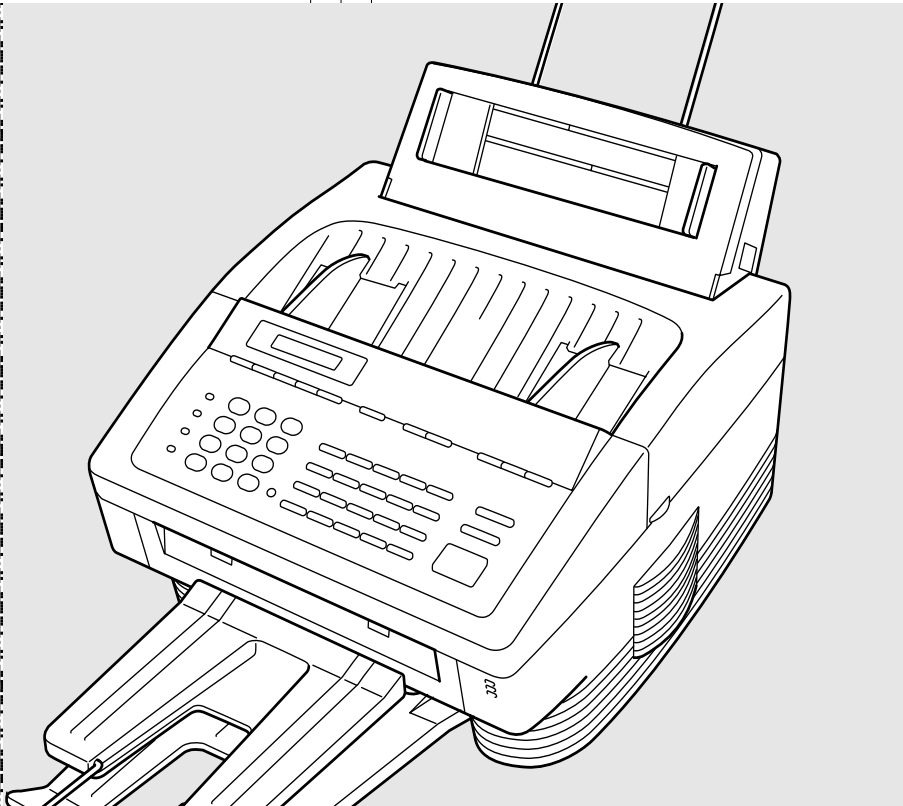


OPERATIONS MANUAL



MFC 4450

.....

brother

MFC 4450/OP-US-5.0

brother®

Brother International Corporation
200 Cottontail Lane,
Somerset, NJ 08875-6714, U.S.A.

Brother International Corporation (Canada) Ltd.
1 rue Hôtel de Ville,
Dollard-des-Ormeaux, QC, CANADA H9B 3H6

These machines are made for use in the USA or CANADA only. We can not recommend using them overseas because it may violate the Telecommunications Regulations of that country and the power requirements of your fax machine may not be compatible with the power available in foreign countries. **Using USA or CANADA models overseas is at your own risk and will void your warranty.**

* Manufactured by Brother Industries Ltd. whose quality system is registered by BSI and JQA.

BSI Certificate of registration No. FM27391
JQA Certificate of registration No. JQA-0340

UF78100011
Printed in Japan

Introduction to the Operations Manual for Fax, Printer, Copier

- ▶ Have you set up your MFC and prepared your computer for the printer mode by following the instructions in the Setup Manual? The Setup Manual will help you prepare your MFC to use it as a fax, printer and copier.
- ▶ Your MFC 4450 has 5 performance modes. It is a Fax, Printer, Copier, Scanner and PC Fax.
- ▶ After you complete setting up the MFC, see this "Operations Manual for Fax, Printer, Copier," for more information about your MFC, such as functions of the machine and the control panel. Information about maintenance, troubleshooting and technical specifications are also available in this manual.
- ▶ Please keep this manual beside your MFC, so you can access important information whenever necessary.
- ▶ See the Multi-Function Link Pro Owner's Manual for information on how to set up your MFC and Personal Computer and how to use the Scanner and PC Fax.

TABLE OF CONTENTS

• • • For Your Information

1 THE CONTROL PANEL KEYS	1-1
TELEPHONE AREA	1-2
ONE-TOUCH, PRINTER AND COPY AREA	1-3
LCD & USER SETUP AREA	1-5
2 HOW TO USE ON-SCREEN PROGRAMMING (OSP) AND HELP KEY	2-1
User-friendly Programming	2-1
Using the Function Mode to Access On-screen Programming (OSP)	2-1
Alternating Displays for On-screen Programming (OSP)	2-2
Function Selection Table	2-2
Using the Help Key	2-7
How to Print a Help List	2-7
How to Enter Text in Function Mode	2-8
How to Enter Special Characters, Symbols and Punctuation Marks in Function Mode	2-9
How to Set the Sleep Time	2-10
3 FUNCTION SETTINGS	3-1
Setting the Dialing Mode (Tone/Pulse)	3-1
Setting the Date and Time	3-2
Setting the Station ID	3-3
Setting the Beeper Volume Level	3-5
Storing the One-Touch Dial Numbers	3-6
Storing the Speed-Dial Numbers	3-7
• When You Wish to Change the Stored One-Touch and Speed-Dial Numbers	3-9
• Memory Storage/Temporary Battery Back Up	3-9
Setting Up Number Groups for Broadcasting	3-9
• Types of Numbers	3-11
• Chain Dialing	3-11
4 USING THE MFC WITH AN EXTERNAL TELEPHONE	4-1
Manual Dialing	4-1
One-Touch Dialing	4-1

TABLE OF CONTENTS

Speed Dialing	4-1
• Using Pause and # with the Telephone	4-2
Searching the Telephone Index	4-2
5. SENDING FAXES	5-1
A) DOCUMENT BASICS	5-1
The Size of Your Documents	5-1
How to Insert the Document	5-1
The Auto Document Feeder (ADF)	5-2
Getting Ready to Send a Fax	5-3
Setting the Resolution	5-3
Setting the Contrast	5-4
B) BASIC FAX TRANSMISSIONS	5-5
• Sending a Fax	5-5
• Talking to the Other Party When Sending a Fax	5-5
Sending a Fax Automatically	5-6
Sending a Fax Manually	5-6
Automatic and Manual Redialing	5-7
• Optional Settings When You Send a Fax Manually	5-7
• Printing Page Headers	5-7
C) ADVANCED FAX TRANSMISSIONS	5-8
Sending a Fax by Using Super Quick-Scan (Memory Transmission)	5-8
• If You Get a MEMORY FULL Message When Trying to Send a Fax by Using Super Quick-Scan	5-8
Setting the Daily Timer (for Delayed Transmissions)	5-9
Delayed Transmission	5-9
Broadcasting	5-10
• Getting Familiar with the Broadcasting Function	5-11
Sending by Multiple Transmissions	5-12
Interrupting the Timer and Polled Job	5-13
Canceling a Job	5-14
D) FAX TRANSMISSION OPTIONS	5-15
Setting the Overseas Mode	5-15
Setting Your MFC for Multiple Resolution Transmission	5-16
Sending a Fax with an Electronic Cover Page Message ...	5-17
• Selecting a Comment for the Cover Page	5-18
Customizing Your Cover Page Comment	5-18

TABLE OF CONTENTS

Printing a Sample Cover Page	5-19
To Always Send a Cover Page	5-20
• Sending an Automatic Cover Page	5-21
Sending a Fax When the Cover Page Is ON	5-21
Sending a Cover Page Temporarily	5-21
Call Reservation: Speaking with the Other Party on the External Telephone After Fax Transmission	5-23
• Using the Call Reservation Function	5-23
Printing the Call Back Message	5-25
ECM (Error Correction Mode)	5-25
Error Retransmission	5-25
Next-FAX Reservation	5-26

6. RECEIVING FAXES AND OTHER CALLS 6-1

A) BASIC SETUP TO RECEIVE FAXES	6-1
Selecting an Answer Mode	6-1
Manual Reception (Manual Mode) (Only with an External Telephone Connected to the MFC)	6-2
Automatic Fax Only Reception (Fax Mode)	6-2
Setting the Ring Delay	6-2
The F/T Switch (Fax/Telephone Mode) (Only with an External Telephone Connected to the MFC)	6-3
Setting the F/T Ring Time	6-4
Smoothing	6-4
Setting the Size of the Paper	6-5
Printing a Reduced Size Copy of the Incoming Document ..	6-6
Auto Reduction	6-6
Using Fixed Reduction Ratios	6-7
• Selecting the Ratios of Fixed Reduction	6-8
• Reception into Memory (Out of Paper Reception)	6-8
Setting the Print Density	6-9
Toner Save Function	6-9
Speaker Volume	6-10
Ring Volume	6-11
B) REMOTE ACTIVATION	6-12
What is Remote Activation?	6-12
• Connecting an External or Extension Telephone	6-12
Using Remote Codes	6-13
Using the Activation Code	6-13

TABLE OF CONTENTS

Using the Deactivation Code	6-13
Making the Remote Codes Easier to Use	6-14
Troubleshooting	6-14
Changing and Registering Remote Codes	6-14
C) CONNECTING TO A TELEPHONE ANSWERING DEVICE (TAD)	6-15
How to Use an External TAD with the MFC	6-15
• Connecting an External TAD to the MFC	6-16
Flowchart of External TAD Reception	6-17
Hookup	6-17
Recording the TAD's Outgoing Message (OGM)	6-18
D) DISTINCTIVE RINGING (WITH AN EXTERNAL TELEPHONE CONNECTED TO THE MFC)	6-18
Distinctive Ringing	6-18
What Is Distinctive Ringing?	6-18
What Is the Advantage of Using the Distinctive Ringing Function?	6-18
Can My MFC Use Distinctive Ringing?	6-18
Can I Change the Setting Later?	6-19
How Will the MFC Treat All Other Numbers?	6-19
External Telephone Answering Device (TAD) Answers Other Number(s) on the Line:	6-19
How Does the Distinctive Ringing Function Work? ...	6-20
Flowchart of an Incoming Call	6-20
Which Phone Number Should I Register?	6-20
What Must I Do to Set Up Distinctive Ringing?	6-21
Setting the Distinctive Ringing Function	6-21
How to Turn the Distinctive Ringing Function ON or OFF	6-22
 7. POLLING	 7-1
• What Is Polling?	7-1
• How Does It Work?	7-1
• When to Use Polling	7-1
Polling Another Fax Machine (Calling)	7-2
Setting Up Polled Waiting (Being Called)	7-3
Delayed Polling	7-4
Setting Up Polled Waiting with Super Quick-Scan	7-5
Sequential Polling	7-5

TABLE OF CONTENTS

8. REMOTE FAX OPTIONS	8-1
Setting the Fax Storage	8-1
Paging/Fax Forwarding	8-3
Setting Up Paging (Registering the Paging Number)	8-4
Setting Up Fax Forwarding (Registering the Fax Forwarding Number)	8-6
What Is Remote Control Access?	8-6
Setting the Remote Access Code	8-7
How to Use Remote Access and Control Codes	8-8
Remote Fax Retrieval	8-8
• When to Enter the Remote Access Code	8-8
Remote Control Commands	8-9
Retrieving the Memory Status List and Fax Messages Remotely	8-10
Changing the Fax Forwarding Number Remotely	8-10
Printing a Fax Message	8-11
9. USING THE MFC AS A PRINTER	9-1
Acceptable Paper	9-1
Control Panel Keys	9-4
Simultaneous Operation	9-4
On/OffLine Key	9-4
FF/Cont Key	9-4
Test/Reset Key	9-5
Print Priority Key	9-5
• Windows® Printing	9-6
• Bidirectional Parallel Interface	9-6
• Enhanced Memory Management	9-6
Multipurpose Sheet Feeder	9-7
Manual Feed Slot	9-9
When you load one sheet of paper manually:	9-9
When you load more than one sheet of paper manually:	9-9
• Paper Tray	9-10
10. PRINTING REPORTS AND LISTS	10-1
How to Print Reports and Lists	10-2
Activity Report Interval	10-3
Printing the All Dial List	10-5

TABLE OF CONTENTS

Transmission Verification (Xmit) Report	10-6
Memory Status List	10-7
11. HOW TO USE THE COPY FUNCTION	11-1
Making a Single Copy	11-1
Making Multiple Copies	11-2
• What to Do When You Get a MEMORY FULL Message while Making Copies	11-2
Reducing and Enlarging Copies	11-3
Copying a Photograph	11-4
12. REPLACING TONER CARTRIDGE AND DRUM UNIT	12-1
Toner Empty Indicator	12-1
Replacing the Toner Cartridge	12-1
Replacing the Drum Unit	12-5
13. REGULAR MAINTENANCE	13-1
Regular Maintenance	13-1
Cleaning the Drum Unit	13-2
Packing and Shipping the Machine	13-3
Paper Jams	13-6
Fixing a Document Jam	13-6
Fixing a Paper Jam	13-6
14. TROUBLESHOOTING PROCEDURES	14-1
Error Messages	14-2
If You are Having Difficulty with Your MFC	14-4
Q & A	14-10
15. SPECIFICATIONS	15-1
PARALLEL INTERFACE SPECIFICATIONS	15-3
16. IMPORTANT INFORMATION	16-1
Standard Telephone and FCC Notices (Applies only to 120V model)	16-1

TABLE OF CONTENTS

Important Safety Instructions 16-3

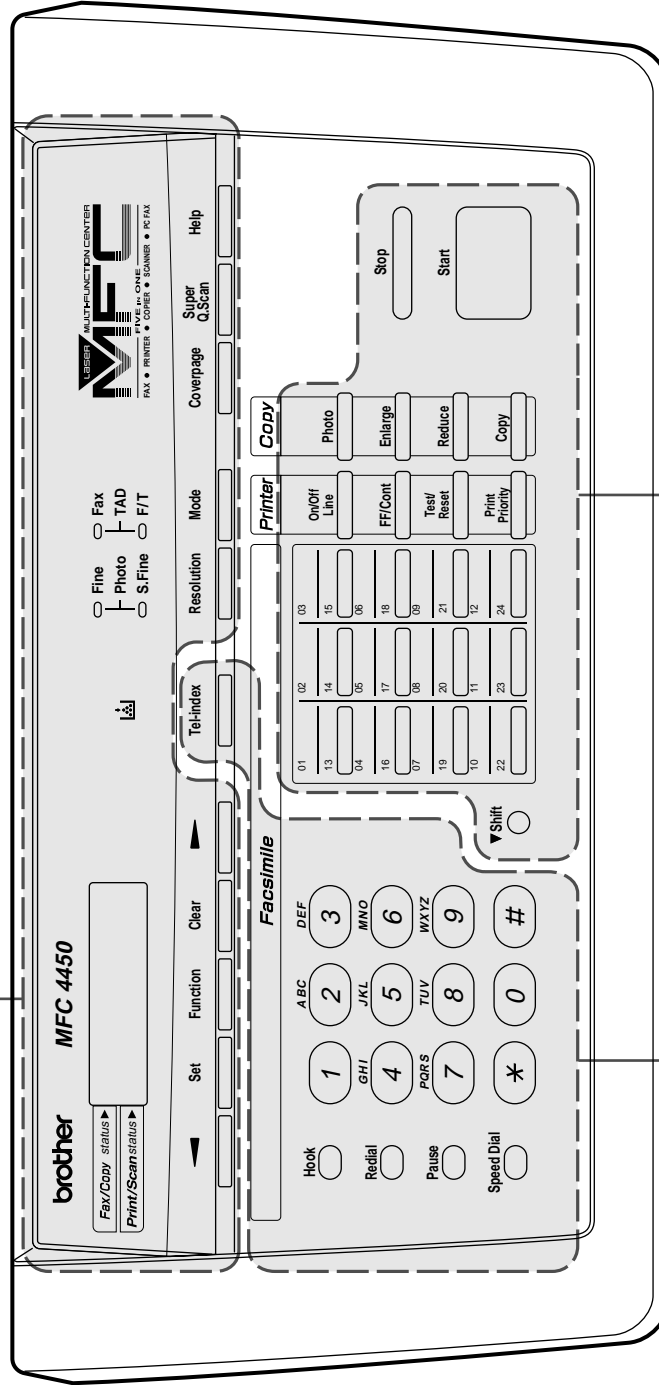
17. INDEX 17-1

THE CONTROL PANEL KEYS

1. THE CONTROL PANEL KEYS

MFC 4450

Ⓒ LCD & User Setting Area



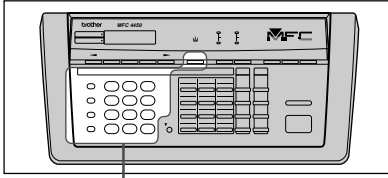
Ⓐ Telephone Area

Ⓑ One-Touch, Printer and Copy Area

Information

THE CONTROL PANEL KEYS

a TELEPHONE AREA



1. Dial Pad

These twelve keys are used to dial phone and fax numbers (see page 4-1), and also can be used as an alphanumeric keyboard for entering information into the MFC. (See page 2-8~10.)

2. Hook

This key lets you dial telephone and fax numbers without lifting the handset of an external telephone. Press this key after you pick up the external handset to answer a call. (See page 4-1.)

3. Redial

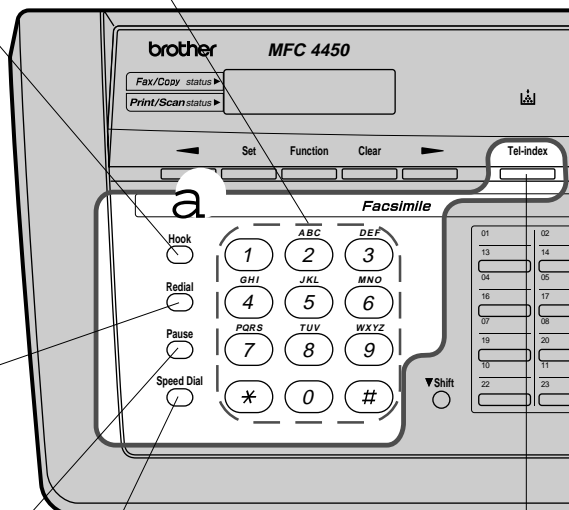
This key redials the last number called. (See page 5-7.)

4. Pause

This key is used to insert a pause in autodial numbers. (See page 3-7, 4-2.)

5. Speed-Dial

This key lets you dial previously stored Speed-Dial phone numbers by entering a two-digit number. (See page 3-7~9, 4-1.)



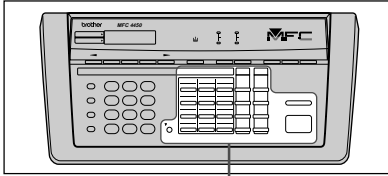
6. Tel-index

This key allows you to alphabetically look up numbers stored in the dialing memory. (See page 4-2.)

THE CONTROL PANEL KEYS

b ONE-TOUCH, PRINTER AND COPY AREA

Information

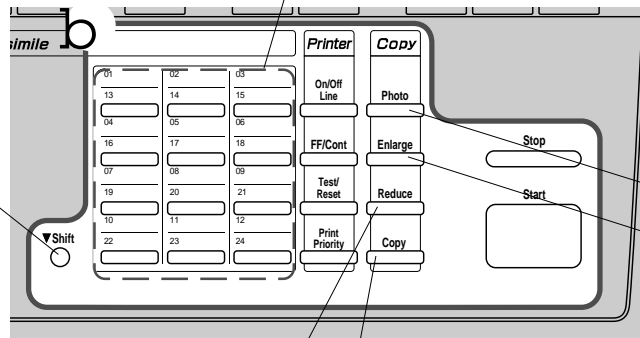


7. Shift

This key is used to access the "13" through "24" One-Touch keys. (See page 3-6.) In the printer mode when **Shift** is pressed together with **Test/Reset**, it resets and restores the MFC to the factory default settings. (See page 9-5.)

8. One-Touch Dial Keys

These 12 keys give you instant access to previously stored phone numbers. (See page 3-6~7, 3-9, 4-1.)



9. Reduce

This **Reduce** key will reduce copies depending on the ratio you select: 100%, 93%, 87%, 75% and 50%. You can also use the Auto Reduction function to have the MFC automatically calculate the reduction ratio that fits the size of your recording paper. (See page 11-3.)

10. Enlarge

This **Enlarge** key will enlarge copies depending on the ratio you select: 200%, 150%, 125%, 120% and 100%. You can also use the Auto Reduction function to have the MFC automatically calculate the reduction ratio that fits the size of your recording paper. (See page 11-3.)

11. Copy

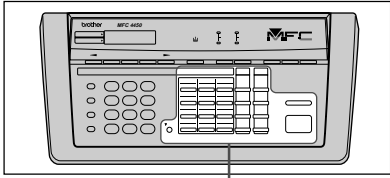
Press this key to make a copy. (See page 11-1~4.)

12. Photo

This key is used to copy photographs. (See page 11-4.)

THE CONTROL PANEL KEYS

b ONE-TOUCH, PRINTER AND COPY AREA



13. On/OffLine

This key is used to turn the printer online (ready to receive PC data) and offline (not ready to receive PC data) alternately. When the printer is online, the LCD displays ONLINE. (See page 9-4.)

14. Stop

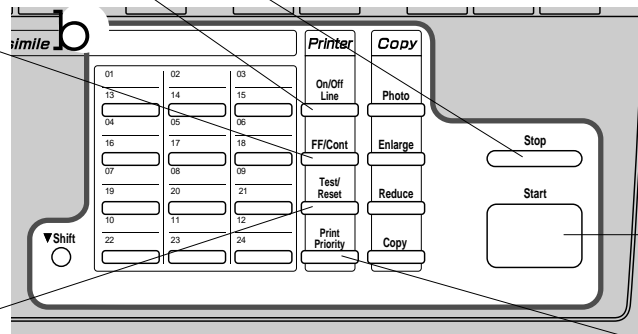
This key stops a fax, cancels an operation, or exits from function mode. (See page 2-2.)

15. Start

Use this key to start an operation, such as sending a fax. (See page 5-5.)

16. FF/Cont

When the LCD shows REMAINED DATA, you can turn the MFC OFFLINE and then press this key to print the data that is in the memory. (See page 9-4~5.)



17. Test/Reset

This key is used to print a test page. When it is pressed together with **Shift**, it clears data from the printer memory, cancels an error status, and then resets and restores to the factory default settings. (See page 9-4~5.)

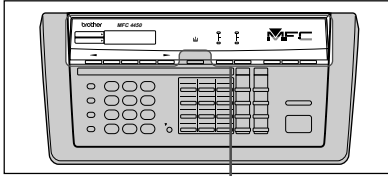
18. Print Priority

When this key is pressed all faxes will be received into memory without first printing and can be printed later. This key also increases the memory available for printing without decreasing memory available for memory transmission and incoming messages. (See page 9-5.)

THE CONTROL PANEL KEYS

c LCD & USER SETUP AREA

Information



19. Z (Left Arrow)

This key moves the LCD cursor to the left. It also allows you to back up one step when you are in function mode (see page 2-1~2) or Telephone Index (see page 4-2).

20. X (Right Arrow)

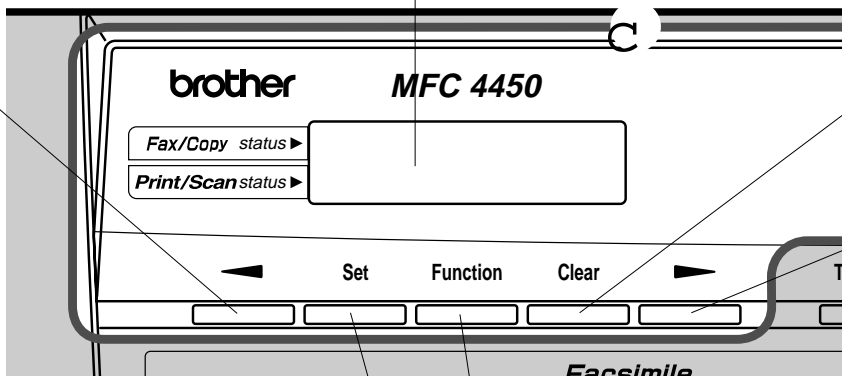
This key moves the LCD cursor to the right, and it also lets you advance one step when you are in function mode (see page 2-1~2) or Telephone Index (see page 4-2).

21. Liquid Crystal Display

The LCD displays messages that will help you set up and operate your MFC (On-Screen Programming), the upper row shows fax and copy status (see page 2-1) and the lower row shows printer and scanner status (see page 9-7).

22. Clear

This key deletes entered data or backs up one step in function mode. (See page 2-2.)



23. Set

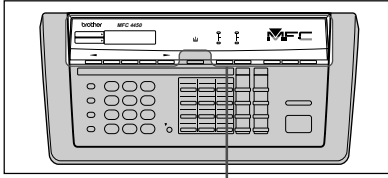
This key is used for storing a function setting into the MFC. (See page 2-2.)

24. Function

This key accesses the function and programming mode (OSP), so you can alter various settings. (See page 2-1.)

THE CONTROL PANEL KEYS

C LCD & USER SETUP AREA



25. Mode

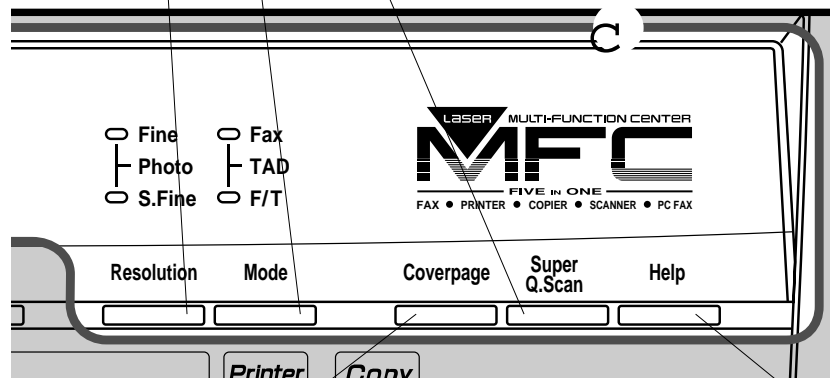
This key is used to specify how the MFC should handle incoming calls. (See page 6-1.)

27. Resolution

This key is used to set the resolution requirements when sending a fax. (See page 5-3.)

26. Super Q.Scan

This key enables you to scan in your originals at twice the normal speed, by storing them in the memory before actual transmission. (See page 5-8.) When it is pressed, Broadcasting is available. (See page 5-10~11.) When **Super Q.Scan** is pressed together with **Shift**, Multi Transmission is available. (See page 5-12~13.)



28. Coveragepage

This key is used to send a Cover Page as the first page of a fax transmission. (See page 5-21~22.)

29. Help

Press this key whenever you want a quick reference Help List printed. This Help List will give you information on how to perform settings for a function, how to register information, or how to get basic information. (See page 2-1, 2-7.)

HOW TO USE ON-SCREEN PROGRAMMING (OSP) AND HELP KEY

2. HOW TO USE ON-SCREEN PROGRAMMING (OSP) AND HELP KEY

User-friendly Programming

We have designed your MFC with on-screen programming and a Help key, user-friendly programming that helps you take full advantage of all the functions your MFC has to offer.

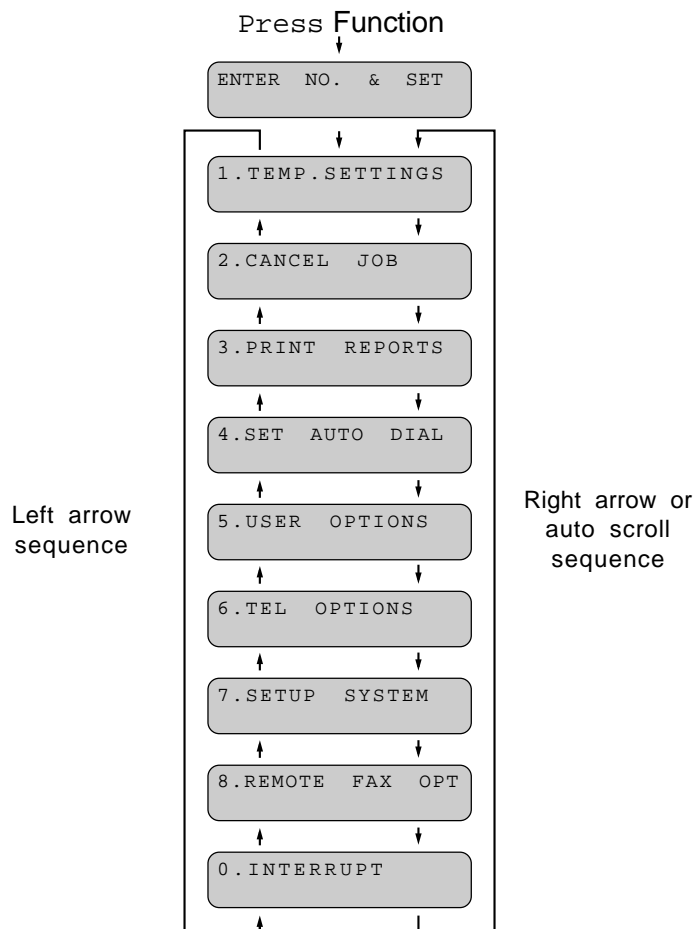
Since your MFC programming is done on the LCD, we created step-by-step on-screen prompt messages to help you program your MFC. All you have to do is follow the prompt instructions as they guide you through the function menu selections and programming options and settings.

Information

Using the Function Mode to Access On-screen Programming (OSP)

You can access the Function mode by pressing **Function**.

When you enter Function mode, your MFC will display a list of Level One Functions to choose from (see pages 2-3 through 2-6 for these Level One Functions), as seen below.



HOW TO USE ON-SCREEN PROGRAMMING (OSP) AND HELP KEY

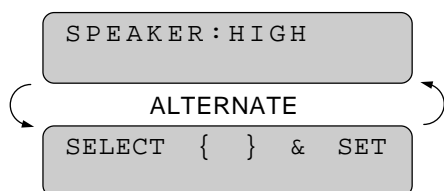
These function options will appear one after the other on the display. You can then choose one of these options by pressing **Set** when the option you want appears on the LCD.

