLINKING
Active	Green	Printer is IDLE	Printer is ACTIVE (processing a job)	Printer is WAITING (a partial job has been printed, and the printer is waiting for additional job data)
Fault	Red	Printer is not in error mode	There is an error that requires user intervention, such as a paper jam, a service call required, etc.	N/A

#### **PUSH BUTTONS**

The Operator Panel push buttons allow you to access and navigate menus, and also assist you in recovering from printer errors. The table below explains the functions of the eight push buttons.

BUTTON	NAME	FUNCTION
ON-LINE ◆	On-Line	Press to enter the off-line status. When in the off-line status, the machine cannot receive data or process printing. Press again to exit the off-line status and enter on-line status (where the machine can receive data. The LED on the button is solid green when ready to print. It flashes green when the printer is in power save mode
Menu	Menu	Enter the menu system.
SELECT P	Select	Select the menu or submenu that is shown on the second line of the display or to choose and save the setting shown on the second line of the display.

BUTTON	NAME	FUNCTION
Cancel	Cancel	Cancel a print job.
Next	Next	Move to the next menu, submenu, or setting within the same level of the menu structure.
Previous	Previous	Return to the previous menu, submenu, or option within the same level of the menu structure.
	Forward	Move forward one level in the menu structure to the menu shown on the first line of the display.
	Back	Move back one level in the menu structure to the menu shown on the first line of the display.

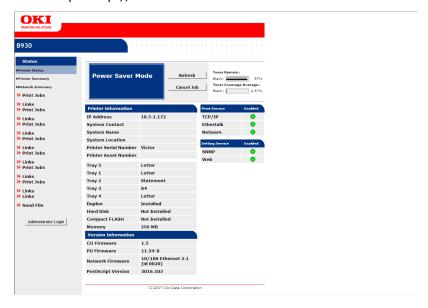
To navigate the menus, use a combination of the Menu, Select, Next and Previous buttons to scroll your way through the Menu Map structure.

# EMBEDDED WEB SERVER

This printer comes with an embedded web server (EWS). The EWS resides on the hardware and no installation is required. The EWS can be used from any remote station via HTTP access. The EWS contains access to all printer features and presents them as HTML web pages. The changes made via the EWS change the printer settings in the same manner as the Operator Panel. To change settings for specific documents, you should use your Printer Properties options within the driver.

To access the embedded web server you must be on an IP-based network and have access to a web browser.

In your web browser, type the IP address assigned to the printer. For example http://192.0.0.1



#### NOTE

> If there is a conflict between settings in the Operator Panel, Printing Preferences, or Embedded Web Server and printer settings set via your application, the application settings supersede any other setting.

The EWS interface consists of a left-navigation area and a display area. Use the left-navigation area to locate the desired items and make any configuration changes in the display area. The items available vary depending on your user login permissions. The default administrator login is "root" and the password is the last four digits of the printer's MAC address. Be sure to change this password after the first administrative login.

#### NOTE

> The username and password are case sensitive.

# **DRIVER PRINTER PROPERTIES**

The driver allows you to set Printer Properties when you send a print job to the printer. These changes apply to the document or program in which you are currently working. To make changes that apply to

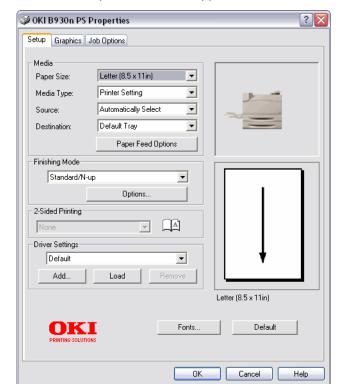
all jobs access Printing properties via your Printers and Faxes Menu. To make changes that apply to documents printed from a specific application, access Printer Properties from the application. Using your Printer Properties is a convenient way to make the most common printer configuration changes such as number of copies to print, paper orientation, and 2-sided printing.

#### NOTE

> If there is a conflict between settings in the Operator Panel, Printing Preferences, or Embedded Web Server and printer settings set via your application, the application settings supersede any other setting.

To access Printer Properties from an application:

- **1.** Select the **Print** option from your program.
- **2.** Select the desired B930 printer.
- **3.** Click Printer's **Properties** button.

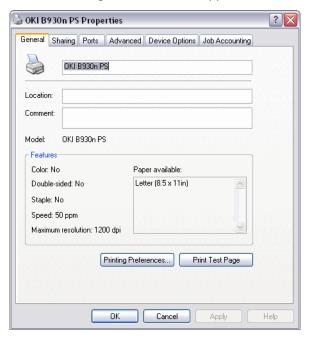


The Printer Properties window appears.

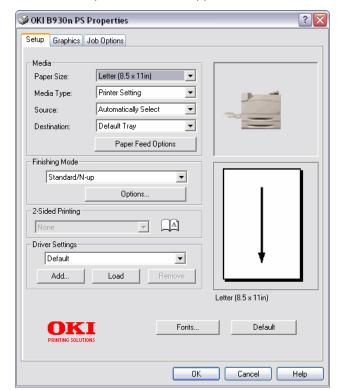
To access Printer Properties from Printers and Faxes (Windows):

- 1. Select the **Printers and Faxes** from your Start menu.
- 2. Right-click the desired B930 printer and select **Properties**.

The Printer's configuration window appears.



3. On the General Tab, click **Printing Preferences** 



The Printer Properties window appears.

# PAPER USAGE

This printer can print on paper that is commonly sold. Select paper suitable for use by referring to the table below. However, we recommend the use of the standard paper for clearer printing.

NOTE

> GSM indicates the weight of a 1 m<sup>2</sup> sheet of paper

## **CAUTION**

Using paper that is not suitable for this printer might lead to paper jams or poor print quality. To make full use of the printer features, we suggest using only paper that is recommended here.

# STANDARD PAPER

The standard paper that can be used for this printer is as follows.

Manufacturer	Paper size	Weight
Xerox Business Multipurpose 4200	Letter	20 Lb/75 GSM.
Xerox Business Multipurpose 4200	Legal	20 Lb.
Xerox Business Multipurpose 4200	Tabloid	20 Lb./75 GSM
Hammermill Tidal MP	Letter	20 Lb.
Hammermill Tidal MP	Legal	20 Lb.
Hammermill Tidal MP	Ledger	20 Lb.
Willamette Willcopy, 84 brightness	Letter	20 Lb.
Boise Cascade X-9000	Letter	20 Lb.
Georgia-Pacific Microprint Laser	Letter	24 Lb.
Xerox 4024	Tabloid	20LB/75G
Xerox 4024	Legal	20 LB/75G
Xerox Business Multipurpose 4200 3 hole	Letter	20 Lb.
Xerox Business Multipurpose 4200	Statement	20 Lb.
Georgia-Pacific Microprint Laser 1000 - (Cut)	Executive	24 Lb.
Xerox Premier	A4	80 GSM
Berga Focus, 265.101	A4	80 GSM
Xerox Business (Saillat)	A3	80 GSM
Xerox A5 80GSM Premier	A5	80 GSM
Xerox Recycled (Steinbeins)	A4	80 GSM
Stra Enso Multicopy	A4	100 GSM

Manufacturer	Paper size	Weight
Arjo Wiggins Conqueror High Speed Laser Laid	A4	90 GSM
Xerox Business 4-Hole	A4	80 GSM
Xerox 4-hole punched Nymolla	A4	80 GSM

#### SPECIAL MEDIA TYPES

The printer can also print on the following media types. These types of media are called special media. The printer can also print on special media types such as transparencies, envelopes, labels, and postcards. These types of media are called special media.

Media Type	Size	Weight	Manufacturer
Envelope	COM-10	24 Lb.	Columbian No. 10 (COM 10) Envelope
Envelope	Monarch	24 Lb.	Strathmore Writing Bright White Move Monarch Envelope
Transparency	Letter		Paper Backed Transparency
Transparency	Letter		Xerox Removable Stripe Transparency
Specialty	Letter		Xerox Carbonless Paper 2-Part
Specialty	Legal		Xerox Carbonless Paper 2-Part
Specialty	Letter		Xerox Carbonless Paper 3-Part
Specialty	Legal		Xerox Carbonless Paper 3-Part

Media Type	Size	Weight	Manufacturer
Heavy media	Letter	32 Lb. / 120 GSM	Xerox Digital Color Xpressions+
Heavy media	Letter	32 LB/120G	Hammermill Laser Print
Heavy media	Letter	90 Lb. / 163 GSM	Xerox 90 lb index
Heavy media	Letter	110 Lb. / 179GSM	Xerox 110 lb. index
Heavy media	Letter	215 GSM	Wausau Bright Cover White
Label	Letter		Xerox High-speed labels 1-up
Label	Letter		Xerox High-speed labels 33-up
Envelope	DL	80 GSM	Riverseries DL Severn Gummed Envelope
Envelope	C5	80 GSM	Riverseries C5 Congo Gummed Envelope
Transparency	A4		3M Type L Desktop Laser Transparencies
Transparency	A4		Xerox Type B Universal White Stripe
Heavy media	A4	160 GSM	Premier 160 GSM
Heavy media	A4	200 GSM	Premier 200 GSM
Heavy media	A3	160 GSM	Premier A3 Paper

Media Type	Size	Weight	Manufacturer
Heavy media	A4	120GSM	Xerox Colotech+ (IP & Neusideler)
Label	A4		Xerox Copier/Laser 24-Up Paper Label

# PAPER TRAY CAPACITY

Paper that can be loaded in the paper trays is as follows:

PAPER TYPE	MAXIMUM CAPACITY		
	MPF (A4/100 SHEETS)	TRAYS 1-4 (A4/ 500 SHEETS)	
Standard paper	100 sheets	500 sheets	
Other paper	Up to a height of 17.5 mm	Up to a height of 59.4 mm	
Envelopes	Columbian Com10 15 sheets	80 sheets or MAX 49.4 mm	
Labels	100 sheets	350 sheets	
Transparencies	100 sheets	100 sheets	
Card stock	120 sheets	400 sheets	

# AVAILABLE PAPER SIZES

All trays but MPF have paper size sensors to detect sizes.

Paper Size	Paper Tray		
	Trays 1-4	Tray 6 and TTM	MPF
A4	О	О	О
(210x297 mm)	0	0	О
Letter (8.5"× 11")	0	0	О
	О	0	О

Paper Size	Paper Tray		
	Trays 1-4	Tray 6 and TTM	MPF
B5	О	-	0
(182x257mm)	О	-	О
B4	О	-	О
(257x364)	О	-	О
Legal 13	О	-	О
(8.5"×13")	О	-	О
Legal 14	О	-	О
(8.5"×14")	О	-	О
A3	О	-	О
(297x420mm)	О	-	О
Tabloid	О	-	0
(11" ×17")	О	-	О
B5 (257x182mm) or Executive (7.2" X 10.5")	О	О	О
	0	0	О
A5 (148x210mm)	О	-	О
	О	-	О
Statement (5.5"x 8.5")	О	-	О
	О	-	О

Those listed below are categorized as "Irregular size paper" that cannot be detected automatically

Paper Size	Paper Tray		
	Trays 1-4	Tray 6 and TTM	MPF
C5 Envelope	О	-	О
(229x162mm)	-	-	-
COM-10	О	-	О
(4.125" x 9.5")	-	-	-
DL Envelope	О	-	О
(220.2x110mm)	-	-	-
COM-9 (3.875"	О	-	О
x 8.875")	-	-	-
Monarch	О	-	О
Envelope (3.875" x 7.5")	-	-	-
A6 LEF (148x105)mm	О	-	О
	-	-	
C4	О	-	О
(229x324mm)	-	-	-

#### **UNUSABLE PAPER**

Using the following types of paper might cause paper jams, malfunctions or damage to the printer. Do not use them.

- full-color transparencies
- Paper that is too thick or thin
- Paper that has been printed on before (including color printing)
- Wrinkled, folded, or torn paper
- Wet paper

- Curled paper
- Paper with static electricity
- Adhesive paper
- Postcards with pictures
- Paper with special coating on its surface
- Treated colored paper
- Paper using ink that will run at a temperature of 150 °C
- Heat sensitive paper
- Carbon paper
- Paper with staples, paper clips, ribbons, or tape
- Paper with rough surfaces such as pulp paper or fibrous paper
- If acid paper is used, the characters might appear fuzzy.
   Replace it with alkaline paper.
- Envelopes that are not flat or have metal fasteners
- Labels which do not fully cover the adhesive backing
- Transparencies that are not compitable for laser printers (i.e., inkjet transparencies)
- Paper that cannot be heated.

If background image suppression agent sticks to the feed roll when feeding postcards with pictures, the postcards may not feed. When this happens, clean the feed roll by referring to "Cleaning the Printer" on page 106".

# **SYSTEM SETTINGS**

You can set a variety of system settings via the System, Quality, and Date/Time menus in your Operator Panel. These settings control items such as power saving, display language, and resolution. For complete descriptions of these settings see "Operator Panel" on page 194.

## **POWER SAVER MODES**

This printer is equipped with a low power mode to reduce power consumption when it is left idle.

When no print data is received for 10 minutes, the printer will enter the power saver. Consumption of power during the Power Saver mode is 10 W or less. After one hour the printer will enter sleep mode and the Operator Panel will shut down. The flashing green LED on the Operator Panel indicates the printer is in Sleep mode.

The printer automatically cancels its power save status once it receives data from the computer.

# **BASIC PRINTING TASKS**

# PRINTING A CONFIGURATION SUMMARY

Your printer can print a configuration summary that lists the currently selected status of menu options, media selections in trays, options installed and other relevant information about your printer. To print a Configuration Summary, press the **Info** button. A multipage summary prints.

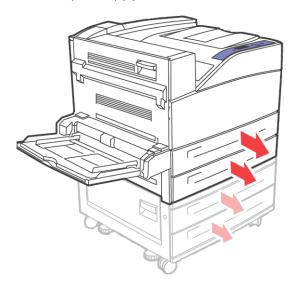
# LOADING PAPER

This section describes how to load paper in each paper tray. See"Paper Usage" on page 20 for details on the type and size of paper that can be loaded in each paper tray.

#### **LOADING TRAYS 1-4**

Trays 3 and 4 are pictured as the two tray feeder. The Tandem tray option is loaded in a similar manner.

**1.** Pull out the Paper Tray(s).



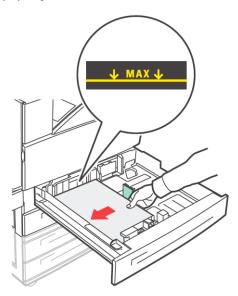
**2.** Fan the paper to release sheets that may stick together.



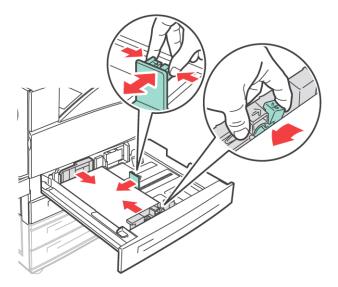
**3.** Add paper to the tray without exceeding the maximum level.

NOTE

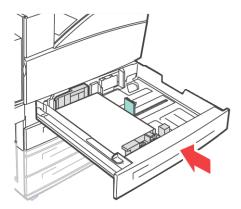
> Do not load paper exceeding the maximum fill line or the maximum capacity allowed. Align the right width guide with the paper width correctly. If the right width guide is not in place, the paper will not be properly fed and may cause a paper jam.



**4.** Insert the paper into the tray. If necessary, adjust the paper guides to the size of the paper.



**5.** Slide the paper tray back into the machine.



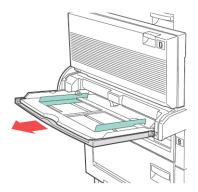
**6.** If custom sizes of paper are used, make the appropriate changes in your Printer Properties and at the Operator Panel as needed.

# LOADING MPF (TRAY 5)

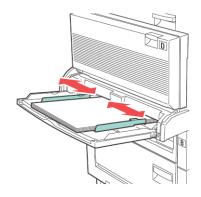
The MPF can be used for both manual and automatic feeds. There is an indicator label on the tray that shows the positioning of each side of paper. This label addresses long-edge and short-edge orientation. For custom size paper loaded in the MPF, you must change the paper type and size on the Operator Panel to match the paper that you loaded.

Side guides must be set accurately against the sides of paper. The printer uses the placement of these guides to calculate and verify the correct paper size.

## 1. Lower the MPF tray.



# **2.** Adjust the paper guides to the size of the paper.



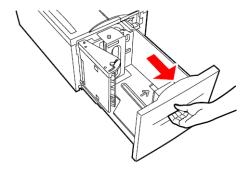
**3.** Fan the paper to release sheets that may stick together.



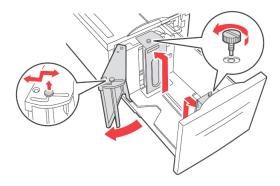
- **4.** Insert the paper into the tray. If necessary, adjust the paper guides to the size of the paper.
- **5.** If custom sizes of paper are used, make the appropriate changes in your Printer Properties and at the Operator Panel as needed

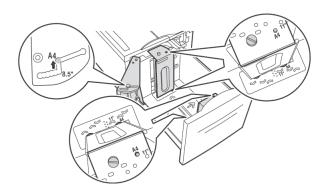
### **LOADING TRAY 6 HCF**

**1.** Pull out the tray.



**2.** If loading paper with a different width or length, adjust the width and length guides.

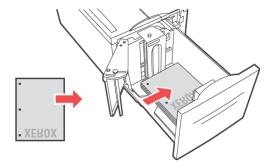




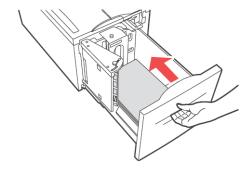
**3.** Fan the paper to release sheets that may stick together.



**4.** Insert the paper into the tray.



**5.** Push the tray completely into the printer.



# **PRINTING A TEST PAGE**

You can print a Demo (test) page to verify printer connectivity and operation.

The most convenient way to enable this feature is by using your Printer Properties. You may also enable this feature at the Operator Panel or by using the EWS.

To print a test page through the driver:

- 1. Select the **Device Options** tab within driver.
- 2. Click **Demo Print**.
- 3. Click OK.

## **BASIC PRINTING**

When you send a job to the printer, you should select the paper size, number of copies, orientation, and decide if you want the copies collated. This can often be done from windows specific to your application. The instructions in this section refer to setting these options directly through the driver.

#### SELECTING PAPER SIZE

You can select from a list of standard paper sizes.

The most convenient way to enable this feature is by using your Printer Properties. You may also enable this feature at the Operator Panel or by using the EWS.

To select the paper size through your Printer Properties:

- Select the desired Paper Size from the Paper Size pulldown in the **Setup** Tab of your Printer Properties.
- 2. Click OK.

#### **SELECTING NUMBER OF COPIES**

You can select the number of copies to print via your Printer Properties. When selecting the number of copies, you should also decide if those copies are collated.

To select number of copies:

- 1. Select the **Job Options** tab within your Printer Properties.
- **2.** Either enter the number of copies or select from the pulldown.
- Click OK.

#### COLLATING COPIES

When printing multiple copies of a job, the output can be automatically collated if desired. When copies are collated, they are printed in groups by the print job not by the page. If you do not select the collate option, your copies will be printed by page. So, 10 page number 1's will print and then 10 page number 2's will print. Collated jobs will print all pages of the first copy and then all pages of the next.

The most convenient way to enable this feature is by using your Printer Properties. You may also enable this feature at the Operator Panel or by using the EWS.

To select collating through your Printer Properties:

- **4.** Select **Collate** in the Job Options tab within your Printer Properties.
- **5.** Select.
- 6. Click OK.

### SETTING ORIENTATION

Select portrait or landscape orientation or choose to rotate the existing orientation 180 degrees.

The most convenient way to enable this feature is by using your Printer Properties. You may also enable this feature at the Operator Panel or by using the EWS.

To select collating through your Printer Properties:

- **1.** Select the **Job Options** tab within your Printer Properties.
- **2.** Select the desired orientation.
- Click OK.

#### SKIP BLANK PAGES

If pages exist in your document that do not contain text, you may select not to print them.

The most convenient way to enable this feature is by using your Printer Properties. You may also enable this feature at the Operator Panel or by using the EWS.

To skip blank pages:

**1.** Select the **Paper Feed** button in the Setup tab within your Printer Properties.

The Paper Feed Options window appears.

- 2. Select Skip Blank Pages.
- Click OK.
- Click OK.

#### PRINTING IN REVERSE ORDER

By default the printer prints jobs from back to front placing the first page of the document on the top of the stack. You may opt to print in the reverse order, placing the last page of the document on the top of the stack.

