

WorkCentre Pro 412

User Guide

708P86380

Prepared by:

The Document Company Xerox
GKLS European Operations
Bessemer Road
Welwyn Garden City
Hertfordshire
AL7 1HE
ENGLAND

©2001 by Xerox Corporation. All rights reserved.

Copyright protection claimed includes all forms and matters of copyrighted material and information now allowed by statutory or judicial law or hereinafter granted, including without limitations, material generated from the software programs which are displayed on the screen, such as icons, screen displays, looks etc.

Xerox[®], The Document Company[®], the digital X[®] and all Xerox products mentioned in this publication are trademarks of Xerox Corporation. Product names and trademarks of other companies are hereby acknowledged.

Changes are periodically made to this document. Changes, technical inaccuracies, and typographical errors will be corrected in subsequent editions.

Table of Contents

1	About This Guide	1-1
	Finding Information in the User Guide	1-2
	Customer Support	1-4
	Conventions	1-5
	Orientation	1-5
	Bracket Text Typeface	1-7
	Italic Typeface	1-7
	Quick Pathway	1-7
	Notes	1-8
	Hints	1-8
	Cautions	1-8
	Warnings	1-8
	Related Information Sources	1-9
2	Product Overview	2-1
	Unpacking	2-2
	Identifying the Machine Components	2-4
	Front View	2-4
	Rear View	2-5
	Control Panel Components and Keys	2-6
	Entering Characters Using the Numeric Keypad	2-8
	Making Connections	2-11
	Installing Drum and Toner Cartridges	2-14
	Loading Paper	2-18
	Setting the Language	2-22
	Setting the Local ID and Name	2-23
	Setting the Date and Time	2-25
	Installing Software	2-26
3	Copy	3-1
	Copying Procedure	3-2
	1. Press the Copy/Fax/Scan Key	3-2

2. Select the Paper Supply	3-3
3. Load the Originals	3-4
4. Select the Copy Features	3-7
5. Enter the Quantity	3-7
6. Press Start	3-8
Standard Copy Features.....	3-9
Lighten/Darken	3-9
Original Type	3-10
2-Sided Copy	3-11
Reduce/Enlarge	3-12
Output	3-12
Resetting Copy Features	3-13
Special Copy Features.....	3-14
Auto Fit.....	3-14
Clone.....	3-15
4 Print.....	4-1
Printing a Document from an Application	4-2
Printer Settings	4-3
Accessing Printer Settings	4-3
Printer Properties Tabs	4-5
5 Fax.....	5-1
Faxing Procedure	5-2
1. Load the Originals	5-2
2. Press the Copy/Fax/Scan Key	5-5
3. Select the Fax Features	5-6
4. Enter the Fax Number.....	5-6
5. Press Start	5-7
6. Fax Job Management	5-7
Dialing Methods	5-9
Keypad Dialing	5-9
Speed Dialing.....	5-10
Group Dialing (for Multi-Address Transmission)	5-12
Manual Group Dialing	5-14
Manual Dialing	5-16
Redial	5-16
Sending a Fax After Talking.....	5-17
Receiving a Fax	5-18
Receive Modes	5-18

Standard Fax Features	5-20
Resolution	5-20
Scan Options.....	5-21
Original Type.....	5-21
Lighten/Darken.....	5-22
Resetting Fax Features.....	5-22
Advanced Fax Features.....	5-23
Sending a Color Fax	5-23
Delay Send.....	5-24
Priority Sending.....	5-27
Polling	5-28
Canceling a Scheduled Operation	5-32
Fax Reports	5-33
6 Scan	6-1
The WorkCentre Pro 412 TWAIN Scanner Program.....	6-2
Scanning Procedure	6-3
1. Load the Originals.....	6-3
2. Run the ScanToPC Program	6-6
3. Press the Copy/Fax/Scan Key	6-6
4. Select the Scan Features.....	6-7
5. Press Start	6-7
Configuring the Default Scan Application	6-8
Standard Scan Features	6-9
Resolution	6-9
Scan Options.....	6-9
Original Type.....	6-10
Lighten/Darken.....	6-11
Reduce/Enlarge	6-12
Resetting Scan Features.....	6-12
Advanced Scanning.....	6-13
7 Maintaining the Product.....	7-1
Cleaning	7-2
Cleaning the WorkCentre Pro 412	7-2
Cleaning the Document Glass and Cover.....	7-3
Control Panel and LCD Display	7-3
Document Feeder and Output Tray	7-3
Ordering Supplies	7-4
Customer Replaceable Units	7-5

Toner Cartridge	7-5
Drum Cartridge.....	7-11
Loading Media	7-14
Using the Paper Cassette	7-15
Using the Bypass Tray	7-19
Media Guidelines	7-23
8 Basic Troubleshooting.....	8-1
Document Jams	8-2
Input Misfeed.....	8-2
Exit Misfeed.....	8-3
Roller Misfeed	8-3
Paper Jams	8-4
Paper Feed Area.....	8-4
Fuser Area	8-6
Paper Exit Area.....	8-8
Duplex Jam	8-11
Bypass Jam.....	8-11
Calling for Service.....	8-12
Customer Support Telephone Number	8-12
LCD Error Messages.....	8-13
Solving Problems.....	8-16
Copier Problems Solution Chart.....	8-16
Printing Problems Solution Chart	8-18
Faxing Problems Solution Chart	8-21
Resetting the Machine	8-23
9 System Setup	9-1
System Setup	9-2
System Setup Options	9-2
Changing the System Setup Options	9-4
Adjusting Speaker Volume.....	9-5
System Data Settings	9-6
System Data Options	9-6
Setting System Data Options.....	9-8
Reports.....	9-9
Clearing Memory	9-11
ControlCentre 5.0	9-12
Installing ControlCentre 5.0.....	9-12

Running ControlCentre 5.0	9-12
Using ControlCentre 5.0.....	9-13
10 Appendix A - Safety Notes.....	A-1
Safety Standards.....	A-3
Regulatory Information.....	A-4
Laser Safety.....	A-5
The Electricity at Work Regulations - UK ONLY	A-6
Certification to 1999/5/EC	A-9
FCC Regulations.....	A-10
Canadian Certification.....	A-13
Environmental Compliance.....	A-14
Energy Star®.....	A-14
11 Appendix B - Specifications	B-1
Printer Specification	B-2
Fax Specification.....	B-3
Scanner and Copier Specification.....	B-4
General Specification	B-5
Paper Specification.....	B-6
12 Index	Index - i

1 *About This Guide*

Thank you for purchasing the *WorkCentre Pro 412*. The *WorkCentre Pro 412* is designed for ease of use, but to use your machine to its fullest potential, take some time to read the User Documentation.

Finding Information in the User Guide

The User Guide contains the following sections:

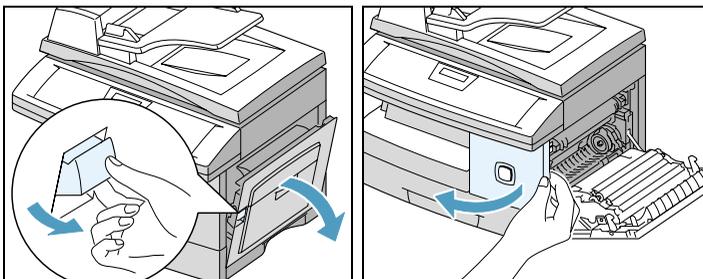
- Table of Contents
Use the Table of Contents to find topics easily.
- About this Guide - Chapter 1
Describes the information in this User Guide.
- Product Overview - Chapter 2
Describes the system and hardware features of the machine and provides instructions for unpacking and setting up your new machine ready for use.
- Copy - Chapter 3
Describes the procedures for loading and copying originals. It also includes instructions for using the copy features available.
- Print - Chapter 4
Describes the procedure for printing from a PC and an overview of the printer driver features.
- Fax - Chapter 5
Describes the procedures for sending and receiving faxes. It also includes instructions for using all the fax features and functions available.
- Scan - Chapter 6
Describes the procedures for using the Scan function available on your machine.
- Maintaining the Product - Chapter 7
Provides maintenance and cleaning procedures necessary to ensure optimum product performance. Includes instructions for ordering and replacing consumables.
- Basic Troubleshooting - Chapter 8
Guides the user through problem solving and provides a list of error messages and recommended corrective actions.

- System Setup - Chapter 9
Provides instructions for programming the default system settings available on the machine. Also provides information about setting up and using ControlCentre 5.0.
- Safety Notes - Appendix A
Provides safety procedures and approval certification information for the product.
- Specifications - Appendix B
Provides information on the machine specifications. Use this chapter to ensure all materials being used are within specification.
- Index
Refer to the Index to locate specific information.

Customer Support

If after product installation further assistance is required, please call our experts at the Xerox Welcome Centre or your local representative. When telephoning please quote the machine serial number. Use the space below to make a note of the machine serial number:

The serial number is located on the machine, behind the front door. To access the serial number, open the side cover using the release latch and then open the front door.



You will be provided with the Xerox Welcome Centre or local representative telephone number when the *WorkCentre Pro 412* is installed. For convenience and future reference, please record the telephone number in the space below:

Welcome Centre or local representative Telephone Number:

Xerox US Welcome Center: 1-800-821-2797

Xerox Canada Welcome Center: 1-800-93-XEROX
(1-800-939-3769)

Conventions

Throughout this *User Guide*, there are some terms that are used interchangeably:

- *Document* is synonymous with *original*.
- *Button* is synonymous with *key*.
- *Page* is synonymous with *sheet*.
- *WorkCentre Pro 412* is synonymous with *the machine*.

Orientation

There are two types of orientation referred to in this guide, Image Orientation and Feed Orientation.

Image Orientation

Image Orientation describes the direction of the image on the page. There are two types of image orientation:

Portrait



The image is portrait when vertically aligned with the longest edge of the paper.

Landscape



The image is landscape when vertically aligned with the shortest edge of the paper.

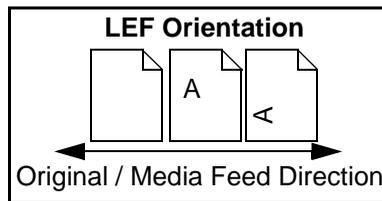
Feed Orientation

Feed Orientation describes the direction the originals and the media is fed through the machine. It is recommended the feed orientation of the originals matches that of the media.

There are two types of feed orientation:

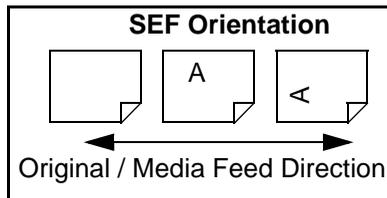
Long Edge Feed (LEF)

When observed from the front of the machine, originals or media with the long edges to the left and right of the document feeder or paper tray.



Short Edge Feed (SEF)

When observed from the front of the machine, originals or media with the short edges to the left and right of the document feeder or paper tray.



Bracket Text Typeface

The [Bracket Text] typeface is used to emphasize the selection of a feature or key. For example:

- Press [Reduce/Enlarge] on the control panel repeatedly until 'REDUCE/ENLARGE' displays on the LCD.
- Enter the required percentage using the numeric keypad.

If you press [Clear/Clear All], the selected percentage returns to 100%.

Italic Typeface

The *Italic* typeface is used to emphasize a word or phrase. For example:

- *Always* follow safety procedures when operating the equipment.
- There are several fax dialing methods available on your *WorkCentre Pro 412*.

Quick Pathway

Quick Pathway

- **Press the Copy/Fax/Scan Key.**
- **Select the Paper Supply.**
- **Load the Originals.**
- **Choose the Copy features required.**
- **Enter the copy quantity required.**
- **Press [Start].**

In addition to the step by step instructions available throughout this User Guide, a summary of the steps is contained in the Quick Pathway at the beginning of a chapter or section. After becoming familiar with the procedures for a particular feature, the Quick Pathway is a useful reminder of the steps required to access a particular feature.

Notes

Notes are statements that provide additional information. For example:

NOTE: You cannot include one group dial number in another group dial number.

Hints

Hints help users perform a task. For example:



HINT: For information about all the dialing methods available, refer to the section “Dialing Methods” on page 5-9.

Cautions

Cautions are statements that suggest *mechanical* damage may be the result of an action. For example:



CAUTION: When cleaning the *WorkCentre Pro 412*, do not use organic solvents or aerosol cleaners.

Warnings

Warnings are statements that alert users to the possibility of personal injury. For example:



WARNING: This product must be connected to a protective earthing circuit.

Related Information Sources

Information available for the *WorkCentre Pro 412* consists of:

- This *User Guide*
- The *Quick Start Guide*
- The *Installation Sheet*
- The *Customer Documentation CD*

2 *Product Overview*

Thank you for purchasing the *WorkCentre Pro 412*. This product provides printing, copying, faxing and scanning functionality.

This chapter provides an overview of your *WorkCentre Pro 412* and step-by-step instructions for setting up your machine and installing the software.

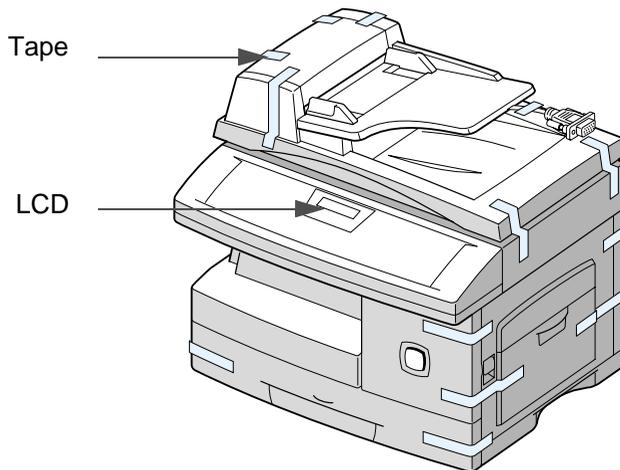
This chapter includes:

- Unpacking
- Identifying the Machine Components
- Control Panel Components and Keys
- Making Connections
- Installing Drum and Toner Cartridges
- Loading Paper
- Setting the Language
- Setting the Local ID and Name
- Setting the Date and Time
- Installing Software

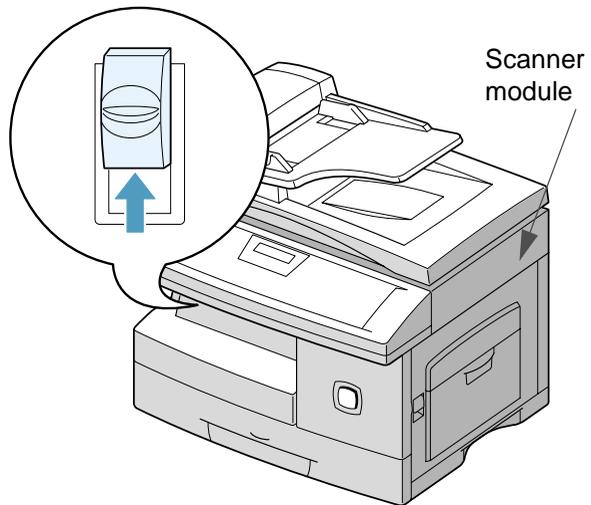
Unpacking

Using the instructions provided in this section, unpack your Xerox WorkCentre Pro 412.

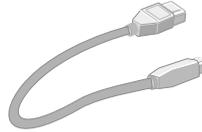
- Remove the plastic film from the LCD. Remove all tapes and packing materials from your WorkCentre Pro 412.



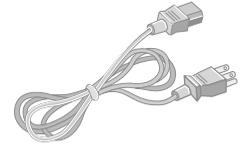
- Pull the Scan unlock switch located on the bottom of the scanner module toward you to unlock the scanner.
- Pull open the paper cassette and remove the packing material from the paper cassette.



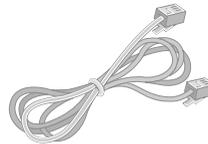
➤ Ensure that you have the following components:



USB Cable



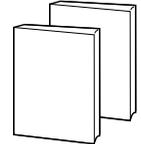
AC Power Cord



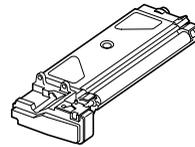
Telephone Line Cord



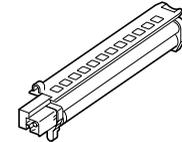
Software



User Documentation



Starter Toner Cartridge



Drum Cartridge

NOTE: The *WorkCentre Pro 412* is equipped with a USB port and a parallel port for use with IBM Compatible computers with a 100MHz Pentium or higher equivalent processor.

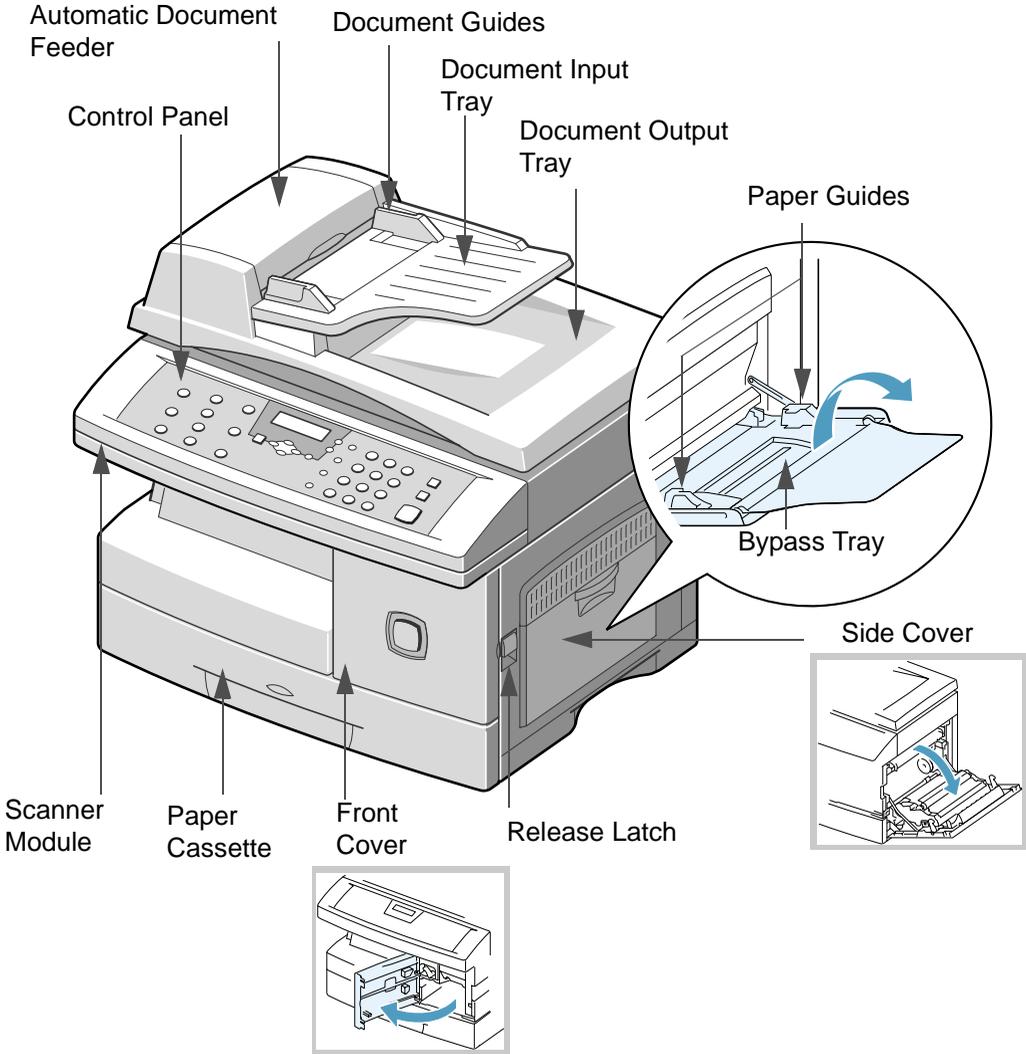
NOTE: You must be running Windows 98, Windows 2000 or Windows Me to use the USB cable. Otherwise, use a parallel cable. (Parallel or USB cables are not required for standalone features.)

HINT: If using a parallel cable, ensure that it meets IEEE standard 1284 specifications and is not longer than twelve feet.

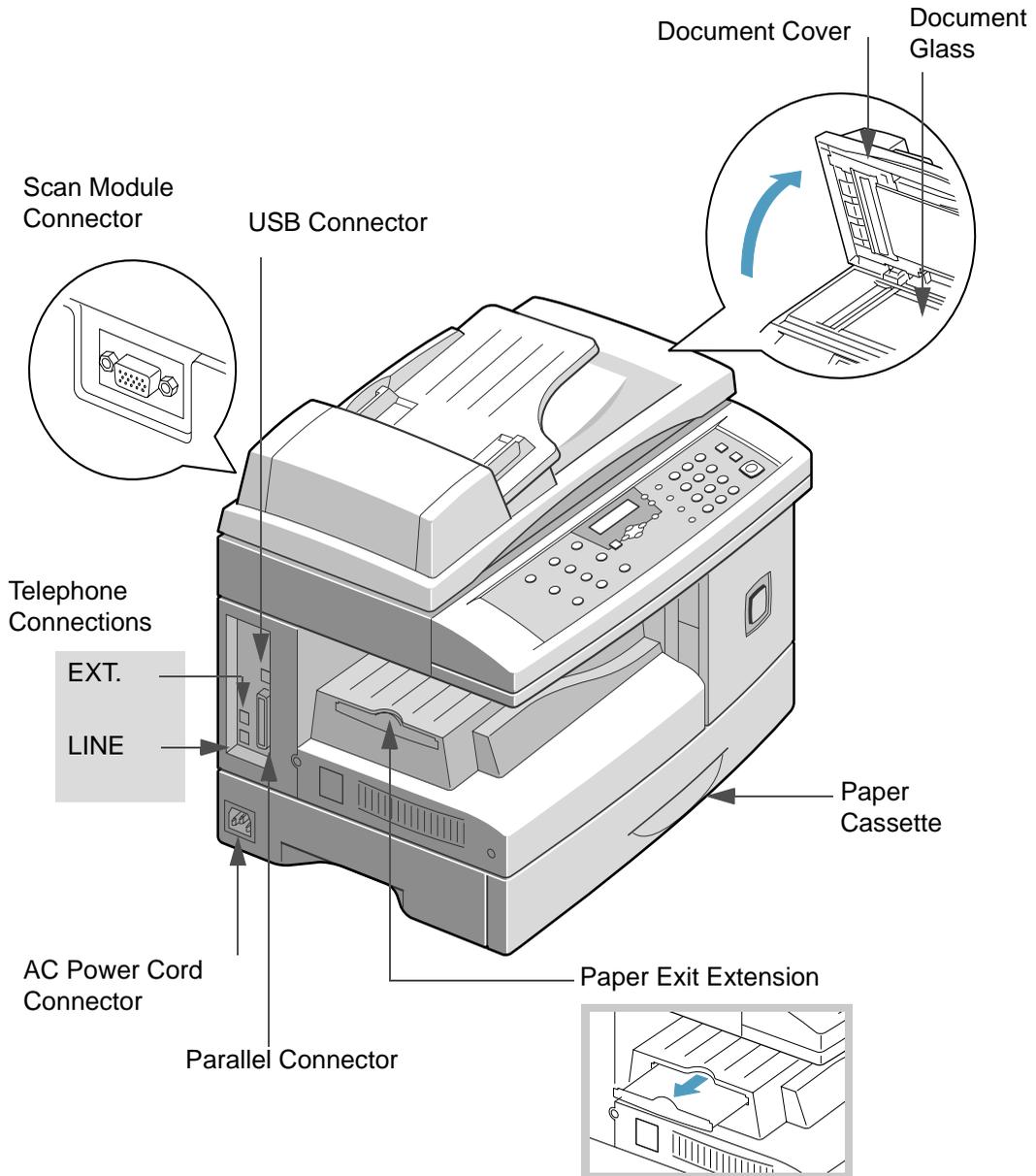
Identifying the Machine Components

Use the illustrations in this section, identify your *WorkCentre Pro 412* components and their location.

Front View

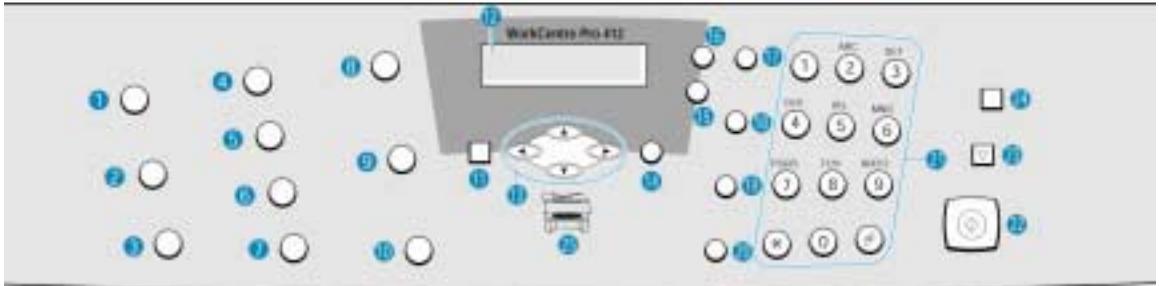


Rear View



Control Panel Components and Keys

Use the illustration below to identify the components and keys of your *WorkCentre Pro 412* control panel.



Item	Description	Function
1	Pause PC Printing	Use to pause a print job. When pressed again, the PC print job is resumed.
2	Reports	Use to display a list of available reports for printing and the menu map.
3	2-Sided Copy	Use to make one or two-sided copies from one-sided originals.
4	Output	Use to collate outputs in copy mode.
5	Reduce/Enlarge	Use to adjust copy size from 25% to 400% when you feed an original from the document glass, and 25% to 100% from the ADF. When feeding from the document glass, Clone and AutoFit features are available using this key.
6	Lighten/Darken	Use to adjust contrast level prior to copying, faxing or scanning.
7	Paper Supply	Use to select paper supply source between Cassette and Bypass in Copy or Fax mode.
8	Resolution	Use to adjust the resolution or sharpness for the current fax or scan job.
9	Original Type	Use to select original type between text, mixed, and photo for copying, faxing, and scanning.
10	Scan Options	Use to select COLOR, B&W or GRAY mode for scanning. In Fax mode, B&W or COLOR mode is selectable.

Item	Description	Function
11	Copy/Fax/Scan	Use to select the functionality of the machine; COPY MODE, FAX MODE or SCAN MODE. When the required mode displays, press Select or wait a few seconds to access the mode.
12		The display shows the current status of the machine and guides the user through various tasks using a menu system for each operation.
13		Use to navigate the menu list vertically and horizontally.
14	Select	Use to save a current selection.
15	Job Status	Use to display current job status and pending jobs.
16	Menu/Exit	Use to enter or exit Menu mode.
17	Manual Group	Use to send a fax job to multiple destinations.
18	Manual Dial	Use to dial a fax number manually (inter-active dial).
19	Speed Dial	Use to dial calls and send fax documents by entering a 2 digit Speed Dial number which has been stored in the machine's phone book memory.
20	Pause/Redial	Use to redial the last phone number called or to add a pause when storing a number in the phone book memory.
21		Use to dial a phone number, to enter a letter, or to choose special functions in conjunction with the Menu button.
22		Use to start a job.
23		Use to stop an operation at any time. Any operation originating on a PC should be stopped on the PC.

Item	Description	Function
24	Clear/Clear All	Clear/Clear All operates differently depending on the selected mode: <ul style="list-style-type: none"> • Copy Mode - Use to clear the copy quantity (while you are entering a number) or clear the currently selected feature setting (while you are programming a copy feature). • Scan Mode - Use to return to Standby mode. • Fax Mode - Use to clear an incorrect fax number. Press twice to clear all currently user selected settings and return to Standby mode.
25		Illuminates when a system error occurs.

Entering Characters Using the Numeric Keypad

As you perform various tasks, you'll need to enter names and numbers. For example, when you set up your machine you enter your name (or your company's name) and telephone number. When you store Speed dial or Group dial numbers, you may also enter the corresponding names.

Use the instructions below to enter alphanumeric characters.

- When prompted to enter a letter, locate the button labeled with the character you want.
- Press the button repeatedly until the correct letter appears in the display.

For example, to enter the letter O, press 6, (labeled MNO). Each time you press 6, the display shows a different letter, first M, then N and O, and finally 6.



Numeric Keypad

- You can enter special characters (space, plus sign, etc.). For details, see "Keypad Character Assignment" on page 9.

- To enter additional letters, repeat the procedure.
- If the next letter is printed on the same button, move the cursor by pressing ►, then press the button labeled with the letter you want.

The cursor moves to the right and the next letter appears in the display.

- When you have finished entering letters, press [Select].

Keypad Character Assignment

Key	Assigned Numbers, Letters or Characters
1	1
2	A > B > C > 2
3	D > E > F > 3
4	G > H > I > 4
5	J > K > L > 5
6	M > N > O > 6
7	P > Q > R > S > 7
8	T > U > V > 8
9	W > X > Y > Z > 9
0	+ > - > , > . > ' > / > * > # > & > 0

Editing Numbers or Names

If you make a mistake, move the cursor under the wrong character by pressing ◀ or ▶. Press the correct number to overwrite the incorrect character. If you press [Clear/Clear All], all the characters are deleted.