You can also move through the function menu options at a faster rate by pressing X (right arrow). (See page 1-5 to locate this key on your Control Panel.) When you find the option you want, press **Set**.

After you press the Level One Function number, then press the Level Two Function number associated with each option (refer to pages 2-3 through 2-5).

Helpful Hints If you want to exit function mode, press **Stop**. If you selected the wrong menu and want to return to the previous step, press **Clear**.

Alternating Displays for On-screen Programming (OSP)



When you see alternating displays, the LCD will usually alternate between the currently selected option, and a help message giving brief instructions on how to proceed. The example shows the current speaker volume is high and prompts you to use Z (left arrow) and X (right arrow) to change the setting, and then to press **Set** to store it.

Function Selection Table

If you have a basic understanding of how to program your MFC, you can perform most of the programming settings without the Operations Manual. To help you understand the function selections, options, and settings that are found in your MFC programs, we have the following Function Selection Table.

Read through this table to gain a basic understanding of what your new Multi-Function Center can do, and then the next section will begin instructing you how to use On-Screen Programming.

HOW TO USE ON-SCREEN PROGRAMMING (OSP) AND HELP KEY

<1. FAX MENU FUNCTIONS>

Level one function	Level two function	Explanation of Options	Factory setting	Page
1 TEMP. (TEMPORARY) SETTINGS	1. TIMER	Use TIMER to send your documents at a later time.	—	5-9~10
	2 POLLING	Polling is the process of retrieving faxes from another machine. ON/OFF	OFF	7-1~6
	3 CALL RESERVE	You can send a fax and then talk to the recipient using the CALL RESERVE function. ON/OFF	OFF	5-23~24
	4. CONTRAST	There are three types of contrast settings. Usually the AUTO setting is acceptable. But if you want to send or copy an especially light or dark document, you should change this setting. AUTO: Default is AUTO. Contrast setting always reverts to AUTO after one transmission. S. LIGHT: To send very light documents. S. DARK: To send very dark documents.	AUTO	5-4
	5. RESOLUTION	If you need to send a set of originals at various resolutions, this function will allow you to set the required resolution page by page. (If all documents are the same resolution, use the Resolution key. See page 1-6 #27.) STANDARD/FINE/S. FINE/PHOTO	STANDARD	5-16~17
	6. OVERSEAS MODE	If you have trouble when sending overseas, you may want to set OVERSEAS MODE to ON. ON/OFF	OFF	5-15
2 CANCEL JOB		If you wish to cancel a job that has been set with the timer, a polled job etc., use this function.		5-14
3 PRINT REPORTS	See page 10-1 for a list of reports.	You can print several different lists and reports, which are available under function item 3. PRINT REPORTS.		10-1~7
4 SET AUTO DIAL	1. ONE-TOUCH DIAL	If you register names and numbers on One-Touch dial keys, you can dial a number automatically just by pressing a One-Touch key. (Max. of 24 locations)	—	3-6~7

HOW TO USE ON-SCREEN PROGRAMMING (OSP) AND HELP KEY

Level one function	Level two function	Explanation of Options	Factory setting	Page
4 SET AUTO DIAL	2 SPEED-DIAL	If you register names and numbers as Speed-Dial numbers, you can dial a number automatically just by pressing Speed-Dial key and a two-digit number using the dial pad. (Max. of 36 locations)	—	3-7~8
	3 SETUP GROUPS	This is used for setting up a group number used for broadcasting.	—	3-9~10
5 USER OPTIONS	1. SMOOTHING	Smoothing enhances the appearance of incoming faxes. If you set SMOOTHING to ON, you will receive messages with the smoothing enhancement. ON/OFF	ON	6-4~5
	2 BEEPER	You can adjust the volume of the beeper with this function. OFF/LOW/HIGH	LOW	3-5
	3 COVERPG ON/OFF	If you set COVERPAGE to ON, you can send your documents with a Cover Page generated by your MFC. When the COVERPAGE setting is ON, you can select a Cover Page comment. ON/OFF	OFF	5-20~21
	4. ERRORRE-TX	If you set ERROR RE-TRANSMISSION to ON, the MFC automatically resends the page once an error occurs. ON/OFF	OFF	5-25~26
	5. REDUCTION	You can avoid having your incoming data separated by printing a reduced copy of the incoming document. The reduction methods are AUTO or Fixed ratio: AUTO/100%/93%/87%/75%	AUTO	6-7~8
	6 RCDPAPER	You can select one of 3 sizes of paper. The MFC automatically will adjust the size of the incoming fax document or original document so that it fits the paper size you have selected. LETTER/LEGAL/A4	LETTER	6-5~6
	7. TONERSAVE	You can extend the life of the toner by conserving its use. ON/OFF	OFF	6-9~10

HOW TO USE ON-SCREEN PROGRAMMING (OSP) AND HELP KEY

Level one function	Level two function	Explanation of Options	Factory setting	Page
5 USER OPTIONS	8. SLEEPMODE	This mode reduces the power consumption when the MFC is idle. The time period before the MFC drops into the mode is user selectable.	00MIN	2-10~11
	9. PRINT DENSITY	You can adjust Print Density with this function.	—	6-9
6 TEL OPTIONS	1. TONE/PULSE	There are two different dial types and you must select the type of signal suitable for your telephone line. TONE / PULSE	TONE	3-1
	2. RINGDELAY	This is the number of rings before the MFC answers the call when in F/T or Fax Mode. 0/1/2/3/4rings	2	6-2~3
	3. SPEAKER VOLUME	You can adjust the speaker volume with this function. OFF / LOW / HIGH	LOW	6-10
	4. F/TRING TIME	F/T RING TIME sets the time for simulated ringing in F/T mode. 10/20/30/60 seconds	20	6-4
	5. RINGVOLUME	The settings are OFF/LOW/HIGH.	HIGH	6-11
	6. DISTINCTIVE	If you have distinctive ringing service from your phone company, you can use this function to register the ringing pattern of your fax number. And if you set it to ON, you can use the registered number as a fax number only. OFF / ON / SET	OFF	6-18~22
7 SETUP SYSTEM	1. DATE/TIME	If you enter the date and time in 24-hour format, the LCD will display the date and time and they will be printed on outgoing faxes.	01/01/1999 00:00	3-2
	2. DAILYTIMER	If you frequently have delayed jobs, all for execution at same time each day, you can program that time. Once you register it, you do not have to enter that time, just set Timer Transmission in temporary settings.	00:00	5-9

HOW TO USE ON-SCREEN PROGRAMMING (OSP) AND HELP KEY

Level one function	Level two function	Explanation of Options	Factory setting	Page
7 SETUP SYSTEM	3. INTERVAL	You can select the time interval at which the activity report is printed. 6/12/24 hours, 2/4/7 days, OFF	OFF	10-3~4
	4. STATIONID	You can enter your name or company name, fax number and telephone number in STATION ID. It is printed at the top of each page of every outgoing fax. It is also printed on the automatic Cover Page.	—	3-3~4
	5. REMOTE CODE	If you enter a REMOTE CODE, you can activate or deactivate the machine from a remote telephone. ON/OFF	ON *51 (ACT.) #51 (DEACT.)	6-14~15
	6. SET COVERPAGE	You can register your own two custom comments on the Cover Page.	—	5-18~19
	7. MFLINK	When you use the application software included into the MFC, you can select if your PC connected to your MFC will receive voice and fax messages. ON/OFF	ON	See the Multi-Function Link Pro Manual
8 REMOTE FAX OPT	1. FAXSTORAGE	You can store the incoming fax messages in the memory. Then you can use the convenient remote control functions. ON/OFF	OFF	8-1
	2. FAXFWD/PAGING	You can choose either PAGING, FAX FORWARDING or OFF. PAGING ON will cause the MFC to page you when it receives a fax message. FAX FORWARDING ON will cause the MFC to send any stored faxes that are received to another predetermined fax number. OFF/FAX FORWARD/PAGING	OFF	8-3~6
	3. REMOTE ACCESS	You can register the REMOTE ACCESS CODE (3 digits) allowing you remotely operate the MFC. (Example: Retrieving an incoming fax message)	159*	8-7
	4. PRINTFAX	You can print incoming faxes that were stored in memory.	/	8-11
0 INTERRUPT	—	You can send a fax without canceling the Timer or Polled Waiting, even if there are documents in the feeder, by "interrupting" it	—	5-13~14

HOW TO USE ON-SCREEN PROGRAMMING (OSP) AND HELP KEY

Using the Help Key

Press this key to print a quick reference Help List. The Help List will tell you how to perform settings for a function, how to register information or, how to get basic information for sending or receiving faxes, copying and printing. When you don't have the Operations Manual with you or when you want some information quickly, you can press **Help** to get a list of basic operating procedures.

Information

How to Print a Help List

Press Help to get a printout of the Help List. Use it when you need information about how to register or set one of the functions or how to send or receive faxes. You can request a printout whenever the MFC meets the following conditions:

- while the LCD displays the date and time.
- while the MFC is timer waiting.
- while the MFC is polled/polling waiting.
- while the MFC is at level one or two of the function menu.
- while you are using the phone.

NOTE: You can not print the Help List while the MFC is printing data from the PC.

HOW TO USE ON-SCREEN PROGRAMMING (OSP) AND HELP KEY

How to Enter Text in Function Mode

Dial pad keys have three or four letters printed above them. The following keys "0", "1", "# and "*" have no printed letters.



By pressing the appropriate dial pad key the correct number of times, you can access the character you want. When you are setting certain functions, such as the Station ID, you will have to enter text into your MFC.

Key	once	twice	three times	four times	five times
2	A	B	C	2	A
3	D	E	F	3	D
4	G	H	I	4	G
5	J	K	L	5	J
6	M	N	O	6	M
7	P	Q	R	S	7
8	T	U	V	8	T
9	W	X	Y	Z	9

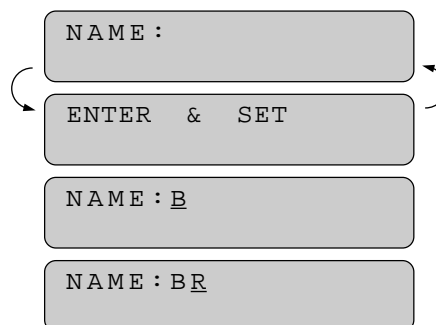
Let's say that you want to enter the initials "BR". Follow the example on the next page.

HOW TO USE ON-SCREEN PROGRAMMING (OSP) AND HELP KEY

KEYS TO PRESS

1. Press **2** twice to enter the letter **B**.
2. Press **7** three times to enter the letter **R**.
3. Press **Set**.

THE DISPLAY WILL SHOW:



Information

FOR YOUR INFORMATION

1. If you want to enter a blank space, press **X** (right arrow) twice.
2. If you entered a letter incorrectly and want to change it, you can use **Z** (left arrow) to move the cursor back. When you reach the letter, you can enter a new one in its place. You can only overwrite letters, not insert them, so you may have to go back and overwrite a lot of letters if you forget to enter a letter.
3. If you have to enter a character that is assigned to the same dial pad key as the previous character, press **X** (right arrow) to move the cursor to the right.

How to Enter Special Characters, Symbols and Punctuation Marks in Function Mode

0 key ----- ÄËÖÜÀÇÈÉÓ
 * key ----- (space) !"#%&'()*+,-./
 # key ----- :;<=>@[]^_

The "0" key contains all the accented characters. The "*" and the "#" key are used for punctuation marks and symbols. Let's say that you want to enter the Symbol "&". Follow the example on the next page.

HOW TO USE ON-SCREEN PROGRAMMING (OSP) AND HELP KEY

KEYSTOPRESS

1. Press * to show a list of characters.
2. Press *,*,*,*,*,* (6 times).
3. Press X (right arrow).

THE DISPLAY WILL SHOW:

NAME : JAMES _

MARK - _ ! " # \$ % & ' () *

MARK - ! " # \$ % & ' () *

NAME : JAMES & _

How to Set the Sleep Time

The sleep mode reduces the power consumption when the MFC is idle. The time period before the MFC drops into sleep mode is user selectable.

You can select the time period before the MFC drops into sleep mode from 00 to 99 minutes by using the dial pad.

The sleep timer is automatically reset when a fax is received, the MFC starts to copy, or the MFC is receiving PC data. The factory setting is 0 minute.

Use the following sequence to set the sleep time.

KEYSTOPRESS

1. Press **Function**.
2. Press **5**.
3. Press **8**.
4. Enter sleep time (00 to 99) by using dial pad.
Example: **05**.
5. Press **Set**.
6. Press **Stop** to exit.

THE DISPLAY WILL SHOW:

01/01/1999 00:00
ONLINE

ENTER NO. & SET

5.USER OPTIONS

8.SLEEP MODE

SLEEP TIME:00MIN

SLEEP TIME:05MIN

8.SLEEP MODE

HOW TO USE ON-SCREEN PROGRAMMING (OSP) AND HELP KEY

NOTICE

- Sleep Mode is activated when the heater stops. However, the cooling fan will continue to run until the MFC has cooled down. The actual time before the fan stops will vary depending upon operating conditions.
- It will take approximately 12 to 30 seconds for the MFC to warm up from the sleep mode before you can start printing or copying. The LCD will show WARMING UP during this time. When it is ready it will automatically start the last job you have entered.

NOTE : The cooling fan will continue to run until the temperature of the MFC reaches a certain level. Even after the heater stops, the MFC will have to warm up before copying and printing.

Information

FUNCTION SETTINGS

3. FUNCTION SETTINGS

This chapter is included in both the Setup Manual and this Operations Manual. If you read the Setup Manual first, you may have completed these function settings already. There are some settings, such as the date and time, you should set on your MFC before you begin using it. Once entered, these settings will remain in the MFC until you change them. You can begin customizing the settings by pressing **Function** on the control panel. This activates the function mode and On-Screen Programming prompts. You can complete a variety of settings in this mode.

Setting the Dialing Mode (Tone/Pulse)

Your MFC supports both tone (multi-frequency) and pulse (rotary) dialing. It is initially set to TONE, so you do not have to change the setting if you use that kind of line. If you are using a pulse dial line, you can change the setting to PULSE by following the steps below:

KEYS TO PRESS	THE DISPLAY WILL SHOW:
1. Press Function .	01/01/1999 00:00 ONLINE
2. Press 6.	ENTER NO. & SET
3. Press 1. After two seconds you will be prompted to select pulse or tone.	6.TEL OPTIONS
	1.TONE/PULSE
	DIALING:TONE
	SELECT { } & SET
	DIALING:PULSE
4. Press Z (left arrow) or X (right arrow) to find the dialing mode that matches your telephone line. Example: PULSE .	
5. Press Set.	1.TONE/PULSE
6. Press Stop to return to the date and time.	

FUNCTION SETTINGS

Setting the Date and Time

Your MFC shows the date and time on the display and prints it on every fax page you send. You can set the date and time in function mode.

KEYS TO PRESS	THE DISPLAY WILL SHOW:
1. Press Function .	01/01/1999 00:00 ONLINE
2. Press 7.	ENTER NO. & SET
3. Press 1.	7.SETUP SYSTEM
4. Enter the last two digits of the year. Example: 98.	1.DATE/TIME
5. Enter two digits for the month. (JAN = 01, OCT = 10, etc.) Example: 09.	ENTER YEAR: <u>XX</u>
6. Enter two digits for the day. Example: 12.	ENTER YEAR: 98
7. Enter the time in 24-hour format. Example: 15:25 (3:25 P.M.).	ENTER MONTH: <u>XX</u>
8. Wait for two seconds.	ENTER MONTH: 09
9. Press Stop to exit and to view the new date and time.	ENTER DAY: <u>XX</u>
	ENTER DAY: 12
	ENTER TIME: <u>XX</u> : <u>XX</u>
	ENTER TIME: 15:25
	1.DATE/TIME
	09/12/1998 15:25 ONLINE

Information

FUNCTION SETTINGS

Setting the Station ID

The Station ID is for identification purposes. Here you can store your name, fax number, and telephone number. Your MFC prints this information on the electronic Cover Page and every fax page you send.

- The telephone number that you stored above is used only for the Call Back Message and the Cover Page features.
- If you do not enter a fax number, no additional information can be entered.
- When you want to enter a space, use X (right arrow). You can back up to type over mistakes by using the Z (left arrow).
- If Station ID has been programmed, then after Step 5 the name will be displayed with the prompt "1" to change "2" to exit. Press "1" to change information. Press "2" to exit from the function.

KEYS TO PRESS

1. Press **Function**.
2. Press 7.
3. Press 4.
You will be prompted to enter your fax number.
4. Enter your fax number (up to 20 digits).
Example: 4155554444.
5. Press Set.
You will be prompted to enter your telephone number.
6. Enter your telephone number (up to 20 digits).
If your telephone number and fax number share the same line, enter the same number again.
Example: 4155554445.

THE DISPLAY WILL SHOW:

09/12/1998 15:25
ONLINE

ENTER NO. & SET

7.SETUP SYSTEM

4.STATION ID

FAX:

ENTER & SET

FAX: 4155554444_

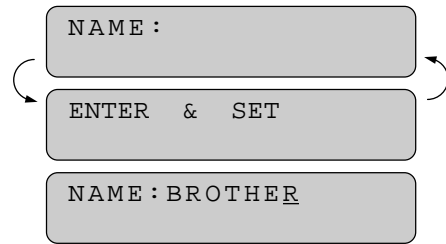
TEL:

ENTER & SET

TEL: 4155554445_

FUNCTION SETTINGS

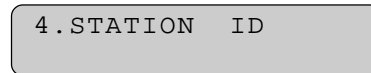
7. Press Set.
You will be prompted to enter your name or company's name.



8. Enter your name by using the dial pad keys (up to 20 characters).
Example: BROTHER.

By pressing the appropriate dial pad keys the correct number of times, you can access the character you want. For example, press 2 twice to enter B. Refer to the section "How to Enter Text in Function Mode" on pages 2-8~10.

9. Press Set to confirm the entry.



10. Press Stop to return to the date and time.

Information

NOTICE

The Telephone Consumer Protection Act. of 1991 makes it unlawful for any person to use a computer or electronic device to send any message via a telephone fax machine unless such messages clearly contain in a margin at the top or bottom of each transmitted page or on the first page of the transmission, the date and time it is sent and an identification of the business or other entity, or other individual sending the message and the telephone number of the sending machines or such business, other entity, or individual.

To program this information into your MFC, complete the steps on the previous page.

FUNCTION SETTINGS

Setting the Beeper Volume Level

If the beeper setting is LOW or HIGH, it will "beep" every time you press a key, make an error, or at the end of sending or receiving a fax.

The initial setting on your MFC for the beeper is LOW. If you do not want the beeper on, select OFF, and if you want it loud, select HIGH.

KEYS TO PRESS	THE DISPLAY WILL SHOW:
1. Press Function .	09/12/1998 15:25 ONLINE
2. Press 5.	ENTER NO. & SET
3. Press 2.	5.USER OPTIONS
4. Press Z (left arrow) or X (right arrow) until you get the setting you want. Example: OFF .	2.BEEPER
5. Press Set .	BEEPER:LOW
6. Press Stop to return to the date and time.	SELECT { } & SET
	BEEPER:OFF
	2.BEEPER

Storing the One-Touch Dial Numbers

You can dial numbers automatically by storing telephone or fax numbers as One-Touch dial numbers. You can also store names with the numbers so when you call, you can verify the destination by the name on the display. You can store a maximum of 24 numbers. To access numbers 13 to 24, hold down the **Shift** key. For example, One-Touch location "13" is accessed by pressing **Shift** and the "01" One-Touch key simultaneously. Here is how to store a telephone number as a One-Touch dial number:

Information

KEYS TO PRESS

1. Press **Function**.
2. Press 4.
3. Press 1.
4. Press the One-Touch key where you want to store a number.
Example: One - Touch 05.

Note: The One-Touch keys are not the keys on the dial pad.
5. Enter a number (up to 20 digits).
Example: 14155551212.
6. Press Set.
You then will be prompted to enter the name or company associated with this number.
7. Enter the name using the dial pad (up to 15 characters).
Example: NJ OFFICE.
(See page 2-8~10.)
8. Press Set.

THE DISPLAY WILL SHOW:

09/12/1998 15:25
ONLINE

ENTER NO. & SET

4.SET AUTO DIAL

1.ONE-TOUCH DIAL

SELECT ONE-TOUCH

*05:

ENTER & SET

*05:14155551212_

NAME:

ENTER & SET

NAME:NJ OFFICE

TYPE:FAX

SELECT { } & SET

FUNCTION SETTINGS

9. Select the type of number (FAX, TEL, F/T, CHAIN) using Z (left arrow) or X (right arrow) to display the type you want. (See For Your Information on page 3-11.)
Example: **FAX**.
10. Press **Set**.
11. Return to Step 4 to enter another number, or press Stop to return to the date and time.

TYPE : FAX

SELECT ONE-TOUCH

Helpful Hints If you must wait for a dial tone to access an outside line, insert a pause by pressing the **Pause** key. When you press **Pause**, a dash "-" will appear on the display. By storing the numbers with a pause, you can create a delay of 3.5 seconds.

Storing the Speed-Dial Numbers

When you store a phone or fax number as a Speed-Dial number, you must enter a **two-digit number**, from 01 to 36 using the dial pad. For example, you can not enter "5". You must enter "05". You can store as many as 36 Speed-Dial numbers.

KEYS TO PRESS

1. Press **Function**.
2. Press 4.
3. Press 2.
4. Use the dial pad to enter a two-digit number.
Example: 05.

THE DISPLAY WILL SHOW:

09/12/1998 15:25
ONLINE

ENTER NO. & SET

4.SET AUTO DIAL

2.SPEED-DIAL

SPEED-DIAL? #_

SPEED-DIAL? #05

#05:

ENTER & SET

FUNCTION SETTINGS

5. Enter the number (up to 20 digits).
Example: 5555151.
6. Press Set.
You will be prompted to enter the name or company associated with this number.
7. Use the dial pad to enter a name (up to 15 characters).
Example: MANCHESTER.
(See page 2-10~12 for entering text.)
8. Press Set.
9. Select the type of number (FAX, TEL, F/T, CHAIN) by using Z (left arrow) or X (right arrow) to display the type you want.
Example: **TEL**. (See page 3-11.)
10. Press Set.
11. You are ready to enter another Speed-Dial number. Or press Stop to return to the date and time.

#05:5555151_

NAME :

ENTER & SET

NAME : MANCHESTER

TYPE : FAX

SELECT { } & SET

TYPE : TEL

SPEED-DIAL? #_

Information

- Helpful Hints
- Print the All Dial List to make sure you have stored the correct numbers. (See page 10-5.) This list will contain the type of number: FAX, TEL, F/T, or CHAIN.
 - **Even if there is a loss of electrical power to your MFC, the telephone and fax numbers you have stored will not be lost.**
 - If your MFC is connected to a PBX and you must first access an outside line, you must insert an additional number followed by a pause before the fax or telephone number.

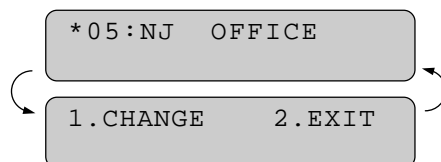
FUNCTION SETTINGS

FOR YOUR INFORMATION

When You Wish to Change the Stored One-Touch and Speed-Dial Numbers

When you try to set up a One-Touch key or Speed-Dial number that is already in use, you will be asked if you wish to change it or to exit so you can select a different One-Touch or Speed-Dial number. This display does not appear if the One-Touch key or Speed-Dial number you chose is not assigned.

1. Press **1** to assign a new number to the One-Touch key or Speed-Dial number, or press **2** to choose a different One-Touch key or Speed-Dial number.



2. If you are replacing an existing number with a new one, the old number and name will appear in the display. Press **Clear** to erase the old number and name. Then, enter the new number and name and press **Set** to store the entry.

Memory Storage/Temporary Battery Back Up

Your MFC is equipped with an internal battery that will keep the date and time information for up to two hours after power has been cut off. After that time, the date and time will be lost and you will have to reenter the information. All other settings in the SET AUTO DIAL, USER OPTIONS and SETUP SYSTEM functions (see page 2-3~6) are stored permanently until you change them and will be retained even in the event of a power failure. However, the faxes stored in the memory during Out-of-Paper Reception and Memory Transmission will be lost when the power is disconnected.

Setting Up Number Groups for Broadcasting

Number Groups allow you to send the same fax message to many fax numbers by pressing only one One-Touch key. (This is called Broadcasting.) You must store each fax number first as a One-Touch or Speed-Dial number. Then you can combine the stored numbers into a Group.

You can have up to 6 smaller Groups (each group uses up a One-Touch key) or you can assign up to 59 numbers if you want one large Group. You can use the same stored number in several groups. Groups can have a name up to 15 characters long.

FUNCTION SETTINGS

KEYS TO PRESS

1. Press **Function**.
2. Press **4**.
3. Press **3**.
4. Press the One-Touch key where you wish to store the number.
Example: select "One-Touch 02" as a group.
5. After two seconds, enter a number for the group, using the dial pad.
Example: **1**.
6. Enter the One-Touch or Speed-Dial numbers in this group.
Example: **#03,#05,*02**.
(Note: Press the Speed-Dial key and dial pad keys for Speed-Dial numbers, and the One-Touch keys for One-Touch numbers.)
7. Press **Set**.
8. Enter the group's name.
Example: **BROTHER SERVICE**.
9. Press **Set**.
10. Press **Stop** to return to the date and time.

THE DISPLAY WILL SHOW:

09/12/1998 15:25
ONLINE

ENTER NO. & SET

4.SET AUTO DIAL

3.SETUP GROUPS

SELECT ONE-TOUCH

SETUP GROUP:G0

ENTER & SET

SETUP GROUP:G01

G01:

ENTER & SET

G01:#03#05*02_

NAME:

ENTER & SET

E:BROTHER SERVICE

3.SETUP GROUPS

*:One-Touch
#:Speed Dial

Information

FUNCTION SETTINGS

Helpful Hints See page 5-11 for Broadcasting procedure. You can print a list of all One-Touch numbers and Speed-Dial numbers. Group numbers will be listed under One-Touch numbers. (See page 10-5.)

FOR YOUR INFORMATION

Types of Numbers

When you store a number as a One-Touch or as a Speed-Dial number, you have a choice of choosing the type of number. There are 4 options:

- 1 FAX (A fax number).
- 2 TEL (A telephone number).
- 3 F/T (Both a fax number and a telephone number)
- 4 CHAIN (A number, usually an access code, for chain dialing).

Chain Dialing

Chain dialing is used to store a very long dialing sequence. You can spread the number over two or more keys if you register the first key(s) in the sequence as type "Chain". **Chain tells the system that the dialing sequence is not completed and that there is more to follow.** The last key in the sequence must be any other dial type (either FAX, TEL or F/T). You can use any combination of One-Touch, Speed-Dial and manually dialed numbers in a chain.

If you must wait for another dial tone at any point in the dialing sequence, store a pause at that point in the number by pressing the **Pause** key. (If you need a pause that is longer than 3.5 seconds, call Fax Customer Service Center at 1-800-284-4329 (USA), 1-800-853-6660 (CANADA) for assistance.)

When you are ready to dial the chain number, simply press the keys one after the other in sequence and then press the **Start** key.

Chain dialing makes using access codes easy. Sometimes you may want to choose from among several long-distance carriers when you make a call; rates may vary depending upon the time and destination. To take advantage of low rates, you can store the access code of a long-distance carrier as you would a regular number and register it as a "chain" number. Then to dial, press this (access code) number followed by the regular number and **Start** key.

You can set up chain dialing for phone/credit card numbers, the same way. However, **when using chain dialing, do NOT send a cover page because your credit card number will be on it.**

USING THE MFC WITH AN EXTERNAL TELEPHONE

4. USING THE MFC WITH AN EXTERNAL TELEPHONE

If you connect an external telephone to the MFC's EXT. jack, you can use the MFC to make regular telephone calls. There are two ways to dial: manually on the external telephone and automatically by using One Touch, Speed Dial, or Tel-Index numbers stored on the MFC. To dial automatically, you must first press the **Hook** key. Then press the One Touch, Speed Dial, or Tel-Index number. You can listen to the other end through the one-way speaker of the MFC, but the other party won't hear you until you pick up the handset of the external telephone and press **Hook** again. When you finish speaking replace the handset.

Manual Dialing

To dial manually, pick up the handset and dial the number on the external telephone.

--OR--

You can dial manually by pressing **Hook** and using the MFC's dial pad as follows:

- 1 Press **Hook**.
- 2 When you hear a dial tone, dial the number on the MFC's dial pad.
- 3 When the other party answers, pick up the handset and press **Hook** again. To end the call, replace the handset.

One-Touch Dialing

- 1 Press **Hook**.
- 2 When you hear the dial tone, press the **One-Touch** key.
- 3 When the other party answers, pick up the handset of the external telephone and press **Hook** again. To end the call, replace the handset.

If you try to use a One-Touch number that has not been stored on the key you pressed, you will hear a warning sound and the display will say, NOT REGISTERED. The display will return to normal after 2 seconds.

Speed Dialing

- 1 Press **Hook**.
- 2 When you hear the dial tone, press the **Speed-Dial** key and then press the two-digit Speed-Dial number, using the MFC's dial pad.
- 3 When the other party answers, pick up the handset of the external telephone and press **Hook** again. To end the call, replace the handset.

USING THE MFC WITH AN EXTERNAL TELEPHONE

FOR YOUR INFORMATION

Using Pause and # with the Telephone

- Press **Pause** to insert a 3.5 second pause between numbers.
- Press **#** to switch the dialing type from "pulse" to "tone" temporarily. This key also is used for push-button services, such as those offered by banks, credit card companies, or paging services.

Searching the Telephone Index

Once you have stored a name and number as a One-Touch number or as a Speed-Dial number, you can search for that name alphabetically using the Telephone Index. You can dial a number directly from the Telephone Index.

KEYSTOPRESS

1. Press **Tel-index**.
2. Use the dial pad to enter the first character of the stored name, and press Z (left arrow) or X (right arrow) to find the name.
3. Press **Start** to begin dialing.
 - Press **Hook** to cancel the call.
4. When you hear the other party answer, pick up the handset of the external telephone and press **Hook** again.
 - To end the call, replace the handset.