The most convenient way to enable this feature is by using your Printer Properties. You may also enable this feature at the Operator Panel or by using the EWS.

To select reverse order through your Printer Properties:

- 1. Select the **Job Options** tab within your Printer Properties.
- Select Reverse.
- 3. Click OK.

### 2-SIDED PRINTING

The printer can automatically print on both sides of paper when the optional duplex unit is installed.

- Paper size must be at least 89 x 127 mm (3.5 x 5 in.) when printing from Tray 1. All other sizes that fit Trays 2-6 may be printed 2-sided.
- Paper weight must be 60-163 gsm (16-43 lb. Bond)

#### CAUTION

Never attempt to duplex print on labels, envelopes, transparencies, or paper that is heavier than 163 gsm (16-43 lb. Bond)

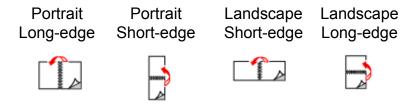
The most convenient way to enable this feature is by using your Printer Properties. You may also enable this feature at the Operator Panel or by using the EWS.

To print on both sides of the paper from the your Printer Properties:

- 1. Select **Long-edge** or **Short-edge** from the 2-sided printing pull-down in the **Setup** Tab of your Printer Properties.
- Select.
- **3.** Verify the page orientation and select the desired tray.
- **4.** Click **OK**.

### BINDING PREFERENCES

You can select how the printer will orient the page layout when duplexing. Depending on your page orientation, duplexing on the long-edge or short-edge of the paper produces different results. The diagram below illustrates these results.



### PRINTING ON SPECIAL MEDIA

The printer can accommodate a variety of special media. Each media type requires some special handling. Read the sections below for each special media type, prior to inserting the media into the tray.

The most convenient way to enable this feature is by using your Printer Properties. You may also enable this feature at the Operator Panel or by using the EWS.

To select the special media types through your Printer Properties:

- **1.** Select the desired Media Type from the Media Type pulldown in the **Setup** Tab of your Printer Properties.
- 2. Click OK.

# **SETTING MEDIA TYPES**

Settings on the Operator Panel and in your Printer Properties are required for media loaded in all trays trays. Media type settings must match those of the actual paper loaded in the trays. Otherwise, image quality cannot be processed accurately. Toner may not fuse properly on the media, resulting in dirty and poor quality printouts.

#### TRANSPARENCIES

Transparencies can be printed from any tray. They should only be printed on one side.

Before printing transparencies:

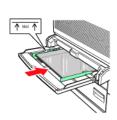
- Remove all other media before loading transparencies into the tray.
- Do not load transparencies above the fill line; this may cause the printer to jam
- Handle transparencies by the edges to avoid fingerprints and creases that can cause poor print quality.
- Do not use transparencies with stripes down the side.
- Change the Media type via the Operator Panel or by selecting the Media type from your Printer Properties Paper Options

### **Loading Transparencies**

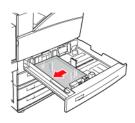
**1.** Fan the transparencies to release sheet that may stick together.



**2.** Insert them with long-edge feed.



Tray 5



Trays 1-4

#### NOTE

- > Do not load paper above the fill line.
- **3.** Adjust the paper guide to the size of the transparencies, if necessary.
- **4.** Change media type at Operator Panel via the Paper Menu's Media Type selection.

- **5.** Select **Transparency** as the Media Type from the Media type pulldown.
- 6. Click OK.

#### **ENVELOPES**

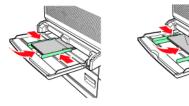
Envelopes can be printed using Tray 5. Read the following guidelines before printing envelopes.

- Use envelopes specifically made for laser printers.
- Make sure that envelopes are stored in a cool dry place and in their original packaging, if possible. Heat and humidity can cause the envelopes to seal before or during printing.
- Do not use padded envelopes
- Remove excess air from enveloped before loading into the feeder.
- Print only on the front of the envelopes.
- Load a maximum stack height of 10mm (.4 in)
- Avoid printing over the area where the envelope seams meet.
- When using commercial flap envelopes with side seams (vs. diagonal seams) verify that the side seams are cut all the way to the corner of the envelope.
- Never use envelopes with windows or metal clasps; they can damage the printer.

### Loading and Printing in Tray 5

- Insert the envelopes in the tray with the following considerations:
  - Place C4 envelopes short-edge feed in the tray.
  - Place Monarch, #10, C5, and DL envelopes long-edge feed in the tray.
  - Place the side to be printed **facedown**.

• Place the envelope with the Flap entering the printer first.



**Short-edge Feed** 

Long-edge Feed

- **2.** Adjust the paper guides to the size of the envelopes.
- **3.** Change media type at Operator Panel via the Paper Menu's Media Type selection.
- **4.** Select **Envelope** as the Media Type in the Media Type pulldown.
- 5. Click OK.

#### **POSTCARDS**

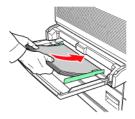
Postcards can printed using Tray 5. Read the following guidelines before printing Postcards.

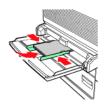
- Make sure that postcards are stored in a cool dry place and in their original packaging, if possible. Heat and humidity can cause the postcards to curl.
- Load a maximum stack height of 10mm (.4 in). No higher than fill line.

### Loading and Printing in Tray 5

- Insert the postcards in the tray with the following considerations:
  - Insert postcards long-edge feed and facedown. Place the top of the postcard to enter the printer first (left side of the printer)

Insert Small postcards short-edge feed and facedown.
 Place the top of the postcard toward the rear of the printer.





Large Postcards Long-edge

Small Postcards Short-edge

- **2.** Adjust the paper guides to the size of the postcards.
- **3.** Change media type at Operator Panel via the Paper Menu's Media Type selection.
- **4.** Select **Postcard** as the Media Type in the Media Type pulldown.
- Click OK.

#### LABELS

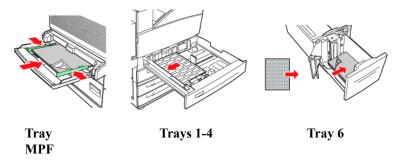
Labels can be printed from all trays. Read the following guidelines before printing Postcards.

- Do not use vinyl labels
- Do not use any labels on a sheet where items are missing; it may damage the printer.
- Print only on one side of the sheet of labels.
- Make sure that postcards are stored in a cool dry place and in their original packaging, if possible. Storing them in extreme conditions can cause jams, curls, or poor print quality.

# **Loading and Printing**

- Insert the postcards in the tray with the following considerations:
  - Tray MPF Insert the label sheets long-edge feed and facedown. Place the top of the page toward the front of the printer.

- Trays 1-4 Insert the label sheets long-edge feed and faceup. Place the top of the page toward the front of the printer.
- Tray 6- Insert the label sheets long-edge feed and facedown. Place the top of the page toward the front of the printer.



- **2.** Adjust the paper guides to the size of the label sheets.
- 3. Change media type at Operator Panel via the Paper Menu's Media Type selection.
- **4.** Select **Label** as the Media Type in the Media Type pulldown.
- 5. Click OK.

## **CUSTOM SIZE PAPER**

You can print custom size from Trays 1 through 5. Tray 6 only prints standard paper. The following paper size ranges can be printed from each tray:

	INPUT TRAY		OUTPUT TRAY		
	5	1-4	STANDARD	STACKER UPPER	STACKER LOWER
Width	89 - 297 mm (3.5 - 11.70 in.)	140 - 297 mm (5.5 - 11.70 in.)	89 - 297 mm (3.5 - 11.70 in.)	203 - 297 mm (7.9 - 11.70 in.)	203 - 297 mm (7.9 - 11.70 in.)
Height	98 - 432 mm (3.87 - 17 in.)	182 - 297 mm (7.16 - 11.70 in.)	98 - 432 mm (3.87 - 17.0 in.)	182 - 432 mm (7.16 - 17.0 in.)	182 - 432 mm (7.16 - 17.0 in.)

#### NOTE

> When loading custom size paper in the trays load by the correct edge (long or short) and to adjust the paper guides as necessary. See "Loading Paper" on page 29 for instructions on loading paper into each tray.

The most convenient way to enable this feature is by using your Printer Properties. You may also enable this feature at the Operator Panel or by using the EWS.

To load and print custom paper:

- **1.** Load the media in the desired tray.
- **2.** Change media type at Operator Panel via that tray's Media Menu option.
- **3.** Select the **Paper Feed** button in the Setup tab within your Printer Properties.

The Paper Feed Options window appears.

- 4. Select Custom Size.
- **5.** Enter the paper parameters and name.
- 6. Click Add.

- 7. Click OK.
- 8. Click OK.
- 9. Click OK.

### TRAY SETTINGS

You can configure a variety of settings for your input trays and output bins. The default settings for your source input tray and output bin are configured through the Operator Panel's Paper menu, Default Source and Output Tray selections.

#### SOURCE

You can select the input tray from which paper is used to print the job.

The most convenient way to enable this feature is by using your Printer Properties. You may also enable this feature at the Operator Panel or by using the EWS.

To select the paper source through your Printer Properties:

1. Select the desired Source from the Source pulldown in the **Setup** Tab of your Printer Properties.

NOTE

- > If there are no paper trays that match the automatic tray selection, an error message prompting for replenishment of paper will be displayed.
- 2. Click OK.

#### **OUTPUT DESTINATION**

You can choose the output bin where your print job will be placed.

The most convenient way to enable this feature is by using your Printer Properties. You may also enable this feature at the Operator Panel or by using the EWS.

To select the paper destination through your Printer Properties:

- Select the desired Destination from the Destination pulldown in the **Setup** Tab of your Printer Properties.
- Click OK.

#### INPUT TRAY LINKING

When an input tray runs out of paper, auto tray changing enables the printer to switch to another available tray that contains the same size and paper type. You can select auto tray changing via the operator panel, Printer Properties, or web interface.

The most convenient way to enable this feature is by using your Printer Properties. You may also enable this feature at the Operator Panel or by using the EWS.

To select auto tray changing through your Printer Properties:

**1.** Select the **Paper Feed** button in the Setup tab within your Printer Properties.

The Paper Feed Options window appears.

- 2. Select Auto Tray Change.
- 3. Click OK.
- **4.** Click **OK**.

#### **OUTPUT BIN LINKING**

When an output bin reaches capacity, the tray full sensors are activated. You can select out put bin linking to have remaining pages sent to an open bin. By default this option is turned on. It is located in the Operator Panel's Print Menu.

#### MANUAL FFFD

Tray MPF can be used for manual feed. You must also set your Printer Properties for manual feed. Tray 1 MPF normally operates in multi-purpose mode, where multiple sheets can be loaded and printed continuously. In manual mode, you are prompted to press the Start key for each sheet.

The most convenient way to enable this feature is by using your Printer Properties. You may also enable this feature at the Operator Panel or by using the EWS.

To select manual feed through your Printer Properties:

1. Select the **Paper Feed** button in the Setup tab within your Printer Properties.

The Paper Feed Options window appears.

- 2. Select Manual Feed.
- Click OK.

## MEDIA CHECK

By default the printer selects the input source based on the paper size requested. If the paper size requested is not loaded in any input tray, the printer feeds from the default input tray. Media Type is not a factor in the printer selection of the input tray. When Media check is enabled, the printer first checks the default input source to see if it has media loaded that matches both the driver requested media type and paper size. If the default input tray does not contain the requested media, the printer searches the other input travs to find one that has media matching the requirements. If none is found, the printer stops and asks you to load the requested media in the default input tray. You can acknowledge this by pressing Start whether the correct media is in place or not. Or you can put the correct media in a tray and then use the Operator Panel to set the media type for that tray. If it is Tray MPF or the size is not auto detectable, you can also set the paper size. Otherwise, the printer can auto detect the paper size.

The most convenient way to enable this feature is by using your Printer Properties. You may also enable this feature at the Operator Panel or by using the EWS.

To enable media check:

**1.** Select the **Paper Feed** button in the Setup tab within your Printer Properties.

The Paper Feed Options window appears.

- Select Media Check.
- Click OK.
- Click OK.

# JOB OFFSET

The Stacker Main and Standard Top Bincan place sheets in alternate positions to separate one print job from another. This is called *job offsetting*. When selected, the output position changes after the final sheet of the print job is printed. The next job is the offset (shifted a bit) to keep it separate from the previous print job.

The most convenient way to enable this feature is by using your Printer Properties. You may also enable this feature at the Operator Panel or by using the EWS.

To turn job offset on through your Printer Properties:

**1.** Select the **Paper Feed** button in the Setup tab within your Printer Properties.

The Paper Feed Options window appears.

- Select Job Offset.
- Click OK.
- 4. Click OK.

### DRIVER SETTINGS

As you create groups of settings in your Printer Properties, you can save that group of settings. You can then select that group of settings by the name under which you saved them. This can save you time and effort when printing

The most convenient way to enable this feature is by using your Printer Properties. You may also enable this feature at the Operator Panel or by using the EWS.

To save a group of settings in your Printer Properties:

- **1.** Set up your print job by choosing all options in the Printer Properties you wish to reuse.
- 2. Select **Add** in the Driver Settings area in the Setup tab within your Printer Properties.
- **3.** Enter a Name for the saved settings.
- 4. Click OK.
- Click OK.

To use saved settings:

- Select the desired setting\_name from the Driver Settings pulldown in the Setup tab within your Printer Properties.
- Click OK.

## **USING THE HOLE PUNCHER**

The optional Finisher contains the Hole Puncher. When installed, a 3-hole or 2/4-hole puncher is available. European finishers have the 2/4 hole punch while American finishers have a 3 hole punch. When hole punching is installed, it must be enabled to punch holes. When the printer detects that the punch waste box is full, a warning appears on the Operator Panel. Printing will continue, but punching will not.

The most convenient way to enable this feature is by using your Printer Properties. You may also enable this feature at the Operator Panel or by using the EWS.

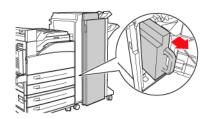
To turn hole punching on through your Printer Properties:

- **1.** Select the **Paper Feed** button in the Setup tab within your Printer Properties.
  - The Paper Feed Options window appears.
- Select the desired Hole Punch type from the Hole Punch pulldown.
- Click OK.
- 4. Click OK.

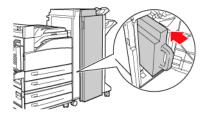
#### **EMPTYING THE PUNCH WASTE BASKET**

See "Jam Area Locations" on page 140 for a decsription of door locations.

- Open Door G.
- **2.** Remove the Punch Waste Box and empty the contents.



### **3.** Place the Punch Waste Box back into the Finisher.



### 4. Close Door G.

# **USING THE STAPLER**

Several stapling options are available. You can staple at different locations on the paper depending on whether one staple or two staples is used. The following table displays the location of the staple(s) based on the staple location selected.

STAPLING SELECTION	ORIENTATION	STAPLE PLACEMENT
Upper-left	Portrait	A
	Landscape	A

STAPLING SELECTION	ORIENTATION	STAPLE PLACEMENT
Bottom-left	Portrait	A
	Landscape	A
Dual	Portrait	A I
	Landscape	A

The most convenient way to enable this feature is by using your Printer Properties. You may also enable this feature at the Operator Panel or by using the EWS.

To turn stapling on through your Printer Properties:

**1.** Select the **Paper Feed** button in the Setup tab within your Printer Properties.

The Paper Feed Options window appears.

- **2.** Select the desired Stapling type from the **Staple** pulldown.
- Click OK.
- 4. Click OK.

# **Adding Staples**

**1.** Open Door G.

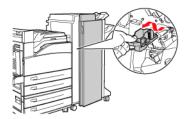


#### NOTE

- > See instructions on the inside of door G.
- **2.** Slide the stapler toward you, then to the right.



**3.** Remove the staple unit by lifting it up and out.



- **4.** If present, remove the depleted staple cartridge.
- **5.** Insert a new staple cartridge.
- **6.** Insert the staple unit into the Finisher.



**7.** Close door G.



# **CANCELLING/CHECKING PRINTING**

### **CANCELLING PRINTING**

To cancel printing, you can either cancel the print job at the printer or at the computer.

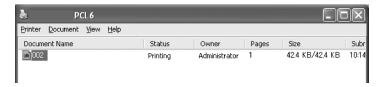
## **Cancelling a Print Job at the Printer**

Press the **CANCEL** button then press the **ON-LINE** button on the Operator Panel. However, pages being printed at the moment will continue to be printed.

# **Cancelling Print Jobs at the Computer**

Double-click the printer icon at the bottom right of the taskbar in Windows.

From the displayed window, click the document name that you wish to delete and press the **Delete** key.



# ADVANCED PRINTING TASKS

## **COVER PAGES**

A cover page is the first page of the document. The printer enables you to choose a different paper source for the cover page than for the rest of the document. You can then use a different stock paper for the first page of the document while sending the document as a single print job. The paper must be the same size as the rest of the document.

The most convenient way to enable this feature is by using your Printer Properties. You may also enable this feature at the Operator Panel or by using the EWS.

To enable cover pages through your Printer Properties:

 Select the **Paper Feed** button in the Setup tab within your Printer Properties.

The Paper Feed Options window appears.

- Check Use Cover Sheet.
- **3.** Select the Cover Source Tray and Cover Media Types form the pulldowns.
- Click **OK**.
- Click OK.

## SEPARATOR PAGE

The printer can generate a separator page between print jobs. This page contains the name of the person who generated the print job. A separator page makes it easy to identify the start or end of a print job and to make sure the correct job is claimed by the correct person. You can enable separator pages via the Operator Panel's Paper menu.

# MULTIPLE PAGES TO SINGLE SHEET (NUP)

You can print multiple pages on a single sheet when printing a multipage document. This can save paper and is handy for draft reviews. You can print one, two, four, six, nine, or sixteen pages per sheet.

Enable this feature is using your Printer Properties.

To select the number of pages to print on a single page:

- Select Standard Nup from the Finishing Mode pulldown in the Setup Tab of your Printer Properties.
- Click Options.

The Standard Nup window appears.

**3.** Enter the desired parameters.

Select the desired number of pages per sheet. Check the box if a page border is desired. Select the page layout option and enter a bind margin. If you wish to scale the pages to a full page size, check Fit to page. Enter the units used to calculate the bind margin, if applicable.

**4.** Click **OK**.

### **BOOKLETS**

With two-sided printing, you can print a document in the form of a small book. You can use any paper size that duplex printing supports. The printer automatically reduces pages to fit within the booklet parameters. It prints two pages per side and prints the pages in the order needed to accommodate a center fold. You can specify the binding width to leave enough room in the center to bind or staple your booklet. The Finisher option can not be used to staple booklets.



Enable this feature is using your Printer Properties.

To print a booklet:

- Select Booklet from the Finishing Mode pulldown in the Setup Tab of your Printer Properties.
- Click Options.

The Booklet window appears.

**3.** Enter the desired parameters.

Select the desired number of signature from the pulldown. Signature sets the number of pages printed on a sheet to form a booklet. Options are No Limit, or a number which is a multiple of 4.Enter a bind margin and the units used to calculate the bind margin. Check the box if right-side binding is desired

- **4.** Click **OK**.
- 5. Click OK.

# **Poster Print**

If you have a large page image that can not be printed on the available paper sizes, you can print the document in poster print. Poster Print prints the document to a full bleed (to the edges of paper) and breaks the document up into multiple pages. The pages can then be placed together, edge-to-edge, to create a large version of the print job.

Enable this feature is using your Printer Properties.

To print in poster mode:

- Select Poster from the Finishing Mode pulldown in the Setup Tab of your Printer Properties.
- 2. Click Options.

The Poster window appears.

- **3.** Enter the desired parameters.
  - Enter the X and y axis enlargement and orientation.
- Click **OK**.
- Click OK.

# Fit to Page

You can scale any page image to fit the paper size being used.

The most convenient way to enable this feature is by using your Printer Properties. You may also enable this feature at the Operator Panel or by using the EWS.

To scale the print image:

 Select the **Paper Feed** button in the Setup tab within your Printer Properties.

The Paper Feed Options window appears.

- **2.** Click the **Scale to fit** checkbox.
- Click OK.
- Click OK.

### **AUTOMATICALLY RESIZE PAPER**

The printer can automatically select from the paper available the paper that is the closest in size to the paper requested by the printer job. The printer will then scale the print job to fit the available paper. This includes scaling A4 to letter and letter to A4; and A3 to Tabloid and Tabloid to A3. You can enable this feature via the Operator Panel's Paper menu.

### WATERMARKS

A Watermark is faded text that appears in the background of all, the first, or all but the first pages. The text can indicate items that are draft versions, confidential or other important marking text.