Inserting a Pause

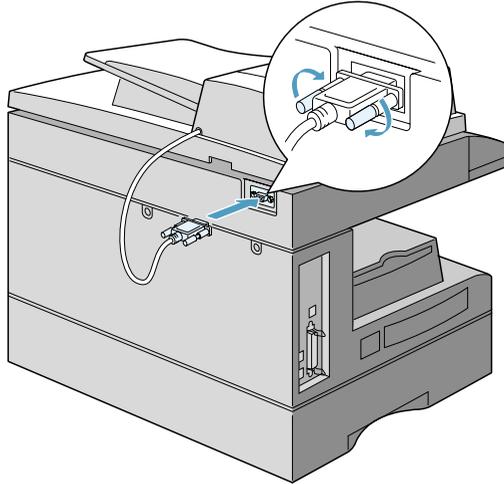
With some telephone systems, you must dial an access code (9 for example) and listen for a second dial tone. In such cases, you must insert a pause in the telephone number. You can insert a pause while you are setting up a Speed dial number.

To insert a pause, press [Pause/Redial] at the appropriate place while entering the telephone number. A “-” will appear in the display at the corresponding location.

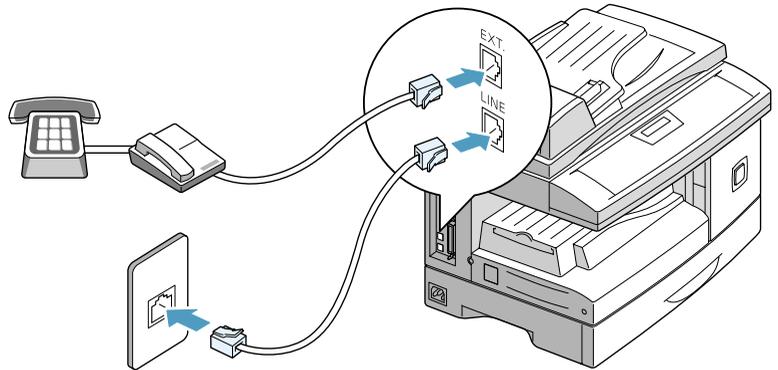
Making Connections

Use the following instructions to make the necessary connections required to install your *Xerox WorkCentre Pro 412*.

- Connect the Scan Module cord to the port shown and fasten the side screws.



- If required, connect your answering machine and/or telephone to the EXT jack.
- Connect the Telephone Line Cord from the wall jack to the LINE jack.

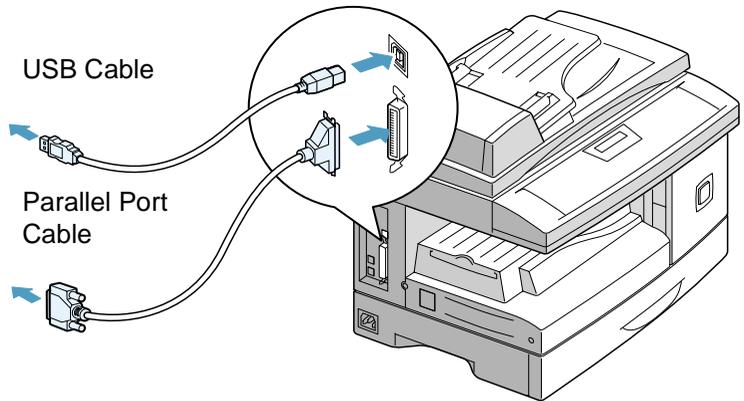


CAUTION: Shut down your computer before connecting the cable.

- Connect the USB Cable directly to your computer.

OR

- Connect a Parallel Port Cable (sold separately).

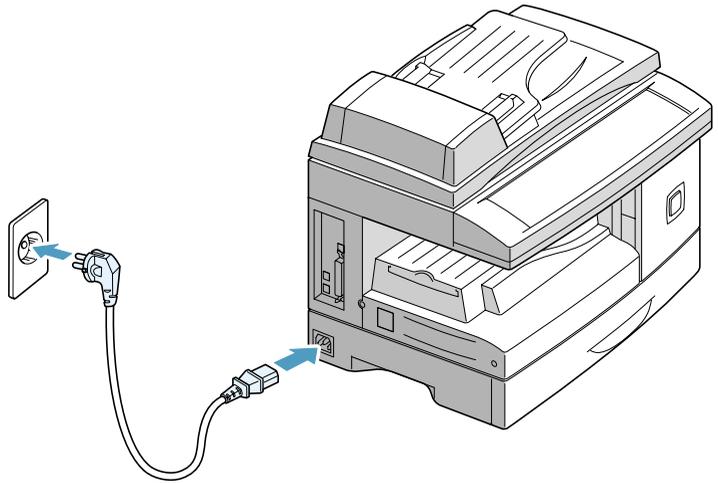


NOTE: Use only the Parallel cable or the USB cable. You must be running Windows 98, Windows 2000 or Windows Me to use the USB cable. Otherwise, use a parallel cable. (Parallel or USB cables are not required for standalone features.)

HINT: If using a parallel cable, ensure that it meets IEEE standard 1284 specifications and is not longer than twelve feet.

- Ensure you have unlocked the Scanner. Pull the scan unlock switch toward you before connecting the power cord. For details refer to “Unpacking” starting on page 2-2.
- Connect the AC Power Cord to your machine and a power outlet.

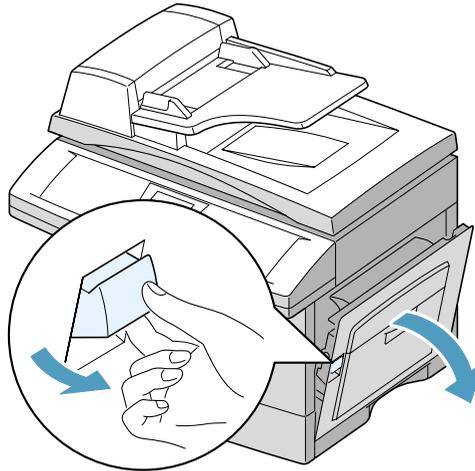
When plugged in, the *WorkCentre Pro 412* is switched on.



Installing Drum and Toner Cartridges

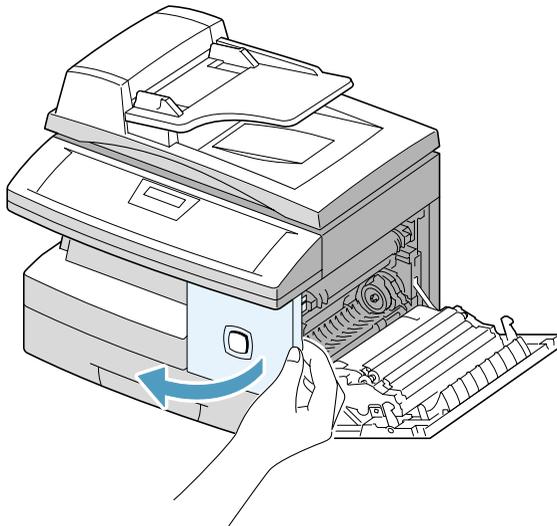
Using the instructions provided, install the Drum and Toner cartridges.

- Pull the release latch to open the side cover.

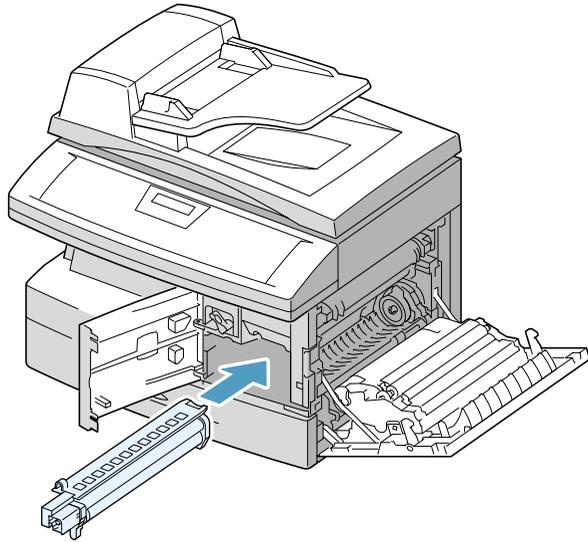


CAUTION: Ensure that the side cover is always open before opening the front cover.

- Open the front cover.



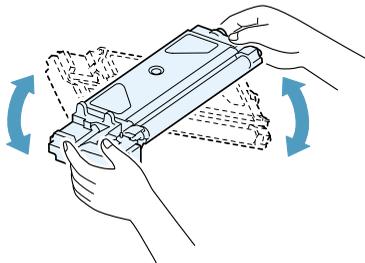
- Remove the drum cartridge from its packaging and slide it into the *WorkCentre Pro 412* until it locks into place.



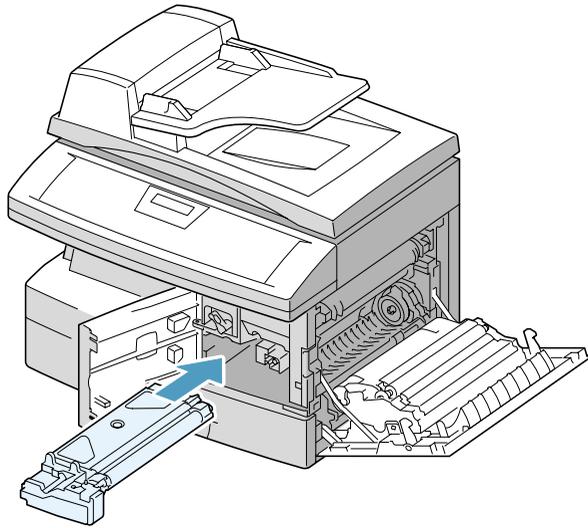
- Remove the starter toner cartridge from its packaging.
- Gently shake the cartridge to loosen the toner.

Shaking the cartridge will assure maximum copies per cartridge.

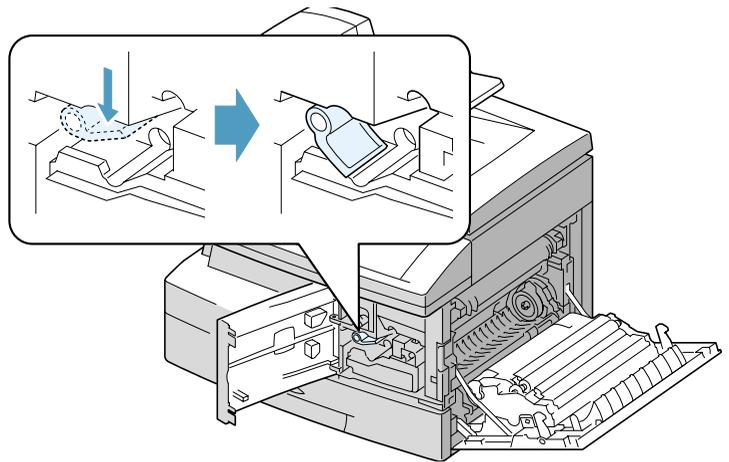
Xerox has included a Starter Toner Cartridge. Purchased replacement toner cartridges will yield approximately two times the number of copies.



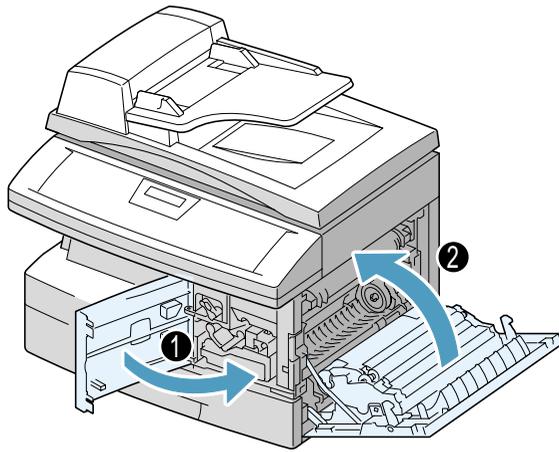
- Slide the toner cartridge into the *WorkCentre Pro 412* until it locks into place.



- Turn the toner lever downwards until it locks into place.



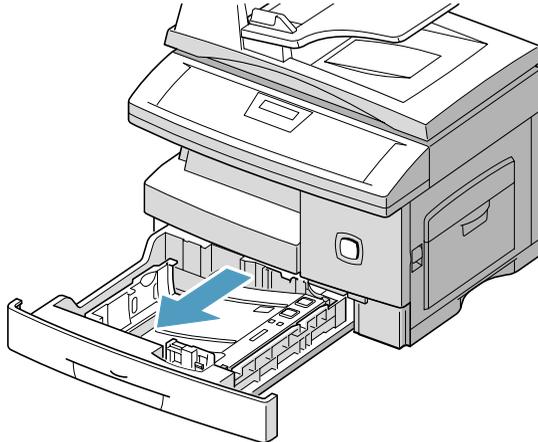
- Close the front cover ❶ and the side cover ❷ .



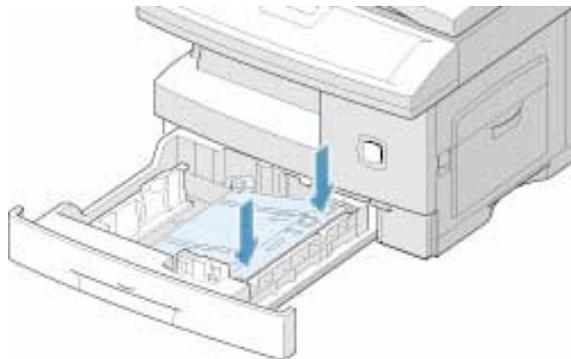
Loading Paper

Using the instructions provided, load paper into your *Xerox WorkCentre Pro 412*. The paper cassette can hold a maximum of 550 sheets of 80 g/m² (20 lb) plain paper.

- Pull open the paper cassette.



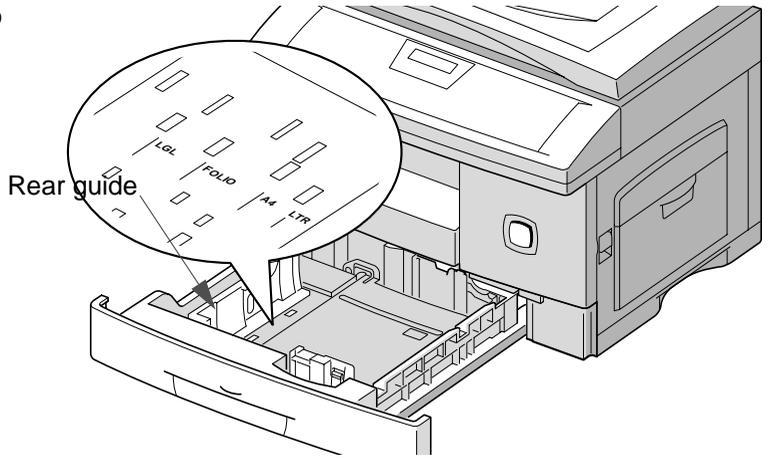
- Push down on the pressure plate until it locks in position.



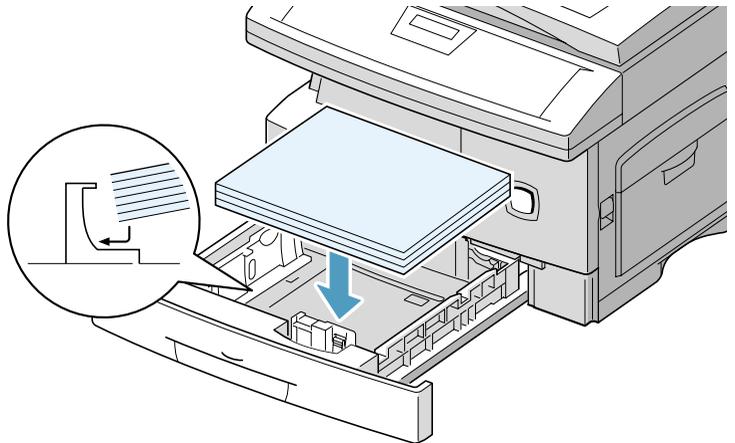
- Adjust the rear paper guide to the required paper length.

It is preset to A4 or 8.5 x 11 inch size depending on country.

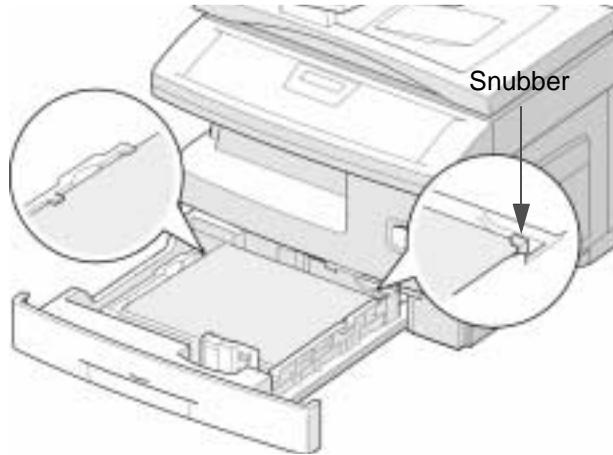
- To load another size, lift and insert the rear guide into the corresponding position.



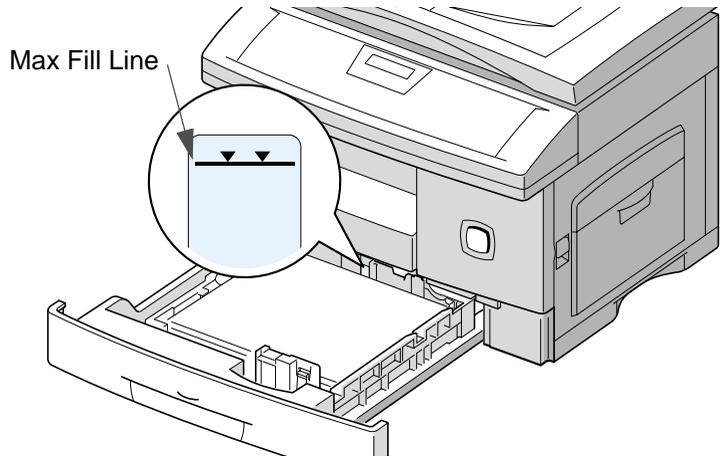
- Fan the paper and insert it into the cassette.



- Ensure that the paper is positioned under the snubbers.



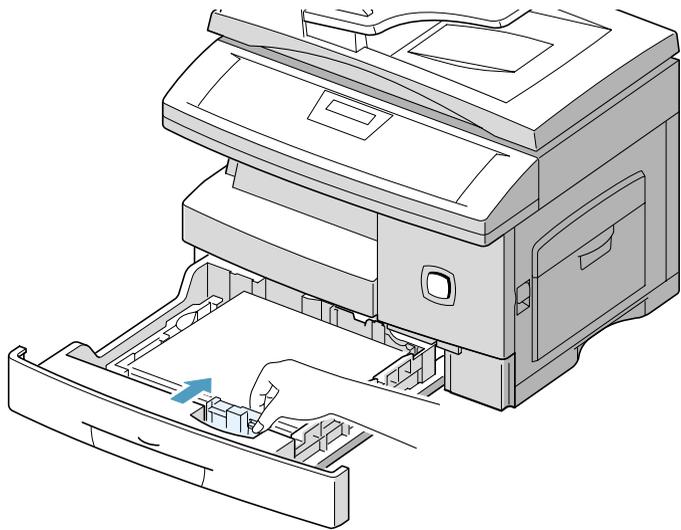
Do not fill above the max fill line.



- While squeezing the side guide as shown, move it toward the stack of paper until it gently touches the side of the stack.

Do not allow the guide to press against the edge of the paper tightly; the guide may bend the paper.

- Close the paper cassette.



Setting the Language

If the machine language requires changing, follow the instructions below to change the Select Language setting.

- Press [Menu/Exit] on the control panel. The display shows the first menu; SYSTEM DATA.
- Scroll to the 'SYSTEM SETUP' menu by pressing ▼ repeatedly, then press [Select].
- Scroll to the 'SELECT LANGUAGE' option by pressing ▼ repeatedly.
- Using the ◀ or ▶ . navigation keys, select the required language option and press [Select].

The language will change to the required setting.

- Press [Menu/Exit] to exit.

Setting the Local ID and Name

In some countries you are required by law to indicate your fax number on any fax you send. The System ID, containing your telephone number and name (or company name), will be printed at the top of each page sent from your machine. Follow the instructions below to enter your machine's System ID.

NOTE: In some countries access to the local ID by the user is not permitted due to local regulations.

- Press [Menu/Exit] on the control panel. The display shows the first menu; SYSTEM DATA.
- Scroll to the next menu 'SYSTEM ID' by pressing ▼, then press [Select].

The display asks you to enter the fax number. If there is a number already entered the number displays.

- Enter your fax telephone number. You can include + symbol in the phone number by pressing the * key, and insert a space by pressing the # key.
- If you make a mistake, move the cursor under the wrong character by pressing ◀ or ▶. Press the correct number to overwrite the incorrect number. If you press [Clear/Clear All], all the characters are deleted.
- Press [Select] when the number on the display is correct.

The display asks you to enter the ID.

- Enter your name or company name by using the numeric keypad.

You can enter alphanumeric characters using the numeric keypad, and include special symbols by pressing 0 repeatedly.

HINT: For details on how to use the numeric keypad to enter alphanumeric characters, refer to "Entering Characters Using the Numeric Keypad" on page 2-8

If you want to enter the same letter or number in succession (e.g. SS, AA, 777), enter one digit, then move the cursor by pressing the ► button, and enter the next digit.

If you want to insert a space in the name, you can also use the ► button to move the cursor to skip the position.

- Press [Select] when the name on the display is correct.

You have now entered the System ID for your machine.

Setting the Date and Time

The current time and date are shown on the display when the machine is on and ready for faxing (Standby mode). The time and date are printed on all faxes you send.

- Press [Menu/Exit] on the control panel. The display shows the first menu; SYSTEM DATA.
- Press ▼ or ▲ until 'DATE & TIME' appears, then press [Select].
- Enter the correct date and time using the numeric keypad:

Day	=	01 ~ 31	
Month	=	01 ~ 12	
Year	=	00 ~ 99	
Hour	=	00 ~ 23	(24-hour mode)
	=	01 ~ 12	(12-hour mode)
Minute	=	00 ~ 59	

The date and time is entered and displayed in the following order:

MM	=	Month
DD	=	Day
YY	=	Year
HH:	=	Hour
MM	=	Minute

You can also use ◀ or ▶ to move the cursor under the digit you want to correct, then enter a new number.

- To select AM or PM for 12-hour format, press ▼ or ▲ .
- Press [Select] when the time and date on the display is correct.

If you enter an invalid number, the machine beeps and does not proceed to the next step. If this happens, just re-enter the correct number.

The display shows the time and date you have set, then returns to Standby mode.

Installing Software

You are now ready to install the drivers and other software that will enable PC printing and scanning.

NOTE: Ensure the *WorkCentre Pro 412* is plugged in and connected to your computer's parallel or USB port before installing software from the CD. Windows 95 and Windows NT 4.0 do not support USB connection.

1. Switch on your PC, and start Windows.

NOTE: If a window appears concerning New Hardware, select Cancel.

2. Insert the Setup CD into the CD-ROM drive of your PC. If the Xerox screen appears automatically, go to step 4.
3. From the Start menu, select [Run]. Type D:\XINSTALL.EXE (Where "D" is the letter of your CD-ROM drive), then click [OK].
4. Follow the on-screen instructions to complete the software installation.
5. After installing all of your software, reboot your PC. For Windows 95/98, upon restart, eject the CD.

Congratulations! Your machine is now set up and fully operational.

NOTE: For more information about printing and scanning, refer to the "Print" and "Scan" chapters of this Guide.

3 Copy

This chapter provides step-by-step instructions for copying documents.

This chapter includes:

- Copying Procedure
- Standard Copy Features
- Special Copy Features

Copying Procedure

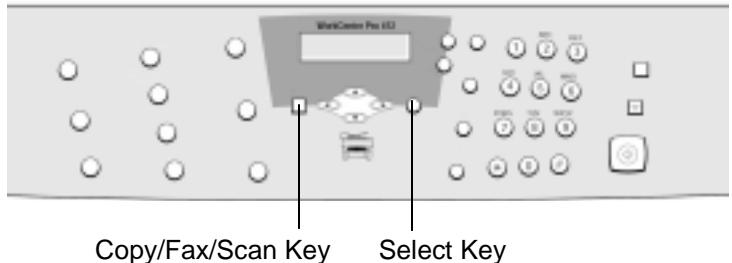
Quick Pathway

- Press the Copy/Fax/Scan Key.
- Select the Paper Supply.
- Load the Originals.
- Choose the Copy features required.
- Enter the copy quantity required.
- Press [Start].

Before making copies identify what is to be copied, the number of copies required and any special programming requirements. Use the following steps to make a copy.

1. Press the Copy/Fax/Scan Key

- Ensure that the LCD displays 'READY TO COPY'.
- If not, press the [Copy/Fax/Scan] key on the control panel repeatedly until 'COPY MODE' displays in the bottom line of the LCD, then press [Select].



2. Select the Paper Supply

You can copy to a size of media as large as a sheet of legal size (216 x 356 mm / 8.5 x 14 inch) paper. For full media specifications, refer to Appendix B - Specifications.

The instructions for loading this media are the same whether you are printing, faxing, or copying.

***HINT:** For instructions on how to load media, refer to Chapter 7 - Maintaining the Product, page 7-14.*

- Select the required paper supply source by pressing [Paper Supply].
- If you are using the cassette, press [Paper Supply] until the LCD displays 'CASSETTE'.
- If you are using the bypass tray to load special print media, press [Paper Supply] until the LCD displays 'BYPASS'.
- Press [Select] to save the required selection.

NOTE: When feeding media through the Bypass Tray the paper size option in System Data Settings must be set to the correct size. If feeding media smaller than A4/Letter, the setting can remain set at A4, Letter or Legal size. Refer to Chapter 9 - System Setup, page 9-6 for instructions.

3. Load the Originals

A choice of document input areas is available. These are:

- An automatic document feeder (ADF) for multiple originals.
- A document glass for single originals or bound originals.

Automatic Document Feeder (ADF)

Using the Automatic Document Feeder (ADF), you can load up to 30 documents in one job. Ensure documents are in good condition, and that all staples and paper clips have been removed. Ensure any glue, ink or correction fluid on the paper is completely dry before loading the documents.

Originals should be between 45 g/m² and 105 g/m² (12.5 lb and 28 lb), and between B5 (182 x 257 mm / 7 x 10 inch) and Legal size (216 x 356 mm / 8.5 x 14 inch).

Do not attempt to feed the following types of documents into the Automatic Document Feeder:

- carbon-paper or carbon-backed paper
- coated paper
- onion skin or thin paper
- wrinkled or creased paper
- curled or rolled paper
- torn paper

Do not load documents containing different sizes or weights of paper.

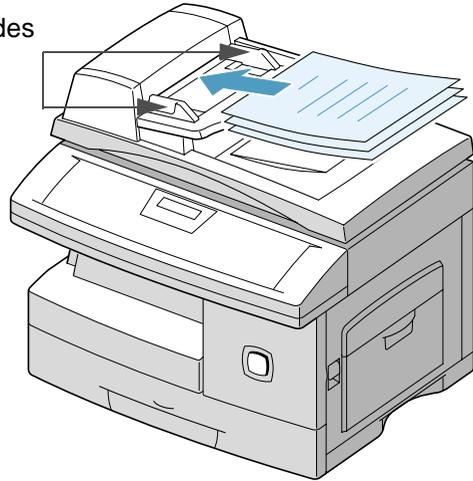
NOTE: If your document falls into any of these categories, use the document glass only.

- Remove all staples and paper clips before placing the originals into the document feeder.
- If necessary, adjust the sliding document guides to the paper size required.
- Insert the originals neatly into the document feeder, face up.

The first page should be on top with the headings towards the back or left of the machine.

- Align the stack with the left and rear edges of the document feeder tray and adjust the guides to just touch the front and rear edges of the originals.

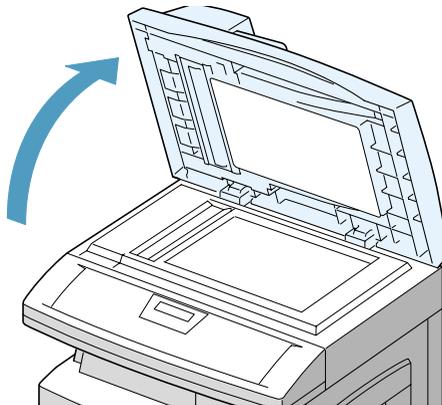
Document guides



Document Glass

The document glass should be used for single pages or bound originals up to a maximum size of Legal size paper (216 x 356 mm / 8.5 x 14 inch).

- Raise the document glass cover.



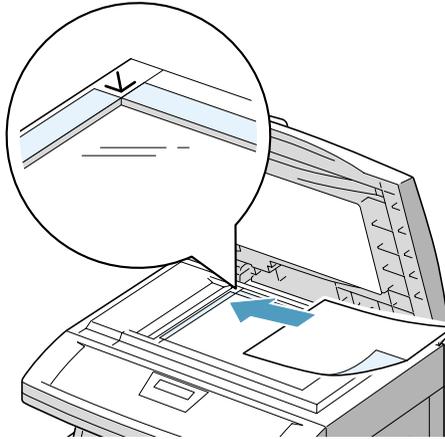
- Position the original face down on the document glass. Align it with the registration arrow in the rear left corner.

NOTE: Ensure that no documents are loaded in the ADF. If a document is detected in the ADF, the document has a priority than the document on the glass.

- Lower the document glass cover.

Leaving the cover open while copying will affect the copy quality and toner consumption.