THE DISPLAY WILL SHOW:

09/12/1998 15:25
ONLINE

TEL. INDEX
ONLINE

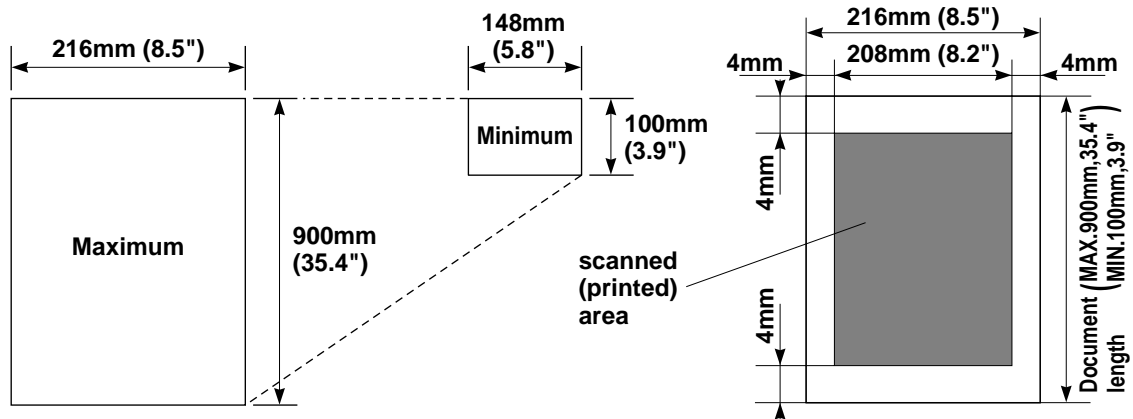
NJ OFFICE
ONLINE

NJ OFFICE
ONLINE

5. SENDING FAXES

A) DOCUMENT BASICS

The Size of Your Documents



The size of the documents you want to send by fax should not be larger (or smaller) than your MFC can accommodate. The documents should each be between 5.8 and 8.5 inches (148 and 216 mm) wide and between 3.9 and 35.4 inches (100 and 900 mm) long.

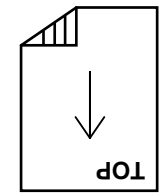
The maximum width of the scanned area, that can be printed on the recording paper of the recipient's fax, is 8.2 inches (208 mm).

Sending FAX

How to Insert the Document

To send a fax, first insert the document you wish to send, face down, in the document feeder. The top edge of the document should go in first, or the fax will be received upside down.

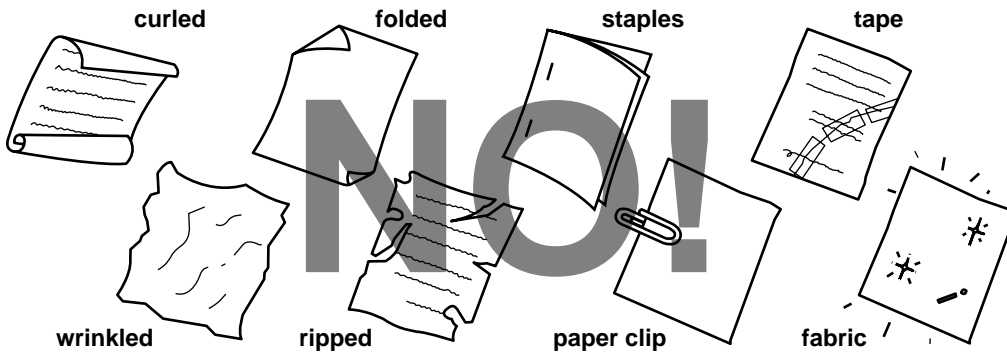
To prevent the document from skewing as it is fed, adjust the paper guides to fit the width of the document.



NOTICE

About the Documents You Send...

Do not use documents that are curled, wrinkled, folded, ripped, or that contain staples, paper clips, paste, or tape. Also, do not use cardboard, newspaper, or fabric.

***The Auto Document Feeder (ADF)***

The Auto Document Feeder (ADF) automatically feeds documents (**up to 30 pages**) into the machine, one at a time. The thickness and weight of the documents should fall into the following categories:

Thickness: For one sheet: 2.8×10^{-3} to 4.7×10^{-3} inches (0.07 to 0.12 mm).

For multiple sheets: 2.8×10^{-3} to 3.9×10^{-3} inches (0.07 to 0.10 mm).

Weight: For one sheet: 0.07×10^{-3} to 0.121×10^{-3} lbs/inch² (52 to 85 g/m²).

For multiple sheets: 0.07×10^{-3} to 0.114×10^{-3} lbs/inch² (52 to 80 g/m²).

Before inserting documents into the document feeder, fan the sheets of paper to make sure the documents are not stuck together. Then tap the leading edge on a flat surface so all the pages are even when placed in the feeder. Make sure you always place the documents in face down.

Getting Ready to Send a Fax

Setting the Resolution

You can choose a setting (STANDARD, FINE, SUPERFINE, or PHOTO) for the resolution any time before you press **Start** or **Copy**. You can choose a setting by pressing the **Resolution** key. (○ means light off. ● means light on.)

STANDARD	<p>○ Fine Photo ○ S.Fine</p>	<p>The STANDARD resolution can be used for most typewritten text. When the STANDARD setting is on, both lights are off. Transmission speed is normal.</p>
FINE	<p>● Fine Photo ○ S.Fine</p>	<p>The FINE resolution is an ideal setting to use if you want to send documents that have small print. When the FINE setting is on, the FINE light will be lit. Transmission speed is slower than STANDARD.</p>
SUPERFINE	<p>○ Fine Photo ● S.Fine</p>	<p>The SUPERFINE resolution is a good setting to use for documents with very small print or artwork. When the SUPERFINE setting is on, the S. FINE light will be lit. Transmission speed is slower than FINE.</p>
PHOTO	<p>● Fine Photo ● S.Fine</p>	<p>The PHOTO resolution is ideal for sending documents that have varying shades of gray, such as photographs. The PHOTO setting is on when both lights are lit. Transmission speed is slower than FINE.</p>

To set different resolutions for each page of a multipage document, refer to "Multiple Resolution Transmission" on page 5-16~17.

SENDING FAXES

DOCUMENT BASICS

Setting the Contrast

The MFC has automatic contrast control, but if you are sending or copying a document that is very light or very dark, you may want to set the contrast yourself.

Use SUPER LIGHT to send a very light document.

Use SUPER DARK to send a very dark document.

KEYSTOPRESS

1. Insert the documents face down into the feeder.
2. Press **Function**.
3. Press **1**.
4. Press **4**.
The display will alternate messages.
5. Use Z (left arrow) or X (right arrow) to select one of the settings, AUTO, S.LIGHT, or S.DARK.
Example: **S.LIGHT**.
6. Press **Set**.
7. Press **Stop** to exit.

THE DISPLAY WILL SHOW:

09/12/1998 15:25
ONLINE

FAX: NO. & START
SCAN READY

COPY: PRESS COPY
SCAN READY

ENTER NO. & SET

1. TEMP. SETTINGS

4. CONTRAST

CONTRAST: AUTO

SELECT { } & SET

CONTRAST: S.LIGHT

4. CONTRAST

FAX: NO. & START
ONLINE

COPY: PRESS COPY
ONLINE

Then start the fax sending operation (see page 5-5) or copy (see page 11-1).

B) BASIC FAX TRANSMISSIONS

FOR YOUR INFORMATION

Sending a Fax

There are 3 basic ways to send a fax:

1) Manual transmission:

You can speak with the other party before sending a fax, by picking up the external handset and dialing the number on the external telephone. After the other party has finished talking and has pressed the **Start** button, you will be able to send your fax by pressing your **Start** key and placing the handset in its cradle. (If you call and all you hear is the chirping sound of a fax machine, you can go ahead and press your **Start** key, and then replace the handset of the external telephone.)

2) Automatic transmission:

You can send a fax without picking up the handset of the external telephone or without pressing **Hook** by dialing the fax number and then pressing **Start**.

a One-Touch Dialing

Press one of the One-Touch keys. (The numbers must be stored beforehand. See page 3-6~7.) Then press **Start**.

b Speed-Dialing

Press **Speed-Dial**, then use the dial pad to enter a two-digit number. For example, press "05" for 5. (The numbers must be stored beforehand. See page 3-7~8.) Then press **Start**.

c Telephone Index

You can use Tel-Index to make telephone or fax calls. (See page 4-2.)

3) Delayed transmission:

It is possible to send documents at a later time by using the TIMER function. (See page 5-9~10.)

Talking to the Other Party When Sending a Fax

When you are sending a fax manually and you hear the recipient's voice instead of fax tones, you can use the handset of the external telephone to have a conversation. If you want to then send a fax, ask the person on the other line to press **Start** and when you hear fax tones you can press **Start** to begin sending your fax.

SENDING FAXES

BASIC FAX TRANSMISSIONS

Sending a Fax Automatically

KEYSTOPRESS

1. Insert the documents face down into the feeder.
2. Enter a fax number.
Example: **One-Touch dialing**.
3. Press **Start**.

THE DISPLAY WILL SHOW:

09/12/1998 15:25
ONLINE

FAX: NO. & START
SCAN READY

COPY: PRESS COPY
SCAN READY

NJ OFFICE
ONLINE

DIALING
ONLINE

SENDING P.01
ONLINE

Sending a Fax Manually

KEYSTOPRESS

1. Insert the documents face down into the feeder.
2. Press **Hook** and listen for the dial tone.
3. Enter the fax number.
You can use manual dialing, One-Touch dialing, Speed Dialing, or Tel-Index.
4. When you hear a fax tone, press **Start**.
Your MFC will begin sending the documents.

THE DISPLAY WILL SHOW:

09/12/1998 15:25
ONLINE

FAX: NO. & START
SCAN READY

COPY: PRESS COPY
SCAN READY

ENTER FAX NO.
ONLINE

PRESS START KEY
ONLINE

NJ OFFICE
ONLINE

SENDING
ONLINE

Automatic and Manual Redialing

If a number you have dialed is busy or your call did not go through for some other reason, you can redial that number. There are two ways to redial: "automatic" and "manual." Automatic redialing can be used only for faxes that were sent using automatic transmission—not for telephone calls. The MFC automatically will redial the number 3 times at 5 minute intervals before giving up. It will redial the last dialed number when you press **Redial** (manual redialing).

FOR YOUR INFORMATION

Optional Settings When You Send a Fax Manually

- Resolution (See page 5-3, 5-16~17.)
- Contrast (See page 5-4.)
- Cover Page (See page 5-17~22.)
- Overseas Mode (See page 5-15.)
- Call Reservation (See page 5-23~24.)

Printing Page Headers

Your MFC can print a page header on the top of every fax you send. It is printed on the receiving party's fax paper. It contains the date and time of transmission, your fax number and name (Station ID), and page number. Of course you must register your Station ID beforehand for that information to be available. (See page 3-3~4.)

Transmission Date and Time	Station ID	Page Number
09/12/1998 15:25	4155554444 BROTHER	PAGE 01

SENDING FAXES

ADVANCED FAX TRANSMISSIONS

C) ADVANCED FAX TRANSMISSIONS

Sending a Fax by Using Super Quick-Scan (Memory Transmission)

If you are faxing a set of documents that are confidential in nature or you just need your original documents back right away, you do not have to stand at the MFC and wait for the transmission of each page to be completed. You can use Super Quick-Scan in order to get your original documents back before transmission.

KEYSTOPRESS

1. Insert the documents into the feeder.
2. Press **Super Q.Scan**.
The display will indicate how much memory is available.
3. Enter the fax number.
4. Press **Start** to begin scanning the documents into memory. Once completed, the MFC will dial the destination.

THE DISPLAY WILL SHOW:

09/12/1998 15:25
ONLINE

FAX: NO. & START
SCAN READY

COPY: PRESS COPY
SCAN READY

MEMORY 100%
ONLINE

ENTER FAX NO.
ONLINE

NJ OFFICE
ONLINE

MEMORY 100%
ONLINE

FOR YOUR INFORMATION

If You Get a MEMORY FULL Message When Trying to Send a Fax by Using Super Quick-Scan

If the memory becomes full when scanning page 1 and the display shows PRESS STOP KEY, then press **Stop** to abort the job.

If the memory becomes full on page 2 or more of a multipage document, you will be prompted to press **Start** to send the portion already scanned, or to press **Stop** to abort the job.

Setting the Daily Timer (for Delayed Transmissions)

The Daily Timer function lets you send a fax at a preset time every day. This is handy for sending delayed jobs that must go out at the same time daily. Once you enter the time, you don't have to enter it again. The setting will stay the same until you change it. So you can use it every day, or only on days when you need it.

KEYSTOPRESS

1. Press **Function**.
2. Press **7**.
3. Press **2**.
4. Enter the time in 24-hour format using the dial pad.
Example: **19:45** (7:45 P.M.).
5. Wait for two seconds, press **Stop** to exit.

THE DISPLAY WILL SHOW:

09/12/1998 15:25
ONLINE

ENTER NO. & SET

7.SETUP SYSTEM

2.DAILY TIMER

ENTER TIME: 00:00

ENTER TIME: 19:45

2.DAILY TIMER

Sending FAX

Delayed Transmission

You can use the timer to send documents at a later time (up to 24 hours later). When the preset time is displayed, accept it or enter a new time if needed. Your MFC also will produce a report, the "Delayed Sending Report", after the fax is sent. You can set up to three different documents for delayed transmission.

KEYSTOPRESS

1. Insert the documents into the feeder.

THE DISPLAY WILL SHOW:

09/12/1998 15:25
ONLINE

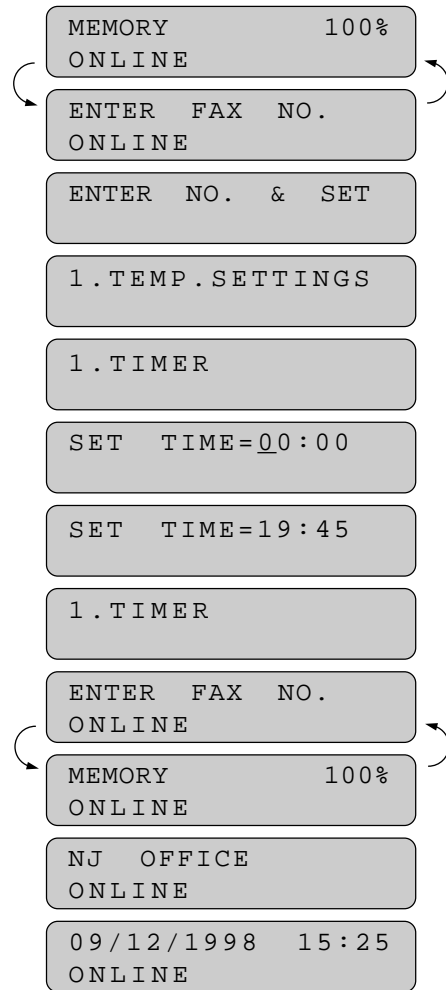
FAX: NO. & START
SCAN READY

COPY: PRESS COPY
SCAN READY

SENDING FAXES

ADVANCED FAX TRANSMISSIONS

2. Press **Super Q.Scan** if you use memory transmission, or you can send your fax normally.
3. Press **Function**.
4. Press **1**.
5. Press **1**.
6. Accept the displayed time or enter the time in 24-hour format using the dial pad.
Example: **19:45** (7:45 P.M.).
7. Wait for two seconds.
8. Press **Stop**.
9. Enter the fax number.
10. Press **Start**.
The MFC will wait until the specified time to call.



Broadcasting

By using the numbers you have stored for One-Touch dialing, Speed-Dialing, or group dialing, you can automatically send faxes to a maximum of 60 numbers at once. Remember, each Group you created reserves one of the One-Touch keys. You can not broadcast to a number that has not been stored into memory. Use the Telephone Index to help you choose the numbers to which you wish to broadcast. (See page 4-2.) After transmission is completed, a Broadcast Report will be printed automatically to let you know the results.

FOR YOUR INFORMATION

Getting Familiar with the Broadcasting Function

- * To stop the broadcast in progress, press **Stop**.
- * Enter the chain dialing numbers as you normally would, but keep in mind that each key counts as one location, so the number of locations you can call becomes limited. (You have up to 60 locations you can call with One-Touch, Speed-Dialing, and group numbers.)
- * If the line is busy or for some other reason a connection could not be made while broadcasting, the MFC will redial the number automatically. (See page 5-7.)
- * If the memory is full, press **Stop** to abort the job or press **Start** to send the portion that is in the memory (if more than one page has been scanned.) (See page 5-8.)

KEYSTOPRESS

1. Insert the documents into the feeder.
2. Press **Super Q.Scan**.
3. Enter the One-Touch key(s) and/or Speed-Dial number(s), one after the other, or a Group number.
Example: **Group number**.
4. Press **Start** and the MFC will read the documents into memory, and then start sending faxes to all the numbers you entered.

THE DISPLAY WILL SHOW:

09/12/1998 15:25
ONLINE

FAX: NO. & START
SCAN READY

COPY: PRESS COPY
SCAN READY

MEMORY 100%
ONLINE

ENTER FAX NO.
ONLINE

ALL BROTHER
ONLINE

MEMORY 100%
ONLINE

DIALING
ONLINE

SENDING P.01
ONLINE

Sending FAX

SENDING FAXES

ADVANCED FAX TRANSMISSIONS

Sending by Multiple Transmissions

Use this function to send several different faxes to several destinations at once. For example, you can automatically fax "Document A" to one destination and "Document B" to another destination.

This is not to be confused with Broadcasting, which is sending the same document (s) to many destinations.

If you wish, you can combine this function with broadcasting so you can fax different documents to different lists of people at the same time. To do this, store various sets of documents in memory. Then automatically your MFC will fax "Document A" to one list of people and "Document B" to another list of people. You can preset 3 different documents (including timer transmission) in memory; if you set one timer transmission, multiple transmissions are available for two other destinations.

If you press only **Super Q.Scan** instead of **Shift + Super Q.Scan** for the last document, your MFC will start dialing without waiting for 30 seconds.

KEYSTOPRESS

1. Insert "Document A" into the feeder.
2. Press **Shift + Super Q.Scan** together to send by multiple transmission. The display shows remaining memory.
3. Enter the fax number. (Or enter a series of numbers if you are broadcasting.)
4. Press **Start** to start scanning documents.
5. Insert "Document B" within 30 seconds after "Document A" has been scanned. (If you wait more than 30 seconds to scan another document, the MFC will begin to send document "A".) Repeat Step 2, 3, 4 for document "B".

THE DISPLAY WILL SHOW:

09/12/1998 15:25
ONLINE

FAX: NO. & START
SCAN READY

COPY: PRESS COPY
SCAN READY

MULTI TX 100%
ONLINE

ENTER FAX NO.
ONLINE

NJ OFFICE
ONLINE

MULTI TX 100%
ONLINE

09/12/1998 15:27
ONLINE

ENTER FAX NO.
ONLINE

PRESS START KEY
ONLINE

6. Repeat Step 1, 2, 3, 4 for document "C".
7. After 30 seconds, your MFC will start sending the documents in scanned order.

MULTI TX 70%
ONLINE

DIALING
ONLINE

Interrupting the Timer and Polled Job

You can send a fax without canceling the timer (see page 5-9~10) or Polled Waiting with documents in the feeder (see page 7-3) by "interrupting" it. When you interrupt the Timer to send a "new" set of documents, the MFC does not automatically redial the number if it was busy. Also, you can not use the function mode if you have interrupted the Timer or Polled Waiting.

Example: TIMER WAITING with a document in the feeder.

KEYSTOPRESS

1. Press **Function**.
2. Press **0**.
3. Wait for two seconds.
4. Remove documents from the MFC.
5. Place the "new" documents into the feeder.
6. Enter the new fax number for the documents you are sending now, then press **Start**.
7. After the transmission is finished, place the "old" documents back into the feeder.

THE DISPLAY WILL SHOW:

TIMER WAITING
ONLINE

ENTER NO. & SET

0 . INTERRUPT

REMOVE DOCUMENT
ONLINE

INSERT DOCUMENT
ONLINE

FAX OR COPY
ONLINE

FUNC 0 TO RESET
ONLINE

DIALING
ONLINE

SENDING P.01
ONLINE

INSERT DOCUMENT
ONLINE

FAX OR COPY
ONLINE

FUNC 0 TO RESET
ONLINE

Sending FAX

SENDING FAXES

ADVANCED FAX TRANSMISSIONS

- 8 Press **Function** and **0** to restore the timer.

0 . INTERRUPT

TIMER WAITING
ONLINE**Canceling a Job**

Use the Cancel Job function to permanently remove scheduled tasks such as Polling or Polled Waiting (see page 7-2~3) and Timer (Delayed Transmission) (see page 5-9~10) from your MFC.

Example: TIMER WAITING with documents in the feeder.

KEYSTOPRESS

- 1 Press **Function**.
- 2 Press **2**.
Any waiting jobs that have been set up will appear in the display.
If no jobs are waiting to be processed, a NO JOB WAITING message will appear in the display.
- 3 Use Z (left arrow) or X (right arrow) to select the job you wish to cancel.
- 4 Press **Set**.
- 5 Press **1** to cancel the selected job, or **2** to exit without canceling.
If **1** is selected, the job will be canceled and the next job in the queue will appear in the display.
- 6 To cancel the next job, press **1** again. To exit, simply press **2**.

THE DISPLAY WILL SHOW:TIMER WAITING
ONLINE

ENTER NO. & SET

2 . CANCEL JOB

19:45 NJ OFFIC

SELECT { } & SET

19:45 NJ OFFIC

19:45 NJ OFFIC

1 . CLEAR 2 . EXIT

D) FAX TRANSMISSION OPTIONS

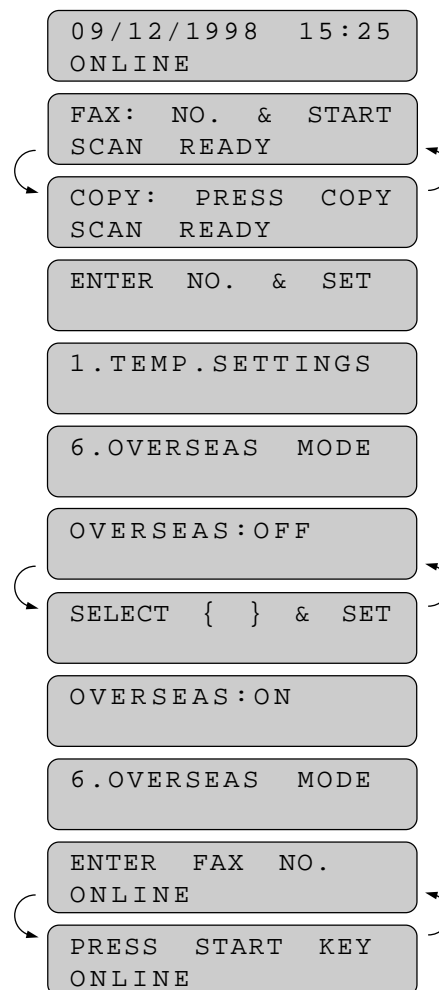
Setting the Overseas Mode

If you experience difficulty with sending faxes overseas, you may want to use the Overseas mode. Using the Overseas mode is an effective way to send faxes overseas.

KEYSTOPRESS

1. Insert the documents into the feeder.
2. Press **Function**.
3. Press **1**.
4. Press **6**.
5. Press **Z** (left arrow) or **X** (right arrow) to switch to ON.
6. Press **Set**.
7. Press **Stop** to exit.
8. Then start the fax sending operation.
(See page 5-5.)

After sending your fax, the overseas mode will switch itself OFF.

THE DISPLAY WILL SHOW:

Sending FAX

SENDING FAXES

FAX TRANSMISSION OPTIONS

Setting Your MFC for Multiple Resolution Transmission

This is a temporary setting for the current transmission job only. You can set the resolution of the documents you send by pressing **Resolution**. Once you set the resolution, all the pages will be sent at the same resolution. However, there may be times when you want to send some pages at one resolution, such as STANDARD, and other pages in another resolution, such as PHOTO. If you send all pages in Photo resolution, for instance, it would take a great deal of time. It is better to specify the resolution for each page to minimize transmission time. This is made possible by using the 1.TEMP.SETTINGS function.

KEYSTOPRESS

1. Insert the documents into the feeder.
2. Press **Function**.
3. Press **1**.
4. Press **5**.
5. Press Z (left arrow) or X (right arrow) to find the resolution you want for the first page of your documents.
Example: **FINE**.
6. Press **Set**.
Return to Step 6 to set the resolution for page 2 and the following pages.
7. When you finish setting the resolution for all your pages, press **Stop**.

THE DISPLAY WILL SHOW:

09/12/1998 15:25
ONLINE

FAX: NO. & START
SCAN READY

COPY: PRESS COPY
SCAN READY

ENTER NO. & SET

1.TEMP.SETTINGS

5.RESOLUTION

PAGE 01:STANDARD

SELECT { } & SET

PAGE 01:FINE

PAGE 02:FINE

FAX: NO, & START
ONLINE

COPY: PRESS COPY
ONLINE

8. Enter the fax number.

9. Press **Start**.

The resolution will revert to STANDARD after the documents have been sent.

Sending a Fax with an Electronic Cover Page Message

An automatic Cover Page will allow you to send details of who the fax is going to, who it is from and when it was sent. This is what the Cover Page looks like:

09/12/1998 15:25	
=== COVER PAGE ===	
TO: NJ OFFICE _____	(1)
FAX: 1415551212	
FROM: BROTHER _____	(2)
FAX: 415554444	
TEL: 415554445	
03 PAGE[S] TO FOLLOW _____	(3)
COMMENT: PLEASE CALL _____	(4)

Sending FAX

- (1) The "TO" information comes from the One-Touch or the Speed-Dial memory. If you are dialing manually, the name of the destination will be left blank.
- (2) The "FROM" information comes from the Station ID.
- (3) The number of pages you are sending. When Cover Page is sent each time by using the automatic settings (see page 5-20~21), the number of pages will be left blank. If you have used the temporary Cover Page setting (see page 5-21~22), the number of pages you entered will be listed.
- (4) Your comments. You may customize the comments (see page 5-18~19).

SENDING FAXES

FAX TRANSMISSION OPTIONS

FOR YOUR INFORMATION

Selecting a Comment for the Cover Page

You can choose one comment from among 6 options. The first option is to send no comment at all. The next 3 are built-in comments, and the last two are ones you can enter yourself. (For more information see below "Customizing Your Cover Page Comment".)

- 1 COMMENT OFF
- 2 PLEASE CALL
- 3 URGENT
- 4 CONFIDENTIAL
- 5 (Your own customized comment up to 27 characters.)
- 6 (Your own customized comment up to 27 characters.)

Customizing Your Cover Page Comment

You can customize the comment on your Cover Page as follows:

KEYSTOPRESS	THE DISPLAY WILL SHOW:
1 Press Function .	09/12/1998 15:25 ONLINE
2 Press 7 .	ENTER NO. & SET
3 Press 6 .	7.SETUP SYSTEM
	6.SET COVERPAGE
	5 .
4 Press Z (left arrow) or X (right arrow) to select 5 or 6 where you wish to store a comment. Example: 5 .	SELECT { } & SET
	5 .
5 Press Set .	5 .

- 6. Enter your customized comment using the dial pad (up to 27 characters). (See page 2-8~10 for more details.) Example: **TOPSECRET.**

5 . TOP SECRET

- 7. Press **Set**.

6 . SET COVERPAGE

- 8. Press **Stop** to exit.

Printing a Sample Cover Page

You can print a sample Cover Page to check the format.

KEYSTOPRESS

- 1. Press **Function**.
- 2. Press **3**.
- 3. Press **4**.
- 4. Press **Start**.

THE DISPLAY WILL SHOW:

09/12/1998 15:25
ONLINE

ENTER NO. & SET

3 . PRINT REPORTS

4 . COVERPAGE

PRESS START KEY

PRINTING

Sending FAX

SENDING FAXES

FAX TRANSMISSION OPTIONS

To Always Send a Cover Page

If you often send an automatic Cover Page, you can set it to ON to avoid having to set up the details of the Cover Page each time. Here is how you can switch the setting for the automatic Cover Page to ON or OFF:

KEYSTOPRESS

1. Press **Function**.
2. Press **5**.
3. Press **3**.
4. Press Z (left arrow) or X (right arrow) to choose ON or OFF.
Example: **ON**.
5. Press **Set**.
6. If you selected ON, you must select a comment, by pressing Z (left arrow) or X (right arrow).
Example: **2.PLEASE CALL**. (See page 5-19.)
7. Press **Set**.
8. Press **Stop** to exit.

THE DISPLAY WILL SHOW:

09/12/1998 15:25
ONLINE

ENTER NO. & SET

5.USER OPTIONS

3.COVERPG ON/OFF

COVERPAGE: OFF

SELECT { } & SET

COVERPAGE: ON

1.COMMENT OFF

SELECT { } & SET

2.PLEASE CALL

3.COVERPG ON/OFF

FOR YOUR INFORMATION

Sending an Automatic Cover Page

If you have the Cover Page ON/OFF setting to ON, the total number of pages will not be printed on the Cover Page. Also, the comment you selected when you set it to ON will be printed on all the Cover Pages you send.

Sending a Fax When the Cover Page Is ON

KEYSTOPRESS

1. Insert the documents into the feeder. The display will say COVERPAGE ON for one second.
2. Enter the fax number.
3. Press **Start**.
Your MFC will begin transmitting the Cover Page and original document.

