Phaser® **6250**
Color Laser Printer

Reference Guide

Guide de référence
Guida di riferimento
Referenzhandbuch
Guía de referencia
Guia de referência
Naslaggids
Referensguiden
Справочного руководства
リファレンスガイド

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1 Features

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Printer Tour

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Printer Features

The Phaser 6250 Color Laser Printer embodies many features to meet your printing needs:

- Great performance and superior print quality
  - Letter: 26 pages per minute (ppm)
  - A4: 24 pages per minute
  - Less than 15 seconds first-page-out for color and monochrome prints
  - Up to 512 Mbytes of RAM
  - Customer-installable configuration upgrades
- Flexible paper handling
  - Optional 500-Sheet Feeder
  - Optional 1000-Sheet High-Capacity Feeder
  - Automatic two-sided printing (available with 6250DP, 6250DT, and 6250DX only)
  - Manual two-sided printing available for supported media types
- Wide variety of productivity features
  - Easy to replace toner cartridges
  - Prints black and white when a color toner cartridge is empty
  - PhaserSMART online troubleshooting
  - CentreWare Internet Services (an embedded web server) helps to manage, configure, and troubleshoot the printer from your computer.
  - Usage Analysis Tool provides cost tracking by logging each job and the cost for each page.
  - PrintingScout provides onscreen notification and guidance if the printer needs help.
  - MaiLinX email notifies a specific person when supplies or maintenance are needed.
  - MaiLinX prints to your network printer from anywhere you have email.

Available Configurations

The Phaser 6250 Color Laser Printer is available in five configurations:

Features	Printer Configuration				
	6250B	**6250N**	**6250DP**	**6250DT**	**6250DX**
Maximum Print Speed	26	26	26	26	26
Standard Memory (Mbytes)	128	256	256	512	512
PostScript and PCL Fonts	Yes	Yes	Yes	Yes	Yes
Secure, Proof, and Saved Print Jobs	No	Optional*	Optional*	Optional*	Yes
Automatic 2-Sided Printing	No	No	Yes	Yes	Yes
Photo Mode	No	Yes	Yes	Yes	Yes
Default Resolutions (dpi)	2400x600	2400x600	2400x600	2400x600	2400x600
500-Sheet Feeder	Optional	Optional	Optional	Standard***	NA
1000-Sheet High-Capacity Feeder	Optional	Optional	Optional	NA	Standard***
Banner-Size Printing	No	Optional*	Optional*	Yes	Yes
USB, Parallel Connection	Yes	Yes	Yes	Yes	Yes
10/100 Ethernet Connection	No	Yes	Yes	Yes	Yes
Internal Hard Drive	NA**	Optional	Optional	Optional	Yes

* Requires an optional hard drive.
**Hard drive is functional but requires an N upgrade to support storage features.
*** Optional feeders are not stackable.
All configurations support two memory slots. The maximum memory is 512 Mbytes.

Front View
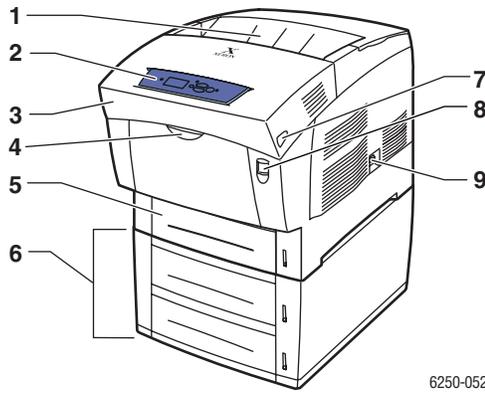
6250-052

1. Output tray
2. Front panel
3. Front door
4. Handle to open Tray 1 (MPT)
5. Tray 2
6. Trays 3 and 4 (optional)
7. Latch to open Front Door B
8. Latch to open Front Door A
9. Power switch

Rear View
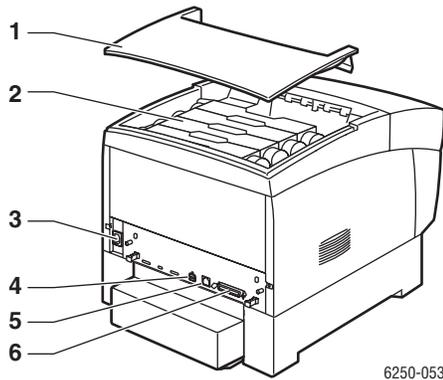
6250-053

1. Top cover
2. Toner cartridges
3. Power cord connection
4. USB connection
5. Ethernet 10/100 Base-T connection
6. Parallel cable connection

Internal Components

Door A Open   **Door B Open**
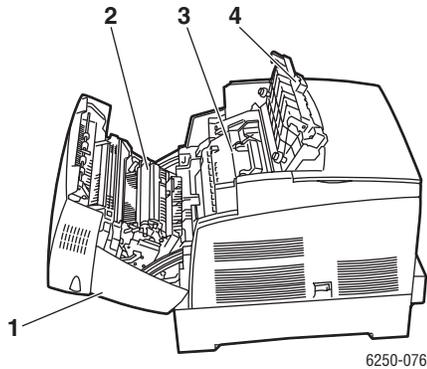
6250-076

6250-034

1. Front Door A   **1.** Front Door B
2. Transfer roller   **2.** Fuser
3. Imaging unit
4. Door C
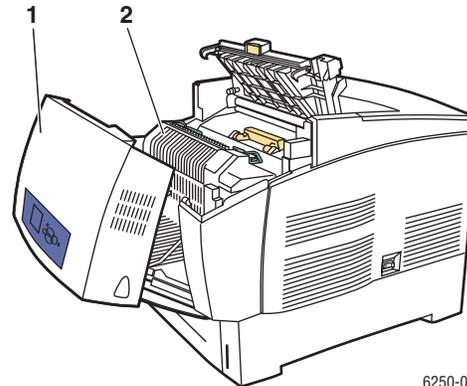
Printer Options and Upgrades

Options and upgrades are available for the Phaser 6250 printer.

Options

■ 256 Mbytes RAM memory card (upgradable to 512 Mbytes RAM memory with two 256 Mbytes RAM memory cards)
■ 500-Sheet Feeder
■ 1000-Sheet High-Capacity Feeder
■ Internal hard drive

Upgrades

■ Phaser 6250B to 6250N
■ Phaser 6250N to 6250DP

For more information on printer options and upgrades, go to www.xerox.com/officeprinting/6250supplies.

Color

Xerox Phaser color printers embody 20 years of printing experience. While different models are optimized for tasks, such as fast, easy, office printing or complex, large format graphic arts applications, all Phaser color printers share important characteristics that contribute to the Xerox reputation for color image quality.

Exceptional color quality starts with the controller. Xerox designs and builds the Phaser printer controller. Working in unison with advanced printer driver software, your printer incorporates capabilities, such as custom color tables for color accuracy. The proprietary TekColor correction applies the best color correction mode to each element on the page. This results in bright, vivid colors in solid fill areas, good detail in photographs, and crisp text.

Your printer also uses True Adobe PostScript 3 for the most accurate page rendering and image quality. Together, these features combine to give you consistently high-quality results for a broad range of printing needs.

For more information about color and your printer, go to Reference/Printing/Using Color on the *User Documentation CD-ROM*.

Resources

You can obtain information regarding your printer and its capabilities from the following sources:

Information	Source
Setup Guide	Packaged with printer
Quick Reference Guide	Packaged with printer
Warranty	Packaged with printer
Supplies Guide	Packaged with printer
Reference Guide	Packaged with printer (*User Documentation CD-ROM*)
Printer Management Tools	www.xerox.com/officeprinting
infoSMART Knowledge Base	www.xerox.com/officeprinting/infoSMART
PhaserSMART	www.phaserSMART.com
Technical Support	www.xerox.com/officeprinting/support
Information Pages	■ Front panel ■ CentreWare IS ■ Printer Driver

Front Panel

This topic includes:

- "Front Panel Features" on page 1-7
- "Front Panel Layout" on page 1-8
- "Error and Warning Messages" on page 1-8
- "Print Icon" on page 1-9
- "Menu Map" on page 1-9
- "Information Pages" on page 1-9

Front Panel Features

The front panel:

- Displays the printer's operating status (for example, **Printing**, **Ready to Print**, printer errors and warnings).
- Alerts you to load paper, replace supplies, and clear jams.
- Enables you to access tools and information pages to help resolve problems.
- Enables you to change printer and network settings.

Go to Reference/Features/Printer Settings on the *User Documentation CD-ROM* for details about front panel settings.

Note

The front panel prompts you to select the paper type when a tray is pulled out and reinserted into the printer.

Front Panel Layout

The front panel on your printer has three components:

■ Multi-colored LED light
■ Graphic display
■ Six button cluster

6250-068
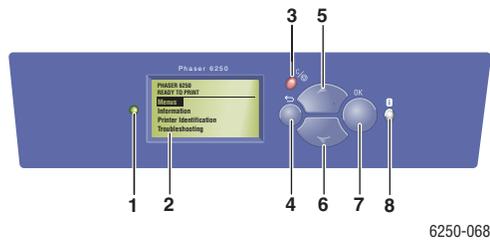
1. Status Indicator LED:

   Blinks = Printer is busy

   Green = Ready to print

   Yellow = Warning, continues to print

   Red = Problem, stops printing

2. Graphic display shows status messages and menus.

3. **Cancel** button

   Cancels the current print job.

4. **Back** button

   Returns to the previous menu item.

5. **Up Arrow** button

   Scrolls upward through the menus.

6. **Down Arrow** button

   Scrolls downward through the menus.

7. **OK** button accepts the setting selected

8. Information (**i**) button

   Displays printer status, error messages, and maintenance information.

The Graphic Display has two sections:

■ The top section displays status messages for the printer.
■ The bottom section displays the front panel menus.

Error and Warning Messages

When there is a problem with the printer, the front panel displays (1) an error or warning message. Press the **i** button (2) for more information about the error or warning message and ways to solve the problem.

6250-069
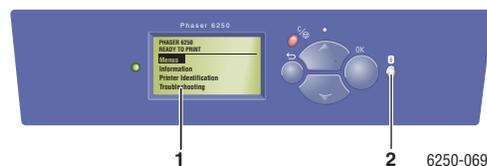
Print Icon

There are a number of information pages accessible through the front panel. When the print icon appears before a title on the front panel display, press the **OK** button to print that page.

Menu Map

The "Menu Map" is a visual representation of the front panel settings and information pages. To print the "Menu Map":

1. At the printer's front panel, select **Information**, then press the **OK** button.
2. Select **Menu Map**, then press the **OK** button to print.

Information Pages

Your printer comes with a set of information pages that helps you solve printing problems and obtain the best results from your printer. Access these pages from the printer's front panel.

To print information pages:

1. At the printer's front panel, select **Information**, then press the **OK** button.
2. Select **Information Pages**, then press the **OK** button.
3. Select the appropriate information page, then press the **OK** button to print.

Note

Print the "Menu Map" to see other information pages available for printing.

Printer Drivers

This topic includes:

- "Available Printer Drivers" on page 1-10
- "Printer Driver Features" on page 1-11

Printer drivers enable your computer and printer to communicate and provide access to your printer features. Xerox makes driver installation easy with its Walk-Up Technology. For more information about printer drivers, see the video at www.xerox.com/officeprinting/drivers.

Available Printer Drivers

Xerox provides drivers for a variety of page description languages and operating systems. The following drivers are available:

Driver	Source*	Description
Windows PostScript Driver	CD-ROM and Web	The PostScript driver is recommended to take full advantage of your printer's custom features and genuine Adobe® PostScript®. (Default driver)
PCL Driver	Web only	The Printer Command Language driver can be used for applications requiring PCL. **Note** For Windows 2000 and Windows XP only.
Xerox Walk-Up Printing Driver (Windows)	Web only	This driver enables printing from a PC to any Xerox PostScript-enabled printer. This is especially helpful for mobile professionals who travel to multiple locations and need to print to different printers.
Macintosh OS Driver	CD-ROM and Web	This driver enables printing from a Macintosh OS 9.x or 10.1 or higher.
UNIX Driver (Linux, Solaris)	Web only	This driver enables printing from a UNIX operating system.

* You can access the printer drivers listed above on the *Printer Installer and Utilities CD-ROM* that came with your printer or go to www.xerox.com/officeprinting/drivers as indicated.

For more information about driver features, go to Reference/Printing/Adjusting Printing Options on the *User Documentation CD-ROM*.

Printer Driver Features

The following table displays the Xerox driver features that are available with specific operating systems.

Feature	Windows 98, Me	Windows NT4	Windows, 2000, XP, Server 2003	Macintosh OS 9.x	Macintosh OS 10.x
Separation Pages	●	●	●	●	●
N-up	●	●	●	●	●
Booklet	●	❍	❍		
Negative Images	●			●	
Mirror Images	●	●	●	●	
Scaling	●	●	●	●	●
Watermarks	●		●		
Image Smoothing	●	●	●	●	●
Cover Pages	●	●	●	●	●
Job Completion Notification	●		●		
Secure Print	●	●	●	●	●
Proof Print	●	●	●	●	●
Saved Print	●	●	●	●	●

● = Supported feature

❍ = Booklet printing support but no controls for gutter or creep

Managing Your Printer

There are a number of resources available to help you get the best quality prints from your printer.

- "Printer's IP Address" on page 1-12
- "CentreWare Internet Services (IS)" on page 1-12
- "PhaserSMART" on page 1-13
- "PrintingScout" on page 1-13

Printer's IP Address

You need your printer's IP address if you change printer settings through CentreWare IS. Follow these steps to identify your printer's IP address:

1. At the printer's front panel, select **Information**, then press the **OK** button.
2. Select **Printer Identification**, then press the **OK** button.

CentreWare Internet Services (IS)

CentreWare IS a printer management tool that helps users and administrators accomplish many tasks. It is available on all networked printers. With CentreWare IS you can:

- Configure and manage multi-vendor printers.
- Access remote diagnostics and troubleshooting information for printer problems.
- Monitor printer and supply status.
- Link to software updates and Technical Support.

CentreWare IS uses TCP/IP (your printer's IP address) to communicate directly with an embedded web server on the printer. CentreWare IS runs on any TCP/IP enabled computer with a web browser.

Launching CentreWare IS

To launch CentreWare IS:

1. Launch your web browser.
2. Enter your printer's IP address in the browser's **Address** field (http://xxx.xxx.xxx.xxx).
3. For detailed information about CentreWare IS software, click **HELP** on the upper right of the CentreWare IS screen.

For more information about "CentreWare IS" go to Reference/Connections & Networks/ Printer Management Software on the *User Documentation CD-ROM*.

PhaserSMART

PhaserSMART Technical Support is an automated, Internet-based support system. Use your default web browser to send diagnostic information from your printer to our web site for analysis. PhaserSMART Technical Support examines the information, diagnoses the problem, and proposes a solution. If the problem is not resolved with the solution, PhaserSMART Technical Support assists you in opening a Service Request with Xerox Customer Support.

Launching PhaserSMART from CentreWare IS

To access PhaserSMART Technical Support through CentreWare IS:

1. Launch your web browser.
2. Enter your printer's IP address in the browser's **Address** field (http://xxx.xxx.xxx.xxx).
3. Select **Support**.
4. Select the **Technical Support** link to access PhaserSMART Technical Support.

PrintingScout

PrintingScout, installed with your printer driver and available only with Windows, automatically checks the printer status and sends instant notification to your computer if the printer needs attention.

Whenever the printer is unable to print your document, the printer automatically sends an on-screen message that provides helpful text and illustrations showing how to fix the printer.

Printer Settings

This topic includes:

- "Accessing the Startup Page" on page 1-14
- "Front View" on page 1-4
- "Accessing Intelligent Ready Mode" on page 1-15
- "Accessing Protected Mode" on page 1-16
- "Accessing Load Paper Timeout" on page 1-17
- "Selecting Tray Settings" on page 1-17
- "Adjusting Front Panel Brightness" on page 1-20
- "Adjusting Front Panel Contrast" on page 1-20
- "Changing Printer Language" on page 1-21

Accessing the Startup Page

The printer automatically produces a "Startup Page" each time the printer is turned on or reset. You can turn off the automatic printing of the "Startup Page" and later print it from the information pages menu.

To turn on/off the "Startup Page" use either:

- The printer's front panel
- CentreWare IS

Using the Printer's Front Panel

To turn on/off the Startup Page:

1. Select **Printer Setup**, then press the **OK** button.
2. Select **Printer Controls**, then press the **OK** button.

   The **Startup Page** is highlighted. The end of the line displays the setting (**On** or **Off**).

3. Press the **OK** button to change the setting.

Using CentreWare IS

To turn on/off the automatic printing of the "Startup Page":

1. Launch your web browser.
2. Enter your printer's IP address.
3. Select **Properties**.
4. Click **Printer Defaults** on the left sidebar of the **Properties** page.
5. Select **Off** or **On** from the **Printer Startup Page** drop-down list to change the setting.
6. Click **Save Changes** at the bottom of the page.

Printing the Startup Page

To print the "Startup Page":

1. Select **Information**, then press the **OK** button.
2. Select **Information Pages**, then press the **OK** button.
3. Select **Startup Page**, then press the **OK** button to print.

Accessing Power Saver

To save energy, the printer enters a Power Saver, low-energy consumption mode after a pre-defined period of time since its last activity. In this mode, most printer electrical systems are shut down. When a print job is sent to the printer, the printer enters Warmup Mode. You can also warm up the printer by pressing the **OK** button on the front panel.

If you find that the printer is going into Power Saver mode too often and you do not want to wait while the printer warms up, increase the length of time before the printer goes into Power Saver mode. Change the timeout value as follows:

1. At the printer's front panel, select **Printer Setup**, then press the **OK** button.
2. Select **Printer Controls**, then press the **OK** button.
3. Select **Power Saver Timeout**, then press the **OK** button.
4. Press the **Down Arrow** or **Up Arrow** button to scroll to a selected Power Saver timeout value. Select a larger value if you want to extend the length of time before the printer goes into Power Saver mode.
5. Press the **OK** button.

Accessing Intelligent Ready Mode

Intelligent Ready mode is an automated system that:

■ Monitors the printer's usage.
■ Warms up the printer when you are most likely to need it based on past usage patterns.
■ Activates the Power Saver mode when the printer times out.

To turn on/off the Intelligent Ready mode, use either:

■ The printer's front panel
■ CenterWare IS

Using the Printer's Front Panel

To turn Intelligent Ready mode on/off:

1. Select **Printer Setup**, then press the **OK** button.
2. Select **Printer Controls**, then press the **OK** button.
3. Select **Intelligent Ready**.
4. Press the **OK** button to turn on/off **Intelligent Ready**.
5. Select **Exit**, then press the **OK** button to return to the main menu.

Using CentreWare IS

To select Intelligent Ready mode or to schedule warmup/standby settings:

1. Launch your web browser.
2. Enter your printer's IP address in the browser's **Address** field (http://xxx.xxx.xxx.xxx).
3. Click **Properties**.
4. Click **Warmup** on the left sidebar.
5. Click the **Warmup Mode** drop-down list and select **Intelligent Ready**, **Scheduled**, or **Job Activated**.
6. If you select **Scheduled** in Step 5, make selections for each day's warmup setting and standby setting.
7. Click **Save Changes** at the bottom of the screen.

Note

Although the front panel selections only allow you to turn Intelligent Ready Mode on or off, CentreWare IS allows you to specify particular printer Warmup Modes and settings.

Accessing Protected Mode

Turn on Protected Mode from the front panel to prevent users from changing printer settings that may impact the jobs of other users. Users can select printing features, such as color corrections, through the printer drivers. Users can access general menus that can improve the print quality of their jobs. These menus direct them to user features, while locking the menus and items in menus that the system administrator uses to manage the printer.

Using CentreWare IS

To enter or exit Protected Mode:

1. Launch your web browser.
2. Enter your printer's IP address in the browser's **Address** field (http://xxx.xxx.xxx.xxx).
3. Click **Properties**.
4. Click the **General** folder on the left sidebar, then click **Printer Defaults**.
5. Click the **Front Panel Menu** drop-down list, then select **On** or **Off.**
   - Select **Off** to have all menus available.
   - Select **On** to lock all menu items that change printer setup values.
6. Click **Save Changes** at the bottom of the page.

Accessing Load Paper Timeout

When the printer cannot satisfy a print job's specification for paper tray, type, or size, the front panel prompts you to load the type and size specified in the print job. If you do not load the requested paper within the load paper timeout, the printer picks paper from the default tray.

To change the load paper timeout, use either:

■ The printer's front panel
■ CenterWare IS

Using the Printer's Front Panel

To change the load paper timeout:

1. Select **Printer Setup**, then press the **OK** button.
2. Select **Paper Handling Setup**, then press the **OK** button.
3. Select **Load Paper Timeout**, then press the **OK** button.
4. Scroll to the desired timeout value. The values (**None**, **1**, **3**, **5**, or **10** minutes, **1** hour or **24** hours) indicate the length of time you want the printer to wait for you to load paper before printing. If you select a value of **None**, the printer does not wait for paper to be inserted and immediately picks paper from the default tray.
5. Press the **OK** button to save the change.

Using CentreWare IS

To change the load paper timeout:

1. Launch your web browser.
2. Enter your printer's IP address in the browser's **Address** field (http://xxx.xxx.xxx.xxx).
3. Click **Properties**.
4. Click the **General** folder on the left sidebar, then click **Printer Defaults**.
5. Scroll to the desired **Load Paper Timeout** value in **Timeout Settings**. The values (**None**, **1**, **3**, **5**, or **10** minutes, **1** or **24** hours) indicate the length of time you want the printer to wait for you to load paper before printing. If you select a value of **None**, the printer does not wait for paper to be inserted and immediately picks paper from the default tray.
6. Click **Save Changes** at the bottom of the screen.

Selecting Tray Settings

Tray Switching

Tray switching is controlled by the printer driver, front panel, or CentreWare IS. If a specific tray is selected, tray switching is turned off.

Tray 1 (MPT) and Tray 2, a 500-sheet adjustable tray, are standard with the Phaser 6250 printers. Additional paper feeders can be purchased:

- 500-Sheet Feeder (Tray 3)
- 1000-Sheet High-Capacity Feeder (Tray 3 and Tray 4)

The printer selects the tray from which to draw paper when:

- The front panel paper source is set to **Auto Select**, and
- The **Let printer select which tray to print from** option is selected in the printer driver.

Note

If you use the driver to specify a tray to use for your print job, tray switching is disabled for that job. If the tray becomes empty during printing, the front panel prompts you to load paper in that tray even if another tray contains the correct paper type and size for the job.

Tray Switching Settings

- If tray switching is *enabled*, and a tray runs out of paper while printing, then the printer selects another tray containing the same paper type, size, and orientation to continue printing the job.
- If tray switching is *disabled*, and a tray runs out of paper while printing, then the front panel prompts you that the tray is empty and must be refilled.

Tray Sequence

You can specify the sequence the printer uses to select trays containing the correct paper type and size for a print job. When a tray runs out of the correct paper during printing, the printer selects the next tray in the sequence containing the correct paper type and size to continue printing the job.

For example, if the tray sequence is set to 4-3-2, the printer selects paper from Tray 4 to print a job. If Tray 4 does not contain the requested paper, or runs out of paper while printing, the printer selects Tray 3. If neither Tray 4 nor Tray 3 contains the requested paper, or is out of paper, then Tray 2 is selected.

You can specify the tray sequence by two different methods:

- The printer's front panel
- CentreWare IS

Using the Front Panel

To specify the tray sequence:

1. At the printer's front panel, select **Printer Setup**, then press the **OK** button.
2. Select **Paper Handling Setup**, then press the **OK** button.
3. Select **Tray Sequence**, then press the **OK** button.
4. Scroll to the desired tray sequence. (If you want to turn off tray switching, select **Off**.)
5. Press the **OK** button to save the changes.

Using CentreWare IS

To specify the tray sequence:

1. Launch your web browser.
2. Enter your printer's IP address in the browser's **Address** field (http://xxx.xxx.xxx.xxx).
3. Click the **Properties** tab.
4. Select **Printer Defaults** in the left sidebar.
5. Select the desired tray sequence from the **Tray Sequence** drop-down list. (If you want to turn off tray switching, select **Off**.)
6. Click the **Save Changes** button at the bottom of the screen.

Selecting the Default Tray

If you do not want to use tray switching, you can specify a default tray to use for printing jobs. The default tray contains the paper type and size used for printing jobs. When the default tray is empty, or contains a different paper type, you are prompted to load the correct paper type in the tray even if another tray contains the correct paper type and size for the job.

You can select the default tray by two different methods:

- The printer's front panel
- CentreWare IS

Using the Front Panel

To select a default tray:

1. Select **Printer Setup**, then press the **OK** button.
2. Select **Paper Handling Setup**, then press the **OK** button.
3. Select **Paper Source**, then press the **OK** button.
4. Scroll to the desired tray to use as the default tray. (If you want tray switching enabled, select **Auto Select**.)
5. Press the **OK** button to save the change.

Using CentreWare IS

To select a default tray:

1. Launch your web browser.
2. Enter your printer's IP address in the browser's **Address** field (http://xxx.xxx.xxx.xxx).

3. Click **Properties**.

4. Select **Printer Defaults** in the left sidebar.

5. Select the tray from the **Paper Source** drop-down list.

6. Click **Save Changes** at the bottom of the screen.

Note

The driver overrides the front panel settings for tray selection.

Adjusting Front Panel Brightness

To adjust the brightness of the front panel's background lighting:

1. At the printer's front panel, select **Printer Setup**, then press the **OK** button.

2. Select **Front Panel Setup**, then press the **OK** button.

3. Select **Front Panel Brightness**, then press the **OK** button.

4. Press the **Down Arrow** or **Up Arrow** button to increase or decrease the front panel brightness value. The brightness values range from **0** (no background light) to **10** (brightest background light).

5. Press the **OK** button to save your change.

Adjusting Front Panel Contrast

To adjust the contrast between the text and the background to make the front panel text more readable:

1. At the printer's front panel, select **Printer Setup**, then press the **OK** button.

2. Select **Front Panel Setup**, then press the **OK** button.

3. Select **Front Panel Contrast**, then press the **OK** button.

4. Press the **Down Arrow** or **Up Arrow** button to increase or decrease the front panel contrast value. The contrast values range from **1** (brightest background light) to **10** (no background light).

5. Press the **OK** button to save your change.

Changing Printer Language

To change the language used for the text on the front panel, CentreWare IS, and some information pages:

1. At the printer's front panel, select **Printer Setup**, then press the **OK** button.

2. Select **Front Panel Setup**, then press the **OK** button.

3. Select **Front Panel Language**, then press the **OK** button.

4. Select the desired language, then press the **OK** button.

Fonts

This topic includes:

- "Resident Postscript Fonts" on page 1-22
- "Resident PCL5c Fonts" on page 1-22
- "Printing a List of Resident Fonts" on page 1-22
- "Downloading Fonts" on page 1-24

Your printer uses the following types of fonts:

- Resident fonts
- Fonts downloaded into printer memory
- Fonts downloaded with your print job from the application

Adobe Type Manager (ATM) software enables your computer to display these fonts on your computer screen as they will appear in your prints.

If you do not have ATM on your computer:

1. Install it from the *Printer Installer and Utilities CD-ROM*.
2. Install the printer's screen fonts for your computer from the ATM folder.

Resident Postscript Fonts

Printer-resident fonts are always available for printing. All printers are shipped with PostScript resident Roman fonts plus the Eastern European encoding for many of the fonts. Print a sample of the resident PostScript fonts at the front panel. See "Information Pages" in this section for information on how to print the sample.

Resident PCL5c Fonts

For PCL5c printing, the printer includes Courier, Times, and Univers typefaces in medium, bold, italic medium, and italic bold.

Printing a List of Resident Fonts

To print a sample of the resident fonts, use either:

- The printer's front panel
- A PC or Macintosh computer

Listing the Fonts from Your Printer's Front Panel

To print either a PCL font list or a PostScript font list at the front panel:

1. Select **Information**, then press the **OK** button.
2. Select **Information Pages**, then press the **OK** button.
3. Select either **PCL Font List** or **PostScript Font List**, then press the **OK** button to print.

Listing the Fonts from a PC

To list the fonts available on your printer, install the font management utility from the Xerox web site at www.xerox.com/officeprinting/support.

1. Select your printer from the **Network Printers** drop-down list.
2. Select the **platform** you are running from the drop-down list, "Which files for your printer would you like?"
3. Select **Printer Utilities** from the drop-down list.
4. Click **Go**.
5. Select the CentreWare **Font Management Utility**.
6. Save the **.exe** file to your desktop.
7. Double-click the **.exe** file icon on your desktop to install the font manager.

Printing the Fonts from a PC

To print the fonts available on your printer:

1. Select **Start**, select **Settings**, then select **Printers**.
2. Right-click the **6250** printer, then select **Properties**.
3. Select the **Troubleshooting** tab, then go to **Printer Information Pages**.
4. Select **PostScript Font List** or **PCL Font List** from the drop-down list.
5. Click **Print**.

Listing the Fonts from a Macintosh

Use the Apple Printer Utility to list the fonts available on your printer.

1. If you do not have the Apple Printer Utility on your computer, install it from the *Printer Installer and Utilities CD-ROM*.
2. Double-click the **Apple Printer Utility** icon (in the **PhaserTools** folder on your computer's hard drive) to launch the utility.
3. In the **Printer Selector** dialog box:
   a. Under **AppleTalk Zones**, select your printer's zone.
   b. Under **Printers**, select your printer.
   c. Click **Open Printer**.
4. From the **File** menu, select **Print Font Samples**.

Downloading Fonts

To supplement the resident fonts (which are always available for printing), downloadable fonts can be sent from your computer and stored in the printer's memory or on the printer's hard drive.

Note

> If you turn the printer off, the fonts you download to memory are deleted. You must download them again when you turn the printer on.

Before printing, verify that the fonts specified in your document are installed in the printer or are set up to download correctly. If your document has a font not currently in your printer, or downloaded with your print job, a different font will be used.

The printer accepts the following downloadable fonts:

- PCL
- Type 1
- Type 3
  - Adobe
  - Agfa
  - Bitstream
  - Microsoft
  - Apple
- TrueType (scalable to any point size; looks the same on-screen and printed).

Downloading Fonts from a PC

To list the fonts available on your printer, install the font management utility from the Xerox web site at www.xerox.com/officeprinting/support.

1. Select your printer from the **Network Printers** drop-down list.
2. Select the **platform** you are running from the drop-down list, "Which files for your printer would you like?"
3. Select **Printer Utilities** from the drop-down list.
4. Click **Go**.
5. Select the CentreWare **Font Management Utility**.
6. Save the **.exe** file to your desktop.
7. Double-click the **.exe** file icon on your desktop to install the font manager.

Downloading Postscript Fonts from a Macintosh (9.x only)

Use the Apple Printer Utility to download fonts to the printer.