NOTE: On completion of a copy job ensure the document glass cover is fully closed.



4. Select the Copy Features

There are five standard features available. The keys are located on the Control Panel.

If you do not adjust any setting, the machine will make a copy with the following features:

- Lighten/Darken – Normal
- Original Type – Mixed
- 2-Sided Copy – OFF
- Reduce/Enlarge – 100%
- Output – OFF

For a more detailed explanation of the standard Copy features available, please refer to the following pages:

- Lighten/Darken - page 3-9
- Original Type - page 3-10
- 2-Sided Copy - page 3-11
- Reduce/Enlarge - page 3-12
- Output - page 3-12

5. Enter the Quantity

Up to 999 copies can be entered using the numeric keypad.

- Use the numeric keypad to enter the number of copies required.
- If necessary, press [Clear/ Clear All] on the control panel to clear the selected quantity and enter a new quantity.



Numeric Keypad Clear/ Clear All Key

6. Press Start

- Press [Start] to begin copying.
The LCD displays copy processing.



Start Key

Standard Copy Features

You can set the following standard features for Copy. Use the feature buttons on the control panel to change feature settings before pressing the Start button to begin copying.

Lighten/Darken

The Lighten/Darken key can adjust the contrast for a document containing faint markings or dark images.

- Press [Lighten/Darken] on the control panel to display the current setting.
- Press [Lighten/Darken] repeatedly to scroll through the choices.

You can choose from 5 contrast settings. Each time you press the key, the selection block on the LCD moves to the left or the right. As the selection block moves to the right, the contrast becomes darker.

- Press [Select] to save the selection.

Original Type

The Original Type setting can be used to improve copies of different documents by specifying the type of document being loaded.

- Press [Original Type] on the control panel to display the current setting.
- Press [Original Type] repeatedly to change the setting.
- Press [Select] to save the selection.

Original Type Options

Text Use to copy documents containing mostly text.

Mixed Use to copy documents with mixed text and graphics.

Photo Use when the originals are photographs.

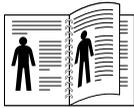
2-Sided Copy

Use the 2-Sided Copy option to produce 2-sided copies from 1-sided originals.

- Press [2-Sided Copy] repeatedly until the required selection displays.
- Press [Select] to save the selection.
- Press [Start].

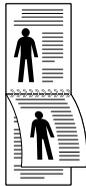
2-Sided Copy Options

Long Edge



Produces copies with the binding orientation along the long edge of the paper as in a magazine.

Short Edge



Produces copies with the binding orientation along the short edge of the paper as in a calendar.

Reduce/Enlarge

You can reduce or enlarge the size of a copied image from 25% to 400% using the document glass or from 25% to 100% using the ADF.

NOTE: The percentage available is different according to the document loading method.

- Press [Reduce/Enlarge] on the control panel repeatedly until 'REDUCE/ENLARGE' displays on the LCD.
- Enter the required percentage using the numeric keypad.

NOTE: Use leading zero's to ensure three digits are entered e.g. enter 050 to program a 50% reduction.

If you press [Clear/Clear All], the selected percentage returns to 100%.

- Press [Select] to save the selection.

Output

When the Output feature is On, the machine collates the copy job into sets. For example, 2 copies of a 3 page job will print one complete document followed by the second complete document (e.g. 1, 2, 3 then 1, 2, 3).

NOTE: If producing multiple collated sets, use the document feeder to scan the originals.

- Press [Output] on the control panel to display the current setting.
- Press [Output] to select 'ON'.
- Press [Select] to save the setting.

Special Copy Features

Special Copy Features can be used for more advanced Copy jobs. Use the Special Copy Features for:

- Printing the Original Image to Fit on the Paper (Auto Fit)
- Printing Multiple Copies on a Single Page (Clone)

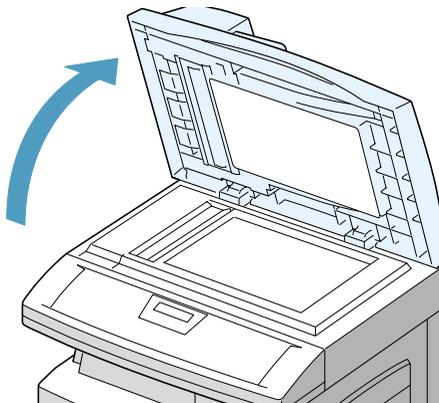
Auto Fit

This feature automatically reduces or enlarges the original image to fit on the paper currently loaded in the machine.

This feature can only be applied when you are using the document glass. If a document is detected in the ADF, the Auto Fit option does not work.

- Ensure that the document to be copied is loaded on the document glass.

NOTE: Ensure that no documents are loaded in the ADF. Auto Fit does not work with ADF loading.



- Press [Reduce/Enlarge] repeatedly until 'AUTO FIT' displays.
- Press [Select] to save the setting.
- Press [Start]. The machine prescans the original image with low resolution to determine the copy ratio.

The machine begins copying the image onto the paper size you have loaded.

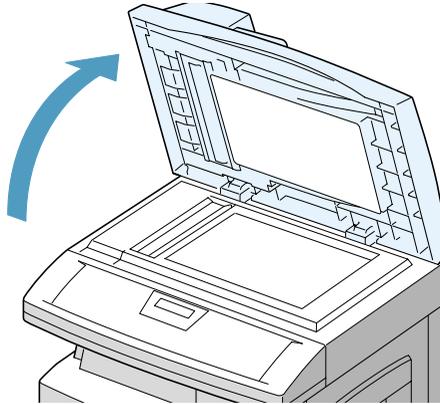
Clone

The Clone feature prints multiple image copies from an original document onto a single page. The number of images is automatically determined by the original image size.

This feature can only be applied when you are using the document glass. If a document is detected in the ADF, the Clone option does not work.

- Ensure that the document to be copied is loaded on the document glass.

NOTE: Ensure that no documents are loaded in the ADF. Clone does not work with ADF loading.



- Press [Reduce/Enlarge] repeatedly until 'CLONE' displays.
- Press [Select] to save the setting.
- Press [Start]. The machine prescans the original image with low resolution to detect the image size and determines the number of images to be printed on a page.

The machine scans the original and reproduces multiple images.

4 *Print*

This section describes printing from your PC to your *Xerox WorkCentre Pro 412*.

This chapter includes:

- Printing a Document from an Application
- Printer Settings

Printing a Document from an Application

This procedure describes the general steps required for printing from various Windows applications. The exact steps for printing a document may vary depending on the application program you are using. Refer to your software application's documentation for the exact printing procedure.

The following steps describe the typical process to print from a Windows environment:

1. Ensure that your *WorkCentre Pro 412* is properly connected to the computer, the machine is powered on, and there is paper in one of the paper trays.
2. Verify that you have installed the printer driver software for your machine. For instructions, refer to Chapter 2 - Product Overview, page 2-26.
3. Start the program you are using to create the document, and create or open the document you want to print.
4. Choose [Print] or [Page Setup] from the File menu. Ensure the *WorkCentre Pro 412* is selected as your default printer. Click [Properties] or [Setup] if you want to make any adjustments that are appropriate for printing your document.

***HINT:** For instructions refer to the next section "Printer Settings".*

5. Click [OK] to close the Properties dialog box.
6. After making any necessary changes to the printing parameters, click [OK] to start the print job.

You can use your machine with all your Windows 95/98/2000/Me or Windows NT 4.0 applications. Ensure you have set the *WorkCentre Pro 412* as the default printer for all your Windows operations.

Most Windows software applications allow you to make changes to the printer settings. This includes settings that determine how a print job looks such as paper size, paper orientation, and margins. Settings made in the application to create the document will usually override settings made in the printer driver.

NOTE: You do not need to use any of the control panel keys to use the machine as a PC printer. For example, if you want to adjust the printing contrast you do not have to press Lighten/Darken on the control panel. The control panel keys are used primarily for copying, faxing and scanning.

Accessing Printer Settings

You can access printer settings by using either of these methods.

Windows 95/98/Me

➤ Select the File > Print > Properties or File > Page Setup command from within any Windows application.

Or

➤ Select the Xerox WorkCentre printer from the Printers folder, then select File > Properties (or select the printer icon in the Printers folder, and click the right mouse button).

Windows NT 4.0

- Select the File > Print > Properties or File > Page Setup command from within any Windows application.

Or

- Select the Xerox WorkCentre printer from the Printers folder, click the right mouse button, then select Document Defaults from the drop-down list.

Windows 2000

- Select the File > Print or File > Page Setup command from within any Windows application.

Or

- Select the Xerox WorkCentre printer from the Printers folder, click the right mouse button, then select Printing Preferences from the drop-down list.

Printer Properties Tabs

When the Printer Properties are displayed, you can review and change settings for your print job.

Your printer's Properties window consists of 5 tabs:

- Paper
- Image Quality
- Page Layout
- Watermark
- About

If you access the Printer Properties through the Printers folder, you can view more Windows-based tabs, as well as these 5 tabs.

For information on the Windows-based tabs, refer to your Windows User Guide.



For details on the printer settings available on each tab, please refer to the printer driver on-line help.

NOTE: If you access the Printer Properties through the Printers folder, any settings made will become the default settings for the printer. Settings made when the Printer Properties are accessed through an application **File** menu and **Print** or **Page Setup** will remain active until the application you are printing from is closed.

Printer Properties Buttons and Icons

- Click [OK] when you have finished reviewing or making changes.
- Click [Cancel] if you want to exit the tab menus without applying any changes.
- Click [Help] to view the online Help feature and tab menu details.
- Click the [?] icon in the title bar. Position the ? pointer over the parameter in question and click to see a pop up window explaining that parameter.
- Click the [Defaults] button to reset the parameter values for current tab to their default settings (i.e., before you made any pending changes).

5 *Fax*

This chapter contains information about the *Fax* function and the features available. It gives step by step instructions on how to send and receive faxes using all the features and functions available.

The following topics are included:

- Faxing Procedure
- Dialing Methods
- Receiving a Fax
- Standard Fax Features
- Advanced Fax Features
- Fax Reports

Faxing Procedure

Quick Pathway

- Load the Originals.
- Press the Copy/Fax/Scan Key
- Choose the Fax features required.
- Enter the fax number.
- Press [Start].

Before sending a fax identify what is to be faxed, the fax number and any special programming requirements. Use the following steps to send a fax.

1. Load the Originals

A choice of document input areas is available. These are:

- An automatic document feeder (ADF) for multiple single sided originals.
- A document glass for single originals or bound originals.

Automatic Document Feeder (ADF)

Using the Automatic Document Feeder (ADF), you can load up to 30 documents in one job. Ensure documents are in good condition, and that all staples and paper clips have been removed. Ensure any glue, ink or correction fluid on the paper is completely dry before loading the documents.

Originals should be between 45 g/m² and 105 g/m² (12.5 lb and 28 lb), and between B5 (182 x 257 mm / 7 x 10 inch) and Legal size (216 x 356 mm / 8.5 x 14 inch).

Do not attempt to feed the following types of documents into the Automatic Document Feeder:

- carbon-paper or carbon-backed paper
- coated paper
- onion skin or thin paper
- wrinkled or creased paper
- curled or rolled paper
- torn paper

Do not load documents containing different sizes or weights of paper.

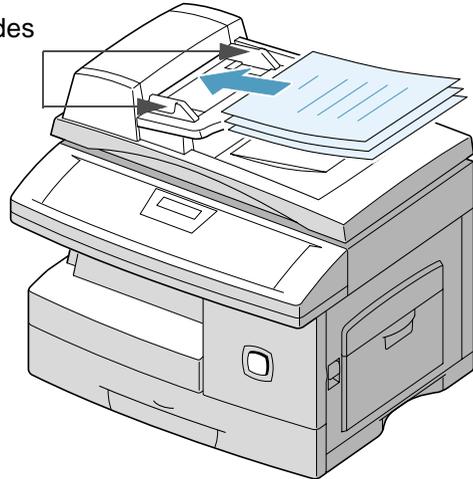
NOTE: If your document falls into any of these categories, use the document glass only.

- Remove all staples and paper clips before placing the originals into the document feeder.
- If necessary, adjust the sliding document guides to the paper size required.
- Insert the originals neatly into the document feeder, face up.

The first page should be on top with the headings towards the back or left of the machine.

- Align the stack with the left and rear edges of the document feeder tray and adjust the guides to just touch the front and rear edges of the originals.

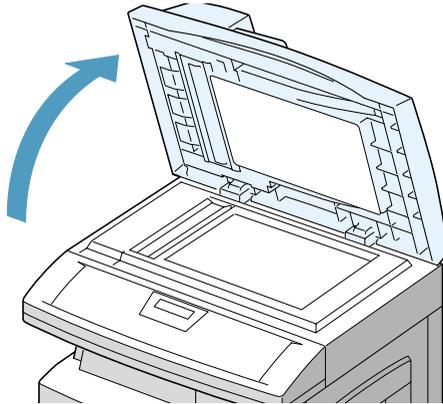
Document guides



Document Glass

The document glass should be used for single pages or bound originals up to a maximum size of Legal size (216 x 356 mm / 8.5 x 14 inch).

- Raise the document glass cover.

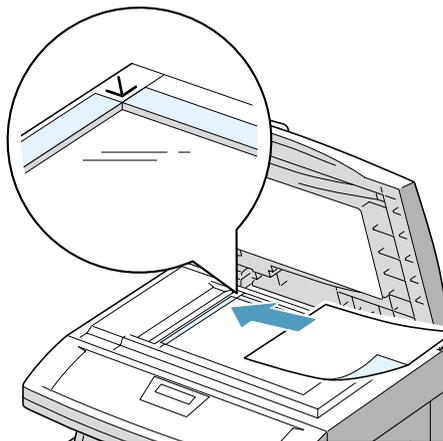


- Position the original face down on the document glass. Align it with the registration arrow in the rear left corner.

NOTE: Ensure that no documents are loaded in the ADF. If a document is detected in the ADF, the document has a priority than the document on the glass.

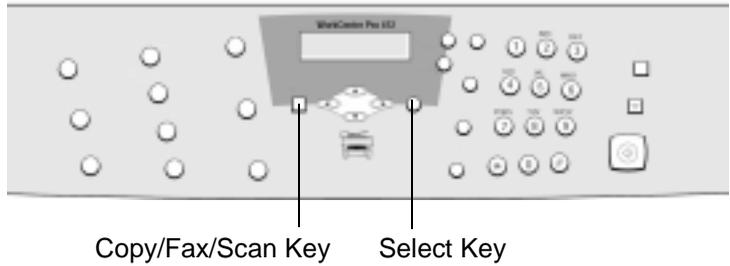
- Lower the document glass cover.

NOTE: On completion of a job ensure the document glass cover is fully closed.



2. Press the Copy/Fax/Scan Key

- Ensure that the LCD displays the date and time (FAX mode).
- If not, press the [Copy/Fax/Scan] key on the control panel repeatedly until 'FAX' displays in the bottom line of the LCD, then press [Select].



3. Select the Fax Features

There are four standard features available. The keys are located on the Control Panel.

For a more detailed explanation of the standard Fax features available, please refer to the following pages:

- Resolution - page 5-20
- Scan Options - page 5-21
- Original Type - page 5-21
- Lighten/Darken - page 5-22

4. Enter the Fax Number

Enter the fax number of the remote machine using the Numeric Keypad.

- Use the numeric keypad to enter the telephone number of the remote fax machine.
- If an incorrect number is entered, use the navigation keys to select the incorrect number and press the correct number.

Pressing the [Clear/Clear All] key will delete the entire fax number entered.



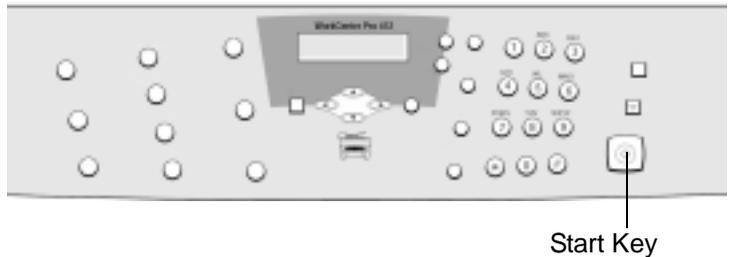
Numeric Keypad Clear/Clear All Key

There are several methods available for entering the remote fax number, including functions such as Speed dialing and Group dialing.

HINT: For information about all the dialing methods available, refer to "Dialing Methods" on page 5-9.

5. Press Start

- Press [Start] to begin scanning and faxing.
- If scanning originals using the document glass, the display asks if you want to send another page. Using the navigation keys select [1:YES] or [2:NO] and press [Select].
- If [1:YES] is selected, repeat the procedure until all the originals have been scanned, then select [2:NO] and press [Select] to send the job.



6. Fax Job Management

Canceling a Fax

To cancel a fax, press Stop at any time during the transmission.

Confirming Transmission

When the last page of your document has been sent successfully, the machine beeps and returns to Standby mode. If something went wrong during your fax transmission, an error message appears on the display.

HINT: For a listing of error messages and their meanings, refer to Chapter 8 - Basic Troubleshooting, page 8-13.

If you receive an error message, press [Stop] to clear the message and try to send the document again.

You can set your machine to print out a Confirmation Report (Message Confirm) automatically each time sending is completed. For instructions refer to Chapter 9 - System Setup, page 9-6.

Monitoring Dual Job Status

Your machine can perform more than one of many functions simultaneously. For example, you can:

- Receive a fax into the memory while making a copy.
- Store a fax document for later transmission while printing an incoming fax.

When the machine performs dual tasks, press [Job Status] to see the current status on the display of the other operation. Each time you press [Job Status], the current status of the two operations displays alternatively.

Dialing Methods

There are several fax dialing methods available on your *WorkCentre Pro 412*.

Keypad Dialing

Use the following instructions to send the fax using Keypad Dialing.

- Feed the document(s) face up into the ADF or place a single document on the document glass face down.
- Ensure the LCD displays the date and time (FAX mode). If not, press the [Copy/Fax/Scan] key until FAX displays, then press [Select].
- Use the numeric keypad to enter the telephone number of the remote fax machine.
- Press [Start].

Speed Dialing

You can store up to 80 numbers in one or 2-digit Speed Dial locations (1-80).

Storing a Number for Speed Dialing

- Ensure that the LCD displays the date and time (FAX mode). If not, press [Copy/Fax/Scan] until FAX displays, then press [Select].
- Press and hold [Speed Dial] on the control panel for 2 seconds.
- Enter a speed dial number using the numeric keypad, then press [Select].

If a number is already stored in the location you chose, the display shows the number.
- Enter the fax number you want to store, then press [Select].
- To assign a name to the number, enter the required name.

For information on how to enter names, refer to Chapter 2 - Product Overview, page 2-8.

If you do not want to assign a name, skip this step.
- Press [Select] when the name appears correctly or simply without entering a name.
- To store more telephone numbers, repeat the procedure.
- To return to Standby mode, press [Menu/Exit] or [Stop].

Using Speed Dialing

- Feed the document(s) face up into the ADF or place a single document on the document glass face down.
- Ensure the LCD displays the date and time (FAX mode). If not, press the [Copy/Fax/Scan] key until FAX displays, then press [Select].
- Program any features required for the job.
- Press [Speed Dial] on the control panel.
- Enter the speed dial number.
- Press [Start].

The fax number stored in the speed dial location will be automatically dialed, then the document will be sent when the remote fax machine answers.

Group Dialing (for Multi-Address Transmission)

A number of speed dial numbers can be assigned as a group. By using the group number, you can send a document to multiple parties in a single operation. Your machine will dial the remote numbers in stored sequence. If the number is busy, your machine will dial the next stored number and after dialing all of the stored numbers, will automatically redial any number that was previously busy. Before you can use this feature, you must coordinate and store the group numbers required.

Assigning Speed Dial Numbers to a Group

- Ensure that the LCD displays the date and time (FAX mode). If not, press [Copy/Fax/Scan] until FAX displays, then press [Select].
- Press [Menu/Exit] on the control panel. The display shows the first menu; SYSTEM DATA.
- Press ▼ or ▲ until you find 'GROUP DIAL', then press [Select].
- Press [Select] to access 'NEW'.
- Enter the required group number between Speed Dial location numbers 01 and 80, then press [Select].

NOTE: If the group number is already used, 'NO. IS REGISTERED' appears on the LCD.

- The display asks for a 2-digit speed dial number.
- Enter the speed dial number you want to include in the group and press [Select].
- The speed dial number, fax number and name displays.
- Press [Select].
 - Repeat the procedure to enter other speed dial numbers into the selected group.
 - Press [Menu/Exit] when you have entered all the required speed dial numbers.
- The display asks you to enter an ID (name).

- To assign a name to the group, enter the required name.
If you do not want to assign a name, skip this step.
- When you have finished, press [Select].
- If you want to assign another group, repeat the whole procedure.
- To exit and return to the previous menu level, press [Menu/Exit]. To return to Standby mode, press [Stop].

NOTE: You cannot include a group dial number in another group dial number.

Editing Group Dial Numbers

You can delete a specific speed dial number from a selected group or add a new speed dial number to the selected group.

- Ensure that the LCD displays the date and time (FAX mode). If not, press [Copy/Fax/Scan] until FAX displays, then press [Select].
- Press [Menu/Exit] on the control panel. The display shows the first menu; SYSTEM DATA.
- Press ▼ or ▲ until you find 'GROUP DIAL', then press [Select].
- Press ▼ or ▲ to select 'EDIT' then press [Select].
- Enter the group number you want to edit, then press [Select].

The display prompts you to enter a speed dial number.

- If you want to delete a specific speed dial number from the group, enter the speed dial number and press [Select].

The LCD displays 'DELETE?'.
The LCD displays 'DELETE?'.

- If you want to add a new speed dial number, enter the new speed dial number and press [Select].

The LCD displays 'ADD?'.

- Press [Select] to select the required option. Repeat the steps to add or remove other speed dial numbers.

- Press [Select] when you have finished editing the Group. If there is a name assigned to the group, the name appears.
- Change the name if necessary, then press [Select]. You can continue editing other groups by repeating the whole procedure.
- To exit and return to the previous menu level, press [Menu/Exit]. To return to Standby mode, press [Stop].

Using Group Dialing (Multi-Address Transmission)

You can use Group Dialing for Manual Group sending, or Delayed sending.

Follow the procedure of the required operation, for Manual Group sending refer to the instructions below. For Delayed Sending, refer to “Delay Send” page 5-24.

When you come to a step in which the display asks you to enter the remote fax number, press Speed Dial and enter the group dial number. You can use only one group number for one operation. Then continue the procedure to complete the required operation.

Your machine automatically scans the document into memory, and the machine will dial each of the numbers included in the Group.

Manual Group Dialing

Use this feature to send your documents to multiple locations. After sending, the documents are automatically erased from the memory.

- Feed the document(s) face up into the ADF or place a single document on the document glass face down.
- Ensure the LCD displays the date and time (FAX mode). If not, press the [Copy/Fax/Scan] key until FAX displays, then press [Select].
- Program any features required for the job.
- Press [Manual Group] on the control panel.

- Enter the remote fax phone number using the numeric keypad.

To enter the number, you can also press [Speed Dial] and enter a speed dial number and press [Select].

- Press [Select] to confirm the number.

The display asks you to enter the next fax number to send the document to.

NOTE: If you have an operation stored in the memory which requires the machine to send or receive to or from more than one location, the machine will not allow additional fax numbers to be entered here.

- Press [Select] and enter another fax number using the numeric keypad.

You can also press [Speed Dial] and enter a speed dial number and press [Select]. Note that you cannot use Group dial numbers for another fax number.

The number appears on the display.

- Press [Select] to confirm the number.
- To send to one location or when you complete the last fax number setting, press [Menu/Exit].

The document will be scanned into the memory before transmission.

The display shows the memory capacity and the number of pages being stored in the memory, then the machine begins sending the document in order of the numbers you entered.

NOTE: For an original fed from the document glass, the display asks if you want to feed another page. Using the navigation keys, select [1:YES] or [2:NO] and press [Select]. When you have finished scanning all the originals, select [2:NO] and press [Select] to send the fax.

Manual Dialing

- Feed the document(s) face up into the ADF or place a single document on the document glass face down.
- Ensure the LCD displays the date and time (FAX mode). If not, press the [Copy/Fax/Scan] key until FAX displays, then press [Select].
- Program any features required for the job.
- Press [Manual Dial] on the control panel. The dial tone will be audible.
- Enter the remote fax phone number using the numeric keypad.
- When you hear the fax tone from the remote machine, press [Start] to begin sending.

Redial

To Redial the Last Number:

- Ensure the LCD displays the date and time (FAX mode). If not, press the [Copy/Fax/Scan] key until FAX displays, then press [Select].
- Press [Pause/Redial]. If a document is loaded in the ADF or on the document glass, the machine automatically begins to send.

To Search Redial Memory:

- Ensure the LCD displays the date and time (FAX mode). If not, press the [Copy/Fax/Scan] key until FAX displays, then press [Select].
- Press and hold [Pause/Redial] for 2 seconds.

The Redial memory in your machine retains the last 10 numbers called. If you have dialed the same number multiple times, the machine does not count the duplicates.

- Press ▲ or ▼ to search through the memory until you find the number you want.
- When the number you want appears on the display, press [Start] to dial.

Sending a Fax After Talking

If you have a phone connected to the EXT jack, you can send a fax after speaking with a person at the remote site.

- When you have finished talking, instruct the person at the remote location to start their fax machine and hang up. The remote fax machine will send the initial fax tones.
- Wait until you hear the fax tone from the remote fax machine.
- Place the documents in the Automatic Document Feeder.
- Press [Start] and replace your handset.

Receiving a Fax

Your *WorkCentre Pro 412* can automatically answer, receive, and print all incoming faxes.

During PC file printing, an incoming fax can be received and stored in memory.

You can change the receive mode.

Receive Modes

You can configure your machine to TEL, FAX, TEL/FAX or ANS/FAX mode.

- Press [Menu/Exit] on the control panel.
- Press ▼ or ▲ until 'SYSTEM SETUP' appears in the display, then press [Select].
- Press ◀ or ▶ to select the required receive mode.
- Press [Select] to save the setting.
- Press [Menu/Exit] to exit and return to the previous menu level.
- To return the Standby mode, press [Stop].

Receive Mode Options

TEL In TEL mode, automatic fax answering and reception is turned off. To receive a fax manually, pick up the external phone handset or press Manual Dial to accept the call. You can hear voice or fax tone from the remote machine. Press [Start] and replace the handset.

NOTE: If the machine is in Scan or Copy mode, the Manual Dial button will not be activated. Ensure that the LCD displays the date and time (FAX mode).

FAX The machine answers an incoming call and immediately goes into fax receive mode.

- TEL/FAX** The machine answers the incoming call. If a fax signal is not detected, the machine sounds a ringing tone to indicate a voice phone call. To answer the call, press [Start] on the control panel, then lift the handset. If the external phone is not lifted while the ringing tone is sounding, the machine will switch to automatic fax reception mode.
- ANS/FAX** Use if attaching an answering machine to the *Xerox WorkCentre Pro 412*. If the machine senses a fax tone, it automatically switches to FAX mode.

Receiving Manually in TEL Mode

If you have an external phone connected to the EXT jack, you can answer voice phone calls and receive faxes manually.

- Answer an incoming call by picking up the external phone.
- If you hear a fax tone, or if the person calling asks you to receive a fax, press [Start].

You may also press the characters *9* on the telephone to initiate reception.

- Replace the external phone handset. The machine begins receiving and returns to Standby mode when reception is complete.

NOTE: The characters *9* (star-nine-star) are preset at the factory as the default remote receive start code (Rcv Code) for machines operated with a telephone connected to the EXT jack. The asterisks in the code are fixed characters, but the number can be changed. For instructions, refer to Chapter 9 - System Setup, page 9-6.

Standard Fax Features

You can set the following standard features for Faxing. Use the feature buttons on the control panel to change feature settings before pressing the Start button to begin scanning.

Resolution

Use the Resolution option to increase sharpness and clarity. If you press [Resolution] repeatedly after loading an original, you can choose between FINE, SUPER FINE, and STANDARD.

- Press [Resolution] on the control panel to display the current setting.
- Press [Resolution] repeatedly to scroll through the choices.
- Press [Select] to save the required selection.

Resolution Options

- | | |
|-------------------|--|
| Standard | Use for documents with normal sized characters. |
| Fine | Use for documents containing small characters or thin lines, or for sending documents printed using a dot-matrix printer. |
| Super Fine | Use for documents containing extremely fine detail. Super Fine mode is enabled only if the remote machine also supports Super Fine resolution. |

NOTE: Super Fine resolution is not available if the Send from Memory feature is set to ON. If Send From Memory is set to ON, all documents will be stored to memory in Standard mode. If the product is set to Super Fine resolution and the remote fax machine does not support Super Fine resolution, your product will transmit using the highest resolution mode supported by the remote fax machine.

Scan Options

If the remote fax machine has color reception capability, you can send color documents. Select B&W for non-color documents, and COLOR for color documents.

- Press [Scan Options] on the control panel to display the current setting.
- Press [Scan Options] repeatedly to scroll through the choices.
- Press [Select] to save the selection.

Original Type

If you send different types of documents, use this option to change the original type to ensure a high quality.

- Press [Original Type] on the control panel to display the current setting.
- Press [Original Type] repeatedly to change the setting.
- Press [Select] to save the selection.

Original Type Options

Text Use to scan documents containing mostly text.

Mixed Use to scan documents with mixed text and graphics.