THE DISPLAY WILL SHOW:

09/12/1998 15:25
ONLINE

COVERPAGE ON
SCAN READY

FAX: NO. & START
SCAN READY

COPY: PRESS COPY
SCAN READY

NJ OFFICE
ONLINE

SEND COVERPAGE
ONLINE

SENDING P.01
ONLINE

Sending FAX

Sending a Cover Page Temporarily

KEYSTOPRESS

1. Insert the documents into the feeder.
2. Press **Coverpage**.

THE DISPLAY WILL SHOW:

09/12/1998 15:25
ONLINE

FAX: NO. & START
SCAN READY

COPY: PRESS COPY
SCAN READY

1.COMMENT OFF
ONLINE

SELECT { } & SET
ONLINE

SENDING FAXES

FAX TRANSMISSION OPTIONS

3 Press Z (left arrow) or X (right arrow) to select the comment you want.

Example: **2.PLEASE CALL.**

2 . PLEASE CALL
ONLINE

4 Press **Set**.

TOTAL PAGES? : 00
ONLINE

5 Enter the number of pages you are sending. (Enter 00 to leave the number of pages blank.)

TOTAL PAGES? : 02
ONLINE

6 Wait for two seconds.

ENTER FAX NO.
ONLINE

PRESS START KEY
ONLINE

7 Enter the fax number.

NJ OFFICE
ONLINE

8 Press **Start**.

SEND COVERPAGE
ONLINE

SENDING P.01
ONLINE

Helpful Hints

- Even if the Cover Page ON/OFF setting is ON, you can avoid sending an automatic Cover Page by pressing **Coverpage** once to turn off the Cover Page for that transmission.
- If you want the total number of pages sent to be printed on the cover page, press **Coverpage** once to set the COVERPAGE ON/OFF option to OFF. (See page 5-20~21.) Then press **Coverpage** once again and enter the number of pages.

Call Reservation: Speaking with the Other Party on the External Telephone After Fax Transmission

You can send a fax and then talk to the recipient using the Call Reservation feature. After your MFC prints on the receiving end, the receiving fax machine will ring as if it were receiving a telephone call. If the recipient picks up the handset, your MFC will ring. If you have a telephone plugged in to the EXT. Jack of your MFC, you can pick up your handset, press **Hook** and start a conversation. If you have both Call Reservation and Call Back Message set to ON and the recipient does not pick up the handset when it rings, your MFC will leave a fax message asking the recipient to call you.

FOR YOUR INFORMATION

Using the Call Reservation Function

- There are some fax machines that will not respond to this function.
- When you use auto redialing, you can not use the Call Reservation function, but if Call Back Message is ON, your machine will leave a Call Back Message asking the other party call you.
- You can not use Call Reservation with the Delayed Transmission or with the Polling function.
- **You must register your Station ID number to turn Call Back Message: ON. (See page 3-3~4.)**

Sending FAX

KEYSTOPRESS

1. Insert the documents into the feeder.
2. Press **Function**.
3. Press **1**.

THE DISPLAY WILL SHOW:

09/12/1998 15:25
ONLINE

FAX: NO. & START
SCAN READY

COPY: PRESS COPY
SCAN READY

ENTER NO. & SET

1. TEMP. SETTINGS

SENDING FAXES

FAX TRANSMISSION OPTIONS

4. Press **3**.

3 . CALL RESERVE

CALL RESERVE : OFF

SELECT { } & SET

CALL RESERVE : ON

5. Press Z (left arrow) or X (right arrow) to select Call Reservation ON or OFF.
Example: **Call Reserve ON**.

6. Press **Set**.

CALL BACK : OFF

SELECT { } & SET

CALL BACK : ON

7. Press Z (left arrow) or X (right arrow) to select Call Back Message ON or OFF.
Example: **Call Back Message ON**.

8. Press **Set**.

3 . CALL RESERVE

9. Press **Stop**.

ENTER FAX NO.
ONLINE

PRESS START KEY
ONLINE

10. Enter the fax number.

NJ OFFICE
ONLINE

11. Press **Start**.

DIALING
ONLINE

12. Pick up your handset of the external telephone and press **Hook** if it rings.

```

09/12/1998 15:25

=== CALL BACK MESSAGE ===

TO:      NJ OFFICE
FAX:    14155551212

FROM:    BROTHER

PLEASE CALL AT [TEL] 4155554445
              [FAX] 4155554444
    
```


Printing the Call Back Message

You can print a sample Call Back Message to check the format .

KEYSTOPRESS

1. Press **Function** .
2. Press **3** .
3. Press **5** .
4. Press **Start** .

THE DISPLAY WILL SHOW:

09/12/1998 15:25
ONLINE

ENTER NO. & SET

3.PRINT REPORTS

5.CALL BACK MSG

PRESS START KEY

PRINTING

ECM (Error Correction Mode)

The Error Correction Mode (ECM) is a way for the MFC to check the integrity of a fax transmission while it is in progress. ECM transmissions are possible only between machines that both have the ECM feature. If they do, you may send and receive fax messages that are continuously checked for their integrity.

Sufficient memory must be available in your MFC for this feature to work.

Error Retransmission

Error Retransmission is helpful when the receiving machine does not have ECM. Even though your MFC can not check the integrity of the message, it will send the affected page(s) again after occurrences of accidental noise have caused an error.

This feature is available only for memory transmission using Super Quick-Scan (see page 5-8~13).

SENDING FAXES

FAX TRANSMISSION OPTIONS

KEYSTOPRESS

1. Press **Function**.
2. Press **5**.
3. Press **4**.
4. Press **Z** (left arrow) or **X** (right arrow) to choose either **ON** or **OFF**.
Example: **ON**.
5. Press **Set**.
6. Press **Stop** to exit.

THE DISPLAY WILL SHOW:

09/12/1998 15:25
ONLINE

ENTER NO. & SET

5.USER OPTIONS

4.ERROR RE-TX

ERROR RE-TX:OFF

SELECT { } & SET

ERROR RE-TX:ON

4.ERROR RE-TX

Next-FAX Reservation

You can use Next-FAX Reservation for sending a fax when the MFC is busy receiving or transmitting from memory. This function saves you from having to wait until the incoming fax has printed or the fax stored in memory has finished transmission. To use the Next-FAX Reservation feature, insert the documents as you normally would and follow a few other simple steps.

FOR YOUR INFORMATION

- Next-FAX Reservation can not be used when there are documents in the document feeder awaiting Delayed Transmission or Polled Waiting or when the Interrupt function is in use.
- When you are making a call using Next-FAX Reservation, you can dial manually, or use One-Touch, Speed-Dial, Redial, or Chain dialing. However, when you use One-Touch dialing, the screen will display only the number of the One-Touch number you are using, such as "*01" and not the name of the person you are calling. Similarly, if you use Speed-Dialing, the screen will show you only the Speed-Dial number, such as "#02".
- You can set the resolution for Next-FAX Reservation by pressing Resolution, but you can not change any settings using the **Function** key. (For example, you can not change a setting for multiple resolution transmission by using function mode.)
- To cancel a Next-FAX Reservation, remove the documents and press Stop.

KEYSTOPRESS

1. Insert the documents into the feeder.
2. Enter a fax number.
3. Press **Start**.
4. Press **Set**.

THE DISPLAY WILL SHOW:

RECEIVING P.01
ONLINE

ENTER No & START
SCAN READY

1415551234
ONLINE

PRESS SET
ONLINE

NEXT-FAX RESERVD
ONLINE

09/12/1998 15:25
ONLINE

DIALING
ONLINE

Sending FAX



- If a One-Touch or Speed-Dial number is selected that is not stored, a warning beep will sound.













RECEIVING FAXES AND OTHER CALLS

BASIC SETUP TO RECEIVE FAXES

6. RECEIVING FAXES AND OTHER CALLS**A) BASIC SETUP TO RECEIVE FAXES*****Selecting an Answer Mode***

There are four different answer modes for your MFC. You may choose the mode that best suits your needs by pressing the **Mode** button repeatedly until you have changed the Fax and F/T lights to the setting you want to use. For more detailed information about a particular mode, please refer to the page number in the right column.

Note: the lighted indicators mean  = not selected  = is selected and lit

Mode	Light	How it works	When to use it	Page #
1 Manual (manual receive) (If you have an external telephone plugged into the EXT. Jack)	 Fax  TAD  F/T	You control the phone line and must answer every call yourself.	Use this mode when you are using a computer modem on the same line or if you receive very few fax messages. You can also use this mode with Distinctive Ringing.	6-2
2 Fax (automatic receive)	 Fax  TAD  F/T	The MFC automatically answers every call as a fax.	For dedicated fax lines. You can not receive a voice call but you can call out.	6-2
3 F/T (Fax/Telephone) (If you have an external telephone plugged into the EXT. Jack)	 Fax  TAD  F/T	The MFC controls the line and automatically answers every call. If the call is a fax it will receive the fax. If the call is not a fax it will ring (double ring) for you to pick up the call by using the external telephone.	This mode is for when you are not using an answering machine. You can not have an answering machine on the same line, even if it is on a separate jack on the same line. You can not use the telephone company's Voice Mail in this mode.	6-3
4 TAD (External Telephone Answering Device or machine plugged into the EXT. Jack)	 Fax  TAD  F/T	The answering machine controls the phone line and answers every call. As soon as the TAD answers, the MFC listens for fax tones. If it hears then it will take over the call and receive the fax message.	You must have an external answering machine plugged into the MFC for this mode to work properly. It will not work with the telephone company's Voice Mail services. The TAD mode can be set so you have time to answer calls before the TAD picks up. You do not have to change modes when you are in or out.	6-15

- *NOTE:
- In TAD mode the Ring Delay and F/T Ring Time settings on the MFC do not apply! The number of rings is set on the external answering machine, which overrides the settings on the MFC.
 - In F/T mode you must set the Ring Delay and F/T Ring Time. If you have extension phones on the line, set the Ring Delay to 4 rings.

Manual Reception (Manual Mode) (Only with an External Telephone Connected to the MFC)

When you set the Answer Mode to manual, you must answer each incoming call yourself. Here is what you should do when using Manual Mode:

If You Get a...	Then You Should...
1. Regular phone call	Talk as you normally would through the handset of the external telephone.
2. Phone call and request to send a fax	Press Start or press your Remote Activation Code (*51) on the external telephone when you finish talking, replace the handset. Note: The sender must also press Start .
3. Faxtone...	Press Start or press your Remote Activation Code (*51) on the external telephone, and replace the handset.

Automatic Fax Only Reception (Fax Mode)

You can automatically receive all your faxes in Automatic Fax Reception mode (Fax light is ON). Select this mode by pressing **Mode**.

Setting the Ring Delay

You can set the number of rings before the MFC will answer the line.

KEYSTOPRESS	THE DISPLAY WILL SHOW:
1. Press Function .	09/12/1998 15:25 ONLINE
2. Press 6 .	ENTER NO. & SET 6.TEL OPTIONS
3. Press 2 .	2.RING DELAY RING DELAY:02
	SELECT { } & SET

Receive FAX

RECEIVING FAXES AND OTHER CALLS

BASIC SETUP TO RECEIVE FAXES

- Press Z (left arrow) or X (right arrow) repeatedly until you find the number of rings you want.
Example: **00**.

RING DELAY : 00

When you set 00, you can receive your incoming faxes without any rings.

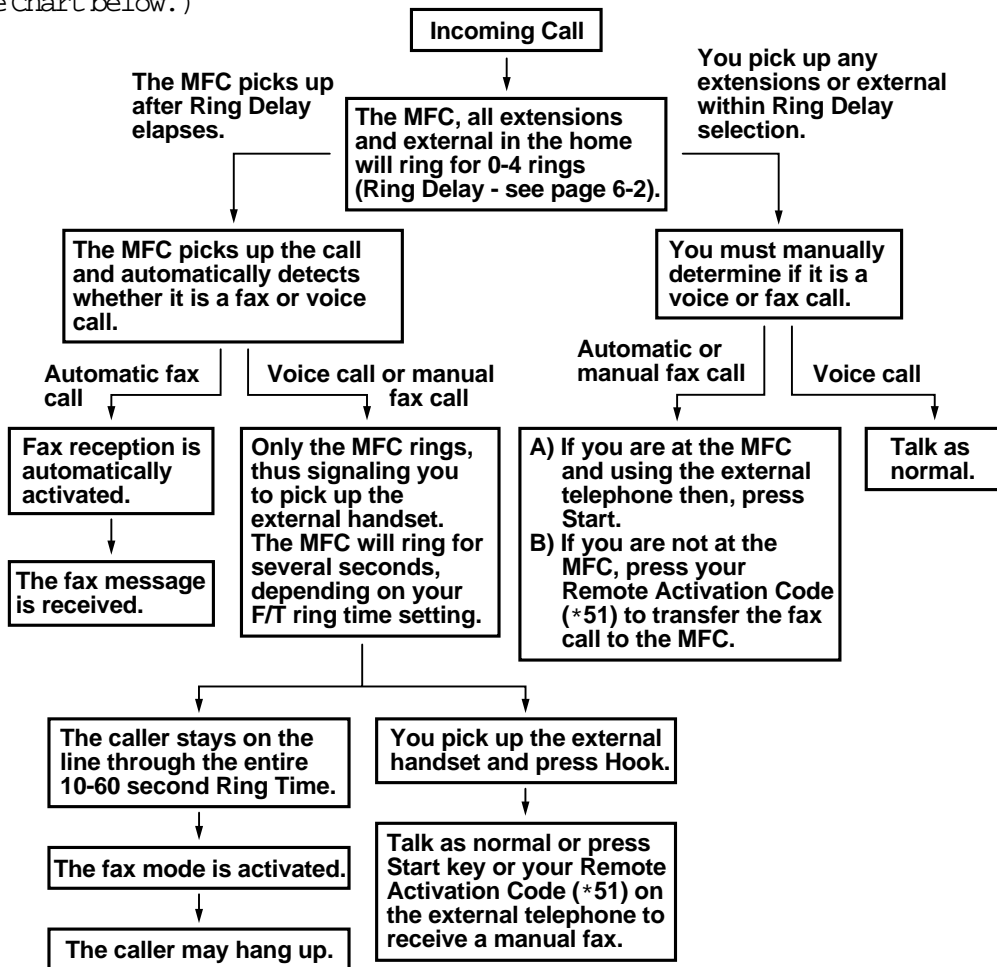
- Press **Set**.

2 . RING DELAY

- Press **Stop** to exit.

The F/T Switch (Fax/Telephone Mode) (Only with an External Telephone Connected to the MFC)

When you share one line for your telephone and fax application, in the F/T switch mode, the MFC can determine whether an incoming call is a fax or a telephone call. (See Chart below.)



NOTE : The F/T ringing will continue for 10-60 seconds even if the caller hangs up during F/T ring time.

Setting the F/T Ring Time

You can specify the maximum time you want the MFC to ring (double ring) to notify you after it has answered a telephone call. There are four predefined settings: 10, 20, 30, or 60 seconds. During this time, only the MFC will ring. No other phones on the same line will ring.

KEYSTOPRESS	THE DISPLAY WILL SHOW:
1. Press Function .	09/12/1998 15:25 ONLINE
2. Press 6 .	ENTER NO. & SET
3. Press 4 .	6.TEL OPTIONS
	4.F/T RING TIME
	RING TIME: 20 SEC
	SELECT { } & SET
4. Press Z (left arrow) or X(right arrow) repeatedly until you find the setting you want. Example: 10SEC .	RING TIME: 10 SEC
5. Press Set .	4.F/T RING TIME
6. Press Stop to exit.	

Receive FAX

Smoothing

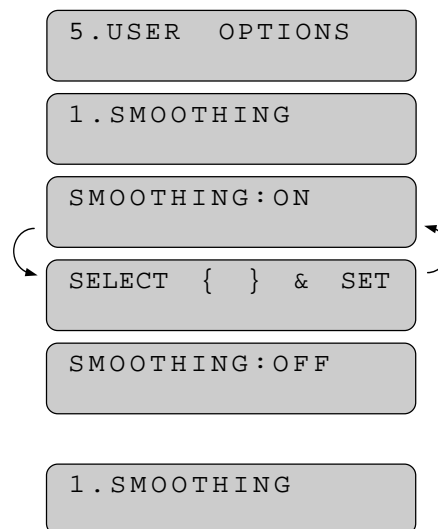
The smoothing feature enhances the appearance of incoming faxes by making the lines smooth and takes no additional time. This function does not apply to outgoing faxes, or to lists or reports you print. The initial setting is ON.

KEYSTOPRESS	THE DISPLAY WILL SHOW:
1. Press Function .	09/12/1998 15:25 ONLINE
	ENTER NO. & SET

RECEIVING FAXES AND OTHER CALLS

BASIC SETUP TO RECEIVE FAXES

2. Press **5**.
3. Press **1**.
4. Press Z (left arrow) or X (right arrow) to choose ON or OFF.
Example: **OFF**.
5. Press **Set**.
6. Press **Stop** to exit.



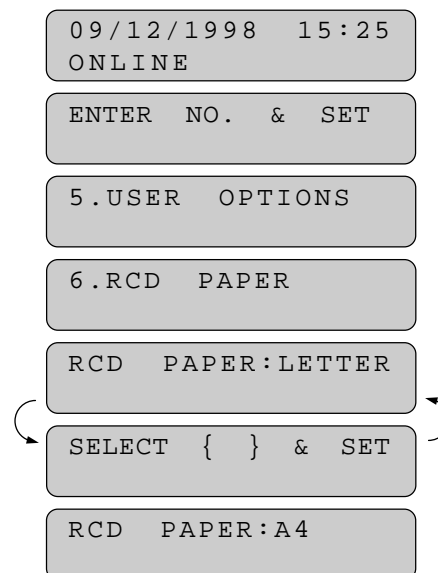
Setting the Size of the Paper

There are three different settings for the size of the (printing) paper. The MFC automatically will reduce and print the incoming data according to the setting of the paper size in the cassette.

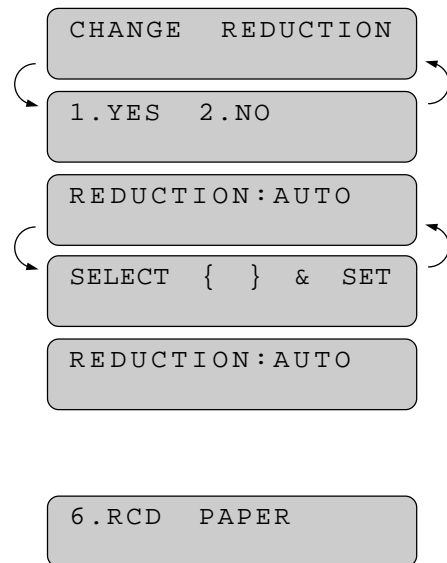
KEYSTOPRESS

1. Press **Function**.
2. Press **5**.
3. Press **6**.
4. Press Z (left arrow) or X (right arrow) to select either LETTER, LEGAL or A4.
Example: **A4**.

THE DISPLAY WILL SHOW:



5. Press **Set**.
6. Press **1** to go to the REDUCTION setting in Function menu 5-5. (See page 6-7~8.)
7. Press Z (left arrow) or X (right arrow) to select either AUTO, 100%, 93%, 87%, or 75%.
Example: **AUTO**.
8. Press **Set**.
9. Press **Stop** to exit.



NOTICE

Regardless of the actual size of the paper, the MFC will calculate the reduction ratio by this setting. So when you change the paper size, you must also change this setting to get the correct reduction. Your MFC can be set to receive incoming fax documents on only letter, legal or A4 paper.

Printing a Reduced Size Copy of the Incoming Document

You can avoid separating data even if the document is longer than the paper in your cassette by using this function to print a reduction of the document. There are two types of reduction: Auto Reduction and Fixed Reduction.

Auto Reduction

Regardless of the original size of the incoming document, it will be reduced so that it fits on one page of paper. The MFC will automatically calculate the reduction ratio by taking into account the size of the incoming document and the size of the paper you selected in Function menu 5-6. (See page 6-5.)

RECEIVING FAXES AND OTHER CALLS

BASIC SETUP TO RECEIVE FAXES

Using Fixed Reduction Ratios

You can choose to have incoming documents reduced at a fixed reduction ratio, regardless of the size of the paper. The reduction ratio can be selected from among four choices: 100%, 93%, 87%, or 75%.

KEYSTOPRESS

1. Press **Function**.
2. Press **5**.
3. Press **5**.
4. Press **Z** (left arrow) or **X** (right arrow) to select the reduction ratio you want :
 - If you want Auto Reduction, choose "AUTO".
 - Choose 93%, 87%, or 75% if you want Fixed Reduction.
 - Example: **93%**.
 - Choose 100% if you want to record the same size.
5. Press **Set**.
6. Press **Stop** to exit.

THE DISPLAY WILL SHOW:

09/12/1998 15:25
ONLINE

ENTER NO. & SET

5.USER OPTIONS

5.REDUCTION

REDUCTION:AUTO

SELECT { } & SET

REDUCTION: 93%

5.REDUCTION

NOTICE

- You can use Auto Reduction to reduce incoming documents to fit on one page of paper, only as long as the original document is not longer than legal size. If the original is longer than legal size, the data will not be reduced (see For Your Information below) and will carry over to print on a second page.
- When you use Auto Reduction and you receive an incoming document that is smaller than your paper, no reduction will take place.
- When selecting Fixed Reduction, you must consider the size of the paper as registered in Function menu 5-6. (See page 6-5.) If you selected letter size, you can choose a reduction of 93%, 87%, or 75%. If you selected A4 size, you can choose a reduction of only 93% or 87%. And if you selected legal size, you can choose only 93%.

FOR YOUR INFORMATION

Selecting the Ratios of Fixed Reduction

Other party sends you a document the size of...	Your paper size is:	Recommended Reduction Ratio is:
Letter document (8.5"x11") (mostly Domestic communications)	Letter	93%
	A4, Legal	100%
A4 document (8.2"x11.6") (mostly International communications)	Letter	87%
	A4	93%
	Legal	100%
Legal documents (8.5"x14")	Letter	75%
	Legal	93%

Reception into Memory (Out of Paper Reception)

If the multipurpose sheet feeder is empty, the LCD will display the message CHECK PAPER. Add more paper.

Your MFC automatically will store incoming faxes in its memory if it runs out of paper. The contents of the memory will be printed automatically when you replace the paper. The memory will not be lost as long as you do not turn off the MFC or disconnect the power.

Receive FAX

RECEIVING FAXES AND OTHER CALLS

BASIC SETUP TO RECEIVE FAXES

Setting the Print Density

You can set print conditions with the following steps. Press Z (left arrow) to make the print lighter and X (right arrow) to make the print darker. If the print is still too light or too dark, you can adjust it further by turning the Print Density Dial located in the right corner under the top cover. (Remove the drum unit to find the dial. See page 14-5 for more information.)

KEYSTOPRESS	THE DISPLAY WILL SHOW:
1. Press Function .	09/12/1998 15:25 ONLINE
2. Press 5 .	ENTER NO. & SET
3. Press 9 . The display will alternate messages.	5.USER OPTIONS
4. Use Z (left arrow) or X (right arrow) to change the settings.	9.PRINT DENSITY
5. Press Set .	-■■■■■■■■□□□□□□+ SELECT { } & SET
6. Press Stop to exit.	9.PRINT DENSITY

Toner Save Function

This function lets you extend the life of the toner by conserving its use. When the Toner Save is set to ON, the print appears somewhat lighter. This feature is also available when copying. The default setting is OFF.

KEYSTOPRESS	THE DISPLAY WILL SHOW:
1. Press Function .	09/12/1998 15:25 ONLINE
2. Press 5 .	ENTER NO. & SET
	5.USER OPTIONS

3. Press **7**.

7 . TONER SAVE

4. Press **Z** (left arrow) or **X** (right arrow) to select either ON or OFF.
Example: **ON**.

TONER SAVE : OFF

SELECT { } & SET

TONER SAVE : ON

5. Press **Set**.

7 . TONER SAVE

6. Press **Stop** to exit.

Speaker Volume

There are three settings available for the Speaker Volume, OFF, LOW, or HIGH. This setting controls the loudness of the MFC's one-way speaker, which is connected to the phone line. The initial setting is LOW.

KEYSTO PRESS

THE DISPLAY WILL SHOW:

1. Press **Function**.

09/12/1998 15:25
ONLINE

2. Press **6**.

ENTER NO. & SET

3. Press **3**.

6 . TEL OPTIONS

4. Press **Z** (left arrow) or **X** (right arrow) to choose a setting either OFF, LOW, or HIGH.
Example: **HIGH**.

3 . SPEAKER VOLUME

SPEAKER : LOW

SELECT { } & SET

SPEAKER : HIGH

5. Press **Set**.

3 . SPEAKER VOLUME

6. Press **Stop** to exit.

Receive FAX

RECEIVING FAXES AND OTHER CALLS

BASIC SETUP TO RECEIVE FAXES

Ring Volume

You can set the ring volume to either OFF, LOW or HIGH. The initial setting is HIGH. Even if you select OFF, the ring volume will be LOW for F/T ringing, Call Reservation ringing and when the Distinctive Ringing mode is SET.

KEYSTOPRESS

1. Press **Function**.
2. Press **6**.
3. Press **5**.
4. Press Z (left arrow) or X (right arrow) to choose either OFF, LOW, or HIGH.
Example: **LOW**.
5. Press **Set**.
6. Press **Stop** to exit.

THE DISPLAY WILL SHOW:

09/12/1998 15:25
ONLINE

ENTER NO. & SET

6.TEL OPTIONS

5.RING VOLUME

RING VOLUME:HIGH

SELECT { } & SET

RING VOLUME:LOW

5.RING VOLUME

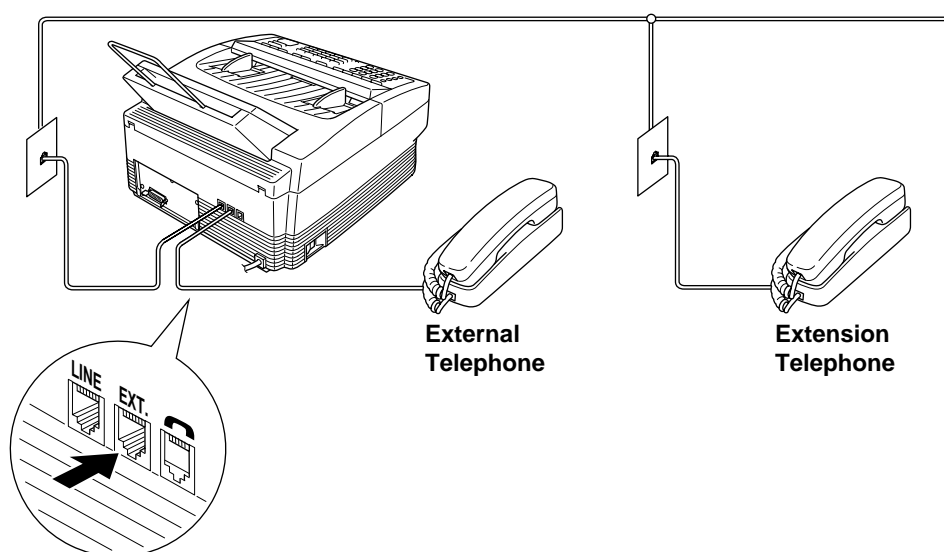
B) REMOTE ACTIVATION***What is Remote Activation?***

If you answer a call that is a fax message, you can use the Remote Activation Code to make your MFC take over the call. If your MFC answers a telephone call that is for you, you can use the Remote Deactivation Code (#51) to pick up the call at an extension phone. You must use a touch tone phone.

FOR YOUR INFORMATION***Connecting an External or Extension Telephone***

You may connect an external telephone to your MFC, as shown below. Use the "EXT." jack on your machine.

Alternatively, you may wish to use this "EXT." jack to connect a telephone answering device (TAD). An extension phone is a telephone that is plugged into a separate wall jack on the same line.

**Receive FAX**

RECEIVING FAXES AND OTHER CALLS

REMOTE ACTIVATION

Using Remote Codes

The Remote Activation Code (*51) is used in F/T and TAD modes. The Deactivation Code (#51) is used only in F/T mode.

Using the Activation Code

When you are at the MFC, you will probably answer incoming calls before your MFC or answering machine is programmed to pick up. If you answer a call and no one seems to be on the line, assume it is a fax message. Do not hang up. You must activate your MFC to take over the call first. If you are on an extension/external phone, press *51 and wait for your MFC to respond before you hang up. After 3 seconds you will hear receiving tones (chirps) through the handset of extension phone. Then hang up. You can repeat the code as many times as needed. Your MFC will take over the call and print the fax message. If your caller wants to talk before sending the fax, you can have a conversation first and then activate your MFC with the code.

The Remote Activation Code can also be used by your callers. When you are using a TAD, your outgoing message (OGM) should end with the statement "to send a fax, press *51". (See the section on Connecting a Telephone Answering Device for more information.)

Using the Deactivation Code

When your MFC is in F/T mode, sometimes it will answer a call that is not fax calling tones (a telephone call or manual fax). It will respond with a doublering (short, short) to alert you to take over. Because the MFC has already answered the call, only the MFC will ring, extension phones are no longer connected to the call. You can take over the call at an extension phone using the Deactivation Code (#51).

Pick up the handset on another telephone and **press #51 quickly during the silence between the double ring pattern.** When the MFC hears the code it will stop ringing and let you speak with the caller. If no one is on the line or someone is trying to send you a manual fax, send the call back to the MFC (*51).

Making the Remote Codes Easier to Use

You can change the codes at any time. It may be easier for you and your callers to press the same key three times (Example: *** and ###). Although you can change the codes to any numbers you want, try to avoid using digits for the Activation Code. The Remote Activation Code can not match any number you dial. If you try to dial a phone number that includes the Activation Code, your MFC will go into receiving mode.

Troubleshooting

Sometimes other equipment on your phone line reserves a key that is in the Activation or Deactivation code. (Some answering machines reserve the "*" key.) If the code you use to retrieve messages from your answering machine causes the line to be disconnected, try changing the Remote Codes. Change *51 to ### and #51 to 999. The Remote Activation and Deactivation Codes may not work with some telephone systems or telephone sets.

NOTE: If you accidentally pick up the extension phone when a fax message is being received, you may disrupt the transmission or render some portions unreadable.