Enable this feature is using your Printer Properties.

Standard Copy, Draft, and Confidential watermarks are provided. You can view these by clicking on their name in the Watermark Pane of the Watermark Window. You can edit their settings or the settings of any configured watermark by clicking the Edit button.

To create a new watermark to be placed on a print job:

- **1.** Select the **Job Options** tab within your Printer Properties.
- Click Watermark.

The Watermark Window appears.

Click New.

The configurable fields for watermark parameters are enabled.

**4.** Enter the position of the text on the page.

The position anchors the left corner of the text to a specific location regardless of rotation.

- **5.** Enter the text to be displayed.
- **6.** Enter the font, typeface, and size of the text.
- **7.** Enter the angle of rotation of the text.
- **8.** Enter the degree of transparency for the text.

  The text should not obscure the actual text on the printed page.
- 9. Click OK.
- **10.** Click **OK**.

# **Image Options**

You can make a variety of adjustments to quality of your printed pages. This can help improve the clarity of the print job regardless of the quality of items such as graphics contained in the document.

Enable this feature is using your Printer Properties.

To modify image options:

- **1.** Select the **Graphics** tab within your Printer Properties.
- 2. Enter the desired Brightness and Quality settings.
- 3. Click OK.

# **BRIGHTNESS AND CONTRAST**

For PCL6 you can use the brightness and contrast sliders to adjust these settings for all items, text, graphics, or photos.

# **QUALITY**

For all Print driver versions, you can adjust quality settings. These include resolution (600 or 1200 dpi), toner saving (prints lighter text), and printing all text as black (darkens light text).

# **E-MAIL NOTIFICATIONS**

You can choose to be notified by e-mail when your job has successfully printed.

The most convenient way to enable this feature is by using your Printer Properties. You may also enable this feature using the EWS.

Using the EWS, you must have enabled email send and set the email server address for this feature to work.

To email notification upon completion:

- **1.** Select the **Job Options** tab within your Printer Properties.
- 2. Check email on job completion
- **3.** Enter the e-mail address to which to mail.
- **4.** Click **OK**.

### JOB STORAGE AND SECURE PRINTING

You can store print jobs for future use or hold a job at the printer until you release it with a PIN number for secure printing.

#### STORED JOBS

You can assign a name to a print job and store it for later use.

The most convenient way to enable this feature is by using your Printer Properties. You may also enable this feature at the Operator Panel or by using the EWS.

To store a job:

- **1.** Select the **Job Options** tab within your Printer Properties.
- 2. Click Stored Job
- **3.** Enter the name of the job.
- 4. Click OK.

#### SECURE PRINT

You can assign a PIN number to a job. The job will be sent to the printer but not printed until you enter the PIN number at the Operator Panel. This helps secure the information printed. It will not sit on the printer waiting to be picked up, but will be ready to print as soon as you get there. This is temporary storage. For long-term storage you need to store the job as described in "Stored Jobs" on page 61.

Enable this feature is using your Printer Properties.

To create a secure job:

- **1.** Select the **Job Options** tab within your Printer Properties.
- 2. Click Secure Print
- **3.** Enter the name of the job
- **4.** Enter PIN number to be entered at the Operator Panel.
- Click OK.

To print a secure job:

- At the Operator Panel, press the Menu button.
   Print Jobs is displayed.
- Press the Forward (right) key.You are requested to enter a pin number.
- 3. Use the **Next** and **Previous** buttons to change a digit.
- **4.** Press **Forward** (right) key to enter the digit.
- **5.** Repeat steps 3-4 until all Digits are entered.
- Press Select.

You are asked for the number of copies to print.

- **7.** Use **Next** to enter the number of copies.
- **8.** Press **Select**.

The job prints.

# **PROOF PRINT**

When the optional hard disk or compact flash has been installed, Proof Printing automatically prints one copy of the job as it is stored. You can select these jobs for printing by entering a PIN at the operator panel. Proof Print is a feature that allows you to store the print data of multiple copies in the hard disk or compact flash, print out only the first set to check the print result and if satisfactory, print the remaining copies from the Operator Panel.

To create a proof print:

- 1. Select the **Job Options** tab within your Printer Properties.
- **2.** Set copies to at least 2.
- 3. Click Proof and Print

- **4.** Enter the name of the job
- **5.** Enter PIN number to be entered at the Operator Panel.
- 6. Click OK.

To print the proof:

- At the Operator Panel, press the Menu button.
   Print Jobs is displayed.
- 2. Press the **Forward** (right) key.

You are requested to enter a pin number.

- 3. Use the **Next** and **Previous** buttons to change a digit.
- **4.** Press **Forward** (right) key to enter the digit.
- **5.** Repeat steps 3-4 until all Digits are entered.
- **6.** Press **Select**.
- **7.** Use **Next** to until the document is displayed.
- **8.** Press **Select**.

The proof document prints.

- Use the **Next** and **Previous** buttons to print of delete the saved document.
- **10.** Press **Forward** (right) key to print the document.

You are asked for the number of copies to print.

- **11.** Use **Next** to enter the number of copies.
- 12. Press Select.

The job is printed or deleted as instructed.

# TIME SPECIFIED PRINTING

When the optional hard disk or compact flash has been installed, you can use the delayed print feature. The delayed print feature allows you to store the data in the printer and then print it automatically at the specified time.

To create a time specified job:

**1.** Select the **Job Options** tab within your Printer Properties.

- 2. Click Timed Job.
- 3. Click Set Time.
- **4.** Enter the elapsed time or real desired.

For elapsed time, specify the number of minutes to delay before printing. For real time, enter actual date parameters.

- Click OK.
- **6.** Enter a job name and PIN number.

A PIN number is only needed to cancel a timed job.

7. Click OK.

You can cancel a timed job from the Operator Panel without waiting for the specified time.

To cancel a timed job:

- **1.** At the Operator Panel, press the Menu button.
  - Print Jobs is displayed.
- **2.** Press the **Forward** (right) key.

You are requested to enter a pin number.

- **3.** Use the **Next** and **Previous** buttons to change a digit.
- **4.** Press **Forward** (right) key to enter the digit.
- **5.** Repeat steps 3-4 until all Digits are entered.
- Press Select.
- **7.** Use **Next** to until the document is displayed.
- **8.** Press **Select**.
- **9.** To delete the job, press the **Cancel** Button. To Print the press the **Forward** (right) key

You are asked for the number of copies to print.

- **10.** Use **Next** to enter the number of copies.
- **11.** Press **Select**.

The job is printed or deleted as instructed.

# DIRECT PDF PRINTING

The printer's PDF Direct feature allows you to send a Version 1.3 PDF file directly to the printer without the use of Adobe Acrobat on the host computer. You can send a PDF file directly to the printer for printing without using the printer driver. As the print data is sent directly to the printer, the printing process is simpler than printing with the printer driver.

### **OVERLAYS**

The Overlay window allows you to create, delete, and edit behavior of overlays. An overlay is a portion of a document that is added to each page of a print job such as a letterhead or standard form. (there are no pre-defined overlays). You must create overlays using your application of choice. Then the application you have created may be included on future print jobs. You are not allowed to set create overlay as the default. You are only allowed to set create overlay from within an application.

Overlay Function provides options to print overlays. No Overlay mode does not create an overlay, and an overlay will not be printed. Create New Overlay will create an overlay when the print job is sent. Each time, you are prompted for the overlay name.

Another set of options available allows you to define when an overlay should be printed, either All Pages, First Page Only, or All But First Page.

Front indicates that the overlay is printed in front of the print job data. Placing the overlay in front of the print data may make portions of the print job unreadable. The default is Front. Back indicates that the overlay is printed behind print job data. The Remove button deletes the selected overlay from the list.

Enable this feature is using your Printer Properties.

To create an overlay:

- **1.** Access your printer's properties from your application.
- 2. Select the **Layout** tab within your Printer Properties.
- **3.** Click **Overlay**.

The Overlay Window appears.

**4.** Select **Create New Overlay** as the Overlay Function

- **5.** Click **OK** to close the Overlay window
- **6.** Click **OK** to close the printer properties.

When you do, a window will popup asking you for the name of the overlay. This can be any text you like.

- **7.** Enter a name for the overlay.
- 8. Click OK.

The popup and entire properties window closes.

- **9.** Click **Print** in the print dialog and the overlay will be created.
- **10.** Click **OK**.

To use an overlay:

- 1. Open any document in any application.
- **2.** Select **File>Print>Properties** within that application.
- **3.** Select the overlay button from the Job Options tab.
- **4.** Select the overlay in the Overlay list box
- **5.** Select "One Overlay" as the Overlay Function
- **6.** Click **OK** to close the Overlay window and OK to close the printer properties.
- Click **Print** in the print dialog and the document will be printed with the overlay added to every page.

# JOB ACCOUNTING

Job accounting stores information about each print job received by the printer.

Configure this feature is using your Printer Properties. It is enabled at the Operator Panel or EWS.

To use job accounting:

- 1. Select the **Job Accounting** tab within the driver.
- 2. Enter the User name and Job Account ID.
- Click OK.

The job accounting information is collected on an internal accounting file within the printer. It can then be downloaded

as a .csv file by an administrator via the printer EWS and processed off line by the users accounting application.

## **SENDING FILES**

Accessed via the Send File menu in the EWS, this page allows you to select a file from the client computer (or any file-servers attached to the client computer) and send the file to the printer. A file is selected by typing in the name of the file or browsing to locate the file. After selection of a file, click the Send button to send the file to the printer.

The types of files that are appropriate for sending with this feature are:

- Print Data files this includes any file containing:
  - a) Simple printable text.
  - b) PJL/PCL5/PCL6/PS/Epson FX print-data.
  - c) PDF (Version 1.3 and earlier)
- Firmware-Upgrade Files.

# **N**ETWORKING

## SUPPORTED ENVIRONMENT

This printer can be connected to a network through the Ethernet interface. The printer supports multiple protocols. As a result, one printer can be shared even from different network environments.

### SUPPORTED OS AND ENVIRONMENT

CONNECTION		NETWORK		
PORT		LPD	PORT 9100	ETHERTALK
PROTOCOL		TCP/IP	TCP/IP	APPLETALK
OS	Windows 95	Х	Х	
	Windows 98	Х	Х	
	Windows Me	Х	Х	
	Windows NT 4.0	Х		
	Windows 2000	Х	Х	
	Windows XP	х	Х	
	Windows Vista	Х	Х	
	Windows Server 2003	Х	Х	
	UNIX	Х	Х	
	Macintosh	Х	Х	Х

#### NOTE

When using Windows 95/98/Me, use OKI LPR.

UNIX Filter are required to print PostScript data. UNIX Filter is compatible with the OSs in Solaris, HPUX and Linux (Redhat, SuSE).

Macintosh Supports Mac OS 10.02 or later.

## **Important**

 The EtherTalk port setting in this printer is disabled by default. To use this port, enable the setting on the Operator Panel.

## CONFIGURATION

The B930 is a fast 100BASE-TX/10BASE-T network capable printer. It supports major protocols such as TCP/IP and Ethertalk. This section details configuring the printer's network interface and should be done prior to configuring your computer.

#### **IP ADDRESS**

The factory configuration is for the printer to obtain an IP address automatically from your networks' DHCP server. Use the printers' Operator Panel to determine the printers' address.

If the DHCP server is not available or not in use, use one of the following methods to retrieve and set the IP address.

Set the IP address manually from the Operator panel or EWS

## Important:

- Depending on the network environment, you may need to set the subnet mask and gateway address.
- Please check with your network administrator if you have any questions concerning your network environment.

## PRINTER SETUP USING THE EWS

If the printer is connected to the network using TCP/IP, its settings can be configured using the EWS.

To apply configuration changes using a Web browser, select the Administrator Login. You will be prompted for a username and password. The username is [root] and the default password is the last six digits of the Ethernet MAC address. The MAC address can be found on the Network Summary page. Note that the password is case sensitive and letters should be entered in upper case.

The following explanation uses Windows XP and Internet Explorer version 6.0 as an example to manually set the printers IP address.

- Launch the EWS using the IP address for the printer you are configuring.
- **2.** Enter the username and password for the Administrator login.
- **3.** Select the Network group.
- **4.** Select the TCP/IP subgroup.
- **5.** Select "Set IP Manually"
- **6.** Configure the IP Address, Subnet Mask and Gateway for the printers' network interface. Once the new address is submitted to the printer, the new address will have to be entered into the browsers' address.

Most of the printers' configuration can be done through the browser including setting the administrator password.

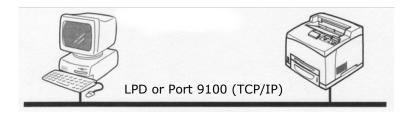
### PRINTING FROM A WINDOWS COMPUTER

### **OVERVIEW**

This chapter provides guidelines on how to print over the network from various Microsoft Windows platforms. There are numerous ways of printing from Windows and the exact set-up will vary depending upon your environment. There are also numerous versions of Windows, which can be configured as either a client, server or both.

Although there are many variants of Windows, the principles of network printing are the same. Microsoft provides on-line help with all of their operating systems and this is a good reference point for the exact details of each configuration option within Windows.

The network printer supports TCP/IP protocol that can be used in conjunction with the Windows operating system.



Once the printer registered on the Windows NT 4.0/Windows 2000/ Windows XP/Windows Server 2003 computer is shared, you can also print from Windows 95/Windows 98/Windows Me computers through this printer.

## INSTALLATION OF TCP/IP PROTOCOL

There are a number of options available when printing using TCP/IP for Windows. The following table lists the options:

WINDOWS	VERSION METHOD
95/98/Me	OKI LPR Utility
NT 4.0	OKI LPR Utility
	Microsoft LPR <sup>1</sup>
2000/XP/Vista	OKI LPR Utility
	Microsoft LPR <sup>1</sup>
	Port 9100 <sup>1</sup>

<sup>&</sup>lt;sup>1</sup>These functions are built into Windows and are displayed as options when using the Add Printer Wizard.

Although there are some differences in configuration options between the various Windows platforms, the procedure for printing using TCP/IP is the same.

1. Ensure that the TCP/IP protocol has been installed in Windows. This can be confirmed by checking the network settings from within the Operator Panel. If TCP/IP has not

- been installed refer to the section below Installation of TCP/IP protocol.
- 2. If not already configured, a suitable IP address, Subnet Mask and Gateway address should be configured. Please refer to the on-line help if necessary. It is vital that the IP address entered is unique and valid. Entering an incorrect IP address may cause severe network problems. Please check the address with the network administrator.
- **3.** If your network environment uses domain names, DNS should be enabled and configured on your system. However, this step is not essential to enable network printing.
- **4.** Restart the operating system.

### **WINDOWS 95/98/Me**

- Click the [Start] button, select [Settings] and then click [Control Panel].
- **2.** In the [Control Panel] double-click on the [Network] icon.
- **3.** In the [Network] dialogue box click [Configuration Panel].
- **4.** If the [Client for Microsoft Networks] is not listed, click [Add].
- **5.** In the [Select Network Component Type] dialogue box, select [Protocol] then click [Add].
- **6.** In the [Select Network Protocol] dialogue box, select [Microsoft] from the list of manufacturers, then select [TCP/IP] from the list of network protocols, then click [OK].
- **7.** The Windows installation CD-ROM may be required. Follow the remaining dialogue box prompts.

### **WINDOWS NT 4.0**

- 1. Click [Start], select [Settings] and then click [Control Panel].
- **2.** Double-click the [Network] icon.
- **3.** In the Network dialogue box, click the [Protocols] tab.
- **4.** If the [TCP/IP Protocol] is not listed, click [Add].
- **5.** In the [Select Network Protocol] dialogue box, select [TCP/IP Protocol] and click [OK].

**6.** The Windows NT installation CD-ROM may be required. Follow the remaining dialogue box prompts.

### WINDOWS 2000

- Click the [Start] button, select [Settings] and then click [Network and Dial-up Connections].
- **2.** Double-click the [Local Area Connection] icon. In the [Local Area Connection Status] dialogue box, click [Properties].
- **3.** In the [Local Area Connection Properties] dialogue box, click [Install].
- **4.** In the [Select Network Component Type] dialogue box, select [Protocol] and click [Add].
- **5.** In the [Select Network Protocol] dialogue box, select [TCP/IP Protocol] and click [OK].
- **6.** Click [Close] button in the [Local Area Connection Properties] dialogue box.
- **7.** Click [Close] in the [Local Area Connection Status] dialogue box.

#### WINDOWS XP AND VISTA

- **1.** Click the [Start] button and select [Control Panel].
- Select [Network and Internet Connection] and [Network Connection].
- **3.** Double-click [Local Area Connection] and click [Properties] in the [Location Area Connection Status] dialogue box.
- **4.** If the [Internet Protocol (TCP/IP)] is not listed, click [Install.].
- **5.** In the [Select Network Component Type] dialogue box, select [Protocol] then click [Add].
- In the [Select Network Protocol] dialogue box, select [Internet Protocol (TCP/IP)] then click [OK].
- **7.** The Windows XP installation CD-ROM may be required. Follow the remaining dialogue box prompts.

Once the protocol has been installed and configured in Windows, the next step is to configure the TCP/IP parameters in the network printer.

### **CONFIGURING AS A NETWORK PRINTER**

### **WINDOWS 95/98/ME**

When printing using TCP/IP, the Oki LPR utility is the only option to use. The following procedure should be used. When installing the driver, ensure it is installed as a local printer and not a network printer. Ensure the appropriate printer driver has been installed in Windows.

Install the Oki LPR utility as described in "OKI LPR" on page 81 of this manual and add the printer installed earlier.

#### **WINDOWS NT 4.0**

With Windows NT 4.0, you have two options for printing using TCP/IP. They are:

- Oki LPR
- Microsoft LPR

In order to use Microsoft LPR, it must first be installed into your operating system.

NT 4.0 requires administrator privileges.

### Oki LPR

Please follow the procedure described in the Windows 95/98/Me section "OKI LPR" on page 81.

### Microsoft LPR

To install this port, the following needs to be carried out.

- Select [Start], [Settings], [Control Panel] and then select [Printers].
- **2.** Select [Add Printer] Wizard.
- **3.** Select [My Computer] and then [Next].
- 4. Select [Add Port].
- **5.** Select [LPR Port] and then [OK].

- **6.** In [Name or address of server providing lpd] type the host name or IP address of the host for the printer you are adding.
- 7. In [Name of printer or print queue on that server] type the logical printer name "lp" and then click [OK].
- **8.** Follow the instructions on the screen to finish installing the LPR-compatible printer.

If the LPR port is not available, install the Microsoft TCP/IP Printing Service.

Insert the printer driver for Windows NT4.0.

- Select [Start].[Settings].[Control Panel] and then doubleclick the [Network] icon.
- **2.** In the Network dialogue box, click the [Services] tab.
- **3.** If [Microsoft TCP/IP Printing] is not listed, click [Add].
- **4.** In the [Select Network Service] dialogue box, select [Microsoft TCP/IP Printing] and click [OK].
- **5.** The Windows NT installation CD-ROM may be required. Follow the remaining dialogue box prompts.

#### **WINDOWS 2000**

Windows 2000 requires administrator privileges.

With Windows 2000, there are four options for printing using TCP/IP.

- Oki I PR
- Microsoft LPR
- Port 9100
- IPP

In order to use Microsoft LPR, it must first be installed on your system.

#### OKI LPR

Please follow the procedure described in the Windows 95/98/Me section in "OKI LPR" on page 81.

### Microsoft LPR

To install this port, the following needs to be carried out:

- **1.** Select [Start], [Settings], [Control Panel and Printers].
- **2.** Open the [Printers] folder.
- **3.** Double-click [Add Printer] and then select [Next].
- **4.** Select [Local Printer], clear the [Automatically detect my printer] check box, and then select [Next].
- **5.** Select [Create a new port] and then [LPR Port].
- **6.** Select [Next] and then provide the following information:

In [Name or address of server providing LPD] enter the host name or Internet Protocol (IP) address of the host for the printer you are adding.

In [Name of printer or print queue on that server] type lp. Follow the instructions on the screen to finish installing the TCP/IP printer.