Photo Use when the originals are photographs.

Lighten/Darken

Use Lighten/Darken to compensate for the brightness or darkness of your faxed document. Set to darker mode when the document contains faint pencil markings or light print. Set to lighter mode for dark print.

- Press [Lighten/Darken] on the control panel to display the current setting.
- Press [Lighten/Darken] repeatedly to scroll through the choices.

You can choose from 5 contrast settings. Each time you press the key, the selection block on the LCD moves to the left or the right. As the selection block moves to the right, the contrast becomes darker.

- Press [Select] to save the selection.

Resetting Fax Features

You can reset all the Fax feature selections you have made back to the factory default status.

- Press [Clear/Clear All] on the control panel twice.

The LCD displays the date and time.



Clear/Clear All Key

Advanced Fax Features

There are a number of fax functions which can be used for more advanced fax jobs.

Sending a Color Fax

Use the following procedure to send a color fax if your original contains color:

- Feed the document(s) face up into the ADF or place a single document on the document glass face down.
- Ensure the LCD displays the date and time (FAX mode). If not, press the [Copy/Fax/Scan] key until FAX displays, then press [Select].
- Press [Resolution] on the control panel to display the current setting.
- Press [Resolution] repeatedly until 'FINE' is displayed.
- Press [Select] to save the setting.
- Press [Scan Options] on the control panel to display the current setting.
- Press [Scan Options] repeatedly until 'COLOR' is displayed.
- Press [Select] to save the setting.
- Press [Manual Dial] on the control panel and enter the number of the remote machine using the numeric keypad.
- Press [Start] to begin scanning and then sending.

NOTE: If the remote machine does not have color printing capability, the received fax will be printed in black and white.

Delay Send

You can set your machine to send a fax at a later time when you will not be present.

- Feed the document(s) face up into the ADF or place a single document on the document glass face down.
- Ensure the LCD displays the date and time (FAX mode). If not, press the [Copy/Fax/Scan] key until FAX displays, then press [Select].
- Program any features required for the job.
- Press [Menu/Exit] on the control panel.
- Press ▼ or ▲ until 'DELAY SEND' appears, then press [Select].
- Enter the number of the remote machine using the numeric keypad.

To enter the number, you can also press Speed Dial and enter the speed dial number then press [Select].

- Press [Select] to confirm the number.

The display asks you to enter the next fax number to send the document to.

NOTE: If you have an operation stored in the memory which requires the machine to send or receive to or from more than one location, the machine will not allow additional fax numbers to be entered here.

- If you want to send to more than one location, press [Select], and enter another fax number using the numeric keypad.

You can also press Speed Dial and enter a speed dial number, then press [Select].

- The number appears on the display. Press [Select] to confirm the number.
- To send to one location or when you complete the last fax number setting, press [Menu/Exit].

- The display asks you to enter an ID. If you want to assign a name to the transmission, enter the name. If not, skip this step.

For details on how to enter the name using the numeric keypad, refer to Chapter 2 - Product Overview, page 2-8.

- Press [Select].

The display shows the current time and asks you to enter the start time when the fax is to be sent.

- Enter the time by using the numeric keypad.

To select AM or PM for 12-hour format, press ▼ or ▲. If you set a time earlier than the current time, the document will be sent at that time on the following day.

- Press [Select] when the start time displays correctly.

The document will be scanned into the memory before transmission. The display shows the memory capacity and the number of pages being stored in the memory.

NOTE: For an original fed from the document glass, the display asks if you want to feed another page. Using the navigation keys, select [1:YES] or [2:NO] and press [Select]. When you have finished scanning all the originals, select [2:NO] and press [Select].

- The machine returns to Standby mode and the LCD reminds you that you are in Standby mode and that Delayed Transmission is set.

NOTE: For instructions on canceling a delayed send transmission, refer to “Canceling a Schedule Transmission” on page 5-32.

Adding Documents To a Delayed Transmission

You can add documents to the delayed transmission previously reserved in your machine's memory.

- Feed the document(s) face up into the ADF or place a single document on the document glass face down.
- Ensure the LCD displays the date and time (FAX mode). If not, press the [Copy/Fax/Scan] key until FAX displays, then press [Select].
- Program any features required for the job.
- Press [Menu/Exit] on the control panel.
- Press ▼ or ▲ until 'ADD/CANCEL' appears, then press [Select].
- Press [Select] to access 'ADD'. The display shows the information of the last job reserved in the memory.
- Press ▼ or ▲ repeatedly until you find the operation to which you want to add documents, then press [Select].

The machine automatically stores the documents in the memory, and the display shows the memory capacity and the number of pages.

After storing, the machine displays the number of total pages, then returns to Standby mode.

When the Priority Send is enabled, a high priority document can be transmitted ahead of reserved operations. The document is scanned into the memory, then transmitted when the current operation is concluded. In addition, the Priority Send will interrupt a broadcast operation between stations (i.e., when transmission to station A ends, before transmission to station B begins) or between redial attempts.

- Feed the document(s) face up into the ADF or place a single document on the document glass face down.
- Ensure the LCD displays the date and time (FAX mode). If not, press the [Copy/Fax/Scan] key until FAX displays, then press [Select].
- Program any features required for the job.
- Press [Menu/Exit] on the control panel.
- Press ▼ or ▲ until 'PRIORITY SEND' appears, then press [Select].
- Enter the number of the remote machine using the numeric keypad.

To enter the number you can also press [Speed Dial] and enter the speed dial number, then press [Select].

- Press [Select] to confirm the number.
- The display asks you to enter an ID. If you want to assign a name to the transmission, enter the name. If not, skip this step.

For details on how to enter the name using the numeric keypad, refer to Chapter 2 - Product Overview, page 2-8.

- Press [Select].

The document will be scanned into the memory before transmission. The display shows the memory capacity and the number of pages being stored in the memory.

NOTE: For an original fed from the document glass, the display asks if you want to feed another page. Using the navigation keys, select [1:YES] or [2:NO] and press [Select]. When you have finished scanning all the originals, select [2:NO] and press [Select] to send the job.

The machine shows the number being dialed, then begins sending the document.

Polling

What is Polling?

Polling is used when one fax machine requests another to send a document. This is useful when the person with the original document to be sent is not in the office. The person who wants to receive the document calls the machine holding the original and requests that the document be sent. In other words, it “polls” the machine holding the original.

TX Poll

You can program your fax machine to send documents in your absence when polled by a remote fax machine. It is possible to use a poll code to prevent unauthorized polling of your fax machine. When you secure your machine in this manner, only those who know the poll code can poll your machine.

- Feed the document(s) face up into the ADF or place a single document on the document glass face down.
- Ensure the LCD displays the date and time (FAX mode). If not, press the [Copy/Fax/Scan] key until FAX displays, then press [Select].
- Program any features required for the job.
- Press [Menu/Exit] on the control panel.
- Press ▼ or ▲ until ‘POLLING’ appears, then press [Select].
- Press [Select] to access ‘TX POLL’.

The display asks you to enter a 4-digit poll code. The poll code is preset to 0000 at the factory, which represents no poll code.

- If you want to use a poll code, enter the required 4-digit code (except for 0000), then press [Select]
- If you do not want to secure the transmission with a poll code, press [Select] when the display shows 0000 for the poll code, or enter 0000.
- The display asks you to store the document in the machine's bulletin board memory.

If you store the document in the bulletin board memory, more than one remote station can poll that document from your machine. If not, the document will be automatically erased after being polled by a remote machine.

- Using the ◀ or ▶ key, select 'ON' to store in the bulletin board or 'OFF' not to store in the bulletin board. Then press [Select].

The machine stores the document in the memory. The display counts the number of pages being stored in the memory and the memory capacity remaining.

***HINT:** A Schedule Job Information report can be printed to confirm that a TX Poll operation has been set. Refer to "Fax Reports" on page 5-33 for further information.*

The machine returns to Standby mode.

NOTE: For an original fed from the document glass, the display asks if you want to feed another page. Using the navigation keys, select [1:YES] or [2:NO] and press [Select]. When you have finished scanning all the originals, select [2:NO] and press [Select].

NOTE: If you have previously set the receive mode to other than FAX mode, the machine automatically switches to FAX mode (automatic receiving) when set to be polled.

RX Poll and Delay RX Poll

You can set your machine to automatically receive documents from one or more unattended remote fax machines now, or at a later time. This feature permits unattended polling in the evening hours when telephone rates are lower:

NOTE: The remote machine must be ready for polling.

- Ensure the LCD displays the date and time (FAX mode). If not, press the [Copy/Fax/Scan] key until FAX displays, then press [Select].
- Press [Menu/Exit] on the control panel.
- Press ▼ or ▲ until 'POLLING' appears, then press [Select].
- Press ▼ or ▲ to select 'DELAY RX POLL', then press [Select].

The display asks you to enter the number of the remote fax machine.

- Enter the number of the remote fax machine using the numeric keypad.

You can press [Speed Dial] and enter the speed dial number and press [Select].

- Press [Select] to confirm the number.

The display asks you to enter another fax number to receive documents from another location.

NOTE: If you have an operation stored in the memory which requires the machine to send or receive to or from more than one location, the machine will not allow additional fax numbers to be entered here.

- To poll more than one location, press [Select] and repeat the procedure.
- To poll one location or when you have entered all locations, press [Menu/Exit].

The display asks you to enter the time you require your machine to call the remote machine.

- Enter the time using the numeric keypad.

Use ▼ or ▲ to select AM or PM. If you set a time earlier than the current time, your machine will call the number at that time on the following day.

To call the remote machine immediately, skip this step.

- Press [Select] when the time appears correctly in the display or without entering the time.

The display asks you to enter a 4-digit code. Poll code '0000' represents no code.

- If the remote machine is secured with a Poll code, you must enter the correct code, and press [Select]

If the remote machine is not secured with a Poll code, press [Select] to accept [0000] which represents no code, or enter 0000.

If you have entered a specific start time, the machine will dial, and receive a document from the remote machine at the time specified.

If not, the machine dials the remote machine immediately to retrieve the document.

Canceling a Scheduled Operation

Delayed Sends, Priority Sends, Group Sends and TX Polling are all scheduled operations. To cancel a scheduled operation, use the following instructions.

- Ensure the LCD displays the date and time (FAX mode). If not, press the [Copy/Fax/Scan] key until FAX displays, then press [Select].
- Press [Menu/Exit] on the control panel. The display shows the first menu; SYSTEM DATA.
- Press ▼ or ▲ until 'ADD/CANCEL' appears, then press [Select].
- Press ▼ or ▲ to select 'CANCEL', then press [Select]. The display shows the information of the last job reserved in memory.
- Press ▼ or ▲ repeatedly until you find the operation you want to cancel, then press [Select].
- A confirmation message appears, press [Select] to initiate canceling the job. The selected job is canceled.

Various Reports and Lists are available on your machine. The Fax Reports help you confirm and monitor your fax activity. Reports can be set up to include specific information or to print automatically.

Your machine can print reports containing useful information – Schedule Job, Phonebook List, etc.

NOTE: For further information about Reports refer to the Customer Documentation CD.

The following fax reports are available:

Message Confirmation

This report shows the fax number, the number of pages, elapsed time of the operation, the communication mode, and the communication results.

You can set up your machine to print the message confirmation report in one of the following ways:

- Automatically after each transmission (ON)
- Automatically only if an error occurs during transmission (ERR)
- No report printed at all (OFF). You can print this report manually at any time you want.

Schedule Job Information

This list shows the document currently stored for Delayed Sending, Priority Sending, Group Sending, and TX polling. The list shows the starting time, type of operation, etc.

Phonebook List

This list shows all of the numbers currently stored in the machine's memory as Speed dial numbers and Group dial numbers.

Transmission Journal

This report shows information concerning transmission activities recently made.

Reception Journal

This report shows information concerning reception activities recently made.

Multi-Communication Report

This report is printed automatically after sending documents or receiving documents from more than one location.

NOTE: The list you have set to print out automatically will not print out when there is no paper loaded or a paper jam has occurred.

HINT: For a full list of the reports available, refer to Chapter 9 - System Setup, page 9-9.

Printing Reports

- Press [Reports] on the control panel.
The display shows the first menu; MSG. CONFIRM.
- Press [Reports] repeatedly until you find the list you want to print, then press [Select].
The selected list will be printed out.

6 *Scan*

Your *WorkCentre Pro 412* is equipped with a True Color Quality Scanner capable of reproducing color charts, photographs, graphics or printed text.

This chapter includes:

- The WorkCentre Pro 412 TWAIN Scanner Program
- Scanning Procedure
- Configuring the Default Scan Application
- Standard Scan Features
- Advanced Scanning

The WorkCentre Pro 412 TWAIN Scanner Program

The *WorkCentre Pro 412* TWAIN Scanner program is used to scan documents and photographs. You can decide what portion of a document you want to scan, adjust the brightness and contrast, color balance, resolution, and many other scanner settings.

These settings are fully described in the Scanner Program's Help.

Scanning Procedure

Quick Pathway

- Load the Originals.
- Run the ScanToPC program.
- Press the Copy/Fax/Scan Key.
- Choose the Scan features required.
- Press [Start].

Before using the Scan function, identify what is to be scanned and any special programming requirements. Use the following steps to scan a document.

1. Load the Originals

A choice of document input areas is available. These are:

- An automatic document feeder (ADF) for multiple single sided originals.
- A document glass for single originals or bound originals.

Automatic Document Feeder (ADF)

Using the Automatic Document Feeder (ADF), you can load up to 30 documents in one job. Ensure documents are in good condition, and that all staples and paper clips have been removed. Ensure any glue, ink or correction fluid on the paper is completely dry before loading the documents.

Originals should be between 45 g/m² and 105 g/m² (12.5 lb and 28 lb), and between B5 (182 x 257 mm / 7 x 10 inch) and Legal size (216 x 356 mm / 8.5 x 14 inch).

Do not attempt to feed the following types of documents into the Automatic Document Feeder:

- carbon-paper or carbon-backed paper
- coated paper
- onion skin or thin paper
- wrinkled or creased paper
- curled or rolled paper
- torn paper

Do not load documents containing different sizes or weights of paper.

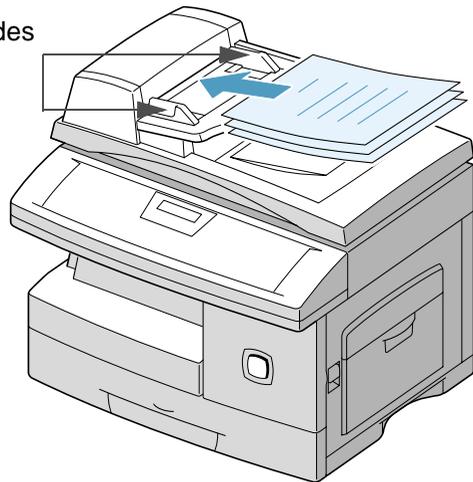
NOTE: If your document falls into any of these categories, use the document glass only.

- Remove all staples and paper clips before placing the originals into the document feeder.
- If necessary, adjust the sliding document guides to the paper size required.
- Insert the originals neatly into the document feeder, face up.

The first page should be on top with the headings towards the back or left of the machine.

- Align the stack with the left and rear edges of the document feeder tray and adjust the guides to just touch the front and rear edges of the originals.

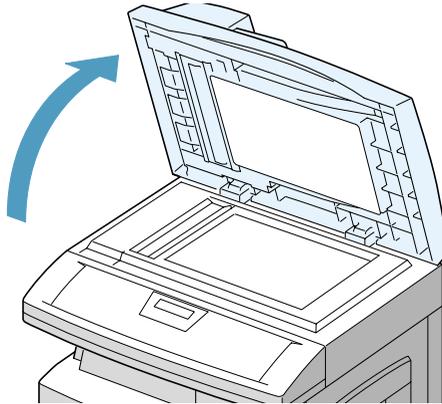
Document guides



Document Glass

The document glass should be used for single pages or bound originals up to a maximum size of Legal size (216 x 356 mm / 8.5 x 14 inch).

- Raise the document glass cover.

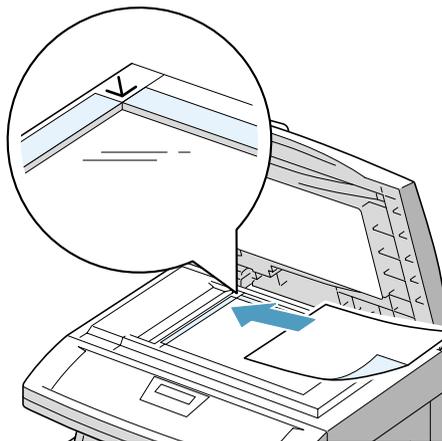


- Position the original face down on the document glass. Align it with the registration arrow in the rear left corner.

NOTE: Ensure that no documents are loaded in the ADF. If a document is detected in the ADF, the document has a priority than the document on the glass.

- Lower the document glass cover.

NOTE: On completion of a job ensure the document glass cover is fully closed.



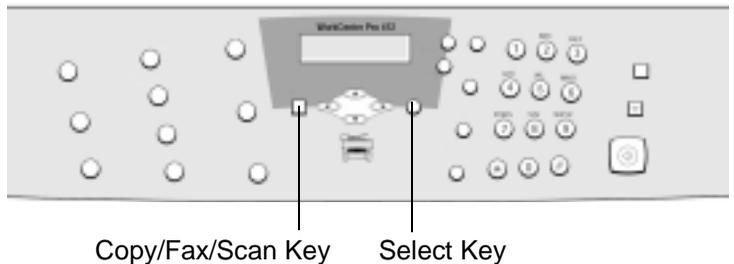
2. Run the ScanToPC Program

Ensure the ScanToPC program is running.

- Click the Windows [Start] button then select Programs > Xerox WorkCentre Pro 412 > ScanToPC.

3. Press the Copy/Fax/Scan Key

- Ensure that the LCD displays 'READY TO SCAN'.
- If not, press the [Copy/Fax/Scan] key on the control panel repeatedly until 'SCAN MODE' displays in the bottom line of the LCD, then press [Select].



4. Select the Scan Features

There are five standard features available. The keys are located on the Control Panel.

For a more detailed explanation of the standard Scan features available, please refer to the following pages:

- Resolution - page 6-9
- Scan Options - page 6-9
- Original Type - page 6-10
- Lighten/Darken - page 6-11
- Reduce/Enlarge - page 6-12

5. Press Start

- Press [Start] to begin scanning.

The machine scans the document.

'PC-SCAN' appears in the display, and the scanned image appears in Microsoft Paint.



Start Key

Configuring the Default Scan Application

Use these instructions if you would like to configure PaperPort or another program as the default scanning application.

- Double click the [ScanToPC] icon in the Windows taskbar (typically in the lower right hand corner of your screen).
- Click the [Add Application] option and specify the required application.
- Click [OK] when done.

For other ScanToPC options, click the ScanToPC Preference tab.

For more information about scanning, please see the PaperPort support information and the Xerox WorkCentre TWAIN Scanner program Help.

Standard Scan Features

You can set the following standard features for Scanning. Use the feature buttons on the control panel to change feature settings before pressing the Start button to begin scanning.

Resolution

The Resolution key can adjust the scan resolution from 150 dpi to 600 dpi for Black & White scanning.

The range available for Grey or Color scanning is from 75 dpi to 600 dpi.

- Press [Resolution] on the control panel to display the current setting.
- Press [Resolution] repeatedly to scroll through the choices.
- Press [Select] to save the selection.

Scan Options

Use this key to select Black & White, Gray, or Color scanning.

- Press [Scan Options] on the control panel to display the current setting.
- Press [Scan Options] repeatedly to scroll through the choices.
- Press [Select] to save the selection.

Original Type

Use this option to choose the setting for the original type you want to scan.

- Press [Original Type] on the control panel to display the current setting.
- Press [Original Type] repeatedly to change the setting.
- Press [Select] to save the selection.

Original Type Options

Text Use to scan documents containing mostly text.

Mixed Use to scan documents with mixed text and graphics.

Photo Use when the originals are photographs.

Lighten/Darken

Use this option to adjust the contrast of the scanned image.

- Press [Lighten/Darken] on the control panel to display the current setting.
- Press [Lighten/Darken] repeatedly to scroll through the choices.

You can choose from 5 contrast settings. Each time you press the key, the selection block on the LCD moves to the left or the right. As the selection block moves to the right, the contrast becomes darker.

- Press [Select] to save the selection.

Reduce/Enlarge

Use this button to enlarge or reduce the scanned image within a range from 25% to 400% if using the document glass and 25% to 100% when feeding from the ADF.

- Press [Reduce/Enlarge] on the control panel repeatedly until 'REDUCE/ENLARGE' displays on the LCD.
- Enter the required percentage using the numeric keypad.

If you press [Clear/Clear All], the selected percentage returns to 100%.

- Press [Select] to save the selection.

Resetting Scan Features

You can reset all the Scan feature selections you have made back to the factory default status.

- Press [Clear/Clear All] on the control panel twice.

The LCD displays 'READY TO SCAN'.



Clear/Clear All Key

Advanced Scanning

This section explains advanced scanning with PaperPort.

NOTE: If you are using another scanning application, refer to the documentation provided by the manufacturer.

- Place a single document or photograph face down on the document glass with the edges aligned to the green guides on the document glass.

NOTE: You can also place a document in the Automatic Document Feeder.

- Start Scan Direct on your PC. Click the Windows Start button, then Programs>PaperPort>Scan Direct.

HINT: You can also double-click on the Scan Direct icon located on your desktop if available.

- From the PaperPort inbox, click the [Scan] button (the Scan A Document Icon at the top of the Inbox screen). The PaperPort Scan Tool Scanner displays. The PaperPort Scan Tool opens to the Scanner tab.
- If the Scanner Setup Wizard opens, follow the on-screen instructions to select the *Xerox WorkCentre Pro 412* as the Scanning Source. Click [Finished] when done to redisplay the PaperPort Scan Tool.
- Click the [Preview] option. This will perform a preliminary scan and display the WorkCentre TWAIN Scanner program.

For additional instructions, refer to the PaperPort support information.

7 *Maintaining the Product*

There will be times when the machine will require maintenance tasks to be carried out. This chapter provides step by step instructions for maintaining the machine and replacing consumables.

This chapter includes:

- Cleaning
- Ordering Supplies
- Customer Replaceable Units
- Loading Media

Cleaning

Cleaning the WorkCentre Pro 412

Proper maintenance is important for the smooth operation of any equipment.



CAUTION: When cleaning the *WorkCentre Pro 412*, do *not* use organic or strong chemical solvents or aerosol cleaners. Do *not* pour fluids directly onto any area. Avoid supplies that are not specifically listed as approved in this documentation. They can cause poor performance and create a dangerous condition. Use supplies and cleaning materials only as directed in this documentation. Keep all cleaning materials out of the reach of children.



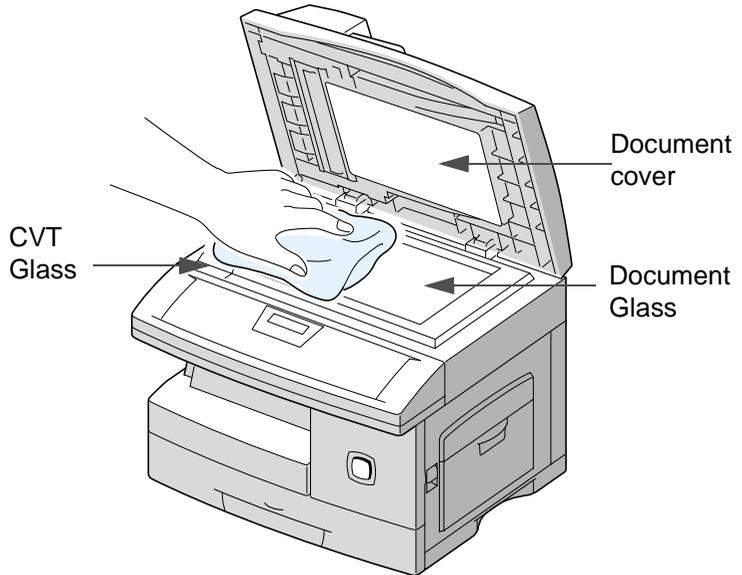
WARNING: Do *not* remove the covers or guards that are fastened with screws. You cannot maintain or service any of the parts that are behind these covers and guards. Do *not* attempt any maintenance procedure that is not specifically described in the documentation supplied with the *WorkCentre Pro 412*.

Cleaning the Document Glass and Cover

Keeping the document glass clean helps ensure the best possible copies. It is recommended that you clean the document glass at the start of each day and during the day as needed.

The Constant Velocity Transport (CVT) glass is the strip of glass located to the left of the document glass and is used to scan originals fed through the document feeder. The CVT glass also requires cleaning.

- Slightly dampen a soft lint-free cloth or paper towel with water.
- Open the document cover.
- Wipe the surface of the document glass and CVT glass until they are clean and dry.
- Wipe the underside of the white document cover until it is clean and dry.
- Close the document cover.



Control Panel and LCD Display

Regular cleaning keeps the Control Panel and LCD Display free from dust and dirt. To remove finger prints and smudges, clean the control panel and LCD screen with a soft, lint-free cloth, lightly dampened with water.

Document Feeder and Output Tray

Use a cloth moistened with water to clean the Document Feeder, Output Tray, Paper Cassette and the outside areas of the *WorkCentre Pro 412*.

Ordering Supplies

The Toner Cartridge and the Drum Cartridge are available as customer replaceable units.

The customer replaceable unit part numbers are listed below:

Customer Replaceable Unit	Part Number	
	Europe	USA and Canada
Toner Cartridge	106R586	106R584
Drum Cartridge	113R506	113R506

To obtain supplies, contact your local Xerox office, giving your company name, the product number and its serial number.

Use the space below to keep a record of the telephone number.

Supplies Telephone Number:

Customer Replaceable Units

Toner Cartridge

Expected Cartridge Life

The life of your toner cartridge depends on the amount of toner used in each printed job. For instance, when you print a typical business letter with about 5% page coverage, you can expect a toner cartridge life of approximately 6,000 pages (3,000 pages only for the toner cartridge shipped with your machine). The actual number may vary according to the print density of the page you print. If you print a lot of graphics, you may need to change the cartridge more often.

Toner Save Mode

You can extend the life of your toner cartridge by using Toner Save mode. The Toner Save mode uses less toner than normal printing. The printed image is much lighter, and is adequate for printing drafts or proofs.

Use the instructions below to activate Toner Save mode.

- Press [Menu/Exit] on the control panel to display 'SYSTEM DATA'.
- Press ▼ or ▲ until 'SYSTEM SETUP' appears in the display, then press [Select].
- Using ▼ or ▲, select 'TONER SAVE'.
- Use ◀ or ▶ to select 'ON'.
- Press [Select] to save the setting.

Replacing the Toner Cartridge

When the toner cartridge is near the end of its life, white streaks or hue change will occur. The LCD displays warning message 'TONER LOW'.

When the 'TONER LOW' message appears, you can remove the toner cartridge and gently shake it to temporarily re-establish the print quality. Shaking the cartridge re-distributes the remaining toner in the cartridge. This procedure can only be performed once prior to changing the Toner Cartridge.

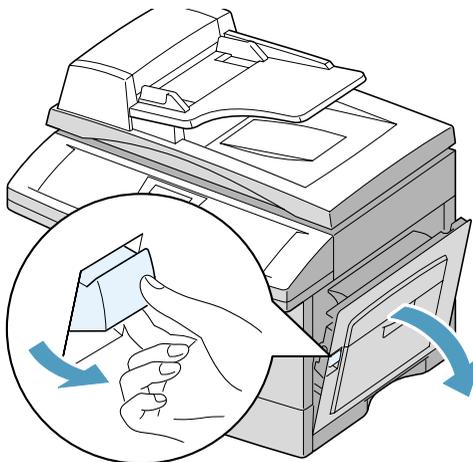


CAUTION: When ordering a new Toner Cartridge make sure the correct cartridge is ordered for the *WorkCentre Pro 412*. For assistance, the product number is displayed on the cartridge box.

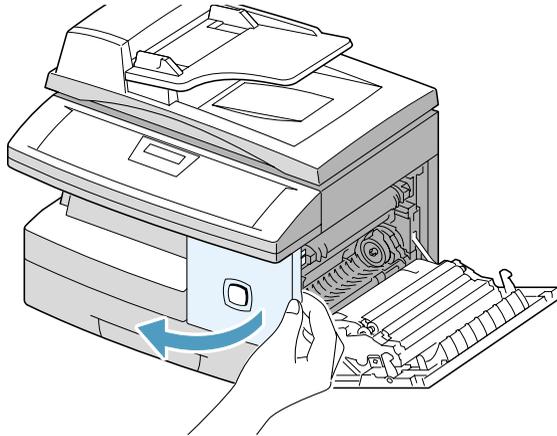


CAUTION: Do not shake an empty cartridge or hold it close to you. Some toner residue might accidentally spill. Do not shake the empty Toner Cartridge and return it to the machine to extend its use.

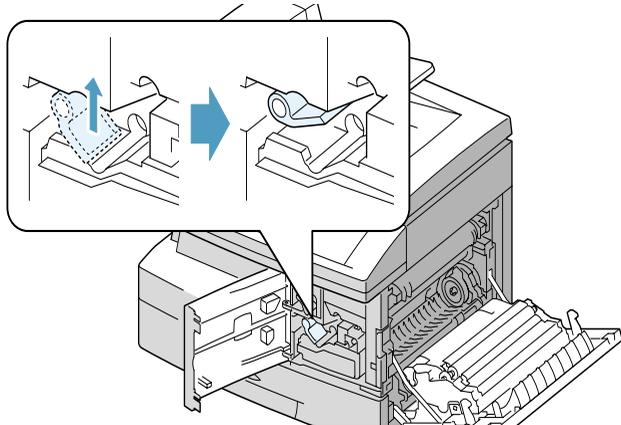
- Pull the release latch to open the side cover.