Changing and Registering Remote Codes

KEYSTO PRESS	THE DISPLAY WILL SHOW:
1. Press Function .	09/12/1998 15:25 ONLINE
2. Press 7 .	ENTER NO. & SET
3. Press 5 .	7.SETUP SYSTEM
	5.REMOTE CODE
	REMOTE ACT.:ON
4. Press Z (left arrow) or X (right arrow) to choose ON or OFF. Example: ON .	SELECT { } & SET
5. Press Set .	REMOTE ACT.:ON

Receive FAX

RECEIVING FAXES AND OTHER CALLS

REMOTE ACTIVATION

6. Enter new remote code to activate.
(Factory setting is *51.) Then press **Set**.

ACT.CODE : *51

7. Enter new remote code to deactivate.
(Factory setting is #51.)

DEACT.CODE : #51

8. Press **Set**.

5 : REMOTE CODE

9. Press **Stop** to exit.

C) CONNECTING TO A TELEPHONE ANSWERING DEVICE (TAD)

How to Use an External TAD with the MFC

When you have a Telephone Answering Device on the fax phone line, the TAD will answer all the incoming calls. Your Brother MFC will listen in on the line for fax CNG tones. If it hears them, it will take over the call and receive the fax message. If it does not hear fax tones, it will let the TAD continue playing the outgoing message so the caller can leave a voice message.

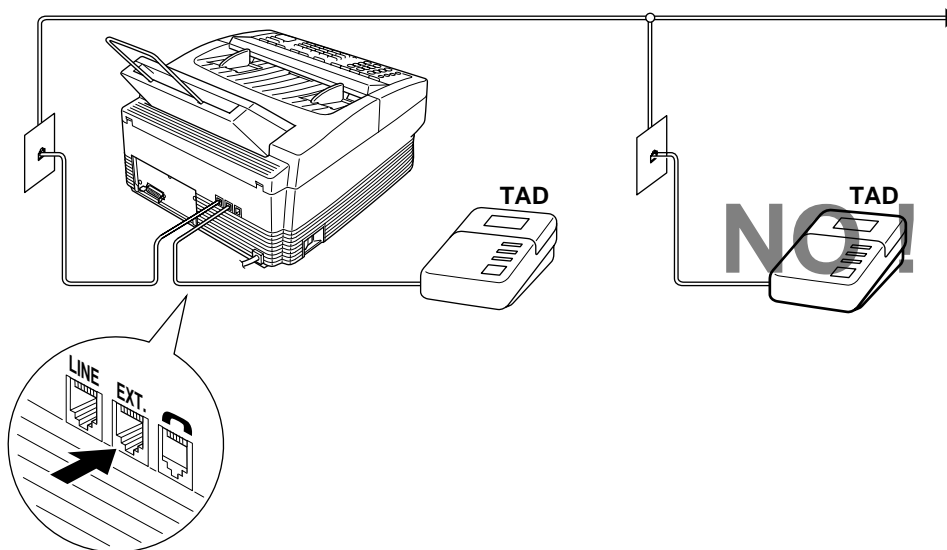
The TAD must answer within 4 rings. The MFC can not hear the CNG calling tones until the TAD answers the call. When the Ring Delay is set for 4 rings, only 8-10 seconds of CNG calling tones are left for the "handshake". So you must strictly follow the instructions for recording the OGM.

You must erase the incoming messages frequently on your TAD. When the TAD's memory is full it will not answer any incoming calls (fax or voice).

FOR YOUR INFORMATION

Connecting an External TAD to the MFC

You may connect an external TAD to your MFC, as shown below. Use the "EXT." jack on your machine.



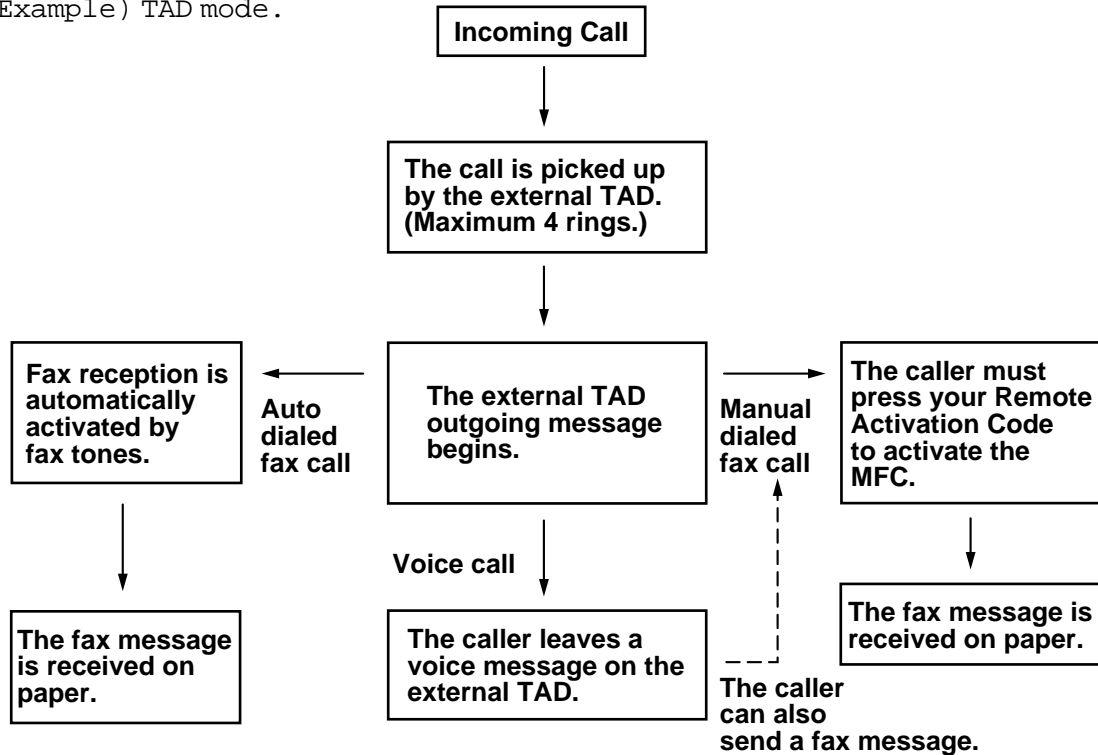
-Do not connect a TAD elsewhere on the same phone line. This will cause problems because your MFC and TAD will both try to control the line.

RECEIVING FAXES AND OTHER CALLS

CONNECTING TO A TELEPHONE ANSWERING DEVICE (TAD)

Flowchart of External TAD Reception

Example) TAD mode.

*Hookup*

There is only one way you can hook up a Telephone Answering Device (TAD) on the fax phone line. The TAD must be plugged into the back of the MFC in the jack labeled EXT. Your MFC can not work properly if you plug the TAD into a wall jack. Follow these steps:

1. Plug the telephone line cord from the wall jack into the back of the MFC in the jack labeled LINE.
2. Plug the telephone line cord from your TAD into the back of the MFC in the jack labeled EXT. (Double check that the telephone line cord comes from the jack in the TAD for telephone line and not for telephone set.)
3. Put your MFC in TAD mode by turning both the Fax and F/T lights on.
4. Set your TAD to 4 rings or less. (The MFC's Ring Delay setting does not apply).
5. Turn the TAD's Answer mode to ON.
6. Record the OGM (outgoing message) on your TAD as explained on the next page.

Recording the TAD's Outgoing Message (OGM)

The TAD's outgoing message is important because it must be set up to handle two kinds of fax receptions: automatic and manual. Timing is important.

- 1 Record 5 seconds of silence as the beginning of your message. (Your MFC will be able to hear the fax calling tones, of automatic fax transmissions, before they stop.)
- 2 Limit your speaking to 20 seconds.
- 3 End your 20 second message by giving your Remote Activation Code for people sending manual faxes:
"After the beep, leave a message or send a fax by pressing *51."

NOTE: Do not assume that most callers send faxes automatically. Many people do not realize they are not sending fax tones when they lift the handset or press the Hook key. Also, some machines may not send fax tones.

D) DISTINCTIVE RINGING (WITH AN EXTERNAL TELEPHONE CONNECTED TO THE MFC)

Distinctive Ringing

What Is Distinctive Ringing?

Distinctive ringing is a service offered by the telephone carriers that allows you to have several different numbers on one phone line, so you can have a separate number for your MFC. Each number has its own distinctive ringing pattern. This way, when you get an incoming call, you can identify the number being called by its ring. Your local telephone company can provide more information about this service. The service is usually offered as a monthly charge to your normal telephone bill.

What Is the Advantage of Using the Distinctive Ringing Function?

Using Distinctive Ringing is the most efficient way to receive both fax and telephone calls on the same line. It is much easier for your callers who dial manually. The MFC will answer with receiving tones so they will not have to press an activation code or wait 30 seconds to hear fax tones (F/T mode). And the people who call to talk on your main number, will not have to talk to your MFC. Basically, it gives you two independent numbers without the higher cost of a second line.

Can My MFC Use Distinctive Ringing?

Yes, it has a distinctive ringing function that allows you to register the distinctive ringing pattern of an additional phone number on the line. The number you register must be the number you want to use as your dedicated fax number. Once you register the ringing pattern, the MFC will be able to identify its own incoming calls and automatically receive faxes at that number. You can register only one ringing pattern. There are some ringing patterns that can not be registered.

RECEIVING FAXES AND OTHER CALLS

DISTINCTIVE RINGING (WITH AN EXTERNAL TELEPHONE CONNECTED TO THE MFC)

Can I Change the Setting Later?

Yes, you can change or cancel the distinctive ringing setting at any time. You can switch it OFF temporarily and then turn it back ON. When you move or get a new fax number, change the distinctive ringing mode to SET so you can register the new number.

How Will the MFC Treat All Other Numbers?

As long as the MFC is set to **Manual** mode and you have registered its distinctive ringing number, **the MFC will answer only the registered number**. When a call comes in to your main number (or additional distinctive ringing numbers), all the phones will ring until you or an answering machine pick up the call. (See the chart on page 6-20.)

If you want the MFC to allow a telephone answering device (TAD) to answer only the main number(s), you must leave the MFC in **Manual** mode. You can plug the telephone answering device into either the EXT jack of the MFC or into a separate phone jack. If the TAD is in the EXT jack, you will not hear the first two rings on the TAD. The TAD must be set to its maximum number of rings (at least 4 ring cycles). Otherwise, it will answer the registered distinctive ringing number before the MFC has time to recognize the ringing pattern.

If you change the answer mode on the MFC to Fax or F/T, that setting will override the Distinctive Ringing setup. **In Fax or F/T modes, your MFC will answer all the phone numbers (including its own ring pattern).**

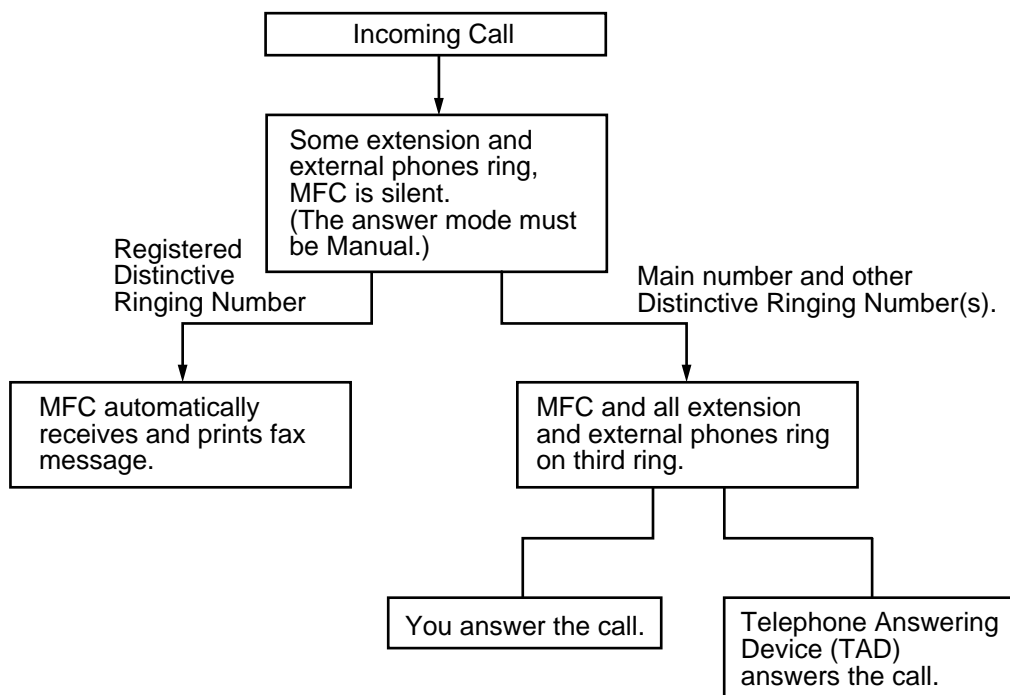
External Telephone Answering Device (TAD) Answers Other Number(s) on the Line:

An external telephone answering device (TAD) can be set up to work with the Distinctive Ringing function. The external TAD must be set to its maximum number of rings (at least 4 ring patterns). Otherwise, it will answer the registered fax number before the MFC has time to recognize the ringing pattern. The external TAD's OGM (outgoing message) will answer your main number(s) if you do either #1 or #2 as follows:

1. Plug the external TAD into the EXT jack of the MFC (you will not hear the first two rings on the MFC). Put your MFC in **Manual** mode (Fax and F/T lights off).
2. Plug the external TAD into another phone jack and put the MFC in **Manual** mode (Fax and F/T lights turned off).

How Does the Distinctive Ringing Function Work?

Your telephone number will have the standard ring pattern of long long, while the new number could have a ring pattern of short short, long short, etc. When Distinctive Ringing is ON, you will not hear the first two rings of all incoming calls on the MFC. Extension phones may ring as usual. If the MFC recognizes the ring pattern, all ringing will stop and the MFC will answer and automatically receive the fax message. Otherwise, you will hear the extension phones and the MFC continue to ring. The MFC always listens to at least two ring patterns before it answers, so do not pick up the phone during that time. You will quickly learn to recognize the ring pattern for faxes, so you will not be tempted to answer that number. Either you or a telephone answering device can answer the main number(s).

Flowchart of an Incoming Call

Receive FAX

* The MFC always listens to at least two ring patterns before it answers, so do not pick up the phone during that time.

Which Phone Number Should I Register?

It is a good idea to keep your old number for its original purpose and to register the new number as your fax number. Remember to give the new fax number to your customers and colleagues.

RECEIVING FAXES AND OTHER CALLS

DISTINCTIVE RINGING (WITH AN EXTERNAL TELEPHONE CONNECTED TO THE MFC)

What Must I Do to Set Up Distinctive Ringing?

To use the Distinctive Ringing feature you must:

1. Get the distinctive ringing service from your telephone carrier.
2. When your distinctive ringing number is available, register it in the function called "Setting the Distinctive Ringing Function".
3. Keep the MFC in **Manual** answer mode (both Fax and F/T lights turned off).

Setting the Distinctive Ringing Function

This function is a one-time procedure to register a distinctive ringing number with your MFC. Your MFC will answer the registered number automatically, simulating Fax mode on a dedicated fax line. You can register only one number. **Do not try to set up this function if you do not have the distinctive ringing service. It may cause your MFC to malfunction.**

This procedure is in two parts: First, you must put the MFC in **SET** mode; **D/R SET MODE** will be on the display screen. Second, you must wait for a friend to call the distinctive ringing number so you can register the ringing pattern. When a call comes in, do not pick up the handset of the external and extension telephones until the MFC's display says **PICK UP TO SET**. Then pick up the handset of the external telephones if you are at the MFC. If the caller dialed your distinctive ringing number, press the **Start** key and check that the display says **REGISTERED** before you hang up. If the caller dialed the other number, press the Stop key and hang up to try again.

Before you begin this function:

1. If your MFC is connected to a telephone answering device or to the telephone company's Voice Mail system, disconnect it before you begin this function.
2. **Have a friend ready to call your distinctive ringing number.**

KEYSTOPRESS

1. Press **Function**.
2. Press **6**.
3. Press **6**.

THE DISPLAY WILL SHOW:

09/12/1998 15:25
ONLINE

ENTER NO. & SET

6.TEL OPTIONS

6.DISTINCTIVE

DISTINCTIVE:OFF

SELECT { } & SET

4. Press Z (left arrow) or X (right arrow) to find the SET mode.

DISTINCTIVE : SET

5. Press **Set**.

6 . DISTINCTIVE

6. Press **Stop**.

D/R SET MODE
ONLINE

NOTE : The display should say **D/R SET MODE**. Also, the answer mode lights will flash. You must now wait for someone to call the distinctive ringing fax number.

7. When the phone rings, listen carefully to check that the ringing pattern is the one you want to register. If it is, wait until the display says **PICKUPTOSET**. Then pick up the external handset.

PICK UP TO SET

START TO SET

STOP TO CANCEL

8. Press **Start** to set. Check that the display says **REGISTERED**. (If the other number was called, press **Stop** to cancel.)

REGISTERED

TELEPHONE / FAX
ONLINE

9. Press **Start** again to receive the incoming fax, or if the call is a voice call, talk into the external handset.

After you complete this one-time setup:

1. The Distinctive Ringing function automatically will be changed from SET to ON. Set the answer mode based upon your needs.
2. Be sure to have a friend call you on both numbers to test that everything is set up correctly.
3. If you do not complete this function by pressing Start key to register a number, your MFC will stay in D/R SET MODE. So, if you decide not to register a number, you must repeat Steps 1~8 and in Step 6 change the mode to OFF.

Receive FAX

How to Turn the Distinctive Ringing Function ON or OFF

The distinctive ringing function is designed to accommodate the distinctive ringing service (a telephone service that provides you with multiple numbers, each with a distinctive ring pattern, on one line). You can change the distinctive ringing function setting to ON or OFF as needed after you have registered the distinctive ringing number in the function called Setting the Distinctive Ringing Function. To change the setting, repeat Steps 1~8 above; Step 4 is where you can select either ON or OFF.

POLLING

7. POLLING

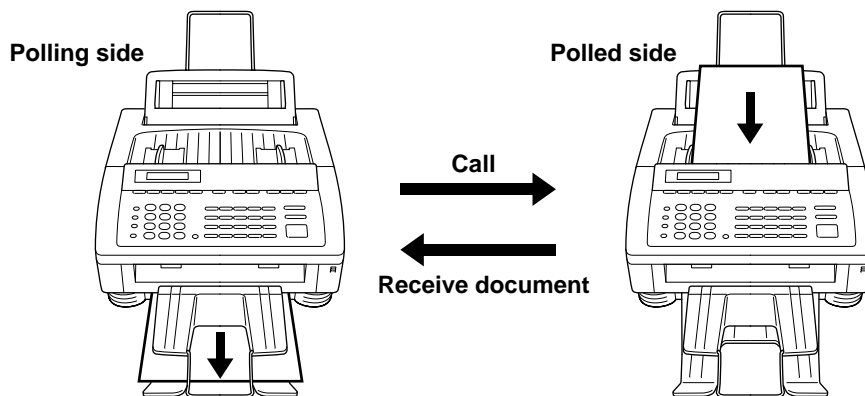
FOR YOUR INFORMATION

What Is Polling?

Polling is the process of **retrieving** faxes from another fax machine. You may use your MFC to "poll" other machines, or you may ask someone to poll your MFC. The party who polls pays for the cost of the call.

How Does It Work?

First all parties set up their fax machines so that they can accommodate polling. Then one party leaves documents in the fax machine so that the other party can call and have the documents sent to them.

***When to Use Polling***

Use polling to control the cost of who pays for sending a fax.

1. If **you** want to pay for the cost of the call: Send faxes to other parties as you normally would, and if another party has documents to send you, ask if you can poll for them.
2. If you want **others** to pay for the cost of the call: Ask them to poll your MFC for documents they want, and have them fax any documents that you want.

* There are some fax machines that will not respond to the polling function.

Helpful Hints

Using Polling Effectively (Examples)

Problem No. 1: You want another party to send you a long fax, but they do not want to pay for the call.

Solution: Ask them to leave the document in their fax machine so you can poll for it.

Problem No. 2: Sales representatives have difficulty sending faxes to the head office's fax machine because it is busy much of the time.

Solution: Head office can poll the sales representatives' fax machines.

Problem No. 3: Because of the time or location, it is cheaper for someone to call you than it is for you to make the call.

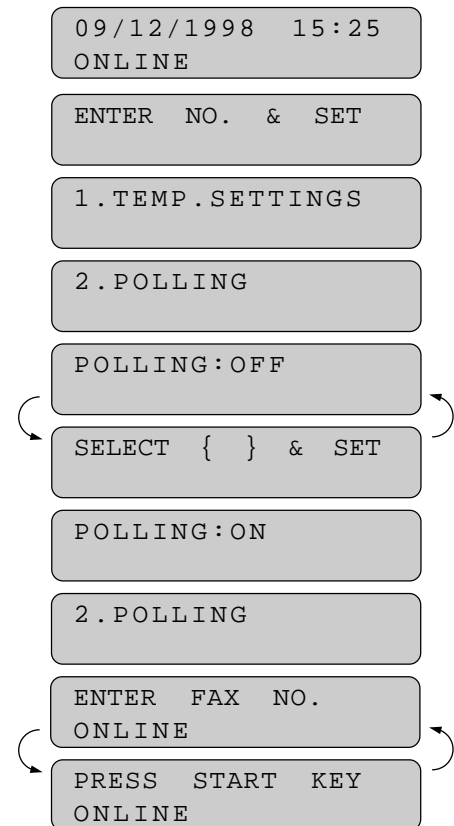
Solution: Ask the other party to poll for the documents and offer to pay for the call at their lower rate.

Polling Another Fax Machine (Calling)

Once you have set up polling, as described below, and the other party has set their fax machine to POLLED WAITING, you can receive their documents automatically.

KEYS TO PRESS

- Make sure there are no documents in your feeder.
1. Press Function.
 2. Press 1.
 3. Press 2.
 4. Wait for two seconds.
 5. Press Z (left arrow) or X (right arrow) to select Polling ON.
 6. Press Set.
 7. Press Stop.

THE DISPLAY WILL SHOW:

FAX Options

POLLING

- 8 Enter the fax number.
Example: **One-Touch dialing**.

NJ OFFICE
ONLINE

- 9 Press Start.

DIALING
ONLINE

RECEIVING P.01
ONLINE

Setting Up Polled Waiting (Being Called)

Polled Waiting is when you place a document in your MFC and set your machine to allow another fax machine to retrieve that document. Your MFC will print a Polled Report after the transmission.

KEYS TO PRESS

- 1 Insert the documents into the feeder.
- 2 Press Function.
- 3 Press 1.
- 4 Press 2.
- 5 Wait for two seconds.
- 6 Press Z (left arrow) or X (right arrow) to select Polling ON.
- 7 Press Set.
- 8 Press Stop.
- 9 Press Start and wait for the polling call to come in.

THE DISPLAY WILL SHOW:

09/12/1998 15:25
ONLINE

FAX: NO. & START
SCAN READY

COPY: PRESS COPY
SCAN READY

ENTER NO. & SET

1. TEMP. SETTINGS

2. POLLING

POLLING: OFF

SELECT { } & SET

POLLING: ON

2. POLLING

PRESS START KEY
ONLINE

POLLED WAITING
ONLINE

Delayed Polling

You can set the time when you want polling to take place. After you select POLLING:ON, press **Set**, then press **1** and use the dial pad to enter the time when you want polling to take place.

KEYS TO PRESS

- Make sure no documents are in the feeder.
1. Press **Function**.
 2. Press **1**.
 3. Press **2**.
 4. Wait for two seconds.
 5. Press **Z** (left arrow) or **X** (right arrow) to select Polling ON.
 6. Press **Set**.
 7. Press **1**.
 8. Enter the time.
Example: **19:45** (7:45P.M.).
 9. Wait for two seconds.
 10. Press **Stop**.
 11. Enter the fax number.
Example: **One-Touch dialing**.
 12. Press **Start**.
The MFC waits until the specified time to call.

THE DISPLAY WILL SHOW:

09/12/1998 15:25
ONLINE

ENTER NO. & SET

1.TEMP.SETTINGS

2.POLLING

POLLING:OFF

SELECT { } & SET

POLLING:ON

2.POLLING

1.TIMER

SET TIME=00:00

SET TIME=19:45

1.TIMER

ENTER FAX NO.
ONLINE

PRESS START KEY
ONLINE

NJ OFFICE
ONLINE

09/12/1998 15:25
ONLINE

POLLING

Setting Up Polled Waiting with Super Quick-Scan

Before pressing **Start**, press **Super Q.Scan** so that you can store your Polled Waiting document in the memory. If you use **Super Q.Scan** to place the Polled Waiting documents into the memory, they will not be erased automatically after they are polled. To erase them you must use the Cancel Job function. (See page 5-14.)

Sequential Polling

This function is the reverse of Broadcasting, in which your MFC sends a document to several destinations. In a sequential polling operation, your MFC will request documents from several fax units in a single operation.

After all the polling operations are finished, a Sequential Polling Report will be printed automatically.

KEYS TO PRESS	THE DISPLAY WILL SHOW:
1. Make sure there are no documents in the feeder.	09/12/1998 15:25 ONLINE
2. Press Function .	ENTER NO. & SET
3. Press 1.	1. TEMP. SETTINGS
4. Press 2.	2. POLLING
5. Press Z (left arrow) or X (right arrow) to select Polling ON.	POLLING: OFF
6. Press Set.	SELECT { } & SET
7. Press Stop.	POLLING: ON
	2. POLLING
	ENTER FAX NO. ONLINE
	PRESS START KEY ONLINE

POLLING

- Specify the destination of fax machines, that you wish to poll by using One-Touch, Speed-Dial, or Group keys.

Example: **Group key**.

- Press Start. Your MFC polls each number or group member in turn for a document.

ALL BROTHER
ONLINE

DIALING
ONLINE

REMOTE FAX OPTIONS

8 REMOTE FAX OPTIONS

Since the MFC can store incoming data in memory as well as print it, you can use the convenient FAX Forwarding, Paging and Remote Retrieval functions.

Setting the Fax Storage

Set this function to ON if you want the incoming data to be stored in the memory as well as printed. When data is stored in the memory, you can use the Fax Forwarding, Paging, and Remote Retrieval functions. It is a good idea to turn the Fax Storage function ON when you go out. The initial setting is OFF.

KEYS TO PRESS

1. Press **Function**.
2. Press **8**.
3. Press **1**.
4. Press **Z** (left arrow) or **X** (right arrow) to select ON or OFF.
Example: **ON**.
5. Press **Set**.
6. Press **Stop** to exit.

THE DISPLAY WILL SHOW:

09/12/1998 15:25
ONLINE

ENTER NO. & SET

8.REMOTE FAX OPT

1.FAX STORAGE

FAX STORAGE:OFF

SELECT { } & SET

FAX STORAGE:ON

1.FAX STORAGE

REMOTE FAX OPTIONS

FOR YOUR INFORMATION

- When you have FAX STORAGE:ON, your incoming faxes will be stored in the memory and the LCD will show the number of incoming calls:

FAX IN MEMORY:01
ONLINE

- When you want to change the Fax Storage setting from ON to OFF and fax data is still in the memory, you will get the following message after you select OFF:

ERASE ALL FAX?
1.YES 2.NO

If you select 1, you will erase all the fax data from the memory and the function will be set to OFF. If you press 2, the data will not be erased, and the setting will remain ON.

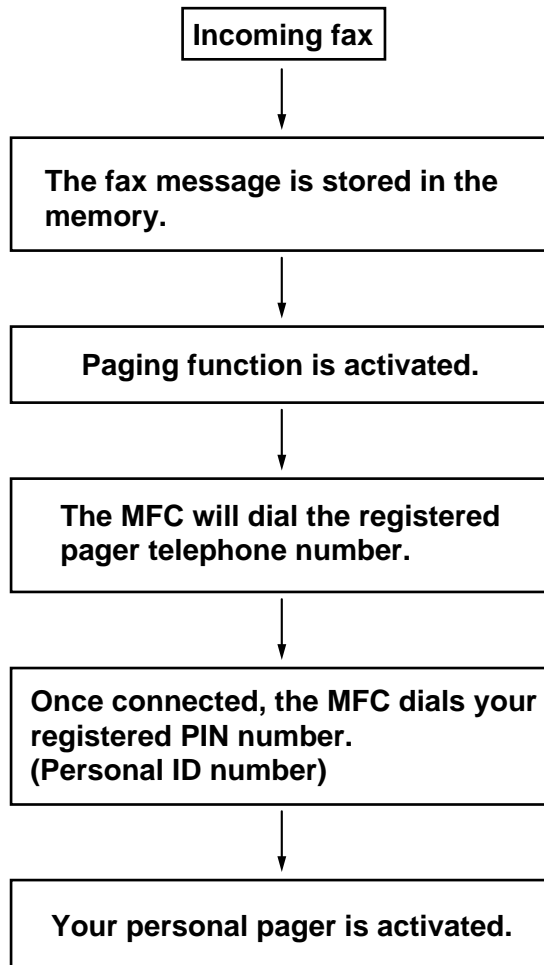
Whenever your fax prints a document for "Back-Up Printing", it will be printed in standard resolution regardless of the resolution in which it was received.

REMOTE FAX OPTIONS

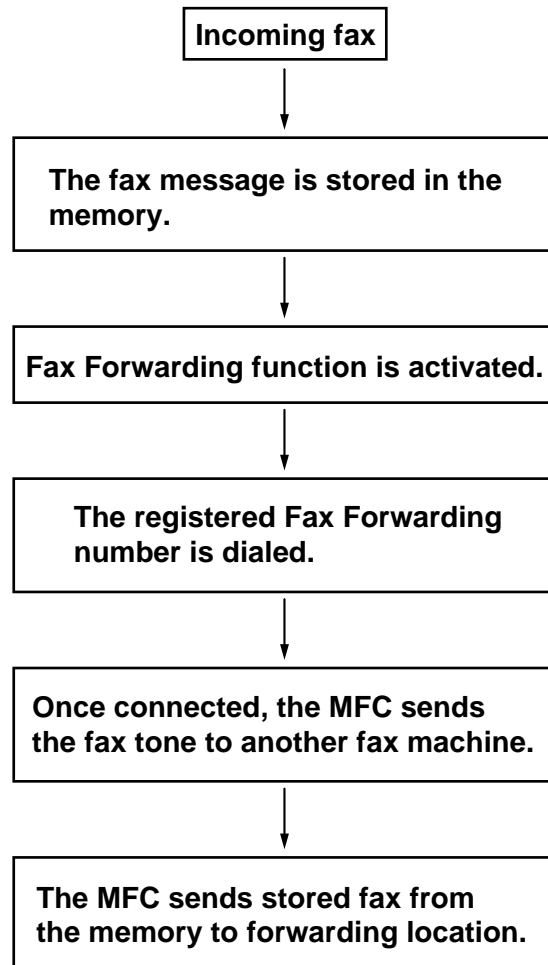
Paging/Fax Forwarding

When you set the Fax Storage function in Function menu 8-1 to ON (see page 8-1), you have an additional option of paging or fax forwarding, when your machine receives a fax message into memory.