#### Port 9100

- **1.** Select [Start].[Settings].[Control Panel].
- 2. Open the [Printers] folder.
- **3.** Double-click [Add Printer] and then select [Next].
- **4.** Select [Local Printer], clear the [Automatically detect my printer] check box and then click [Next].
- **5.** Select [Create a New Port] and select [Standard TCP/IP Port].
- **6.** Select [Next].
- **7.** The [Welcome to the Add Standard TCP/IP Printer Port Wizard] will appear.
- **8.** Select [Next] and provide the following information. Enter [Printer name] or IP address, for example: 172.168.1.31. If the above IP address is entered, the Port Name will default to IP\_172.168.1.31.
- **9.** Select [Next]. Additional port information will be required.
- **10.** Under [Device Type], select [Custom] then [Settings].
- **11.** Ensure [Protocol] is set to [Raw].
- **12.** Ensure [Port Number] is 9100 and [SNMP Status Enabled] is deselected.

- **13.** Select [OK].
- **14.** Select [Follow the instructions on the screen to finish installing the printer.]

#### WINDOWS XP AND VISTA

Windows XP requires administrator privileges.

With Windows XP, there are four options for printing using TCP/IP.

- Oki I PR
- Microsoft LPR
- Port 9100
- IPP

In order to use Microsoft LPR, it must first be installed on your system.

### OKI LPR

Please follow the procedure described in the Windows 95/98/Me in "OKI LPR" on page 81.

### Microsoft LPR

To install this port, the following needs to be carried out:

- Select [Start].[Settings].[Control Panel].[Printers and Other Hardware].
- **2.** Select [Printers and Faxes].
- **3.** Click [Add Printer], then select [Next].
- **4.** Select [Local printer attached to this computer], clear the [Automatically detect and install my Plug and Play printer] check box, and then click [Next].
- **5.** Select [Create a New Port] and [Type Standard TCP/IP Port].
- **6.** Click [Next].
- **7.** [Welcome to the Add Standard TCP/IP Printer Port Wizard] appears.
- **8.** Click [Next] and provide the following information. Enter [Printer name or IP address], for example: 172.168.1.31. If

- the above IP address is entered, the Port Name will default to IP 172.168.1.31.
- Click [Next]. [Additional Port Information Required] displayed.
- **10.** Under [Device Type], select [Custom] then [Settings].
- **11.** Ensure [Protocol] is set to [LPR].
- **12.** Ensure [Queue Name] is Ip and [SNMP Status Enabled] is deselected.
- **13.** Click [OK].
- **14.** Follow on screen instructions to finish installing the printer.

### Port 9100

- Select [Start].[Settings].[Control Panel].[Printers and Other Hardware].
- Select [Printers and Faxes].
- **3.** Click [Add Printer] and then click [Next].
- **4.** Select [Local printer attached to this computer], clear the [Automatically detect and install my Plug and Play printer] check box, and then click [Next].
- **5.** Select [Create a New Port] and select [Type Standard TCP/IP Port].
- **6.** Click [Next].
- **7.** [Welcome to the Add Standard TCP/IP Printer Port Wizard] appears.
- **8.** Click [Next] and provide the following information. Enter [Printer name or IP address], for example: 172.168.1.31. If the above IP address is entered, the Port Name will default to IP 172.168.1.31.
- **9.** Click [Next]. [Additional Port Information Required] is displayed.
- **10.** Under [Device Type], select [Custom] then [Settings].
- **11.** Ensure [Protocol] is set to [Raw].
- **12.** Ensure [Port Number] is 9100 and [SNMP Status Enabled] is deselected.

- **13.** Click [OK].
- **14.** Follow the instructions on the screen to finish installing the printer.

### **CREATING A SHARED PRINTER**

Create a shared printer as required.

### Settings Windows NT 4.0/2000/XP/Server 2003

The following procedure explains how to do the settings, using Windows XP as an example.

- 1. Click [Start], and then select [Printers and Faxes]. The [Printers and Faxes] window appears.
- 2. Select the icon of a printer to set, and then select [Sharing] from the right-click menu. Then the printer properties dialogue box is displayed.
- **3.** Click [Share this printer] and enter a share name.
- **4.** Click [Additional Drivers] and select a substitute driver to install, and then click [OK].
- **5.** When installing a substitute driver, an input screen is displayed for the printer driver file location. Insert the attached CD-ROM and specify the appropriate folder.

## Settings of Windows 95/98/Me

- 1. Click [Start], and then select [Settings], followed by [Printers]. The [Printers] window appears.
- **2.** Double click [Add Printer]. The [Add Printer Wizard] dialog box appears.
- Install the printer driver according to the on-screen instructions. Select [Network Printer] for the printer connection, then specify the shared printer created on Windows NT 4.0/Windows 2000/Windows XP/Windows Server 2003 in the previous section.

### OKI LPR

The OKI LPR Utility is network software which supported TCP/IP printing on Windows Me, Windows 98, and Windows 95. It redirects print data from the LPR port to the specified IP address.

### INSTALLING THE OKI LPR UTILITY

The OKI LPR utility requires that the TCP/IP protocol be installed on your Windows system. To install the TCP/IP protocol onto your Windows system, consult your Windows manual.

- 1. Set up the printer driver and designate the output destination to be Local Printer (LPT:). For information on setting up your printer driver, see the printer user manual.
- 2. Insert the CD-ROM provided with your printer into the CD-ROM drive. If the Menu Installer doesn't start automatically, click Start>Run>Browse. Browse to your CD-ROM and click Install>Open>OK.
- 3. Select [Network Software].
- **4.** Select [Installation/Config]
- **5.** Select [Oki LPR].
- **6.** Follow the on-screen instructions.
- 7. Select [Install Oki LPR].
- **8.** Follow the on-screen instructions.
- **9.** Click [Next] when the [Welcome] screen is displayed.
- **10.** Verify [Destination Folder] and [Spool Folder] and click [Next].
- 11. Check [Register in Startup] if you want automatic startup as Windows boots up. Check [Launch as Minimized] if you want to startup in the Icon state and click [Next].
- **12.** Verify the program folder name and click [Next]. The installation starts.
- 13. When the installation ends, the [Setup complete] screen is displayed. Check [Yes, I want to launch OKI LPR Utility now] and click [Finish]. Check [Yes, I want to view the ReadMe File] if you want to read the Readme file. The OKI LPR utility starts.

- **14.** Select [Add Printer] on the [Remote Print] menu.
- **15.** Select [Printer] to accept the printer that has been added in Step 1.
- **16.** Enter an IP address at [IP Address] and click [Ok]. A printer is added to the main window.

Refer to the On-Line Help for information on how to use the utility.

#### UNINSTALL

- **1.** Stop the OKI LPR Utility. Right-click the OKI LPR icon in the system tray and click [Exit].
- Select Start>Program>Okidata>OKI LPR Utility>Uninstall OKI LPR Utility
- **3.** Click [Yes] when the [Confirm File Deletion] dialogue is displayed. Removal of the OKI LPR utility starts.
- **4.** When the removal is complete, the [Uninstall Complete] screen is displayed. Click [Ok].

## PRINTING FROM UNIX

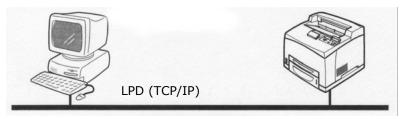
#### FOR PRINTING FROM UNIX

This section explains the installation procedure for printing from a UNIX computer.

### SYSTEM CONFIGURATION

The printer uses the Line Printer Daemon Protocol (LPD) that supports TCP/IP as the transport protocol. With the LPD, the printer can be under a UNIX network environment.

The printer LPD supports Spool Mode where print jobs from clients are spooled once before output and Non-spool Mode where print jobs are sequentially output without spooling.



#### NOTE

When the LPD port is used, the printer can limit print instructions by IP addresses.

### **TARGET COMPUTERS**

The target computers are as follows:

 Workstation or personal computer with RFC 1179 Line Printer Daemon Protocol. LPD (TCP/IP) UNIX

### **INTERFACE**

The printer LPD is available on the following interfaces:

- Ethernet 100BaseTX
- Fthernet 10Base-T

The applicable frame types conform to Ethernet II.

#### **SET UP PROCEDURE**

The setting procedure is as follows:

Setting up the printer

Set the IP address on the printer Operator Panel.

Use the printer Operator Panel or the EWS to set the LPD port to [Enable] (default: [Enable]).

#### NOTE

> Before activating the LPD port, set the IP address of the printer. For details on how to set the IP address and the port, refer Printer Configuration.

- > > The EWS allows more detailed settings.
- **2.** Settings of the workstation

Set the printer in the workstation.

Refer to: "SETTING UP THE WORKSTATION" on page 84

### SETTING UP THE WORKSTATION

This section explains the settings of Solaris 2.x workstation for printing.

### **BEFORE SETUP**

Before setting up the workstation, check the following:

- The setup procedures and commands may vary according to different versions of OS. Refer to the manuals that came with the workstation for details.
- To setup the printer, the user must be a superuser. Contact your network administrator to perform the setup if you do not have the authority of a superuser.
- Check the IP address set up for the printer in advance. Be cautious as an incorrect IP address may cause severe errors.
- Before performing any network setup (such as the IP address) to a host running under NIS (Network Information Service), consult the NIS administrator.

### **EXAMPLES OF SETTINGS FOR SOLARIS 2.X**

The examples below show printer settings for Solaris 2.6 where the printer host name is printer1.

- Registering a printer (printer name: P001) supporting the PostScript language
  - #lpadmin -p P001 -s printer1\!PS
- 2. Registering a printer (printer name: P002) supporting the PostScript language that feeds paper from an A4-size paper tray for duplex printing
  - #lpadmin -p P002 -s printer1\!PS A4 DUP

**3.** Registering a logical PostScript printer PS01 set using the EWS.

#lpadmin -p P003 -s printer1\!PS01

#### NOTE

- > Enter the host name and printer name of the remote host after -s by linking with !. The printer name corresponds to the print language/mode.
- > The output style may be specified at the same time. The parameters for specifying a style are the same as those available for the -C option. As the example of (2) shows, insert "\_" between the printer name and output parameters. You can enter up to 14 characters.
- If PS%n or PLT%nH is specified for the printer name as in the example of (3), however, the printer does not operate normally with an output style different from the preset one.
- Set a printer name corresponding to the print language/ mode and output style.

### Refer to:

Manuals, such as online manuals, that came with various workstations.

## PRINT (LP)

The "lp" command is used for printing.

### **COMMAND FORMAT**

Ip [-d Printer name] [-n No. of copies] File name

#### **COMMAND OPTIONS**

The following command options are available:

#### -d Printer name

Specify the printer name registered by the "lpadmin" command as the -d option. If this option is omitted, the default printer lp will be specified.

## -n No. of copies

This option specifies the number of copies. If one "lp" command is issued to print multiple files, the number of copies specified by this option will apply to all the files.

However, this option is effective when the printer is in the spool mode. In the non-spool mode, the client must be a Windows NT machine to use this option.

#### **Precautions**

 Among options not listed above (e.g. -m option), those not processed by the workstation which sends the print instructions will not be effective.

In the spool mode, up to 32 files can be printed by one "lp" command. Files that come after the 32nd files will be ignored.

## Sample

To print a file named "file1" to a printer set up as "P001", enter the following command:

```
%lp -d P001 file1
```

To output three copies of "file1" and "file2" to "P001", enter the following:

```
$lp -d P001 -n3 file1 file2
```

## **DELETE (CANCEL)**

This cancel command is used to delete print data which has been sent to print.

### **Command Format**

cancel [Printer name] [Job Number]

### **COMMAND OPTIONS**

The following command options are available:

#### **Printer name**

This option specifies the printer name. The "cancel" command can be effectively used with the combined use of -a, -e and -u as shown below. This option is invalid in the non-spool mode.

#### -a

Deletes all the print data, sent by a user who issues this command, from the data which has been received by a specified printer.

#### -е

Deletes all the print data received by a specified printer.

#### -u user name

Deletes all the print data sent by a specified user and received by a specified printer.

### **JOB NUMBER**

This option specifies the job number of the print data to be deleted. These numbers can be checked by issuing a "lpstat" command.

This option is invalid in the non-spool mode.

### **Precautions**

- Print data that consists of multiple files sent in one print instruction cannot be deleted file by file. All the files will be deleted at one go.
- This command will become invalid if it is executed without options having been specified or if there is no print data which matches the option.
- A workstation can only delete print data it has sent. It cannot delete print data sent by other workstations.
- When a command to delete print data is received, the file concerned will be deleted even if it is in the process of being printed. Only the print data available prior to file deletion will be printed.

### Sample

To cancel the print data related to the files of printer "P001" (Job number: P001-27), enter the following command:

%cancel P001-27

To cancel all the printer data of printer "P001", enter the following command:

%cancel P001 -e

## **INQUIRY (LPSTAT)**

The "Ipstat" command is used to inquire about the status of the printer.

Important:

In the non-spool mode, this function is available to Windows NT clients but not to Solaris clients.

### **Command Format**

### **Ipstat** [Option]

Command Options The following command options are available:

If no option is specified, all the print data-related information will be displayed.

The sequence of the options does not affect the outcome.

To use more than one argument at the same time, separate them by commas and enclose all the arguments with " ".

E.g. %|pstat -u "user1,user2,user3"

# -o [Printer name]

This option displays the print data received. The printer name is specified in the argument.

-t

This option displays all the information.

### -u [User name]

This option displays received print data information on users of specified user names.

### -v [Printer name]

This option displays the printer name and the device path name. The printer name is specified in the argument.

#### **Precautions**

- Long file names will be truncated.
- Up to 64 print instruction information can be displayed.
- If two or more types of print languages/modes are set up on a single workstation, identical job numbers may be displayed when an inquiry command (lpstat) is issued.

### Sample

To inquire about the print data received by a printer set up as "P001", enter the following command:

%lpstat -o P001

## -C OPTION (LPR COMMAND)

This section explains the functions which can be specified and printing operations which will be affected by the -C option.

The -C option is available only when the SunOS directs the printer to enter the spool mode.

## Important:

 When the PostScript logical printer that was configured on the EWS and -C option of "Ipr" command have been specified simultaneously, some of the actions cannot be guaranteed to work. Also, when specifying the PostScript logical printer as a default printer on Unix, it is recommended not to user the -C option by "Ipr" command.

#### **FUNCTION**

The following items can be set up by using the -C option:

#### NOTE

Any parameter other than below becomes invalid if specified.

## Selecting a Paper Tray

When selecting a paper tray, either the paper size or the tray itself is specified. If the paper size is specified, the printer automatically searches and selects the tray where the specified paper is loaded. The following parameters can be specified:

PARAMETER	DESCRIPTION
INTRAY1/intray1	Selects Tray 1
INTRAY2/intray2	Selects Tray 2
INTRAY3/intray3	Selects Tray 3
INTRAY4/intray4	Selects Tray 4
INTRAY5/intray5	Selects Tray 5
INTRAY6/intray6	Selects Tray 6
A4/a4	Selects the tray where A4 paper is loaded.
B5/b5	Selects the tray where B5 paper is loaded.
A5/a5	Selects the tray where A5 paper is loaded.
LETTER/Letter	Selects the tray where Letter paper is loaded.
LEGAL/Legal	Selects the tray where Legal paper is loaded.

### NOTE

- If several parameters are specified in one "lpr" command, data may not be printed correctly.
- > The system default is used if no tray number is specified, a specified tray is not loaded, or paper of a specified size is not loaded.
- > This option is for specifying a paper size only. Paper is selected but the document size is not corrected according to the paper size.
- If the print data specifies a paper tray, the tray specification by the data becomes valid and that by the -C option becomes invalid.

- > If an unacceptable combination is specified, the printer may not operate correctly.
- > For some print language, the specification may be invalid.

## Selecting a Paper Output Tray

The following parameters can be specified:

PARAMETER	DESCRIPTION
OUTUP/outup	Ejects prints to the rear tray (option).
OUTDOWN/outdown	Ejects prints to the center tray.

## **Selecting a Paper Type**

The following parameters can be specified:

PARAMETER	DESCRIPTION
PTS/pts Selects	Plain paper.
PT1/pt1	Selects Heavy weight paper 1.
PT2/pt2	Selects Heavy weight paper 2.
POH/poh	Selects Transparency.
PRC/prc	Selects Recycled paper.

## **Specifying 2 sided Printing**

The following parameters can be specified:

PARAMETER	DESCRIPTION
DUP/dup	2 sided printing as follows:

PARAMETER	DESCRIPTION
TUMBLE/tumble	2 sided printing as follows:
SIMP/simp	1 sided printing

## NOTE

- > If several parameters are specified in one "lpr" command, data may not be printed correctly.
- > The system default is used if no parameter is specified.
- If the print data specifies 2 sided or 1 sided printing, the specification by the data becomes valid and overrides that by -C option.

## **Specifying Paper Size and 2 sided Printing**

Select a paper size and a binding type. The following parameters can be specified:

PARAMETER	DESCRIPTION
A4D/a4d	2 sided printing on A4 paper and long- side binding
A4T/a4t	2 sided printing on A4 paper and short- side binding
A5D/a5d	2 sided printing on A5 paper and long- side binding
A5T/a5t	2 sided printing on A5 paper and short- side binding
B5D/b5d	2 sided printing on 85 paper and long- side binding
B5T/b5t	2 sided printing on B5 paper and short- side binding

### NOTE

> If several parameters are specified in one "lpr" command, data may not be printed correctly.

- > The system default is used if no parameter is specified.
- > If the print data specifies 2 sided or 1 sided printing, the specification by the data becomes valid and overrides that by -C option.

## **Specifying Collation**

The following parameter can be specified:

PARAMETER	DESCRIPTION
COLLATE/collate	Sorts prints electronically.

#### NOTE

> For some print language, the specification may be invalid.

Specifying Color and Print Modes

The following color and print mode parameters can be specified:

PARAMETER	DESCRIPTION
CC/cc	Selects color for color mode and quality priority for print mode.
CB/cb	Selects color for color mode and speed priority for print mode.
GC/gc	Selects monochrome for color mode and quality priority for
GB/gb	Selects monochrome for color mode and speed priority for
AC/ac	Selects auto (color/monochrome) for color mode and quality
AB/ab	Selects auto (color/monochrome) for color mode and speed

#### NOTE

- If several parameters are specified in one "lpr" command, data may not be printed.
- > For some print language, the specification may be invalid.
- > The system default is used if no parameter is specified.
- > The color setting is not available on this printer.

### **PRINTING**

To specify the output format of printing, enter the following command:

## -C, [Parameter], [Parameter]

Enter a "," (comma) after -C followed by the parameters which specify the output format. To specify multiple parameters, separate them with ",".

For example, to output a file named "file1" 2-sided on A4 to printer "P001", enter the following command:

%lpr -P P001 -C, DUP, A4 file

### Important:

> If the command specified by the -C option exceeds 64 characters, the operation may not function correctly.

### PRINTING FROM A MACINTOSH COMPUTER

### PRINTING FROM A MACINTOSH COMPUTER

This section explains the installation procedure for printing from a Macintosh computer.

#### SYSTEM CONFIGURATION

As the printer supports EtherTalk and LPD protocol, you can print from Macintosh. NOTE > Printing using the LPD protocol is available only with the Mac OS X.

#### **TARGET COMPUTERS**

The printer supports a Macintosh or Power Macintosh with the following OS:

Mac OS 10.2 and up

#### **SET UP PROCEDURE**

The setting procedure is as follows:

 Use the printer Operator Panel or EWS to set the following port to [Enable].

- > The EWS allows more detailed settings.
- **2.** Setting up the Macintosh

Install the printer driver (Adobe PS) for Macintosh. Install the screen font if necessary. Connect the printre to the network and select Add Printer via the printer setup utility or Printers and Faxes and the Plus button. Select Other using the Print Menu and browse to select the B930n ppd. Add options installed on the printer.

## SNMP SUPPORT

The printer can be managed via a standard SNMP management station. The printer supports SNMP-v1, SNMP-v2c, MIB-II, Host Resources MIB, Printer MIB and OKI Data Private MIB.

## PRECAUTIONS AND LIMITATIONS

## ON USING TCP/IP

This section explains the precautions and limitations of using this printer with TCP/IP.

## Setting Up the Printer

- Be very careful in setting up IP addresses which are controlled as an entire system. Consult your network administrator before performing any setup on IP addresses.
- Depending on the network environments, some require subnet mask and gateway to be set up. Consult your network administrator and set up the necessary items.

## **Setting Up the Computer**

- Be very careful in setting up IP addresses which are controlled as an entire system. Consult your network administrator before performing any setup on IP addresses.
- Before performing any network setup (such as the IP address) to a host running under NIS (Network Information Service), consult the NIS administrator.