- Open the front cover.



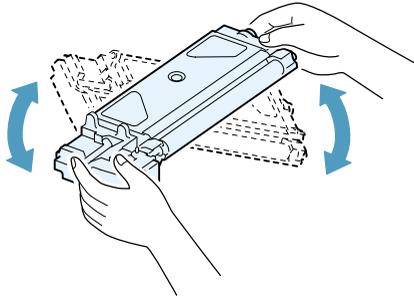
- Turn the toner locking lever upwards to release the toner cartridge.
- Remove the toner cartridge from the machine.



To Re-distribute the Toner:

- Gently shake the cartridge to distribute the toner evenly inside the cartridge.
- Reinstall the toner cartridge, then lock the lever.
- Close the front cover, then the side cover.

The product returns to Standby mode.

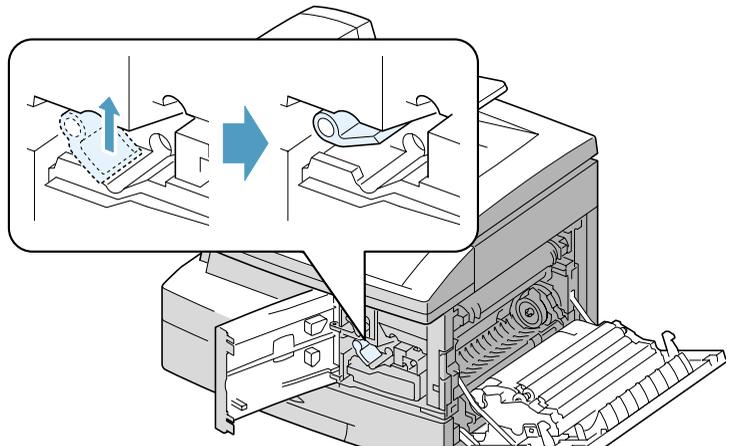


NOTE: If the toner gets on your clothing, wipe it off with a dry cloth and wash clothing in cold water. Hot water sets toner into fabric.

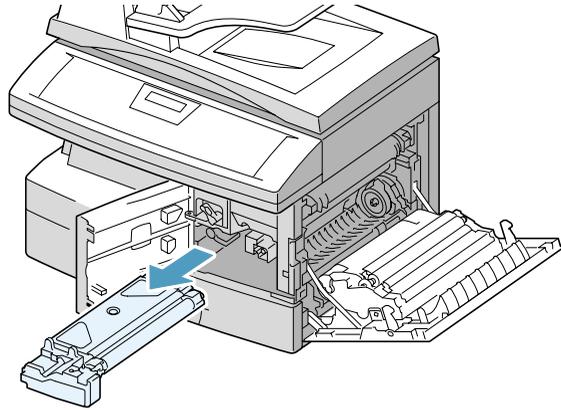
Replacing the Toner Cartridge:

When the toner eventually runs out, only blank pages will print when a job is printed. At this stage, the toner cartridge needs to be replaced. The LCD displays warning message 'TONER EMPTY'.

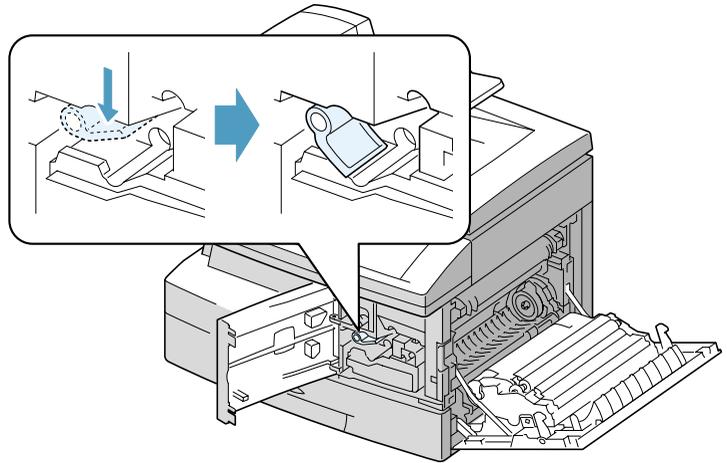
- Open the side cover, then the front cover. The side cover must be open to open the front cover.
- Turn the toner locking lever upwards to release the toner cartridge.



- Pull the used cartridge out.



- Shake the new toner cartridge horizontally four or five times. Save the box and the cover for shipping.
- Slide the new toner cartridge in until it locks in place.
- Turn the toner locking lever downwards until it locks in place.
- Close the front cover, then the side cover.



The product returns to Standby mode.

Setting Your Product to Send Toner Low Information

If you set the Notify Toner menu option to ON, when the toner cartridge needs to be replaced, your machine automatically sends a fax to your service company or the dealer to notify them that your machine requires a new toner cartridge. This feature will be activated only when the phone number of the service company or the dealer is stored in your machine's memory.

Use the instructions below to activate this process.

- Press [Menu/Exit] on the control panel, then press ▼ or ▲ until 'MAINTENANCE' appears, and press [Select].
- Press ▼ or ▲ until you find 'NOTIFY TONER', then press [Select].
- Press ◀ or ▶ to turn this feature 'ON' or 'OFF', then press [Select].
- Enter the customer ID or name (up to 20 digits) then press [Select].
- Enter the customer's fax number, then press [Select].
- Enter the service fax number to which your product sends the Notification fax message, then press [Select].
- Enter the serial number of your product, then press [Select].

NOTE: The product serial number is located on the machine, behind the front door. Refer to Chapter 1 - About this Guide, page 1-4 for further information.

Drum Cartridge

The Drum Cartridge requires replacement when the Drum life warning is displayed, after approximately 15,000 copies.

If you are experiencing streaks or spots on your prints there is an option for cleaning the drum.



CAUTION: Do not expose the green drum to light for an extended period. Never expose the drum to direct sunlight or touch the drum surface. Damage or poor image quality may result.

Cleaning the OPC Drum

If you are getting streaks or spots on your print, you may set the product to clean the drum cartridge.

- Ensure that paper is loaded.
- Press [Menu/Exit] on the control panel to enter menu mode.
- Press ▼ or ▲ until 'MAINTENANCE' appears, then press [Select].
- Press [Select] to access 'CLEAN DRUM'.

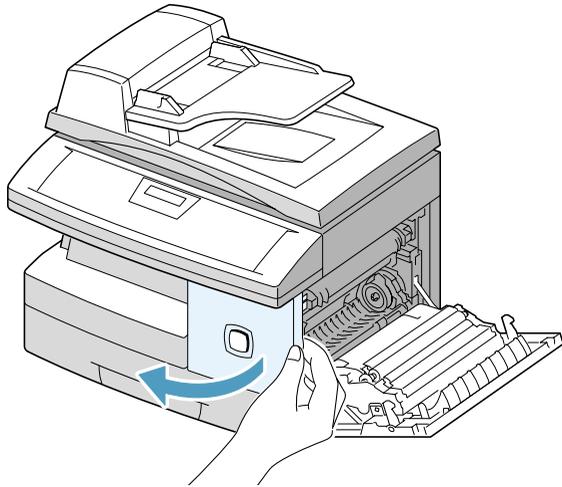
The LCD displays 'CLEANING DRUM PLEASE WAIT...'

The machine automatically pulls in a sheet of paper, and prints it out. The toner particles on the OPC drum surface are fixed to the paper.

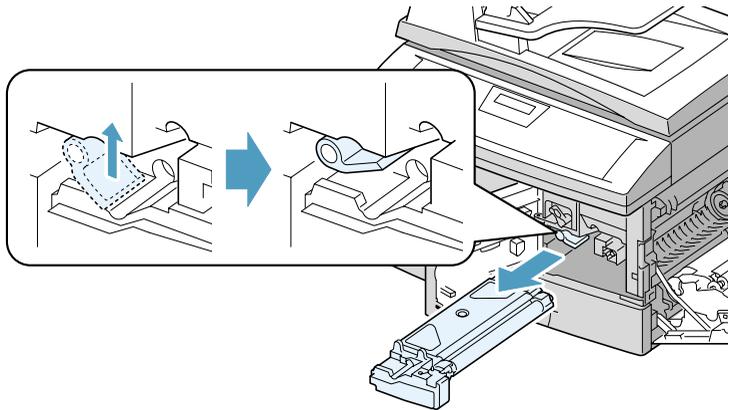
Replacing the Drum Cartridge

The useful life of the drum cartridge is approximately 15,000 copies. The LCD displays 'DRUM WARNING' when the drum is near the end of life. Approximately 1,000 more copies can be made, but you should have a replacement cartridge in stock. When 'REPLACE DRUM' is displayed, the machine will stop operating until the drum cartridge is replaced.

- Open the side cover, then the front cover. The side cover must be open to open the front cover.

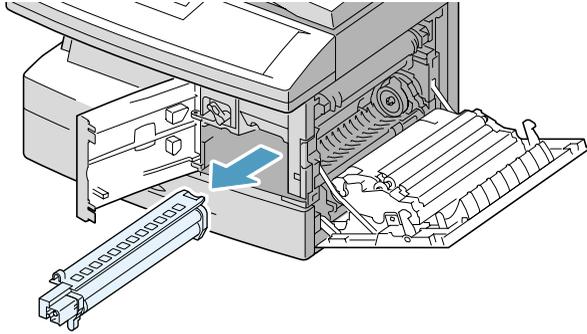


- Turn the toner locking lever upwards to unlock the toner cartridge, then pull the toner cartridge out.

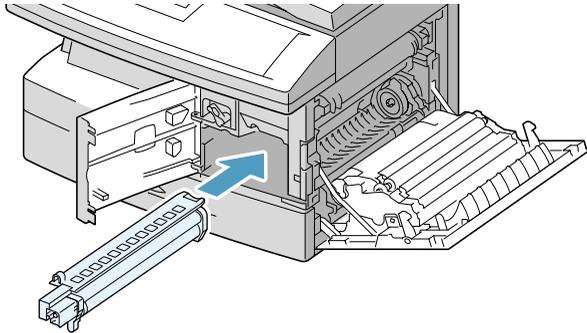


NOTE: The toner cartridge must be removed to replace the drum cartridge.

- Pull the used drum cartridge.

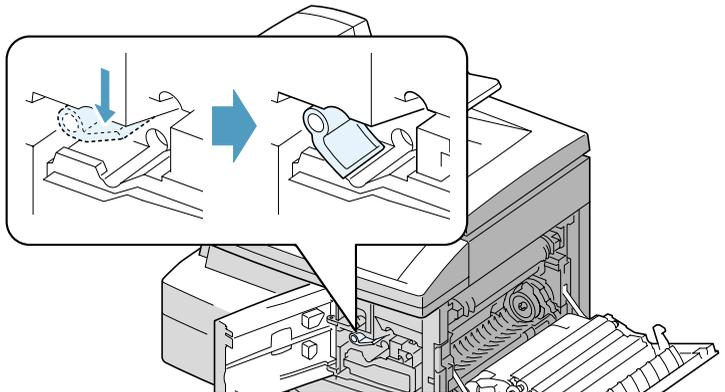


- Unpack the new drum cartridge and slide it in place, making sure not to touch the surface of the drum.



- Reinstall the toner cartridge, then lock the lever.
- Close the front cover and the side cover.

The product returns to Standby mode.



Loading Media

Always use print media that meets the guidelines for use with this product. Using a print media that is not recommended may cause paper jams or print quality problems.

Media can be loaded in the Paper Cassette or in the Bypass Tray.

The table below identifies the Media Sizes which can be used in the Paper Cassette and Bypass Tray, and the capacities which can be loaded.

Media Size	Input Source Capacity ^a	
	Paper Cassette	Bypass Tray
Plain paper		
Letter (8.5 x 11 inch)	YES/550	YES/100
Legal (8.5 x 14 inch)	YES/550	YES/100
Executive (7.25 x 10.5 inch)	NO/0	YES/100
A4 (210 x 297 mm)	YES/550	YES/100
B5 (182 x 257 mm)	NO/0	YES/100
A5 (148 x 210 mm)	NO/0	YES/100
Envelopes		
No. 9 (8.5 x 11 inch)	NO/0	YES/10
No. 10 (8.5 x 14 inch)	NO/0	YES/10
C5 (6.38 x 9.37 inch)	NO/0	YES/10
DL (110 x 220 mm)	NO/0	YES/10
Labels^b		
Letter (8.5 x 11 inch)	NO/0	YES/10
A4 (210 x 297 mm)	NO/0	YES/10
Transparency films^b		
Letter (8.5 x 11 inch)	NO/0	YES/30
A4 (210 x 297 mm)	NO/0	YES/30
Card stocks^b		
A6 (105 x 148.5)	NO/0	YES/10
Post Card (4 x 6 inch)	NO/0	YES/10
Hagaki (5.83 x 8.27 inch)	NO/0	YES/10

- a. Depending on paper thickness, maximum capacity may be reduced.
- b. If you are experiencing excessive jamming, feed one sheet at a time through the Bypass Tray.

Using the Paper Cassette

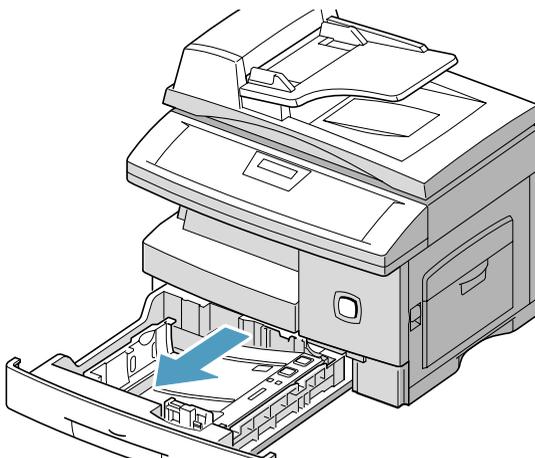
The paper cassette can hold a maximum of 550 sheets of 80 g/m² (20 lb) plain paper.

Acceptable print media is plain paper with sizes ranging from A4 or 8.5 x 11 inch to Legal (216 x 356 mm / 8.5 x 14 inch) and weighing between 60 g/m² and 90 g/m² (16 lb and 24 lb).

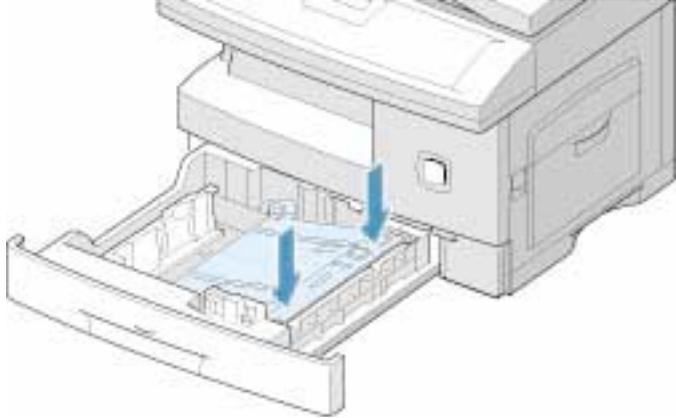
NOTE: When using the paper cassette, the paper size option in System Data Settings must be set to the correct size. Refer to Chapter 9 - System Setup, page 9-6 for instructions.

Loading the Paper Cassette

- Pull open the paper cassette.



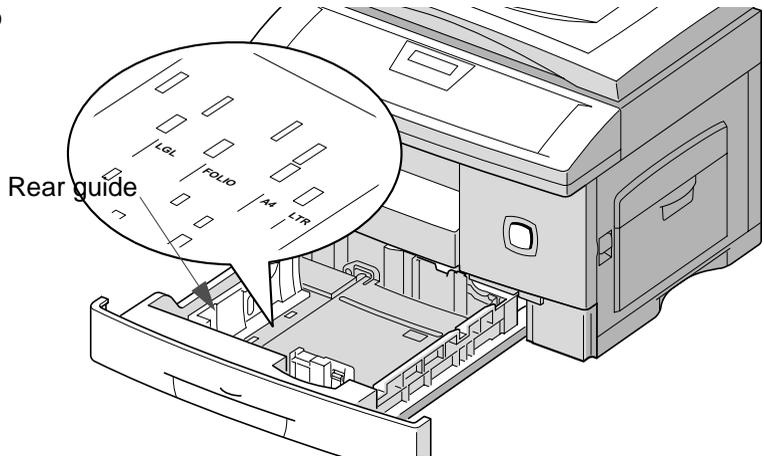
- Push down on the pressure plate until it locks in position.



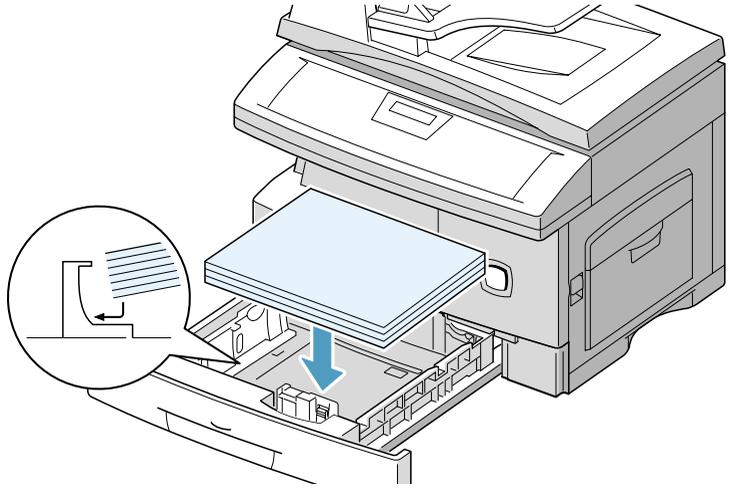
- Adjust the rear paper guide to the required paper length.

It is preset to A4 or 8.5 x 11 inch size depending on country.

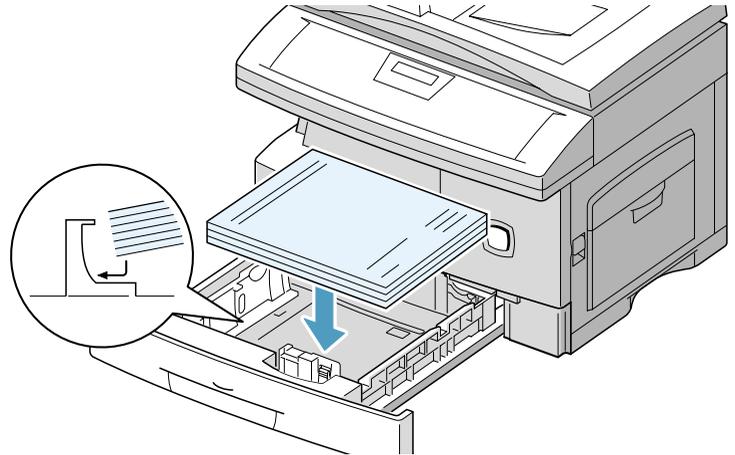
- To load another size, lift and insert the rear guide into the corresponding position.



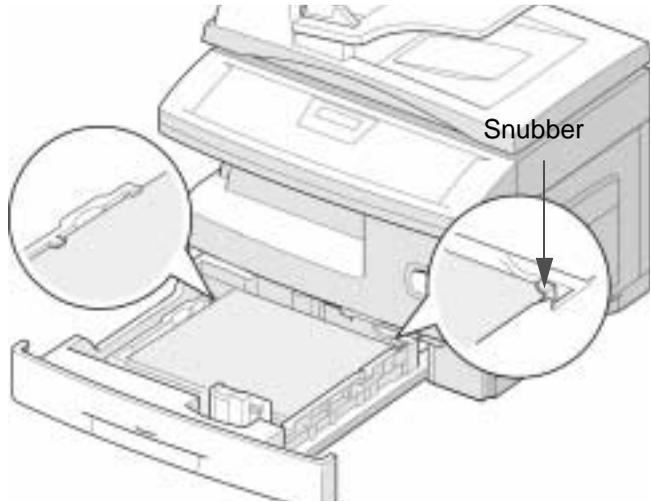
- Fan the paper and insert it into the cassette.



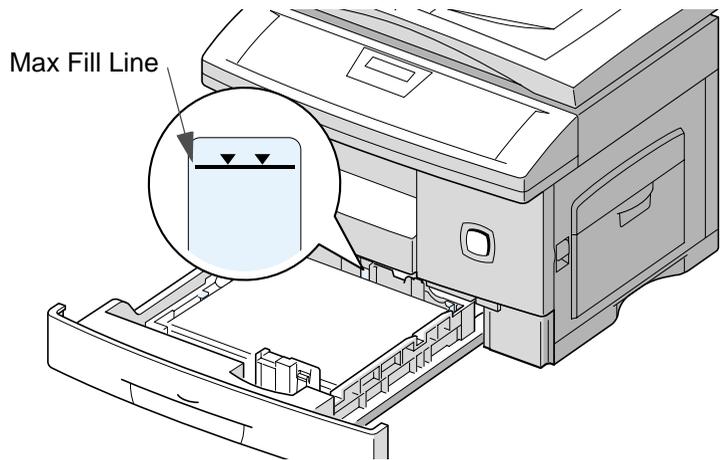
- If loading letterhead paper, load with the design side facing up. The top edge of the sheet with the logo should be placed at the right side.



- Ensure that the paper is positioned under the snubbers.



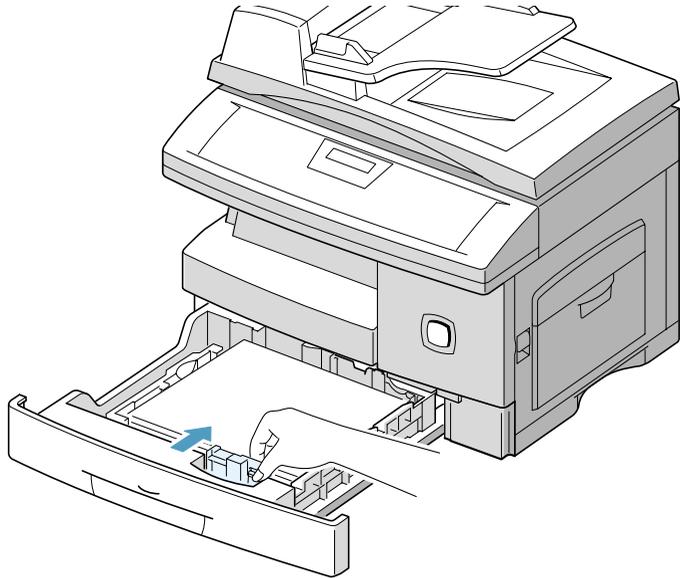
Do not fill above the max fill line.



- While squeezing the side guide as shown, move it toward the stack of paper until it lightly touches the side of the stack.

Do not allow the guide to press against the edge of the paper tightly; the guide may bend the paper.

- Close the paper cassette.



NOTE: When you print a file from your PC using the paper cassette, make sure that you select the source and the correct paper size from your software application before starting your print job.

HINT: If you experience problems feeding paper, place the paper into the Bypass tray.

Using the Bypass Tray

The Bypass tray is located on the right side of your product. It can be closed when you are not using it, making the product more compact.

Use the bypass tray to print transparencies, labels, envelopes or postcards in addition to making quick runs of paper types or sizes that are not currently loaded in the paper cassette.

Acceptable print media is plain paper with sizes ranging from 98 x 148 mm (3.86 x 5.83 inch), to Legal size (216 x 356 mm / 8.5 x 14 inch) and weighing between 60 g/m² and 160 g/m² (16 lb and 43 lb).

NOTE: When feeding media through the Bypass Tray the paper size option in System Data Settings must be set to the correct size. If feeding media smaller than A4/Letter, the setting can remain set at A4, Letter or Legal size. Refer to Chapter 9 - System Setup, page 9-6 for instructions.

The following table summarizes the print media allowed as well as their stacking height limit.

Paper Type	Stacking Height Limit
Plain Paper	100 sheets or 9 mm (0.35 inch) max ^a
Envelope	10 envelopes or 9 mm (0.35 inch) max ^a
Transparency	30 sheets or 9 mm (0.35 inch) max ^a
Label	10 sheets or 9 mm (0.35 inch) max ^a
Cardstock	10 sheets or 9 mm (0.35 inch) max ^a

- a. The height is measured with the stack of sheets laid, without being touched by hands, on a flat surface.

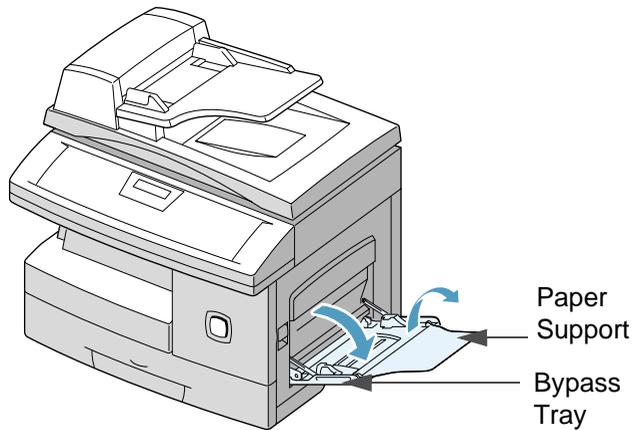
NOTE: Always load only the print media specified in Appendix B - Specifications to avoid paper jams and print quality problems.

NOTE: Do not hit the bypass tray or rest your hands on it; otherwise the tray may be damaged or detached from the product.

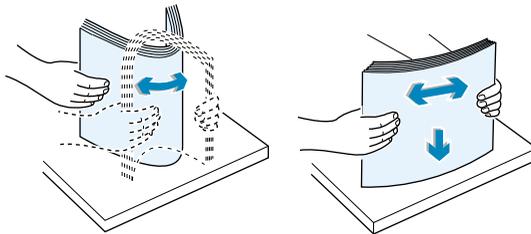
NOTE: Remove any curl on postcards, envelopes, and labels before loading them into the bypass tray.

Loading the Bypass Tray

- Lower the Bypass tray, located on the right side of the product.
- Unfold the paper support extension as shown

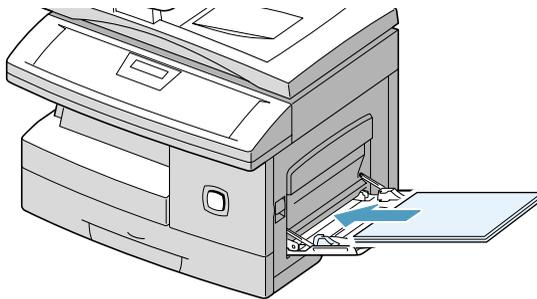


- Prepare a stack of paper or envelope for loading by flexing or fanning them back and forth. Straighten the edges on a level surface.

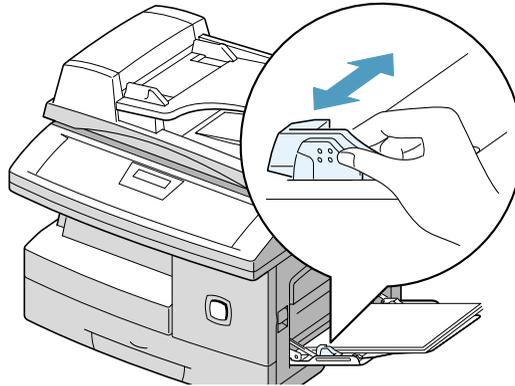


HINT: For transparencies hold the transparencies by the edges and avoid touching the print side. Oils from your fingers that are deposited on the transparency can cause print quality problems.

- Load the print material with the print side facing down and against the right edge of the tray.

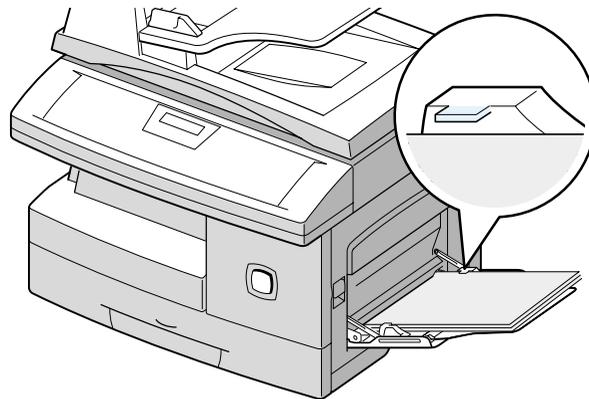


- Adjust the paper guide to the width of the stack of print material.



- Ensure that you have not loaded too much print media. The stack should be under the stack height limit mark. The print media buckles if you load a stack that is too deep, or push it in too far.
- If copying, press [Paper Supply] on the control panel to select 'BYPASS'.

If printing, you must select the correct paper source from your software application.