Note

> If you do not have the **Apple Printer Utility** on your computer, install it from *Printer Installer and Utilities CD-ROM*.

1. Double-click the **Apple Printer Utility** icon (in the **PhaserTools** folder on your computer's hard disk) to launch the utility.
2. In the **Printer Selector** dialog box:
   a. Under **AppleTalk Zones**, select your printer's zone.
   b. Under **Printers**, select your printer.
   c. Click **Open Printer**.
3. Click the arrow next to **Printer Preferences**.
4. Click the arrow next to **Fonts** to display the list of installed fonts and their locations, then click **Add**.
5. Select the folder containing the font you want to download, select the font, then click **Add**. The font is listed as ready to download.

   Note

   To add all of the fonts in the folder to the list of fonts to download, click the **Add All** button. If you decide not to download a font, highlight the font in the list of fonts to download, then click **Remove**.

6. Select either the printer's memory or hard drive for **Destination**.
7. Click **Send** to download the fonts in the list.

Note

To remove downloaded fonts from the printer, follow Steps **2** through **4.** Click the **Fonts** drop-down list, select the font you want to remove, then click **Remove**.

Registering Your Printer

Registering your printer is quick and easy. You can register your printer using one of the following methods:

■   Registration card that came with your printer
■   Online form at www.xerox.com/officeprinting/support
■   Web link from the *Printer Installer and Utilities CD-ROM*

Registering your printer gives you access to Color Connection, a great source for the latest printing hints and tips, and new ideas to promote your business. Color Connection has everything you need to help you look great in print.

Registering your printer also provides you with updates and news about your printer.

2 Printing

This section includes:

Changing Paper

This topic includes:

■ "Guidelines" on page 2-2
■ "Tray Setup" on page 2-2

The paper trays use only certain sizes and types of paper or transparencies. For best results, **use only Xerox Phaser Color Printing Media** specified for this printer. They are guaranteed to produce excellent results on your Phaser 6250 Printer – the Phaser 6250 and Phaser media are *Made for Each Other.* See the "Basic Printing" topic later in this section for instructions on how to load paper in the trays.

Caution

If you change the type of paper in a tray, you **must** change the paper type on the front panel to match the paper that you loaded. **If you fail to do this, print-quality problems can occur and the fuser can be damaged**.

Guidelines

The trays accommodate only certain sizes and types of paper, transparencies, or other specialty media. After loading a tray, set the correct paper type and/or size at the print's front panel.

■ Do not overload the paper tray. See the tray label for the fill line.
■ Fan paper, transparencies, or other specialty media before loading in the paper tray.
■ If excessive jams occur, use fresh paper, transparencies, or other specialty media from a new package.

Caution

Damage caused by using unsupported paper, transparencies, and other speciality media is not covered by the Xerox warranty, service agreement, or Total Satisfaction Guarantee.

Tray Setup

Note

For optimal print quality and performance, set the correct paper type at the printer's front panel after loading paper in any tray. When loading paper in Tray 1 (MPT), also set the correct paper size.

1. Load paper in the tray.
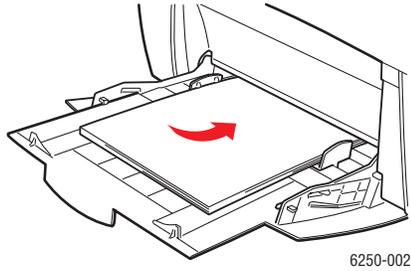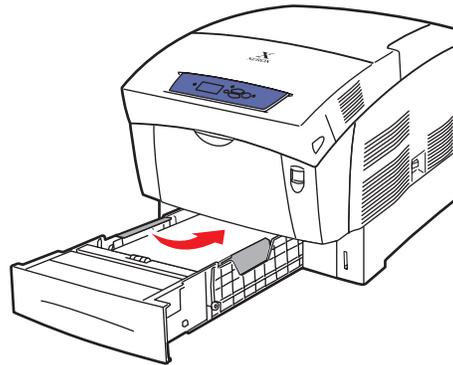
Tray 1 (MPT)   **Trays 2–4**

When prompted by the front panel to confirm the paper type and size:

2. If you have not changed the type or size of paper, press the **OK** button to accept the current setting for paper type and size.

3. If you have changed the paper type:

   a. At the printer's front panel, select **Change**, then press the **OK** button.

   b. Select the appropriate paper type.

   c. Press the **OK** button to save your selection.

4. If you have changed the paper size:

   a. Select the appropriate paper size.

   b. Press the **OK** button to save your selection.

For more information on paper types, weights, and sizes, go to Reference/Printing/Supported Papers on the *User Documentation CD-ROM*.

For online support information, go to www.xerox.com/officeprinting/infoSMART.

Supported Papers

This topic includes:

- "Paper Usage Guidelines" on page 2-4
- "Paper Storage Guidelines" on page 2-7
- "Paper that May Damage Your Printer" on page 2-7

Follow the guidelines in these tables to ensure the best print quality and avoid printer jams. For best results, use only Xerox Phaser Color Printing Media specified for your printer; they are guaranteed to produce excellent results with your Phaser 6250 Color Laser Printer.

Paper Usage Guidelines

- Do not use inkjet paper; it can damage the fuser.
- Use only Phaser 25-Series Premium Transparency Film; other transparencies can cause print quality problems or damage the fuser.
- Use only paper envelopes. Do not use envelopes with plastic windows or metal clasps.

Supported Papers, Transparencies, and Other Specialty Media

❏ Media that cannot be printed on both sides.
■ Media that can be printed on both sides using manual two-sided printing.
● Papers, other specialty media, and custom sizes (between Legal and A5) that can be printed on both sides using automatic two-sided printing.

Paper Type	Tray	Letter (8.5 x 11 in.)	Legal (8.5 x 14 in.)	Executive (7.25 x 10.5 in.)	Statement (5.5 x 8.5 in.)	US Folio (8.5 x 13 in.)	A4 (210 x 297 mm)	A5 (148 x 210 mm)	A6 (105 x 148 mm)	B5 JIS (182 x 257 mm)	ISO B5 (176 x 250 mm)	Custom
Plain Paper 64–90 g/m^2 (17–24 lb. Bond)	**Tray 1 (MPT)**	●	●	●	●	●	●	●	■	●	●	●
	Trays 2–4	●	●	●		●	●			●		
Heavy Plain Paper 85–130 g/m^2 (22–32 lb. Bond)	**Tray 1 (MPT)**	●	●	●	●	●	●	●	■	●	●	●
	Trays 2–4	●	●	●		●	●			●		
Transparency Caution: Do not print on both sides of transparency media. Use only **Phaser 25-Series Premium Transparency Film**. Other transparencies may damage the printer's fuser.	**Tray 1 (MPT)**	❏					❏					
	Tray 2	❏					❏					
Thin Card Stock 100–163 g/m^2 (36–60 lb. Cover)	**Tray 1 (MPT)**	●	●	●	●	●	●	●	■	●	●	●
Thick Card Stock 160–216 g/m^2 (59–80 lb. Cover)	**Tray 1 (MPT)**	■	■	■	■	■	■	■	■	■	■	■
Envelope Caution: Use only paper envelopes. Do not use envelopes with windows or metal clasps. (See **Note** below table)	**Tray 1 (MPT)**											❏
Labels Caution: Do not print on both sides of label media.	**Tray 1 (MPT)**	❏					❏					❏
	Tray 2	❏					❏					❏

Supported Papers, Transparencies, and Other Specialty Media (Continued)

❑ Media that cannot be printed on both sides.

■ Media that can be printed on both sides using manual two-sided printing.

● Papers, other specialty media, and custom sizes (between Legal and A5) that can be printed on both sides using automatic two-sided printing.

Paper Type	Tray	Letter (8.5 x 11 in.)	Legal (8.5 x 14 in.)	Executive (7.25 x 10.5 in.)	Statement (5.5 x 8.5 in.)	US Folio (8.5 x 13 in.)	A4 (210 x 297 mm)	A5 (148 x 210 mm)	A6 (105 x 148 mm)	B5 JIS (182 x 257 mm)	ISO B5 (176 x 250 mm)	Custom
Letterhead 85–130 g/m^2 (22–32 lb. Bond)	**Tray 1 (MPT)** **Trays 2–4**	● ●	● ●	● ●	●	● ●	● ●	●	■	● ●	●	●
Glossy Coated Paper 120–163 g/m^2 (81–110 lb. Text) **Caution**: Do not use glossy inkjet paper or non-laser glossy paper, because they may damage the printer's fuser.	**Tray 1 (MPT)** **Trays 2-4**	● ●	● ●	● ●	●	● ●	● ●	●	■	● ●	●	●
Photo Paper 120–163 g/m^2 (45–60 lb. Cover) **Caution:** Do not use inkjet photo paper or non-laser photo paper, because they may damage the printer's fuser. Use Phaser Digital Photo Paper.	**Tray 1 (MPT)**	❑					❑					❑
Business Cards	**Tray 1 (MPT)**	■					■					■
Greeting Cards	**Tray 1 (MPT)**	■					■					■
CD/DVD Labels **Caution:** Do not print on both sides of label media.	**Tray 1 (MPT)**	❑					❑					❑
CD/DVD Inserts	**Tray 1 (MPT)**	■					■					■

Note: Some wrinkling and embossing may occur when printing envelopes. Go to Reference/Printing on the *User Documentation CD-ROM* for information on how to minimize these occurrences.

#10 Commercial Envelope (4.12 x 9.5 in.)
Monarch Envelope (3.87 x 7.5 in.)
A7 Envelope (5.25 x 7.25 in.)
DL Envelope (110 x 220 mm)

C5 Envelope (162 x 229 mm)
C6 Envelope (114 x 162 mm)
B5 Envelope (176 x 250 mm)
Custom

Go to www.xerox.com/officeprinting/6250supplies to order Xerox Phaser Color Printing Media.

Phaser Color Printing Media

Paper Type	Phaser Media	Size	Part Number
Plain Paper or **Heavy Plain Paper**	Phaser Premium Color Printing Paper, 500 Sheets 90 g/m^2 (24 lb. Bond)	Letter A4	016-1368-00 016-1369-00
Transparency	Phaser 25-Series Premium Transparency Film, 50 Sheets	Letter A4	016-1948-00 016-1949-00
Thin Card Stock or **Thick Card Stock**	Phaser Premium Cover Paper, 100 Sheets 163 g/m^2 (60 lb. Cover)	Letter A4	016-1823-00 016-1824-00
Labels	Phaser Color Printing Labels, 30/Sheet, 100 Sheets Phaser Color Printing Labels, 14/Sheet, 100 Sheets Phaser Color Printing Labels, 6/Sheet, 100 Sheets Phaser Color Printing Labels, 8/Sheet, 100 Sheets	Letter A4 Letter A4	016-1812-00 016-1814-00 016-1813-00 016-1815-00
Glossy Coated Paper	Phaser Glossy Coated Paper, 100 Sheets 148 g/m^2 (100 lb. Text)	Letter A4	016-1704-00 016-1705-00
Business Cards	Phaser Premium Business Cards, 10/Sheet, 25 Sheets 190 g/m^2 (70 lb. Cover)	Letter A4	016-1898-00 016-1899-00
Greeting Cards	Phaser Premium Greeting Cards, 25 Sheets/ Envelopes 190 g/m^2 (70 lb. Cover)	Letter A4	016-1987-00 016-1988-00
CD/DVD Labels CD/DVD Inserts	Phaser CD/DVD Labels and CD/DVD Inserts, 20 Sets CD/DVD Label Applicator	Letter A4	016-2011-00 016-2026-00 016-1885-00
Photo Paper	Phaser Digital Photo Paper, 25 Sheets 163 g/m^2 (60 lb. Cover)	Letter A4	016-2009-00 016-2010-00
Postcards	Phaser Premium Postcards, 100 Sheets 176 g/m^2 (65 lb. Cover)	Letter A4	103R01016 103R01017
Trifold Brochures	Phaser Trifold Brochures, 150 Sheets 176 g/m^2 (65 lb. Cover)	Letter A4	103R01018 103R01019
Weatherproof Paper	Phaser Weatherproof Paper, 150 Sheets 100 g/m^2 (27 lb. Bond)	Letter A4	103R01020 103R01021

For online support information, go to www.xerox.com/officeprinting/infoSMART.

Paper Storage Guidelines

Providing a good environment, and safe handling and storage conditions for your paper contributes to ultimate print quality.

■ Store paper in dark, cool, relatively dry locations. Most paper items are susceptible to damage from ultraviolet (UV) and visible light. UV radiation, which is emitted by the sun and fluorescent bulbs, is particularly damaging to paper items. The intensity and length of exposure to visible light on paper items should be reduced as much as possible.

■ It is recommended that you maintain constant temperatures and relative humidity.

■ Avoid light, heat, and dampness.

■ Avoid attics, kitchens, garages, and basements for storing paper. Inside walls are drier than outside walls where moisture can collect.

■ Store paper flat. Paper should be stored on pallets, cartons, shelves, or in cabinets.

■ Avoid having food or drinks in the area where paper is stored or handled.

■ Do not open sealed packages of paper until you are ready to load them into the printer. Leave paper in the original packaging, and leave the packages in the shipping carton. For most commercial cut-size grades, the ream wrapper contains an inner lining that protects the paper from moisture loss or gain.

Phaser media is sold with appropriate packaging to prevent transportation problems and to promote positive customer results. Greeting cards, business cards, and CD/DVD labels and inserts are packaged inside resealable plastic bags. Leave the media inside the bag until you are ready to use it; reinsert unused media in the bag and reseal it for protection.

Paper that May Damage Your Printer

Your printer is designed to be used with a variety of paper types. For more information about supported papers, go to Reference/Printing/Supported Papers on the *User Documentation CD-ROM*.

Other media types can cause poor print quality, increased paper jams, or damage to your printer.

Following are examples of unacceptable paper:

■ Rough or porous media
■ Paper that has been photocopied
■ Multipart forms
■ Paper with cutouts or perforations
■ Paper with staples inserted
■ Embossed, coated, or pre-printed paper with heat tolerances below 210° C (322° F)
■ Media that melts, offsets or discolors at temperatures greater than 210° C (322° F) for 0.2 seconds.

■ Transparencies not specifically designed for your Phaser 6250 Color Laser Printer.
■ Paper made for inkjet printers
■ Foil laminate
■ Pre-printed paper with drying agents and powders.

Warning

Other types of transparencies may melt and damage the printer.

Phaser papers have better cut quality, thus reducing dust and preventing potential contamination. Using paper free of contaminants helps guarantee longer component life and better print quality. Paper with better cut quality will also reduce paper jams and misfeeds.

Basic Printing

This topic includes:

■ "Tray 1 (MPT) Paper Path" on page 2-9
■ "Loading Paper in Tray 1 (MPT)" on page 2-10
■ "Trays 2-4 Paper Path" on page 2-12
■ "Loading Paper in Trays 2-4" on page 2-12
■ "Factors Affecting Printer Performance" on page 2-17

Follow these steps to print jobs:

1. Load paper in the tray.
2. Confirm the paper type at the printer's front panel.
3. Select **File/Print** to adjust the printing options in the printer driver. For more information go to Reference/Printing/Adjusting Printing Options on the *User Documentation CD-ROM*.
4. Send the job to the printer from the application's **Print** dialog box.

Tray 1 (MPT) Paper Path

The following graphic displays the printer's paper path:
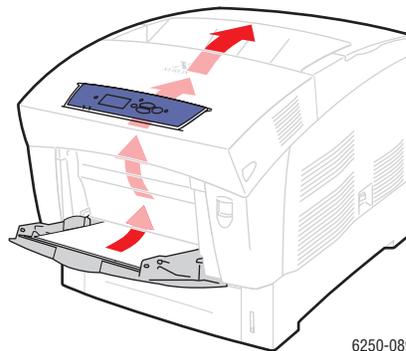
6250-089

Loading Paper in Tray 1 (MPT)

Use Tray 1 (MPT) for plain paper, envelopes, transparencies, custom size paper, labels, business cards, greeting cards, CD/DVD labels, and CD/DVD inserts.

Caution

If you change the type of paper in a tray, you **must** change the paper type on the front panel to match the paper that you loaded. **If you fail to do this, print-quality problems can occur and the fuser can be damaged**.

6250-045

For more information on paper types, weights, and sizes, go to Reference/Printing/Supported Papers on the *User Documentation CD-ROM*.

1. Open Tray 1 (MPT) by pushing the handle down and out.
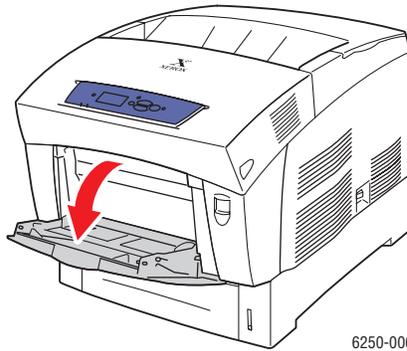
6250-006

2. Adjust the paper guides to match the size of the paper.
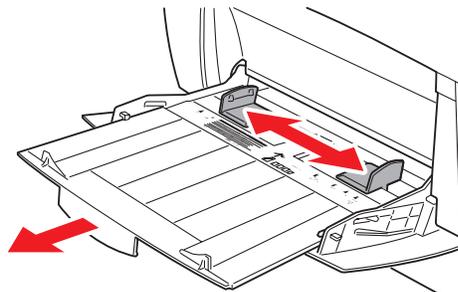
6250-007

3. Fan the paper to release sheets that may stick together.
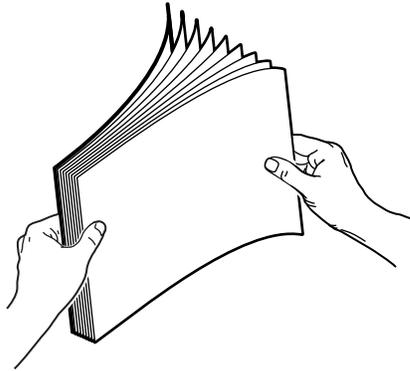
4. Insert the paper, transparencies, or envelopes into the tray. Place the side to be printed **facedown** with the **top** of the page at the back of the tray. Do not load paper above the fill line. Place envelopes with the **flap side up** and **top** of the envelope towards the right of the printer.

6250-072

6250-010
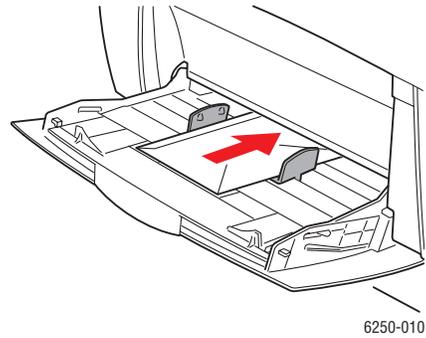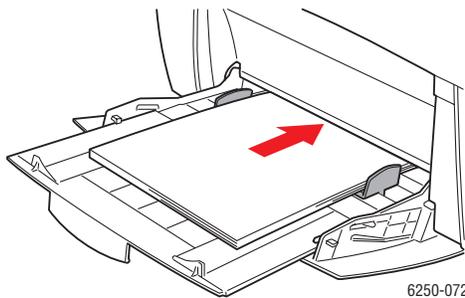
5. If necessary, press the guides inward to match the size of the paper.

   When prompted by the front panel to confirm the paper type and size:

6. If you have not changed the type or size of paper, press the **OK** button to accept the current setting for paper type and size.

7. If you have changed the paper type:
   a. At the printer's front panel, select **Change**, then press the **OK** button.
   b. Select the appropriate paper type.
   c. Press the **OK** button to save your selection.

8. If you have changed the paper size:
   a. Select the appropriate paper size.
   b. Press the **OK** button to save your selection.

Trays 2-4 Paper Path

The following graphic displays the printer's paper path:

6250-093
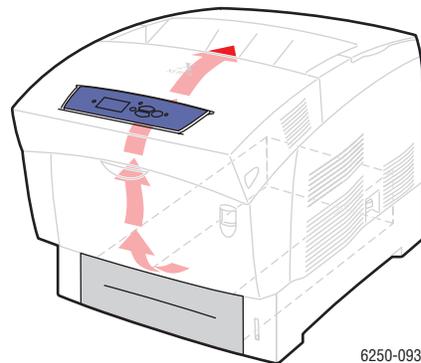
Loading Paper in Trays 2-4

Caution

If you change the type of paper in a tray, you **must** change the paper type on the front panel to match the paper that you loaded. **If you fail to do this, print-quality problems can occur and the fuser can be damaged**.

6250-0

For more information on paper types, weights, and sizes, go to Reference/Printing/Supported Papers on the *User Documentation CD-ROM*.

Caution

DO NOT load card stock, photo paper, envelopes, business cards, greeting cards, CD/DVD labels, and CD/DVD inserts in Trays 2-4. Do not load transparencies or labels in Trays 3 or 4. Use Tray 1 (MPT) or Tray 2 for printing these media types.

1. Pull out the tray.

6250-035
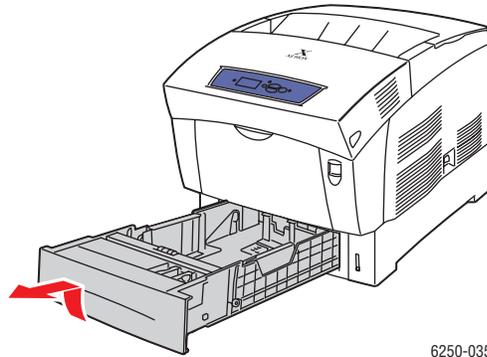
2. If loading paper having a different width or length, adjust the width and length guides.

6250-001

6200-004
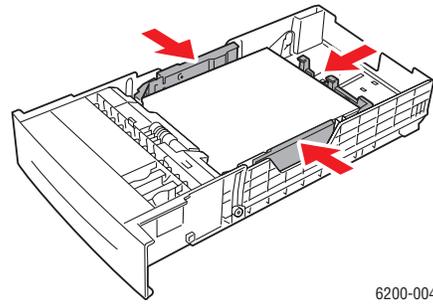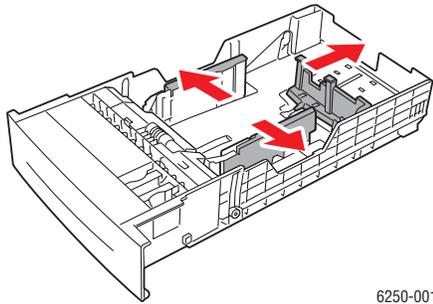
3. Fan the paper to release sheets that may stick together.
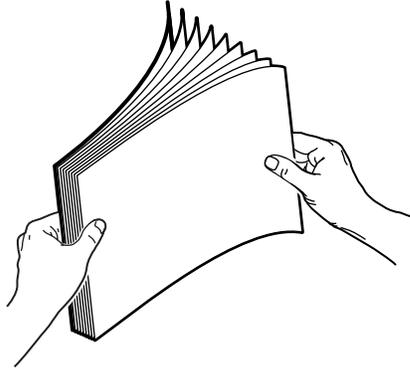
4. Insert paper into the tray.

■ For one-sided prints, place the side to be printed **faceup** with the **top** of the page at the **front** of the tray.
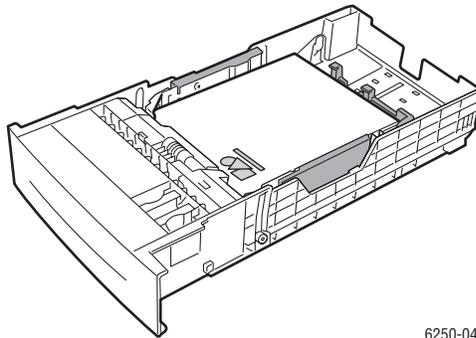
6250-041

■ For two-sided prints, place the side to be printed with the odd-numbered pages **facedown** with the top of the page at the **back** of the tray.

6250-074

■ If using paper with pre-punched holes, place the holes toward the **right side** of the tray.

6250-058

Note

Observe the fill lines on the side of the tray. Do not load paper above the fill line (1); it may cause the printer to jam. Do not load transparencies or glossy-coated paper above the transparency fill line (2). Place the paper under the front corner tabs and the tabs on the back guide. Do not load transparencies in Trays 3 or 4.

6250-003

5. If necessary, press the guides inward to match the size of the paper.

6200-004

6. Insert the paper tray into the printer and push the tray completely to the back of the printer.
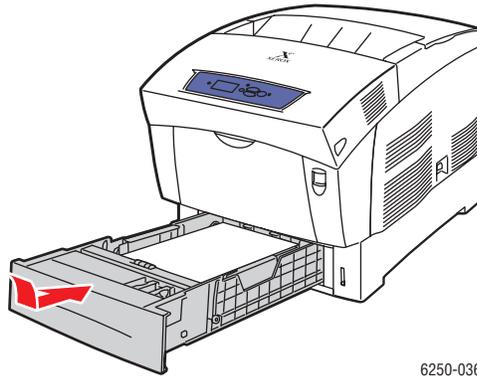
6250-036

When prompted by the front panel to confirm the paper type and size:

7. If you have not changed the type or size of paper, press the **OK** button to accept the current setting for paper type and size.

8. If you have changed the paper type:

   a. At the printer's front panel, select **Change**, then press the **OK** button.

   b. Select the appropriate paper type.

   c. Press the **OK** button to save your selection.

9. If you have changed the paper size:

   a. Select the appropriate paper size.

   b. Press the **OK** button to save your selection.

Note

For more information about printing options and other selections, click the **Help** button on the printer driver tab to view the online help.

Factors Affecting Printer Performance

Many factors affect a print job. They include the print speed (stated in number of pages per minute), the media used, download time, and printer processing time.

The computer download time and printer processing time are affected by several factors including:

■ Printer memory
■ Connection type (network, parallel or USB)
■ Network operating system
■ Printer configuration
■ File size and type of graphics
■ Computer speed

Note

Additional printer memory (RAM) may improve overall printer functions, but will not increase the pages per minute (ppm) ability of the printer.

Adjusting Printing Options

This topic includes:

- "Setting Printing Options" on page 2-18
- "Selecting Print-Quality Modes" on page 2-20
- "Printing in Black & White" on page 2-21

Setting Printing Options

Many printing options are available with the Xerox printer driver.

Selecting Printing Preferences in Windows

Printer preferences control all of your jobs, unless you overwrite them specifically for your job. For example, if you want to use automatic 2-sided printing for most jobs, set this option in printer settings.

1. Click **Start**, select **Settings**, then click **Printers**.
2. In the **Printers** folder, right-click the icon for your printer.
3. From the popup menu, select **Printer Preferences** or **Properties**.
4. Make selections from the driver tabs. See the "Printing Options for Windows Operating Systems" table for specific printing options.
5. Click the **OK** button to save your selections.

Selecting Properties for an Individual Job (Windows)

If you want to use special settings for a particular job, change the driver settings before sending the job to the printer. For example, if you want to use **Photo** print-quality mode for a particular graphic, select this setting in the driver before printing that job.

1. With the desired document or graphic open in your application, access the **Print** dialog box.
2. Select the Phaser 6250 printer for use and click its **Properties** button to open the printer driver.
3. Make selections from the driver tabs. See the following table for specific printing options.
4. Click the **OK** button to save your selections.
5. Print the job.

Printing Options for Windows Operating Systems

Operating System	Driver Tab	Printing Options
Windows 2000, Windows XP, or Windows Server 2003	**Layout** tab	■ **Orientation** ■ **Print on Both Sides (Duplex)** ■ **Pages Per Sheet**
	Paper/Quality tab	■ Paper type, size, and tray selection ■ **Cover Pages** ■ **Print Quality**
	Output Options tab	■ **Separation Pages** ■ Secure prints, proof prints, and saved prints ■ End of Job Notification
	TekColor tab	■ **Color Corrections** ■ **Black & White** conversion
Windows NT	**Page Setup** tab	■ **Orientation** ■ **Print on Both Sides (Duplex Printing)**
	Paper/Quality tab	■ Paper type, size, and tray selection ■ **Cover Pages** ■ **Print Quality**
	Output Options tab	■ **Separation Pages** ■ Secure prints, proof prints, and saved prints
	TekColor tab	■ **Color Corrections** ■ Black & White conversion
Windows 98 or Windows Me	**Setup** tab	■ Paper type, size, and tray selection ■ **Orientation** ■ **Print on 1 Side** or **Print on 2 Sides** ■ **Print Quality**
	Output Options tab	■ **Separation Pages** ■ **Cover Pages** ■ Secure prints, proof prints, and saved prints
	TekColor tab	■ **Color Corrections** ■ **Black & While** conversion

Note

For more information about printing options and other selections, click the **Help** button on the printer driver tab to view the online help.

Selecting Properties for an Individual Job (Mac)

To select print settings for a particular job, change the driver settings before sending the job to the printer.

1. With the document open in your application, click **File**, then click **Print**.

2. Select the desired printing options from the menus and drop-down lists that are displayed.

> **Note**
>
> In Macintosh OS X, click **Save Preset** on the **Print** menu screen to save the current printer settings. You can create multiple presets and save each with its own distinctive name and printer settings. To print jobs using specific printer settings, click the applicable saved preset in the **Presets** list.

3. Click **Print** to print the job.

Selecting Print-Quality Modes

To select the print-quality mode in a supported driver:

■ **Windows 98, Windows Me PostScript driver:**

On the **Setup** tab select a print quality mode.

■ **Windows 2000, Windows XP, Windows Server 2003 Windows NT PostScript driver:**

On the **Paper/Quality** tab, select a print-quality mode.

■ **Mac OS 9 driver:**

In the **Print** dialog box, click **General**, select **Print Quality** from the drop-down list, then select the desired mode for **Quality**.

■ **Mac OS X (version 10.1 and higher) driver:**

In the **Print** dialog box, select the **Printer Features** drop-down list, then select the **Print Quality/Color** tab. Select the desired mode for **Quality**.

Type of Print Job	Print-Quality Mode
General-purpose mode for crisp, bright color prints. Recommended for most office use.	**Enhanced**
Highest-quality color print job with very smooth color shades. Recommended for photo prints, proof prints, and press modes.	**Photo** (Not available on 6250B printers.)
Draft print job used to check layout. Provides lighter toner usage than the Enhanced setting.	**Draft**

Printing in Black & White

Your printer driver can be set to print only with black toner by selecting **black & white** in the printer properties. This may occur due to a special printing need or if a color toner cartridge is empty.

To select black & white in a supported driver:

■ **Windows 98, Windows Me PostScript driver:**

In the **Print** dialog box, select **Print Properties,** select **TekColor**, then select **Black & White**.

■ **Windows 2000, Windows XP, Windows Server 2003, Windows NT PostScript driver:**

In the **Print** dialog box, select **Print Properties,** select **TekColor**, then select **Black & White**.

■ **Mac OS 9 driver:**

In the **Print** dialog box, select **General**, select **TekColor** from the drop-down list, then select **Black & White.**

■ **Mac OS X (version 10.1 and higher) driver:**

In the **Print** dialog box, select the **Printer Features** drop-down list, then select the **Print Quality/Color** tab. Select **Black & White**.