When setting a UNIX workstation, note the following also:

- The setup procedures and commands may vary according to different versions of OS. Refer to the manuals that came with the workstation for the details.
- To setup the printer, the user must be a superuser. Contact your network administrator to perform the setup if you do not have the authority of a superuser.
- The print language/mode is determined by the printer model and configuration. Before setting a UNIX workstation, check the available languages/modes.
- To specify multiple entries for the logical printer, make sure each printer entry is assigned its own unique spool directory.
   If a single spool directory is used for multiple printer entries, the printer select option may not function correctly.

### PRINTING FROM WINDOWS

Take note of the following when printing from Windows:

 In the spool mode, if the print data is bigger than the remaining capacity of the hard disk or the memory at the point of receiving, the data will not be received by the printer.

#### NOTE

- > Some client computers may re-send immediately when the print data has exceeded the receiving capacity. When this occurs, the client appears as if it has crashed. To rectify this situation, the client computer must be stopped from sending print data.
- > In the non-spool mode, printing will commence once data starts to be received by the printer. Therefore, if the printer has accepted a print request from a computer, it will not receive another print request from another computer.
- > For PCL and DUMP, the specification for the number of copies is invalid.

#### PRINTING FROM UNIX

Take note of the following when printing from UNIX:

#### Print

- In the spool mode, up to 32 files can be printed by one command. Files that come after the 32nd file will be ignored. An instruction with more than 32 files will be treated by the printer as a print request of up to 32 files.
- In the spool mode, if the print data is bigger than the remaining capacity of the hard disk or the memory at the point of receiving, the data will not be received by the printer.

#### NOTE

- > Some client workstations may re-send immediately when the print data has exceeded the receiving capacity. When this occurs, the client workstation appears as if it has crashed. To rectify this situation, the client must be stopped from sending print data.
- In the non-spool mode, multiple files can be printed by issuing one command. Furthermore, the number of files is not limited.
- > In the non-spool mode, printing will commence once the data starts to be received by the printer. Therefore, if the printer has accepted a print request from a client workstation, it will not receive another print request from another client workstation.
- Options, such as -m option, not processed by the workstation which sends the print instructions will not be valid.
- > For PCL and DUMP, the specification for the number of copies is invalid.

#### Delete

- Print data which consists of multiple files sent in one print instruction, cannot be deleted file by file. All the files will be deleted at one go.
- This command will become invalid if it is executed without options having been specified or if there is no print data which matches the option.
- A workstation can only delete print data it has sent. It cannot delete print data sent by other workstations.

 Print data which is in the process of printing may not be deleted.

## Inquiry

- Long file names will be truncated.
- Up to 64 print instructions can be displayed.
- If two or more types of print languages/modes are set up on a single workstation, identical job numbers may be displayed when an inquiry command is issued.
- In the non-spool mode, the client must be a Windows NT machine to use this option.

#### Others

 When the IP address or the computer name of a workstation is changed, the printer may not process inquiries or deletions correctly. Make sure the printer is free of all spooled data and switch off/on the printer.

#### NOTE

 The function to stop/eject print data spooled to the printer spool can be operated from the printer Operator Panel.

# **INSTALLING CONSUMABLES**

The Drum Unit and Toner Cartridge should be replaced when they have reached the end of their print life. The Drum Unit prints about 60,000 images. The Toner Cartridge prints about 30,000 images. The printer will produce a warning on the Operator Panel to inform the user when the remaining toner amount is low. When the toner cartridge is empty, there will be a notification on the Operator Panel and the printer will not continue printing until a new cartridge is installed.

#### NOTE

> The possible number of pages that can be printed from a Toner Cartridge is based on Letter or A4 size paper. The number of pages that can be actually printed varies according to the conditions of use.

### **CAUTION**

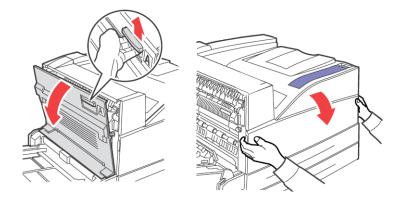
Be sure to switch off and unplug the machine before accessing the interior of the machine for cleaning, maintenance, or fault clearance. Access to a live machine's interior can cause electric shock.

## INSTALLING THE DRUM CARTRIDGE

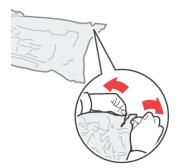
When installing the Drum Cartridge, take note of the following points:

- Do not subject it to direct sunlight or strong light.
- When installing the Drum Cartridge, select a location not subject to strong light and try to finish the installation within 5 minutes or less.
- Do not touch the surface of the photosensitive drum.
- A drum shutter protects the photosensitive drum from light.
   Do not open the drum shutter or contact any internal surfaces with your fingers or hand.

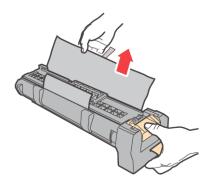
**1.** Open the printer front and side covers.



**2.** Remove the Drum Cartridge from the packing.

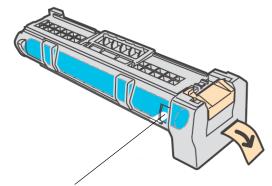


**3.** Remove the protective sheet from the Drum Cartridge.



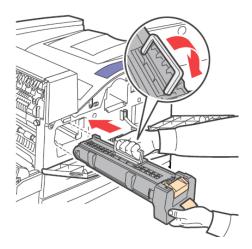
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**4.** Avoid contact with internal surfaces and limit exposure to light for no longer than 5 minutes.

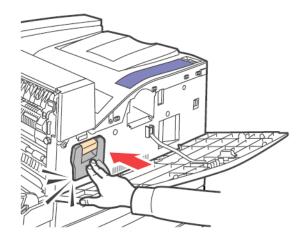


Avoid contact with fingers.

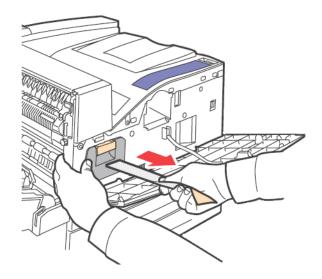
**5.** Fold the handle down and slide the Drum Cartridge into the printer.



**6.** Seat the Drum Cartridge firmly into the printer.



**7.** Remove and discard the protective strip.



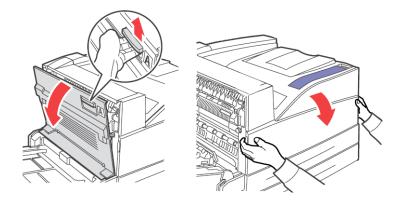
**8.** Close the printer covers.

### INSTALLING THE TONER CARTRIDGE

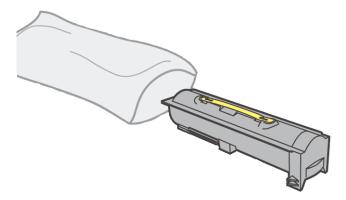
When installing the Toner Cartridge, take note of the following points:

#### WARNING

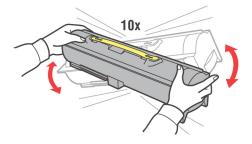
- Never throw a Toner Cartridge into an open flame. It could cause an explosion and you can get burned.
- Keep the toner cartridge in a location out of reach of children.
- Do not forcibly open the toner cartridge.
- > Do not stand or place the Toner Cartridge upside down.
- > Toner is not harmful to the human body, but if some toner has come into contact with your skin, you can wash it off with cold water and soap. If toner gets on your clothing, you should try to immediately remove it with a vacuum cleaner which has a fine filter.
- > Avoid inhaling toner dust.
  - Although the toner is not harmful to the body, wash it off immediately if your hands or clothes are stained with it.
  - It is recommended to use up the Toner Cartridge within 1 year after opening it.
- **1.** Open the printer front and side covers.



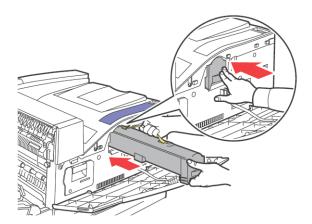
**2.** Remove the Toner Cartridge from its packing.



**3.** Take the Toner Cartridge out of the box and shake it 8 to 10 times as shown in the diagram.

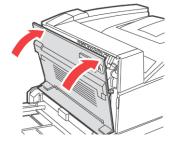


**4.** Slide the Toner Cartridge into the printer and seat firmly in place.



**5.** Close the printer covers.





# **TROUBLESHOOTING**

Your printer's Operator Panel provides you with information and troubleshooting help. When an error or warning condition occurs, the Operator Panel displays a message informing you of the problem.

STATUS MESSAGE	DESCRIPTION
Online	The printer is ready to receive print jobs.
Processing	The printer is processing data.
Printing	A print job is printing.
Warming up	The printer is warming up. Print jobs can be processed but not printed.

Hardware or software failures that may require service support are presented as fatal errors. When the printer's Operator Panel displays a fatal error message a fatal error message replaces the status lines

# **POOR PRINT QUALITY**

When the print quality is poor, select the closest symptom from the following table to rectify the problem. If the print quality does not improve after carrying out the appropriate action, contact our Printer Support Desk.

SYMPTOM	CAUSES	SOLUTIONS
Light Prints -The overall image is lighter than normal.	1. The paper may be damp. 2. You may be using Draft mode. 3. The toner level may be low. 4. Drum cartridge near end of life.	1. Replace the paper. 2. Turn off Draft mode. 3. If the toner cartridge is low on toner, replace it. 4. Replace drum cartridge.
Blank Prints - The entire page is blank with no visible print.	1. If you just installed a new drum cartridge, the yellow sealing tape may still be in place.  2. Multiple sheets may have been fed from the paper tray at the same time.  3. Printable data may not have been received from the computer.	1. Remove the tape. 2. Remove the paper from the paper tray and fan it. Also, ensure that the paper is correctly loaded in the tray. 3. Print a Configuration Page If the Configuration Page prints correctly, check the interface cable between the computer and printer, the printer setup, and application software If the Configuration Page is blank, replace the drum cartridge then reprint the Configuration Page. If the Configuration Page is blank, contact technical support

SYMPTOM	CAUSES	SOLUTIONS	
Black Prints - The entire printed page is black.	The drum cartridge may be defective.     Printable data from the computer may be corrupted.	1. Replace the drum cartridge. 2. Print a Configuration Page.  - If the Configuration Page prints correctly, check the interface cable between the computer and the printer, and the application software.  - If the connections appear normal, contact technical support.	
Horizontal Line Deletions - There are areas of print deletions that appear across the paper.  PRINTED IMAGE PHINTED IMAGE	The drum cartridge may not be installed correctly.     The drum cartridge may be defective or at the end of its life.     The transfer roller may be defective.	1. Remove and re-install the drum cartridge. 2. Replace the drum cartridge. 3. Replace the transfer roller (in the maintenance kit).	
Vertical Line Deletions - There are areas of print deletions that form narrow lines.  PRIN ED IMALE	1. The paper may be defective with creases, folds, etc. 2. The drum cartridge may be defective or at the end of its life. 3. The transfer roller may be defective.	1. Replace the paper. 2. Replace the drum cartridge. 3. Replace the transfer roller (in the maintenance kit).	

SYMPTOM	CAUSES	SOLUTIONS
Horizontal Dark Streaks - There are black lines that appear horizontally on the page.  PRINTED IMAGE	1. The drum cartridge may be defective or at the end of its life.  2. The paper path may be contaminated with toner.  3. The fuser may be defective.	1. Replace the drum cartridge. 2. Print several blank sheets of paper to remove the tone accumulations. 3. Replace the fuser (in the maintenance kit).
Repetitive Vertical Dark Streaks - There are black lines that appear vertically on thepage.  PRINTED IMAGE	1. The paper path may be contaminated with toner. 2. The drum cartridge may be defective or at the end of its life. 3. The fuser may be defective. 4. The transfer roller may be defective.	1. Print several blank sheets of paper to remove the toner accumulations. 2. Replace the drum cartridge. 3. Replace the fuser (in the maintenance kit). 4. Replace the transfer roller (in the maintenance kit).
Dark Spots or Marks - There are dark spots or marks that appear in a random pattern on the page.  PRINTED IMAGE	The paper path may be contaminated with toner.     The drum cartridge may be defective.     The fuser may be defective.     The transfer roller may be defective.	1. Print several blank sheets of paper to remove the toner accumulations.  2. Replace the drum cartridge.  3. Replace the fuser (in the maintenance kit).  4. Replace the transfer roller (in the maintenance kit).

SYMPTOM	CAUSES	SOLUTIONS	
Unfused or Partially Fused Image - The printed image is not fully fused to the paper and easily rubs off.  PRINTED IMAGE	1. The paper may be damp. 2. Heavy or unusual paper may be in the tray. 3. The printer may be located in an environment with extreme temperature or humidity. 4. The fuser may be defective.	1. Replace the paper. 2. Replace the paper with an approved paper type then adjust the media type. 3. Verify that the printer is located in an environment with the temperature between 5× and 32× C (41× and 89× F) and the relative humidity between 15% and 85%. Move the printer to a suitable area, away from air conditioning vents, open loading docks, etc. 4. Replace the fuser (in the maintenance kit).	
Wrinkled Prints - The pages are wrinkled, creased, or torn.	1. The paper is not loaded correctly in the appropriate tray. 2. The paper may be in poor condition. 3. The paper may be damp. 4. The fuser may be at the end of its life.	1. Verify that the paper is correctly loaded in the appropriate tray.  2. Replace the paper.  3. Replace the paper.  4. Replace the fuser (contained in the maintenance kit).	

SYMPTOM	M CAUSES	
Blurred Prints - The image is blurred at theedges.	<ol> <li>The paper may be in poor condition.</li> <li>The paper may be damp.</li> </ol>	<ol> <li>Replace the paper.</li> <li>Replace the paper.</li> <li>Replace the drum cartridge.</li> </ol>
PRINTED IMAGE	3. The drum cartridge may be defective.	
Random or Spot Deletions - Areas of the print are extremely light or missing.  PRINTED IMAGE	1. The paper may be in poor condition. 2. The paper may be damp. 3. The drum cartridge may be defective or at the end of its life.	<ol> <li>Replace the paper.</li> <li>Replace the paper.</li> <li>Replace the drum cartridge.</li> </ol>

# **No Power**

STATUS	ITEMS TO CHECK	ACTION
There is no power.	Is the power switched off?	Press the printer switch to the <i> position to turn the power on.</i>
	Is the power cord disconnected or not securely connected?	Switch off the power and connect the cord to the power outlet and printer again. Then, switch on the power.
	Is the power cord connected to a power outlet with the correct voltage?	Connect the printer exclusively to an outlet with a suitable voltage rating and current rating.
Power is interrupted frequently.	Printer may have malfunctioned.	Switch off the power to the printer, remove the plug from the power outlet and contact Technical Support.
	Is the power cord disconnected or not securely connected?	Switch off the power and connect the cord to the power outlet and printer again. Then, switch on the power.

# **CANNOT PRINT**

STATUS	ITEMS TO CHECK ACTION	
Print instruction was sent but processing did not start.	Is the fault indicator lit? Is the print-ready indicator off?	Carry out the action according to the status of the indicator.
	Is there any message displayed on the control panel?	Check the message, then carry out the action.
	Is there any message displayed in the computer?	Check the message, then carry out the action.

# **PRINTING IS NOT CLEAR**

STATUS	TUS ITEMS TO CHECK ACTION	
Transparencies are not printed clearly.	Are the correct type of transparencies used?	Load the correct type of transparencies.
	Are the transparencies correctly loaded in the paper tray?	Load the transparencies correctly in the paper tray.
Postcards are not printed clearly.	Are the correct type of postcards used?	Load the correct type of postcards.
	Are the postcards correctly loaded in the paper tray?	Load the postcards correctly in the paper tray.
Envelopes are not printed clearly.	Are the correct type of envelopes used?	Load the correct type of envelopes
	Are the envelopes correctly loaded in the paper tray?	Load the envelopes correctly in the paper tray.

# PAPER INCORRECTLY FED

STATUS	ITEMS TO CHECK	ACTION
Paper cannot be fed. Paper jams occur. Multiple sheets of paper are fed. Paper is fed at an angle.	Is the paper correctly loaded?	Load the paper correctly. For transparencies, postcards or envelopes, fan them well first to allow air to enter between each sheet before loading.
	Is the paper damp?	Replace with paper from a new ream.
	Is the paper tray pushed in?	Push the paper tray completely into the printer.
	Is the printer placed on a flat location?	Place the printer on a stable surface.
	Are the paper tray guides set in the correct positions?	Set the length guide and width guide in the correct positions.
	Did you print any picture postcards?	Clean the feed roll.

## Noise

STATUS	ITEMS TO CHECK	ACTION
Strange noise occurs.	Is the printer placed on a flat location?	Shift the printer to a stable surface.
	Is the top cover open?	Close the top cover tight.
	Is the paper tray pushed in?	Push the paper tray completely into the printer.
	Are there foreign objects inside the printer?	Switch off the power and remove any foreign objects inside the printer.
		If the object cannot be removed unless the printer is disassembled, contact Technical Support.

# **NETWORK TROUBLESHOOTING**

## **USING TCP/IP**

This section provides information on the possible causes, verifying methods and recommended actions pertaining to errors which may occur when the printer is used with TCP/IP.

## WHEN USING WINDOWS 95/98/ME

CAUSE		TREATMENT
The printer and the	Status Display	Unable to print (Network Error)
computer are connected to different networks.	Verification	Check with the system administrator of the network verify that the network connecting the computer and that connecting the printer are linked by a router or a gateway.
	Action	Connect the printer directly to the network connecting the computer.
An error has occurred on the	Status Display	Unable to print (Network Error)
network between the computer and	Verification	-
the printer. Connection cannot be established.	Action	Ask the system administrator of the network to check the network for errors.
The printer is	Status Display	Unable to print (Network Error)
switched off after the print instruction has been sent from the computer. Or the print instruction is sent to the printer which is switched off	Verification	Check whether or not the printer is switched on.
	Action	Switch on the printer.
Print instructions	Status Display	Unable to print (Network Error)
from multiple computers are sent to the printer at the	Verification	-
same time.	Action	(Print will be reprocessed automatically.)
Printing cannot be spooled due to insufficient disk	Status Display	Double click [My Computer] and right click the disk installed with Windows 95/98/Me (e.g. C-drive)
capacity of the computer.	Verification	Select [Properties] from the menu displayed and check the free space available.
	Action	After erasing unnecessary files to increase the free space available, select [Pause Printing] from the [Document] menu of the printer window to enable printing to restart

# USING WINDOWS NT 4.0/2000/XP/VISTA/SERVER 2003

The Printer Is Not Printing

CAUSE	VERIFICATION	ACTION
Incorrect IP address.	Ask the network administrator to check if the IP address is correct	Set up the correct IP address for the printer.
If LPD spool is set to [On], the print data sent by the user in a single print instruction has exceeded the	Check the remaining storage capacity of the destination device.	1. If single print data has exceeded the storage capacity of the destination device, free space on the device, or split the file into smaller ones to keep them below the remaining storage space.
remaining storage capacity of the destination device.	device.	If multiple files have exceeded the storage of the destination device, reduce the number of files which can be sent at a time.
An irrecoverable error has occurred during printing.	Check the error message on the printer Operator Panel.	Switch off the printer, then switch it on again.
The data format of the print data to be processed by the printer and that sent by the computer are different.	-	Disable the output function of Ctrl-D.

# Unable to obtain the desired print results

CAUSE	VERIFICATION ACTION	
The specified print language and that of the print data are different.	Check the specified print language and that of the print data.	Specify the print language consistent with that used in the print data.
The printer driver for this printer is not used. (The printer driver of another company is used)	Check that the printer driver which came with this printer has been selected.	Select the printer driver which came with this printer. If it does not appear on the selection list, install and select the printer driver. If a printer driver from another maker is used, the printer may not print properly.

## WHEN USING UNIX

The printer is not Printing

CAUSE	VERIFICATION	ACTION
Incorrect IP address.	Ask the network administrator to check if the IP address is correct	Set up the correct IP address for the printer.
Error occurs on the network connecting the workstation and the printer.	Activate the network test mode (ping) on the workstation to check the communication status.	As the network administrator to look into the network failure.
Unable to set the correct printer entry on the workstation.	Check and correct the printer entry settings on the workstation. Check the/etc/printcap file on the workstation or use the lpstat command to troubleshoot.	Re-enter the correct printer entry.
The printer is in the offline status.	Check whether Off-line is displayed on the printer Operator Panel.	Press the <on line=""> button.</on>
If LPD spool is set to [On], the print data sent by the user in a single print instruction has exceeded the remaining storage capacity of the destination device.		I. If single print data has exceeded the storage capacity of the destination device, free space on the device, or split the file into smaller ones to keep them below the remaining storage space
		2. If multiple files have exceeded the storage of the destination device, reduce the number of files which can be sent at a time.
An irrecoverable error has occurred during print.	Check the error message on the printer Operator Panel.	Switch off the printer, then switch it on again.