Media Guidelines

When selecting or loading paper, envelopes, or other special media, consider these guidelines:

- Attempting to print on damp, curled, wrinkled, or torn paper can cause paper jams and poor print quality.
- Use only high quality copier grade paper. Avoid paper with embossed lettering, perforations, or texture that is too smooth or too rough.
- Store paper in its ream wrapper until ready to use. Place cartons on pallets or shelves, not on the floor. Do not place heavy objects on top of the paper, whether it is packaged or unpackaged. Keep it away from moisture, or other conditions that can cause it to wrinkle or curl.
- During storage, moisture-proof wrap (any plastic container or bag) should be used to prevent dust and moisture from contaminating your paper.
- Always use paper and other media that conform with specifications. Refer to Appendix B - Specifications.
- Use only well-constructed envelopes with sharp, well creased folds.
- DO NOT use envelopes with clasps and snaps.
- DO NOT use envelopes with windows, coated lining, self-adhesive seals, or other synthetic materials.
- DO NOT use damaged or poorly made envelopes.

Guidelines for Special Media

Ensure you read any instructions that come with your special paper. These instructions provide important information regarding how to achieve the highest print quality with these papers.

- It is recommended that you feed special paper types one sheet at a time.
- Only use the special media recommended for use in laser printers.
- To prevent special media such as transparencies and label sheet sticking together, remove them from the exit tray as they are printed.
- Place transparencies on a flat surface after removing them from the product.
- Do not leave the film in the paper tray for long periods of time. Dust and dirt may accumulate on the film resulting in spotty printing.
- To avoid smudging caused by fingerprints, handle transparency film and coated paper carefully.
- To avoid fading, do not expose the printed film to prolonged sunlight.
- Store unused media flat. Do not remove papers from their protective packaging until you are ready to use them.
- Store unused media at temperatures between 15 to 30 degrees centigrade (59 and 86 degrees fahrenheit). The relative humidity should be between 10% and 70%.
- Do not load more than 10 sheets of special media into the Bypass Tray at a time.
- Verify that the labels' adhesive material can tolerate fusing temperature of 200°C (392°F) for 0.1 second.
- Make sure that there is no exposed adhesive material between the labels. Exposed areas can cause labels to peel off during printing, which can cause paper jams. Exposed adhesive can also cause damage to product components.

- Do not feed a sheet of labels through the product more than once. The adhesive backing is designed for one pass through the product.
- Do not use labels that are separating from the backing sheet or are wrinkled, bubbled, or otherwise damaged.

8 **Basic Troubleshooting**

This chapter provides information for solving problems which may occur with your *WorkCentre Pro 412*. Tables listing Error Messages and Codes, problems and possible solutions are provided.

This chapter includes:

- Document Jams
- Paper Jams
- Calling for Service
- LCD Error Messages
- Solving Problems

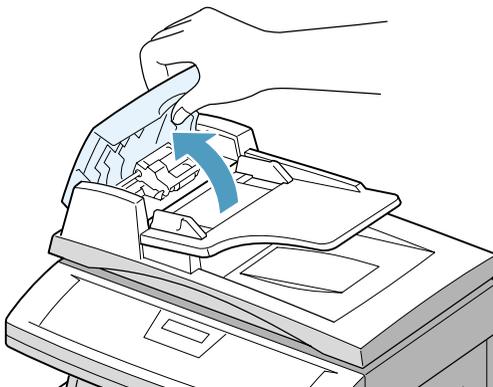
Document Jams

If a document jams while it is feeding through the ADF, 'DOCUMENT JAM' appears in the display.

Details for clearing the three types of document misfeeds are given below.

Input Misfeed

- Open the ADF top cover.



- Pull the document gently to the right and out of the ADF.
- Close the ADF top cover.
- Feed the documents back into the ADF.

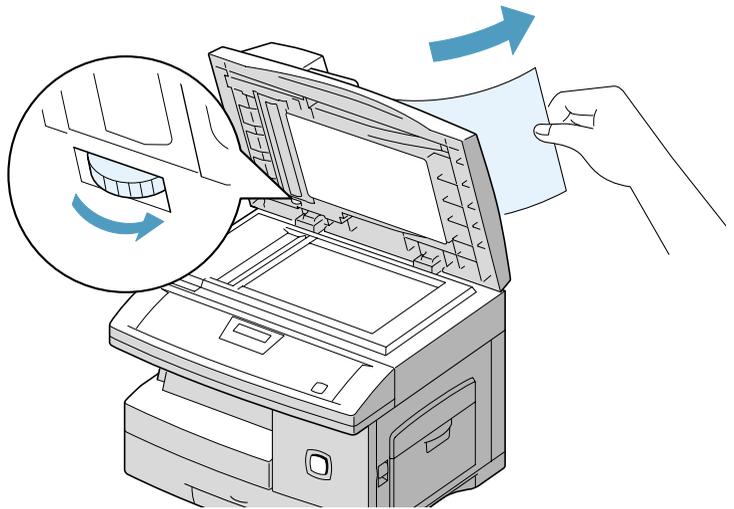


Exit Misfeed

- Open the document cover and turn the roller knob to remove the misfeed documents from the exit area.

If the jammed document cannot be easily removed, skip to “Roller Misfeed”.

- Close the document cover.
- Feed the documents back into the ADF.

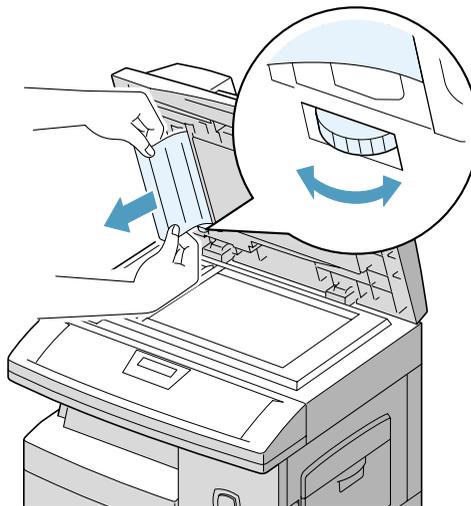


Roller Misfeed

- Open the document cover and turn the roller knob to remove the misfeed document from the ADF or the exit area.

If the document is difficult to remove, gently remove it from under the feeding roller.

- Close the document cover.
- Feed the documents back into the ADF.



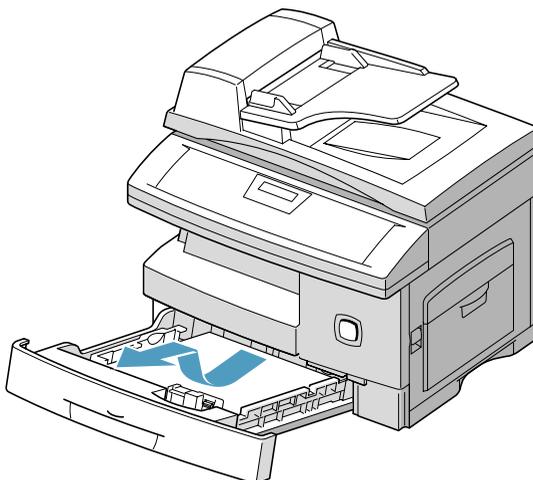
Paper Jams

If paper jams occur, 'PAPER JAM' appears in the display. Follow the steps below to clear jam. To avoid tearing paper, pull the jammed paper out gently and slowly.

Paper Feed Area

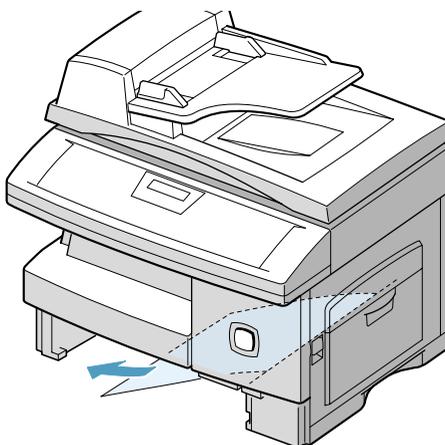
If jammed in the paper feed area, 'PAPER JAM 0' appears in the display.

- Remove the paper cassette.
- After you pull it out completely, lift the front part of the cassette slightly up to release the cassette from the machine.



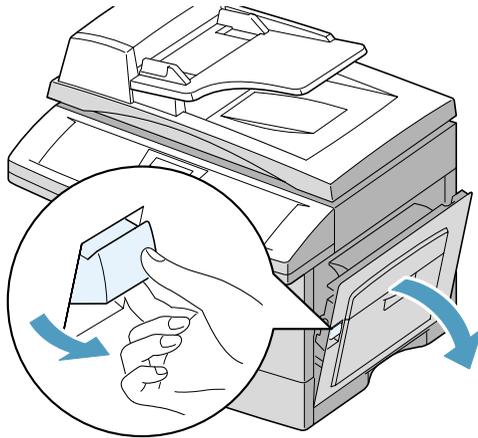
- Remove the jammed paper by gently pulling it straight out.

If there is any resistance, and the paper does not move immediately when you pull, stop pulling and go to the next step.



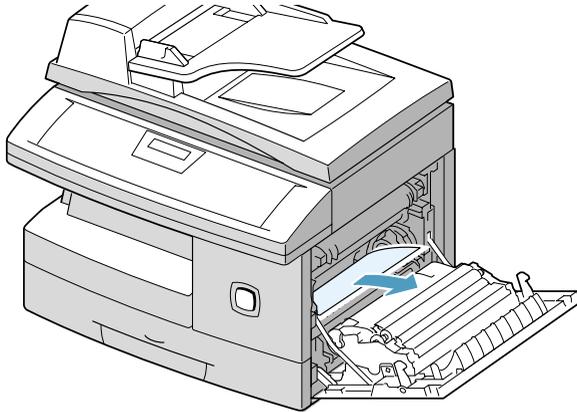
NOTE: If you remove the jammed paper here, open the side cover then close it to clear the 'PAPER JAM' message on the LCD.

- If the paper does not move immediately when you pull, pull the release latch to open the side cover.

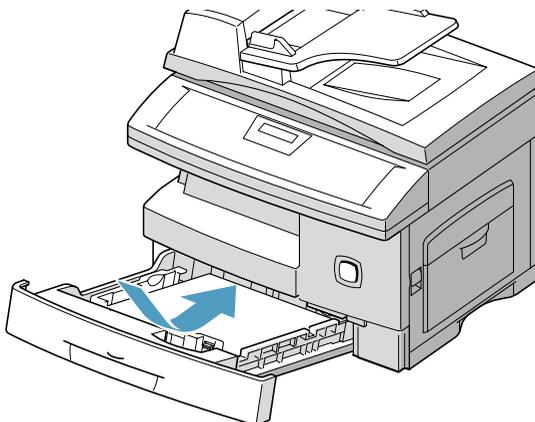


CAUTION: Do not touch the shiny drum cartridge surface. Scratches or smudges will result in poor copy quality

- Carefully remove the misfeed paper in the direction shown.



- Insert the paper cassette. Lower the rear part of the cassette to align the rear edge to the corresponding slot of the machine, then insert it completely.



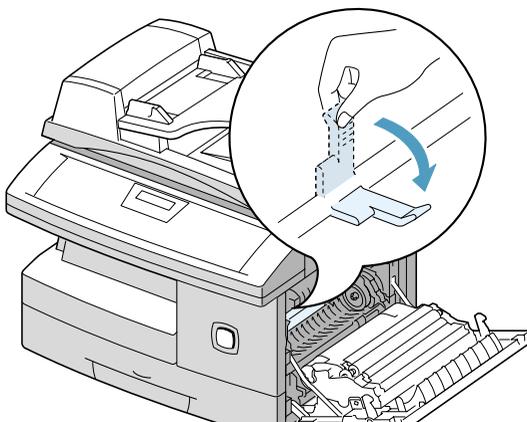
Fuser Area

If jammed in the fuser area, 'PAPER JAM 1' appears in the display.



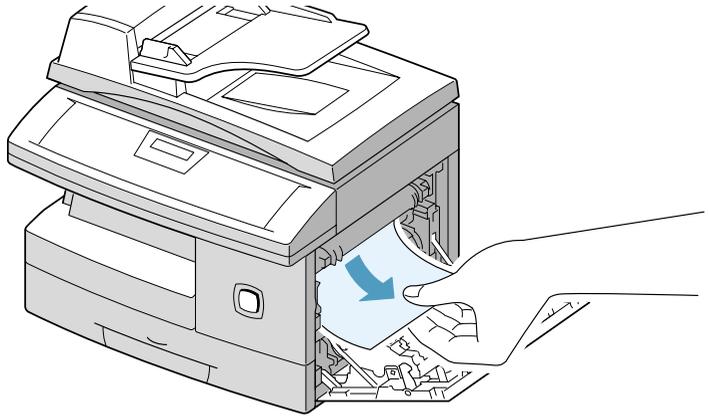
WARNING: The fuser area is hot. Take care when removing paper from the machine.

- Press the release latch to open the side cover.
- Pull down on the fuser lever as shown below. This will release pressure on the paper.
- If paper is not seen in this area, skip to the Exit Area.

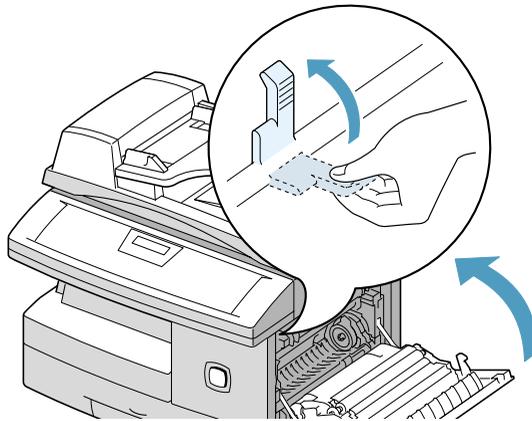


CAUTION: Do not pull paper up through the fusing unit. Unfused toner may adhere in the area, resulting in smudged copies.

- Remove the jammed paper, in the direction shown.



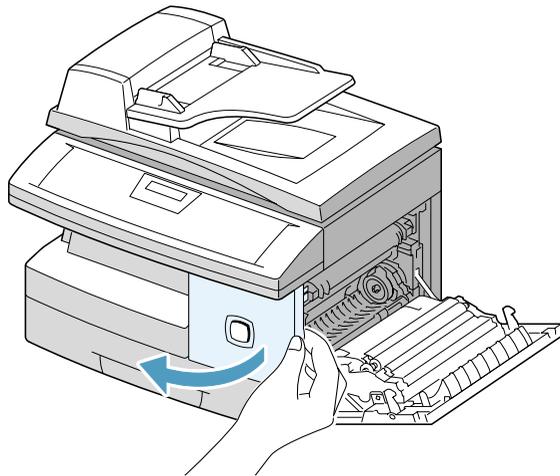
- Push up on the fuser lever, then close the side cover.



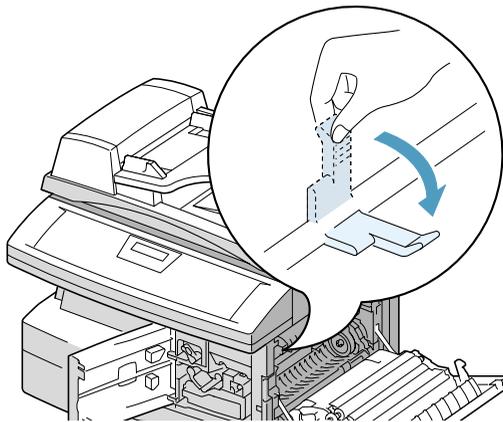
Paper Exit Area

If jammed in the paper exit area, 'PAPER JAM 2' appears in the display.

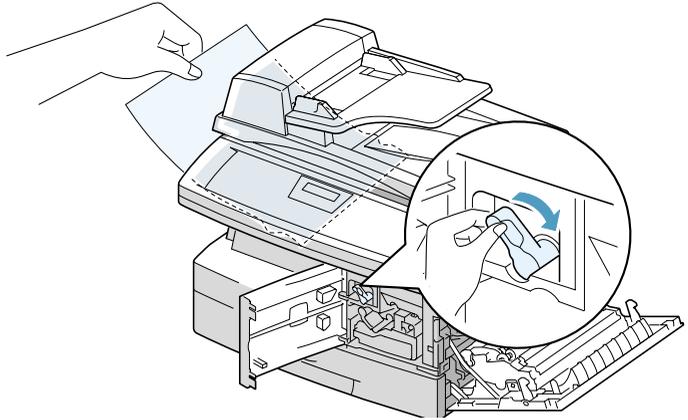
- Press the release latch to open the side cover.
- Open the front cover.



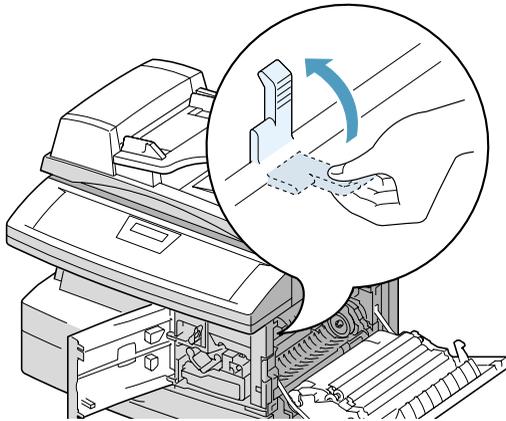
- Pull down on the fuser lever. This will release pressure on the paper.



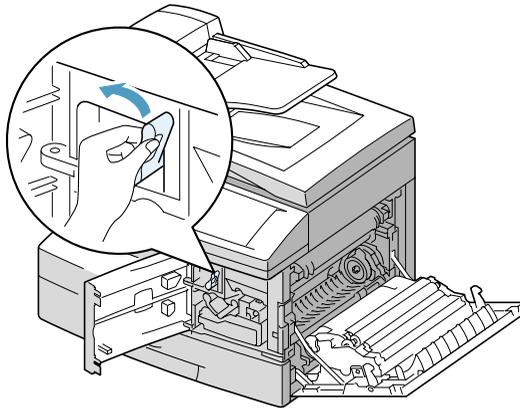
- Turn the jam remove lever in the direction of the arrow to move the paper to the exit area, then gently pull the paper out through the exit area.



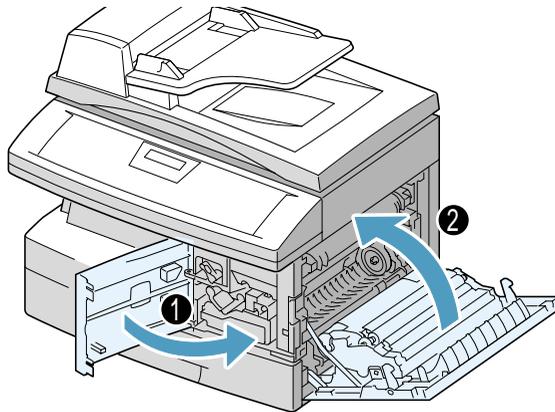
- Push up on the fuser lever.



- Turn the jam remove lever back to the original position.



- Close the front cover **1** and the side cover **2**.



Duplex Jam

If paper jam occurs in the duplexer, 'DUPLEX JAM' appears in the display.

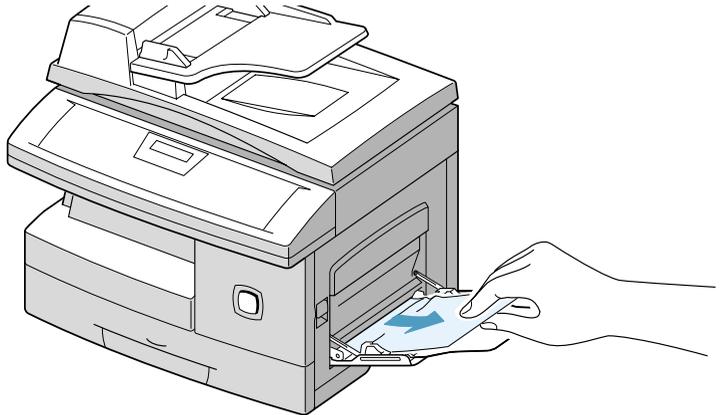
- Press the release latch to open the side cover.
- Remove the jammed paper.
- Close the side cover.

Bypass Jam

'BYPASS JAM' appears in the display when the machine does not detect paper in the bypass tray due to no paper or improper paper loading when you try to print using the bypass tray.

'BYPASS JAM' also may occur when the paper is not properly fed into the machine through the bypass tray.

- If 'BYPASS JAM' displays and paper is loaded in the Bypass Tray, pull the paper out of the machine and re-load.



Calling for Service

If the problem persists, contact the Xerox Welcome Centre or your local representative. The serial number of the machine will be required, together with any relevant error codes

For information on locating the serial number, please refer to "Customer Support" on page 1-4.

Customer Support Telephone Number

The telephone number of the Xerox Welcome Centre or your local representative is provided at the time of product installation. For your convenience and future reference please record the telephone number in the space below:

Welcome Centre or Local Representative Telephone Number:

Xerox US Welcome Center:	1-800-821-2797
Xerox Canada Welcome Center:	1-800-93-XEROX (1-800-939-3769)

LCD Error Messages

If an abnormal condition arises in the machine or an incorrect operation is performed, a message indicating the nature of the error is displayed. If this happens, take the corrective action listed in the following table.

Display	Meaning	Solution
Bypass Jam	The machine detects non feeding from the bypass tray.	Load paper in the bypass tray.
Document Jam	The loaded document has jammed in the ADF.	Clear the document jam. Refer to page 8-2.
Door Open	The side cover is not securely latched.	Close the side cover until it locks into place.
Drum Warning	The drum cartridge is near the end of life.	You should have a replacement cartridge in stock.
Duplex Jam	Paper has jammed in the middle of 2-sided printing.	Clear the jam. Refer to page 8-4.
Fuser Error	There is a problem in the fuser unit.	Unplug the power cord and plug it back in. If the problem still persists, please call for service.
LSU Error	A problem has occurred in the LSU (Laser Scanning Unit).	Unplug the power cord and plug it back in. If the problem still persists, please call for service.
No Developer Cartridge	The toner cartridge is not installed.	Install the toner cartridge. Refer to page 7-5.
No Paper	The recording paper in the paper cassette has run out.	Load the recording paper in the paper cassette.
Paper Jam 0	Paper has jammed in the paper feeding area.	Clear the jam. Refer to page 8-4.
Paper Jam 1	Paper has jammed in the fuser area.	Clear the jam. Refer to page 8-4.
Paper Jam 2	Paper has jammed in the paper exit area.	Clear the jam. Refer to page 8-4.

Display	Meaning	Solution
Replace Drum	The drum cartridge is out of life.	Replace the drum cartridge. Refer to page 7-11.
Toner Empty	The toner cartridge has run out. The machine stops.	Replace with a new toner cartridge. Refer to page 7-5.
Toner Low	The toner is almost empty.	Take out the toner cartridge and gently shake it. By doing this, you can temporarily re-establish printing operations.
Retry Redial	The machine is waiting for the programmed interval to automatically redial.	You can press [Start] to immediately redial, or [Stop] to cancel the redial operation.
Comm. Error	A problem with the fax communications has occurred.	Try resending the fax.
Group Not Available	You have tried to select a group location where only a single location number can be used, such as when adding locations for a multi-dial operation.	Try again, check location for group.
Line Error	Your unit cannot connect with the remote machine, or has lost contact because of a problem on the phone line.	Try resending the fax. If failure persists, wait an hour or more for the line to clear then try again.
Function Full	The memory has become full.	Either delete unnecessary documents, or retransmit after more memory becomes available. You can also split the transmission into more than one operation if it is a large job.
No Answer	The remote machine was not answered after all the redial attempts.	Try resending the fax. Ensure the remote machine is functioning correctly.
Not Assigned	The speed dial location you tried to use has no number assigned to it.	Dial the number manually with the numeric keypad or assign the number to a speed dial location.

Display	Meaning	Solution
Polling Error	When setting up to poll another fax machine you have used an incorrect poll code.	Enter the correct poll code.
	The remote fax machine you want to poll is not ready to respond to your poll request.	The remote operator should know in advance that you are polling and have their fax unit loaded with the original document.
Line Busy	The remote fax didn't answer	Try resending the fax.

Solving Problems

The following chart lists some conditions that may occur and the recommended solutions. Follow the suggested solutions until the problem is corrected. If the problem persists, please call for service.

Copier Problems Solution Chart

Condition	Suggested Solution
The LCD does not turn on	Check that the product is plugged into an electrical receptacle and ensure that there is power to the receptacle.
Copies are too light or too dark	If the original is light, use the Lighten/Darken button to darken the background of the copies. If the original is dark, use the Lighten/Darken button to lighten the background of the copies.
Smears, lines, marks, or spots on copies	If defects are on the original, press the Lighten/Darken button to lighten the background of your copies. If no defects are on the original, clean the document glass and underside of the document cover.
Copy image is skewed	Ensure that original is positioned correctly on document glass. Check that copy paper is loaded correctly.
Blank copies	Ensure that the original is face down on the document glass or face up in the ADF.
Image rubs off the copy easily	Replace the paper in the cassette with paper from a new package. In high humidity areas do not leave paper in the product for extended periods of time.

Condition	Suggested Solution
Frequent copy paper jams	Fan the stack of paper, then turn it over in the cassette. Replace paper in paper cassette with a fresh supply. Check/adjust paper guides. Ensure that the paper is the proper paper weight 80 g/m ² (20 lb) bond paper is recommended. Check for copy paper or pieces of copy paper remaining in the product after a paper jam has been cleared.
Toner yield is lower than expected and TONER LOW message appears in the LCD	Toner may be lodged in the cartridge. Remove the toner cartridge. Shake the toner cartridge and tap along the top of the toner cartridge over a waste receptacle. Take care not to touch the exposed toner on the left side of the cartridge.
Fewer copies from the Toner Cartridge than expected	Originals contain pictures, solids, or heavy lines. Originals are forms, newsletters, books etc. The product is being powered on and off frequently. The document cover is being left open while copies are being made.

Printing Problems Solution Chart

Problem	Probable Cause	Suggested Solution
Your product does not print	The IEEE-1284 parallel cable or USB cable is not connected properly.	Check the cable connection.
	The IEEE-1284 parallel cable or USB cable is defective.	Check the cable with a computer and printer that work. If printing is still not possible, replace the cable.
	The port setting is incorrect.	Check the printer settings in the Windows Control Panel to ensure that the print job is being sent to the correct port. (For Example: LPT1.)
	The toner and drum cartridges are not installed properly.	Check that the toner and drum cartridges are installed properly.
	The printer driver may not be installed properly.	Reinstall the software.
	The parallel port cable specifications may not be correct.	Use the IEEE-1284 parallel port cable supplied with the machine or replace it with an IEEE-1284 compliant cable.
Half of the page is blank	The page layout is too complex.	Reduce the resolution setting from 600 dpi to 300 dpi. Install more RAM in the computer.
	The page orientation may be incorrect.	Change the page orientation in the printer setup dialog.

Problem	Probable Cause	Suggested Solution
Printing is too slow	The computer parallel port may not be set for high speed communications.	If your computer is equipped with an ECP parallel port, enable this mode of operation. Refer to the Enabling High Speed Printer Communications section of your PC's user guide.
	If using Windows 95, the spool setting may be set incorrectly.	Point to the Start Task bar and then click Settings, then Printers. Click your product icon with the right mouse button. Click Properties and then spool settings on the Details tab. Select the required setting from the available choices.
	Computer may not have enough memory (RAM).	Install more RAM in your computer.
	Print job is too large	Reduce resolution from 600 dpi to 300 dpi.
Irregular faded patches of print	There is a paper quality problem.	Use only paper that meets the specifications required by the product.
	Toner may be unevenly distributed.	Remove the toner cartridge and shake it gently to distribute the toner evenly. Then reinstall the toner cartridge.
Black staining	There is a paper quality problem.	Use only paper that meets the specifications required by your product.
Character voids	The paper may be too dry.	Try printing with a different batch of paper.

Problem	Probable Cause	Suggested Solution
Background scatter	The paper may be too damp.	Try printing with a different batch of paper. Do not open packages of paper until necessary so that the paper does not absorb too much moisture from the air.
	Printing over uneven surfaces.	If printing onto envelopes, change your printing layout to avoid printing over areas that have overlapping seams on the reverse side.
Missing characters	The paper may be too damp.	Try printing with a different batch of paper. Do not open packages of paper until necessary so that the paper does not absorb too much moisture from the air.
Back of printout is dirty	The transfer roller may be dirty.	Print a few blank pages to clean the transfer roller.
Incorrect fonts	TrueType fonts may be disabled.	Use the fonts dialog box in the Control Panel to enable TrueType fonts.
Faded graphics	Toner may be low.	Remove the toner cartridge and shake it gently to distribute the toner evenly. Then reinstall the toner cartridge. Ensure that you have a spare toner cartridge.

Faxing Problems Solution Chart

Problem	Suggested Solution
Originals are fed diagonally (skewed)	Ensure the Document Guides are adjusted to the width of the original that you are sending. Check the original meets the conditions established for use with this device.
The original is not being printed on the paper of the remote FAX even though it is being sent	Ensure the originals were placed face-up in the document feeder or face-down on the document glass.
Originals are not sent even if operations are carried out normally	Check that the remote FAX is compatible with your machine. This machine supports G3 communications but not G4 communications.
Originals cannot be received even if [Start] is pressed	Ensure you wait for the bell to ring before picking up the handset. Ensure you do not replace the handset before you press [Start]. When you answer a call using the handset to receive a FAX, do not replace the handset until you press [Start] and you hear the phone line switch to the machine. Check the telephone cord has not been disconnected. Check the power plug has not been unplugged from the power outlet. Check with the party trying to send the original that there are no problems with the remote fax.
Paper is not output	Ensure the machine has paper loaded. Check if a paper jam has occurred.
The received original is printed dark and is illegible or black stripes are printed on the original	Check with the party sending the original that the original is a clean copy. Check with the party sending the original that the problem is not due to a fault or operator error at the remote FAX. For example, dirty scan glass or dirty scan lamp. If the same problem occurs even if you make a copy on your machine, clean the drum using the instructions located on page 7-11.