Using Color

This topic includes:

- "Printers and CMYK" on page 2-22
- "Monitors and RGB" on page 2-22
- "Image Processing" on page 2-23
- "Adjusting Color Using TekColor Correction" on page 2-23
- "Color Calibration" on page 2-24
- "Color Sampler Pages" on page 2-25

Printers and CMYK

Your printer and monitor generate color quite differently. Your printer produces prints using a series of dots in three primary colors: cyan, magenta, and yellow. When equal amounts of these three colors are overlaid, the resulting color is black.

The printer can overlay two colors to produce a third color. For example, magenta and yellow produce red. Cyan and magenta produce blue. It overlays cyan and magenta to produce blue. To produce less saturated colors the printer "mixes" white by leaving some dots unprinted. Mixing magenta with unprinted dots produces pink.

By overlaying two or more primaries, the printer generates a palette of eight colors. Although equal portions of the three primary colors form black, your printer includes a separate black toner cartridge to produce very dense black for images with a large amount of black text or black backgrounds. These four colors—cyan, magenta, yellow, and black—represent the color system known as CMYK.

Monitors and RGB

Your monitor projects color onto the screen. The three primary colors the monitor projects are red, green, and blue. When equal portions of these three colors are projected, they produce white. These three colors represent the color system known as RGB.

The surface of your monitor consists of thousands of phosphor dots. To produce red, the monitor projects red phosphors. To produce a less saturated hue or red (pink) the monitor turns on two out of three of the red phosphors. Printers add unprinted white dots to produce less saturated colors, while monitors turn on fewer phosphors.

Another important difference between your printer and monitor is the way each one translates light. Paper reflects light, while monitors emit light. Because of these different methods, printers have one range of colors and monitors have a different range of colors.

Image Processing

The differences between the way your printer and monitor produce color explain why your printed document can look different from what you see on your screen. To compensate for these differences, the colors are converted by your printer using image processing. Image processing is the process of translating your computer file into printer toner. Your printer uses TekColor Correction to translate color from your computer to your printer.

Adjusting Color Using TekColor Correction

The TekColor correction options provide simulations of different color devices. Follow these basic guidelines to accurately reproduce the colors you want on your prints.

TekColor correction is the default correction for general image processing. For typical business and office printing, select the RGB Vivid option before printing. The sRGB Display and sRGB Vivid work best with RGB images.

Select **Automatic** to let the printer automatically pick the best color correction for elements in your document.

Color correction	Description
Automatic	■ Provides the best results for documents with a mixture of graphics, text, and pictures. ■ Automatically uses the best color correction for each element (text, graphics, and photographs) on the page.
sRGB Display	■ Closely approximates the colors on a standard monitor.
sRGB Vivid	■ Produces the brightest, most saturated colors.
None	■ Does not use a color correction so the colors you specify in the application for your job are not altered. ■ Use this selection with the Phaser 6250 PANTONE Color Chart for PANTONE Color matching.
SWOP Press	■ Matches the Specification for Web Offset Publications (SWOP) press standards.
Euroscale Press	■ Emulates a Euroscale 4-color press. Use this selection for matching Euroscale press standards.
Commercial Press	■ Emulates a 4-color process commercial press. Use this selection for general 4-Color Process PANTONE Color matching and press proofing. Note that not all PANTONE colors can be reproduced.
SNAP Press	■ Matches the newsprint standard of Specifications for Non-Heat Advertising Printing (SNAP).
Black and White	■ Produces a black-and-white version of a document. ■ Colors converted to grayscale. ■ Use to print page masters for photocopying in black-and-white. ■ Use when one of the color toner cartridges is empty. ■ Use for fastest print speeds.

Color correction	Description
Use Printer Front Panel Setting	■ The color correction can be set in the printer using the front panel or using CentreWare IS (if available).

For more information on color matching and ICC profiles, go to www.xerox.com/officeprinting/infoSMART.

To select the color correction in a supported driver:

■ **Windows 98, Windows Me PostScript driver:**

On the **TekColor** tab, select the desired color correction. Some of the color corrections are grouped under **Office Color** or **Press Match Color.**

■ **Windows 2000, Windows XP, Windows Server 2003, Windows NT PostScript driver:**

On the **TekColor** tab, select the desired color correction. Some of the color corrections are grouped under **Office Color** or **Press Match Color.**

■ **Mac OS 9 driver:**

In the **Print** dialog box, click **General**, select **TekColor** from the drop-down list, then select the desired correction for **Color**.

■ **Mac OS X (version 10.1 and higher) driver:**

In the **Print** dialog box, select the **Printer Features** drop-down list, then select the **Print Quality/Color** tab. Select the desired mode for **Color Correction**.

Color Calibration

Overview

Color calibration procedures adjust the printer for optimal color output. Color settings may need adjustment upon initial printer setup or when toners and imaging units are replaced. There are two procedures: "Lighten/Darken Colors" and "Balance Colors." If the overall image appears either too light or too dark, use the Lighten/Darken Colors procedure. If a finer adjustment of the primary colors (cyan, magenta, and yellow) is needed, continue with the Balance Colors procedure.

For more information on color calibration, print the "Color Calibration" information page from your printer's front panel.

To print the "Color Calibration" pages:

1. Select **Information**, then press the **OK** button.
2. Select **Information Pages,** then press the **OK** button.
3. Select **Color Calibration**, then press the **OK** button to print.

Note

For more information on color matching and International Color Consortium (ICC) profiles, go to www.xerox.com/officeprinting/infoSMART.

Color Sampler Pages

Sampler pages for CMYK and RGB color can be printed at the printer's front panel.

To print the "CMYK Sampler Page" or "RGB Sampler Page":

1. Select **Information**, then press the **OK** button.
2. Select **Sample Pages,** then press the OK button.
3. Select either **CMYK Sampler Pages** or **RGB Sampler Pages**, then press the **OK** button to print.

2-Sided Printing

This topic includes:

- "Automatic 2-Sided Printing" on page 2-26
- "Binding Preferences" on page 2-27
- "Manual 2-Sided Printing" on page 2-29
- "Manual 2-Sided Printing Using Tray 1 (MPT)" on page 2-30

Automatic 2-Sided Printing

Your printer must be a 6250DP, 6250DT, or 6250DX to perform automatic 2-sided printing.

Guidelines

To print a 2-sided document, verify that you are using the following weight ranges:

Weight	Tray
65–163 g/m^2 (37–60 lb. Cover)	Tray 1 (MPT)
65–130 g/m^2 (17–32 lb. Bond)	Trays 2-4
120–163 g/m^2 (81–110 lb. Book) (Glossy Coated Paper)	All Trays
120–163 g/m^2 (81–110 lb. Book) (Thin card stock)	Tray 1 (MPT)

Caution

DO NOT use any specialty media, envelopes, or labels for automatic 2-sided printing. Damage caused by automatically printing specialty media using the duplex unit is not covered under the Xerox warranty, service agreement, or Total Satisfaction Guarantee.

For best results with automatic 2-sided printing, do not use heavy toner coverage on the even-numbered pages of your print job.

Tray 1 (MPT) Paper Path
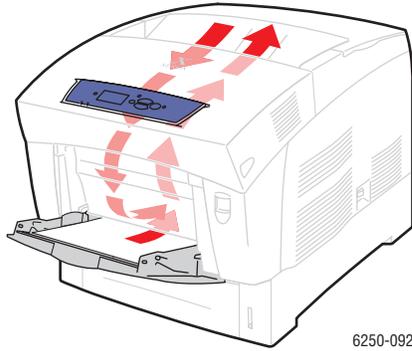
The following graphic displays the printer's paper path:

6250-092

Trays 2-4 Paper Path

The following graphic displays the printer's paper path:

6250-091
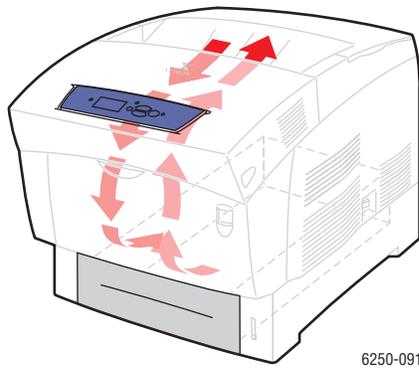
Binding Preferences

Use the printer driver to select **Portrait** or **Landscape** orientation for the images on the page. When you print 2-sided jobs, select the binding preference which determines how the pages turn.

Portrait **Bind on Side Edge** **Flip on Long Edge**	**Portrait** **Bind on Top Edge** **Flip on Short Edge**	**Landscape** **Bind on Side Edge** **Flip on Short Edge**	**Landscape** **Bind on Top Edge** **Flip on Long Edge**

To perform automatic 2-sided printing:

1. Insert paper into the tray. For more information see the "Basic Printing" topic in this section. Place the side to be printed with the odd-numbered pages **face down** with the **top** of the page at the **back** of the tray. If using paper with pre-punched holes, place the holes toward the **right** side of the tray when you are facing the front panel.
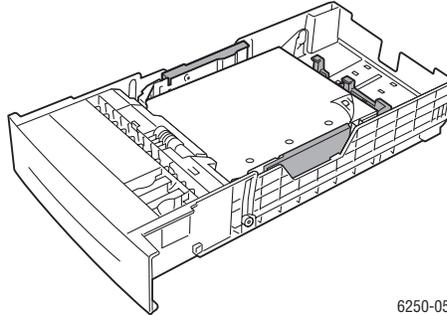
6250-058

Caution

If you change the type of paper in a tray, you **must** change the paper type on the front panel to match the paper that you loaded. **If you fail to do this, print-quality problems can occur and the fuser can be damaged**.

2. In the printer driver:
   ■ Select the appropriate tray.
   ■ Select the orientation.
   ■ Select **2-sided printing** as described in the table below.

3. Click **OK** to accept the printer driver settings, then click **OK** to print.

Setting the Printer Driver for 2-Sided Printing
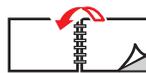
Operating System	Steps
Windows 98 or Windows Me	**1.** Select **File**, then select **Print**. **2.** Click **Properties**. **3.** Select **Setup**, then select **Print 2 Sides**. **4.** Select or deselect **Bind On Top Edge**.
Windows 2000, Windows XP, or Windows Server 2003	**1.** Select **File**, then select **Print**. **2.** Click **Properties**. **3.** Select either **Flip On Long Edge**, or **Flip On Short Edge** in **Print On Both Sides (Duplex)** on the **Layout** tab.
Windows NT	**1.** Select **File**, then select **Print**. **2.** Click **Properties**. **3.** Select either **Long Edge**, or **Short Edge** in **Print On Both Sides (duplex printing)** on the **Page Setup** tab.

Setting the Printer Driver for 2-Sided Printing (Continued)

Operating System	Steps
Mac OS 9	**1.** Select **File**, then select **Print**. **2.** Select **Layout**. **3.** Select **Print on Both Sides.** **4.** Click the **Binding** icon that matches the edge to bind.
Mac OS X, version 10.1 (and higher)	**1.** Select **File**, then select **Print**. **2.** Select **Duplex**. **3.** Select **Print on Both Sides.** **4.** Click the **Binding** icon that matches the edge to bind.

Manual 2-Sided Printing

Guidelines

If the printer does not have automatic 2-sided printing capability, or you want to print on a paper type that cannot be automatically printed on two sides, print manually on both sides of the paper by following the procedures in this section.

- Use any tray for manual 2-sided printing.
- For best opacity and feed reliability, use Plain Paper that is 90 g/m^2 (24 lb. Bond) or heavier paper.
- Increase the top margin on side 1 to at least 12 mm (0.48 in.).
- You must print all the odd-numbered pages first. Reinsert the printed pages in the same tray from which the odd-numbered pages were taken, then print the even-numbered pages.
- Do not use heavy toner coverage on side 1 of a manual 2-sided print job.
- 2-sided printing on specialty paper can shorten the life of printer components.

Print quality may be degraded on the second side of manual 2-sided printing jobs. For best results, follow the prompt on the front panel to perform manual 2-sided printing (duplex printing).

Manual 2-Sided Printing Using Tray 1 (MPT)

Printing Side 1

1. Insert paper into **Tray 1 (MPT)**. For more information, see the "Basic Printing" topic in this section. Place the side to be printed **facedown** with the **top** of the page entering the printer **first**. If using paper with pre-punched holes, place the holes toward the **right** side of the tray when you are facing the front panel.

6250-072
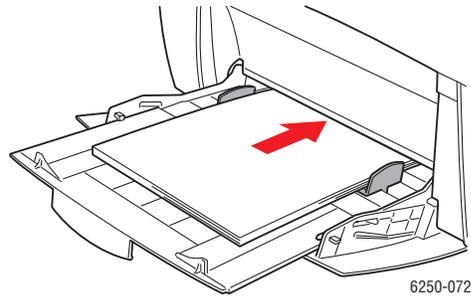
Caution

If you change the type of paper in a tray, you **must** change the paper type on the front panel to match the paper that you loaded. **If you fail to do this, print-quality problems can occur and the fuser can be damaged**.

2. In the printer driver, select **Tray 1 (MPT)**.

3. Send the job to the printer so that the odd-numbered pages (side 1) are printed.

Printing Side 2

1. Insert the printed paper with side 1 **faceup**, and the **top** of the page at the **back** of **Tray 1 (MPT)**. If using paper with pre-punched holes, the holes toward the **left** side of the tray when you are facing the front panel.

6250-056

2. In the printer driver, select **Tray 1 (MPT)** as the paper source.

3. Send the job to the printer so that the even-numbered pages (side 2) are printed.

Manual 2-Sided Printing Using Trays 2-4

Printing Side 1

1. Insert paper into the tray. Place the side to be printed **faceup** with the **top** of the page at the **front** of the tray. If using paper with pre-punched holes, place the holes toward the **right** side of the tray when you are facing the front panel.

6250-041

2. In the printer driver, select the tray containing the paper.

3. Send the job to the printer so that the odd-numbered pages (side 1) are printed.

Printing Side 2

1. Insert the printed paper with side 1 **facedown,** and the **top** of the page at the **front** of the tray**.** If using paper with pre-punched holes, place the holes toward the **left** side of the tray when you are facing the front panel.

6250-040
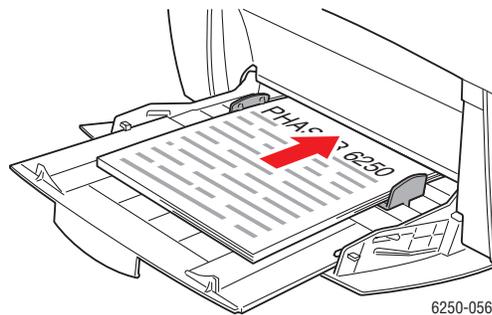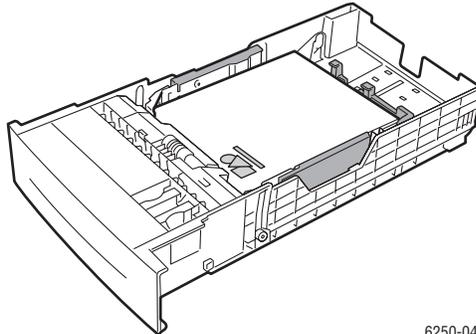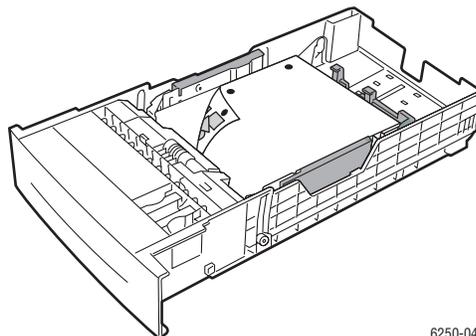
2. In the printer driver, select the tray containing the paper.

3. Send the job to the printer so that the even-numbered pages (side 2) are printed.

Transparencies

This topic includes:

- "Guidelines" on page 2-32
- "Printing Transparencies from Tray 1 (MPT)" on page 2-33
- "Printing Transparencies from Tray 2" on page 2-34

Transparencies can be printed from Tray 1 (MPT) or Tray 2. Handle transparencies by the edges using both hands to avoid fingerprints and creases which can cause poor print quality.
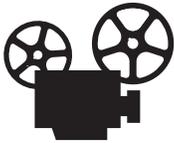
Videos are available with instructions for loading transparencies. Videos are located on the *User Documentation CD-ROM* and at www.xerox.com/officeprinting/6250support.

Guidelines

- Xerox recommends that you use only Xerox Phaser 25-Series Premium Transparency Film, which has been specifically developed for use with this type of printer fuser.
- Place no more than 50 transparencies at one time in the tray.

To order supplies and accessories, contact your local reseller or visit the Xerox web site at www.xerox.com/officeprinting/6250supplies.

Caution

Non-Phaser 25-Series Premium Transparency Film can produce poor image quality, jam the printer, wrap around the fuser rollers, or melt. Some non-Phaser Series-25 Premium Transparency Film have paper tape on the edge that can separate in the heat of the fuser, leading to damage. Damage caused by using non-Phaser 25-Series Premium Transparency Film is not covered under the Xerox warranty, service agreement, or Total Satisfaction Guarantee.

Printing Transparencies from Tray 1 (MPT)

1. Fan the transparencies to release sheets that may stick together.

6250-050
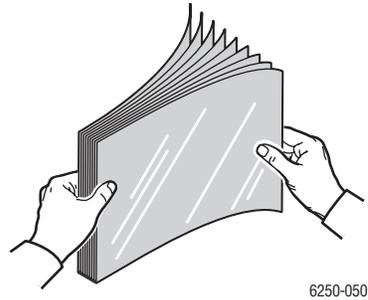
2. Insert the transparencies into Tray 1 (MPT). For more information, see the "Basic Printing" topic in this section.
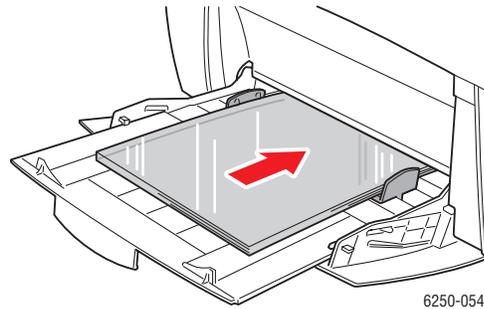
6250-054

When prompted by the front panel to confirm the paper type and size:

3. If you have not changed the type or size of paper, press the **OK** button to accept the current setting for paper type and size.

4. If you have changed the paper type:

   a. At the printer's front panel, select **Change**, then press the **OK** button.

   b. Select the appropriate paper type.

   c. Press the **OK** button to save your selection.

5. If you have changed the paper size:

   a. Select the appropriate paper size.

   b. Press the **OK** button to save your selection.

6. In the printer driver, select either the paper type or **Tray 1 (MPT)** as the paper source.

Printing Transparencies from Tray 2

1. Fan the transparencies to release sheets that are stuck together.

6250-050

2. Insert the transparencies into the tray.
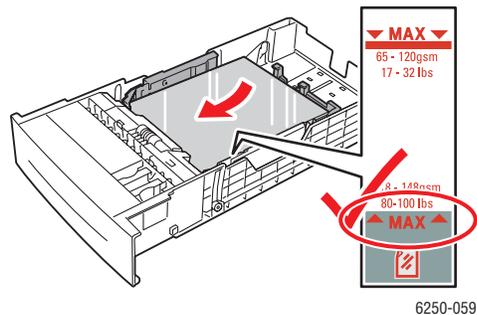
6250-059

When prompted by the front panel to confirm the paper type and size:

3. If you have not changed the type or size of paper, press the **OK** button to accept the current setting for paper type and size.

4. If you have changed the paper type:

    a. At the printer's front panel, select **Change**, then press the **OK** button.

    b. Select the appropriate paper type.

    c. Press the **OK** button to save your selection.

5. If you have changed the paper size:

    a. Select the appropriate paper size.

    b. Press the **OK** button to save your selection.

6. In the printer driver, select either the paper type or **Tray 2** as the paper source.

Note

Do not load transparencies above the transparency fill line; it may cause the paper to jam.

Envelopes

This topic includes:

■ "Guidelines" on page 2-35
■ "Printing Envelopes" on page 2-36

Guidelines

Buying and Storing Envelopes

■ Use only paper envelopes specified in the Supported Papers table. Successful envelope printing is highly dependent on the quality and construction of the envelopes. Use envelopes made specifically for laser printers.
■ It is recommended that you maintain constant temperatures and relative humidity.
■ Store unused envelopes in their packaging to avoid the effects of moisture and dryness which can affect print quality and cause wrinkling. Excessive moisture can cause the envelopes to seal before or during printing.
■ Avoid padded envelopes; purchase envelopes that lie flat on a surface.
■ Remove air "bubbles" from the envelopes before loading by setting a heavy book on top of the envelopes.
■ If wrinkling or embossing problems occur, use a different brand of envelopes made specifically for laser printers.
■ For more information, go to Reference/Printing/Supported Papers on the *User Documentation CD-ROM*.

Preparing to Print

Follow these guidelines to prevent wrinkling problems:

■ Use only Tray 1 (MPT) to print envelopes.
■ Load envelopes facedown with the envelope flap to the right as you view the tray from the front.
■ Print only on the front of the envelope.
■ Perform these steps when using an application that includes a tool for creating an envelope document:
    ■ Select **facedown**.
    ■ Select the feed method with the image centered.
    ■ Clear **Clockwise Rotation**.
■ Load a maximum of 10 envelopes at a time. This printer is not designed to handle high-capacity production envelope printing.

■ 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.

Caution

Never use envelopes with windows or metal clasps; they can damage the printer. Damage caused by using non-Xerox envelopes is not covered under the Xerox warranty, service agreement, or Total Satisfaction Guarantee.

Printing Envelopes

Note

Some wrinkling or embossing may occur when printing envelopes.

1. Insert the envelopes **facedown** with the envelope flap to the **right** as you view the front of the tray. For more information, see "Basic Printing" in this section. **Maximum capacity is 10 envelopes**.
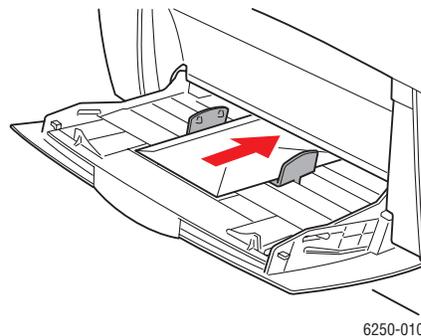
6250-010

When prompted by the front panel to confirm the paper type and size:

2. If you have not changed the type or size of paper, press the **OK** button to accept the current setting for paper type and size.

3. If you have changed the paper type:

   a. At the printer's front panel, select **Change**, then press the **OK** button.

   b. Select the appropriate paper type.

   c. Press the **OK** button to save your selection.

4. If you have changed the paper size:

   a. Select the appropriate paper size.

   b. Press the **OK** button to save your selection.

5. In the printer driver, select either **Envelopes** as the paper type or **Tray 1 (MPT)** as the paper source.

6. Print a test envelope from your application to confirm that the orientation of your envelope is correct.

Labels, Business and Greeting Cards, CD/DVD Labels and Inserts

This topic includes:

- "Guidelines" on page 2-37
- "Printing Labels, Business and Greeting Cards, CD/DVD Labels and Inserts" on page 2-37

Business, greeting cards, and CD/DVD labels and inserts can be printed only from Tray 1 (MPT). Labels can be printed from both Tray 1 (MPT) and Tray 2. The maximum number of sheets that can be loaded in Tray 1 is 25.

To order supplies, contact your local reseller or visit the Xerox web site at www.xerox.com/officeprinting/6250supplies.

Guidelines

- Do not use vinyl labels.
- Do not use any labels, cards, or inserts on a sheet where items are missing; it may damage printer components.
- Store unused labels, cards, and inserts flat in their original packaging. Leave the product inside the original packaging until ready to use. Return any unused product to the original packaging and reseal it for protection.
- Do not store labels, cards, or inserts in extremely dry or humid conditions or extremely hot or cold conditions. Storing them in extreme conditions may cause print quality problems or cause them to jam in the printer.
- Rotate stock frequently. Long periods of storage in extreme conditions can cause the labels, cards, and inserts to curl and jam the printer.
- Print only on one side of the sheet of labels.

Printing Labels, Business and Greeting Cards, CD/DVD Labels and Inserts

If you are printing on labels and your application has a setting for labels, use it as a template. Templates for greeting cards, etc. are available at the Xerox Color Connection web site at www.colorconnection.xerox.com.

1. Insert the media into Tray 1 (MPT). Place the side to be printed **facedown** with the **top** of the sheet toward the back of the printer. For more information go to Reference/Printing/ Basic Printing.
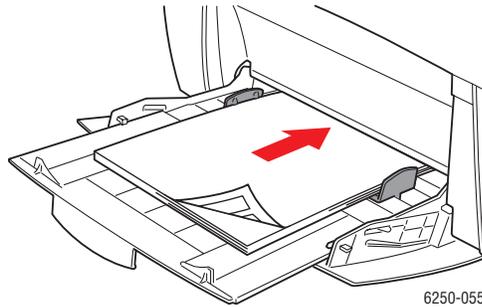
6250-055

When prompted by the front panel to confirm the paper type and size:

2. If you have not changed the type or size of paper, press the **OK** button to accept the current setting for paper type and size.

3. If you have changed the paper type:

   a. At the printer's front panel, select **Change**, then press the **OK** button.

   b. Select the appropriate paper type.

   c. Press the **OK** button to save your selection.

4. If you have changed the paper size:

   a. Select the appropriate paper size.

   b. Press the **OK** button to save your selection.

5. In the printer driver, select the paper type.

Specialty Paper

This topic includes:

- "Printing Glossy Coated Paper" on page 2-39
- "Printing Digital Photo Paper" on page 2-39
- "Loading Custom Size Paper in Tray 1 (MPT)" on page 2-41

Printing Glossy Coated Paper

Guidelines

- Use any tray for printing glossy coated paper.
- Use glossy coated paper that weighs between 120-163 g/m^2 (81-110 lb. Text). Thin coated paper can cause damage to the fuser.
- Do not open sealed packages of paper until you are ready to load them into the printer. Leave paper in the original wrapper, and leave the packages in the shipping carton until ready to use.
- Remove all other paper from the tray before loading glossy paper.
- Load only the amount of paper you are planning to use. Reinsert unused paper in the original wrapper and seal. Rotate paper stock frequently.
- The very smooth surfaces on glossy coated paper produce sharper details because they are more receptive to toner.
- For best results use Phaser Glossy Coated Paper. This paper is designed to give the best performance with your Phaser 6250 printer.

Do not use coated papers designed for inkjet printers. The coatings on these papers may damage the fuser.

Printing Digital Photo Paper

Guidelines

- Use only Tray 1 (MPT) for photo paper.
- Do not open sealed packages of paper until you are ready to load them into the printer. Leave paper in the original wrapper, and leave the packages in the shipping carton until ready to use.
- Remove all other paper from Tray 1 (MPT) before loading photo paper.
- Load only the amount of paper you are planning to use. Reinsert unused paper in the original wrapper and seal. Rotate paper stock frequently.
- Submit your print job to the printer selecting the **photo print quality** mode in the printer driver.

■ The very smooth surfaces on photo paper produce sharper details because they are more receptive to toner.

■ For best results use Phaser Digital Photo Paper. This paper is designed to give the best performance with the Phaser 6250 printer.

Caution

Do not use photo papers designed for inkjet printers. The coatings on these papers may damage the fuser.

Custom Size Paper

Print custom sizes of media in Tray 1 (MPT).

You can print on custom size paper within these dimensions:

■ Width: 89–216 mm (3.5–8.5 in.)
■ Length: 140–356 mm (5.5–14 in.)

Loading Custom Size Paper in Tray 1 (MPT)

1. Insert the custom size paper into Tray 1 (MPT). Adjust the guides to match the size of the paper. Place the side to be printed **facedown** with the **top** of the page toward the **back** of the printer.

6250-079
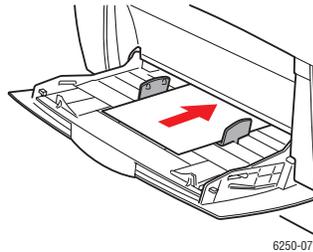
When prompted by the front panel to confirm the paper type and size:

2. Press the **OK** button to accept the current setting, or to change the paper size.
   a. Select **Change**, then press the **OK** button.
   b. Select the paper type, then press the **OK** button.
   c. Select **Custom**, then press the **OK** button.
   d. Select **Custom Width (W)**, then press the **OK** button.
   e. Select the desired width (the width of the paper as it enters the printer), then press the **OK** button.
   f. Select **Custom Height (H)**, then press the **OK** button.
   g. Select the desired height, then press the **OK** button.

Advanced Options

This topic includes:

- "Printing Separation Pages" on page 2-42
- "Printing Multiple Pages to a Single Sheet (N-up)" on page 2-43
- "Printing Booklets" on page 2-43
- "Printing Negative and Mirror Images" on page 2-44
- "Scaling" on page 2-46
- "Printing Watermarks" on page 2-46
- "Image Smoothing" on page 2-48
- "Printing Cover Pages" on page 2-48
- "Printing Secure, Proof, and Saved Jobs" on page 2-49

Printing Separation Pages

A *separation page* (a divider page or slipsheet) can be inserted after a print job, between copies of a print job, or between individual pages of a print job. Specify the tray to use as the source for the separation pages.

To specify separation pages in a supported driver:

- **Windows 98, Windows Me PostScript driver:**

  On the **Output Options** tab, select the location of the separation pages and the tray source.

- **Windows 2000, Windows XP, Windows Server 2003, Windows NT PostScript driver:**

  On the **Output Options** tab, select the location of the separation pages and the tray source.

- **Mac OS 9 driver:**

  In the **Print** dialog box, click **General**, select **Advanced Media Options** from the drop-down list, then select the location of the separation pages and the tray source.

- **Mac OS X (version 10.1 and higher) driver:**

  In the **Print** dialog box, select the **Printer Features** drop-down list, then select the **Advanced Options** tab. Select **Separation Pages**.

Printing Multiple Pages to a Single Sheet (N-up)

When printing a multiple-page document, you can print more than one page on a single sheet of paper. Print one, two, four, six, nine, or 16 pages per sheet.
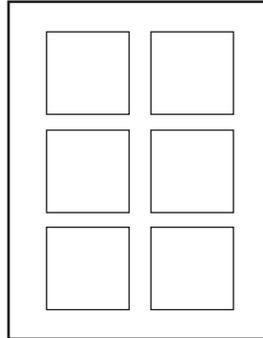
To print multiple pages on a single sheet of paper in a supported driver:

- **Windows 98, Windows Me PostScript driver:**

  On the **Setup** tab, click the **More Layout Options** button, then select the number of pages per sheet from the drop-down list**.** When you print more than one page on a sheet, you can also print a border around each page.