CAUSE	VERIFICATION	ACTION
The data format of the print job does not conform to the printing environment of the workstation. (Print data from the client contains TBCP.)	-	Specify PSASC on the client side to print data containing TBCP by the PostScript language.
The data format of the print job does not con-form to the printing environment of the workstation. (Print data from the client is of a binary format.)	-	Specify PSBIN on the client side for the printer name on the remote host to print a binary file in the PostScript language.
The printer has run out of paper	Check the message on the printer Operator Panel	Load paper into the paper tray

## Unable to obtain the desired Print Results

CAUSE	VERIFICATION	ACTION
The indicated print language and the print language used in the print data are different.	Check that the print language specified is the print language used in the print data.	Specify the print language consistent with that used in the print data.

## **USING ETHERTALK**

This section provides information on the possible causes, verifying methods and recommended actions pertaining to errors which may occur when the printer is used with EtherTalk. The printer is not Printing

CAUSE		TREATMENT
The name (or the default name) of the printer has	Cause	The Apple Talk function of the printer name if it detects that a printer of the same name exists on the network.
been changed.	Verification	Check Chooser to confirm that the printer name has been changed.
	Action	Change the name of the printer or change the name of the other printer to avoid duplicate printer names on the network.
Unable to obtain desired print	Cause 1	The print language of the printer and that of the print drawer are different.
results.	Verification 1	Check the print language set up for the printer and that for the printer driver for Macintosh.
	Action 1	Ensure that PostScript and Adobe PS are set up as the print language for the printer and printer driver respectively. If the print language of the printer is the dump mode, the print data sent from Macintosh will be output in hexadecimal notations.
	Cause 2	The printer driver which came with the printer is not set up on the Macintosh. A printer driver of another maker has been used instead.
	Verification 2	Check the installation procedure for the printer driver which came with the printer again and confirm that the printer driver is installed on the Macintosh. Check that the printer driver which came with the printer appears in the Chooser.
	Action 2	If garbled characters are still printed after the printer driver for the printer has been selected, contact service. If a printer driver of another maker is used, the printer may not print properly.

CAUSE		TREATMENT
The printer is not connected.	Cause 1	On the Macintosh, the printer is not selected correctly in the Chooser. Or, the printer is processing another job.
	Verification 1	Check that the printer is selected correctly on the Macintosh. If the printer is processing another job, the job must be completed before the printer can be connected.
	Action 1	If the printer is still not connected though it is selected correctly and is not processing another job, check the following causes.
	Cause 2	The EtherTalk port of the printer is set to [Disable]. Or, the Start/Stop setting for EtherTalk has been set to Off by the PostScript command. Or, the printer is in the offline status
	Verification 2	Check that the port used is set to [Enable] and that the Start/ Stop setting is set to [Start]. Check whether Off-line is displayed on the printer Operator Panel.
	Action 2	If the printer still cannot be connected although all the above conditions are normal, contact service.

CAUSE		TREATMENT
Although it is connected,	Cause 1	The printer is in the offline status.
the printer does not print.	Verification 1	Check whether Off-line is displayed on the printer Operator Panel.
	Action 1	Press the <on line=""> button.</on>
	Cause 2	The print language of the printer and that of the printer driver are different.
	Verification 2	Check the print language set up for the printer and that for the printer driver for Macintosh.
	Action 2	If the print language of the printer and that of the printer driver are different, set the same language for them. If the problem remains, check the following causes.
	Cause 3	After the Macintosh was connected to the printer, the power to the printer was shut off. Or, paper jam has occurred in the printer. Or, the network is faulty.
	Verification 3	Check that the printer is switched on. Select the printer again from Macintosh and reprint.
	Action 3	If the problem remains, contact service.
"Please reboot printer" is displayed on the printer Operator Panel.	Cause	The AppleTalk function of the printer has failed.
	Verification	Switch off the printer, then switch it on again.
	Action	If Please reboot printer still appears on the

# **ERROR AND WARNING MESSAGES**

MESSAGE	DESCRIPTION
0-1 Main Motor Call Service	System Error
1-1 Main Motor Call Service	Main Motor Error
1-4 Drum Motor Call Service	Drum Motor Error
3-3 and 3-5 ROS Error Call Service	Raster Output Scanner Error
4-1 through 4-9 Fuser Error Call Service	Fuser Error
5-1 Toner Error Call Service	Dispense Motor Error
5-9 CRU Fan Call Service	CRU Fan Error
6-3 through 6-5 NVRAM Error Call Service	Memory Error
6-6 MCU Error Call Service	Memory Error
6-7 PPM Data Call Service	Memory Error
1-1 through 1-3 Paper Jam Clear Area A	Registration Area Jam
3-1 through 3-6 Paper Jam Clear Area A	Fuser Area Jam
4-1 Paper Jam Clear Area A	Exit Area Jam
4-3 Paper Jam Clear Area A/E	Exit Area Jam
4-5 Paper Jam Clear Area A	Exit Area Jam

MESSAGE	DESCRIPTION
4-6 Paper Jam Clear Area A/E	Exit Area Jam
8-2 Paper Jam Clear Area A/E	DM Area Jam
6-1 through 6-2 Feed Error Clear Duplexer	DM Area Jam
1-2 Feed Error Area A/Tray 2	Paper Tray Area - Misfeed Jam
1-3 Feed Error Area A/Tray 1	Paper Tray Area - Misfeed Jam
2-1 Feed Error Area B/Tray 2	Paper Tray Area - Misfeed Jam
2-2 Feed Error Area B/Tray 3	Paper Tray Area - Misfeed Jam
2-3 Feed Error Clear Area A	Paper Tray Area - Misfeed Jam
3-0 Feed Error Area B/Tray 3	Paper Tray Area - Misfeed Jam
3-1 Feed Error Area B/Tray 4	Paper Tray Area - Misfeed Jam
3-2 Feed Error Clear Area B	Paper Tray Area - Misfeed Jam
3-3 Feed Error Clear Area B	Paper Tray Area - Misfeed Jam
4-0 Feed Error Area C/Tray 5	Paper Tray Area - Misfeed Jam
4-1 Feed Error Clear Area B/C	Paper Tray Area - Misfeed Jam
4-2 Feed Error Clear Area B/C	Paper Tray Area - Misfeed Jam
4-3 Feed Error Clear Area B	Paper Tray Area - Misfeed Jam

MESSAGE	DESCRIPTION
4-4 Feed Error Clear Area B	Paper Tray Area - Misfeed Jam
5-1 Feed Error Clear Area B/C	Paper Tray Area - Misfeed Jam
5-2 Feed Error Clear Area B/C	Paper Tray Area - Misfeed Jam
5-3 Feed Error Clear Area B/C	Paper Tray Area - Misfeed Jam
8-2 Feed Error Clear Area B	Paper Tray Area - Misfeed Jam
8-3 Feed Error Clear Area C	Paper Tray Area - Misfeed Jam
8-4 Feed Error Clear Area C	Paper Tray Area - Misfeed Jam
8-5 Feed Error Area C/HCF	Paper Tray Area - Misfeed Jam
8-6 Feed Error Clear Duplexer	Paper Tray Area - Misfeed Jam
9-3 Feed Error Clear Area A	Paper Tray Area - Misfeed Jam
4-12 through 4-26 Finish Jam Clear Area F	Finisher Jam (H-X'port Ent. sensor)
4-32 through 4-43 Finish Jam Clear Area G	Finisher Jam (X'port Ent. sensor)
4-46 Finish Jam Clear Area G	Finisher Jam (Buffer Path sensor)
4-47 Finish Jam Clear Area G	Finisher Jam (Buffer Path sensor)
4-48 Finish Jam Clear Area G	Finisher Jam (Buffer Path sensor)
4-51 through 4-56 Finish Jam Clear Area G	Finisher Jam (Compile Exit sensor)

MESSAGE	DESCRIPTION
4-61 Finish Jam Clear Area H	Finisher Jam (Compiler No Paper sensor)
4-66 Finish Jam Clear Area H	Finisher Jam (Compiler No Paper sensor)
4-71 through 4-78 Finish Jam Clear Area H	Finisher Jam (TOP Tray Exit sensor)
4-82 though 4-88 Finish Jam Clear Area H	Finisher Jam (Gate sensor)
5-1 Cover Open Close Door E	L/H HIGH Cover Open
5-1 Cover Open Close Front Door	FRONT Cover Open
7-3 Duplex Open Close Duplexer	DM COVER Open
5-2 Cover Open Close Door B	L/H LOW Cover Open
6-1 Cover Ope Close Door C	TM Cover Open
5-1 Cover Open Close Door A	L/H Cover Open
1-6 Tray Error Check HCF	HCF Faulty
1-5 Tray Error Check Tray 5	Tray 5 Faulty
1-4 Tray Error Check Tray 4	Tray 4 Faulty
1-3 Tray Error Check Tray 3	Tray 3 Faulty
1-2 Tray Error Check Tray 2	Tray 2 Faulty
1-1 Tray Error Check Tray 1	Tray 1 Faulty

MESSAGE	DESCRIPTION
Paper Out Tray 1	
Paper Out Tray 2	
Paper Out Tray 3	
Paper Out Tray 4	
Paper Out Tray 5	
Paper Out HCF	
8-3 EP Cartridge Reset EP Cart	DRUM/TONER Cartridge Memory Communication Failure
7-7 TM Error Check TM	Tray module Communication Failure
6-7 HCF Error Check HCF	HCF Communication Failure
5-7 Finisher Err Check Finisher	Finisher Communication Failure
3-7 EXIT Error Check EXIT	EXIT Module Communication Failure
2-7 Duplex Fail Call Service	DM Communication Failure
Paper Overlap	Big size onto small size exceeds regulation number.
F/D Tray Full Remove Paper	Face Down Tray is in"Paper Full" state.
Staple Cart Check Stapler	Staple Pin Misfeed.
Staple Suply Low Add Staples	Staple Pin Warning.
Stacker Full Remove Paper	Stacker Tray is in "Paper Full' state.
5-11 FIN Error Call Service	Mechanical failure in Stacker Tray

MESSAGE	DESCRIPTION
5-12 FIN Error Call Service	Mechanical failure in Stacker Tray
5-13 FIN Error Call Service	Mechanical failure in Stacker Tray
5-21 FIN Error Call Service	Mechanical failure in Tamper
5-22 - 5-23 FIN Error Call Service	Mechanical failure in Tamper
5-31 - 5-34 FIN Error Call Service	Mechanical failure in Punching Part
5-81 - 5-86 FIN Error Call Service	Finisher Mechanical Failure
5-91 - 5-96 FIN Error Call Service	Mechanical failure in Stapling Part
7-5 Cover Open Close Door J	HCF Tansport Interlock Switch Open
6-2 Cover Open Close Door F	Finisher H-X'port Cover Open
7-1 Cover Open Close Door G	Finisher FRONT Cover Open
7-2 Cover Open Fin. Eject Cover	Finisher Eject Cover Open
7-4 TM Error Call Service	TM Non Volatile Memory Device ERROR
7-3 TM Error Call Service	TM Non Volatile Memory BCD ERROR
7-8 TM Error Call Service	TM MODEL ERROR
3-1 OCT1 Error Call Service	OCT1 ERROR
3-2 OCT2 Error Call Service	OCT2 ERROR

MESSAGE	DESCRIPTION
2-8 Duplex Error Call Service	DM MODEL ERROR
Staple Fail Check Stapler	Staple NG
Staple Set Error Check Stapler	Staple Set Over Count
Stacker Error Check Finisher	Stacker Lower Safety Fail
Punch Waste Full Empty Waste Box	Punch scraps box full
No Punch Waste Install Box	No punch scraps box
7-2 Drum NV Err Replace Drum	DRUM NV Read/Write Error
3-1 Drum Missing Replace Drum	DRUM cartridge not installed.
7-1 Drum Comm Replace Drum	DRUM Communication failure
6-1 Drum EOL Replace Drum	DRUM cartridge end of life
7-3 Drum ID Replace Drum	DRUM ID Mismatch
4-1 Drum Error Replace Drum	ATC sensor defects
Drum EOL nearby	DRUM warning
8-2 EP Cartridge Replace EP Cart	Toner Cartridge (CRUM) NV Read/Write Error
8-3 EP Cartridge Replace EP Cart	Toner Cartridge Communication failure
8-1 EP Cartridge ID Mismatch	Toner Cartidge Type Mismatch

MESSAGE	DESCRIPTION
1-2 EP Cartridge Replace EP Cart	Toner Cartidge Empty
Toner Low	Toner Cartidge Low
ATC sensor Warning	ATC sensor Warning
Temp sensor Warning	Temperature sensor Warning
Hum sensor Warning	Humidity sensor Warning
HCF Lifting	Lifting warning is only shown for Tray6 (HCF)
HCF Undocked	HCF Docking SW = open
Size Error Tray1	
Size Error Tray2	
Size Error Tray3	
Size Error Tray4	
Size Error Tray5	
Size Error Tray6	
Tray 2 Missing	
Tray 3 Missing	
Tray 4 Missing	
Tray 5 Missing	
HCF Missing	
5-4 FIN Error Call Service	FINISHER Non Volatile Memory Device ERROR
5-8 FIN Error Call Service	FINISHER MODEL ERROR
6-4 HCF Error Call Service	HCF Non Volatile Memory Device ERROR

## **MAINTENANCE**

## **CLEANING THE PRINTER**

This section describes how to clean the printer in order to maintain the printer in good condition.

### **CAUTION**

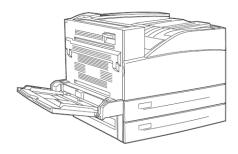
CAUTION: Be sure to switch off and unplug the machine before accessing the interior of the machine for cleaning, maintenance, or fault clearance. Access to a live machine's interior can cause electric shock.

#### **CLEANING THE EXTERIOR**

Clean the exterior of the printer about once a month. Wipe the surface with a damp, well-wrung soft cloth. Then wipe with another dry soft cloth. For stubborn stains, moisten a soft cloth with a small amount of neutral detergent, and gently wipe the stain off.

#### NOTE

> Do not spray the detergent directly on the printer. The liquid detergent may enter the printer through a gap and cause problems. Never use cleaning agents other than neutral detergent.



## **CLEANING THE INTERIOR**

After clearing paper jams or replacing the Toner Cartridge, inspect the interior of the printer before closing the top cover

**CAUTION** 

- CAUTION: Never touch areas labelled as "High Voltage." You can get an electric shock. Never touch a labelled area found on or near the heat roller. You can get burned. If a sheet of paper is wrapped around the heat roller, do not try to remove it by yourself to avoid injuries or burns. Switch off the machine immediately, and contact your service provider.
  - Remove any remaining pieces of paper.
  - Remove any dust or stains with a dry clean cloth.

#### WHEN NOT IN USE FOR A LONG TIME

Carry out the following procedure if you are not going to use the printer for a long period of time.

- **1.** Press the power switch to the <O> position to turn the power off.
- Remove all connection cords, such as the power cord and interface cables. See "Rear View" on page 9 for connector diagrams.
- **3.** Remove the paper from the paper trays and store it in a location free of humidity and dust.

NOTE

> for details on storing the paper

### MOVING THE PRINTER

Carry out the following procedure when moving the printer.

#### **CAUTION**

- When lifting the machine, get a firm footing and bend your knees to avoid possible injuries to your back NOTE
  - > The weight of this printer, without the optional accessories, paper tray, consumables and paper, is 41.0 kg or 90 lbs. If the optional duplex module or tray module has been installed, uninstall it before moving the printer. Otherwise, they may fall to the ground and cause injuries. Refer to "Installing Accessories" on page 164 for details on uninstalling the optional accessories.
  - > When lifting the printer, there should be 2 persons, one in front and one behind the printer, to firmly grip the

recessed areas provided on both sides of the printer. Never try to lift the printer by gripping any other areas. Lifting the printer by gripping any other areas can cause the printer to fall and result in injuries.

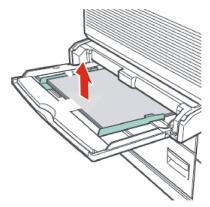


If the optional paper trays have been installed, uninstall them before moving the printer.

- Press the power switch to the <O> position to turn the power off.
- **2.** Remove all connection cords, such as the power cord and interface cables.

### WARNING

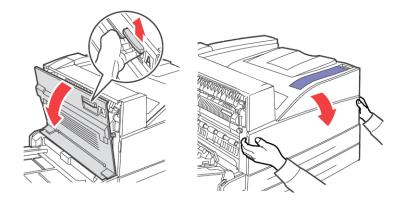
Never touch a power cord with wet hands. Danger of electric shock exists. When unplugging the machine, grasp the plug instead of the cord. Forcibly pulling on a cord can damage it and cause fire or electric shock. **3.** Remove any paper in the MPF Tray (1).



**4.** Pull out the remaining paper trays and remove any paper. Keep the paper wrapped and away from humidity and dirt.

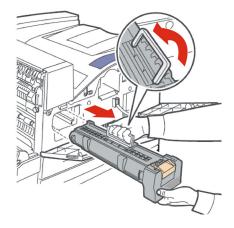


**5.** Open the front and side covers.



#### NOTE

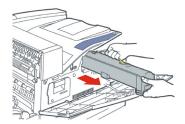
- > Do not touch any parts inside the printer.
- **6.** Hold the Drum Cartridge by the grip to pull it out slowly.



#### NOTE

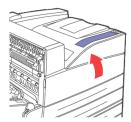
> It is necessary to remove the Toner Cartridge. If you move the printer with the Toner Cartridge installed, the toner may spill in the interior of the printer.

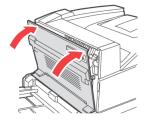
**7.** Hold the Toner Cartridge securely and pull it out slowly.



#### NOTE

- > Do not shake the Toner Cartridge after it has been removed from the printer. The toner will spill.
- > After removing the Toner Cartridge, put it into its original aluminum bag or wrap it with a thick cloth.
- **8.** Close the front cover and side covers securely.





**9.** Lift the printer and move it gently. If the printer is to be moved over a long distance, pack it inside a box.



## **FUSER UNIT**

This section explains the Fuser unit replacement.

#### CAUTION ON HANDLING THE FUSER UNIT

The fuser unit is included as one of the regular replacement parts. Before replacing the fuser unit, open the box of the regular replacement parts and get the new fuser unit ready.

When handling the fuser unit, take note of the following

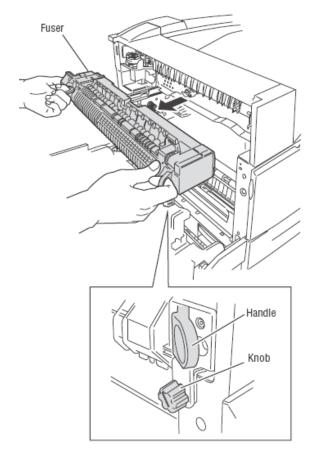
#### **CAUTION**

Never touch a labelled area found on or near the heat roller. You can get burned. If a sheet of paper is wrapped around the heat roller, do not try to remove it by yourself to avoid injuries or burns. Switch off the machine immediately, and contact your service provider. Be sure to switch off and unplug the machine before accessing the interior of the machine for cleaning, maintenance, or fault clearance. Access to a live machine's interior can cause electric shock.

#### REPLACING THE FUSER UNIT

**1.** Switch off the power of the printer and leave it for 30 minutes until the fuser unit cools down.

- **2.** Open the printer left side door.
- **3.** Loosen the two knobs securing the Fuser to the frame.
- **4.** Pull the Fuser toward you by holding the two handles.



- **5.** Unpack the new Fuser from its container.
- **6.** Carefully insert the Fuser by holding the two handles.
- **7.** Secure the Fuser by tightening the two knobs.
- 8. Close the door.
- **9.** Switch the printer power on.

### TRANSFER ROLL CARTRIDGE

This section explains about the transfer roll cartridge.

#### CAUTION ON HANDLING THE TRANSFER ROLL CARTRIDGE

The transfer roll cartridge is included as one of the regular replacement parts. Before replacing the transfer roll cartridge, open the box of the regular replacement parts and get the new transfer roll cartridge ready.

When handling the transfer roll cartridge, take note of the following points.

### WARNING

Never throw a transfer roll cartridge into an open flame. It can cause an explosion and you can get burned.