Problem	Suggested Solution
Paper is output but not printed.	Ensure there enough toner. Check with the party sending the fax that the original was placed correctly when scanned at the remote FAX.

Resetting the Machine

If you are experience problems or the machine locks up you may need to reset the machine. Use the following instructions to reset and reboot the machine:

NOTE: This programming sequence must be performed within 1.5 seconds.

- Press the [Clear/Clear All] key.
- Press the ▲ navigation key.
- Press the [Clear/Clear All] key again.
- Press the ▼ navigation key.

9 System Setup

There are various system settings which require setting up prior to using your *WorkCentre Pro 412* machine. Also ControlCentre 5.0 is available for setting up the machine remotely, at your PC or Workstation.

The following topics are included:

- System Setup
- Adjusting Speaker Volume
- System Data Settings
- Reports
- Clearing Memory
- ControlCentre 5.0

System Setup

Through the System Setup menu you can change various settings on the machine.

System Setup Options

Option	Description
Receive Mode	<p>Your product is set to automatically receive a fax. There are several other receive modes available:</p> <p>TEL: In TEL mode, automatic fax answering and reception is turned off. To receive a fax manually, pick up the external phone handset or press Manual Dial to accept the call. You can hear voice or fax tone from the remote machine. Then press [Start] and replace the handset.</p> <p>FAX: The machine answers an incoming call and immediately goes into fax receive mode.</p> <p>TEL/FAX: The machine answers the incoming call. If a fax signal is not detected, the machine sounds a ringing tone to indicate a voice phone call. To answer the call, press [Start] on the control panel, then lift the handset. If the external phone is not lifted while the ringing tone is sounding, the machine will switch to automatic fax reception mode.</p> <p>ANS/FAX: Use if attaching an answering machine to the Xerox <i>WorkCentre Pro 412</i>. If the machine senses a fax tone, it automatically switches to FAX mode.</p>
Prefix Dial Fax No.	<p>You can set the prefix dial number up to 5 digits. This dial number will be dialed first, before any autodial number is started. It is useful to access PABX exchange.</p>
Ringer Volume	<p>You can set the required ringer volume. There are 10 levels available. You'll hear the selected volume and the display will show the level. Setting to the left end turns the ringer off. The machine will work normally even if the ringer is set to off.</p>
Alarm Sound	<p>With this option set to ON, the alarm tone sounds when an error occurs or fax communication ends.</p>

Option	Description
Key Sound	With this option set to ON, a key tone sounds each time any key is pressed.
Speaker Control	You can set the speaker to ON, OFF or COM. With this option set to COM, the speaker is on until the remote machine answers.
Select Language	You can choose which language to display on the LCD. The options available are English, French, Spanish, Portuguese, German, Italian, Dutch, Danish, Swedish, Finnish, and Norwegian.
Select Country	Setting the 'SELECT COUNTRY' option sets the correct fax communication settings for the PSTN system pertaining to each country. The options available are Austria, Denmark, Finland, Germany, Greece, Switzerland, Italy, Netherlands, Norway, Sweden, Belgium, Portugal, Spain, UK, France and Ireland.
Toner Save	With this option set to ON, you can preserve the toner supply.
USB Mode	USB mode selections are FAST and SLOW. FAST is the default mode. Some PC users may experience poor USB implementation in the default mode. If this occurs, select the SLOW mode in order to achieve successful results.
Fax Duplex	With this option enabled, you can print 2-sided fax pages. You can select LONG EDGE or SHORT EDGE according to the required binding orientation. Setting OFF turns the feature off.
Image Quality	Use this option to set the overall default Image Quality setting for your machine based on the type of originals being copied. Use NORMAL if the machine is used for all types of originals, select TEXT if mainly copying documents containing fine lines and text, or select IMAGE if the machine is used for copying documents containing shading or color.

Changing the System Setup Options

Use the following instructions to display or change the default System Setup options:

- Press [Menu/Exit] on the control panel.
- Press ▼ or ▲ until 'SYSTEM SETUP' appears, then press [Select].
- Press ▼ or ▲ to scroll through the options.
- To display or change any current setting for any of the system setup options, choose a feature and press [Select].

The default setting for your selection will be displayed in the lower line of the LCD.

- Press ◀ or ▶ to display the setting options for the feature you have selected.
- Press [Select] to save the selection. The next System Setup option appears.
- Repeat the procedure to continue changing settings.
- Press [Menu/Exit] to exit and return to the previous menu level. To return to Standby mode, press [Stop].

Adjusting Speaker Volume

Use the following instructions to adjust the loudness of the speaker.

- Ensure that the LCD displays date and time (Fax Standby mode).

If not, press [Copy/Fax/Scan] until FAX displays, then press [Select].

- Press [Manual Dial]. You'll hear a dial tone.
- Press ◀ or ▶ repeatedly until you find the required loudness. The display shows the current volume level.
- Press [Stop] to save the setting and return to Standby mode.

System Data Settings

Your machine has various user-selectable system data options. These options are preset at the factory, but you may need to change them. To find out how the options are currently set, print the System Data list.

NOTE: There may be restrictions on some of the System Data Settings due to local country regulations.

HINT: For more information on printing the System Data list, refer to “Printing Reports” on page 9-10.

System Data Options

Option	Description
Paper Size	Use to set the default paper size for the cassette and bypass tray – Letter, A4, or Legal (216 x 356 mm / 8.5 x 14 inch). NOTE: If feeding media smaller than A4/Letter through the bypass tray, the setting can remain set at A4, Letter or Legal size.
Message Conf.	Use to enable a report showing whether the transmission was successful, how many pages were sent, and additional information. Options are ON, OFF or ERR. ERR prints only when a transmission is not successful.
Auto Journal	Use to enable a report with detailed information about the previous 40 communications operations, including time and dates. Optional settings are ON or OFF.
Receive Code	The Rcv Code allows you to initiate fax reception from an extension phone plugged into the <i>WorkCentre Pro 412</i> EXT jack. If you pick up the extension phone and hear fax tones, enter the Rcv Code and press Start. The Rcv Code is preset to *9* at the factory. Settings range from 0 to 9.

Option	Description
Power Save	<p>The power saving menu item lets you reduce power usage when the machine is idle.</p> <p>Select ON to turn this feature on. The LCD prompts you to choose the length of time the machine waits after a job is printed before it switches to a reduced power state.</p> <p>Select OFF to turn this feature off. It keeps the machine ready to print with minimum warm-up time.</p>
ECM Mode	<p>Error Correction Mode compensates for poor line quality. Options are ON or OFF. If the line quality is poor, transmission time may be increased when ECM is enabled.</p>
RX Reduction	<p>When receiving a document as long as or longer than the paper installed in your machine, the machine can reduce the size of the document to fit the paper size in the <i>WorkCentre Pro 412</i>.</p> <p>Use this feature if you want to automatically reduce an incoming page. If the <i>WorkCentre Pro 412</i> cannot reduce the document to fit onto one page, the document is divided and printed at actual size on two or more pages. With Horizontal Reduction enabled, the machine reduces an incoming document along the vertical axis only.</p>
Discard Size	<p>When receiving a document as long as or longer than the paper installed in your machine, you can set the fax machine to discard any excess at the bottom of the page. If the received page is outside the margin you set, it will print on two sheets of paper at the actual size.</p> <p>If the document is within the margin, and the Auto Reduction feature is turned ON, it will be reduced to fit into the appropriate size paper (discard does occur). If the Auto Reduction feature is turned OFF or fails, the data within the margin will be discarded. Settings range from 0 to 30 mm.</p>
Redial Interval	<p><i>WorkCentre Pro 412</i> can automatically redial a remote fax machine if it was busy. Intervals from 1 to 15 minutes can be entered.</p>
Redials	<p>Specifies the number of redial attempts (from 0 to 9) the <i>WorkCentre Pro 412</i> will attempt.</p>
Answer On Rings	<p>Specifies the number of times <i>WorkCentre Pro 412</i> rings (1 – 7) before answering an incoming call.</p>

Option	Description
Send From Memory	When enabled, all fax transmission documents are automatically scanned into memory. It will not be necessary to wait until documents in the Automatic Document Feeder are sent before you can send or store other fax jobs.
Local ID	When enabled, the <i>WorkCentre Pro 412</i> automatically prints the page number and date and time of reception at the bottom of each page of a received document.
Clock Mode	You can configure your machine to display time using either a 12-hour or 24-hour format.

Setting System Data Options

Use the instructions below to set the System Data options to the required settings:

- Press [Menu/Exit] on the control panel. The display shows the first menu; SYSTEM DATA.

The display shows the first system data option menu 'PAPER SIZE' in the bottom line.

- Scroll through the options by pressing ▼ or ▲ repeatedly.
- When the option you want appears on the display, press [Select].
- Choose the required status by pressing ◀ or ▶ repeatedly.
- When the required status appears, press [Select].
- You can exit from setup mode at any time by pressing [Menu/Exit] or [Stop].

Menu/Exit returns to the previous menu level. Stop returns to Standby mode.

Reports

Various Reports and Lists are available on your machine. The reports help you to monitor your machine and fax activity. Reports can be set up to include specific information or to print automatically.

Your machine can print reports containing useful information – Schedule Job, System Data, etc.

NOTE: For further information about Reports refer to the Customer Documentation CD.

The following reports are available:

Message Confirmation

This report shows the fax number, the number of pages, elapsed time of the operation, the communication mode, and the communication results.

You can set up your machine to print the message confirmation report in one of the following ways:

Automatically after each transmission (ON)

Automatically only if an error occurs during transmission (ERR)

No report printed at all (OFF). You can print this report manually at any time you want.

Schedule Job Information

This list shows the document currently stored for Delayed Sending, Priority Sending, Group Sending, and TX polling. The list shows the starting time, type of operation, etc.

Phonebook List

This list shows all of the numbers currently stored in the machine's memory as Speed dial numbers and Group dial numbers.

System Data List

This list shows the status of the user-selectable options. After you change any setting, print this list to confirm your changes.

Transmission Journal

This report shows information concerning transmission activities recently made.

Reception Journal

This report shows information concerning reception activities recently made.

Help List This list shows the machine's basic functions and commands to use as a quick reference guide.

Multi-Communication Report This report is printed automatically after sending documents or receiving documents from more than one location.

Power Failure Report This report is printed out automatically when power is restored after a power failure occurs and there is data loss due to the power failure.

NOTE: The lists you have set to print out automatically will not print out when there is no paper loaded or if a paper jam has occurred.

Printing Reports

- Press [Reports] on the control panel.
The display shows the first menu; MSG. CONFIRM.
- Press [Reports] repeatedly until you find the list you want to print, then press [Select].
The selected list will be printed out.

Clearing Memory

You can selectively clear the following information stored in your machine's memory:

- | | |
|-----------------------|--|
| SYSTEM ID | Your fax number and name are cleared from the machine's memory. |
| SYSTEM DATA | Restores all the user-selectable options to the factory default. |
| PHONEBK/MEMORY | Clears the speed dial or group dial numbers stored in the memory. In addition, all the Scheduled Job operations you have reserved are also canceled. |
| TX-RX JOURNAL | <p>Clears all records of transmissions and receptions.</p> <p>Use the following instructions to clear the required information from the machine's memory:</p> <ul style="list-style-type: none">➤ Press [Menu/Exit] on the control panel. The display shows the first menu; SYSTEM DATA.➤ Press ▼ or ▲ until 'MEMORY CLEAR' appears, then press [Select]. <p>The display shows the items you can choose to clear.</p> <ul style="list-style-type: none">➤ Press ▼ or ▲ until you find the item you want to clear and press [Select] to clear the item. <p>To exit without clearing the item, press the [Menu/Exit] key.</p> <ul style="list-style-type: none">➤ Repeat the procedure to clear another item or press [Menu/Exit] or [Stop] to exit and return to Standby mode. |

ControlCentre 5.0

Using the *Xerox WorkCentre Pro 412* ControlCentre 5.0, you can set up fax system data options, create and edit phonebook entries, or view the information of your *WorkCentre Pro 412* machine on your desktop computer.

After setting up fax data options or creating phonebooks, just click [Apply] on the ControlCentre 5.0 screen to download the new settings to your *WorkCentre Pro 412* machine.

Installing ControlCentre 5.0

When you install *Xerox WorkCentre Pro 412* software, *Xerox WorkCentre Pro 412* ControlCentre 5.0 utility is automatically installed.

HINT: For information on installing WorkCentre Pro 412 software, please refer to Chapter 2 - Product Overview.

Running ControlCentre 5.0

Use the following instructions to run ControlCentre 5.0:

- Start your Windows software.
- Click the [Start] button on your desktop computer.
- From Programs, select [Xerox WorkCentre Pro 412], then [ControlCentre 5.0].

The *Xerox WorkCentre Pro 412* ControlCentre 5.0 screen appears.

Using ControlCentre 5.0

The ControlCentre 5.0 screen provides five tabs:

- Settings
- Advanced
- Phonebook
- Information
- Firmware Update

To exit ControlCentre 5.0, click the [Exit] button in the bottom of each tab screen.

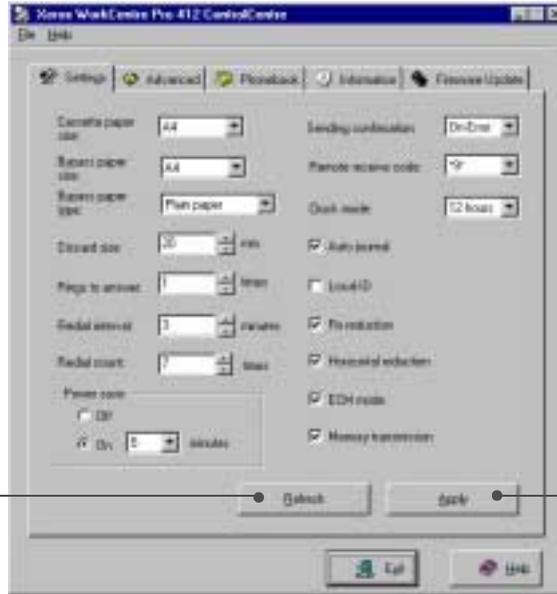
For further details, click the [Help] button in the bottom of each tab screen.

NOTE: When you change the settings on ControlCentre 5.0, or when you run ControlCentre 5.0, the settings on the machine and on ControlCentre 5.0 will be automatically updated to the latest settings you have made either on the machine or on ControlCentre 5.0.

Settings Tab

Click on the [Settings] tab to configure Fax System Data settings.

Reads the current settings in the *WorkCentre Pro 412* machine then refreshes ControlCentre 5.0 with the machine's current setting.



Downloads the settings made in ControlCentre 5.0 to the *WorkCentre Pro 412* machine.

HINT: For details on the System Data Setting options, please refer to "System Data Settings" on page 9-6.

Advanced Tab

Click on the [Advanced] tab to change the default Fax System Setup options.

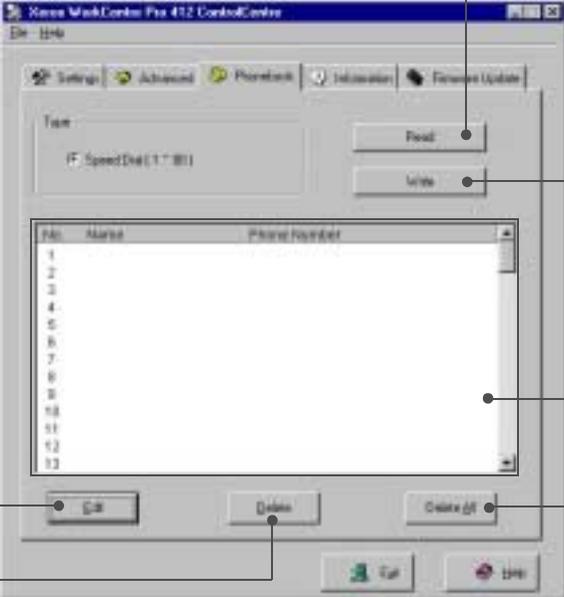


HINT: For details on the System Setup options, please refer to “System Setup” on page 9-2.

Phonebook Tab

Click on the [Phonebook] tab to create and edit phonebook entries.

Reads the phonebook entries from the *WorkCentre Pro 412* machine to ControlCentre 5.0.



Allows you to download the phonebook entries from ControlCentre 5.0 to the *WorkCentre Pro 412* machine.

Phonebook entries.

Deletes all phonebook entries.

Deletes a selected phonebook entry.

Allows you to edit a selected phonebook entry in a separate Edit dialog box.

No.	Name	Phone Number
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		

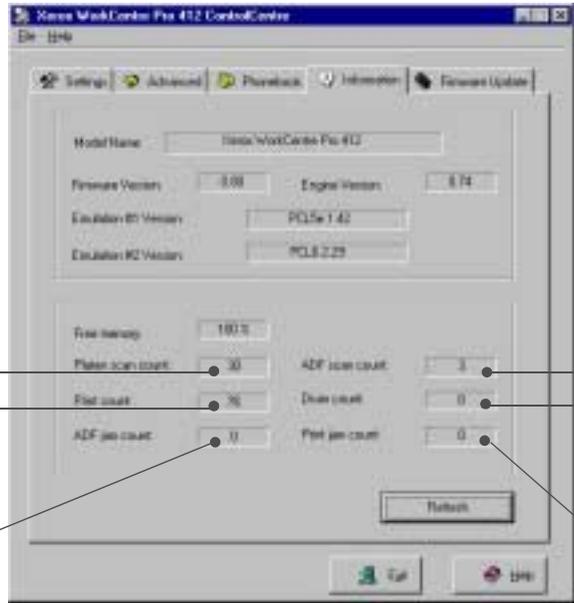
Information Tab

Click on the [Information] tab to view the software version information and various counters. The counters allow you to check how many scans and prints have been made, and how many jams have occurred on your machine.

Number of scans using the document glass.

Number of prints performed by the machine.

Number of jams in the ADF.



Number of scans using the ADF.

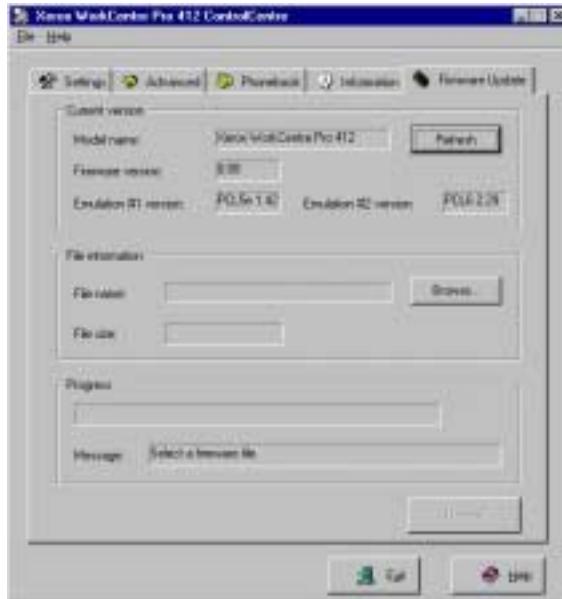
Number of prints using the drum.

Number of jams during printing.

Firmware Update Tab

Click on the [Firmware Update] tab to update the firmware of your machine.

NOTE: This feature should be used by an Xerox Service Representative. Please contact your local Xerox representative or authorised dealer for further information.



Appendix A - Safety Notes

Your Xerox product and supplies have been designed and tested to meet strict safety requirements. These include Safety Agency approval, and compliance to established environmental standards. Please read the following instructions carefully before operating the product and refer to them as needed to ensure the continued safe operation of your product.

The safety testing and performance of this product have been verified using XEROX materials only.

Follow all warnings and instructions marked on, or supplied with the product.



This WARNING Mark alerts users to the possibility of personal injury.



This WARNING Mark alerts users to heated surfaces.



WARNING: This product must be connected to a protective earthing circuit.

This product is equipped with a 3-wire type plug, provided with a protective earthing pin. This plug will fit only into an earthed power outlet. This is a safety feature. To avoid risk of electric shock, contact your electrician to replace the receptacle if you are unable to insert the plug into the outlet. Never use an earthed adapter plug to connect the product to a power source receptacle that lacks an earth connection terminal.

This product should be operated from the type of power source indicated on the marking label. If you are not sure of the type of power available, consult your local power company.

Do not allow anything to rest on the power cord. Do not locate the product where persons will step or trip on the cord.

Use of an extension cord with this product is not recommended or authorized. Users should check building codes and insurance requirements if a properly earthed extension cord is to be used. Ensure that the total ampere ratings of the products plugged into the extension cord do not exceed the extension cord ampere rating. Also, make sure that the total amperage of all products plugged into the wall outlets does not exceed the outlet rating.

Disconnect Device for this product is the power cord. To remove all electrical power to the product, disconnect the power cord from the power receptacle.

Your equipment is equipped with an energy saving device to conserve power when the machine is not in use. The machine may be left on continuously.

Unplug this product from the wall outlet before cleaning. Always use materials specifically designated for this product. Use of other materials may result in poor performance and could create a hazardous situation.

Do not use aerosol cleaners. Follow the instructions in this User Guide for proper cleaning methods.

Never use supplies or cleaning materials for purposes other than those for which they were intended. Keep all supplies and materials out of reach of children.

Do not use this product near water, wet locations, or outdoors.

Do not place this product on an unstable cart, stand or table. The product may fall, causing personal injury or serious damage to the product

Slots and Openings in the cabinet and in the back and sides of the product are provided for ventilation. To ensure reliable operation of the product and to protect it from overheating, these openings must not be blocked or covered. The product should never be located near or over a radiator or heat register. This product should not be placed in a built-in installation unless proper ventilation is provided.

Never push objects of any kind into the slots of the product as they may touch dangerous voltage points or short out parts which could result in a fire or electric shock.

Never spill liquid of any kind on the product.

Never remove covers or guards that require a tool for removal, unless directed to do so in a Xerox approved maintenance kit.

Never defeat interlock switches. Machines are designed to restrict operator access to unsafe areas. Covers, guards and interlock switches are provided to ensure that the machine will not operate with covers opened.

Do not put your hands into the fuser area, located just inside the exit tray area, as you may be burned.

Quality Standards: The product is manufactured under a registered ISO9002 Quality system.

If you need additional safety information concerning this XEROX product or XEROX supplied materials you may call the following number:

EUROPE +44 (0) 1707 353434

USA/CANADA 1 800 928 6571

Safety Standards

EUROPE This XEROX product is certified by the following Agency using the Safety Standards listed.

Agency: TUV Rheinland

Standard: IEC60950 3rd Edition Amendments A1, A2, A3, A4 and A11.

USA/CANADA This XEROX product is certified by the following Agency using the Safety Standards listed.

Agency: UNDERWRITERS LABORATORIES

Standard: UL 1950 3rd Edition. Certification is based on reciprocity agreements, which include requirements for Canada.

Regulatory Information



The CE marking applied to this product symbolizes Xerox Limited Declaration of Conformity with the following applicable Directives of the European Union as of the dates indicated:

January 1, 1995: Council Directive 73/23/EEC amended by Council Directive 93/68/EEC, approximation of the laws of the member states related to low voltage equipment.

January 1, 1996: Council Directive 89/336/EEC, approximation of the laws of the member states related to electromagnetic compatibility.

March 9, 1999 Council Directive 99/5/EC, on radio equipment and telecommunications terminal equipment and the mutual recognition of their conformity.

A full declaration, defining the relevant directives and referenced standards can be obtained from your Xerox representative or by contacting:

Environment, Health and Safety

Xerox Limited

PO Box 17

Bessemer Road

Welwyn Garden City

Herts

AL7 1HE

England

Tel Number +44 (0) 1707 353434

WARNING: This is a Class A product. In a domestic environment this product may cause radio frequency interference, in which case the user may be required to take adequate measures.

WARNING: This product is certified manufactured and tested in compliance with strict safety and radio frequency interference regulations. Any unauthorized alteration which includes the addition of new functions or the connection of external devices may impact this certification. Please contact your local XEROX Limited

representative for a list of approved accessories.

WARNING:In order to allow this equipment to operate in proximity to Industrial, Scientific and Medical (ISM) equipment, the external radiation from the ISM equipment may have limited or special mitigation measures taken.

WARNING:Shielded cables must be used with this equipment to maintain compliance with Council Directive 89/336/EEC.

FCC Part 15

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the product is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Reference CFR 47 Part 15 Section 15.21

Changes or modifications to this equipment not specifically approved by the XEROX Corporation may void the user's authority to operate this equipment.

Shielded cables must be used with this equipment to maintain compliance with FCC regulations.

Laser Safety



WARNING:Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

With specific regard to lasers, the equipment complies with laser product performance standards set by governmental, national and international agencies as a Class 1 Laser

Product. It does not emit hazardous radiation as the beam is totally enclosed during all phases of customer operation and maintenance.

The Electricity at Work Regulations - UK ONLY

The Electricity at Work Regulation 1989 came into force in England and Wales on the 1 April 1990. This 1989 Regulation places a duty on all employers and self-employed persons to ensure the electrical system in their premises is constructed, maintained and operated in such a manner as to prevent, so far as reasonably practical, danger. This includes ensuring all electrical equipment connected to such electrical systems safely constructed, maintained and operated.

All Xerox equipment has been designed to exacting safety standards and has undergone a variety of stringent safety tests including earth bond, insulation resistance and electrical strength tests. Xerox Limited manufacturing plants have been awarded ISO 9000 quality certification and are subject to regular audits by the British Standards Institution or equivalent national standards body.

Xerox equipment which has been properly and regularly serviced and maintained should not have to undergo additional specific safety tests pursuant to the 1989 Regulation. Customers wishing to complete safety testing should contact Xerox Limited Technical Centre (*see page A-8*) for advice prior to any test implementation.

XEROX equipment should, however, be properly and regularly serviced and maintained at all times.

QUESTION: What is the Electricity at Work Regulation?

ANSWER: The Electricity at Work Regulation 1989 came into force in England and Wales on the 1 April 1990. This 1989 Regulation places a duty **on all employers and self-employed persons** to ensure the electrical systems in their premises are constructed, maintained and operated in such a manner as to prevent, so far as reasonably practicable, danger. This includes ensuring that all electrical products connected to such electrical systems are safely constructed, maintained and operated.

QUESTION: Does XEROX Limited comply with the Electricity at Work Regulation?

ANSWER: The regulation places a duty on **all employers and self-employed persons** to ensure the electrical systems in their premises are, effectively safe.

The regulation does not impose on, amongst others, **manufacturers or suppliers** of such electrical systems. However, rest assured that all XEROX equipment which XEROX Limited and its authorized distributors supplies to customers, conforms with all the relevant safety legislation and standards.

QUESTION: Is XEROX equipment safe?

ANSWER: All XEROX equipment supplied by XEROX Limited and their authorized distributors conforms to all relevant safety legislation and standards.

QUESTION: Is the XEROX equipment in my premises safe?

ANSWER: All XEROX equipment supplied by XEROX Limited and their authorized distributors conforms to all relevant safety legislation and standards. However, like all electrical equipment, they have to be regularly serviced and maintained by competent persons.

XEROX Limited Customer Service Engineers ensure XEROX equipment is serviced and maintained to exacting XEROX safety standards. If you would like your XEROX equipment to be serviced and maintained to such high standards, please contact your local XEROX Limited Customer Service Organization. They will be pleased to assist you.

QUESTION: Does the XEROX equipment in my premises comply with the Electricity at Work Regulations?

ANSWER: All employers and self-employed persons must ensure that the electrical systems in their premises are safe. This will include ensuring XEROX equipment in such premises is safe.

XEROX Limited's Product Safety function has prepared a guide which contains a list of tests which may be completed by your XEROX Limited Customer Service Organization.

THESE TESTS MUST BE CARRIED OUT ONLY BY

PERSONS WHO POSSESS THE RELEVANT SKILL, KNOWLEDGE AND EXPERIENCE TO CARRY OUT SUCH TESTS.

Please contact the XEROX Limited Customer Service Organization for further information.

THE USE OF INAPPROPRIATE TEST PROCEDURES AND TEST EQUIPMENT MAY PROVIDE MISLEADING RESULTS AND MAY CAUSE DEATH, PERSONAL INJURY AND/OR DAMAGE TO PROPERTY.

QUESTION: I would like to carry out my own safety tests on the XEROX equipment in my premises.

ANSWER: You may, of course, request such tests as you deem necessary to satisfy yourself that your XEROX equipment is safe. Your XEROX Limited Customer Support will be pleased to advise you on such testing.

QUESTION: I require records of all tests.

ANSWER: After safety testing, your XEROX Limited Customer Service Engineer will provide you with a certificate which details the results of all tests completed.

In the event of any defect being noted, the XEROX equipment will be switched off and disconnected from the supply until the defect has been corrected. You will be advised of such action to enable such defects to be corrected.

PLEASE NOTE: YOU MUST ENSURE THAT YOUR XEROX EQUIPMENT IS SAFE AT ALL TIMES.

Please contact us if you have any queries regarding the information provided in this document.

Environment, Health and Safety

XEROX Limited

PO Box 17

Bessemer Road

Welwyn Garden City

Herts

AL7 1HE

England

Tel Number +44 (0) 1707 353434

Radio Equipment & Telecommunications Terminal Equipment Directive

This Xerox product has been self-certified by Xerox for pan-European single terminal connection to the analogue public switched telephone network (PSTN) in accordance with Directive 1999/5/EC.