How paging works (Paging ON)



How fax forwarding works (Fax Forwarding ON)



NOTICE

- 1 You can activate either paging or fax forwarding ; they are very similar features and can not be used simultaneously.
- 2 If paging is ON, you will be paged every time a fax message is received into the memory.

REMOTE FAX OPTIONS

Setting Up Paging (Registering the Paging Number)

KEYS TO PRESS	THE DISPLAY WILL SHOW:
1. Press Function .	09/12/1998 15:25 ONLINE
2. Press 8 .	ENTER NO. & SET
3. Press 2 .	8.REMOTE FAX OPT
4. Press Z (left arrow) and X (right arrow) to select PAGING .	2.FAX FWD/PAGING
5. Press Set .	OFF
6. Enter a paging number up to 20 digits (this is the telephone number of your pager), followed by two # signs. Do not include the area code if it is the same for your MFC and pager. Example: 18002844329## .	SELECT { } & SET
7. Press Set .	PAGING
8. Enter a PIN (Personal Identification Number), #, press Pause , your MFC telephone number, and ##. Example: 12345#-19085551234## .	PAG#:
- If you do <u>not</u> use a PIN, you <u>must</u> enter the telephone number of your fax machine. Press Pause before entering your fax number and add ##. Example: -19085551234## .	ENTER & SET
	#:18002844329##_
	PIN#:
	ENTER & SET
	5#-19085551234##

REMOTE FAX OPTIONS

9. Press Set.

2.FAX FWD/PAGING

10. Press Stop to exit.

- Paging number and PIN number cannot be changed remotely.
- **Pause** appears as a hyphen on the display.

FOR YOUR INFORMATION

The PIN (Personal Identification Number) you enter depends upon the type of paging company you use. There are generally two types of paging companies...

1) Satellite Pagers: In this case we recommend you enter your actual satellite PIN# plus your return MFC telephone/fax number/or special alpha message.

PIN#	Return#	PIN#	Alpha Message
For Example: 12345#19085551234## or 12345#329329329##			
FAXFAXFAX			

2) Radio Pagers: Most* radio pagers do not require a PIN#, and in this case you should use the PIN # in the MFC only for the return number or special alpha message.

Return#	Alpha Message
For Example: 19085551234## or 329329329##	
FAXFAXFAX	

* If your radio pager utilizes a PIN # then use satellite sequence above.

The "##" symbols at the end of the special message (or return #) are used to signify the end the PIN #/Message.

REMOTE FAX OPTIONS

Setting Up Fax Forwarding (Registering the Fax Forwarding Number)

KEYS TO PRESS	THE DISPLAY WILL SHOW:
1. Press Function .	09/12/1998 15:25 ONLINE
2. Press 8 .	ENTER NO. & SET
3. Press 2 .	8.REMOTE FAX OPT
	2.FAX FWD/PAGING
	OFF
	SELECT { } & SET
4. Press Z (left arrow) and X (right arrow) to select FAX FORWARD .	FAX FORWARD
5. Press Set .	FWD#:
	ENTER & SET
6. Enter a fax forwarding number up to 20 digits. Example: 18005551234 .	WD#:18005551234_
7. Press Set .	2.FAX FWD/PAGING
8. Press Stop to exit.	

What Is Remote Control Access?

When you leave your home or office, you will turn on your FAX STORAGE to receive fax messages. (See page 8-1.) But if you would like to activate or deactivate this FAX STORAGE feature, you can control and program your fax by remote control. You can call your MFC from any touch tone phone, enter your remote access code, followed by programming commands.

REMOTE FAX OPTIONS

Setting the Remote Access Code

The initial setting for the remote access code on your new fax is "159*". You can change this code if it conflicts with other equipment codes or if you just wish to. Change the Remote Access Code frequently and use it as a "secret password" to limit access to your REMOTE FAX OPTIONS.

When you use the Remote Access Code, you must press all four keys (three-digit number plus *).

KEYS TO PRESS

1. Press **Function**.
2. Press **8**.
3. Press **3**.
4. Enter a three digit number **000** to **999**.
The last digit, an asterisk, cannot be changed.
Example: **160***.
The three digit number must not be the same as the remote activation and deactivation codes. (See page 6-12~15.)
Example: When the remote access code is 160*, don't use 160 or 60* for the activation and deactivation code.
5. Wait for two seconds.
6. Press **Stop** to exit.

THE DISPLAY WILL SHOW:

09/12/1998 15:25
ONLINE

ENTER NO. & SET

8.REMOTE FAX OPT

3.REMOTE ACCESS

ACCESS CODE:159*

ACCESS CODE:160*

3.REMOTE ACCESS

REMOTE FAX OPTIONS

How to Use Remote Access and Control Codes

1. Pick up the handset of a remote touch tone phone or fax machine.
2. Dial your MFC's number.
3. When your MFC answers with a beep, immediately press your Remote Access Code (159*). (See page 8-7.)
4. If you hear a long beep, it means your MFC has received fax message(s).
If you do not hear a long beep, it means your MFC did not receive any message(s).
5. As soon as you hear two (2) short beeps, press a Control Command.
Each time your MFC completes an instruction, it gives two (2) short beeps telling you to enter the next command; if you wait longer than 30 seconds to enter the command, your MFC will disconnect the line. If you perform a wrong operation, you will hear three (3) short beeps.
6. When you are ready to exit remote control mode, press **90** to reset your MFC.

Remote Fax Retrieval

If you have set your FAX STORAGE: ON to store incoming fax messages, you have the ability to retrieve these fax messages from any remote group 3 facsimile machine. Remote fax retrieval is accomplished via remote control access commands, which are described in the remainder of this chapter.

FOR YOUR INFORMATION

When to Enter the Remote Access Code

Just after the line is connected, you should enter the remote access code from any touch tone phone. Make sure that you enter the remote access code while you do **NOT** hear the chirping sound of your MFC. If the MFC is set to MANUAL mode, it will answer the call after about 20 rings (about 100 seconds). You will have 30 seconds to press the remote access code or the line will be disconnected.

REMOTE FAX OPTIONS

Remote Control Commands

You can control your MFC with the following remote control commands.

Remote control command		Detail Operation
95	Changing Fax Forwarding /Paging setting	
	1 OFF	If you hear one long beep, the change is accepted. If you hear three short beeps, you can not change it because the conditions (ex. registering fax forwarding or paging number) have not been completed. You can register your fax forwarding number by using 4. FAX FWD No. (see page 8-10). Once you have registered the number, the MFC automatically will turn to "FAX FWD:ON" mode. To receive a Memory Status List, enter 961 (see page 8-10). Check the List to make sure the Fax Forwarding number you registered is correct. Then enter the confirmation command 955. Now the MFC will start Fax Forwarding.
	2 Fax Forwarding	
	3 Paging	
	4 FAX FWD No.	
	5 FWD No. Confirm	
	6 Fax Storage ON	You can set FAX STORAGE ON or OFF.
7 Fax Storage OFF		
96	Retrieve FAX	
	1 Memory Status List	You must call from a remote fax machine to receive the Memory Status List or stored fax message(s). (See page 8-10.)
	2 00 Retrieve all FAXES	
	2 "MSG No." 00 Retrieve by MSG number	
3 Erase FAX in the memory	If you hear one long beep, you can erase fax message(s) from the memory.	
97	Check the receiving status	You can check whether your MFC has received any fax message(s). If yes, you will hear one long beep. If no, you will hear three short beeps.
	1 FAX	
98	Change Answer Mode	If you hear one long beep, you can change the Answer Mode. If you hear three short beeps, you can not change it.
	1 TAD	
	2 F/T	
	3 Fax	
90	Exit	After a long beep, you can exit remote control.

Retrieving the Memory Status List and Fax Messages Remotely

From a remote fax machine, you can retrieve your Memory Status List to see if you have any stored fax messages in the memory. Then you can retrieve all or only specified fax messages that are on the list.

1. Pick up the handset of a remote touch tone fax machine.
2. Dial your MFC's number.
3. When your MFC answers with a beep, immediately press your Remote Access Code (**159***).
4. As soon as you hear two (2) short beeps, press **961**.
5. When you hear your MFC through the handset responding with a fax tone, press **Start** and hold the handset if you want to retrieve fax messages also. (If you wish to retrieve only the Memory Status List, replace the handset.)
6. Your remote fax machine will print the Memory Status List. (See page 10-7.)
7. Look at the Memory Status List to see if there are any fax messages you want to retrieve.
8. Press 96 2 as soon as you hear two (2) short beeps.
After 96 2, enter the two-digit message numbers from the Memory Status List (Example: 01) and end by pressing 00.
Example:) To receive NO.1 and NO.2 messages, press 96 2 01 02 00.
If you want to retrieve all messages, simply press 00.
Example:) To retrieve all fax messages, press 96 2 00.
9. When you hear your MFC through the handset responding with a fax tone, press **Start**.
10. Replace the handset.
11. Your remote fax machine will print the fax messages.

Changing the Fax Forwarding Number Remotely

1. Pick up the handset of a remote fax machine.
2. Dial your MFC's number.
3. When your MFC answers with a beep, immediately press your Remote Access Code (**159***).
4. As soon as you hear two (2) short beeps, press **954**.
5. Enter your new Fax Forwarding number using the dial pad (up to 20 digits). You can not register * and # as dial numbers. Use * to create a pause between the dial numbers.
6. Press # after entering the new number.
7. As soon as you hear the next two (2) short beeps, press **961**.
8. When you hear your MFC through the handset responding with a fax tone, press **Start** and hold the handset.
9. Your remote fax machine will print the Memory Status List. Look at the list to make sure the new Fax Forwarding number you registered is correct.
10. If the new number is correct, wait for the next two (2) short beeps, and press **955**. (If the new number is incorrect, press **954** and reenter the number beginning at Step 5.)
11. Replace the handset. Your new Fax Forwarding number is activated.

REMOTE FAX OPTIONS

Printing a Fax Message

You can print a fax message that is stored in the memory.

KEYS TO PRESS

1. Press **Function**.
2. Press **8**.
3. Press **4**.
4. Press **Set**.
5. Press **Start**.

6. Press **Stop** to exit.

THE DISPLAY WILL SHOW:

FAX IN MEMORY:01
ONLINE

ENTER NO. & SET

8.REMOTE FAX OPT

4.PRINT FAX

PRESS START KEY

PRINTING

4.PRINT FAX

USING THE MFC AS A PRINTER

9. USING THE MFC AS A PRINTER

Acceptable Paper

Your MFC can handle paper that has the following specifications. But please note that you can receive fax messages on only Letter, Legal and A4 paper. And if you use Legal or A4 sheet, you have to change the Paper Size setting, which is FUNCTION 5-6. (See page 6-5~6.)

Paper Type	Paper Size
Cut sheet	A4, Letter, Legal, B5, A5, Executive, Custom size 2.75-8.5 x 5-14 inches (70-216 x 127-356 mm)
Envelopes	DL, C5, COM-10, Monarch, 9" x 12"
Post Card	2.75-8.5 x 5-11 inches (70-216 x 127-356 mm)
Organizer	Day-Timer® J, K, L, M 2.75-8.5 x 5-11 inches (70-216 x 127-356 mm)
Labels and Transparencies	2.75-8.5 x 5-14 inches (70-216 x 127-356 mm)

Paper Capacity in Feeder

Multipurpose

Sheet Feeder: Up to 22 mm (0.87 inch) in height (up to the mark) Approx. 200 sheets of 75 g/m² (20 lb.) or 50 sheets of 158 g/m² (42 lb.) A4/Letter paper, or 10 envelopes

Output Tray: Approx. 100 sheets of 75 g/m² (20 lb.) A4/Letter paper

	Cut Sheet	Envelope
Basis Weight	16 to 42 lb. (60 to 158 g/m ²)	20 to 24 lb. (75 to 90 g/m ²) single thickness
Caliper	0.08 to 0.2 mm (±0.03 to ±0.08 in.)	0.084 to 0.14 mm (0.0033 to 0.0058 in.) single thickness
Moisture Content	4% to 6% by weight	4% to 6% by weight
Smoothness	100 to 250 (Sheffield)	100 to 250 (Sheffield)

Recommended paper types:

Cut sheet: Xerox 4200

Label: Avery laser label or equivalent

Transparency: 3MCG3300 for laser printers or equivalent

USING THE MFC AS A PRINTER

Helpful Hints

It is recommended that you test paper, especially special sizes and types of paper, on the MFC before purchasing large quantities.

Avoid feeding labels with carrier sheets exposed, or your MFC will be damaged.

Avoid using coated paper, such as vinyl coated paper.

Avoid using preprinted or highly textured paper.

For optimum printing, use a recommended type of paper, especially plain paper and transparencies. For more information on paper specifications, consult with your nearest authorized sales representative or the place where you purchased your MFC.

Use label or transparencies that are designed for use in laser printers.

We recommend you use long-grained paper for the best print quality.

If you are using special paper, and the paper has problems feeding from the multipurpose sheet feeder, try again using the manual feed slot.

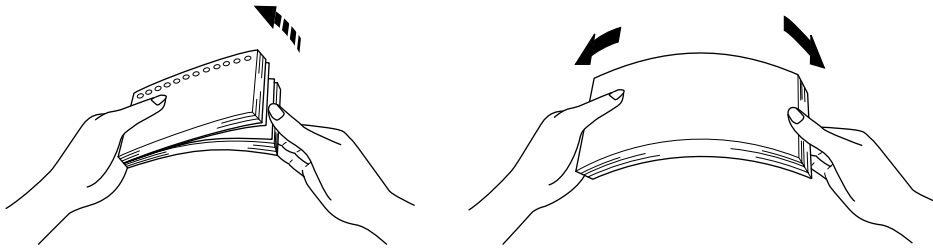
You can use recycled paper in this MFC.

USING THE MFC AS A PRINTER

FOR YOUR INFORMATION

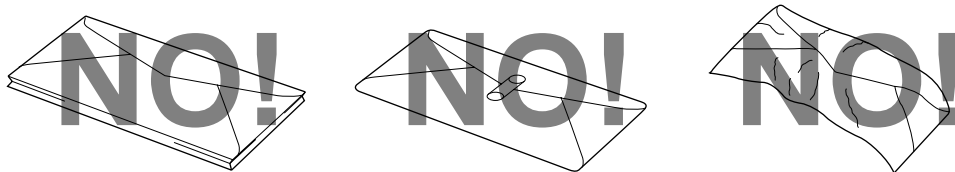
Before using paper with holes such as organizer sheets, you must fan the stack well to avoid paper jams and misfeeds.

Before using any paper, make sure that it is not curled. If it is, straighten the paper as much as possible. Using curled paper will cause paper jams and misfeeds.

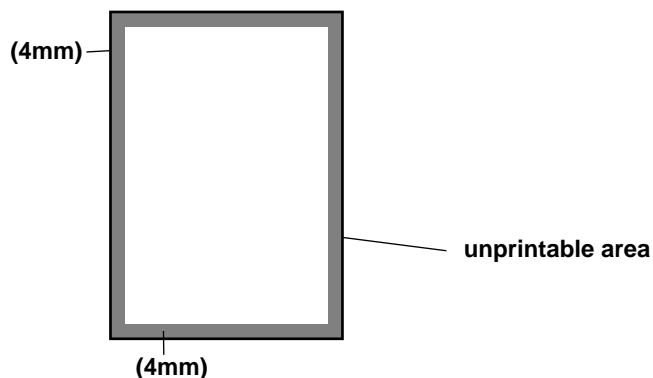


The following types of envelopes should not be used:

- Damaged, curled, wrinkled, or irregularly shaped envelopes
- Extremely shiny or highly textured envelopes
- Envelopes with clasps
- Envelopes with self-adhesive closures
- Envelopes of baggy construction
- Envelopes that are not sharply creased
- Embossed envelopes
- Envelopes already printed with a laser printer
- Envelopes preprinted on the inside
- Envelopes that can not be arranged uniformly when placed in a pile



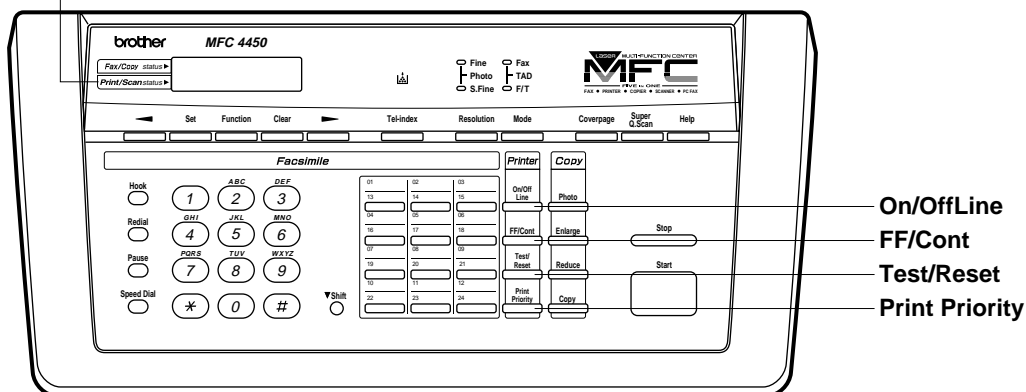
The printable area of your MFC begins at approximately 4mm (0.16 inch) from the edge of the paper.



USING THE MFC AS A PRINTER

Control Panel Keys

Printer Status



Simultaneous Operation

Your MFC can print data from the PC simultaneously while either sending or receiving a fax message or scanning into the PC. When your MFC is copying or receiving a fax on paper, it pauses the PC printing operation until it has finished.

On/OffLine Key

This key is used to turn the printer on-line (ready to receive PC data) and off-line (not ready to receive PC data). If you press this key during printing, the MFC immediately stops printing even if it has already started to print. It ejects the page, and then enters the offline status. Press the **On/OffLine** again and the printer will print the complete page again.

When the printer is in the online status and the LCD shows ONLINE, you can not use **FF/Cont** and **Test/Reset** keys.

FF/Cont Key

The upper switch on the control panel can work as the Form Feed (**FF**), Continue (**CONT**) key.

<FORM FEED>

When the LCD shows **REMAINED DATA**, press **On/OffLine** to turn the printer offline, then press **FF/Cont**. The MFC prints any data remaining in the printer memory.

USING THE MFC AS A PRINTER

NOTE

The MFC periodically will print any data remaining in the memory .

Test/Reset Key

<TEST PRINT>

This key is used to print a test sample page. If data remains in the printer memory, press **On/OffLine** to turn the printer offline and press **Test/Reset**. The MFC will print the remaining data first and then will print a test sample page. If the printer is online, the MFC can not print a test sample page.

<RESET>

When **Test/Reset** is pressed together with **Shift**, it clears data from the memory. The printer is also reset and restored to the factory default settings.

Remember that the **Test/Reset** switch clears data from the printer memory.

Print Priority Key

When this key is first pressed, it puts the MFC exclusively in printer mode. All fax data will be stored in the memory instead of printing on paper. When this key is pressed again, and PC data is not being sent or the MFC has completed printing, it will exit automatically from the print priority status. When the **Print Priority** key is pressed, it increases the memory available for printing without decreasing memory available for memory transmission and incoming faxes.

USING THE MFC AS A PRINTER

FOR YOUR INFORMATION

Windows® Printing

The dedicated printer driver for Microsoft® Windows® 95 and 3.1 are available on the floppy disk supplied with your MFC. You can easily install them into your Windows® system using our installer program. The driver supports our unique compression mode to enhance printing speed in Windows® applications, and allows you to set various printer settings including economy printing mode and custom paper size.

Bidirectional Parallel Interface

The parallel interface of this MFC allows bi-directional communication with a computer. This interface allows the printer to communicate back to the computer useful information such as the amount of memory installed, and other printer setup conditions.

Enhanced Memory Management

The MFC has its own Data Compression Technology, which automatically compress graphic data and download font data efficiently into the printer's memory. You can avoid memory errors and print most full page 600 dpi graphic and text data, including larger fonts, with the printer's standard memory.

USING THE MFC AS A PRINTER

Multipurpose Sheet Feeder

The MFC has a multipurpose sheet feeder that can feed plain paper, envelopes and organizer paper.

When the MFC receives data, it begins the print process by loading paper from the multipurpose sheet feeder.

KEYSTOPRESS

1. Select and set the PC command and status.
2. Your PC will send a print command and data to the MFC.
If the MFC is in sleep mode, it will wake up. (See page 2-10~11.)
3. When the PC has sent the first page data, the MFC will start printing.
4. The MFC will start to print the next page automatically.
Example: 2 pages of data
5. When the MFC finishes printing all the data, it will return to online status.

If some data is still remaining in memory, press **On/OffLine** and then press **FF/Cont.**

THE DISPLAY WILL SHOW:

09/12/1998 15:25
ONLINE

09/12/1998 15:25
RECEIVING DATA

09/12/1998 15:25
REMAINED DATA

09/12/1998 15:25
REMAINED DATA

09/12/1998 15:25
ONLINE

09/12/1998 15:25
REMAINED DATA

Printer

Helpful Hints

You may select the proper paper source, paper size, and orientation in your application software.

If your application software does not support your custom paper size, select the next larger paper size. Then adjust the print area by changing the right and left margins in your application software.

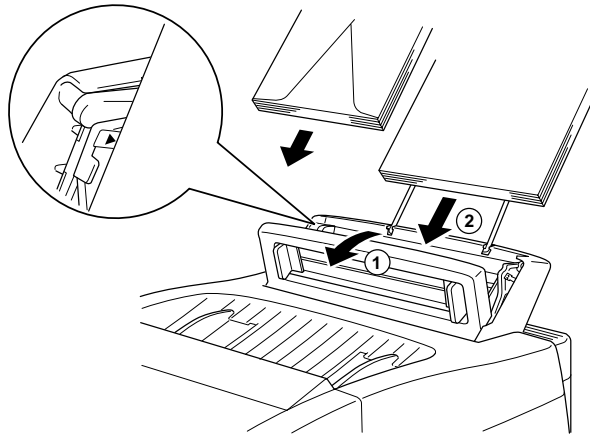
NOTICE

When you use labels or transparencies for overhead projectors, be sure to use the manual feed slot. See the next section "Manual Feed Slot" for more information.

USING THE MFC AS A PRINTER

FOR YOUR INFORMATION

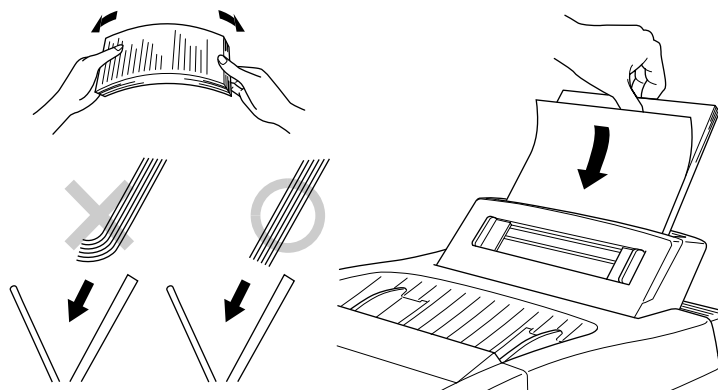
If you load envelopes into the feeder, make sure they are inserted in the direction shown below.



Two-sided Printing (Manual Duplexing)

The supplied printer driver for Windows® 95 or 3.1 enables manual duplex printing. For more information about settings, see the Help screen text for the printer driver. The MFC will print all the even numbered pages on one side of the paper first, and then will print all the odd pages numbered on the reverse side of the paper. When you have finished printing on one side of the paper, the Windows® driver instructs you with a pop-up message on the computer to reinsert the paper. Follow the instructions on how to reinsert the paper.

Before reinserting the paper, straighten it. Or you may get the paper jam. The use of very thin or very thick paper is not recommended. If you encounter the double feeding error, hold the paper except the front sheet while the paper is feeding.



NOTICE

When you use the Manual Duplex function, it is possible that a paper jam may occur or the print quality might not be satisfactory.

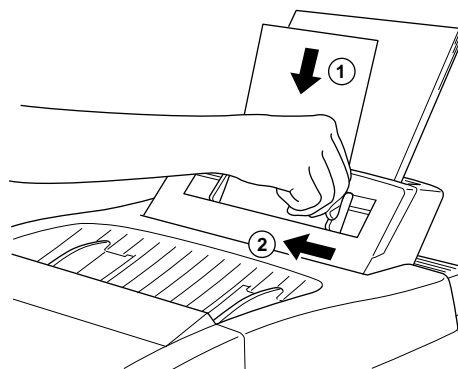
USING THE MFC AS A PRINTER

Manual Feed Slot

The multipurpose sheet feeder also has a manual feed slot. You can manually load paper, sheet by sheet into this slot. You do not have to remove paper from the multipurpose sheet feeder. When you use labels or transparencies, be sure to use this slot. For information on paper specifications, see "Acceptable Paper" on page 10-1.

When you load one sheet of paper manually:

You do not have to choose manual feed in the Setup dialog box of your printer driver. Insert the sheet of paper in the direction for Portrait or Landscape, placing the side if the paper you wish to print on face down in the manual feed slot. Align the paper at the center of the manual feed slot, and be sure to insert it all the way. (1) Adjust the paper guide of the manual feed slot to the paper width you are using. (2)



When you load more than one sheet of paper manually:

Open the Setup dialog box of the Windows® printer driver and select Manual Feed in the Paper Source section. Follow the above instructions to load the first page. The MFC will start printing automatically. After the first page is printed, the dialog box will appear and prompt you to load the next page. Load a sheet and select OK to resume printing. Repeat these steps until you have finished printing all the pages.

USING THE MFC AS A PRINTER

Helpful Hints

1. If you do not select manual paper feed and insert a page in the manual feed slot, the MFC will load the first page from the manual feed slot and subsequent pages from the multipurpose sheet feeder.
2. If your application software does not support your custom paper size, select the next paper size. Then adjust the print area by changing the right and left margins in your application software.
3. When you want to stop or clear the manual feed, press **Shift** and **Test/Reset**, or you can also stop it with a PC command.
4. When you use manual feed slot, it is best to first press **Print Priority**. This allows you to print PC data without interruption from incoming faxes. Incoming faxes will be stored in the MFC's memory. To continue printing PC data, press **FF/Cont** after each page has printed.
5. If bi-directional communication is not operational between the printer and the computer, such as when the MFC is shared on a network, the dialog box to load the next page will not appear. When your MFC is attached to a network, we do not recommend manual feeding.

FOR YOUR INFORMATION

Paper Tray

The MFC ejects paper with printed surfaces face down into the paper tray at the front of the MFC.

When you use transparencies, remove each sheet immediately after printing, to prevent a paper jam or curled sheets.

PRINTING REPORTS AND LISTS

10. PRINTING REPORTS AND LISTS

You can print the following lists and reports under function item 3. PRINT REPORTS.

Level one function	Level two function	Content	Page
3 PRINT REPORTS	1. ACT.REPORT	The Activity Report lets you know whether transmissions and incoming faxes were received.	10-2~4
	2 ALLDIAL	This is a list of the names and numbers that are stored in One-Touch and Speed-Dial memory, printed in One-Touch and Speed-Dial number order.	10-5
	3 TELINDEX	This is the same report as the All Dial list printed in alphabetical order.	—
	4. COVERPAGE	This sample coverpage allows you to see the Cover Page format.	5-19
	5. CALLBACK MSG	This sample Call Back message allows you to see the format.	5-24~25
	6 USER OPTIONS	The settings for FUNCTION MENU 5 to 8 (User Options, Tel Options, Setup System and Remote Fax Option) are listed.	—
	7. XMITREPORT	You can choose whether the Transmission Verification Report will be printed after all faxes you send. ON/OFF	10-6
	8 MEMORY STATUS	Summary information and the amount of occupied memory for items stored in the memory will be listed.	10-7

NOTE : If the MFC's engine has entered the sleep mode (see page 2-10~11) and the engine has started to cool down (the cooling fan may still be running), the MFC will have to warm up before printing the above lists and reports. The LCD will show WARMING UP.

PRINTING REPORTS AND LISTS

Other Reports

The following reports are printed automatically, for your information.

- Help List (By pressing **Help** on the control panel.) (See page 2-7.)
- Polled Report
- Delayed Sending Report
- Broadcast Report
- Sequential Polling Report
- Transmission Verification Report

How to Print Reports and Lists

All the reports and lists may be printed as follows:

KEYS TO PRESS	THE DISPLAY WILL SHOW:
1. Press Function.	09/12/1998 15:25 ONLINE
2. Press 3.	ENTER NO. & SET
3. Press the number of the level two function you wish to print. Example: 1.ACT.REPORT.	3.PRINT REPORTS
	1.ACT.REPORT
4. Press Start.	PRESS START KEY
	PRINTING

PRINTING REPORTS AND LISTS

Activity Report Interval

An Activity Report can be printed at certain intervals that you specify. You can set the journal period to "OFF", "6 hours", "12 hours", "24 hours", "2 days", "4 days" or "7 days". The Activity Report will list all outgoing and incoming faxes (only the last 50) during that period. The factory default setting is OFF.

After the Activity Report has printed at the preset interval, the information will be deleted and can not be recovered. However, at any time between these scheduled reports, you can manually print the Activity Report and the information will remain.

NOTE: If your Activity Report is not listing all your transactions, select a shorter interval period.

KEYSTOPRESS

1. Press **Function**.
2. Press **7**.
3. Press **3**.
4. Press **Z** (left arrow) or **X** (right arrow) to choose the setting.
Example: **12HOURS**.
If you select seven days, you will be prompted to choose the base day of the week.
5. Press **Set**.
6. Enter the time to print in 24-hour format using the number keys.
Example: **19:45** (7:45P.M.).
7. Wait for two seconds.
8. Press **Stop** to exit.