- **Windows 2000, Windows XP, Windows Server 2003 PostScript driver:**

  On the **Layout** tab, select the number of pages per sheet from the drop-down list.

- **Windows NT PostScript driver:**

  On the **Advanced** tab under **Document Options**, select the desired **Page Layout (N-up) Option.**

- **Mac OS 9 driver:**

  In the **Print** dialog box, click **General**, select **Layout** from the drop-down list, then select the number of pages per sheet.

- **Mac OS X (version 10.1 and higher) driver:**

  In the **Print** dialog box, select the **Layout** drop-down list, then select a layout.

Printing Booklets

With two-sided printing, you can print a document in the form of a small book. Create booklets for any paper size that is supported for 2-sided (duplex) printing. The driver automatically reduces each page image by 50 percent and prints two pages per sheet of paper. The pages are printed in the correct order so that you can fold and staple the pages to create a booklet.
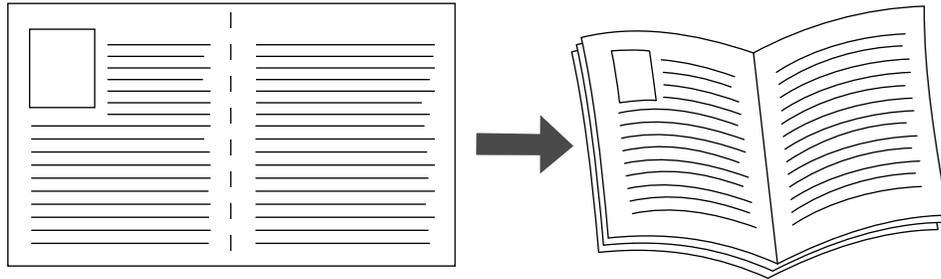
When you choose to print booklets, you can also specify the *creep* and *gutter* in both Windows 98 and Windows Me drivers. The gutter is the horizontal distance from the fold to the page image (in points). The creep is the distance that page images are shifted inward (in 10ths of a point); this compensates for the thickness of the folded paper, which otherwise would cause the inner page images to shift slightly outward.
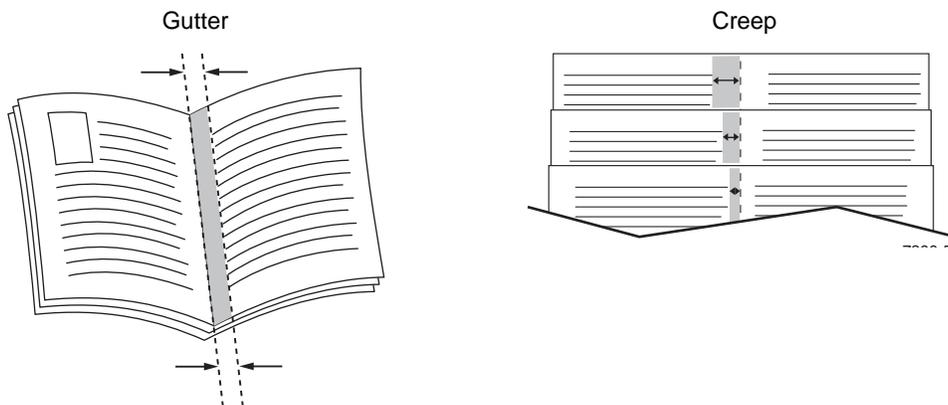
To select booklet printing in a supported Windows driver:

■ **Windows 98, Windows Me PostScript driver:**

On the **Setup** tab, click **More Layout Options**, then check **Print Booklet Style** in the **More Layout Options** box. You can also specify the creep and gutter in this box.

■ **Windows 2000, Windows XP, Windows Server 2003 PostScript driver:**

On the **Layout** tab, select **Booklet** from the **Pages per Sheet** drop-down list.

Printing Negative and Mirror Images

You can print pages as a negative image (reverses the light and dark areas in your printed image) or mirror image (flips images horizontally on pages when printed).
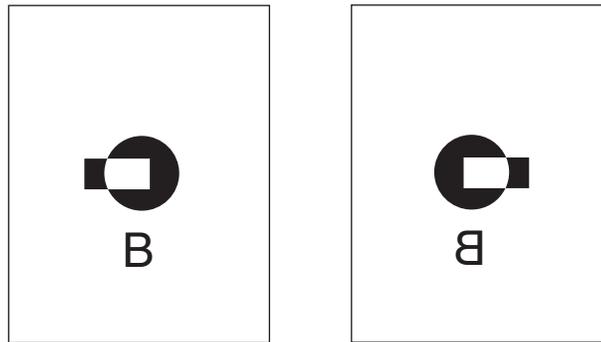
Mirror Image

Negative Image

To select negative or mirror images in a supported driver:

■ **Windows 98, Windows Me PostScript driver:**

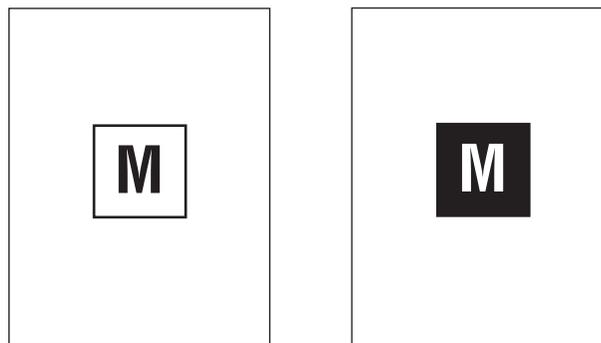On the **Setup** tab, click **More Layout Options**, then select **Print as a Negative Image** or **Print as a Mirror Image**.

■ **Windows 2000, Windows XP, Windows Server 2003 PostScript driver:**

From the **Layout** tab, click **Advanced**. Under **Document Options** and **PostScript Options,** select **Yes** for **Mirrored Output**.

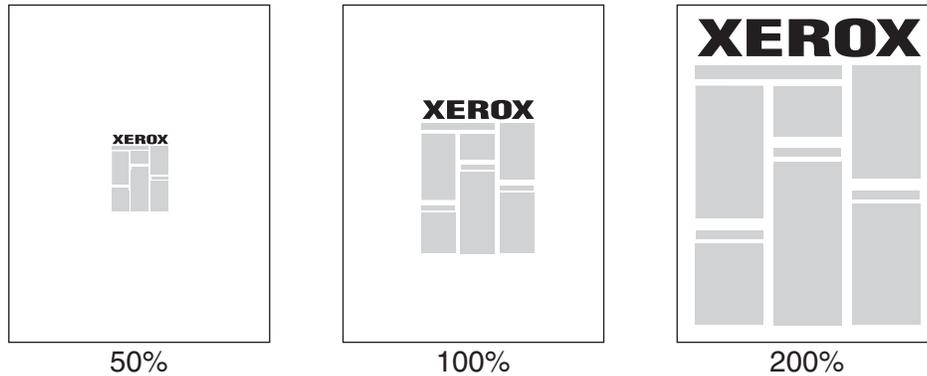■ **Windows NT driver:**

On the **Advanced** tab, under **Document Options** and **PostScript Options**, select **Yes** for **Mirrored Output** or **Negative Output**.

■ **Mac OS 9 driver:**

From the **File** menu, select **Page Setup**, choose **PostScript Options** from the drop-down list, then select **Invert Image** (to print a negative image) or **Flip Horizontal** (to print a mirror image).

Scaling

You can reduce or enlarge your page images when they are printed by selecting a scaling value between 25 and 400 percent. The default is 100 percent.

50%   100%   200%

To select scaling in a supported driver:

■ **Windows 98, Windows Me PostScript driver:**

On the **Setup** tab, click **More Layout Options**, then specify the percentage to scale in the **Percentage** box.

■ **Windows 2000, Windows XP, Windows Server 2003 PostScript driver:**

From the **Layout** tab, click **Advanced**, select **Graphic**, then select the desired percentage for **Scaling**.

■ **Windows NT driver:**

On the **Advanced** tab, select **Graphic**, then select the desired percentage for **Scaling**.

■ **Mac OS 9, Mac OS X (version 10.1 and higher) driver:**

From the **File** menu, select **Page Setup,** then specify the percentage in the box after **Scaling**.

Printing Watermarks

A watermark is additional text that can be printed across one or more pages. For example, terms like Draft, Confidential, Date, Version that you might stamp on a page before distribution, can be inserted with a watermark.

In some Windows drivers you can:

■ Create a watermark

■ Edit an existing watermark's text, color, location, and angle

■ Place a watermark on either the first page or every page in a document

■ Print the watermark in the background

■ Print the text of the watermark as an outline (instead of filled text)

Note

Not all applications support watermark printing.

To select, create, and edit watermarks using a supported Windows driver:

■ **Windows 98, Windows Me PostScript driver:**

On the **Setup** tab, click **More Layout Options**, then click **Watermark** to display the **Watermarks** dialog box.

■ **Windows 2000, Windows XP, Windows Server 2003 PostScript driver:**

From the **Layout** tab, click the **Advanced** button. In the box under **Document Options** and **Printer Features**, select **Watermarks**, then select **Modify** for the desired watermark.

Image Smoothing

Image smoothing blends adjacent colors in low-resolution images for smoother color transitions. For example, use image smoothing to improve the appearance of a 72 dpi image downloaded from the World Wide Web. Image smoothing is not recommended for images with resolutions of 300 dpi or higher.

Note

Print processing is slower when this option is selected.

To select image smoothing in a supported driver:

- **Windows 98, Windows Me PostScript driver:**

  On the **Setup** tab, click **More Layout Options**, then click the **Image Smoothing** checkbox.

- **Windows 2000, Windows XP, Windows Server 2003 Post Script driver:**

  From the **Layout** tab, click the **Advanced** button. In the box under **Document Options** and **Printer Features**, select **On** for **Image Smoothing**.

- **Windows NT driver:**

  On the **Advanced** tab under **Printer Features**, select **On** for **Image Smoothing**.

- **Mac OS 9 driver:**

  In the **Print** dialog box, click **General**, select **Advanced Options** from the drop-down list, then select **On** for **Image Smoothing.**

- **Mac OS X (version 10.1 and higher) driver:**

  In the **Print** dialog box, select the **Printer Features** drop-down list, then select **On** for **Image Smoothing**.

Printing Cover Pages

A cover page is the first or last page of a document. The printer enables you to choose a different paper source for the cover page than for the body of a document. For instance, use your company letterhead for the first page of a document, or use card stock for the first and last pages of a report.

- Use any paper tray as the source for printing cover pages.
- Verify that the cover page is the same size as the paper used for the rest of your document. If you specify a different size in the driver than the tray you select as a cover pages source, your cover(s) print on the same paper as the rest of your document.

You have several choices for cover pages:

- **None** - Prints the first and last pages of your document using the same paper as the rest of your document.
- **First Page Only** - Prints only the first page of your document from one tray, then prints the remainder of your document from another tray.
- **First and Last Pages** - Prints only the first and last pages of your document from one tray, then prints the remainder of your document from another tray.

If you select **First Page Only** or **First and Last,** and you select 2-sided printing, the first two pages of the job print on the front cover.

If you select **First and Last Pages** and you select 2-sided printing, both the first two pages and last two pages (for a document with an even number of pages) of the job print on the front and back cover pages.

Note

> For a blank back cover, you must include a blank last page in your document. For the back of your front cover to remain blank, you must include a blank page following the front cover page.

To select cover pages in a supported driver:

- **Windows 98, Windows Me PostScript driver:**

  On the **Output Options** tab**,** select **First Page Only** or **First and Last Pages**, then select the tray to use for the covers from the **Source** drop-down list.

- **Windows 2000, Windows XP, Windows Server 2003, Windows NT PostScript driver:**

  On the **Paper/Quality** tab under **Cover Pages**, select **First Page Only** or **First and Last Page**, then select the tray to use for the covers from the **Source** drop-down list**.**

- **Mac OS 9 driver:**

  In the **Print** dialog box, click **General**, select **First Page,** then select the tray from the drop-down list.

- **Mac OS X (version 10.1 and higher) driver:**
  - **a.** In the **Print** dialog box, select **Paper Feed**, then select **First Page From**.
  - **b.** In the **Printer Features** dialog box, select **Last Page Paper Source**.

Printing Secure, Proof, and Saved Jobs

Note

> These features are available if your printer has an internal hard drive. These jobs are stored on the hard drive and remain in the printer even when it is turned off.

Choose one of the following special job types:

- **Secure Print:** Prints confidential documents. Your four-digit numeric password-protected jobs are stored on the printer's hard drive. The jobs print only after the four-digit number is entered at the printer's front panel. The jobs are automatically deleted from the hard drive after printing.
- **Proof Print:** Prints only one copy of a multiple copy job in order to proof the copy. To print the remaining copies, select the job name at the printer's front panel. The job is automatically deleted from the hard drive after printing. If you do not want to print the remaining copies, delete the job at the front panel.
- **Saved Print:** Stores the job on the printer's hard drive so you can print it on demand. The job is not deleted after printing. This is useful for any document you frequently print, such as tax forms, personnel forms, or requisition forms.

Sending Secure, Proof, and Saved Print Jobs to the Printer

Use a supported driver to specify a job as a secure print, proof print, or saved print job:

- **Windows 98, Windows Me PostScript driver:**

  On the **Output Options** tab, choose the job type under **Walk-Up Features**. For a secure print job, enter a 4-digit password to assign to this job. For a proof print or saved print job, enter the name you want to give this job.

- **Windows 2000, Windows XP, Windows Server 2003, Windows NT PostScript driver:**

  On the **Output Options** tab, choose the job type under **Walk-Up Features**. For a secure print job, enter a 4-digit password to assign to this job. For a proof print or saved print job, enter the name you want to give this job.

- **Mac OS 9 driver:**

  In the **Print** dialog box, click on **General**, select **Job Type** from the pull-down menu, then choose the job type. For a secure print job, enter a 4-digit password to assign to this job. For a proof print or saved print job, enter the name you want to give this job in the **Job Name** field.

- **Mac OS X (version 10.1 and higher) driver:**

  In the **Print** dialog box, select the **Printer Features** pull-down menu, select the **Job Type** tab, and then select **Secure Print**, **Proof Print**, or **Saved Print**. For a secure print job, select the numbers for the password from the drop-down lists. For a proof print or saved print job, a portion of the document name is used as the job name.

Printing Secure Print Jobs

To print a secure print job, specify the four-digit password at the printer's front panel:

1. Select **Walk-Up Printing**, then press the **OK** button.
2. Select **Secure Print Jobs**, then press the **OK** button.
3. Scroll to your User Name, then press the **OK** button.
4. Scroll to the number for the first digit of the numeric password, then press the **OK** button to accept that digit.
5. Repeat Step 4 for the second, third, and fourth digits.

   Note

   If you entered less than four digits in the driver's **Password** field, enter zeros before your password so that there are four digits entered in the front panel. For example, if **222** is entered in the driver, enter **0222** at the front panel. Use the **Back** button to return to a previous digit.

6. If more than one secure print job is entered with a password, select the desired job to print or select **All of Them**, then press the **OK** button.
7. Select **Print and Delete**, then press the **OK** button to print.

Printing Proof and Saved Print Jobs

To print a saved print job or the remaining copies of a proof print job, select the job name at the printer's front panel:

1. Select **Walk-Up Printing**, then press the **OK** button.
2. Select **Proof Print Jobs** or **Saved Print Jobs**, then press the **OK** button.
3. Scroll to the job name, then press the **OK** button.
4. Select **Print and Delete** (for proof prints) or **Print and Save** (for saved prints), then press the **OK** button.
5. Scroll to the desired number of copies, then press the **OK** button to print the job.

Deleting Secure, Proof, and Saved Print Jobs

There is a limit per type to the number of jobs that can be stored on the hard drive. When the printer reaches the limit, it deletes the oldest job per type automatically before adding a new one. To save space:

■ Periodically delete saved print jobs that are no longer needed
■ Delete secure print and proof print jobs that you don't want to print

To delete a secure print job without printing it, specify the 4-digit password at the printer's front panel:

1. Select **Walk-Up Printing**, then press the **OK** button.
2. Select **Secure Print Jobs**, then press the **OK** button.
3. Scroll to your User Name, then press the **OK** button.
4. Scroll to the number for the first digit of the numeric password, then press the **OK** button to accept that digit.
5. Repeat Step 4 for the second, third, and fourth digits.
6. If more than one secure print job is entered with a password, select the desired job to print or select **All of Them**, then press the **OK** button.
7. Select **Print and Delete**, then press the **OK** button to print.
8. When prompted at the front panel whether you want to delete the job(s), select **Yes**, then press the **OK** button.

To delete a saved print job or the remaining copies of a proof print job, select the job name at the printer's front panel:

1. Select **Walk-Up Printing**, then press the **OK** button.
2. Select **Proof Print Jobs** or **Saved Print Jobs**, then press the **OK** button.
3. Scroll to the job name, then press the **OK** button.
4. Select **Delete**, then press the **OK** button.
5. When prompted at the front panel whether you want to delete the job(s), select **Yes**, then press the **OK** button.

Supplies and Recycling

This topic includes:

- "Supplies" on page 2-52
- "Supply Life Indicators" on page 2-52
- "Recycling" on page 2-53

Supplies

The printer's front panel displays status messages and warnings as the supply nears its replacement time. When the front panel prompts you that a supply is low or needs to be replaced, verify that you have replacements on hand. It is important to order these supplies when the messages first appear to avoid interruptions to your printing.

To order supplies and accessories, contact your local reseller or visit the Xerox web site at www.xerox.com/officeprinting/6250supplies.

Inside the printer, all handles and points of user interaction for replacing supplies are **gold**.

The following customer usage patterns may significantly reduce toner cartridge life:

- Higher than 5 percent coverage
- Using paper that is larger than letter-size
- Printing jobs of less than 4 pages
- Using Photo print-quality mode
- Using TekColor Correction

Caution

If you attempt to use a non-Xerox toner cartridge, it may not fit properly in the printer. If the cartridge does not fit properly, the printer will not function.

Supply Life Indicators

The Phaser 6250 Color Laser Printer has supply life indicators for consumables and routine maintenance items.

Consumables

Consumables are:

- High-Capacity Toner Cartridges (Cyan, Magenta, Yellow, and Black)
- Standard-Capacity Toner Cartridges (Cyan, Magenta, Yellow, and Black)

Routine Maintenance Items

Routine maintenance items are printer parts or assemblies that have a limited life requiring periodic replacement. Replacements may be in the form of parts or kits. Routine Maintenance Items are typically customer replaceable.

Routine maintenance items for the Phaser 6250 include:

■ Imaging Unit
■ Fuser
■ Transfer Roller

Access the "Supplies Usage Page" from the printer's front panel, from CentreWare IS, or print the "Usage Profile" from the printer's front panel.

Caution

If you attempt to use a non-Xerox toner cartridge, it may not fit properly in the printer. If the cartridge does not fit properly, the printer will not function.

Recycling

For information on Xerox supplies recycling programs, go to www.xerox.com/officeprinting/recycle.

3 Connections & Networks

This section includes:

Connections and IP Address

This topic includes:

■ "Printer Setup" on page 3-2
■ "Ethernet Connection (Recommended)" on page 3-2
■ "USB Connection" on page 3-4
■ "Parallel Connection" on page 3-5

Printer Setup

> **i** The information in this section is also stored as an information page in your printer. Use the front panel to quickly print this information in the future.

Ethernet Connection (Recommended)

An Ethernet connection is recommended because it is faster than either a USB or Parallel cable connection. It also allows the user direct access to CentreWare IS.

Network Connection

Use an Ethernet connection with two twisted-pair (Category 5/RJ-45) cables and an Ethernet hub. Connect the computer to the hub with one cable, then connect the printer to the hub with the second cable. Connect to any port on the hub except the uplink port. TCP/IP and EtherTalk are the most common protocols used with Ethernet cables. To print using TCP/IP, each computer and printer requires a unique IP address. Go to "Setting an IP Address" in this section.

Standalone (Cable or DSL) Network Connection

For information about setting up a cable or DSL connection for your printer, go to www.xerox.com/officeprinting/infoSMART to view Document # 33188, entitled *Basic TCP/ IP Tutorial and Home Networking Guidelines*.

Setting an IP Address

If your computer is on a large network, contact your network administrator for the appropriate TCP/IP addresses and additional configuration information.

If you are creating your own small Local Area Network or connecting the printer directly to your computer over Ethernet, follow the procedure for automatically setting the printer's IP address.

The printer and computer(s) must have unique IP addresses. It is important that the addresses are similar, but not the same. For example, your printer can have the address 192.168.1.2 while your computer has the address 192.168.1.3. Another device can have the address 192.168.1.4.

For more information, go to www.xerox.com/officeprinting/infoSMART to view Document # 18545.

Automatically Setting the Printer's IP Address

Use the Phaser installer on the *Printer Installer and Utilities CD-ROM* to detect and/or assign an IP address to your printer. For further instructions, insert the *Printer Installer and Utilities CD-ROM* into your computer's CD-ROM, launch the installer, then follow the prompts for installation.

Note

For the automatic installer to function, the printer must be connected to a TCP/IP network.

Manually Setting the Printer's IP Address

1. At the printer's front panel, select **Printer Setup,** then press the **OK** button.
2. Select **Connection Setup**, then press the **OK** button.
3. Select **Network Setup**, then press the **OK** button.
4. Select **TCP/IP Setup**, then press the **OK** button.
5. Select **DHCP/BootP**, then press the **OK** button to select **Off**.
6. Select **TCP/IP Address**, then press the **OK** button.
7. Enter your printer's IP address, then press the **OK** button.

Setting a Static IP Address on Your Computer

Windows 2000, Windows XP, and Windows Server 2003

1. On the desktop, right-click **My Network Places**, then click **Properties**.
2. Right-click **Local Area Connection**, then click **Properties**.
3. If you do not have TCP/IP available, click **Add**, then click **Protocol**.
4. Click **Add**, then click **Internet Protocol TCP/IP**.
5. Select the **General** tab, select the TCP/IP protocol for your network card, then click **Properties**.
6. Select the **General** tab, then click **Use the following IP address**.
7. Enter an IP address and Subnet mask, then click **OK**.
8. If prompted, click **OK** to restart Windows .

Windows NT 4.x

1. On the desktop, right-click **Network Neighborhood**, then click **Properties**.
2. On the **Protocols** tab, click **TCP/IP Protocol**, then click **Properties**.
3. Select the **IP Address** tab, then click **Specify an IP Address**.
4. Enter an IP Address and Subnet mask, then click **OK**.
5. If prompted, click **OK** to restart Windows.

Windows 98 and Windows Me

1. On the desktop, right-click **Network Neighborhood** or **My Network Places**, then click **Properties**.
2. On the **Configuration** tab, select the TCP/IP protocol for your network card, then click **Properties**.
3. Select the **IP Address** tab, then click **Specify an IP address**.
4. Enter an IP address and Subnet mask, then click **OK**.
5. If prompted, click **OK** to restart Windows.

Macintosh 9.x TCP/IP

1. Click the **Apple** icon, then select the **Controls Panel** folder.
2. Double-click **TCP/IP**, then verify that Ethernet is the connection type.
3. Enter an IP address and Subnet mask, then click **OK**.
4. If prompted, click **OK** to restart.

Macintosh OS X (10.1 and higher) TCP/IP

1. Click the **Apple** icon, click **System Preferences**, then click the **Network** icon.
2. In the **Network** control panel, click the **TCP/IP** tab.
3. Under **Location**, click **Automatic**.
4. Under **Show**, click **Built-in Ethernet**.
5. Under **Configure**, click **Manually**.
6. Enter the IP Address, Subnet Mask, and Router (Gateway).
7. Click **Apply Now** to activate the changes.

USB Connection

The USB connection requires a standard USB cable. This cable is not included with your printer and must be purchased separately. Verify that you are using the correct USB cable for your connection.

Windows 98 or Later and Windows 2000 or Later

Connect the USB cable to the PC and follow the **Add New Hardware Wizard** to create the USB port. Follow the **Add Printer Wizard** to install the printer driver from the *Printer Installer and Utilities CD-ROM*. For more information go to www.xerox.com/officeprinting/infoSMART to view these documents:

■ Windows 98: Document # 18215
■ Windows 2000: Document # 22701
■ Windows XP: Document # 53543

Macintosh (OS 9.0.4 and Higher)

A USB-connected printer does not display in the Chooser. Install the printer driver from the *Printer Installer and Utilities CD-ROM*. Use the **Desktop Printer Utility** (version 1.2 or later) to create a desktop USB printer. The utility is located in the **PhaserTools** folder which is created during the software installation. For more information go to www.xerox.com/officeprinting/infoSMART to view Document # 33225.

Macintosh (OS X and Higher)

1. Install the printer driver from the *Printer Installer and Utilities CD-ROM*.
2. Open the **Print Center Utility**. (On the Macintosh hard drive, open the **Applications** folder, then open the **Utilities** folder.)
3. Click the **Add** button.
4. Select **USB** from the top drop-down list.
5. Select the printer in the printers window.
6. Select **Xerox** from the list of manufacturers in the drop-down list.
7. Select the appropriate printer model from the list of available printers.
8. Click the **Add** button.

The printer is displayed as an available printer in the **Print Center**. For more information, go to www.xerox.com/officeprinting/infoSMART to view Document # 49355.

Parallel Connection

Use an IEEE 1284 parallel printer cable–maximum length 10 feet (3 meters)–to connect your computer's and printer's parallel ports. Install the printer driver from the *Printer Installer and Utilities CD-ROM*. Select the appropriate LPT parallel port.

Connection Setup

Installing the Printer Driver

To download the latest printer drivers, go to www.xerox.com/officeprinting/support.

Windows 98 or Later and Windows 2000 or Later

Install the printer driver from the *Printer Installer and Utilities CD-ROM*. The *Printer Installer and Utilities CD-ROM* automatically installs and identifies the printer during the installation process. For more information go to www.xerox.com/officeprinting/infoSMART to view these documents:

- Windows 98 and Windows Me: Document # 9840
- Windows 2000, Windows XP, and Windows Server 2003: Document # 36894
- Windows NT: Document # 11338

Macintosh EtherTalk

If you use EtherTalk, Macintosh computers do not require IP addresses.

1. Open the **AppleTalk** Control Panel.
2. Verify that the **Ethernet** port is the selected network port.
3. Double-click the installer on the *Printer Installer and Utilities CD-ROM* to install the printer driver.
4. Open the **Chooser**, then click the **LaserWriter** driver.
5. From the right column of the **Chooser**, select the printer, then click **Create** to create the desktop printer.

For more information go to www.xerox.com/officeprinting/infoSMART to view Documents # 2562 and # 1886.

Macintosh OS X (10.2 and Higher)

1. Install the printer driver from the *Printer Installer and Utilities CD-ROM*.
2. Open the **Print Center Utility**. (On the Macintosh hard drive, open the **Applications** folder, then open the **Utilities** folder.)
3. Confirm that the drop-down list is set to **Rendezvous**.
4. Select the printer in the printers window.
5. Click the **Add** button.

Macintosh OS X (10.1 and Higher)

Macintosh OS X supports TCP/IP as the default protocol, as well as AppleTalk. For a TCP/IP installation, follow the instructions provided to set an IP address in the printer.

1. Open the **Print Center Utility**. (On the Macintosh hard drive, open the **Applications** folder, then open the **Utilities** folder.)
2. Click the **Add Printer** button.
3. Choose the connection type you desire.

   - For **LPR**, enter the IP address of the printer that you set previously. The **Queue Name** field remains blank if the **Use default queue on server** box is checked (by default). Other options are **PS** or **AUTO**. Select the appropriate PPD for the printer model under the **Printer Model** drop-down list.
   - For **AppleTalk**, select the appropriate printer from the list that is displayed. The configuration process continues until configuration is complete. If AppleTalk is not available in the Print Center drop-down list, the AppleTalk protocol is disabled and must be installed on the Macintosh. If the AppleTalk protocol is enabled, but is not available in the drop-down window, it is recommended that you contact your system administrator or Apple Computer Incorporated for assistance.

For more information go to www.xerox.com/officeprinting/infoSMART to view Documents # 48704, # 50080, and # 49814.

Dynamic Methods of Setting the Printer's IP Address

An Internet Protocol (IP) address is required to identify your printer on a network. Set the printer's IP address by any of the following methods:

- DHCP
- CentreWare Internet Services
- Auto IP (Host Names)

Information Required for IP Addressing

Information	Comments
Internet (IP) address for the printer	Format is *xxx.xxx.xxx.xxx*, where *xxx* represents a decimal number from 0–255.
Network Mask	If you are unsure, leave this blank; the printer chooses an appropriate mask.
Default Router/Gateway address	If you want to communicate with the printer from anywhere other than the local network segment, you need the router address.

Enabling DHCP on the Printer

Verify that the printer's DHCP protocol is enabled by setting the front panel or using CentreWare IS.

Note

To determine your printer's IP address, select **Printer Identification** at the front panel. For information about the front panel, go to Reference/Features on the *User Documentation CD-ROM*.

Changing or Modifying the IP Address Using CentreWare Internet Services (IS)

CentreWare IS is a printer administration and support tool using web technology. With CentreWare IS software, you can access printer status and manage your printer over a TCP/IP network using a web browser. For more information, go to Explore/CentreWare IS on the *User Documentation CD-ROM*.

After setting the printer's IP address, you can modify the TCP/IP using CentreWare IS.

1. Launch your web browser.
2. Enter your printer's IP address in the browser's **Address** field (http://xxx.xxx.xxx.xxx).
3. Click **Properties** on the left side of the printer's main CentreWare IS page.
4. Open the **Protocols** folder, then click **TCP/IP**.
5. Enter or modify your printer's settings, then click **Save Changes** at the bottom of the page.

Using Host Names with the Domain Name Service (DNS)

The printer supports DNS through an embedded DNS resolver. The DNS resolver protocol communicates with one or more DNS servers to resolve the IP address for a given host name or the host name for a given IP address.

To use an IP host name for the printer, the system administrator must configure one or more DNS servers and a local DNS domain name space database.

To set up the printer for DNS, supply a maximum of two DNS name server IP addresses. There are two ways to set up the printer:

■ TCP/IP–Go to "DNS Setup Using CentreWare Internet Services."
■ DHCP–Go to "Dynamic Domain Name Service (DDNS)."

DNS Setup Using CentreWare Internet Services

Set up the printer for DNS using CentreWare IS after setting the printer's IP address.

1. Launch your web browser.
2. Enter your printer's IP address in the browser's **Address** field (http://xxx.xxx.xxx.xxx).
3. Click **Properties** on the right side of the printer's main CentreWare IS page.
4. Open the **Protocols** folder and click **TCP/IP**.
5. In the DNS Settings section, enter your domain server's IP address in these fields:
  ■ **Primary Name Server IP Address** (required)
  ■ **Second Name Server IP Address** (optional)
6. Click **Save Changes** when you are finished entering the settings.