The product has been designed to work with the national PSTNs and compatible PBXs of the following countries:

Austria	Germany	Luxembourg	Sweden
Belgium	Greece	Netherlands	Switzerland
Denmark	Iceland	Norway	United Kingdom
France	Ireland	Portugal	
Finland	Italy	Spain	

In the event of problems, you should contact your local Xerox representative in the first instance.

This product has been tested to and is compliant with TBR21, a technical specification for terminal equipment for use on analogue switched telephone networks in the European Economic Area.

The product may be configured to be compatible with other country networks. Please contact your Xerox representative if it needs to be reconnected to another country's network. There are no user-adjustable settings in the product.

NOTE: Although this product can use either loop disconnect (pulse) or DTMF (tone) signalling it is recommended that it is set to use DTMF signalling. DTMF signalling provides reliable and faster call set-up.

Modification, connection to external control software or to external control apparatus not authorised by Xerox, will invalidate its certification.

Send Header Requirements

Federal Communications Commission (FCC) regulations require all persons within the United States who send any message via a facsimile machine to include an identifying message in the transmission. The message must clearly contain an identifier and telephone number for the entity (business or individual) sending the message.

This facsimile machine provides the local ID and name features required for the FCC regulation. To satisfy the FCC regulation, the telephone number and name must be included with the printed document. To comply with the FCC rules, carefully read and follow the instructions listed in this document to program the local ID and name.

Data Coupler Information

This Xerox machine contains an internal data coupler. Its use is restricted by the FCC (Federal Communications Commission). To comply with the FCC rules, you must carefully read and follow the instructions listed below.

This equipment complies with Part 68 of the FCC rules. On the rear of this equipment is a label that contains, among other information, the FCC registration number and Ringer Equivalence Number (REN). If requested, provide this information to your telephone company.

The REN is useful to determine the quantity of devices you may connect to your telephone line and still have all of those devices ring when your number is called. In most, but not all areas, the sum of the RENs of all devices should not exceed five (5.0). To be certain of the number of devices you may connect to your line, as determined by the REN, you should call your local telephone company to determine the maximum REN for your calling area.

WARNING: Ask your local telephone company for the modular jack type installed on your line. Connecting this machine to an unauthorized jack can severely damage telephone company equipment. You, not Xerox, assume all responsibility and/or liability for any damage caused by the connection of this machine to an unauthorized jack.

You may safely connect the machine to the following standard modular jack: USOC RJ-11C. Use the standard line cord (with modular plugs) provided with the installation kit to connect it.

An FCC compliant telephone cord and modular plug is provided with this equipment. This equipment is designed to be connected to the telephone network or premises wiring using a compatible modular jack which is Part 68 compliant.

Do not connect this machine to a party or coin operated phone line.

Repairs to the machine should be made only by a Xerox representative or an authorized Xerox service agency. This applies at any time during or after the service warranty period. If unauthorized repair is performed, the remainder of the warranty period is null and void.

If you find the telephone line is damaged or the telephone company notifies you that your machine is causing damage, disconnect the machine from the telephone line and call for service. Do not reconnect the machine until necessary repairs are made.

The telephone company will, where practical, notify you when they need to temporarily disconnect service. However, if action is reasonable and necessary, but prior notice is not practical, they may still temporarily disconnect your service. In such cases they must:

- Immediately notify you of their temporary action.
- Reconnect service when the source of damage is removed.
- Inform you of your rights to bring a complaint to the FCC under FCC rules.

The telephone company may make changes to its communications facilities, equipment, operations, or procedures. Such action must be reasonable, required in the operation of their business, and consistent with FCC rules. They must give you prior written notification if the changes can:

- Make your machine incompatible with their equipment.
- Require modification or alteration of the machine.
- Otherwise physically affect performance of the machine.

**WARNING:When programming emergency numbers and/or making test calls to emergency numbers:
Remain on the line and briefly explain to the dispatcher the reason for the call before hanging up.
Perform such activities in the off-peak hours, such as early morning hours or late evenings.**

Notice: The Industry Canada Label on the machine identifies certified equipment. This certification means that the equipment meets certain telecommunications networks protective, operational and safety requirements. Industry Canada does not guarantee the equipment will operate to the user's satisfaction.

Before installing this equipment, users should ensure that it is permissible to be connected to the facilities of the local telecommunications company. The equipment must also be installed using an acceptable method of connection. In some cases, the company's inside wiring associated with a single line individual service may be extended by means of a certified connector assembly (telephone extension cord).

The customer should be aware that compliance with the above conditions may not prevent degradation of service in some situations.

Repairs to certified equipment should be made by an authorized Canadian maintenance facility designated by the supplier. Any repairs or alterations made by the user to this equipment, or equipment malfunctions, may give the telecommunications company cause to request the user to disconnect the equipment.

Users should ensure for their own protection the electrical ground connections of the power utility, telephone lines and internal metallic water pipe system, if present, are connected together. This precaution may be particularly important in rural areas.

CAUTION: Users should not attempt to make such connections themselves, but should contact the appropriate electric inspection authority or electrician, as appropriate.

Notice: The Ringer Equivalence Number (REN) assigned to each terminal device provides an indication of the maximum number of terminals allowed to be connected to a telephone interface. The termination on an interface may consist of any combination of devices subject only to the requirement that the sum of the Ringer Equivalence Numbers of all the devices does not exceed 5.

Environmental Compliance

Energy Star®



XEROX Corporation designed this product to comply with the guidelines of the ENERGY STAR® program of the Environmental Protection Agency. As an ENERGY STAR® Partner, XEROX has determined that this product meets the ENERGY STAR® guidelines for energy efficiency.

Appendix B - Specifications

The *WorkCentre Pro 412* adheres to strict specifications, approvals and certifications. These specifications are designed to provide for the safety of users and to ensure that the machine operates in a fully functional state. Use the specifications listed in this chapter to quickly identify the capabilities of the machine.

This chapter includes:

- Printer Specification
- Fax Specification
- Scanner and Copier Specification
- General Specification
- Paper Specification

If further specification information is required please contact your local Xerox Representative or authorized Xerox dealer.

Printer Specification

Item	Description
Emulation	PCL6
Resolution	True 600 x 600 dpi, 1200 dpi class
Printing speed	12 ppm (for A4 / letter size)
Effective printing width	208 mm (8.2 inches) for letter / legal (216 x 356 mm / 8.5 x 14 inch) 202 mm (8 inches) for A4
First print out time	13 seconds (warm up)

Fax Specification

Item	Description
Applicable line	G3 PSTN (Public Switched Telephone Network)
Compatibility	ITU Group 3
Resolution	Standard: 203 x 98 dpi Fine: 203 x 196 dpi Super Fine: 300 x 300 dpi
Data coding	MH/MR/MMR/JPEG
Maximum modem speed	33.6 kbps
Transmission speed	3.5 seconds (Standard resolution, MMR, 33.6 kbps)
Memory	4 Mbytes
Printing speed	12 ppm (for A4 / letter size)
Effective scanning width	208 mm (8.2 inches)
Effective printing width	208 mm (8.2 inches) for letter / legal (216 x 356 mm / 8.5 x 14) 202 mm (8 inches) for A4
Document width and weight	ADF: 176 ~ 216 mm (7 ~ 8.5 inches) 45 ~ 105 g/m ² (12.5 ~ 28 lb) Platen: Maximum Legal (216 x 356 mm / 8.5 x 14 inch)
Input paper tray capacity	Cassette: 550 sheets 80 g/m ² (20 lb)
Document feeder	ADF: Up to 30 pages 80 g/m ² (20 lb) Platen: 1 page

Scanner and Copier Specification

Item	Description
Scanning method	CCD, Flat-bed
Scan speed	Platen (SDMP ^a): 12 cpm ADF (SDMP): 12 cpm ADF (MDSP): 6.6 cpm at Text/Mixed 3.3 cpm at Photo
Scan resolution	600 x 600 dpi, 1200 dpi class
Scan mode	True color, 250 gray, Black and white
Copy mode	Black and white
Effective scanning width	208 mm (8.2 inches)
Maximum document width	216 mm (8.5 inches)
Multi copy range	1 ~ 999
Reduction & Enlargement	25% ~ 400% in 1% increments (from Platen) 25% ~ 100% in 1% increments (from ADF)
Maximum print edge margin	Top, Bottom, Each side 4 mm (0.16 inch)

a. Single Document Multiple Printout

General Specification

Item	Description
Input paper tray capacity	Cassette: 550 sheets 80 g/m ² (20 lb) Bypass tray: 100 sheets 80 g/m ² (20 lb)
Output tray capacity	250 sheets 80 g/m ² (20 lb)
Toner cartridge life	6,000 pages (for Starter, 3,000 pages), 5% coverage
Drum life	15,000 pages (5% coverage)
Operating Environment	Temperature: 10 - 32° C / 50 - 90° F (20 ~ 80% RH)
Paper size and weight	Cassette: A4, Letter, Folio, Legal (216 x 356 mm / 8.5 x 14 inch) 60 ~ 90 g/m ² (16 ~ 24 lb) Bypass tray: A6 ~ Legal (216 x 356 mm / 8.5 x 14 mm) 60 ~ 160 g/m ² (16 ~ 43 lb) Duplex: A4, Letter, Folio, Legal (216 x 356 mm / 8.5 x 14 inch) 80 ~ 90 g/m ² (20 ~ 24 lb)
Original document width and weight	ADF: 176 ~ 216 mm (7 ~ 8.5 inches), 45 ~ 105 g/m ² (12.5 lb ~ 28 lb) Platen: Maximum legal (216 x 356 mm / 8.5 x 14 inch)
ADF capacity	30 sheets 80 g/m ² (20 lb)
Power rating	AC220 ~ 240V (Europe), 50/60 Hz AC100 ~ 127V (US, Canada), 50/60 Hz
Power consumption	19 W in Power save mode 85 W in Standby mode 350 W during operation
Weight	22.85 kg / 50.37 lb (Drum and Toner cartridges included)
Dimensions (WxDxH)	560 x 429 x 456 mm (22 x 17 x 18 inches)

Paper Specification

Item	Description		
Paper types available	Plain paper, OHP film, Label, Envelope, Card, Postcard		
Paper sizes	Paper Type	W x L (mm)	W x L (Inch)
	Letter	215.9 x 279	8.5 x 11
	Legal	215.9 x 355.6	8.5 X 14
	JIS B5	182 x 257	7.17 x 10.12
	A4	210x 297	8.27 x 11.69
	Executive	184.2 x 266.7	7.25 x 10.5
	A5	148.5 x 210	5.85 x 8.27
	A6 card	105 x 148.5	4.13 x 5.85
	Post Card 4x6	101.6 x 152.4	4 x 6
	HagaKi	100 x 148	3.94 x 5.83
	Envelope 7-3/4	98.4 x 190.5	3.88 x 7.5
	Envelope COM-10	105 x 241	4.12 x 9.5
	Envelope DL	110 x 220	4.33 x 8.66
	Envelope C5	162 x 229	6.38 x 9.02
Custom	98 x 148 ~ 215.9 x 355.6	3.86 x 5.83 ~ 8.5 x 14	

Item	Description			
Input Source	Source	Media Types	Sizes	Thickness
	Paper Cassette	Plain Paper	A4, Letter, Legal, Folio	60 ~ 90 g/m ² (16lb ~ 24lb)
	Bypass Cassette	Plain Paper, Envelop, Transparency, Label, Cardstock	A4, Letter, Legal, Folio, Executive, A5, B5, A6, Monarch (7 3/4), COM10, #9, C5, DL, Custom	60 ~ 160 g/m ² (16lb ~ 43lb)
	Duplex	Plain Paper	A4, Letter, Folio, Legal	80 ~ 90 g/m ² (20lb ~ 24lb)
	B5 means JIS and ISO Transparency film thickness: 150 µm (see core media list) Paper Label thickness: 140 µm (see core media list)			

Numerics

- 2-Sided Copy 3-11
 - Long Edge 3-11
 - Short Edge 3-11

A

- Accessing Printer Settings 4-3
- Adding a Pause 2-10
- Adding Documents To a Delay Send 5-26
- Adding Paper 2-18
- Adjusting Speaker Volume 9-5
- Advanced Fax Features 5-23
 - Canceling a Scheduled Operation 5-32
 - Delay Send 5-24
 - Polling 5-28
 - Priority Sending 5-27
 - Sending a Color Fax 5-23
- Advanced Scanning 6-13
- Advanced Tab 9-15
- ANS/FAX 5-19
- Appendix A - Safety Notes A-1
- Appendix B - Specifications B-1
- Application, printing from 4-2
- Assigning Speed Dial Numbers to a Group 5-12
- Auto Fit 3-14
- Automatic Document Feeder (ADF) 3-4, 5-2, 6-3

B

- Basic Troubleshooting 8-1
 - Copier Problems Solution Chart 8-16
 - Faxing Problems Solution Chart 8-21
 - LCD Error Messages 8-13
 - Printing Problems Solution Chart 8-18
 - Resetting the machine 8-23
 - Solving Problems 8-16
- Bracket text typeface, conventions 1-7

- Bypass Tray 7-19, 7-21

C

- Calling for Service 8-12
- Calling for service, Serial number location 1-4
- Canceling a Fax 5-7
- Canceling a Scheduled Operation 5-32
- Cautions, conventions 1-8
- Changing System Setup 9-1
- Changing the System Setup Options 9-4
- Character Assignment 2-9
- Characters, entering 2-8
- Cleaning 7-2
 - Control Panel and LCD Display 7-3
 - Document Feeder and Output Tray 7-3
 - Document Glass and Cover 7-3
 - WorkCentre Pro 412 7-2
- Cleaning the OPC Drum 7-11
- Clearing Memory 9-11
 - PHONEBK/MEMORY 9-11
 - SYSTEM DATA 9-11
 - SYSTEM ID 9-11
 - TX-RX JOURNAL 9-11
- Clone 3-15
- Color Faxing 5-23
- Components, machine 2-4
- Configuring the Default Scan Application 6-8
- Confirming Transmission 5-7
- Connecting the machine 2-11
- Connections 2-11
- Control Panel 2-6
 - buttons 2-6
 - keys 2-6
- Control Panel Overview 2-6
- ControlCentre 5.0 9-12
 - Advanced Tab 9-15
 - Firmware Update Tab 9-18
 - Information Tab 9-17

- Installing 9-12
- Phonebook Tab 9-16
- Running ControlCentre 5.0 9-12
- Settings Tab 9-14
- Using ControlCentre 5.0 9-13
- Conventions 1-5
 - bracket text typeface 1-7
 - cautions 1-8
 - hints 1-8
 - italic typeface 1-7
 - notes 1-8
 - orientation 1-5
 - quick pathway 1-7
 - warnings 1-8
- Copier Problems Solution Chart 8-16
- Copy 3-1
 - Copying Procedure 3-2
 - Loading the Originals 3-4
- Copy Features
 - 2-Sided Copy 3-11
 - Auto Fit 3-14
 - Clone 3-15
 - Lighten/Darken 3-9
 - Original Type 3-10
 - Output 3-12
 - Reduce/Enlarge 3-12
 - Resetting Copy Features 3-13
 - Select the Copy features 3-7
 - Special 3-14
 - Standard 3-9
- Copy/Fax/Scan Key 3-2, 5-5, 6-6
- Copying Procedure 3-2
- Counters Information 9-17
- Customer Replaceable Units 7-5
 - Drum Cartridge 7-11
 - Toner Cartridge 7-5, 7-6
- Customer Support Telephone Number 8-12
- D**
 - Date and Time, setting up 2-25
 - Default Scan Application, Configuring 6-8
 - Delay RX Poll 5-30
 - Delay Send 5-24
 - Adding Documents to a Delay Send 5-26
- Dialing Methods 5-9, 5-16
 - Group Dialing 5-12
 - Keypad Dialing 5-9
 - Manual Dialing 5-16
 - Manual Group Dialing 5-14
 - Multi-Address Transmission 5-12
 - Sending a Fax after Talking 5-17
 - Speed Dialing 5-10
- Document Glass 3-5, 5-4, 6-5
- Drum Cartridge 7-11
 - Cleaning the OPC Drum 7-11
 - Replacing the Drum Cartridge 7-12
- Drum Cartridge, installing 2-14
- E**
 - Editing Group Dial Numbers 5-13
 - Editing Numbers or Names 2-9
 - Energy Star A-14
 - Enter the Fax Number 5-6
 - Enter the Quantity 3-7
 - Entering Characters Using the Numeric Keypad 2-8
 - Error Messages 8-13
 - Expected Toner Cartridge Life 7-5
- F**
 - FAX 5-18
 - Fax 5-1
 - Canceling a Fax 5-7
 - Canceling a Scheduled Operation 5-32
 - Confirming a Transmission 5-7
 - Dialing Methods 5-9
 - Entering the Fax Number 5-6
 - Faxing Procedure 5-2
 - Loading the Originals 5-2
 - Receiving a Fax 5-18
 - Reports 5-33
 - Fax Features
 - Advanced 5-23
 - Delay Send 5-24
 - Lighten/Darken 5-22
 - Original Type 5-21
 - Polling 5-28
 - Priority Sending 5-27
 - Resetting Fax Features 5-22

- Resolution 5-20
- Scan Options 5-21
- Sending a Color Fax 5-23
- Standard 5-20
- Fax Job Management 5-7
 - Canceling a Fax 5-7
 - Confirming a Transmission 5-7
 - Monitoring Dual Job Status 5-8
- Fax Number 5-6
- Fax Reports 5-33
 - Message Confirmation 5-33, 9-9
 - Multi-Communication Report 5-34, 9-10
 - Phonebook List 5-33, 9-9
 - Printing Reports 5-34, 9-10
 - Reception Journal 5-33, 9-9
 - Schedule Job Information 5-33, 9-9
 - Transmission Journal 5-33, 9-9
- Fax Specification B-3
- Faxing Problems Solution Chart 8-21
- Faxing Procedure 5-2
- Features
 - Copy Features 3-9
 - Fax Features 5-20
 - Select the Fax features 5-6
 - Select the Scan features 6-7
- Features, Copy
 - 2-Sided Copy 3-11
 - Auto Fit 3-14
 - Clone 3-15
 - Lighten/Darken 3-9
 - Original Type 3-10
 - Output 3-12
 - Reduce/Enlarge 3-12
 - Resetting Copy Features 3-13
 - Special 3-14
- Features, Fax
 - Advanced 5-23
 - Delay Send 5-24
 - Lighten/Darken 5-22
 - Original Type 5-21
 - Polling 5-28
 - Priority Sending 5-27
 - Resetting Fax Features 5-22
- Resolution 5-20
- Scan Options 5-21
- Sending a Color Fax 5-23
- Features, Scan
 - Advanced Scanning 6-13
 - Lighten/Darken 6-11
 - Original Type 6-10
 - Reduce/Enlarge 6-12
 - Resetting Scan Features 6-12
 - Resolution 6-9
 - Scan Options 6-9
- Finding Information 1-2
- Firmware Update Tab 9-18
- G**
 - General Specification B-5
 - Group Dialing 5-12
 - Assigning Speed Dial Numbers to a Group 5-12
 - Editing Group Dial Numbers 5-13
 - Using Group Dialing 5-14
 - Guidelines for Special Media 7-24
- H**
 - Help List 9-10
 - Hints, conventions 1-8
- I**
 - Identifying the machine components 2-4
 - Information Sources 1-9
 - Information Tab 9-17
 - Inserting a Pause 2-10
 - Installing ControlCentre 5.0 9-12
 - Installing Drum and Toner Cartridges 2-14
 - Installing Software 2-26
 - Italic typeface, conventions 1-7
- J**
 - Job Management, Fax 5-7
- K**
 - Keypad Character Assignment 2-9
 - Keypad Dialing 5-9
 - Keys 2-6
- L**
 - Language, setting 2-22
 - Laser Safety A-5

- LCD Error Messages 8-13
- Lighten/Darken 3-9, 5-22, 6-11
- Loading Media 7-14
 - Loading the Bypass Tray 7-21
 - Loading the Paper Cassette 7-15
 - Media Guidelines 7-23
 - Special Media Guidelines 7-24
 - Using the Bypass Tray 7-19
 - Using the Paper Cassette 7-15
- Loading Paper 2-18, 7-14
 - Loading the Bypass Tray 7-21
 - Loading the Paper Cassette 7-15
 - Media Guidelines 7-23
 - Special Media Guidelines 7-24
 - Using the Bypass Tray 7-19
 - Using the Paper Cassette 7-15
- Loading the Bypass Tray 7-21
- Loading the Originals 3-4, 5-2, 6-3
 - Automatic Document Feeder (ADF) 3-4, 5-2, 6-3
 - Document Glass 3-5, 5-4, 6-5
- Loading the Paper Cassette 7-15
- Local ID, setting 2-23
- M**
- Machine components 2-4
- Machine Reset 8-23
- Machine Specifications B-1
- Maintaining the Product 7-1
- Making Connections 2-11
- Manual Dialing 5-16
- Manual Group Dialing 5-14
- Media Guidelines 7-23
- Media, Loading 7-14
- Memory, Clearing 9-11
- Message Confirmation 5-33, 9-9
- Meter Readings 9-17
- Monitoring Dual Job Status 5-8
- Multi-Address Transmission 5-12
- Multi-Address Transmission, using Group Dialing 5-14
- Multi-Communication Report 5-34, 9-10
- N**
- Name, setting 2-23

- Notes, conventions 1-8
- Numeric Keypad 2-8
- O**
- Ordering Supplies 7-4
- Orientation, conventions 1-5
- Original Type 3-10, 5-21, 6-10
 - Mixed 3-10, 5-21, 6-10
 - Photo 3-10, 5-21, 6-10
 - Text 3-10, 5-21, 6-10
- Output 3-12
- P**
- Paper Cassette 7-15
- Paper Specification B-6
- Paper Supply
 - Selecting 3-3
- Paper, Loading 7-14
- Paper, loading 2-18
- Paper, Media Guidelines 7-23
- Paper, Special Media Guidelines 7-24
- Pause, adding 2-10
- PHONEBK/MEMORY 9-11
- Phonebook List 5-33, 9-9
- Phonebook Tab 9-16
- Polling 5-28
 - Delay RX Poll 5-30
 - RX Poll 5-30
 - TX Poll 5-28
 - What is Polling? 5-28
- Power Failure Report 9-10
- Press Start 3-8, 5-7, 6-7
- Press the Copy/Fax/Scan Key 3-2, 5-5, 6-6
- Print 4-1
 - Accessing Printer Settings 4-3
 - Printer Properties Buttons & Icons 4-6
 - Printer Properties Tabs 4-5
 - Printer Settings 4-3
 - Printing a Document from an Application 4-2
- Print Count 9-17
- Printer Properties Tabs 4-5
 - Buttons & Icons 4-6
- Printer Settings 4-3
 - Accessing 4-3

- Accessing from Windows 2000 4-4
- Accessing from Windows 95/98/Me 4-3
- Accessing from Windows NT 4.0 4-4
- Printer Specification B-2
- Printing a Document from an Application 4-2
- Printing Problems Solution Chart 8-18
- Printing Reports 5-34, 9-10
- Priority Sending 5-27
- Problem Solving 8-1, 8-16
- Product Overview 2-1
- Properties Tabs 4-5
 - Buttons & Icons 4-6
- Q**
- Quantity 3-7
- Quick pathway, conventions 1-7
- R**
- Rebooting the Machine 8-23
- Receive Mode Options 5-18
- Receive Modes 5-18
 - ANS/FAX 5-19
 - FAX 5-18
 - Receiving Manually in TEL Mode 5-19
 - TEL 5-18
 - TEL/FAX 5-19
- Receiving a Fax 5-18
 - Receive Mode Options 5-18
 - Receive Modes 5-18
- Receiving Manually in TEL Mode 5-19
- Reception Journal 5-33, 9-9
- Redial 5-16
 - To Redial the Last Number 5-16
 - To Search Redial Memory 5-16
- Re-distributing the Toner 7-8
- Reduce/Enlarge 3-12, 6-12
- Regulatory Information A-4
- Replacing the Drum Cartridge 7-12
- Replacing the Toner Cartridge 7-6, 7-8
- Reports 9-9
 - All Reports 9-9
 - Fax Reports 5-33
 - Help List 9-10
 - Message Confirmation 5-33, 9-9
 - Multi-Communication Report 5-34, 9-10
 - Phonebook List 5-33, 9-9
 - Power Failure Report 9-10
 - Printing Reports 5-34, 9-10
 - Reception Journal 5-33, 9-9
 - Schedule Job Information 5-33, 9-9
 - System Data List 9-9
 - Transmission Journal 5-33, 9-9
- Resetting Copy Features 3-13
- Resetting Fax Features 5-22
- Resetting Scan Features 6-12
- Resetting the Machine 8-23
- Resolution 5-20, 6-9
 - Fine 5-20
 - Standard 5-20
 - Super Fine 5-20
- Run the ScanToPC Program 6-6
- Running ControlCentre 5.0 9-12
- RX Poll 5-30
- S**
- Safety Notes
 - Appendix A A-1
- Safety Standards A-3
- Scan 6-1
 - Configuring the Default Scan Application 6-8
 - Loading the Originals 6-3
 - Scanning Procedure 6-3
 - Standard Features 6-9
 - TWAIN Scanner Program 6-2
- Scan Application, Default Configuration 6-8
- Scan Features
 - Advanced Scanning 6-13
 - Lighten/Darken 6-11
 - Original Type 6-10
 - Reduce/Enlarge 6-12
 - Resetting Scan Features 6-12
 - Resolution 6-9
 - Scan Options 6-9
- Scan Options 5-21, 6-9
- Scanner and Copier Specification B-4
- Scanner Unlock Switch 2-2
- Scanning Procedure 6-3
- Schedule Job Information 5-33, 9-9

- Select the Copy Features 3-7
- Select the Fax Features 5-6
- Select the Paper Supply 3-3
- Select the Scan Features 6-7
- Sending a Color Fax 5-23
- Sending a Fax after Talking 5-17
- Serial number location 1-4
- Service Telephone Number 8-12
- Service, Calling for Service 8-12
- Setting System Data Options 9-8
- Setting the Date and Time 2-25
- Setting the Language 2-22
- Setting the Local ID and Name 2-23
- Setting up the Machine 9-1
 - Adjusting Speaker Volume 9-5
 - Changing System Data Options 9-8
 - Changing the System Setup Options 9-4
 - ControlCentre 5.0 9-12
 - Installing ControlCentre 5.0 9-12
 - System Data Options 9-6
 - System Data Settings 9-6
 - System Setup 9-2
 - System Setup Options 9-2
- Setting your Product to Send Toner Low Information 7-10
- Settings Tab 9-14
- Software Installation 2-26
- Solutions, Copier Problems 8-16
- Solutions, Faxing Problems 8-21
- Solutions, Printing Problems 8-18
- Solving Problems 8-16
- Special Copy Features 3-14
 - Auto Fit 3-14
 - Clone 3-15
- Special Media Guidelines 7-24
- Specifications
 - Appendix B B-1
 - Fax B-3
 - General B-5
 - Paper B-6
 - Printer B-2
 - Scanner and Copier B-4
 - WorkCentre Pro 412 B-1

- Speed Dialing 5-10
 - Assigning Speed Dial Numbers to a Group 5-12
 - Storing a Number 5-10
 - Using Speed Dialing 5-11
- Standard Copy Features 3-9
- Standard Fax Features 5-20
- Standard Scan Features 6-9
- Start key
 - Press Start 3-8, 5-7, 6-7
- Storing a Number for Speed Dialing 5-10
- SYSTEM DATA 9-11
- System Data List 9-9
- System Data Options 9-6
- System Data Settings 9-6
- System Defaults 9-1
- SYSTEM ID 9-11
- System Setup 9-1, 9-2
 - Adjusting Speaker Volume 9-5
 - Clearing Memory 9-11
 - ControlCentre 5.0 9-12
 - Installing ControlCentre 5.0 9-12
- System Setup Options 9-2
 - Changing the System Setup Options 9-4

T

- TEL 5-18
- TEL/FAX 5-19
- Time and Date, setting up 2-25
- Toner Cartridge 7-5
 - Expected Cartridge Life 7-5
 - Re-distributing the Toner 7-8
 - Replacing the Toner Cartridge 7-6, 7-8
 - Setting your Product to Send Toner Low Information 7-10
 - Toner Save Mode 7-5
- Toner Cartridge, installing 2-14
- Toner Low Information 7-10
- Toner Save Mode 7-5
- Total Number of Prints 9-17
- Transmission Journal 5-33, 9-9
- Transmission Report (Message Confirmation) 5-33, 9-9
- Troubleshooting 8-1

Copier Problems Solution Chart 8-16
Faxing Problems Solution Chart 8-21
LCD Error Messages 8-13
Printing Problems Solution Chart 8-18
Resetting the machine 8-23
Solving Problems 8-16
TWAIN Scanner Program 6-2
TX Poll 5-28
TX-RX JOURNAL 9-11

U

Unpacking the machine 2-2
Using ControlCentre 5.0 9-13

Using Group Dialing 5-14
Using Speed Dialing 5-11
Using the Bypass Tray 7-19
Using the Paper Cassette 7-15

W

Warnings, conventions 1-8
What is Polling? 5-28
Windows 2000 4-4
Windows 95/98/Me 4-3
Windows NT 4.0 4-4
WorkCentre Pro 412 TWAIN Scanner Program
6-2