THE DISPLAY WILL SHOW:

09/12/1998 15:25
ONLINE

ENTER NO. & SET

7.SETUP SYSTEM

3.INTERVAL

ACT.RPT.:OFF

SELECT { } & SET

EVERY 12 HOURS

START AT:00:00

START AT:19:45

3.INTERVAL

Reports

PRINTINGREPORTSANDLISTS

ACTIVITY REPORT

TIME : 09/12/1998 19:45
NAME : BROTHER
FAX : 4155554444
TEL : 4155554445

DATE	TIME	FAX NO./NAME	DURATION	PAGE(S)	RESULT	COMMENT
09/12	10:00	BROTHER BOSTON	04:23	20 CV CA	OK	TX
09/12	10:10	NJ OFFICE	00	00	NG	TX
09/12	14:53	BROTHER BOSTON	48	01 CV CA	OK	TX

BUSY: BUSY/NO RESPONSE
NG : POOR LINE CONDITION
CV : COVERPAGE
CA : CALL BACK MSG
POL : POLLING
RET : RETRIEVAL

Note : "TX" means Transmit, "RX" means Receive.

PRINTING REPORTS AND LISTS

Printing the All Dial List

You can print a list of all stored One-Touch numbers and Speed-Dial numbers.

ALL DIAL LIST

TIME : 09/12/1998 15:25
 NAME : BROTHER
 FAX : 4155554444
 TEL : 4155554445

ONE-TOUCH DIAL

NUMBER	FAX/TEL NUMBER		DESTINATION	GROUP
*01	61-2018285881	FAX	AUSTRIAN OFFICE	
*02	234-5678	TEL	ABC COMPANY	
*03	334-5566	FAX	HEAD OFFICE	
*04				
*05	14155551212	FAX	NJ OFFICE	
*24				

@:CHAIN

SPEED-DIAL

NUMBER	FAX/TEL NUMBER		DESTINATION	GROUP
#01	5892786	F/T	BROWNE M.	
#02@	1234567		W. COMPANY	
#03	03-256-1121	FAX	TOKYO OFFICE	
#36	5555151	TEL	MANCHESTER	

@:CHAIN

Reports

PRINTING REPORTS AND LISTS

Transmission Verification (Xmit) Report

The Transmission Verification Report can be used as proof that you sent a fax. It lists the name or fax number of the receiving party, the time and date of transmission, and whether the transmission was successful. The factory default setting is OFF.

OFF: The report will be printed automatically only if an error occurs during transmission. If the report says "Result: NG" then send all the pages again. If the report says "Result: Check readability of transmitted page(s) 02, 05" then send only pages 2 and 5 again.

ON: A report will be printed automatically. It is important to read the result of each report to check that the transmission was successful.

KEYSTOPRESS

1. Press Function.
2. Press 3.
3. Press 7.
4. Press Z (left arrow) or X (right arrow) to choose the setting.
Example: **ON**.
5. Press Set.
6. Press Stop to exit.

THE DISPLAY WILL SHOW:

09/12/1998 15:25
ONLINE

ENTER NO. & SET

3.PRINT REPORTS

7.XMIT REPORT

XMIT REPORT:OFF

SELECT { } & SET

XMIT REPORT:ON

7.XMIT REPORT

PRINTING REPORTS AND LISTS

TRANSMISSION VERIFICATION REPORT

TIME : 09/12/1998 15:25
 NAME : BROTHER
 FAX : 4155554444
 TEL : 4155554445

DATE, TIME	09/12 15:24
FAX NO./NAME	NJ OFFICE
DURATION	00:00:45
PAGE(S)	01
	COVERPAGE
RESULT	OK
MODE	STANDARD

Reports

Memory Status List

The MEMORY STATUS LIST will show you summary information and the amount of occupied memory for items stored in the memory such as Delayed Transmissions and Polled Waiting. You will see the combined total of stored fax messages for retrieval. The available memory is expressed as percentage of remaining memory.

MEMORY STATUS LIST

TIME : 09/12/1998 15:25
 NAME : BROTHER
 FAX : 4155554444
 TEL : 4155554445

STORED FAXES FOR RETRIEVAL

	DATE	TIME	RECEIVED FROM	# OF PAGES
MESSAGE 01	: 09/12/1998	12:00	0528242787	01
MESSAGE 02	: 09/12/1998	14:42	5892786	03
	(A)	(B)		10%

You received two FAX messages :
 (A) When the fax came in
 (B) Sending party's number

MEMORY USED FOR FAX FEATURES

	TIME	DESTINATION	# OF PAGES
TIMER	1) 23:45	(BROADCAST)	01 10%
REDIAL WAITING	1)	BROTHER BOSTON	02 05%
POLLING WAITING			02 12%
FAX FORWARD NUMBER	:	18005551234	

This shows that you have three items in the fax's memory for timer, polling and redial transmissions.

This shows the Fax Forwarding number.

MEMORY AVAILABLE

FREE	63%
------	-----

This shows the amount of available memory.

HOW TO USE THE COPY FUNCTION

11. HOW TO USE THE COPY FUNCTION

Use the **Copy** key to make a single copy or multiple copies. When making copies, check that the text or image on the original document is not too close to the edge. Your MFC can not read anything closer than 4 mm (1/8 inch) from the edge. Original documents should be straight and not wrinkled or they may jam. Also, do not pull on the paper while copying is in progress or you may distort the image and damage your MFC.

Make sure there is enough paper in the MFC. And when making multiple copies, do not let the paper tray become overstacked. Remove copies from the paper tray.

Set the resolution to either PHOTO, FINE or S.FINE. If you select STANDARD, the resolution will change automatically to S.FINE. However, when you make a single copy and select S.FINE, the resolution may change automatically to FINE in case memory is used for memory transmission.

Making a Single Copy

KEYSTOPRESS

1. Insert the documents face down into the feeder.
2. Press Copy.
3. Press Copy or just wait for 5 seconds

THE DISPLAY WILL SHOW:

09/12/1998 15:25
ONLINE

FAX: NO. & START
SCAN READY

COPY: PRESS COPY
SCAN READY

NO.OF COPIES:01
ONLINE

ENTER & COPY KEY
ONLINE

COPYING
ONLINE

COPYING P.01
ONLINE

COPYING P.02
ONLINE

HOW TO USE THE COPY FUNCTION

Making Multiple Copies**KEYSTOPRESS**

1. Insert the documents face down into the feeder.
2. Press **Copy**.
3. Enter two digits for the number of copies you want using the number keys (Max. 99 copies).
Example: **05**.
4. Press **Copy** or just wait 5 seconds.
5. The MFC will begin copying.

THE DISPLAY WILL SHOW:

09/12/1998 15:25
ONLINE

FAX: NO. & START
SCAN READY

COPY: PRESS COPY
SCAN READY

NO.OF COPIES:01
ONLINE

ENTER & COPY KEY
ONLINE

NO.OF COPIES:05
ONLINE

COPY STACK
ONLINE

COPY STACK P.01
ONLINE

FOR YOUR INFORMATION***What to Do When You Get a MEMORY FULL Message while Making Copies***

When you are making copies, if the memory becomes full and the display shows PRESS STOP KEY, then press **Stop** to abort the job.

In this case, you can make only a single copy that is not reduced or enlarged.

Copy

HOW TO USE THE COPY FUNCTION

Reducing and Enlarging Copies

Use this function to make reduced or enlarged copies of a document. Select Auto Reduction (AUTO) if you want to reduce the size of the original, regardless of its size, to the size of the recording paper. To enlarge or reduce a document, select one of the enlargement/reduction ratios: 200%, 150%, 125%, 120%, 93%, 87%, 75% or 50%. If you want to reproduce the same size, select 100%.

When enlarging, any portion that extends outside the edge of the printing paper will be cut off.

KEYSTOPRESS

1. Insert the documents face down into the feeder.
2. Press **Reduce** or **Enlarge**.
Example: **Reduce**.
3. Press **Z** (left arrow) or **X** (right arrow) to choose the setting.
- If you want Auto Reduction, select **AUTO** or the reduction or enlargement ratio.
Example: **93%**.
4. Press **Copy**.
5. Enter two digits for the number of copies you want, using the number keys (Max. 99 copies).
Example: **05**.
6. Press **Copy** or just wait for 5 seconds.
7. The MFC will begin copying.

THE DISPLAY WILL SHOW:

09/12/1998 15:25
ONLINE

FAX: NO. & START
SCAN READY

COPY: PRESS COPY
SCAN READY

REDUCE: AUTO
ONLINE

SELECT {} & COPY
ONLINE

REDUCE: 93%
ONLINE

NO.OF COPIES: 01
ONLINE

ENTER & COPY KEY
ONLINE

NO.OF COPIES: 05
ONLINE

COPY STACK
ONLINE

COPY STACK P.01
ONLINE

HOW TO USE THE COPY FUNCTION

Copying a Photograph

You can copy a photograph by pressing **Photo**, without pressing the **Resolution**.

KEYSTOPRESS	THE DISPLAY WILL SHOW:
1. Insert the documents.	09/12/1998 15:25 ONLINE
2. Press Photo .	FAX: NO. & START SCAN READY
3. Enter two digits for the number of copies you want, using the number keys (Max. 99 copies). Example: 05 .	COPY: PRESS COPY SCAN READY
4. Press Copy or just wait 5 seconds.	NO. OF COPIES: 01 ONLINE
5. Press Copy or just wait 5 seconds.	ENTER & COPY KEY ONLINE
6. The MFC will begin copying.	NO. OF COPIES: 05 ONLINE
	QUALITY: HIGH ONLINE
	SELECT {} & COPY ONLINE
	COPY STACK ONLINE
	COPY STACK P.01 ONLINE

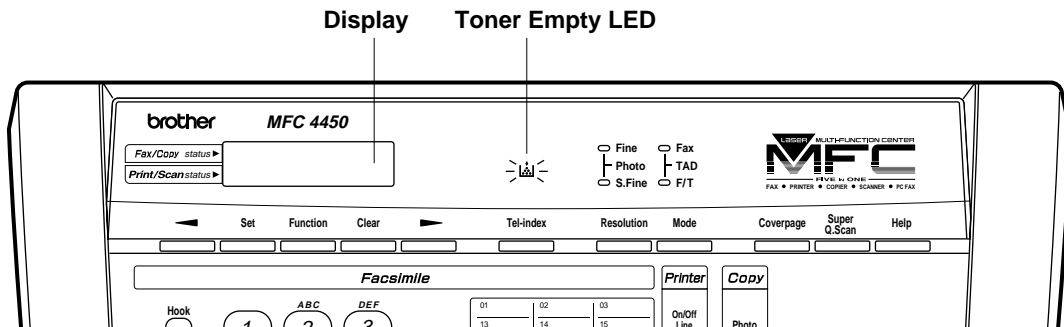
Copy

REPLACING TONER CARTRIDGE AND DRUM UNIT

12. REPLACING TONER CARTRIDGE AND DRUM UNIT

Toner Empty Indicator

When the toner cartridge is running low, the display will show CHANGE TONER and the Toner Empty LED on the control panel will flash on and off to indicate the toner is low.



The Toner Empty LED will light and the display will show CHANGE TONER and TONER EMPTY alternately to indicate that the toner is empty. Once this indication appears, your MFC will not resume printing until you have installed a new toner cartridge.

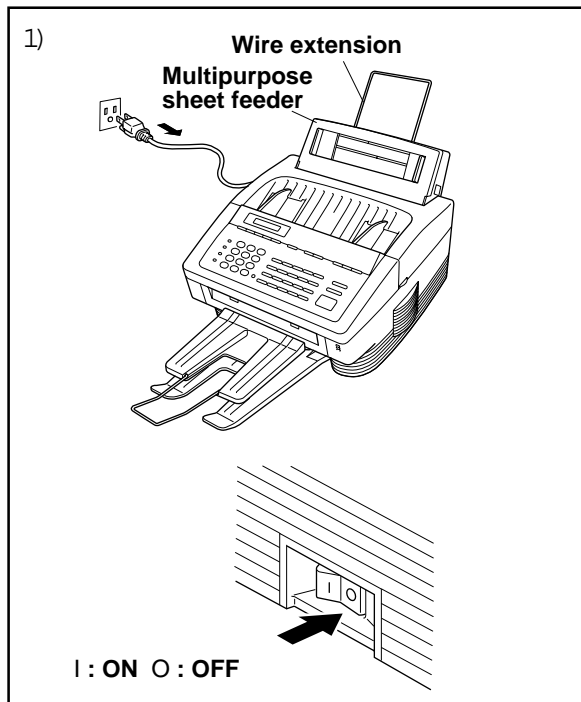
Replacing the Toner Cartridge

The MFC can print approximately 2,200 pages with one toner cartridge. When the toner cartridge is running low, the display shows CHANGE TONER. The MFC is supplied with a starter toner cartridge that must be replaced after 1,000 pages.

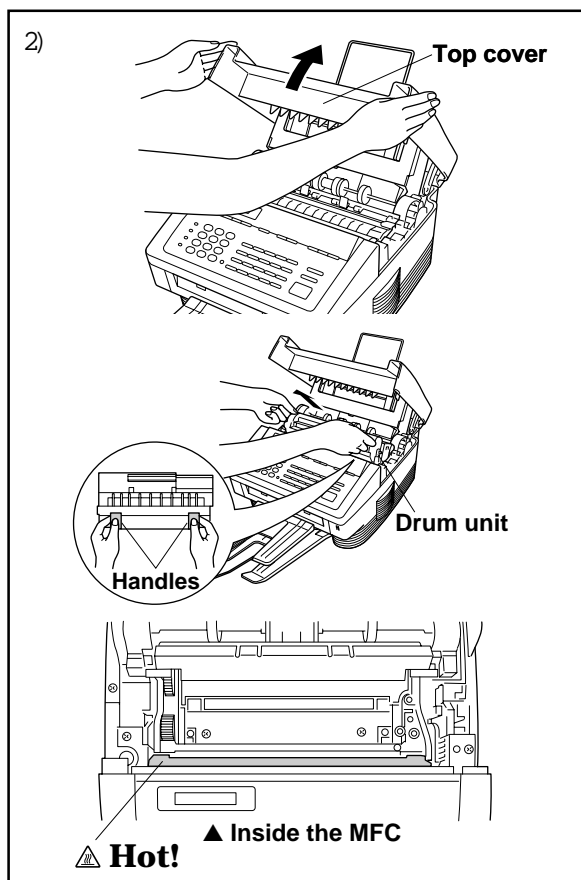
- NOTE :
- Actual page count will vary depending on your average document type. (i.e.: standard letter, detailed graphics, etc.)
 - It is recommended that you always keep a new toner cartridge ready for use for when you see the toner low warning.
 - Discard the used toner cartridge according to local regulations. If you are not sure of them, consult with Brother Customer Service. Be sure to seal the toner cartridge tightly so toner powder does not spill out of the cartridge. When discarding used toner cartridges, keep them separate from domestic garbage.
 - It is recommended that you clean the MFC when you replace the toner cartridge.

REPLACING TONER CARTRIDGE AND DRUM UNIT

Follow these steps to replace the toner cartridge:



- 1) Turn off the power switch and unplug the power cord.



- 2) Open the top cover. To remove the drum unit, hold each side of the drum by its handles and gently lift the drum forward toward you.

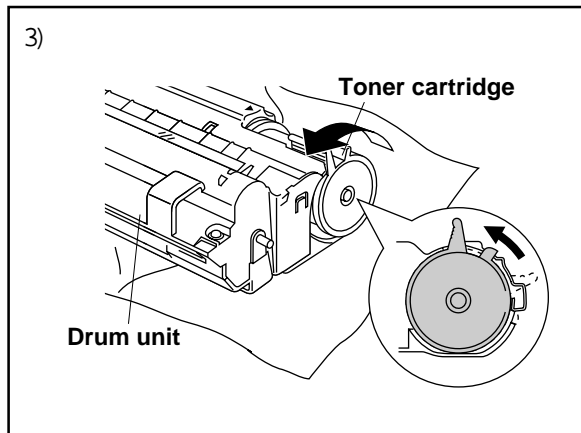
NOTE

- Make sure the top cover is completely open, by lifting it until the latch clicks into place.
- We recommend you place the drum unit on a drop cloth or large piece of disposable paper to avoid spilling and scattering the toner.

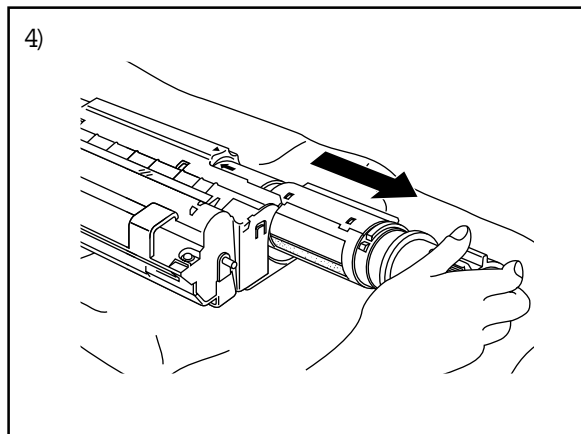
WARNING

Just after you have used the MFC, some internal parts of the MFC will be extremely **HOT!** So, never touch the shaded parts shown in the left illustration.

REPLACING TONER CARTRIDGE AND DRUM UNIT



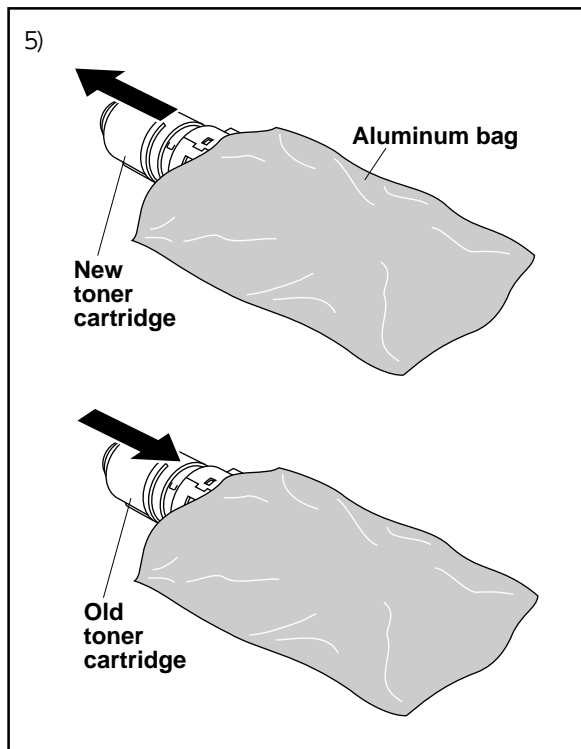
- 3) Gently turn the lever on the toner cartridge forward until it stops. The toner cartridge can not be removed unless the shutter is completely closed, by turning the lever fully to the front.



- 4) Remove the old toner cartridge from the drum unit by gently pulling it out.

WARNING

Handle the toner cartridge carefully. If toner scatters on your hands or clothes, immediately wipe it off or wash it with cold water.

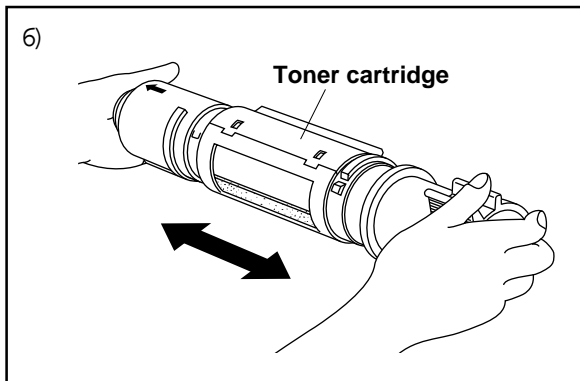


- 5) Unpack the new toner cartridge. Place the used toner cartridge into the aluminum bag and discard it according to local regulations.

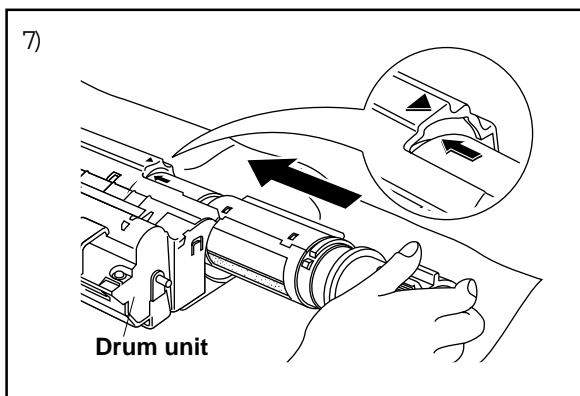
WARNING

- Wait to unpack the toner cartridge until immediately before you install it into the MFC. If a toner cartridge is left unpacked for a long period of time, the toner life is shortened.
- **You can use only a genuine Brother toner cartridge (TN-5000PF series) which is specially formulated to ensure top print quality. Using another brand of toner cartridge could void your MFC's warranty.**

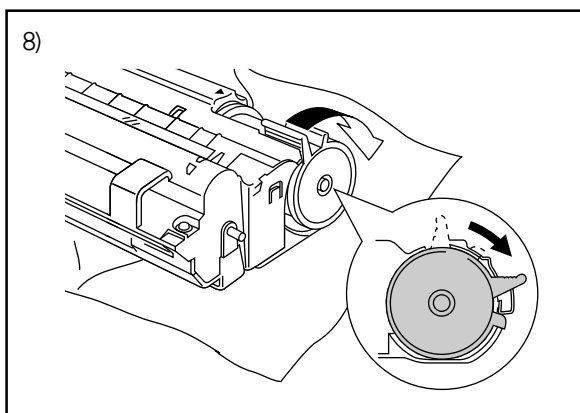
REPLACING TONER CARTRIDGE AND DRUM UNIT



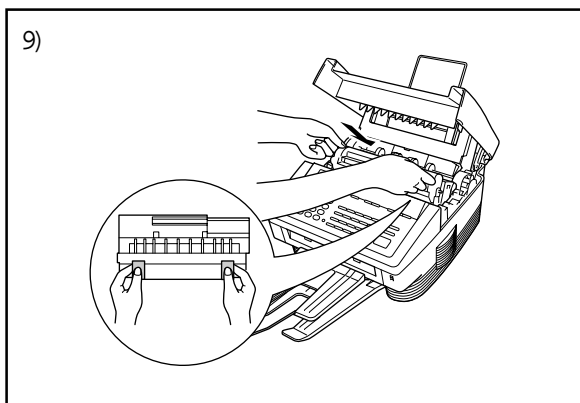
- 6) Gently rock the toner cartridge from side to side five or six times.



- 7) Slide the new toner cartridge into the opening on the right hand side of the drum unit. To ensure that the toner cartridge and the drum unit fit together correctly, make sure that the toner cartridge guide bar is exactly aligned with the guide slot in the drum unit.



- 8) Gently turn the lever on the toner cartridge backward until it stops.



- 9) Reinstall the drum unit into the MFC and close the top cover. Then, turn on the power switch or plug in the power cord.

REPLACING TONER CARTRIDGE AND DRUM UNIT

Replacing the Drum Unit

The MFC uses a drum unit to create the print images on paper. If the display shows CHANGE DRUM, it indicates the drum unit is nearly at the end of its life. We recommend you prepare a new drum unit to replace the current one. Even if the display shows CHANGE DRUM, you may be able to continue to print without replacing the drum unit for a while. If there is a noticeable deterioration in the output print quality even before CHANGE DRUM is shown, then the drum unit should be replaced.

WARNING

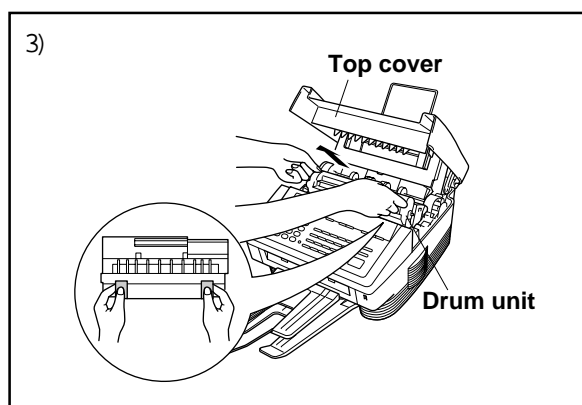
- When removing the drum unit, handle carefully because it contains toner.
- You should clean the MFC when you replace the drum unit. See page 13-1~3.

NOTE: The drum unit is a consumable, and it is necessary to replace it periodically. The drum unit is rated at approximately 20,000 pages. There are many factors that determine the actual drum life, such as temperature, humidity, type of paper and toner that you use and the number of pages per print job, etc... The drum life is estimated at approximately 20,000 pages at 20 page per job and 8,000 pages at 1 page per job. The actual number of pages your drum will print may be significantly less than these estimates. Because we have no control over the many factors that determine the actual drum life, we cannot guarantee a minimum number of pages that will be printed by your drum.

For best performance, use only genuine Brother toner, and the product should be used only in a clean, dust-free environment with adequate ventilation.

Follow these steps to replace the drum unit:

- 1) Turn off the power switch or unplug the power cord.
- 2) Open the top cover.

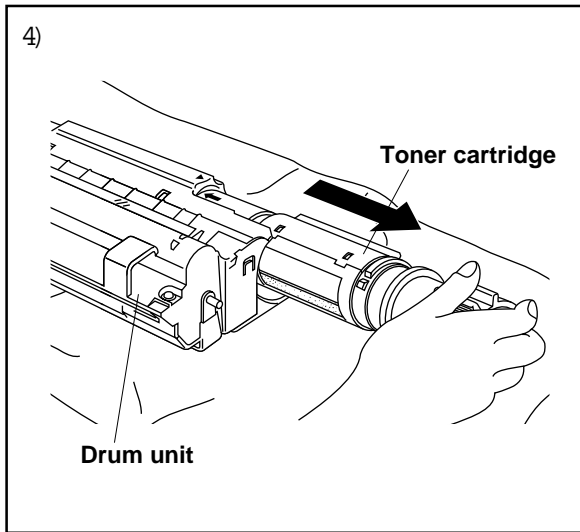


- 3) Remove the old drum unit. (See page 12-2.)

WARNING

Just after you have used the MFC, some internal parts of the MFC are extremely **HOT!** So please be careful. (See page 13-2.)

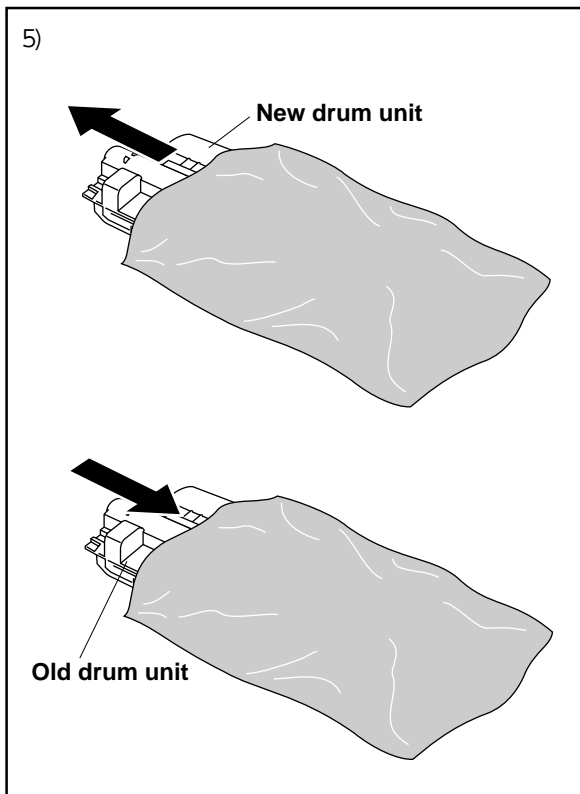
REPLACING TONER CARTRIDGE AND DRUM UNIT



- 4) Remove the toner cartridge from the drum unit and keep it in a safe place. For more information, see "Replacing the Toner Cartridge" on page 12-1~4.

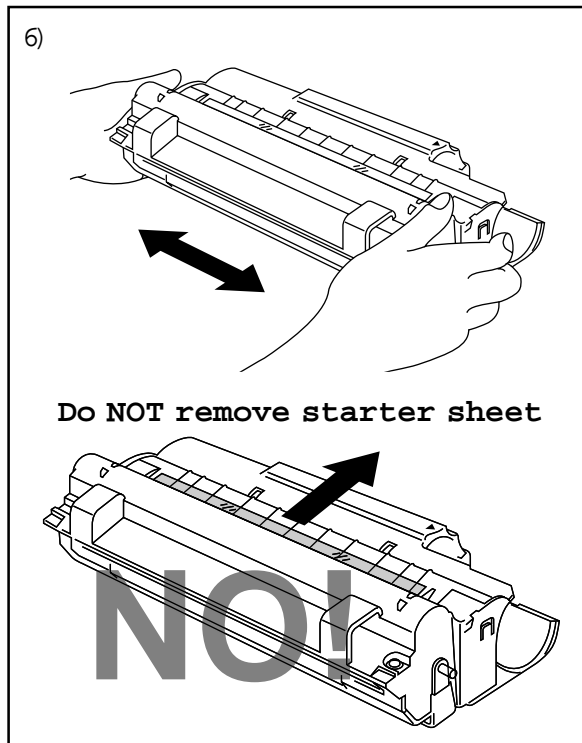
NOTE :

- Discard the used drum unit according to local regulations. If you are not sure of them, consult with Brother Customer Service. Be sure to seal the drum unit tightly so toner powder does not spill out of the unit. When discarding used drum units, keep them separated from domestic garbage.
- We recommend you place the drum unit on a drop cloth or large piece of disposable paper to avoid spilling and scattering the toner.



- 5) Wait to unpack the new drum unit until immediately before installing it. Place the old drum unit into the aluminum bag and discard it according to local regulations.

REPLACING TONER CARTRIDGE AND DRUM UNIT

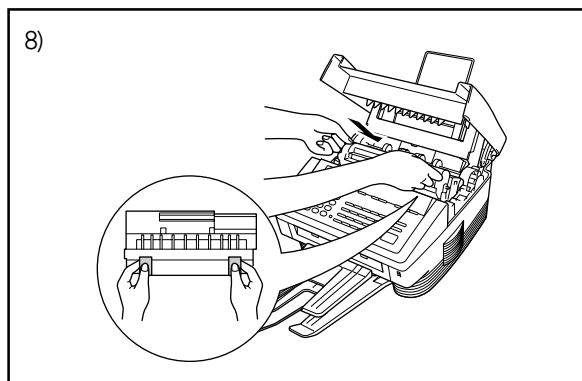


- 6) Gently rock the new drum unit side to side five or six times.