Dynamic Domain Name Service (DDNS)

This printer supports Dynamic DNS through DHCP. You must have DHCP enabled on the printer for DDNS to function. Your network's DHCP server must also support Dynamic DNS updates through option 12 or option 81 support. See your network administrator for details.

1. Launch your web browser.
2. Enter your printer's IP address in the browser's **Address** field (http://xxx.xxx.xxx.xxx).
3. Click **Properties** on the right side of the printer's main CentreWare IS page.
4. Open the **Protocols** folder and click **TCP/IP**.
5. In the BOOT/DHCP Settings section, set the **BOOTP/DHCP** option to **ON**.
6. To enable DDNS, enter the following DDNS/WINS settings information:
  ■ **DDNS** - Set to **ON**.
  ■ **Release Host Name** - Set to **NO**.
  ■ **DDNS/WINS Name** - Use the default name provided by Xerox or enter another name.
  ■ **Primary WINS Server** (optional)
  ■ **Secondary WINS Server** (optional)
7. Click **Save Changes** when you are finished entering the settings.

Other Resources

For more information about network setup and troubleshooting, go to Reference/Connections & Networks on the *User Documentation CD-ROM*.

Printer Management Software

This topic includes:

■ "Using CentreWare Software" on page 3-9
■ "Using Printer Management Features" on page 3-11

Using CentreWare Software

CentreWare Internet Service (IS)

CentreWare IS is a printer administration and support tool using web technology. With CentreWare IS software, you can access printer status and manage your printer over a TCP/IP network using a web browser.

CentreWare IS enables you to:

■ Receive printer status and manage printers independent of network servers and operating systems.
■ Define a link to your local web server's support page.
■ Access online manuals and technical support information by using built-in links to the Xerox web site.

CentreWare IS provides an easy-to-use, consistent interface that you can use for most configuration tasks.

CentreWare IS requires only a web browser and a TCP/IP connection between the printer and the network (in Windows, Macintosh, or UNIX environments). TCP/IP and HTTP must be enabled in the printer.

For complete information about CentreWare IS, go to www.xerox.com/officeprinting to view *CentreWare IS Online Help.*

CentreWare DP for NetWare

CentreWare DP is easy-to-use printer management software that runs on Windows 98 or later and Windows 2000 or later. Through point-and-click navigation you can install, connect, and configure the printer quickly and easily on a network . It provides network administrators with setup procedures and management of networked printers.

The following table lists CentreWare DP key features and benefits.

Feature	Benefit
Setup Wizard	Provides a step-by-step guide to install your printer on the network.
Advanced Setup	Provides a tool to service multiple file servers and queues.
Instant Status	Enables you to select a printer from the Printer List to monitor the printer at any given time.

Feature	Benefit
Remote Configuration and Management	Enables you to do most configuration and monitoring tasks from your workstation.
Printer Upgrades	Enables you to upgrade your printer from your workstation (if available for your printer model).

For more information go to www.xerox.com/officeprinting to view *CentreWare DP User Guide*.

CentreWare MC (Microsoft Management Console)

CentreWare MC allows IP discovery of printers equipped with an embedded web server. The embedded web server in Xerox printers is called CentreWare Internet Services.

For installing or managing multiple printers on a Windows NT 4.x (Service Pack 6 or higher), Windows 2000, or Windows XP network with the TCP/IP protocol enabled, use the Xerox CentreWare MC snap-in to Microsoft Management Console. For more information go to www.xerox.com/officeprinting to view the *CentreWare MC User Guide*.

CentreWare Web

CentreWare Web is a multi-vendor printer management, installation, and troubleshooting application that can remotely manage, install, and troubleshoot printers on your network using a web browser. Printers are found through network or print server discovery and managed over TCP/IP networks using RFC-1759 SNMP (Simple Network Management Protocol).

Some of the features provided by CentreWare Web:

- Remotely add ports, queues, and drivers to Windows 2000, XP, and NT4.x SP6 print servers.
- Install, troubleshoot, upgrade, and clone wizards to aid all users in performing administrative tasks.
- Install CentreWare Web on a server for availability to all clients on the network that have Internet access with a browser.
- Support multiple users and provide for different levels/privileges of user access, such as administrators or guests.
- Discover printers on local and remote subnets.
- Automatically discover printers as scheduled.
- Generate reports.
- Connect to printer web servers for additional printer-specific features, including help.

For more information go to www.xerox.com/officeprinting to view *CentreWare Web User Guide*.

Using Printer Management Features

Job Accounting

The printer stores information about print jobs in a log file. The log file is stored either in the printer's memory or on an optional hard disk if one is installed in the printer. If the log file is stored in the printer's memory, it is lost when the printer is reset. It is recommended that a hard disk be used for job accounting.

The log file lists job records. Each record contains fields such as user name, job name, pages printed, job times, and toner and ink used. Not all fields are supported by all printers. For information go to *CentreWare IS online help* or *CentreWare Web online help*.

The job accounting values reported vary depending on the protocol and print command used when each job was printed. For example, using NPRINT over NetWare provides the printer with the most information about the job being printed. When using Windows and NetWare, the job name is often LST: or LST:BANNER. Other jobs from other ports may provide less information about the job.

Job accounting is available through CentreWare IS and CentreWare Web.

Using CentreWare IS

1. Launch your web browser.
2. Enter your printer's IP address in the browser's **Address** field (http://xxx.xxx.xxx.xxx).
3. On the right side of the main CentreWare IS page, click **Jobs**.

The "Job Accounting Links" page provides links that enable you to browse, download, and clear job accounting records.

For complete information on CentreWare IS job accounting, including clearing job information, downloading job information to a file, and job accounting file formats, go to *CentreWare IS Online Help*.

MaiLinX Alerts

MaiLinX alerts allow the printer to automatically send email to the system administrator and others under the following conditions:

■ When printer errors, warnings, and alerts occur.
■ When the printer requires attention (for example, when service is required or supplies need to be replenished).
■ When a reply to a CentreWare IS Remote Internet Printing message is desired. For more information about CentreWare IS Remote Internet printing, go to *CentreWare IS Online Help*.

Three designated users can receive messages:

■ SysAdmin
■ Service
■ Key

Printer messages reporting errors, alerts, and warnings can be individually assigned to any of these users. You can customize the message text and the subject line in the Status Notification messages.

Status Notification is supplied by the printer's Simple Mail Transport Protocol (SMTP) client.

Setting Up CentreWare IS Status Notification

1. Launch your web browser.
2. Enter your printer's IP address in the browser's **Address** field (http://xxx.xxx.xxx.xxx).
3. Click **Properties** on the main CentreWare IS screen.
4. Click **Mail Alerts**. Follow the instructions on the page to set up **Status Notification**.
5. Click **Save Settings**.

For complete information about CentreWare IS Status Notification, go to *CentreWare IS Online Help*.

Usage Profile Reports

The printer generates reports accessed through CentreWare IS that detail printer usage. Usage profile reports track over 100 items, including:

■ Printer information, such as printer name, date installed, total pages printed, options installed, and network ID.

■ Supplies usage data, such as toner or ink. By tracking supplies usage, you can order supplies before they reach their end of life.

■ Media and tray information, such as how often prints are made on paper compared to transparencies, and how often each tray is used.

■ Job characteristics, such as size and timing of jobs.

Setting Up Usage Profile Reporting

1. Launch your web browser.
2. Enter your printer's IP address in the browser's **Address** field (http://xxx.xxx.xxx.xxx).
3. Click **Jobs**.
4. Click **Usage Profile** to view the **Usage Profile Reports** page.
5. Click the **Usage Profile Properties** link. Follow the instructions on the page to set up reports.
6. Click **Save Changes**.

For complete information about Usage Profile reporting, including descriptions of each field in the report, go to *CentreWare IS Online Help*.

Using CentreWare IS

Note

To send usage profile reports using email, the MaiLinX must be properly set up using "MaiLinX Alerts" on page 3-11.

1. Enter your printer's IP address into the browser to connect to the printer using CentreWare IS.
2. Click **Jobs**.
3. Click **Usage Profile**.
4. Enter the desired email address in the **Send to Specific Address** field.
5. Click **Send Usage Profile Report**.

Xerox Usage Analysis Tool

The Xerox Usage Analysis Tool is a Windows client/server application that allows system administrators to automatically track Xerox printer usage and obtain job accounting records. The tool supports large networks with many users and printers.

Job accounting and printer usage data is stored in a database. The application can be run on multiple clients using a single server. The data can be exported to a spreadsheet for viewing, analysis, and billing.

Complete information about using the Xerox Usage Analysis Tool is provided by the application's online help system.

System Requirements

- IP network
- Xerox Phaser printers with Ethernet interface (optional hard disk recommended)
- A PC with at least 32 Mbyte of RAM. At least 1 Gbyte of hard disk space is recommended for the server
- Supported operating systems: Windows 98 or later and Windows 2000 or later
- Microsoft Excel 97 or Excel 2000 for export to spreadsheet (for graphing, billing, data analysis)

Windows 2000, Windows XP, and Windows Server 2003

This topic includes:

- "Preliminary Steps" on page 3-14
- "Quick CD-ROM Install Steps" on page 3-14
- "Other Methods of Installation" on page 3-15
- "Windows 2000, Windows XP, Windows Server 2003 Troubleshooting (TCP/IP)" on page 3-19

Preliminary Steps

These preliminary steps must be performed for all printers:

1. Verify that the printer is plugged in, turned on, and connected to an active network.
2. Verify that the printer is receiving network traffic by monitoring the LED's on the back of the printer or on the CentreDirect External Print Server. When the printer is connected to a functioning network and receiving traffic, its link LED is green, and its amber traffic LED is flashing rapidly.
3. Proceed to "Quick CD-ROM Install Steps" or "Other Methods of Installation" for the installation method desired.
4. Print the "Configuration Page" and keep it for reference.

Quick CD-ROM Install Steps

1. Insert the *Printer Installer and Utilities CD-ROM* into the computer's CD-ROM drive. If your PC is set to autorun, the installer launches automatically. If it does not launch, do the following:
   a. Click **Start**, then click **Run**.
   b. In the Run window, type: **<CD drive>:\INSTALL.EXE**.
2. Select your desired language from the list.
3. Select **Install Printer Driver**.
4. Click **I Agree** to accept the Xerox Software License Agreement.
5. In the Select Printer dialog box, the default **Use Walk-Up Technology (recommended for network printers)** is selected. Click **Next**.
6. Follow the **Use Walk-Up Technology** instructions displayed.
7. Click **Exit Program**.

Note

If the Walk-Up Technology dialog box remains onscreen after you have completed Steps 1–6, click the **Back** button, then click **Select from the following discovered printers**. Follow the onscreen prompts to complete the installation procedure.

Other Methods of Installation

Your printer can also be installed on a Windows 2000, Windows XP, or Windows Server 2003 network using one of these methods:

■ Microsoft TCP/IP Protocol
■ Xerox TCP/IP Port Monitor
■ Microsoft IPP Port

The following methods can also be used to monitor or configure your printer:

■ A web browser using CentreWare IS if your printer is connected to a Windows 2000, Windows XP, or Windows Server 2003 network with the TCP/IP protocol enabled.
■ The Xerox CentreWare MC snap-in to Microsoft Management Console for installing or managing multiple printers on a Windows 2000, Windows XP, or Windows Server 2003 network with TCP/IP protocol enabled. See the *CentreWare MC User Guide* or go to www.xerox.com/officeprinting.

Note

The CentreWare methods are not discussed in this section. For more information concerning CentreWare IS, CentreWare DP, or CentreWare MC, go to Reference/ Connections & Networks/Printer Management Software on the *User Documentation CD-ROM*.

Microsoft TCP/IP Protocol

Note

For Windows XP, select Classic Look or the Windows XP procedures will not match the steps below. To select Classic Look, click **Start**, then **Settings**, then **Taskbar and Start Menu**. Select the **Start Menu** tab, then select the **Classic Start menu**. Click **OK**.

1. Right-click the **My Network Places** icon on the desktop, then click **Properties**.
2. Right-click **Local Area Connection**, then click **Properties**.
3. Click the **General** tab to verify that **Internet Protocol (TCP/IP)** is installed.

■ If the Internet Protocol (TCP/IP) box is checked, the software is installed.
■ If the Internet Protocol (TCP/IP) box is not checked, the software is not installed. Install TCP/IP software using the documentation provided by Microsoft, then return to this document.

Adding the Printer

1. On the desktop click **Start**, then click **Settings**.
2. Select one of these options:
   - For Windows 2000 click **Printers**, double-click **Add Printer** to launch the **Add Printer Wizard**, then click **Next**.
   - For Windows XP and Windows Server 2003, click **Printers and Faxes**. Double-click **Add Printer** to launch the **Add Printer Wizard**, then click **Next**.
3. Click the **Local Printer** button, then click **Next**.
4. Click the **Create a New Port** button.
5. Select **Standard TCP/IP Port** from the New Port Type pull-down menu, then click **Next**.
6. Click **Next**.
7. Click in the **Printer Name or IP Address** edit box and enter the IP Address of the printer you want to use. Click **Next**.
8. Select one of these options:
   - Click **Finish** in the **Confirmation** window if the data is correct.
   - Click the **Back** button to correct the data if incorrect, then click **Finish** in the **Confirmation** window when the data is correct.

Configuring the Printer

1. Insert the *Printer Installer and Utilities CD-ROM* into the computer's CD-ROM drive and click **Have Disk**.
2. Click the **Browse** button, then select the directory which contains the Windows 2000 or Windows XP drivers.
3. Select the ***.INF** file, then click **Open**.
4. Verify that the path and filename are correct, then click **OK**.
5. Enter a name for the printer and select whether you want that printer to be the default. Click **Next**.
6. Select one of these options:
   - If the printer is not shared, click **Next**.
   - If the printer is shared, enter a **Share Name**, check the **Share** box, then click **Next**.

Printing a Test Page

You are prompted to print a test page.

1. Select one of these options:
   - Click **Yes** to print a test page, then click **Next**.
   - Click **No** if you do not want to print a test page, then click **Next**.
2. Select one of these options in the **Completing the Add Printer Wizard** screen:
   - Click the **Finish** button if the data presented is correct. Proceed to step 3.
   - Click the **Back** button to correct the data if incorrect, then click **Finish** in the **Add Printer Wizard** when the data is correct. Proceed to Step 3.
3. If you printed a test page, you are prompted to confirm that the test page printed:
   - Click **Yes** if the test page printed successfully.
   - Click **No** if the test page did not print or printed incorrectly. Proceed to step 4.
4. Note the print-quality of the print job. If print-quality problems exist, or if the job does not print, go to Reference/Troubleshooting on the *User Documentation CD-ROM* for more information.

Xerox TCP/IP Port Monitor

The Windows installer installs the Xerox TCP/IP Port Monitor for those installations using the PCL5c driver. The Xerox TCP/IP Port Monitor is used to add or remove TCP/IP ports.

Adding the TCP/IP Printer Port

1. Open **Printer Properties** for the printer you would like to attach to the new TCP/IP port.
2. Click **Start**, click **Settings**, then click **Printers**.
3. Right-click the printer to be attached to the new TCP/IP port, then select **Properties**.
4. Select the **Ports** tab, then click the **Add Port** button.
5. Select **Other**.
6. From the list of available printer-port monitors, select the **Xerox TCP/IP Port**, then click **OK**.

Configuring the TCP/IP Printer Port

The Xerox TCP/IP Printer Port Wizard guides you step-by-step through the following procedures:

- Choosing a name for the new port
- Identifying a printer by its DNS Name or IP Address
- (Alternatively) Identifying a printer using the automatic **Printer Discovery** feature

To install the printer port:

1. Click **Next** to proceed with the port installation. The wizard verifies the port name and printer address, then configures the remaining port settings for you. Any errors detected in printer identification are displayed in a dialog box requesting Additional Information.

2. In the **Add Xerox TCP/IP Port** dialog box;:
   - Enter a unique name for the port being added in the **Enter a Port Name** section.
   - Enter the printer's host name or IP Address in the **Enter a Printer Name or IP Address** section.

3. Click **Next**.

Note

To locate Xerox printers on your local area network, select **Auto Printer Discovery**, then click **Refresh**. The Xerox TCP/IP Port Monitor searches the network for Xerox printers and displays them in a list. Select the desired printer from the list, then click **OK**.

Completing the Printer Port TCP/IP Setup

After the port settings have been configured and verified, a **Completing** dialog box appears summarizing all of the settings. You can change or select printer port settings.

1. Select one of these options:
   - Click **Finish** to complete the printer port setup.
   - Click **Back** to change the settings. When you have completed the changes, click **Finish** to complete the printer-port setup.

2. Click **OK** to exit **Printer Properties**.

Microsoft IPP Port

Follow these steps to obtain the printer's URL and create an Internet Printing Protocol (IPP) printer.

Obtaining the Printer's URL (Network Path)

1. Launch your web browser.

2. Enter your printer's IP address in the browser's **Address** field (http://xxx.xxx.xxx.xxx).

3. Click **Properties** on the right side of the printer's main CentreWare IS page.

4. Select the **Protocols** folder, then click **IPP (Internet Printing Protocol)**. The Network Path field on the CentreWare IS IPP page displays the printer's URL.

Creating an IPP Printer

1. On the desktop, click **Start**, click **Settings**, then click **Printers**.

2. Double-click **Add Printer** to launch the Microsoft Add Printer Wizard.

3. Select **Network Printer**, then click **Next**.

4. When prompted for **Network Path** (Windows 9x) or **URL** (Windows NT, Windows 2000, Windows XP), enter the printer's URL in the following format:

http://*printer-ip-address:ipp*

5. Click **Next**.

6. Substitute your printer's IP address or DNS name for *printer-ip-address*. The printer's URL is displayed on the CentreWare IS IPP page in the Network Path field.

Windows 2000, Windows XP, Windows Server 2003 Troubleshooting (TCP/IP)

Note

For Windows XP, select Classic Look or the Windows XP procedures will not match the steps below. To select Classic Look, click **Start**, then **Settings**, then **Taskbar and Start Menu**. Select the **Start Menu** tab, then select **Classic Start menu**. Click **OK**.

This troubleshooting section assumes you have completed the following tasks:

■ Loaded a Phaser printer PCL or PostScript printer driver.

■ Printed and kept a current copy of the "Configuration Page".

Printing the Configuration Page

You can print the "Configuration Page" to help you solve printing problems and obtain the best results from your printer. Access this page from the printer's front panel.

To print the "Configuration Page":

1. At the printer's front panel, select **Printer Settings**, then press the **OK** button.

2. Select **Configuration Page**, then press the **OK** button to print.

Note

Print "Menu Map" to see other information pages available for printing.

Verifying Settings

1. Verify the settings on the "Configuration Page".
   - **IP Address Source** is set to: **DHCP**, **Front Panel**, **BOOTP**, or **Auto IP** (depending on your network configuration).
   - **Current IP Address** is set correctly. (Note this address if it is assigned by Auto IP, DHCP, or BOOTP.)
   - **Subnet Mask** is set correctly (if used).
   - **Default Gateway** is set correctly (if used).
   - **LPR** is enabled. Verify that the LPR and AppSocket settings are set as desired.
   - **Interpreters**: **Auto**, **PCL,** or **PostScript** (depending on your driver).
2. Verify that the client is logged into the network and printing to the correct print queue. The user should also have access to the Phaser printer queue.

Verifying Driver Installation

1. Right-click **My Network Places** on the desktop, then click **Properties**.
2. Right-click **Local Area Connection**, then click **Properties**.
3. Click the **General** tab. View the list of installed network protocols to verify that TCP/IP is installed. (For more information, contact your network administrator.)
4. Click **Install** to install any components not listed, then restart your computer.
5. Click **Start**, click **Settings**, then click **Printers**.
6. Right-click the printer icon, then click **Properties**.
7. Click the **Advanced** tab. Verify that the correct printer driver is installed.
8. Click the **Ports** tab. Verify that the IP Address in the **Print to the Following Ports** list is identical to the one on the "Configuration Page" .You may need to click the **Configure Port** button to see the IP address. If necessary, re-select the TCP/IP number used for the printer.

Printing a Test Page

1. Click the **General** tab.
2. Click **Print Test Page**. If the printer does not print, do one of the following:
   - Select **PhaserSMART Technical Support** on the **Troubleshooting** tab of your Windows printer driver to access PhaserSMART Technical Support.
   - Go to www.xerox.com/officeprinting/support.

Windows NT 4.x

This topic includes:

■ "Preliminary Steps" on page 3-21
■ "Quick CD-ROM Install Steps" on page 3-21
■ "Other Methods of Installation" on page 3-22
■ "Windows NT 4.x Troubleshooting (TCP/IP)" on page 3-25

Preliminary Steps

These preliminary steps must be performed for all printers:

1. Verify that the printer is plugged in, turned on, and connected to an active network.

2. Verify that the printer is receiving network traffic by monitoring the LED's on the back of the printer or on the CentreDirect External Print Server. When the printer is connected to a functioning network and receiving traffic, its link LED is green, and its amber traffic LED is flashing rapidly.

3. Proceed to "Quick CD-ROM Install Steps" or "Other Methods of Installation" for the installation method desired.

4. Print a "Configuration Page" and keep it for reference.

Quick CD-ROM Install Steps

1. Insert the *Printer Installer and Utilities CD-ROM* into the computer's CD-ROM drive. If your PC is set to autorun, the installer launches automatically. If it does not launch, do the following:

    a. Click **Start**, then click **Run**.

    b. In the Run window, type: **<CD drive>:\INSTALL.EXE**.

2. Select your desired language from the list.

3. Select **Install Printer Driver**.

4. Click **I Agree** to accept the Xerox Software License Agreement.

5. In the Select Printer dialog box, the default **Use Walk-Up Technology (recommended for network printers)** is selected. Click **Next**.

6. Follow the **Use Walk-Up Technology** instructions displayed.

7. Click **Exit Program**.

> **Note**
>
> If the Walk-Up Technology dialog box remains onscreen after you have completed Steps 1–6, click the **Back** button, then click **Select from the following discovered printers**. Follow the onscreen prompts to complete the installation procedure.

Other Methods of Installation

Install your printer on a Windows NT network using one of these methods:

- Microsoft TCP/IP protocol
- Xerox TCP/IP Port Monitor

The following methods can also be used to monitor or configure your printer:

- A web browser using CentreWare IS if your printer is connected to a Windows NT network with TCP/IP protocol enabled.
- The Xerox CentreWare MC snap-in to Microsoft Management Console for installing or managing multiple printers on a Windows NT network with TCP/IP protocol enabled. See the *CentreWare MC User Guide* or go to www.xerox.com/officeprinting.

Note

> The CentreWare methods are not discussed in this section. For more information concerning CentreWare IS, or CentreWare MC, go to Reference/Connections & Networks/Printer Management Software on the *User Documentation CD-ROM*.

Quick Install Steps (Microsoft TCP/IP Protocol)

Note

> This procedure is only performed by the system administrator.

1. Right-click the **My Network Places** icon on the desktop, then click **Properties**.
2. Click the **Protocols** tab to verify that the TCP/IP protocol has been installed.
3. Select the **Services** tab and verify that Microsoft TCP/IP Printing software is installed. If it is not installed, install it, and then return to this document.

Adding the Printer

1. Open the **Control Panel**, then double-click the **Printers** icon.
2. Double-click **Add Printer** to launch the **Add Printer Wizard**, then click **Next**.
3. Verify that **My Computer** is selected, then click **Next**.
4. Click **Add Port**, then select the LPR Port from the list displayed.
5. Click **New Port**.
6. Enter the IP address for your printer and a printer name of 31 characters or less (no spaces).
7. Select **OK**.
8. Verify that the new IP address you entered is listed correctly. If the check box next to the IP address is not checked, select the check box, then click **Next**.

Configuring the Printer

1. Insert the *Printer Installer and Utilities CD-ROM* into the computer's CD-ROM drive, then click **Have Disk**.
2. Click the **Browse** button and select the directory containing the Windows NT drivers.

3. Select the ***.INF** file, then click **Open**. Verify that the path and filename are correct, then click **OK**.

4. Select the correct printer, then click **OK**.

5. Enter a name for the printer, select whether you want that printer to be the default, then click **OK**.

6. Select one of these options:

   ■ If the printer is not shared, click **Next**.

   ■ If the printer is shared, enter a Share Name, check the **Share** box, then click **Next**.

Printing a Test Page

You are prompted to print a test page.

1. Select one of these options:

   ■ Click **Yes** to print a test page, then click **Next**.

   ■ Click **No** if you do not want to print a test page, then click **Next**.

2. Select one of these options:

   ■ Click the **Finish** button if the data presented is correct. Proceed to step 3.

   ■ Click the **Back** button to correct the data if incorrect, then click **Finish** when the data is correct. Proceed to Step 3.

3. If you printed a test page, you are prompted to confirm that the test page printed:

   ■ Click **Yes** if the test page printed successfully.

   ■ Click **No** if the test page did not print or printed incorrectly. Proceed to step 4.

4. Note the print-quality of the print job. If print-quality problems exist or if the job does not print, go to Reference/Troubleshooting on the *User Documentation CD-ROM*.

Xerox TCP/IP Port Monitor

The Windows installer installs the Xerox TCP/IP Port Monitor for those installations using the PCL5c driver. The Xerox TCP/IP Port Monitor is used to add or remove TCP/IP ports.

Adding the TCP/IP Printer Port

1. Open **Printer Properties** for the printer you would like to attach to the new TCP/IP port.
2. Click **Start**, click **Settings**, then click **Printers**.
3. Right-click the printer to be attached to the new TCP/IP port, then select **Properties**.
4. Select the **Ports** tab, then click the **Add Port** button.
5. Select **Other**.
6. From the list of available printer-port monitors, select the **Xerox TCP/IP Port**, then click **OK**.

Configuring the TCP/IP Printer Port

The Xerox TCP/IP Printer Port Wizard guides you step-by-step through the following procedures:

■ Choosing a name for the new port
■ Identifying a printer by its DNS Name or IP Address
■ (Alternatively) Identifying a printer using the automatic **Printer Discovery** feature

To install the printer port:

1. Click **Next** to proceed with the port installation. The wizard verifies the port name and printer address, then configures the remaining port settings for you. Any errors detected in printer identification are displayed in a dialog box requesting Additional Information.
2. In the **Add Xerox TCP/IP Port** dialog box;:
   ■ Enter a unique name for the port being added in the **Enter a Port Name** section.
   ■ Enter the printer's host name or IP Address in the **Enter a Printer Name or IP Address** section.

Note

Click **Next**.To locate Xerox printers on your local area network, select **Auto Printer Discovery**, then click **Refresh**. The Xerox TCP/IP Port Monitor searches the network for Xerox printers and displays them in a list. Select the desired printer from the list, then click **OK**.

Completing the Printer Port TCP/IP Setup

1. Select one of these options:

   ■ Click **Finish** to complete the printer port setup.

   ■ Click **Back** to change the settings. When you have completed the changes, click **Finish** to complete the printer port setup.

2. Click **OK** to exit **Printer Properties**.

Windows NT 4.x Troubleshooting (TCP/IP)

This troubleshooting section assumes you have completed the following tasks:

■ Loaded a Phaser printer PCL or PostScript printer driver.

■ Printed and kept a current copy of the "Configuration Page". For information about printing a "Configuration Page", go to Reference/Features/Front Panel on the *User Documentation CD-ROM*.

Verifying Settings

1. Verify the settings in the "Configuration Page."

   ■ **IP Address Source** is set to: **DHCP**, **Front Panel**, **BOOTP**, or **Auto IP** (depending on your network configuration).

   ■ **Current IP Address** is set correctly. (Note this address if it is assigned by Auto IP, DHCP, or BOOTP.)

   ■ **Subnet Mask** is set correctly (if used).

   ■ **Default Gateway** is set correctly (if used).

   ■ **LPR** is enabled. Verify that the LPR and AppSocket settings are set as desired.

   ■ **Interpreters**: **Auto**, **PCL,** or **PostScript** (depending on your driver).

2. Verify that the client is logged into the network and printing to the correct print queue. The user should also have access to the Phaser print queue.

Verifying Installation

1. Right-click the **My Network Places** icon on the desktop and select **Properties**.

2. Click the **Protocols** tab to verify that the TCP/IP protocol has been installed.

3. Click **Add** to install any components not listed, then restart your computer.

4. Click **Start**, click **Settings**, then click **Control Panel.**

5. Double-click **Services**.

6. Locate **TCP/IP Print Server**, then verify these column entries:
   - **Status** column: **Started**
   - **Startup** column: **Automatic**

7. Click **Start**, click **Settings**, then click **Printers**.

8. Right-click the printer icon, then select **Properties**. Verify that you have installed the correct driver for your printer.

9. Select the **Ports** tab. Verify that the IP Address in the **Print to the Following Port** list is identical to the one on the "Configuration Page." You may need to click the **Configure Port** button to view the IP address. If necessary, re-select the TCP/IP number used for your printer.

Printing a Test Page

1. Click the **General** tab.

2. Click **Print Test Page**. If the printer still does not print, do one of the following:
   - Access **PhaserSMART** Technical Support on the **Troubleshooting** tab of your printer driver.
   - Go to www.xerox.com/officeprinting/support.

Windows 98 and Windows Me

This topic includes:

- "Preliminary Steps" on page 3-27
- "Quick CD-ROM Install Steps" on page 3-28
- "Other Methods of Installation" on page 3-28
- "Windows 98 and Windows Me Troubleshooting" on page 3-30

Preliminary Steps

1. Verify that the printer is plugged in, turned on, and connected to an active network.

2. Verify that the printer is receiving network traffic by monitoring the LED's on the back of the printer or on the CentreDirect External Print Server. When the printer is connected to a functioning network and receiving traffic, its link LED is green, and its amber traffic LED is flashing rapidly.

3. Print a "Configuration Page" and verify that the desired protocol is enabled, then follow one of these options:

   - Proceed to Step 4 if you do not have a TCP/IP address configured for your printer.
   - Proceed to Step 5 if you do have a TCP/IP address configured for your printer.

4. Do one of the following if you *do not* have a TCP/IP address configured for your system:

   - Contact your system administrator to ensure that configuration is made according to your company guidelines.
   - Configure your PC with a unique address such as 192.1.1.1.

5. If you have a TCP/IP address, then follow these steps to verify the IP address for your PC:

   a. Click **Start**, then click **Run**.

   b. Enter **winipcfg** in the **Open** field. (If the file is not found, TCP/IP may not be installed.)

   c. Click **OK**.

   d. Select your network adapter from the list. The IP address is listed in the IP Address field.

   Note

   For more information about installing and configuring TCP/IP in Windows environments, go to your Microsoft Windows documentation.

6. Proceed to "Quick CD-ROM Install Steps" or "Other Methods of Installation" for the installation method desired.

Quick CD-ROM Install Steps

1. Insert the *Printer Installer and Utilities CD-ROM* into the computer's CD-ROM drive. If your PC is set to autorun, the installer launches automatically. If it does not launch, do the following:

   a. Click **Start**, then click **Run**.

   b. In the Run window, type: **<CD drive>:\INSTALL.EXE**.