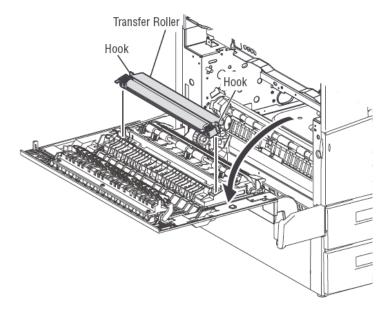
Do not remove and re-insert the transfer roll cartridge in use.

When the message to replace the transfer roll cartridge appears, replace the transfer roll cartridge. Otherwise, the printer will not continue to print.

#### REPLACING THE TRANSFER ROLL CARTRIDGE

- **1.** Switch off the power of the printer.
- **2.** Open the printer left side door.

**3.** Pinch the hooks at each end of the Transfer Roller and lift to remove the Transfer Roller from the chute.



- **4.** Grasp the new Transfer Roller by the hooks.
- **5.** Carefully insert the new Transfer Roller into its mounting and reseat the hooks.
- **6.** Close the door.
- **7.** Turn the printer power on.
- **8.** Run sample prints to verify correct operation.

### MAINTENANCE KIT

A Maintenance kit is required every 300,000 pages. It consists of:

- Fuser Unit
- Transfer Roller
- Paper Feed Rollers

Contact your service department to install the kit when the panel requests it.

# **CLEARING PAPER JAMS**

When there is a paper jam, refer to the following procedures and follow the instructions.

#### **CAUTION**

CAUTION: Never touch areas labelled as "High Voltage." You can get an electric shock.Never touch a labelled area found on or near the heat roller. You can get burnt. If a sheet of paper is wrapped around the heat roller, do not try to remove it by yourself to avoid injuries or burns. Switch off the machine immediately, and contact your service provider.

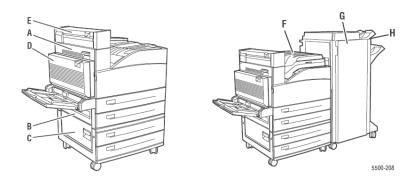
#### **CAUTION**

Use caution; some components inside doors may be hot.

#### NOTE

> Paper jams could be due to the printer installation environment and type of paper used.

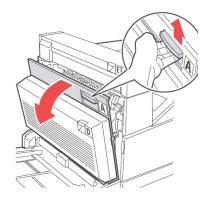
### JAM AREA LOCATIONS



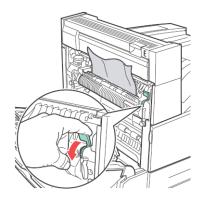
### JAM AT A

Follow these steps to clear the jam

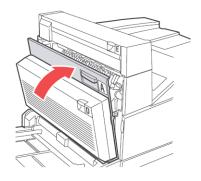
### 1. Open Door A.



**2.** Pull the jammed paper out of the printer. If necessary, press the green handle to move the paper to make it easier to remove. Confirm that all paper fragments are removed.



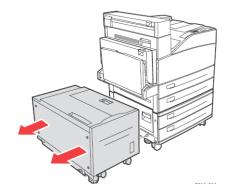
### 3. Close Door A.



## JAM AT B

Follow these steps to clear the jam.

**1.** If the printer has the 2000-Sheet Feeder (Tray 6), slide the feeder away from the printer.



## 2. Open Door B.



**3.** Pull the jammed paper out of the printer. Confirm that all paper fragments are removed.



### 4. Close Door B.



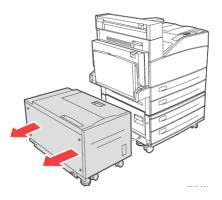
**5.** If the printer has the 2000-Sheet Feeder (Tray 6), slide the feeder firmly against the printer.



# JAM AT C

Follow these steps to clear the jam.

1. If the printer has the 2000-Sheet Feeder (Tray 6), slide the feeder away from the printer.



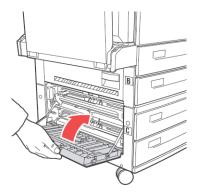
2. Open Door C.



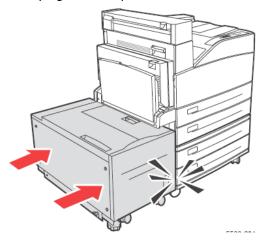
**3.** Pull the jammed paper out of the printer. Confirm that all paper fragments are removed.



4. Close Door C.



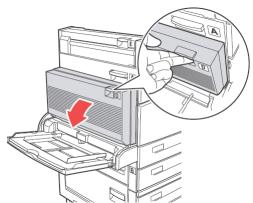
**5.** If the printer has the 2000-Sheet Feeder (Tray 6), slide the feeder firmly against the printer.



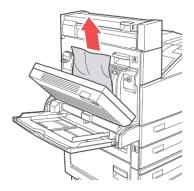
# JAM AT D

Follow these steps to clear the jam.

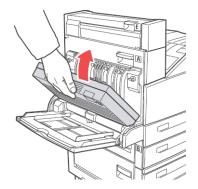
**1.** Open Door D.



**2.** Pull the jammed paper out of the printer. Confirm that all paper fragments are removed.



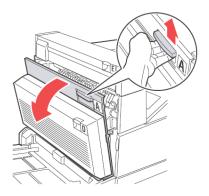
3. Close Door D.



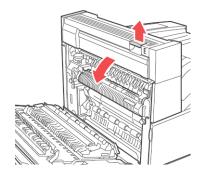
# JAM AT E

Follow these steps to clear the jam.

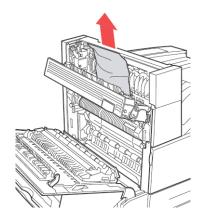
# 1. Open Door A.



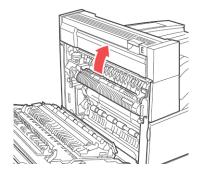
# 2. Open Door E.



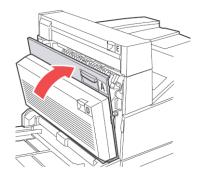
**3.** Pull the jammed paper out of the printer. Confirm that all paper fragments are removed.



4. Close Door E.



### **5.** Close Door A.



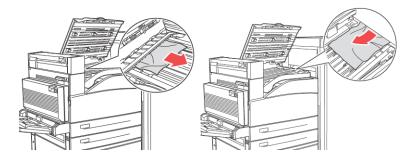
# JAM AT F

Follow these steps to clear the jam.

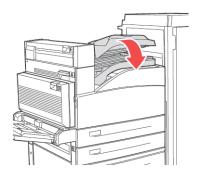
# 1. Open Door F.



**2.** Pull the jammed paper out of the printer. Confirm that all paper fragments are removed.



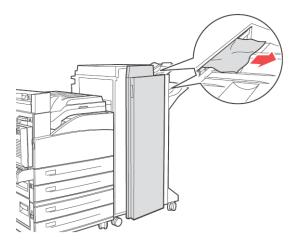
3. Close Door F.



# JAM AT G

Follow these steps to clear the jam.

**1.** If visible, pull the jammed paper out of the stacker upper tray.



**2.** Open Door G.



**3.** Depending on the instructions shown on the Operator Panel, open handle 2a, handle 2b, or handle 3 as shown on the instruction labels.

#### NOTE

- > If the stapler is in the way, slide the stapler toward you then to the right.
- **4.** If you opened handle 2a or handle 2b, rotate knob 2c counter clockwise as needed.

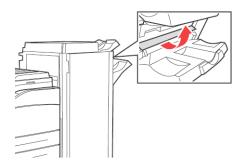
- **5.** Pull the jammed paper out of the printer. Confirm that all paper fragments are removed.
- **6.** Close the handles opened in Step 3.
- **7.** Close Door G.



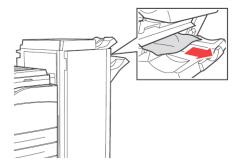
### JAM AT H

Follow these steps to clear the jam.

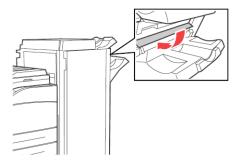
**1.** Lift Door H.



**2.** Pull the jammed paper out of the printer. Confirm that all paper fragments are removed.



3. Close Door H.

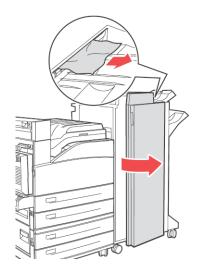


## JAM AT THE STACKER UPPER TRAY

Follow these steps to clear the jam.

1. Pull the jammed paper out of the stacker upper tray.

# 2. Open Door G.

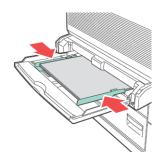


# 3. Close Door G.

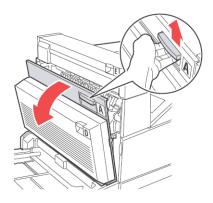


# PAPER JAM IN TRAY 5 (MPF)

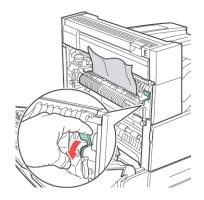
Follow these steps to clear the paper jam in Tray 5.



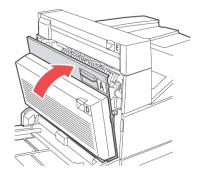
- **1.** Verify that the width guides are pressed against the paper.
- 2. If the paper size and type shown on the Operator Panel match the size and type of the paper in the tray, press the **OK** button.
- **3.** If the paper size shown on the Operator Panel does not match the size of the paper in the tray, change it to match.
- 4. Open Door A.



**5.** Pull the jammed paper out of the printer. If necessary, press the green handle to move the paper to make it easier to remove. Confirm that all paper fragments are removed.



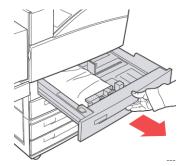
**6.** Close Door A.



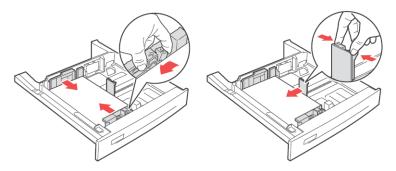
# PAPER JAMS IN TRAYS 1-4

Follow these steps to clear the paper jam in Trays 1-4.

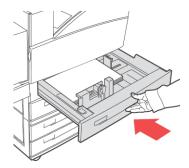
**1.** Pull out the tray specified on the Operator Panel.



**2.** Verify that the length and width guides are pressed against the paper.

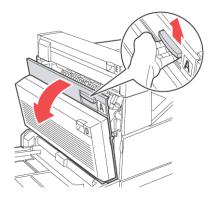


**3.** Push the tray completely into the printer.

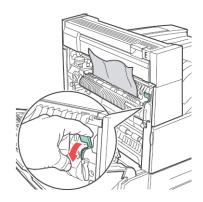


**4.** Specify the size of the paper in the Operator Panel.

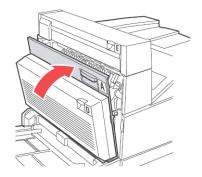
### **5.** Open Door A.



**6.** Pull the jammed paper out of the printer. If necessary, press the green handle to move the paper to make it easier to remove. Confirm that all paper fragments are removed.



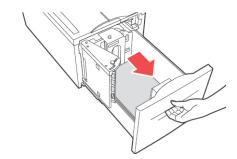
### **7.** Close Door A.



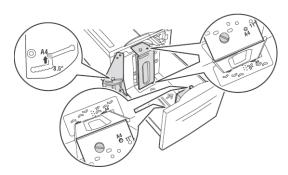
## PAPER JAM IN TRAY 6

Follow these steps to clear the paper jam in Tray 6.

**1.** Pull out Tray 6.



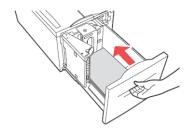
**2.** Verify that the length and width guides are set correctly



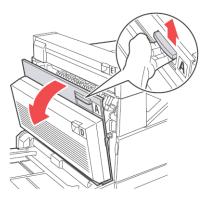
B930n User's Guide> 161

### NOTE

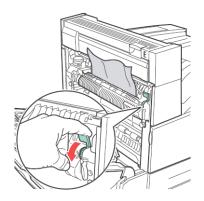
- > The default setting is for 8.5 x 11 in. paper. You must change the guides for A4 paper.
- **3.** Push the tray completely into the printer.



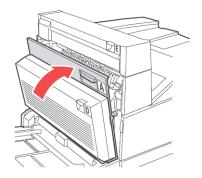
- **4.** Specify the size of the paper in the Operator Panel.
- **5.** Open Door A.



**6.** Pull the jammed paper out of the printer. If necessary, press the green handle to move the paper to make it easier to remove. Confirm that all paper fragments are removed.



### **7.** Close Door A.

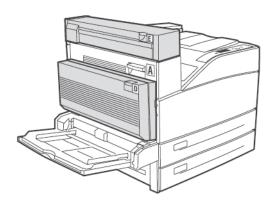


# **INSTALLING ACCESSORIES**

### **DUPLEX MODULE**

#### **CAUTION**

Be sure to switch off the power and unplug the power cord from the outlet before carrying out the operations. If not, you might get an electric shock.



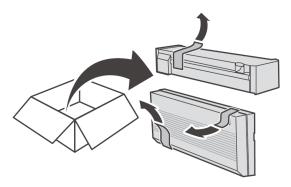
#### CHECK THE CONTENTS OF THE DUPLEX OPTION

Unpack the carton and confirm that the part numbers of the Duplex Transport and all components are correct. Ensure that all components are undamaged.

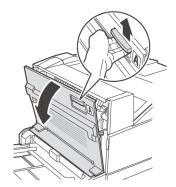
#### INSTALLING THE DUPLEX MODULE

You can install an optional duplex module to this printer.

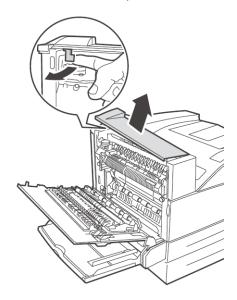
1. Unpack the Option Duplex, remove cushioning materials, and confirm that all attachments are available.



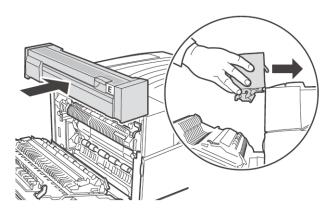
**2.** Open Printer door A.



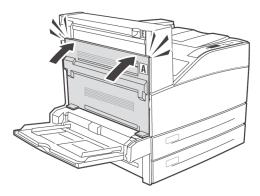
**3.** Remove cover and save for possible reuse.



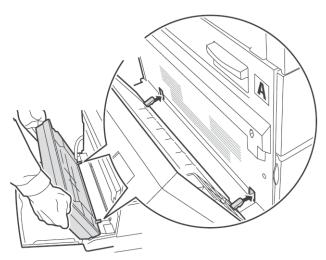
**4.** Slide the Exit 2 Module into position.



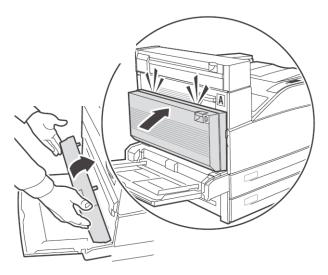
**5.** Close printer door A.



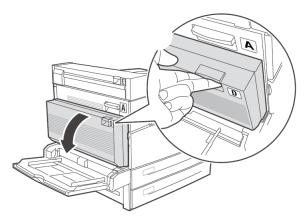
**6.** Place the Duplex Unit in position while inserting the 2 hooks on the bottom of the unit into the shown locations in the receptors of the printer.



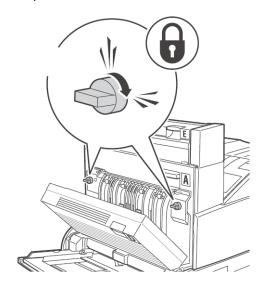
**7.** Lift the Duplex Unit until the upper hooks are latched in the printer.



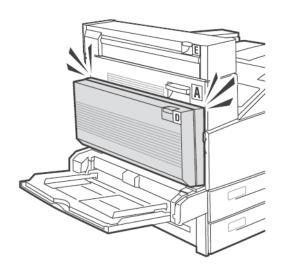
**8.** Open the Duplex Unit cover by lifting latch D.



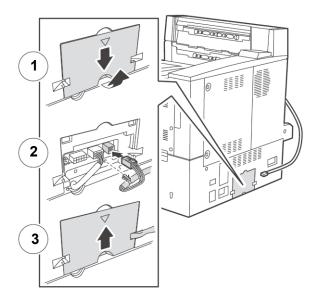
**9.** Twist the 2 locking screws clockwise to secure the Duplex Unit to the printer.



10. Close the Duplex Unit cover.

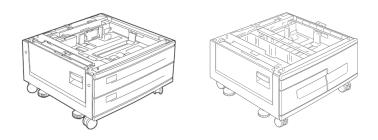


**11.** Remove the printer access cover (1), connect the Duplex Unit interface cable (2) and replace the printer access cover (3).

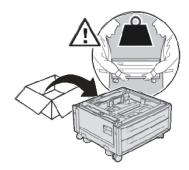


- **12.** Connect the power cord.
- **13.** Turn on the power switch of the laser printer.
- **14.** Try some test duplex-printings to confirm that there is no problem.

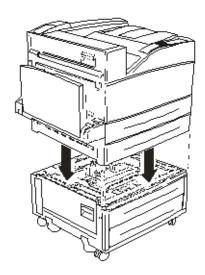
### 1000 SHEET FEEDER OR TANDEM TRAY MODULE



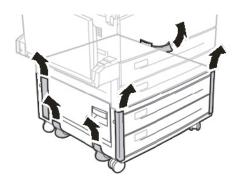
- 1. Switch OFF the printer power.
- **2.** Remove the power cord from the printer.
- **3.** Unpack the Paper Feeder and remove cushioning materials.



- **4.** Place the Paper Feeder in an installation location.
- **5.** Fit the holes on the bottom of the laser printer with the four positioning bosses of the Paper Feeder, and place the laser printer on the Paper Feeder.



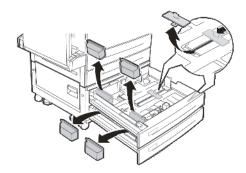
**6.** Remove the packing tape from the Paper Feeder.



**7.** Slide out the 2 drawers.



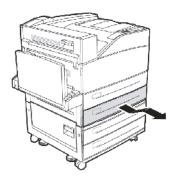
**8.** Remove all packing materials from both drawers.



**9.** Slide both drawers back into the Paper Feeder.



**10.** Remove printer drawer 3.



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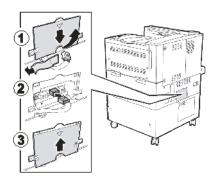
**11.** Insert the 2 locking screws, turning clockwise to secure the printer to the Feeder.



**12.** Replace drawer 3 back in the printer.

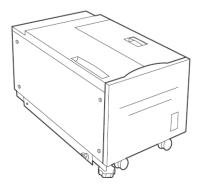


**13.** Remove the printer Interface Panel Cover (1), connect the 1000 Sheet Feeder Interface Connector (2) and replace the printer Interface Panel Cover (3).



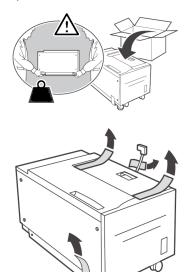
- **14.** Connect the power cord.
- **15.** Turn on the power switch of the laser printer.

#### 2000 SHEET HIGH CAPACITY FEEDER

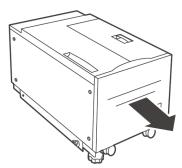


- **1.** Switch OFF the printer power.
- **2.** Remove the power cord from the printer.

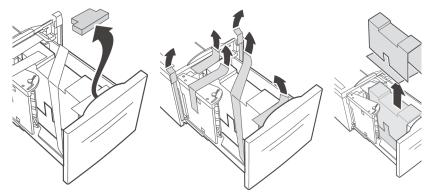
**3.** Unpack the Paper Feeder and remove cushioning materials.



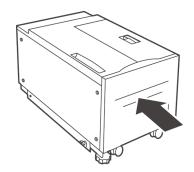
**4.** Slide the drawer out of the Paper Feeder.



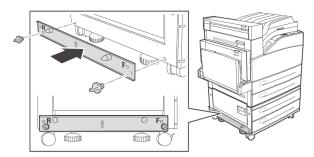
**5.** Remove the packing material from the feeder drawer.



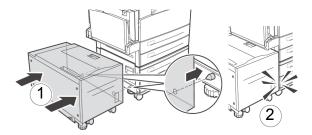
**6.** Slide the drawer back into the feeder.



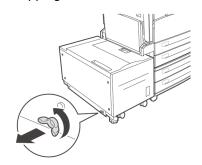
**7.** Install the mounting bracket.