2. Select your desired language from the list.

3. Select **Install Printer Driver**.

4. Click **I Agree** to accept the Xerox Software License Agreement.

5. In the Select Printer dialog box, the default **Use Walk-Up Technology (recommended for network printers)** is selected. Click **Next**.

6. Follow the **Use Walk-Up Technology** instructions displayed.

7. Click **Exit Program**.

   Note

   If the Walk-Up Technology dialog box remains onscreen after you have completed Steps 1–6, click the **Back** button, then click **Select from the following discovered printers**. Follow the onscreen prompts to complete the installation procedure.

Other Methods of Installation

Install your printer on a Windows 98 or Windows Me network using one of these methods:

- Xerox TCP/IP Port Monitor
- PhaserPort Software

Xerox TCP/IP Port Monitor

The Windows installer installs the Xerox TCP/IP Port Monitor. The Xerox TCP/IP Port Monitor can be used to add or remove TCP/IP ports.

Adding a Port

1. Open **Printer Properties** for the printer you would like to attach to the new TCP/IP port.

2. Click **Start**, click **Settings**, then click **Printers**.

3. Right-click the printer to be attached to the new TCP/IP port, then click **Properties**.

4. Click the **Details** tab, then click the **Add Port** button.

5. Select **Other**.

6. From the list of available printer-port monitors, select the **Xerox TCP/IP Port**, then click **OK**.

Configuring a Port

The Xerox TCP/IP Printer Port Wizard guides you step-by-step through the following procedures:

■ Choosing a name for the new port

■ Identifying a printer by its DNS Name or IP Address

■ (Alternatively) Identifying a printer using the automatic **Printer Discovery** feature

1. Click **Next** to proceed with the port installation. The wizard verifies the port name and printer address, then automatically configures the remaining port settings. Any errors detected in printer identification are displayed in a dialog box requesting Additional Information.

2. In the **Add Xerox TCP/IP Port** window:

■ Enter a unique name for the port being added in the **Enter a Port Name** section.

■ Enter the printer's host name or IP Address in the **Enter a Printer Name or IP Address** section.

3. Click **Next**.

Note

To locate Xerox printers on your local area network, select **Auto Printer Discovery**, then click **Refresh**. The Xerox TCP/IP Port Monitor searches the network for Xerox printers and displays them in a list. Select your desired printer from the list, then click **OK**.

Completing the Printer Port TCP/IP

After the port settings have been configured and verified, a **Completing** dialog box appears summarizing all the settings. You can change or select printer port settings.

1. Select one of these options:

■ Click **Finish** to complete the printer port setup.

■ Click **Back** to change the settings. When you have completed the changes, click **Finish** to complete the printer-port setup.

2. Click **OK** to exit **Printer Properties**.

PhaserPort Software

Note

PhaserPort is the preferred utility for PostScript installations. For PCL installations, go to "Xerox TCP/IP Port Monitor" in this section.

The Windows installer installs PhaserPort for Windows (for those installations using PostScript drivers). PhaserPort for Windows is a Xerox print monitor for printing over Windows 98 or Windows Me TCP/IP peer-to-peer networks.

Changing a PhaserPort IP Address

If the printer's IP address is changed, you must change the IP address for the printer's corresponding port:

1. Click **Start**, click **Settings**, then click **Printers**.
2. Right-click the printer to be changed to a new PhaserPort IP address, then click **Properties**.
3. Select the **Details** tab.
4. Verify that PhaserPort appears in the **Print to the Following Port** field.
5. Click **Port Settings**. The **Configure PhaserPort** dialog box appears.
6. Do one of the following:
   a. If you know the correct IP address or DNS name for the printer, enter that information.
   b. If you don't know the printer's IP address or DNS name, then click **Browse** to display a list of printers on the network.
   c. Double-click the appropriate printer. PhaserPort automatically enters the information into the **Configure PhaserPort** dialog box.

   Note

   To search the network again, click **Refresh.** To expand the search to other subnets, click **Advanced**.

7. Click **OK**.
8. Click **OK** again to apply the changes.

Windows 98 and Windows Me Troubleshooting

This troubleshooting section assumes you have completed the following tasks:

- Verified that the printer is plugged in, turned on, and connected to an active network.
- Installed a Phaser printer PCL or PostScript print driver.
- Verified that the printer is receiving network traffic by monitoring the LED's on the back of the printer or on the CentreDirect External Print Server. When the printer is connected to a functioning network and receiving traffic, its link LED is green, and its amber traffic LED is flashing rapidly.
- Printed and kept a current copy of the "Configuration Page". For information about using the front panel or printing a "Configuration Page", go to Reference/Features/Front Panel on the *User Documentation CD-ROM*.

Verifying Settings

1. Right-click **Network Neighborhood** on the desktop, then click **Properties**.

2. Click the **Configuration** tab. A list of installed network components appears for the following items:
   - Client for Microsoft networks
   - Xerox TCP/IP Port Monitor

3. If you are running CentreWare DP verify the following :

- Novell Networks: You are required to load Novell IntraNetWare Client or Microsoft Client for IPX networks.

- TCP/IP Networks: No additional software is required, but your printer must have a valid TCP/IP address assigned.

4. If any of the above protocols or services are not installed, install the necessary components and restart the system. When the system is restarted, return to this document.

5. Click **Start**, click **Settings**, then click **Printers**. The **Printers** window appears.

6. Right-click the printer icon, then click **Properties**.

7. Select the **Details** tab.

8. Verify the following:

a. The printer driver name in the **Print Using the Following Driver** list. If necessary, re-select or install a new printer driver.

b. The **Port** name in the **Print to the Following Port** list. If necessary, re-select the correct name.

9. Send a print job to the printer. If the printer does not print, access PhaserSMART Technical Support from the Troubleshooting tab of the Windows printer driver or go to www.xerox.com/officeprinting/support.

Macintosh

This topic includes:

■ "Requirements" on page 3-32
■ "Enabling and Using EtherTalk" on page 3-32
■ "Enabling and Using TCP/IP" on page 3-33
■ "Quick Install Steps for Mac OS 9.x" on page 3-33
■ "Quick Install Steps for Mac OS X, Version 10.1" on page 3-35
■ "Quick Install Steps for Mac OS X, Version 10.2 (Rendezvous)" on page 3-36
■ "Macintosh Troubleshooting (Mac OS 9.x, Mac OS X, Versions 10.1 and 10.2)" on page 3-37

Requirements

■ A workstation with the appropriate printer driver installed.
■ A working knowledge of the operating system (System 9.0+ or higher) being used on the workstation.
■ Proper cabling to connect the printer to the network.

Enabling and Using EtherTalk

If you use EtherTalk, Macintosh computers do not require IP addresses.

1. Open the **AppleTalk Control Panel**. Verify that the Ethernet port is the selected network port.
2. Insert the *Printer Installer and Utilities CD-ROM* into the computer's CD-ROM drive. If your PC is set to autorun, the installer launches automatically.
3. Double-click the installer on the *Printer Installer and Utilities CD-ROM* to install the printer driver.

Mac OS 9.x

1. Open the **Chooser**, then click the **LaserWriter printer** driver.
2. Select the printer.
3. Click **Create** to create the desktop printer.

Mac OS X, Versions 10.1 and 10.2

1. Open **Print Center**.
2. Click **Add Printer**, then select the printer.
3. Click **Add**.

Note

For more information, go to www.xerox.com/officeprinting/infoSMART to view Document # 2562.

Enabling and Using TCP/IP

This section provides installation and troubleshooting steps for Macintosh (Mac OS 9 through Mac OS X, version 10.2).

Quick Install Steps for Mac OS 9.x

Setting Up the Macintosh Ethernet Port for TCP/IP

Perform the following procedure to set up your Macintosh TCP/IP:

1. Click **Control Panels** from the Apple menu.
2. Click **TCP/IP**.
3. Click **Ethernet** from the **Connect via** menu.
4. Specify one of the following methods for the Macintosh to obtain its IP address:
   - Manually
   - DHCP

   #### Note
   > If you select to set up the printer manually, specify the IP address in the dialog box. You must also enter information for the Subnet Mask, Router Address, and Name Server Address, if needed

5. Close the dialog box.

Creating an LPR Printer with LaserWriter 8.5.1 or Higher

1. Open the **Desktop Printer Utility**. (This utility, or an alias to it, can be found in the PhaserTools folder.)
2. Click **Printer (LPR)** in **Create Desktop**, then click **OK**.
3. Click **Change** in the P**ostScript Printer Description (PPD)** file.
4. Select the appropriate PPD from the list, then click **Select**. If your printer's PPD is not listed, install it from the *Printer Installer and Utilities CD-ROM*.
5. Click **Change** in **LPR Printer Selection**.
6. Enter information in the following fields:
   - **Printer Address**: Enter the printer's IP address or domain name.
   - **Queue**: Enter **PS** (use upper-case), then click **OK**.
7. Close the dialog box. When prompted, click **Save**.
8. Enter a name for the desktop printer in **Save Desktop Printer As** field, then click **Save**.
9. Two methods are available for printing through LPR:
   - Use the new Desktop Printer (LPR)
   - Use the LaserWriter 8.5.1 printer driver (any printer can be selected). Click **File**, then click **Print** to select the appropriate LPR printer in the **Printer** drop-down list.

Creating an AppSocket Printer with LaserWriter 8.6

Xerox provides Macintosh AppSocket printing with PhaserPort for Mac OS on the printer's *Printer Installer and Utilities CD-ROM*. PhaserPort for Mac OS provides a bi-directional, high-speed communications channel using the new plug-in communication architecture of Apple LaserWriter version 8.6.

AppSocket provides feedback about print job status which is not available through LPR.

PhaserPort for Mac OS System Requirements

Note

PhaserPort is not supported under Mac OS X.

System requirements include:

■ A Phaser printer installed on a TCP/IP network
■ PowerPC-based Macintosh
■ Apple's LaserWriter version 8.6 or later, with Desktop Printing enabled
■ Open Transport version 1.1 or later networking. TCP/IP networking provided by MacTCP software is not supported. The Macintosh must be properly configured to communicate with the printer.

Files and Installation

PhaserPort for Mac OS consists of two files:

■ **PhaserPortLib**: A special type of shared library recognized by the LaserWriter printer driver version 8.6.
■ **PhaserPort Printer Tool**: A Macintosh PowerPC application for creating desktop printers that communicate with PhaserPortLib.

To install PhaserPort for Mac OS:

1. Copy **PhaserPortLib** into **System Folder/Extensions/Printing Plug-Ins**.
2. Copy the **PhaserPort Printer Tool** to any folder on the Macintosh.

Creating a Desktop Printer with PhaserPort for Mac OS

1. Launch the **PhaserPort Printer Tool**.
2. Enter the printer's IP address or DNS name in the **Printer Internet Address** field.
3. Enter a name for the desktop printer in the **Desktop Printer Name** field.
4. Click **Verify** to contact the printer over the TCP/IP network, then verify its network configuration.
5. Click **Create** to create the desktop printer.
6. Click **Quit** to exit the **PhaserPort Printer Tool**.
7. In the **Finder**, click the newly created desktop printer icon.
8. Click **Change Setup** in the **Finder's Printing** menu.

9. Select the **PostScript Printer Description** file and provide configuration information. You can also select the **Auto Setup** button, then Macintosh automatically attempts to determine the correct settings for the Phaser printer.

Note

Certain utilities, such as Adobe Font Downloader, are not compatible with PhaserPort for Mac OS software because they attempt to directly communicate with the printer using the AppleTalk protocol. If you use Mac OS software, create an AppleTalk desktop printer, then delete this printer after running and exiting the non-compatible software.

Quick Install Steps for Mac OS X, Version 10.1

Requirements

Verify that you are running Mac OS X, version 10.1. The previous versions of Mac OS X do not fully support PostScript printing and printer features.

Setting up the Macintosh Ethernet Port for TCP/IP or AppleTalk

Perform the following procedure to set up your Macintosh for TCP/IP:

1. Select **Network** from the System Preferences application, then select **TCP/IP**.

2. Select **Built-In Ethernet** from the **Active Ports** menu.

3. Specify how you will obtain the IP address from the **TCP/IP** tab:

- **Manually**: Specify the IP address, **Subnet Mask**, **Router Address,** and **Name Server Address** in the dialog box.

- **DHCP**: If you wish to use AppleTalk, select the **AppleTalk** tab and verify that the **Make AppleTalk Active** box is selected.

4. Close the dialog box.

Creating an LPR Printer with Mac OS X, Version 10.1

1. Open the **Print Center Utility**. (This utility is found in a directory called **Utilities** in the **Applications** directory.)

2. Select **Add Printer**, then select **LPR Printers Using IP** from the pull-down menu.

3. Enter the printer's IP address or host name in the **LPR Printer's Address** field.

4. Enter **PS** (use upper-case) in the **Queue** field, then click **OK**.

5. Select the appropriate **PPD** from the list in the **Printer Model** drop-down list. If your printer's PPD is not listed, install it from the *Printer Installer and Utilities CD-ROM*.

6. Click **Add** to complete the configuration.

Creating an AppleTalk Printer with Mac OS X, Version 10.1

1. Verify that **AppleTalk** is enabled in **System Preferences**.

2. Open the **Print Center Utility**. (This utility is found in a directory called **Utilities** in the **Applications**.)

3. Select **Add Printer**, then select **AppleTalk** from the pull-down list.

4. Select the appropriate zone.

5. Select your printer from the list provided.

6. Select the appropriate **PPD** from the list in the **Printer Model** drop-down list. If your printer's PPD is not listed, install it from the *Printer Installer and Utilities CD-ROM*.

7. Click **Add** to complete the configuration.

Quick Install Steps for Mac OS X, Version 10.2 (Rendezvous)

Requirements

Verify that you are running Mac OS X, version 10.2 or later. Also ensure that you have run the installer from the *Printer Installer and Utilities CD-ROM* to install the proper printer drivers for your printer.

1. Open the **Print Center Utility** (located in **Utilities** in the **Applications** Directory).

2. Click **Add**.

   A list appears displaying your printer's name, followed by a series of numbers. For example, *Your Printer's Name xx:xx:xx*. Each numbered segment represents the last section of your printer's hardware address. Your PPD is automatically selected.

3. Click **Add** to complete the installation.

Setting Up the Macintosh Ethernet Port for TCP/IP or AppleTalk

Perform the following procedure to set up your Macintosh for TCP/IP:

1. Select **Network** from the System Preferences application, then select **TCP/IP**.

2. Select **Built-In Ethernet** from the **Active Ports** menu.

3. Specify how you will obtain the IP address from the TCP/IP tab:
   - **Manually**: Specify the IP address, **Subnet Mask**, **Router Address,** and **Name Server Address** in the dialog box.
   - **DHCP**: If you wish to use AppleTalk, select the **AppleTalk** tab and verify that the **Make AppleTalk Active** box is selected.

4. Close the dialog box.

Creating an LPR Printer with Mac OS X, Version 10.2

1. Open the **Print Center Utility** (located in **Utilities** in the **Applications** Directory).

2. Click **Add**.

3. Select **IP Printing** from the drop-down list.

4. Enter your printer's IP address.

5. Deselect **Use default queue on server box**.

6. Type **AUTO** in the **Queue Name** field.

7. Select the appropriate PPD from the list displayed in the **Printer Model** drop-down list.

8. Click **Add**.

Macintosh Troubleshooting (Mac OS 9.x, Mac OS X, Versions 10.1 and 10.2)

The following procedure eliminates cabling, communication, and connection problems. Once you complete these steps, print a test page from your software application. If the job prints, no further system troubleshooting is necessary. If there are print quality problems, go to Reference/Troubleshooting on the *User Documentation CD-ROM*.

Macintosh Troubleshooting Step-By-Step

Mac OS 9.x

Perform these steps *only* for Mac OS 9:

1. Open the **Chooser**, then click the **LaserWriter** driver.
2. Do one of the following:
   - If the printer name appears, your printer is communicating through the network. You do not need to perform any additional steps.
   - If your printer name does not appear, proceed to Step 3.
3. Verify that the printer is plugged in, turned on, and connected to an active network.
4. Verify the cable connection from the network to the printer.
5. Follow these steps:
   a. From the printer's front panel, verify that **EtherTalk** is enabled. If it is not, enable it in the front panel, then reset the printer.
   b. Print the "Configuration Page" and verify that **EtherTalk** is enabled.
   c. From the "Configuration Page", verify the **Zone**. If you have multiple zones on your network, verify that your printer appears in the desired zone.
6. If you are still unable to print, go to www.xerox.com/officeprinting/support or access PhaserSMART Technical Support through CentreWare Internet Services:
   a. Launch your web browser.
   b. Enter your printer's IP address in the browser's **Address** field (http://xxx.xxx.xxx.xxx).
   c. Click **Support**.
   d. Click the **Technical Support** link to access PhaserSMART.

Mac OS X, Versions10.1 and 10.2

Perform these steps *only* for Mac OS X, versions 10.1 and 10.2:

1. Open the **Network Utility**, then click the **Ping** tab.
2. Enter your printer's IP address.
3. Click **Ping**. If you do *not* get a response, confirm that your TCP/IP settings are correct for both your printer and computer.
4. For **AppleTalk**, follow the steps below. For **TCP/IP** proceed to Step 5.
   a. From the printer's front panel, verify that **EtherTalk** is enabled. If it is not, enable it in the front panel, then reset the printer.

b. Print the "Configuration Page" and verify that **EtherTalk** is enabled.

c. From the "Configuration Page", verify the **Zone**. If you have multiple zones on your network, verify that your printer appears in the desired zone.

5. If you are still unable to print, go to www.xerox.com/officeprinting/support or access PhaserSMART Technical Support through CentreWare Internet Services:

a. Launch your web browser.

b. Enter your printer's IP address in the browser's **Address** field (http://xxx.xxx.xxx.xxx).

c. Click **Support**.

d. Click the **Technical Support** link to access PhaserSMART.

Novell NetWare

This topic includes:

- "Configuration Software for NetWare Networks" on page 3-39
- "Quick Setup" on page 3-39
- "Advanced Setup" on page 3-39
- "NetWare 4.x, NetWare 5.x, and NetWare 6.x Print Server Setup" on page 3-40
- "Novell NetWare Troubleshooting" on page 3-40

Configuration Software for NetWare Networks

CentreWare DP configures the printer and the network when using NetWare 4.x and 5.x. CentreWare DP is a Novell Directory Service (NDS)/Bindery tool used only for Novell Distributed/Enterprise Print Services (NDPS).

Quick Setup

1. Print the "Configuration Page" and keep it for reference. For information about printing a "Configuration Page", go to Reference/Features/Front Panel on the *User Documentation CD-ROM*.
2. View the "Configuration Page", then verify the following:
   - **Novell enable** is **On**
   - **Frame Type** is correctly set.
3. Install CentreWare DP on a Windows-based workstation.
4. Run the CentreWare DP application, then click **Setup Wizard** on the **Printer** menu.
5. Select **NDS Install**, then follow the **Setup Wizard** steps.
6. Install printer drivers from the *Printer Installer and Utilities CD-ROM*.
7. Send a print job to the printer.
8. Verify the print-quality of the document. If print-quality problems exist, or if your document did not print, go to Reference/Troubleshooting on the *User Documentation CD-ROM* for more information.

Advanced Setup

The Advanced Setup option of CentreWare DP is a tool that allows you to control how your devices are configured in your Novell NetWare network environment. This tool is necessary for connecting your device to more than one file server or queue. For a connection to a single device and queue, use Setup Wizard.

NetWare 4.x, NetWare 5.x, and NetWare 6.x Print Server Setup

The Phaser printer defaults enable connection to Novell NetWare without adjustment. Review the "Configuration Page" and verify the following settings:

- **NetWare** is enabled
- **Frame Type** matches the frame type of the desired file server
- **PDL** is set to your desired PDL (**PostScript** or **PCL**) or to **Auto**. You may wish to set PDL to the desired type if only one PDL is used
- **Desired Novell mode** is set to either **NDS/BEM**, **NDS**, or **BEM (Bindery Emulation Mode)**
- **Print Server Name**

Setting Up NetWare with CentreWare DP

The CentreWare DP software provides the quickest and easiest method for installing a printer on a network. For more information go to www.xerox.com/officeprinting or go to the *CentreWare DP User Guide* or *CentreWare DP Online Help*.

Advanced Setup in Bindery Mode for Novell Directory Services (NDS)

The Advanced Setup option of CentreWare DP provides an additional tool to control how your printers are configured on a Novell NetWare network environment. This tool is necessary for connecting a printer to more than one file server or queue.

Novell Distributed/Enterprise Print Services (NDPS/NEPS)

To access Xerox printers in this environment, Xerox Gateway software must be installed on a system. The latest version of the Xerox Gateway Software is available on the Xerox web site at www.xerox.com/officeprinting. Instructions are available on the web site for installing a printer using NDPS. The web site also contains the *CentreWare for NDPS User Guide*.

Novell NetWare Troubleshooting

Troubleshooting for Windows-based computers includes both hardware and software solutions to eliminate cabling, communication, and connection problems associated with direct-connected ports. Complete one of the following procedures (based on the type of port being used), then print a test page from your software application. If the test page prints, no further system troubleshooting is necessary. For print-quality problems, go to Reference/Troubleshooting on the *User Documentation CD-ROM*.

Requirements

Verify that you:

■ Are operating a Windows-based system with CentreWare DP software installed and at least one printer driver installed

■ Are a NetWare Network Administrator, an administrative person with ADMIN/ SUPERVISOR, or ADMIN/SUPERVISOR EQUIVALENT within login rights to the NetWare Server(s) servicing the Phaser printer

■ Have a basic knowledge of NetWare

Novell NetWare Troubleshooting Quick Check

1. Verify that the printer is plugged in, turned on, and connected to an active network.

2. Verify that the printer is receiving network traffic by monitoring the LEDs on the back of the printer. When the printer is connected to a functioning network and receiving traffic, its link LED is green, and its amber traffic LED is flashing rapidly.

3. Verify that the client is logged into the network and printing to the correct print queue.

4. Verify that the user has access to the Phaser printer queue.

5. Verify that the Phaser printer NetWare print queue exists, is accepting jobs, and has a print server attached. If it does not, use the Setup Wizard in CentreWare DP to reconfigure the print queue.

6. Print the "Configuration Page". Verify that **Printer Server** is enabled. Set the frame type to the frame type your NetWare server is using.

   ### Note
   To determine your NetWare IPX frame type, type *config* at the Novell console screen. On networks using multiple IPX frame types, it is *critical* that the frame type be set correctly.

7. Verify that the **Primary Server** is set (NetWare 3.1x only). The primary server should have been set during initial queue setup and installed using CentreWare DP. If it is not set, use CentreWare DP to set it, then reset the printer.

   ### Note
   Setting the Primary Server is extremely important on large networks.

8. Go to www.xerox.com/officeprinting/support if the above steps fail to resolve the printing problem.

Novell NetWare Troubleshooting Step-By-Step

These procedures eliminate cabling, communication, and connection problems associated with network connected printers. The steps are divided into two groups:

■ Novell NetWare Hardware Step-by-Step
■ Novell NetWare Software Step-by-Step

Note

Novell NetWare Software Step-by-Step assumes that you are connected to a Novell NetWare network with a Windows OS installed on the client workstation. When both of these procedures are completed, print a test page from your software application. If the test page prints, no further system troubleshooting is necessary.

Novell NetWare Hardware Step-By-Step

Note the LED activity on the printer. The green link LED is ON whenever it is connected to an active network. The amber traffic LED is flickering when data is being received.

1. Verify the following:
   ■ The cable connections: Use a new cable or connectors if possible
   ■ Which port your printer is attached to. Connect a functioning network device to your printer to test the port.
2. Print the "Configuration Page" from your printer. For information about printing Configuration pages, go to Reference/Features/Front Panel.
3. Review the **Connectivity Settings** and verify these items:
   ■ **NetWare** is enabled
   ■ **Frame Type** matches the frame type of the desired file server

   ### Note

   To determine your NetWare IPX frame type, type *config* at the Novell console screen. On large networks, using multiple IPX frame types, it is *critical* that the frame type be set correctly.

   ■ **PDL** is set to your desired PDL (**PostScript** or **PCL**) or to **Auto**
   ■ **Primary Server** (for NetWare 3.x only) is set to the name of the server which serves the print queue you have assigned to the Phaser printer
   ■ **NDS Tree** (for NetWare 4.x NDS and later) is set for the correct NDS tree name
   ■ **NDS Context** (for NetWare 4.x NDS and later) is set for the correct NDS Context
   ■ **Print Server** (PServer) Name is set for the name selected for the Phaser printer to act as a print server
   ■ **Novell Mode** is correctly set
4. If changes are made, reset the printer. Once the printer has been reset, allow approximately two minutes for the printer to go through a self test, then log onto the network server.
5. Print out another copy of the "Configuration Page" to verify that the items you modified were set and kept.

Novell NetWare Software Step-By-Step

1. Verify that CentreWare DP and a Phaser printer driver have been loaded on the workstation.
2. Click **Start,** click **Settings,** then click **Printers** to verify that the printer is installed.

Launching CentreWare DP

1. Click **Start**, click **Programs,** then click **CentreWare DP**.
2. Select the desired printer. If a communications error message appears, your printer is not able to communicate with your workstation. Verify your printer's settings, then return to this document.
3. With the printer selected, click the **Printer** drop-down list, then select **Advanced Setup**.
4. Select one of the following connection methods:
   - **Novell Directory Services**
   - **Bindery**
5. Verify that the information displayed is also contained on the "Configuration Page". Verify these items:
   a. The queue name of the Phaser printer is set to **service**. If necessary, create a new queue to test the printer.
   b. The **Primary Server** lists the server name on the "Configuration Page"

Printing a Document

1. Click the **Tools** drop-down list.
2. Select the **Send File...** menu item, then select the appropriate directory and file for downloading. Verify that this is a valid file with no errors.
3. Click **OK**. The file is sent to the printer. If the document does not print, review the Novell Menu settings on the "Configuration Page".

Verifying the Network Settings

1. At the CentreWare DP main screen, click the **Printer** drop-down list, click **Properties,** then click **Connections**.
2. Click the **Network Card** tab. A new dialog box displays information about frame type and connectors.
3. Verify that the printer is enabled and the connector and frame type are correct. If changes are made, reset the printer from the front panel.
4. Re-print a test page. If the test print does not print, go to www.xerox.com/officeprinting/support.

UNIX (Linux)

This topic includes:

■ "Quick Install Steps" on page 3-44
■ "Additional Resources" on page 3-45

Your printer supports connection to a variety of UNIX platforms through the parallel and network interface. The workstations currently supported by CentreWare for UNIX/Linux to a network-connected printer are:

■ Sun Solaris
■ IMB AIX
■ Hewlett-Packard HP-UX
■ DEC UNIX
■ Linux (i386)
■ Linux (PPC)
■ SGI IRIX

The following procedures enable you to connect your printer using any of the supported versions of UNIX or Linux listed above.

Quick Install Steps

From the Printer

1. Verify that both TCP/IP protocol and the proper connector are enabled.
2. At the printer's front panel, select one of these IP address options:
   ■ Allow the printer to set up a DHCP address.
   ■ Enter the IP address manually.
3. Print the "Configuration Page" and keep it for reference. For information about printing Configuration pages, go to Reference/Features/Front Panel on the *User Documentation CD-ROM*.

From Your Computer

1. Access www.xerox.com/officeprinting/support, to select your printer type.
   ■ Operating system: **UNIX**
   ■ File type: **Drivers**
2. From the list of files provided, download the **PrinterPackageXPXX** and the file that matches your operating system
3. Print a test page.

4. Verify the print quality of the printed page.

Note

If print-quality problems exist, or if your job did not print, go to Reference/Troubleshooting on the *User Documentation CD-ROM*. You can also access PhaserSMART Technical Support through CentreWare Internet Services.

Launch your web browser.

a. Enter your printer's IP address in the browser's **Address** field (http://xxx.xxx.xxx.xxx).

b. Select **Support**.

c. Select the **Technical Support** link to access PhaserSMART.

Additional Resources

■ Information about creating a generic print queue in a specific workstation environment can be found in the Xerox infoSMART Knowledge Base at www.xerox.com/officeprinting/infoSMART.

■ Access the Xerox web site for the latest CentreWare for UNIX drivers at www.xerox.com/officeprinting/support.

a. Select **Download Software Drivers & Utilities**.

b. Select your printer, your platform (UNIX), and the printer driver files you want.

c. Click **Go to Downloads**.

d. Select the appropriate CentreWare printer driver for your platform.

e. Also download the **PrinterPackage XPXX**. It provides the printer-specific features of CentreWare for UNIX driver.

4 **Troubleshooting**

This section includes:

- "Automatic Diagnostic Tools" on page 4-2
- "Paper Jams" on page 4-3
- "Print-Quality Problems" on page 4-12
- "Maintenance" on page 4-20
- "Front Panel Messages" on page 4-23
- "Moving and Repacking the Printer" on page 4-26
- "Additional Resources" on page 4-28

Note

For network troubleshooting, go to Reference/Connections & Networks on the *User Documentation CD-ROM*.

Automatic Diagnostic Tools

This topic includes:

- "PhaserSMART" on page 4-2
- "Front Panel i Button" on page 4-2
- "PrintingScout" on page 4-2

Xerox provides several automatic diagnostic tools to help you produce and maintain print quality.

PhaserSMART

To access PhaserSMART Technical Support:

1. Go to www.phaserSMART.com.
2. Enter your printer's IP address in the browser address window.

If you have other questions or problems, click the appropriate PhaserSMART Technical Support topic to continue.

Front Panel i Button

The front panel information button, **i** button, on your printer provides a wealth of information about your printer and how it works. You can press the **i** button at any time to get additional information about the messages displayed on the front panel.

PrintingScout

PrintingScout, installed with your printer driver and available only with Windows, automatically checks the printer status and sends instant notification to your computer if the printer needs attention.

Whenever the printer is unable to print your document, the printer automatically sends an on-screen message that provides helpful text and illustrations showing how to fix the printer.

Paper Jams

This topic includes:

- "Misfeed at Tray 1 (MPT)" on page 4-3
- "Misfeed at Tray 2, 3, or 4" on page 4-5
- "Jam at the Fuser" on page 4-8
- "Jam at the Duplex Unit" on page 4-10

For safety information, go to Reference/Troubleshooting/User Safety on the *User Documentation CD-ROM*.

Misfeed at Tray 1 (MPT)

Follow these steps to clear the misfeed.

1. Remove the jammed paper from Tray 1 (MPT).

6250-013

2. Push up the latch on the front of the printer to open Front Door A.

6250-066
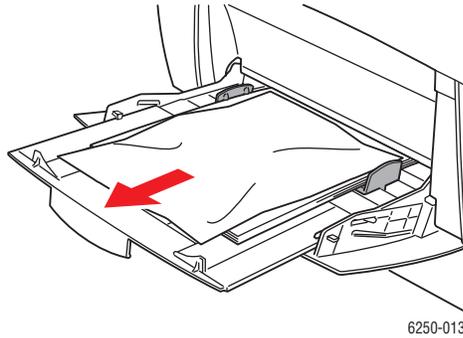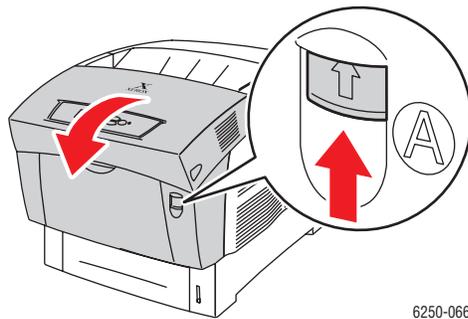
3. Remove jammed paper.

6200-016
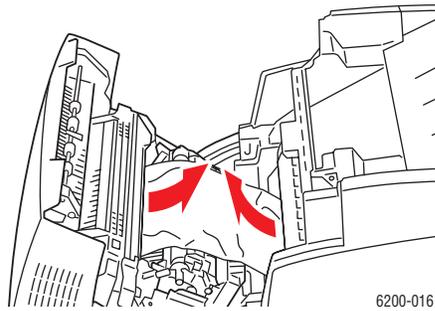
4. Close Front Door A.

6250-064
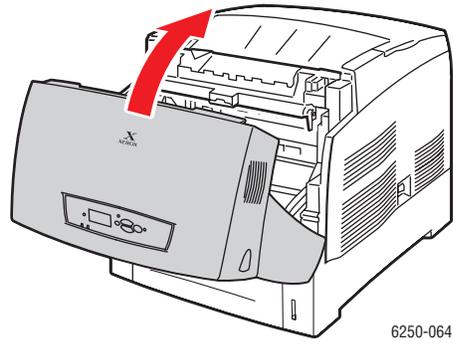
5. Load the paper in Tray 1 (MPT). Do not load the paper above the fill line. Confirm that the guides are set flush against the paper. Verify that the paper is clean and not stuck together.

6250-008

6250-009
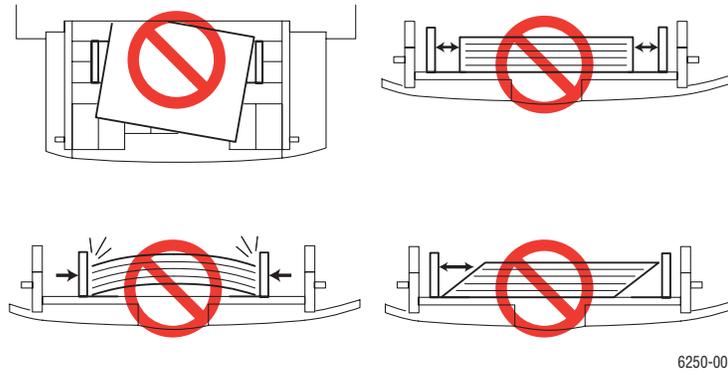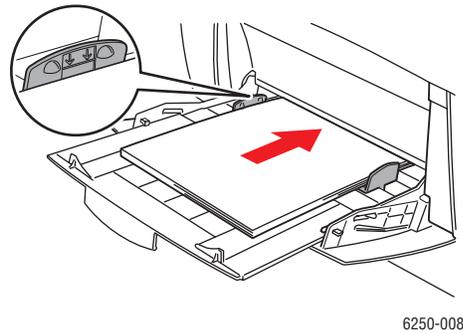
For additional information, go to www.phaserSMART.com.

Misfeed at Tray 2, 3, or 4

Follow these steps to clear the misfeed for the tray specified on the front panel.

1. Pull the tray specified on the front panel completely out of the printer.

6250-035
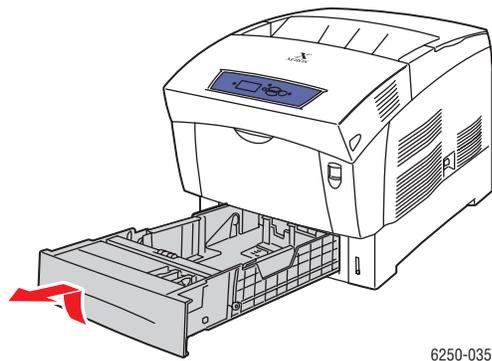
2. Remove any crumpled paper from the tray.
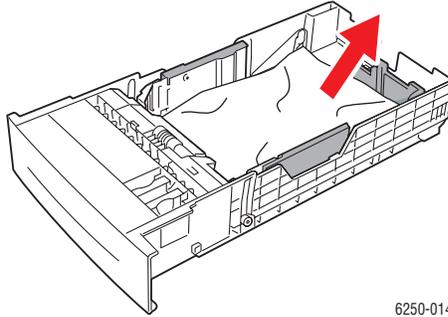
6250-014

3. Verify that the paper is loaded correctly in the tray and the guides are set flush against the paper.
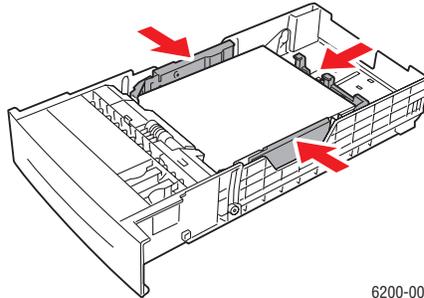
6200-004

4. Remove jammed paper from inside the printer tray slot. Verify that all scraps of paper are removed.
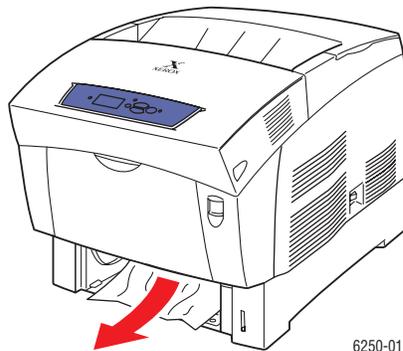
6250-015

5. Insert the tray into the tray slot and push it completely to the back of the printer.

6250-036

6. Push up the latch on the front of the printer to open Front Door A.

6250-066
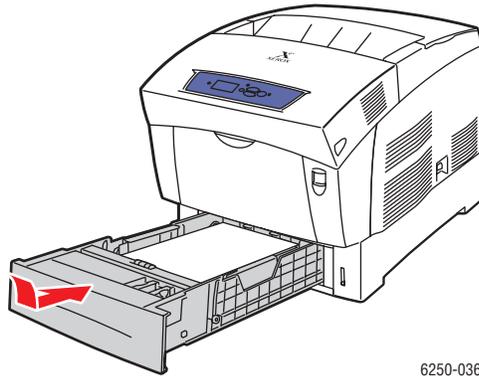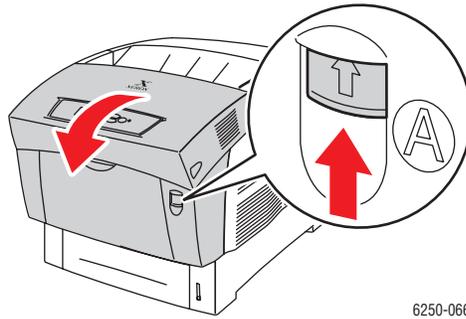
7. Remove jammed paper.

6200-016
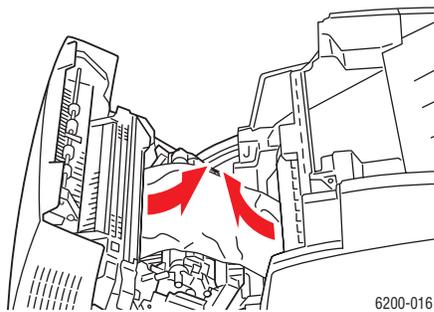
8. Close Front Door A.

6250-064
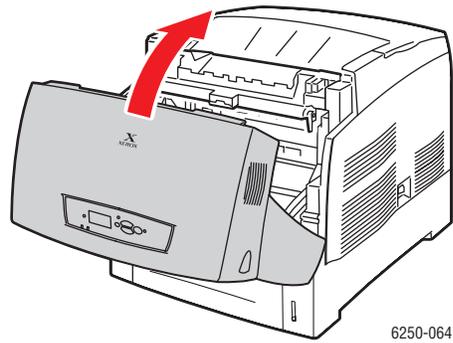
For additional information, go to www.phaserSMART.com.

Jam at the Fuser

Follow these steps to clear the jam.

1. Press the latch on the right side of the printer to open Front Door B.

6250-039
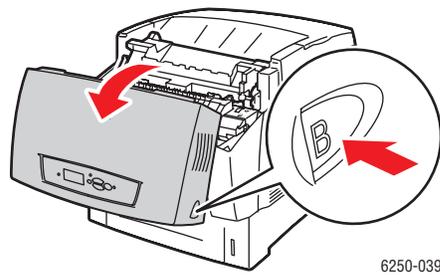
2. Pull up the two green levers at both ends of the fuser unit.

Warning

    The fuser is hot. To prevent burns, do not touch the black part of the fuser.

6250-061

3. Remove the jammed paper.

6250-063
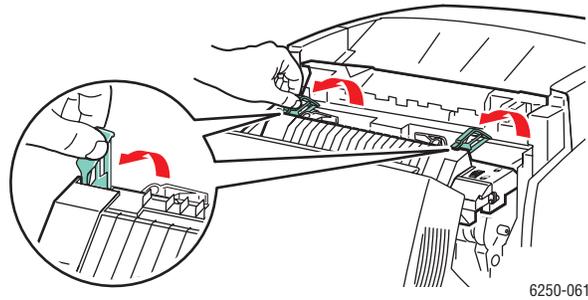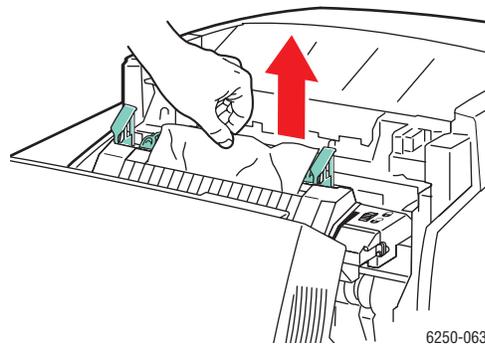
4. Completely push down the two green levers at both ends of the fuser.

6250-062

5. Close Front Door B.

6250-094
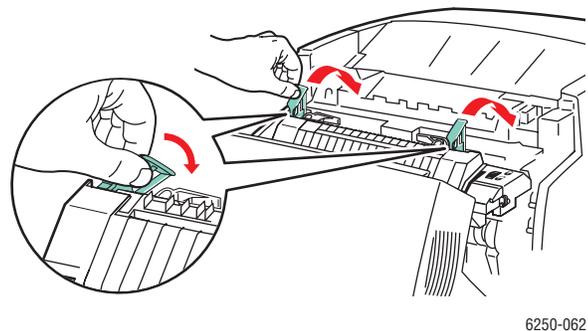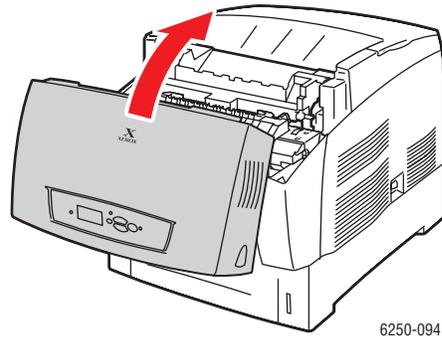
For additional information, go to www.phaserSMART.com.

Jam at the Duplex Unit

Follow these steps to clear the jam.

1. Press the latch on the right side of the printer to open Front Door B.

6250-065
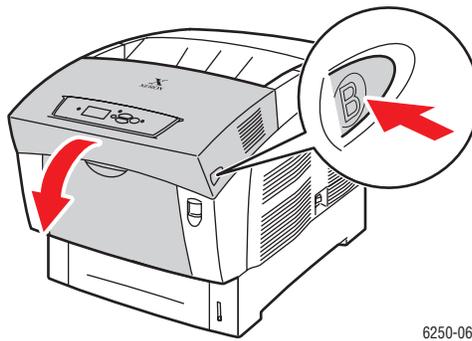
2. Remove the jammed paper.

6250-019

3. Close Front Door B.

6250-094
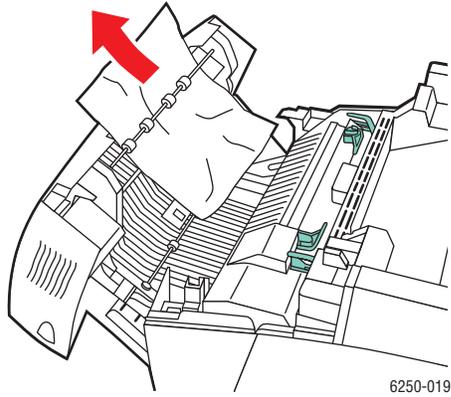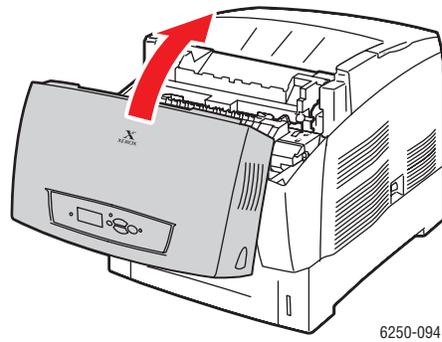
For additional information, go to www.phaserSMART.com.

Print-Quality Problems

This topic includes:

- "Paper Type" on page 4-12
- "Diagnosing Print-Quality Problems" on page 4-12
- "Color Settings" on page 4-16
- "Color Calibration" on page 4-16
- "Lighten/Darken Colors" on page 4-16
- "Balance Colors" on page 4-17
- "Calibrate Margins" on page 4-18

Your printer is designed to produce consistently high-quality color prints. If you observe print-quality problems, use the information on these pages to troubleshoot the problem.

For detailed, online support information, go to <u>www.xerox.com/officeprinting/infoSMART</u>. For suggestions on using color, go to <u>www.colorconnection.xerox.com</u>.

Paper Type

Caution

If you change the type of paper in a tray, you **must** change the paper type on the front panel to match the paper that you loaded. **If you fail to do this, print-quality problems can occur and the fuser can be damaged**.

For best results, **use only Xerox Phaser Color Printing Media**. They are guaranteed to produce excellent results on your Phaser printer—your Phaser printer and Phaser media are *Made for Each Other.*

Diagnosing Print-Quality Problems

Caution

Damage caused by using unsupported paper, transparencies, and other speciality media is not covered by the Xerox warranty, service agreement, or Total Satisfaction Guarantee.

Diagnosing Print-Quality Problems

Problem	Solution
Lines, Smudges, or Streaks Black and/or colored areas appear on the page in all colors and/or in non-printed areas.	1. Verify that the paper you are using is the correct type for the printer and is properly loaded. For information on supported paper types and weights, at the printer's front panel, select **Troubleshooting**, select **Paper Jams**, select **Paper Tips Page**, then press the **OK** button. 2. Verify that the paper loaded in the tray matches the paper type selected at the printer's front panel and in the printer driver. 3. At the printer's front panel, select **Troubleshooting**, select **Print Quality Problems**, select **Remove Print Smears**, then press the **OK** button. Three cleaning pages will run through the printer. Repeat this step until no toner appears on the pages. 4. If the problem continues, replace the imaging unit.
Repeating Defects Marks or voids are regularly repeated on the page.	1. At the printer's front panel, select **Troubleshooting**, select **Print Quality Problems**, select **Repeating Defects Page**, then press the **OK** button to print. A page prints with guides to identify the defect source. 2. Replace the supply identified on the Repeating Defects Page to correct the problem.
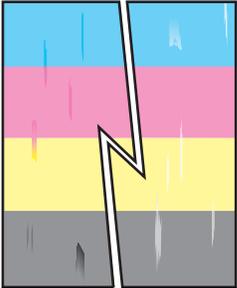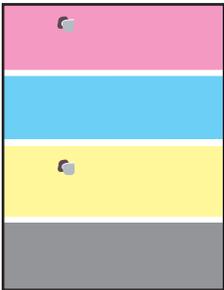
Colors Align Incorrectly
 	
Printed items appear to be blurry, hazy, or they have halos.
	1. Verify that the printer is on a solid, level, flat surface.
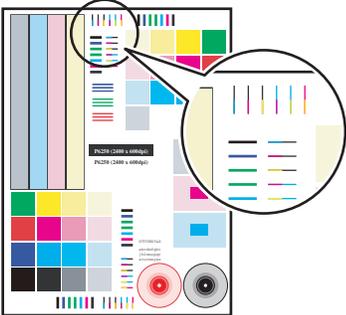	
	2. At the printer's front panel, select **Troubleshooting**, select **Print Quality Problems**, select **Color Registration**, then press the **OK** button.
	
	  a. Vertical printing issues are corrected automatically when the **Color Registration** page is printed.
	
	  b. Horizontal printing issues are corrected when you follow the directions provided on the **Color Registration** page.

Diagnosing Print-Quality Problems (Continued)

Problem	Solution
Fusing Is Incomplete Toner appears to be missing from the print, or is easy to rub off.	1. Verify that the paper you are using is the correct type for the printer and is properly loaded. For information on supported paper types and weights, a the printer's front panel, select **Troubleshooting**, select **Paper Jams**, select **Paper Tips Page**, then press the **OK** button to print. 2. Verify that the paper loaded in the tray matches the paper type selected at the printer's front panel and in the printer driver. 3. If the problem continues, open and close the selected paper tray or re-insert the paper loaded in Tray 1 (MPT). The printer's front panel prompts you to confirm or change the paper type. 4. Select **Change**, then press the **OK** button. Set the paper type to **the next heavier type** of paper, then press the **OK** button. **Note** Paper types from lightest to heaviest are: Plain Paper, Heavy Plain Paper, Thin Card Stock, Thick Card Stock.

All Colors Too Light or Too Dark
 	
Colors appear faded or too dark.
	1. Use a different Color Correction mode. See the "Color Settings" section on the following page for detailed descriptions of the available settings.
	
	   a. For the best results for most documents, set the **TekColor Correction** to **Automatic**.
	
	   b. If the print is too light, verify that the **Print-Quality Mode** in the printer driver is not set to **Draft Mode**.
	
	2. Adjust the light or darkness levels.
	
	   At the printer's front panel, select **Troubleshooting**, select **Print Quality Problems**, select **Calibrate Colors**, then select **Print Tutorial Page**. Follow the procedure to lighten or darken colors.

Poor Transparency Print Quality Possible print-quality defects are occurring on transparency film, such as: ■ Light and/or dark spots ■ Smeared toner ■ Light bands on print	■ Use **only** Phaser 25-Series Premium Transparency Film. ■ Using non-Phaser 25-Series Premium Transparency Film may cause print-quality problems or damage to the printer's fuser. Damage caused by using unsupported media is not covered by the Xerox warranty, service agreement, or Total Satisfaction Guarantee. ■ For a list of transparency part numbers, print the **Paper Tips Page**. At the printer's front panel, select **Information**, select **Information Pages**, select **Paper Tips Page**, then press the **OK** button.

Diagnosing Print-Quality Problems (Continued)

Problem	Solution
Grays Not Neutral The grays on the printed page are not neutral; they contain color tints.	■ Calibrate the printer's colors. Calibrating adjusts the lightness level and color balance of the printer. At the printer's front panel, select **Troubleshooting**, select **Print Quality Problems**, select **Calibrate Colors**, select **Tutorial Page** then press the **OK** button. ■ Follow the instructions on the Tutorial Page to lighten or darken colors.
Colors Vary Between Computers The colors printed from one computer do not match the colors printed from a different computer.	1. Confirm that the driver settings for **Print-Quality** and **Color Correction** are identical on both computers. 2. Adjust the settings as needed. Driver settings override the settings made at the printer's front panel.
Color Settings Not Applied Changing color settings at the printer's front panel does not affect the colors in the printed document.	In the printer driver, change the settings for **Print-Quality** and **Color Correction**. Driver settings override the settings made at the printer's front panel.
Colors Do Not Match The color produced by the printer is different from the color that it must match.	1. Confirm that the settings for **Print-Quality** and **Color Correction** are identical in the printer driver and at the printer's front panel. 2. At the printer's front panel, select **Information Pages**, select **Sample Pages**, select either **RGB Sampler Pages** or **CMYK Sampler Pages**, then press the **OK** button to print a color sampler. 3. Use the values on the color sampler to set the colors in your document. For detailed instructions about color matching, see "Using Color" in the "Printing" section on the *User Documentation CD-ROM*, or access the infoSMART Knowledge Base at www.xerox.com/officeprinting/infoSMART.
Printed Colors Do Not Match Monitor Colors The color produced by the printer looks different from the color that appears on the monitor.	For information about color matching between the monitor and the printed document, see the infoSMART Knowledge Base at: www.xerox.com/officeprinting/PhaserSMART. View document # **11202**.
PANTONE® Colors Do Not Match Colors printed on the document do not match the Phaser 6250 PANTONE color chart.	For information about PANTONE color matching, see the infoSMART Knowledge Base at www.xerox.com/officeprinting/infoSMART. View document # **7456**.

Color Settings

The print-quality mode and TekColor correction directly control the quality of your prints. You can change these settings in the printer driver or at the printer's front panel.

Note

Driver settings override the printer's front panel settings.

For more information on using color, go to Reference/Printing/Using Color on the *User Documentation CD-ROM*.

Color Calibration

Color calibration procedures adjust the printer for optimal color output. Color settings may need adjustment upon initial printer setup or when toner cartridges and imaging units are replaced. There are two procedures: "Lighten/Darken Colors" and "Balance Colors." If the overall image appears either too light or dark, use the Lighten/Darken Colors procedure. If a finer adjustment of the primary colors (cyan, magenta, and yellow) is needed, continue with the Balance Colors procedure.

Lighten/Darken Colors

The Lighten/Darken Colors procedure uniformly increases or decreases each primary color (cyan, magenta, yellow, and black) to produce a lighter or darker image.

Procedure:

1. At the printer's front panel, select **Troubleshooting**, then press the **OK** button.
2. Select **Print Quality Problems**, then press the **OK** button.
3. Select **Calibrate Colors**, then press the **OK** button.
4. Select **Lighten/Darken Colors**, then press **OK** button. The "Color Reference Page" prints. Use this page to evaluate the lightness/darkness of the image. The printer's current **Lighten/Darken Value** is displayed on the page.
   a. Select **Lightness Level**, then press the **OK** button.
   b. Press the **Up** or **Down Arrow** buttons to change the value from **-5** (lightest) to **5** (darkest), then press the **OK** button. The "Color Reference Page" automatically prints using the new lighten/darken value. Repeat this procedure until you achieve the desired result.
5. To complete the procedure, select one of the following options:
   - **Accept Changes and Continue**: Saves the new value and returns to the **Calibrate Colors** menu.
   - **Accept Changes and Exit**: Saves the new value and returns to the **Main** menu.
   - **Discard Changes and Exit**: Returns to the **Main** menu without saving changes.

Balance Colors

The Balance Colors procedure sets the balance between the primary colors (cyan, magenta, and yellow) to simulate black.

Each of the color balance information pages (like the page illustrated on the right) contains a large cluster of circles, numbered from 0 to 54, that vary in hue.

The center circle (0) should match or appear to blend with some portion of its surrounding hexagonal gray ring. The circle displays a color shift if one or more of the colors are printing with a different density. For example, if cyan is printing lighter than normal, the circle will appear redder.
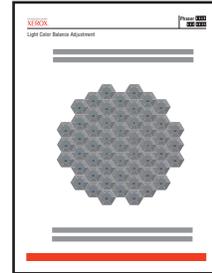
Procedure:

1. At the printer's front panel, select **Calibrate Colors**, then press the **OK** button.
2. Select **Balance Colors**, then press the **OK** button.
3. Follow the steps on the "Light Color Balance Page" until the desired adjustment is achieved.
4. Follow the steps on the "Dark Color Balance Page" until the desired adjustment is achieved.

Calibrate Margins

Use the **Calibrate Margins** menu to adjust the printed area to fit within the edges of the paper. The imaging area appears as a dashed rectangle; the printer does not print outside this rectangle.

Adjusting Side 1 Margins

1. At the printer's front panel, select **Troubleshooting**, then press the **OK** button.
2. Select **Print Quality Problems**, then press the **OK** button.
3. Select **Calibrate Margins**, then press the **OK** button to print the page.
4. To move Side 1 "A" margin:
   a. Select **Adjust Side 1 "A" Margin**, then press the **OK** button.
   b. Press the **Up** arrow to move the margin as illustrated.
5. To move Side 1 "B" margin:
   a. Select **Adjust Side 1 "B" Margin**, then press the **OK** button.
   b. Press the **Up** arrow to move the margin as illustrated.

You can adjust the settings from -40 to +40 units. The thickness of the rectangle's dashed line is 1 unit. 12 units move the rectangle 1 mm. The maximum distance the rectangle can be moved (-40 to +40) is 6.7 mm.
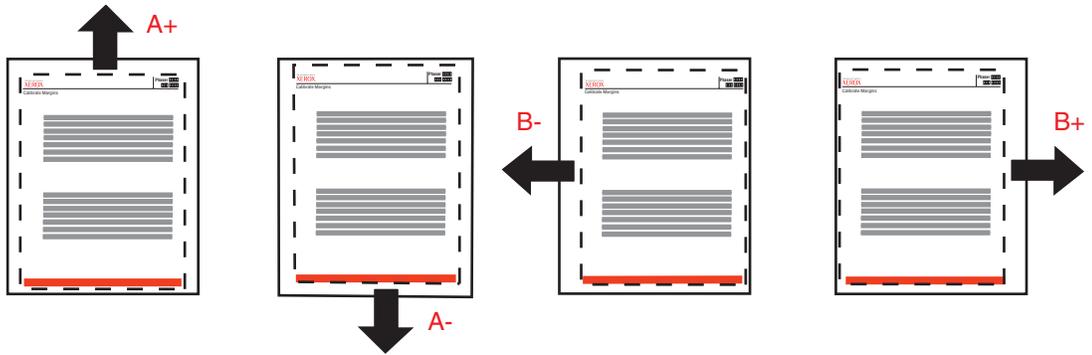
To move up: increase the Adjust Side 1 "A" margin setting.

To move down: decrease Adjust Side 1 "A" margin setting.

To move left: decrease Adjust Side 1 "B" margin setting.

To move right: increase Adjust Side 1 "B" margin setting.

Adjusting Side 2 Margins with Duplex Option

1. With side 1 facing you, hold the print up to a strong light. Note the shadow of the solid lines printed on side 2.

2. To move the dashed rectangle you see on the page to the position you want:

    a. Select **Side 2 "A" Margin**, then press the **OK** button.

    b. Press the **Up** arrow to move the margin as illustrated.

    c. Select **Side 2 "B" Margin**, then press the **OK** button.

    d. Press the **Up** arrow to move the margin as illustrated.

3. Reprint this page to verify the adjustment.
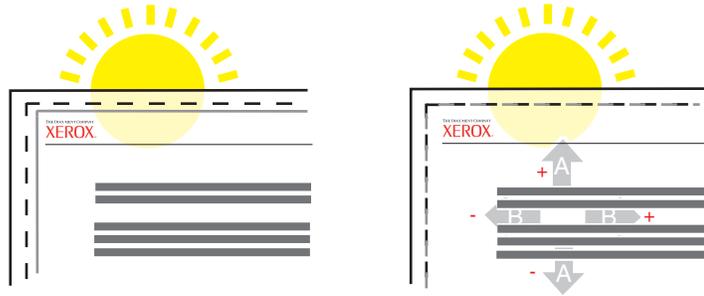
Maintenance

This topic includes:

■ "Cleaning the Outside of the Printer" on page 4-20
■ "Cleaning the Density Sensor" on page 4-21

For safety information, go to Reference/Troubleshooting/User Safety on the *User Documentation CD-ROM*.

Your printer needs little maintenance to keep it producing quality prints. Certain routine maintenance items need to be ordered occasionally:

■ Toner Cartridges (Cyan, Yellow, Magenta, and Black)
■ Imaging Unit
■ Fuser
■ Transfer Roller
■ Feed Roller Kit

Access the "Supplies Usage Page" from the printer's front panel, from CentreWare IS, or print the "Usage Profile" at the printer's front panel.

Caution

If you attempt to use a non-Xerox toner cartridge, it may not fit properly into the printer. If the cartridge does not fit properly, the printer will be unable to function.

Order extra printer supplies when the printer's front panel displays a warning that the supply is low or near the end of its life. You must replace the supply when the front panel displays an error message that the supply is empty or at the end of its life.

For information about supplies, go to www.xerox.com/officeprinting/6250supplies. Each supply includes installation instructions with the packaging.

Cleaning the Outside of the Printer

You can clean the outside of the printer with a soft, damp, cloth. You can use a cloth moistened with a mild neutral detergent to remove stains; do not spray detergent directly onto the printer.

Warning

To prevent electric shock, turn the printer off and unplug the power cord from the electrical outlet before cleaning the printer.

Do not use a vacuum cleaner to clean the printer. Do not lubricate the printer with oil.

Cleaning the Density Sensor

The printer has stopped printing because the density sensor is dirty. To clean it:

1. Push up the latch on the front of the printer to open Front Door A.

6250-066
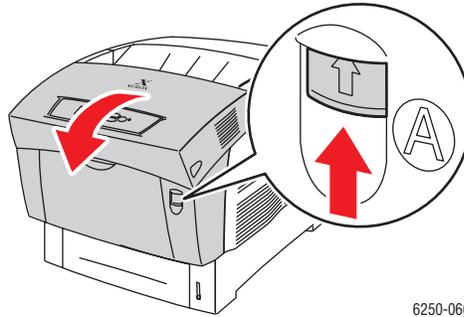
2. Remove the transfer roller. Squeeze together the orange tabs at both sides of the transfer roller and gently lift it out of the printer.

Caution

Avoid touching the surface of the roller.

6200-023
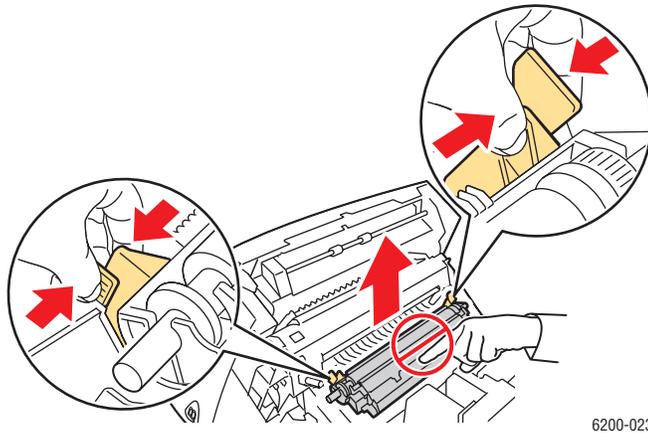
3. Use a dry towel or cotton swab to clean the density sensor.