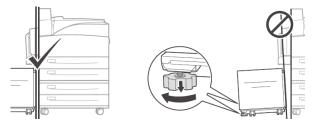
**8.** Slide the 2000 Sheet Feeder to the mounting plate guiding it on the locating pin until it latches.



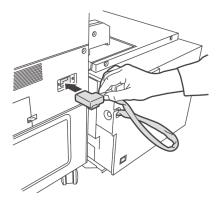
**9.** Remove the shipping hardware and discard.



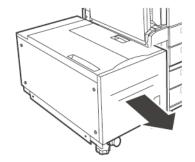
**10.** Adjust the feet on the feeder assembly to set the feeder position parallel to the printer.



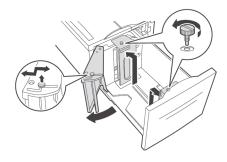
**11.** Connect the feeder power cord into the printer accessory outlet.



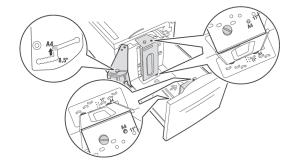
**12.** Slide the drawer out of the feeder.



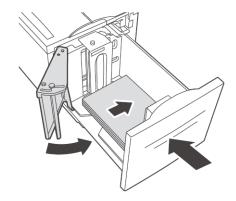
**13.** Remove the shipping screws.



14. Adjust the feeder paper size guides.



**15.** Load the paper tray.



- **16.** Connect the power cord.
- **17.** Turn on the power switch of the laser printer.

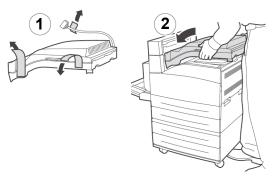
#### 3500 SHEET FINISHER

The finisher provides a main 3000 sheet lower stacker and a top 500 sheet stacker. It also provides a stapler for up to 50 sheets of standard paper and a hole punch. In Europe the punch has a 2 hole

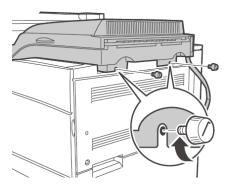
and a 4 hole capability while in the Americas, the punch is a 3 hole punch  $\,$ 



- **1.** Switch OFF the printer power.
- **2.** Remove the power cord from the printer.
- **3.** Unpack the Horizontal Transport and position on top of the printer.



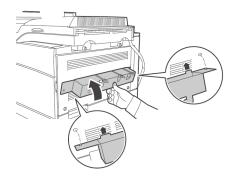
**4.** Insert the 2 mounting screws to secure the Horizontal Transport.



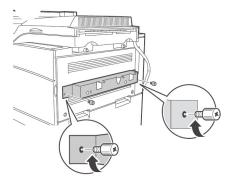
**5.** The guides from the printer itself must be moved to the Exit 2 module.

The guides are a two pieces of rubber and plastic that assist in stacking to the top of the printer. When installing the Horizontal Transport this guide needs to be moved from the body of the printer up to the Exit 2 module included with the duplex.

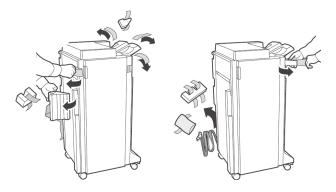
**6.** Place the mounting bracket in position.



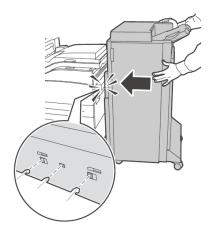
**7.** Insert the 2 mounting screws to secure the bracket.



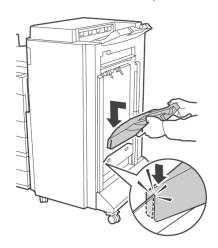
**8.** Remove all the packing materials from the Finisher.



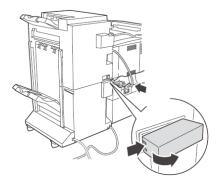
# **9.** Slide the Finisher into position engaging the latching hardware



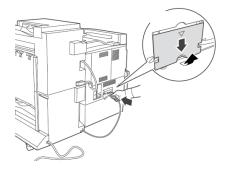
**10.** Insert the Stacker Lower catch tray.



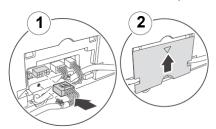
**11.** Remove the access cover and plug in the Finisher interface cable.



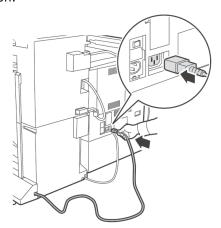
**12.** Remove the printer interface cover.



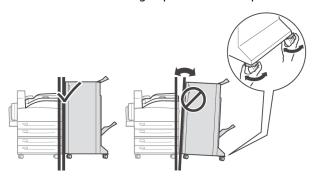
**13.** Connect the interface connector and replace the cover.



**14.** Connect Finisher power cord to the printer accessory power connection.



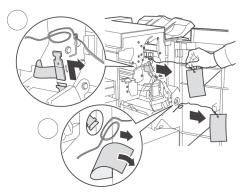
**15.** Level the Finisher making it parallel to the printer.



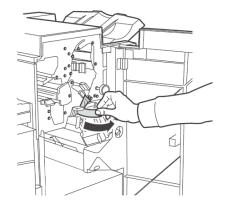
## **16.** Open the Finisher door.



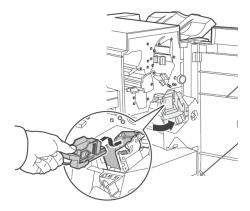
## **17.** Remove the internal tags and shipping brackets.



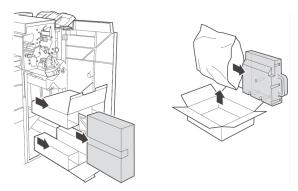
# **18.** Move the catch to the right.



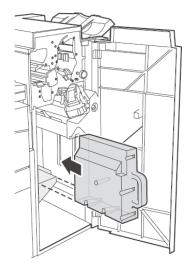
# **19.** Insert the staple module



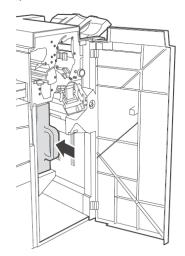
## **20.** Unpack the paper punch waste container.



## **21.** Insert the punch waste Dust container



#### 22. Fully seat into position.



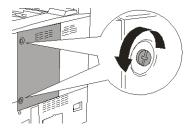
#### 23. Close the Finisher door.



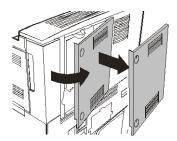
#### HARD DISK OPTION

- **1.** Carefully review the safety precautions in the front of this guide before starting this installation procedure.
- **2.** Ensure that the printer power switch is set to the OFF [O] position.
- **3.** Disconnect the power cord from the printer.

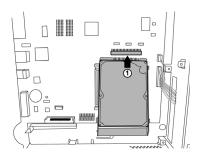
**4.** Remove side cover from printer.



**5.** Turn thumbscrews on controller assembly counter clockwise until loose and gently pull cover towards you to remove from printer.

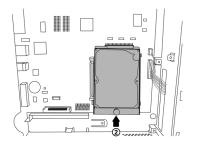


**6.** Carefully insert the Hard Drive into the socket, being careful not to damage the fragile pins.



ADD
NEW GRAPHIC

**7.** Seat the Hard Drive over the locating pins and push firmly to seat the unit.

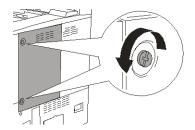


ADD
NEW GRAPHIC

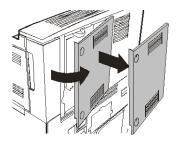
- **8.** Reinstall the side covers in reverse order.
- **9.** Connect the power cord to the wall outlet. Turn the printer power switch to the ON [I] position.

#### INSTALLING THE MEMORY OPTION AND COMPACT FLASH

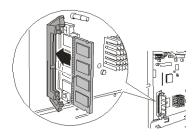
- **1.** Ensure that the printer power switch is set to the OFF [O] position.
- **2.** Disconnect the power cord from the printer.
- **3.** Remove side cover from printer.



**4.** Turn screws on controller assembly counter clockwise until loose and gently pull cover towards you to remove from printer.



**5.** Carefully insert a DDR Memory module which is compatible with your printer into the slot as shown below. When properly seated, gently push down on the module until the side braces close onto the ends of the RAM module.



The Compact Flash is inserted in a similar manner.

- **6.** Reinstall the side covers in reverse order.
- **7.** Connect the power cord to the wall outlet.
- **8.** Turn the printer power switch to the ON [I] position.

# **OPERATOR PANEL**

This Appendix provides a description of Operator Panel Menu and menu item. Navigate to items as described in "Embedded Web Server" on page 15.

MENU	PARAMETER	DEFAULT	DESCRIPTION
Information Menu	Print Menu Map	Execute	Prints the menu map
	Print PCL Fonts	Execute	Prints the PCL font list
	Print PS Fonts	Execute	Prints the PS font list
	Print FX Fonts	Execute	Prints the FX font list
	Print Demo	Execute	Prints the demo page
Print Jobs Menu			
	Password	0	Prints jobs stored on printer. Used for Secure Print, Stored Job, Proof Print and Timed Job
Print Menu	Print Method		
	Copies	1	Set the number of copies printed
	Duplex	Off	Enable duplex printing
	Duplex Binding	Long Edge	Choose the bind edge during duplex printing
	Paper Feed	Tray 1	Select default paper source tray
	Default Orientation	Portrait	Set print orientation

MENU	PARAMETER	DEFAULT	DESCRIPTION
	Lines per Page	57- Executive 39-Monarch Envelope 51-Com10 Envelope 46-DL Envelope 48-C5 Envelope 47-Com9 Envelope 29-A6 43-A5 45- Statement 54-B5 60-Letter 64-A4 71-Legal13 78-Legal14	Set number of lines per page
	Auto Tray Switch	On	Enable auto switch of paper tray
	Separator Page	Off	Select the paper source tray for the separator page.
	Print Quality		
	Resolution	600 dpi	Select print resolution
	Print Density	4	Set the print density
	Toner Saver Mode	Off	Use less toner. 10 pt characters print legibly, but 8 pt characters do not.
	Output Tray	Face Down Tray	Output paper tray
	Output Linking		
	Hole Punch		
	Staple Mode		
	White Page Skip	Disable	Enable skipping of blank pages
	Job Offset		

MENU	PARAMETER	DEFAULT	DESCRIPTION
System Adjust Menu			
	PCL Tray 1 ID#	1	PCL tray ID
	PCL Tray 2 ID#	4	PCL tray ID
	PCL Tray 3 ID#	5	PCL tray ID
	PCL Tray 4 ID#	6	PCL tray ID
	PCL Tray 5 ID#	1	PCL tray ID
	PCL Tray 6 ID#	4	PCL tray ID
	PCL Auto ID#	7	PCL tray ID
	Hex Dump	Disable	Hex Dump
Date/Time	Month	Current Month	Month
	Day	Current Day	Day
	Year	Current Year	Year
	Hour	Current Hour	Hour
	Minute	Current Minute	Minute
	Second	Current Second	Second
	GMT Offset/Hours	0	GMT Offset
	GMT Offset/Mins	0	GMT Offset
	Daylight Saving	Current Month	Month
Media Menu			
	Tray 1 Paper Size	Letter	Set the media size
	Tray 2 Paper Size	Letter	Set the media size
	Tray 3 Paper Size	use custom	Set the media size
	Tray 4 Paper Size	use custom	Set the media size
	Tray 1 Media Type	Plain	Set the media type

MENU	PARAMETER	DEFAULT	DESCRIPTION
	Tray 2 Media Type	Plain	Set the media type
	Tray 3 Media Type	Letter	Set the media size
	Tray 4 Media Type	Plain	Set the media type
	Tray 1 Custom Size	Plain	Set the media size
	Tray 2 Custom Size	letter	Set the media size
	Tray 3 Custom Size if two-tray feeder	use custom	Set the media size
	Tray 4 Custom Size if two-tray feeder	use custom	Set the media size
	Tray 5 Paper Size	Letter	Set the media size
	Tray 5 Media Type	Plain	Set the media type
	Tray 6 Paper Size	Letter	Set the media size
	Tray 6 Media Type	Plain	Set the media type
	Unit of Measure	Inches (US) Millimeters (Otherwise)	Select unit of measure used for Custom Paper Sizes
	Tray 1 X Dimension	8.5 in (216 mm)	Set the paper width
	Tray 1 Y Dimension	11.00 in (279mm)	Set the paper length
	Tray 2 X Dimension	8.5 in (216 mm)	Set the paper width
	Tray 2 Y Dimension	11.00 in (279mm)	Set the paper length
	Tray 3 X Dimension	8.5 in (216 mm)	Set the paper width
	Tray 3 Y Dimension	11.00 in (279mm)	Set the paper length
	Tray 4 X Dimension	8.5 in (216 mm)	Set the paper width
	Tray 4 Y Dimension	11.00 in (279mm)	Set the paper length
	Tray 5 X Dimension	279mm	Set the paper width

MENU	PARAMETER	DEFAULT	DESCRIPTION
	Tray 5 Y Dimension	2216mm	Set the paper length
Printer Sys Config Menu	Personality	Auto Emulation PCL Postscript 3	Auto Emulation
	Language	English other	English
	PS System Start		
	Power Save Delay Time	15	Set delay time in minutes for printer to enter power saver
	Low Toner	Continue Stop	Stop
	Wait Timeout	0-99999 Seconds	20
	Print PS Error	off	Prints a page with postscript errors
	Sleep Mode Time	60	Amount of minutes before entering sleep mode.
PCL Emulation	Font Source	Internal Compact Flash User Flash Disk Drive	Internal
	Font Number	50	Default font number
	Symbol Set	Available Symbol sets	10U:PC-8 CP437
	Font Pitch	10	Default font pitch
	CR Function	CR CR+LF	CR
	LF Function	LF	Printer action on line feed
	A4 Print Width	78 Columns	Default A4 width
	Print Area	Normal	Print boundaries
FX Emulation	Character Pitch	10 срі	Default font pitch

MENU	PARAMETER	DEFAULT	DESCRIPTION
	Character Set	Set-2	Default character set
	Symbol Set	8U:Roman 8	Default font
	Letter O Style	Disable	Selects replacing ¢(9b) and ¥(9D) with (ou) (zero) respectively
	Zero Character	Normal	Selects not slashed or slashed zero character.
	Line Pitch	6 lpi	Default lines per inch
	CR Function	CR	Printer action on carriage return
	Line Length	80 Column	Characters per line.
	Form Length	11 inch	Set length of paper
	TOF Position	0 inch	Downward shift of image
	Left Margin	0 inch	Right shift of image
	Fit To Letter	Disable	Enable fit of image to paper size
	Text Height	Same	Selects text height to remain uniform or to differ.
Parallel Menu	Parallel	Enable	Enable port
	BI-Direction	Enable	Enable bi-direction communication
	PS Protocol	ASCII	PS Protocol
Serial Menu	Serial	Enable Disable	Enable
	Communications		
	Baud-Rate	9600	Serial baud rate
	Data Bits	7	Serial data bits
	Stop Bits	1	Serial stop bits
	Parity	None	Serial parity
	DTR Ready/Busy	Off	Serial Signal

MENU	PARAMETER	DEFAULT	DESCRIPTION
	DTR Onl/Offl	Off	Serial Signal
	DTR Error	Off	Serial Signal
	RTS Ready/Busy	Serial Signal	On/Off
	RTS Onl/Offl	Off	Serial Signal
	RTS Error	Off	Serial Signal
	XON Ready/Busy	On	Serial Signal
	XON Onl/Offl	On	Serial Signal
	XON Error	Off	Serial Signal
	DTR Polarity	High	Serial Signal
	RTS Polarity	High	Serial Signal
	Robust XON	Off	Serial Signal
	Data Setting		
	Serial PS-Protocol	ASCII	PS Protocol
USB Menu			
	USB	Enable	Enable port
	USB PS Protocol	ASCII	PS Protocol
Job Accounting	Job Accounting	Yes No	No
	Print Job Accounting Info	Execute	Execute
	Reset Job Accounting Info		
Spooling	Start Spooling	Enable spooling to Flash or Hard drive	Enable spooling to Flash or Hard drive
	Stop Spooling	Disable spooling	Disable spooling
	Playback	Print selected spool file	Print selected spool file

MENU	PARAMETER	DEFAULT	DESCRIPTION
	Delete	Delete selected spool file	Delete selected spool file
	Destination	Spool device	Spool device
Save/Restore	Save Menu		
	Restore Menu (Menu Reset)		
Information Print	Status Page		
Network	General Network Settings		
	System Contact		
	System Name		
	System Location		
	Printer Asset Number		
	TCP / IP	Enable	Enable port
	Netware		
	EtherTalk	Enable	Enable port
	HUB Link Setting	Auto Negotiate	Hub link setting
	TCP/IP	Enable	Enable port
	IP Address	Specified	Set by user or DHCP
	Subnet (Mask)	Specified	Set by user or DHCP
	Gateway Address	Specified	Set by user or DHCP
	Host Name		
	Set IP Auto/Manually	Automatic	Enable DHCP
	Bonjour Rondezvous		
	mDNS		
	mDNS Host Name		
	mDNS Service Name		

MENU	PARAMETER	DEFAULT	DESCRIPTION
	Current Settings		
	Frame Type		
	Netware Mode		
	PServer Mode Settings		
	Print Server Name		
	NDS Tree Name		
	NDS Context		
	Job Poll Interval		
	NPRINTER Mode Settings		
	Print Server SAP Name		
	Remote Printer Number		
	EtherTalk	Enable	
	EtherTalk Zone Name		
	EtherTalk Printer Name		
	Email		
	SMTP Send		
	SMTP Server Name		
	Printer Email Address		
	Alert Settings Options		
	SNMP	Enable	Enable SNMP server
	Select Version		
	Disable		
	SNMP Read Community		
	SNMP Write community		

MENU	PARAMETER	DEFAULT	DESCRIPTION
	SNMP Trap Settings		
	Trap Community		
	Printer Trap Address		
	Printer Trap Assignments		
User Flash	Directories		
	Delete	Selected File	Delete file
	Print	Selected File	Print file
	Copies	Execute	Print media info and directory
	Print Summary	Execute	Print media info and directory
	User Flash Summary	Execute	Print media info and directory
	Format		Overwrite delete data with random data
	Format User Flash	Execute	Format media
Disk Menu	Directories		
	Delete	Selected File	Delete file
	Print	Selected File	Print file
	Copies	Execute	Print media info and directory
	Disk Summary	Execute	Print media info and directory
	Format Disk	Execute	Format media
	Data Security	Off	Overwrite delete data with random data
FLASH Menu	Directories		
	Delete	Selected File	Delete file
	Print	Selected File	Print file

MENU	PARAMETER	DEFAULT	DESCRIPTION
	Copies	Execute	Print media info and directory
	Print Summary	Execute	Print media info and directory
	CFLASH Summary	Execute	Print media info and directory
	Format	Execute	Format media
	Format Comp FLASH	Execute	Format media
	Data Security	Off	Overwrite delete data with random data
Security	Protocol On /Off		
	WEB	Enable	
	HTTP Port Number		
	SNMP	Enable	
	IP Filtering		
	IP Address Range		
	Admin IP Address		
	Storage Devices		
	User Flash		
	Hard Drive		
	Compact Flash		
	Panel Lockout		
	Panel Enable/Disable		
	Password Configuration		
	New Password		
Maintenance	Reset /Restore	Execute	Reset menu to default
	Reset Printer	Execute	Reset menu to default
	Reset Network Card	Execute	Reset menu to default

MENU	PARAMETER	DEFAULT	DESCRIPTION
	Restore Port to Factory Defaults	Execute	Reset menu to default
	Restore Net to Factory Defaults	Execute	Reset menu to default
Usage	Page Count	Current count	Total prints produced
	Fuser Count	Current count	Total prints since fuser maintenance
	Toner	Current level	Percentage of toner remaining
	Tray 1 Level	Current level	Paper supply level
	Tray 2 Level	Current level	Paper supply level
	Tray 3 Level	Current level	Paper supply level
	Tray 4 Level	Current level	Paper supply level
	Tray 5 Level	Current level	Paper supply level
	Tray 6 Level	Current level	Paper supply level
Links	Support Links		
	Tray 4 Level		
	Driver Download		
	Technical Support		
	Order Consumables		
	Register Printer		
	Download Firmware		
	Other Link (1-5)		
	Edit Links		
Send File	Select File		