Caution

    Do not use isopropyl alcohol or canned air on the sensor.

6250-012
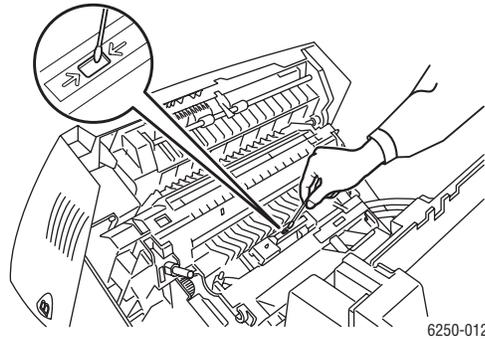
4. Reinstall the transfer roller. Insert the rounded ends of the transfer roller into the curved black guides inside the printer. Lock the transfer roller into the printer by pushing down on the orange tabs until you hear a click.

6200-024
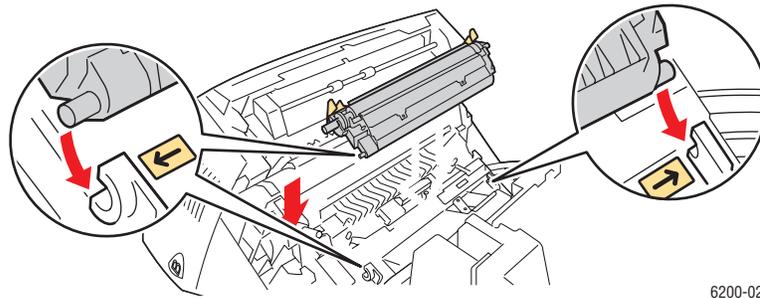
5. Close Front Door A.
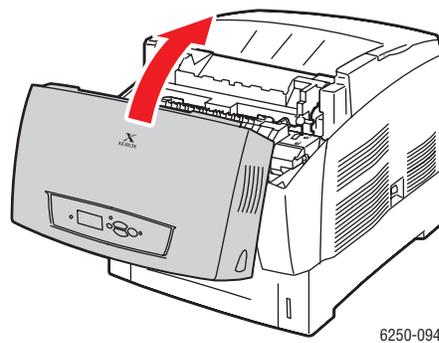
6250-094

Front Panel Messages

This topic includes:

■ "Status Messages" on page 4-23
■ "Errors and Warnings" on page 4-24

Your printer's front panel provides you with information and troubleshooting help.

6250-090

The front panel is divided into two sections. The upper section displays printer status messages; the lower section displays menu lists.

Some of the status messages that appear in the front panel are listed below:

Status Messages

The front panel display is divided into two sections. The upper section displays printer status messages; the lower section displays menu lists.

Some of the status messages that appear in the front panel are listed in the following table:

Status Message	Description
Ready to Print	The printer is ready to receive print jobs.
Processing data - Please wait*	The printer is receiving data; wait until **Ready to Print** or **Printing** is displayed.
Receiving data - Please wait*	The printer is receiving data; wait until **Ready to Print** or **Printing** is displayed.
Printing page x of y*	A print job is printing; wait until **Ready to Print** is displayed.
Warming up - Please wait*	The printer is warming up. Print jobs can be processed but not printed.
Cleaning - Please wait*	The printer is performing a cleaning cycle. Print jobs can be processed but not printed.

* You cannot access the front panel menus when these messages are displayed.

Errors and Warnings

The printer displays error or warning messages in the front panel display.

Hardware or software failures that may require service support are presented as fatal errors. When the printer's front panel displays a fatal error message, the LED blinks red. A fatal error message replaces the status lines.

The following table lists some of the media error and warning messages that appear in the front panel.

Error or Warning Messages Description

Alert	Error or Warning Message	Description
Doors	**Close Front Door**	Close the front door to continue printing.
Media Jams	**Jam at Fuser; Open Front Door B to Clear**	1. Open front door B. 2. Pull the green release levers. 3. Remove the jammed paper. 4. Close the green release levers. 5. Close front door B.
	Jam at Duplexer; Open Front Door B to Clear	1. Open front door B. 2. Remove any jammed paper. 3. Close front door B. 4. Press the OK button.
	Misfeed at Tray 1 (MPT); Open Front Door A to Clear	1. Open front door A. 2. Remove misfed paper. 3. Close front door A. 4. Press the OK button.
	Misfeed at Tray [2][3][4]; Open Tray and Front Door A to Clear	1. Open front door A. 2. Remove misfed paper. 3. Close front door A. 4. Pull out indicated tray. 5. Verify that paper is loaded correctly and guides are placed flush against the paper. 6. Push in the tray.
	Jam at Registration Roller	1. Remove Tray 2 completely. 2. Clear the jammed paper from the printer's intake slot. 3. Re-insert Tray 2. 4. Open front door A. 5. Remove jammed paper if present. 6. Close front door A.
Tray Problems	**No Paper in Tray 1 (MPT)**	Load paper in Tray 1 (MPT)
	No Paper in Tray [2][3][4]	Load paper in the indicated tray.
	Tray 1 (MPT) Paper Is Low	The indicated tray is nearly empty. Reload the same size and type of paper soon.

Error or Warning Messages Description (Continued)

Alert	Error or Warning Message	Description
	Tray [2][3][4] Paper is Low	The indicated tray is nearly empty. Reload the same size and type of paper soon.
	Out of Paper; Load Tray; [Tray 1 (MPT)[2][3][4]	Load the indicated paper size and type into the indicated paper tray.
	Wrong Paper Type; Load Tray [Tray 1 (MPT)][2][3][4] with [type]	Replace the indicated paper type into the indicated paper tray.
	Wrong Paper Size; Load Tray [Tray 1 (MPT)][2][3][4] with [size]	Replace the indicated paper size into the indicated paper tray.
	Paper Not Available; Load Tray 1 (MPT) with [type][size]	Replace the paper in Tray 1 (MPT) with paper of the indicated size and type. You can also select **Print with Available Paper** to use a paper size and type currently loaded in the printer.
	Output Tray is Fill; Unload Paper	Remove some paper from the output tray.
	Insert Tray	Reinsert the indicated tray to continue printing.
	Tray [1 (MPT)][2][3][4] is Missing	Reinsert the indicated tray.
Density Sensor	**Dusty Density Sensor**	1. Open front door A. 2. Remove transfer roller. 3. Wipe the density sensor with a clean, dry towel. 4. Reinstall the transfer roller. 5. Close front door A.
Supplies	**[Color] Toner Is Low**	The [Color] toner is almost empty. Order replacement. Visit our web site at www.xerox.com/officeprinting/6250supplies.
	Fuser Is Near End of Life	The Fuser is near the end of its life. Order replacement at www.xerox.com/officeprinting/6250supplies.
	Imaging Unit Is Near End of Life	The Imaging Unit is near the end of its life. Order replacement at www.xerox.com/officeprinting/6250supplies.
	Transfer Roller Is Near End of Life	The Transfer Unit is near the end of its life. Order replacement at www.xerox.com/officeprinting/6250supplies.
	Replace [Color] Toner Cartridge	The [Color] Toner cartridge is empty. Prints that use only black toner may be printed.

When an error occurs, PrintingScout displays an instant notification on your computer screen that the printer needs attention.

The front panel **i** button also provides valuable information about errors and warnings.

Moving and Repacking the Printer

This topic includes:

■   "Precautions for Moving the Printer" on page 4-26
■   "Moving the Printer Within the Office" on page 4-26
■   "Preparing the Printer for Shipment" on page 4-27

For safety information, go to Reference/Troubleshooting/User Safety on the *User Documentation CD-ROM*.

Follow these guidelines to move the printer within the office or to prepare the printer for shipment.

Precautions for Moving the Printer

Warning

Follow these guidelines to avoid injuring yourself or damaging the printer.

■   Always use two people to lift the printer.
■   Always turn off the printer using the power switch and unplug all cables and cords.
■   Always lift the printer from the designated lift points.
■   Do not place any food or liquids on the printer.
■   Failure to repackage the printer properly for shipment can result in damage to the printer not covered by the warranty, service agreement, or Total Satisfaction Guarantee.
■   Damage to the printer caused by improper moving is not covered by the Xerox warranty, service agreement, or Total Satisfaction Guarantee.

37 kg
80 lbs.

6250-070
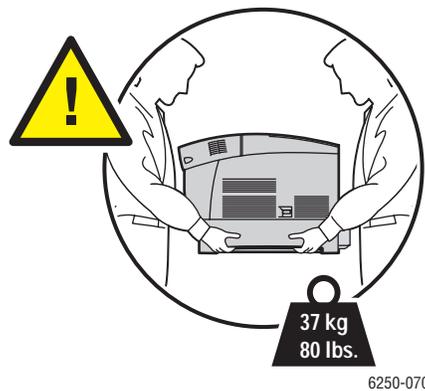
Moving the Printer Within the Office

The printer can be safely moved from one location within an office to another as long as it travels in an upright position, gently over smooth surfaces. Any jarring movement, such as pushing the printer over a raised door threshold or across a parking lot, can damage the printer.

Preparing the Printer for Shipment

To transport the printer by vehicle, the printer must be repackaged in the original packaging or a repackaging kit. The Imaging Unit and Transfer Roller need to be removed and stored in an upright position.

Caution

Do not allow the Imaging Unit to be exposed to direct sunlight, or exposed to other light for more than 10 minutes, as damage could result.Use the dark bag that cae with the Imaging Unit or dark paper as a cover.

Caution

Do not remove the toner cartridges; leave them locked in the normal operating position.

If you do not have all of the original packaging, order the repackaging kit from www.xerox.com/officeprinting/6250supplies. Instructions for repackaging the printer are provided in the repackaging kit or go to Setup/Other Resources/Instruction Sheets on *User Documentation CD-ROM* for additional information. If you are unable to repackage the printer, contact your local Xerox service representative.

Additional Resources

This topic includes:

■ "Support" on page 4-28
■ "infoSMART" on page 4-28
■ "Web Links" on page 4-28

Support

There is additional help available at www.xerox.com/officeprinting/support. You can access infoSMART Knowledge Base, PhaserSMART Technical Support, Technical Support via email, driver downloads, and much more.

A set of Xerox links is installed in your web browser's Favorites folder when you install the printer drivers on your computer. The Troubleshooting tab in your Windows printer driver also includes useful links.

infoSMART

This is the same troubleshooting knowledge base used by Xerox Customer Support. infoSMART Knowledge Base provides solutions for printer issues such as error codes, print quality, media jams, software installation, networking, and more. Go to www.xerox.com/officeprinting/infoSMART.

Web Links

Xerox provides many resources to help you learn more about your Xerox printer. Use these web sites to obtain information about your printer.

Resource	Link
To link to product and supplies information, download printer drivers, view documents, and access support information:	www.xerox.com/officeprinting
To access the troubleshooting knowledge base used by Xerox Customer Support staff:	www.xerox.com/officeprinting/infoSMART
To link to a color resource for tools and information such as interactive tutorials, color printing templates, helpful tips, and customized features to meet your individual needs:	www.colorconnection.xerox.com
To view technical support information:	www.xerox.com/officeprinting/6250support
To order Xerox supplies:	www.xerox.com/officeprinting/6250supplies
To find your local sales and support center:	www.xerox.com/officeprinting/contacts

A User Safety

Your printer and the recommended supplies have been designed and tested to meet strict safety requirements. Attention to the following information will ensure the continued safe operation of your printer.

Electrical Safety

- Use the power cord supplied with your printer.
- Plug the power cord directly into a properly grounded electrical outlet. If you do not know if an outlet is grounded, ask an electrician to check the outlet.
- Do not use a ground adapter plug to connect the printer to an electrical outlet that does not have a ground connection terminal.
- Do not use an extension cord or power strip.

Warning

Avoid the potential of electrical shock by ensuring that the printer is properly grounded. Electrical products may be hazardous if misused.

- Do not place the printer in an area where people might step on the power cord.
- Do not place objects on the power cord.
- Do not block the ventilation openings. These openings are provided to prevent overheating of the printer.
- Do not drop paper clips or staples into the printer.

Warning

Do not push objects into slots or openings on the printer. Making contact with a voltage point or shorting out a part could result in fire or electrical shock.

If you notice unusual noises or odors:

1. Turn off the printer immediately
2. Disconnect the power cord from the electrical outlet
3. Call an authorized service representative to correct the problem.

The power cord is attached to the printer as a plug-in device at the back of the printer. If it is necessary to disconnect all electrical power from the printer, disconnect the power cord from the electrical outlet.

Do not remove the covers or guards that are fastened with screws unless you are installing optional equipment and are specifically instructed to do so. Power should be OFF when performing these installations. Except for user-installable options, there are no parts that you can maintain or service behind these covers.

Note
Leave the printer on for optimum performance; it does not pose a safety hazard.

The following are hazards to your safety:

■ The power cord is damaged or frayed.
■ Liquid is spilled into the printer.
■ The printer is exposed to water.

If any of these conditions occur:

1. Turn off the printer immediately.
2. Disconnect the power cord from the electrical outlet.
3. Call an authorized service representative.

Laser Safety

With specific regard to lasers, this printer complies with laser product performance standards set by governmental, national, and international agencies and is certified as a Class 1 Laser Product. The printer does not emit hazardous light because the beam is totally enclosed during all modes of customer operation and maintenance.

Maintenance Safety

■ Do not attempt any maintenance procedure that is not specifically described in the documentation supplied with your printer.
■ Do not use aerosol cleaners. The use of supplies that are not approved may cause poor performance and could create a hazardous condition.
■ Do not burn any of the supplies (such as a toner cartridge, fuser, or transfer roller). For information on Xerox supplies recycling programs, go to www.xerox.com/officeprinting/recycle.

Operational Safety

Your printer and supplies were designed and tested to meet strict safety requirements. These include safety agency examination, approval, and compliance with established environmental standards.

Your attention to the following safety guidelines helps to ensure the continued, safe operation of your printer.

Printer Supplies

■ Use the supplies specifically designed for your printer. The use of unsuitable materials may cause poor performance and a possible safety hazard.

■ Follow all warnings and instructions marked on, or supplied with, the printer, options and supplies.

Caution

If you attempt to use a non-Xerox toner cartridge, it may not fit properly in the printer. If the cartridge does not fit properly, the printer will not function.

Printer Location

■ Place the printer in a dust-free area where the temperature range is 50 degrees F to 90 degrees F (10 degrees C to 32 degrees C) and the relative humidity range of 10 percent to 85 percent.

■ Place the printer in an area where there is adequate space for ventilation, operation, and servicing. The recommended minimal spacing is 20 cm (8 in.) behind and on each side of the printer.

■ Do not block or cover the slots and openings on the printer. The printer may overheat without adequate ventilation.

■ For optimum performance, use the printer at elevations below 2,500 m (8,200 ft.). Performance may diminish at elevations between 2,500 m (8,200 ft.) and 3,000 m (9,840 ft.). Use at elevations above 3,000 m (9,840 ft.) exceeds operability limits.

■ Do not place the printer near a heat source.

■ Do not place the printer in direct sunlight.

■ Do not place the printer in line with the cold air flow from an air conditioning system.

■ Place the printer on a level, solid surface with adequate strength for the weight of the printer. The base printer weight without any packaging materials is approximately 37 kg (80 lbs.).

Moving the Printer

The printer is heavy and must be lifted by two people. The illustration below demonstrates the proper technique for lifting the printer.

6250-070
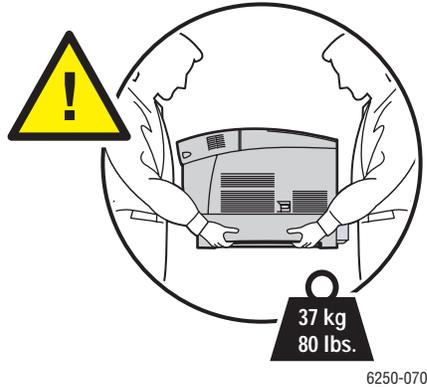
Follow the recommended procedure when moving the printer from one location to another. Information about moving your printer is included in the repackaging kit. You can order the kit from www.xerox.com/officeprinting/6250supplies or contact your local Xerox service representative. For additional instructions about repackaging the printer go to Setup/Other Resources/Instruction Sheets on the *User Documentation CD-ROM*.

- Always use two people to lift the printer.
- Always turn off the printer using the power switch and unplug all cables and cords.
- Always lift the printer from the designated lift points.
- Do not place any food or liquids on the printer.
- Failure to repackage the printer properly for shipment can result in damage to the printer not covered by the warranty, service agreement, or Total Satisfaction Guarantee.
- Damage to the printer caused by improper moving is not covered by the Xerox warranty, service agreement, or Total Satisfaction Guarantee.

Warning

Avoid touching areas inside the printer that are labeled with a warning symbol. These areas may be very hot and can cause personal injury.

Printing Safety Guidelines

- Wait 10-15 seconds between turning the printer off and on.
- Keep hands, hair, neckties, etc., away from the exit and feed rollers.
- Do not remove the paper source tray that you selected in either the printer driver or front panel.
- Do not open the doors.
- Do not move the printer.

Symbols Marked on the Product

	Use caution (or draws attention to a particular component). See the manual(s) for information.
	Avoid pinching fingers in the printer. Use caution to avoid personal injury.
	Hot surface on or in the printer. Use caution to avoid personal injury.
	Do not touch the imaging unit.
	Do not burn the item.
00:30	It may take 30 minutes for the fuser to cool down.
	Do not shake the imaging unit.
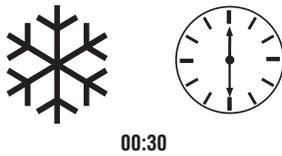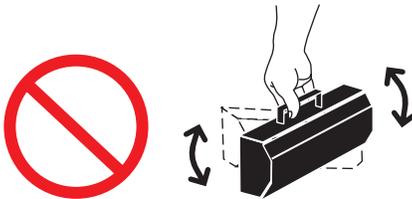
B Warranty

For warranty information regarding your Phaser 6250 printer, go to www.xerox.com/officeprinting/6250warranty.

C Printer Specifications

Physical Specifications

Printer

- Width: 439 mm (17.30 in.)
- Depth: 638 mm (25.14 in.)
- Height: 445 mm (17.53 in.)
- Weight: 37 kg (80 lbs.)

Optional High-Capacity Feeder

- Width: 439 mm (17.30 in.)
- Depth: 563 mm (22.18 in.)
- Height: 336 mm (13.24 in.)

Optional 500-Sheet Feeder

- Width: 439 mm (17.30 in.)
- Depth: 563 mm (22.18 in.)
- Height: 172 mm (6.78 in.)

Environmental Specifications

Temperature

- Storage: -20° to 60° C / -4° to 140° F
- Operating: 10° to 32° C / 50° to 90° F
- Optimum print quality environmental conditions: 17° to 26° C / 62° to 80° F

Relative Humidity

- Storage: 10% to 95%
- Operating: 10% to 85%
- Optimum print quality environmental conditions: 35% to 70%

Electrical Specifications

Available in two (2) models:

■ 110-127 VAC, 50/60 Hz
■ 220-240 VAC, 50/60 Hz

ENERGY STAR qualified printer

Performance Specifications

Resolution

■ 600 x 600 dpi
■ 2400 x 600 dpi

Print Speed

■ Letter: 26 pages per minute (ppm)
■ A4: 24 ppm

Controller Specifications

500 MHz processor

Memory

■ 128 Mbytes PC133 DRAM standard on the Phaser® 6250B Color Laser Printer
■ 256 Mbytes PC133 DRAM standard on the Phaser® 6250N Color Laser Printer
■ 256 Mbytes PC133 DRAM standard on the Phaser® 6250DP Color Laser Printer
■ 512 Mbytes PC133 DRAM standard on the Phaser® 6250DT Color Laser Printer
■ 512 Mbytes PC133 DRAM standard on the Phaser® 6250DX Color Laser Printer
■ Upgradable to a maximum of 512 Mbytes

Page Description Languages (PDL)

■ PCL5c
■ Adobe PostScript 3

Resident Fonts

■ 136 PostScript Type 1

Interfaces

■ IEEE 1284 parallel
■ Ethernet 10BaseT and 100BaseTx
■ USB

D Regulatory Information

United States

The equipment described in this manual generates and uses radio frequency energy. If it is not installed properly in strict accordance with Xerox' instructions, it may cause interference with radio and television reception or may not function properly due to interference from another device. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiver (device being interfered with).
- Increase the separation between the printer and the receiver.
- Connect the printer into an outlet on a circuit different from that which the receiver is connected.
- Route the interface cables on the printer away from the receiver
- Consult the dealer, Xerox service, or an experienced radio/television technician for help.

Changes or modifications not expressly approved by Xerox can affect the emission and immunity compliance and could void the user's authority to operate this product. To ensure compliance, use shielded interface cables. A shielded parallel cable can be purchased directly from Xerox at www.xerox.com/officeprinting/supplies.

Xerox has tested this product to internationally accepted electromagnetic emission and immunity standards. These standards are designed to mitigate interference caused or received by this product in a normal office environment. This product is also suitable for use in a residential environment based on the levels tested.

In the United States this product complies with the requirements of an unintentional radiator in part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference; (2) this device must accept any interference received, including interference that may cause undesired operation.

Canada

This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus set out in the Radio Interference Regulations of the Canadian Department of Communications, ICES-003.

Le présent appareil numérique n'émet pas de bruits radioélectrique dépassant les limits applicables aux appareils numériques de la classe B prescrites dans le Réglement sur le brouillage radioélectrique édicté par le ministere des Communications du Canada, NMB-003.

European Union

Xerox Corporation declares, under our sole responsibility, that the printer to which this declaration relates is in conformity with the following standards and other normative documents:

Following the provisions of the Low Voltage Directive 73/23/EEC and its amendments:

EN 60950 (IEC 60950)	"Safety of Information Technology Equipment including Electrical Business Equipment"

Following the provisions of the Electromagnetic Compatibility Directive 89/336/EEC and its amendments:

EN 55022:1998 (CISPR 22)	"Limits and Methods of measurement of radio interference characteristics of Information Technology Equipment." Class B.
EN 61000-3-2:1995 +A1:1998+A2:1998 (IEC61000-3-2)	"Part 3: Limits - Section 2: Limits for harmonic current emissions (equipment input current less than or equal to 16A per phase)."
EN 61000-3-3:1995 (IEC61000-3-3)	"Part 3: Limits - Section 3: Limitation of voltage fluctuations and flicker in low-voltage supply systems for equipment with rated current less than or equal to 16A."
EN 55024:1998 (CISPR 24)	"Information technology equipment - Immunity characteristics - Limits and methods of measurement. "

CISPR 24 Immunity Phenomena	Basic Standard	Test Specification
Electrostatic Discharge	IEC 61000-4-2:1995	6 kV Contact, 10 kV Air
Radio-Frequency Electromagnetic Field (radiated)	IEC 61000-4-3:1995	80-1000 MHz, 3 V/m, 80% AM @ 1 KHz
Fast Burst Transients	IEC 61000-4-4:1995	5/50 Tr/Th ns, 5 kHz Rep. Freq 0.5 kV Signal Lines 1 kV AC Mains
Line Surge	IEC 61000-4-5:1995	Combination wave 2.0 kV Common mode 2.0 kV Differential mode
Radio-Frequency Electromagnetic Field (Conducted)	IEC 61000-4-6:1996	0.15 - 80 MHz, 3 V, 80% AM @ 1 kHz
Line voltage dips	IEC 61000-4-11:1994	>95% dip for ½ cycle @ 50 Hz 30% dip for 25 cycles @ 50 Hz
Line voltage drop-out	IEC 61000-4-11:1994	>95% dropout for 250 cycles @ 50 Hz

This product, if used properly in accordance with the user's instructions, is neither dangerous for the consumer nor for the environment.

A signed copy of the Declaration of Conformity for this product can be obtained from Xerox.

E Material Safety Data Sheet

Manufacturer: Xerox Corporation, Office Group

P. O. Box 1000, Wilsonville, Oregon, 97070-1000

Preparation Date: May 6, 2003

Section 1–Product Identification

Product Names	Part Numbers
Black Toner Cartridge	106R00671, 106R00675
Cyan Toner Cartridge	106R00668, 106R00672
Magenta Toner Cartridge	106R00669, 106R00673
Yellow Toner Cartridge	106R00670, 106R00674
Imaging Unit, contains Developer	108R00591

Product Use: Phaser 6250 Color Laser Printer

Section 2–Information Ingredients

Ingredients (percent by weight)	CAS number
Toner:	
Polyester resins (70-90%)	Trade Secret
Carbon black or non-hazardous color pigments (<10%)	carbon black: 1333-86-4
Paraffin and vegetable waxes (<15%)	Trade secret
Amorphous silicas (<8%)	Trade secret
Developer:	
Frits, chemicals (>90%)	Trade secret
Toner (>10%)	Trade secret

Section 3–Hazards Identification

Routes of Exposure: Toner and developer powders are encased in a cartridge. Minimal exposure through inhalation or skin contact is expected when used as intended.

Potential Health Effects: Health effects from this product are expected to be negligible, when product is used as intended. See Section 11, Toxicology Information.

Immediate Effects:

Inhalation: Minimal irritation to respiratory tract, as for any non-toxic dust

Skin: Not expected to cause skin irritation

Eye: Not expected to cause eye irritation

Ingestion: Not an expected route of exposure

Chronic Effects: None known

Signs and Symptoms of Exposure: Minor irritation to respiratory tract.

Medical Conditions Aggravated by Exposure: None known.

Section 4–First Aid Measures

Inhalation: Remove person to fresh air. Seek medical attention if symptoms occur.

Eyes: If particles get into eye, flush thoroughly with water. Seek medical attention if symptoms occur.

Skin: Wash thoroughly with soap and water. Seek medical attention if symptoms occur.

Ingestion: Dilute stomach contents with several glasses of water. Seek medical attention if symptoms occur.

Section 5–Fire Fighting Measures

Flash Point: Not applicable

Fire and Explosion Hazards: Toner is a combustible powder. Like most organic powders, it can form explosive mixtures when dispersed in air.

Extinguishing Methods: Water, dry chemical, carbon dioxide, or foam.

Fire Fighting Information: Avoid inhalation of smoke. As for any fire, wear protective clothing and self-contained breathing apparatus.

Section 6–Accidental Release Measures

Spill or leak: Sweep up or vacuum spilled materials and carefully transfer into sealable waste container. Sweep slowly to minimize generation of dust during clean up. If a vacuum is used, the motor must be rated as dust tight. A conductive hose bonded to the machine should be used to reduce static buildup. Clean up residue if necessary with soap and cold water. Wash or dry clean garments after removing loose toner.

Section 7–Handling and Storage

Handling: No special precautions, when used as intended.

Storage: Avoid high temperatures.

Section 8–Exposure Control - Personal Protection

No special personal protection indicated, when used as intended in Xerox Phaser color printers.

Threshold Limit Value (TLV): 10 mg/m^3 (total dust)

Permissible Exposure Limit (PEL): 15 mg/m^3 (total dust); 5 mg/m^3 (respirable dust)

Short Term Exposure Limit (STEL): None established

Ceiling Limit: None established

Xerox Exposure Limit (XEL): 2.5 mg/m^3 (total dust); 0.4 mg/m^3 (respirable dust)

Section 9–Physical and Chemical Properties

Appearance/Odor: Black, blue, red, or yellow powders/faint odor

Boiling Point: Not applicable

Solubility in Water: Insoluble to negligible.

Evaporation Rate: Not applicable

Vapor Density (Air = 1): Not applicable

Volatile (%): Not applicable

Softensing Range: Not available

Melting Point: Not available

Specific Gravity (Water = 1): Not available

Vapor Pressure (mm Hg): Not applicable

pH: Not applicable

Section 10–Stability and Reactivity

Stability: Stable.

Incompatibility with Other Materials: Strong oxidizers

Hazardous Polymerization: Will not occur

Hazardous Decomposition Products: During a fire, toxic gases may be generated by thermal decomposition or combustion.

Section 11–Toxicological Information

This material has been evaluated by Xerox Corporation. The toxicity data noted below is based on test results of the materials described herein or similar toners.

Oral LD$_{50}$: >5 g/kg (rats), practically non-toxic

Dermal LD$_{50}$: > 5 g/kg (rabbits), practically non-toxic

Inhalation LC$_{50}$: > 5 mg/l (rats; 4 hour exposure), practically non-toxic

Eye Irritation: Not an irritant

Skin sensitization: Not a sensitizer

Skin irritation: Not an irritant

Mutagenicity: No mutagenicity detected in Ames assay

Carcinogens: None present

Additional Information: The results obtained from a Xerox sponsored Chronic Toner Inhalation Study demonstrated no lung changes in rats for the lowest (1 mg/m^3) exposure level (i.e., the level most relevant to potential human exposure). A very slight degree of fibrosis was noted in 25% of the animals at the middle (4 mg/m^3) exposure level, while a slight degree of fibrosis was noted in all the animals at the highest (16 mg/m^3) exposure level. The findings are attributed to "lung overloading," a generic response to excessive amounts of any dust retained in the lungs for a prolonged period. This study was conducted using a special test toner to

comply with EPA testing protocol. The test toner was ten times more respirable than commercially available Xerox toner and would not be functionally suitable for Xerox equipment.

Section 12–Ecological Information

Not available

Section 13–Disposal Consideration

These materials are not RCRA hazardous wastes as specified in 40 CFR 261. State and local waste disposal requirements, however, may be more restrictive. Dispose in accordance with all federal, state, and local regulations. Incinerate only in a closed container.

Section 14–Transport Information

DOT: Not regulated

Section 15–Regulatory Information

TSCA: All components of these toners have been manufactured in compliance with TSCA.

CANADIAN WHMIS: These toners are not regulated as controlled products under the Workplace Hazardous Material Information System (WHMIS).

Section 16–Other Information

NFPA 704: Health–0, Fire–1, Reactivity–0 (All colors)

Original preparation date: 05/06/2003

Xerox Corporation

Office Group

Environmental, Health & Safety

P.O. Box 1000

Mail Stop 60-512

Wilsonville, Oregon 97070

Safety Information: 800-828-6571

Health Emergency: 585-422-2177

Transportation Emergency (Chemtrec): 800-424-9300

F Product Recycling and Disposal

Xerox operates a worldwide equipment takeback and reuse/recycle program. Contact your Xerox sales representative (1-800-ASK-XEROX) to determine whether this Xerox product is part of the program. For more information about Xerox environmental programs, visit www.xerox.com/environment.html.

If your product is not part of the Xerox program and you are managing its disposal, please note that the product may contain lead and other materials whose disposal may be regulated due to environmental considerations. For recycling and disposal information, contact your local authorities. In the United States, you may also refer to the Electronic Industries Alliance at www.eiae.org.

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