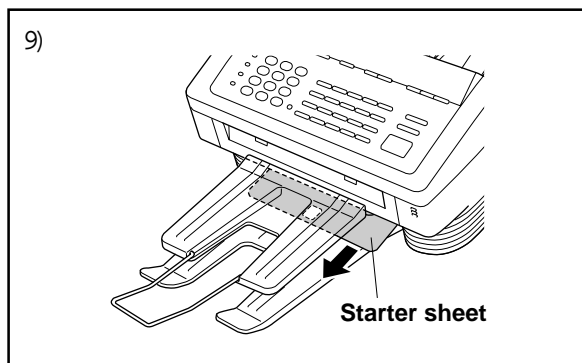
WARNING

- **Do not remove the starter sheet.**
- Wait to unpack the drum unit immediately before installing it into the MFC. If an unpacked drum unit is subjected to excessive direct sunlight or room light, the unit may be damaged.
- Handle the toner cartridge and the drum unit carefully because it contains toner. If toner scatters and your hands or clothes get dirty, immediately wipe or wash it off with cold water.

- 7) Reinstall the toner cartridge into the new drum unit. For more information, see "Replacing the Toner Cartridge" on page 12-1~4.



- 8) Holding the new drum unit by its handles, install it. Close the top cover.



- 9) Turn on the power switch or plug in the power cord. The MFC automatically will eject the starter sheet.

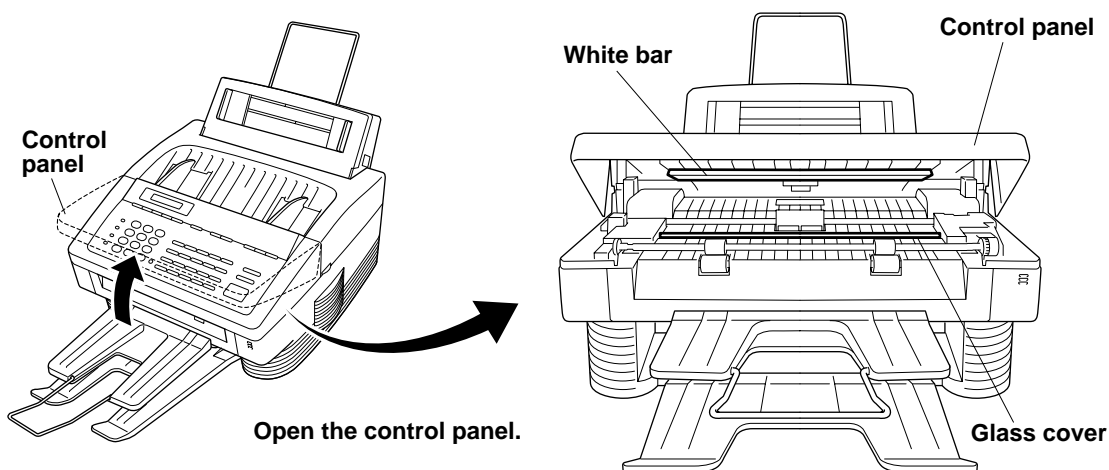
13. REGULAR MAINTENANCE

Regular Maintenance

You can keep your MFC in optimum condition by cleaning it on a regular basis. It is a good idea to replace the toner cartridge and the drum unit during this routine. Avoid using thinners or other organic solvents to clean the MFC and do not use water.

Follow the steps below:

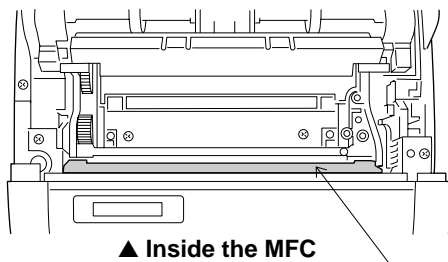
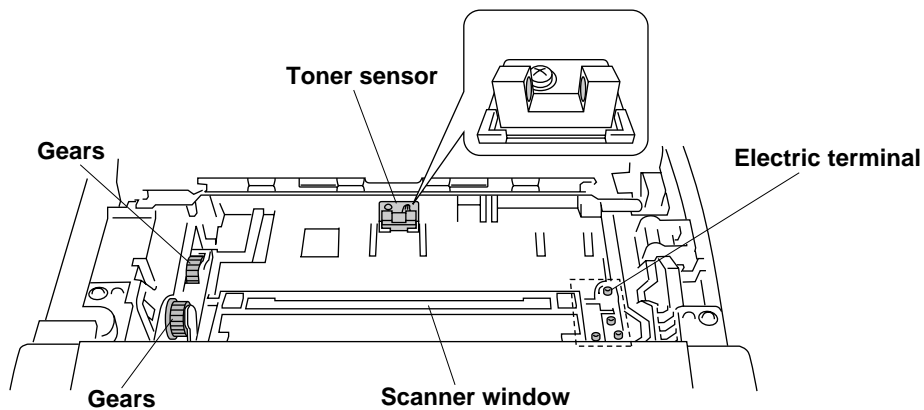
1. Unplug the telephone line and then the power cord.
When you reconnect these lines later, make sure to connect the power cord first, then the telephone line.
 2. Wipe dirt off the MFC using a slightly damp clean cloth.
 3. Clean the white bar and the glass cover.
Moisten a small piece of clean soft, lint-free cloth with isopropyl alcohol and carefully remove dirt from the glass cover and the white bar of the scanner.
- * Do not use isopropyl alcohol to remove dirt from the control panel. It may cause a crack on the panel.
4. Wipe the gears and electric terminals with isopropyl alcohol on a cotton swab.
Gently wipe the scanner window and the toner sensor with a clean soft dry cloth.



REGULAR MAINTENANCE

WARNING

- Do not use isopropyl alcohol to clean the scanner window or the toner sensor.
- Do not touch the scanner window with your finger.
- Handle the drum unit carefully as it contains toner. If toner scatters and your hands or cloths get dirty, immediately wipe or wash it off with cold water.



WARNING

Just after you have used the MFC, some internal parts of the MFC are extremely **Hot!** When you open the top cover of the MFC, never touch the shaded parts shown in the diagram to the left.

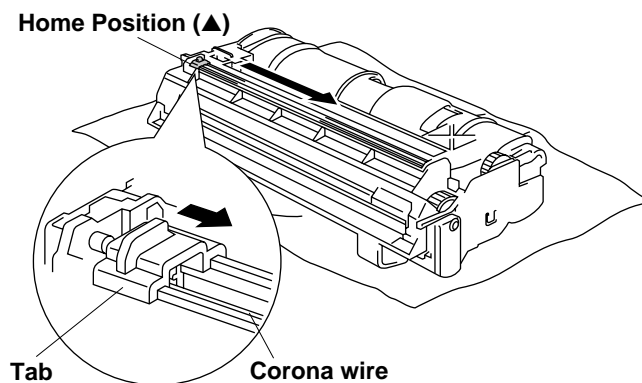
Cleaning the Drum Unit

NOTE: We recommend you place the drum unit on a drop cloth or large piece of disposable paper to avoid spilling and scattering the toner.

1. Turn the drum unit upside down carefully.

REGULAR MAINTENANCE

- 2 Clean the primary corona wire inside the drum unit by gently sliding the tab from right to left several times.



- 3 Return the tab to the home position (▲ mark position) before reinstalling the drum unit.

CAUTION

If you do not position the tab at the home position, printed pages may have vertical stripes.

- 4 Install the drum unit into the MFC.
See the section "Replacing the Drum Unit" on page 12-5~7.
- 5 Close the top cover.
- 6 Plug in the power cord and turn on the power switch.

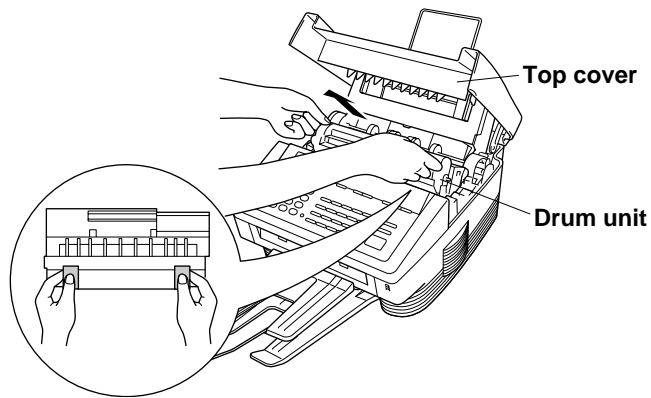
Packing and Shipping the Machine

Whenever you transport the MFC, use the packing materials that came with your machine. Also, follow the steps below to pack the MFC or the machine may be damaged, which will void the MFC's warranty.

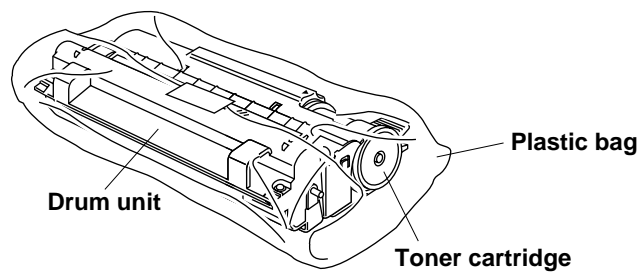
- 1 Turn off the power switch and unplug the MFC from the AC outlet.
- 2 Open the top cover.
- 3 Remove the drum unit assembly. To remove the drum unit, please refer to the previous section (See page 12-5~7.)

REGULAR MAINTENANCE

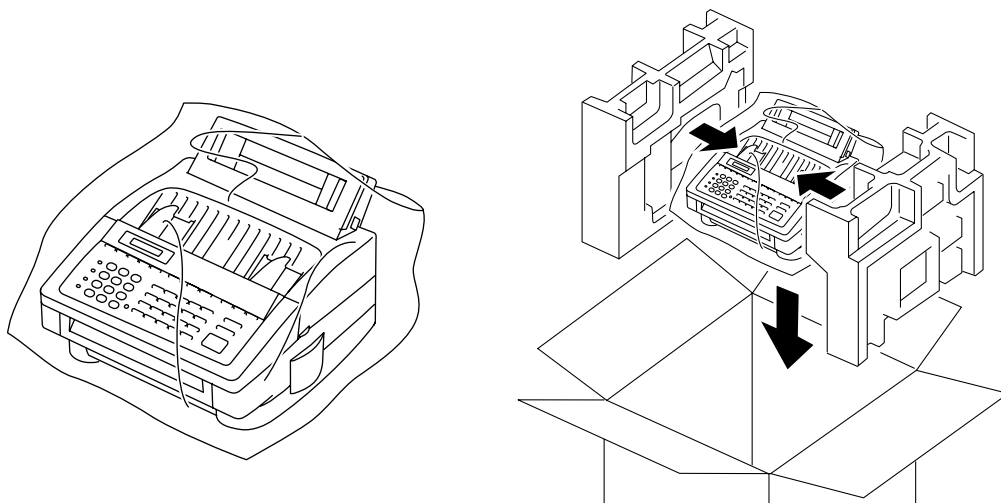
NOTE: Remove the drum unit and toner cartridge. Leave the toner cartridge installed in the drum unit.



4. Place the drum unit and toner cartridge assembly into the plastic bag and seal the bag completely.

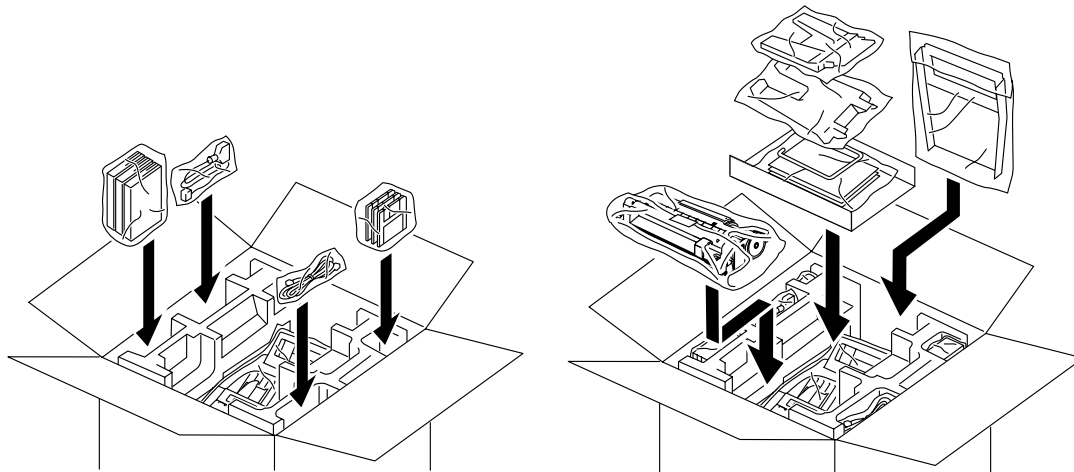


5. Close the top cover. Remove the wire extension, document tray, dust cover, paper tray and pack them.
6. Wrap the MFC in the plastic bag and place it in the original carton box with the original packing material.



REGULAR MAINTENANCE

7. Place any documents (manual and printed materials) and the drum unit and toner cartridge assembly into the carton box as shown below. If you are shipping the MFC, insert your documentation explaining the reason.



8. Close the carton box and tape it shut.

REGULAR MAINTENANCE

Paper Jams

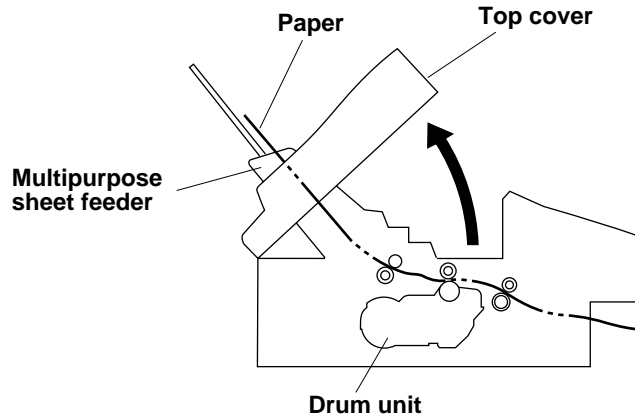
Your MFC will sound an alarm if the document jams while going through the feeder or if the paper becomes stuck. The display will show DOCUMENT JAM or PRINTER JAM.

Fixing a Document Jam

1. Open the front control panel.
2. Remove the jammed documents.
3. Close the control panel.
4. Press **Stop**.

Fixing a Paper Jam

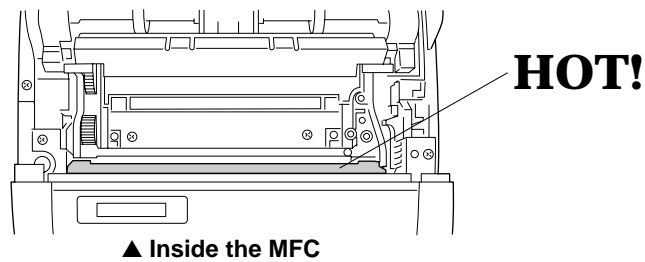
Before you can clear a paper jam error, you must find out where the paper is stuck. Use the diagram below to help locate the position of the paper.



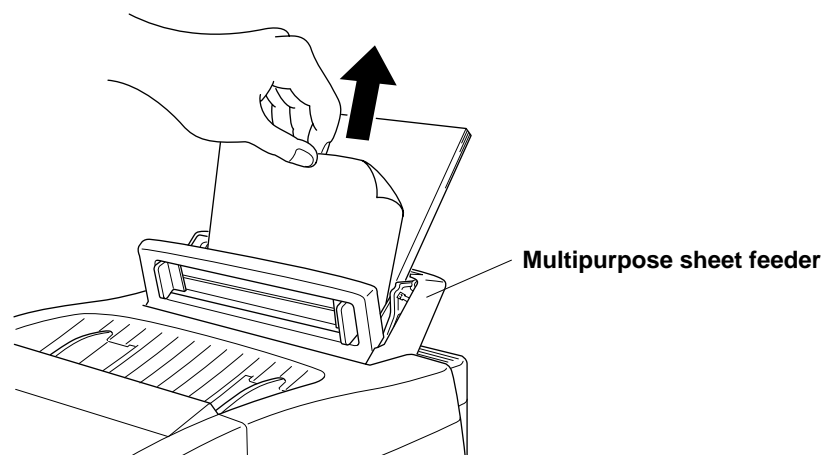
REGULAR MAINTENANCE

WARNING

- Do not force the jammed paper from the paper tray because you may damage the MFC and cause toner to scatter on the next printed panels.
- After you have used the MFC, some internal parts of the MFC are extremely **HOT!** When you open the top cover of the MFC, never touch the shaded parts shown in the following diagram.

**1 Clearing a Paper Jam in the Multipurpose Sheet Feeder.**

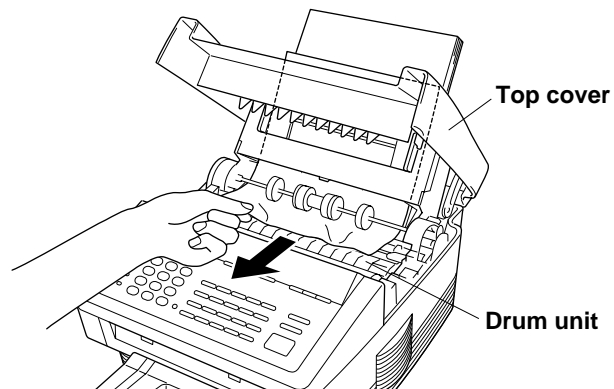
If a paper jam has occurred inside the multipurpose sheet feeder, open the multipurpose sheet feeder to pull the jammed paper upward out of the feeder; then close the multipurpose sheet feeder. Also, open the top cover and check that a torn piece of paper does not remain inside the MFC (see the next section.)



REGULAR MAINTENANCE

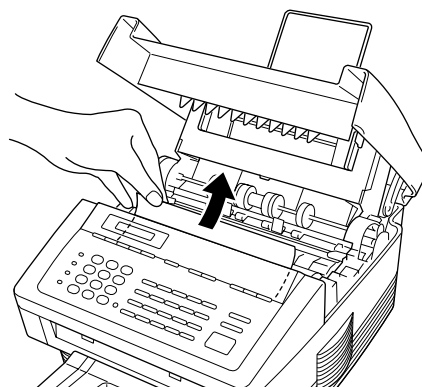
2 Clearing a Paper Jam near the Drum Unit.

If a paper jam has occurred near the drum unit, open the top cover, and remove the drum unit. Then, pull the jammed paper upward and out of the MFC. Reinstall the drum unit and close the top cover.



3 Clearing a Paper Jam in the Fuser Unit.

If a paper jam has occurred in the fuser unit, open the top cover and remove the drum unit. Then, pull the jammed paper out of the fuser. Reinstall the drum unit and close the top cover.



TROUBLESHOOTING PROCEDURES

14. TROUBLESHOOTING PROCEDURES

BROTHER CUSTOMER SERVICE HAS INSTALLED AN EASY TO USE FAX-BACK SYSTEM SO YOU CAN GET INSTANT ANSWERS TO COMMON TECHNICAL QUESTIONS AND PRODUCT INFORMATION FOR ALL BROTHER PRODUCTS. THIS SYSTEM IS AVAILABLE 24 HOURS A DAY 7 DAYS A WEEK. YOU CAN USE THE SYSTEM TO SEND FAXES TO ANY FAX MACHINE, NOT JUST THE ONE FROM WHICH YOU ARE CALLING.

PLEASE CALL **1-800-521-2846** (for USA) OR **1-800-681-9838** (for CANADA) AND FOLLOW THE VOICE PROMPTS TO RECEIVE FAXED INSTRUCTIONS ON HOW TO USE THE SYSTEM AND FOR YOUR INDEX OF FAX-BACK SUBJECTS.

If additional help is needed, please contact the following Customer Service numbers:

USA : 1-800-284-4329 (voice)
1-908-271-1937 (fax)

From within Canada : 1-800-853-6660 (voice)
1-514-685-4898 (fax)

From within Montreal : 1-514-685-6464 (voice)

For product and Service information you may also contact us via the Brother Bulletin Board and the Internet:

BBS USA : 1-714-859-2610
From within Canada : 1-514-685-2040

Internet <http://www.brother.com>

To order Brother accessories:

If you have a Visa, Master Card Discover or American Express credit card, you can order accessories for your MFC directly from Brother:

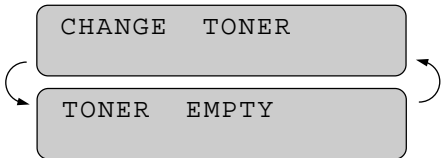
USA : 1-888-879-3232 (voice)
1-800-947-1445 (fax)
From within Canada : 1-800-668-2768 (voice)

TROUBLESHOOTING PROCEDURES

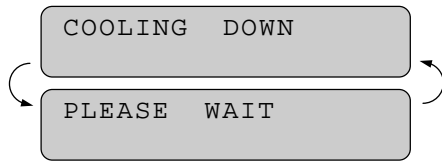
Error Messages

Occasionally, you may have a problem with your MFC or telephone line. If this happens, your MFC usually identifies the problem and displays an error message. Refer to the following list when you see an error message on the display.

Error messages are listed below in alphabetical order.

C	CHANGE DRUM	You can clear a print quality problem by replacing the drum unit with a new one if the display shows CHANGE DRUM. The drum unit is at the end of its life.
	CHANGE TONER	If the display shows CHANGE TONER and at the same time the Toner Empty LED on the control panel flashes on and off, you can still print. But the toner is depleted and it is telling you that the toner will soon run out. Order a new toner cartridge now.
		The toner is used up and printing is not possible. Replace the toner cartridge with a new one. (See page 12-1~4.)
	CHECK PAPER	The MFC is out of paper or the paper is not properly loaded in the multipurpose sheet feeder. Refill the paper or remove the paper and load it again.
	CHECK PAPER SIZE	Your Paper Size setting may not be set correctly for the paper you are using (see page 6-5~6). When you see this error, the reduction ratio automatically will be changed to AUTO if you have used a fixed reduction ratio (see page 6-7~8).
	COMM. ERROR	A poor quality phone line caused a communications error. Try the call again.
	CONNECTION FAIL	You requested the polling function even though the machine you called does not have the polling feature.

TROUBLESHOOTING PROCEDURES



When the temperature of the drum unit or toner cartridge becomes too hot, the MFC will pause its current print job and go into cooling down mode. During the cooling down mode you will hear the cooling fan running while the display on the MFC shows COOLING DOWN and PLEASE WAIT. You must wait and allow the MFC to resume printing when it is ready.

COVER OPEN

The top cover or multipurpose sheet feeder cover was not completely closed. Please check each of them.

D DISCONNECTED

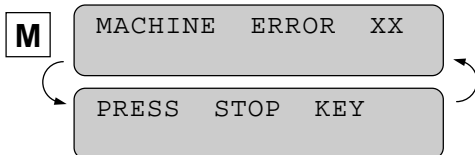
The telephone line was disconnected by the other party during the communication. Try calling the other party to see what happened.

DOCUMENT JAM

Your documents were not inserted properly, or the documents were not fed properly, or the documents were too long.

Open the control panel and remove the documents. (See page 13-6~8.) Then close the control panel, press **Stop** and insert the documents again, adjusting the guides on either side of the document, and try sending the fax again.

Original documents should be straight, non-wrinkled, to be correctly fed. Otherwise, the documents may occasionally jam.



Turn off the power. Then contact the Customer Service number listed on page 14-1.

MEMORY FULL

- Press the **FF/Cont** switch to print the data remaining in the MFC.
- Reduce the print resolution or reduce the complexity of your document.

N NO RESPONSE/BUSY

The number you called does not answer or is busy. Or, you may have reached a number that is not connected to a fax machine. Check the number and try again.

TROUBLESHOOTING PROCEDURES

NOT REGISTERED

The One-Touch key or Speed-Dial number you pressed has no number assigned to it. You will have to program a phone number. (See page 3-6~8.)

P

PRINTER JAM

The paper is stuck in the printing area. Remove the jammed paper. (See page 13-6~7.)

S

SET CARTRIDGE

A toner cartridge is not installed. Reinstall the toner cartridge.

If You are Having Difficulty with Your MFC

When the Receiving Party Says the Picture is Not Clear

Sometimes the resolution mode you chose when you sent your fax may not have been appropriate. Send the fax again, but try using the FINE or SUPERFINE mode. Also, your MFC's scanner may be dirty, so try cleaning it. (See page 13-1~2.)

When the Receiving Party Says Vertical Streaks Appear on the Faxes They Receive:

Your MFC's scanner may be dirty or the receiving party's printer head may be dirty. Clean your scanner, (see page 13-1~2) and make a copy to check if the problem was caused by your machine.

Vertical Streaks Appear on the Faxes You Receive

Sometimes you may see vertical streaks on the faxes you receive. Either your MFC's primary corona wire for printing may be dirty, or the sending party's fax scanner may be dirty. Clean your primary corona wire. (See page 13-3.) Make a copy to see if the vertical streaks are still there.

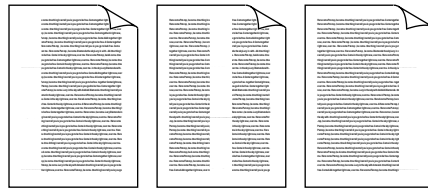
Vertical Streaks Appear in Copies

Sometimes you may see vertical streaks on your copies. Either the scanner or the primary corona wire for printing is dirty. Clean them both. (See page 13-1~3.)

TROUBLESHOOTING PROCEDURES

If the Printed Pages are Still Blurred at the Center or Either Edge as Below
First, make sure that the printer is placed on a flat, horizontal surface.

If the problem still occurs, remove the drum unit with the toner cartridge installed. Hold the unit horizontally with both hands and tap it firmly against a flat surface 3 or 4 times. Reinstall the drum unit with the toner cartridge and try printing again. If the print quality is acceptable, you may continue using this drum unit. If the print quality is not acceptable, replace the drum unit. If streaks still occur, please contact Brother Customer Service or your local Authorized Service Center for further assistance.



Horizontal Streaks

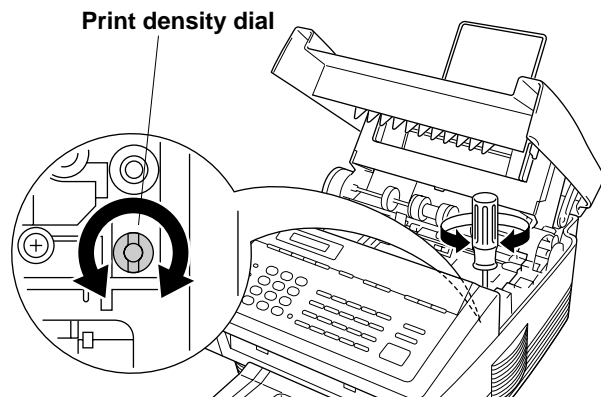
You may get a fax with horizontal streaks or with missing lines. Usually this is caused by a poor telephone connection. Ask the other party to send the fax again.

Poor Printing Quality

If the printing quality is not at an acceptable level, please replace your drum unit with a new one.

The Print is too Light or too Dark
The print density dial is located in the corner under the top cover. (Remove the drum unit.) You can use it to adjust print density by increasing or decreasing the Print Density function setting you chose.

The print may become darker or lighter as conditions change (such as changing the toner cartridge and drum unit or if the MFC has become overheated from heavy use).



Use a straight blade screwdriver to turn the print density dial clockwise for darker print and counterclockwise for lighter print. The dial has been set to the middle position.

Make five or six copies to bring the toner up to the level of the new setting.

If the print is still too light, check to see if the Toner Save feature is ON (see page 6-9-10).

TROUBLESHOOTING PROCEDURES

Received Faxes Appear as Split or Blank Pages:

If the received data is divided and printed on 2 pages or if you get an additional blank page, your size may not be set correctly for the paper you are using (see page 6-5~6). If you are using the fixed reduction feature, check to see if the reduction ratio is suitable for the real paper (see page 6-7~8).

When Dialing Doesn't Work...

You may have the wrong dialing mode. Change the TONE/PULSE setting. (See page 3-1.) You should check all the telephone line connections (to the external telephone and to the wall jack). Check also that the power cord is connected and the power switch is turned on. (See page 2-7 of Setup Manual for Fax, Printer, Copier.) Check by pressing **Hook** to see if you hear a dial tone. Also try dialing by first pressing **Hook** or lifting the handset of the external telephone. Wait until you hear the fax tones and then press **Start**.

MFC Does Not Answer When Called:

Make sure the MFC is in the correct receiving mode for your setup (either FAX, F/T or TAD). Check for dial tone. If possible, call your MFC to hear it answer. If there is still no answer, check the telephone line cord connection. If there is no ringing when you call your MFC, call your Telephone Company to check the line.

No Dial Tone on the Handset of an external telephone:

Press **Hook**. If you do not hear a dial tone, check telephone line cord connections at the MFC, wall jack and external telephone. Test the wall jack with another single line telephone. If no dial tone on the wall outlet, call your Telephone Company.

Double Ring in F/T Mode

The MFC knows the incoming call is not a fax so it is signaling you to answer the telephone call. Pick up the external handset or answer from an extension phone and press your MFC's Remote Deactivation Code (default setting is #51).

Problem using the HP Pavilion PC and the "HP DEMO" screen saver

If you select the "HP Demo" screen saver on your HP Pavilion PC after you have installed the Multi-Function Link Pro software, the System.ini file is overwritten and you can not use the Brother MFC to print, scan or for Remote Setup.

If you have used the HP Demo screen saver already, you must edit the System.ini file as follows:

```
[boot]
;comm.drv=comm115.drv
comm.drv=brmfcomm.drv
```

```
[386Enh]
DEVICE=Bi-Di.386
```

If you do not want to edit the System.ini file, please change the screen saver to another one and Re-install Multi-Function Link Pro again.

TROUBLESHOOTING PROCEDURES

Bi-Directional Parallel Ports (nibble and byte modes)

The MFC 4450 supports both nibble (AT) and byte (Bi-Directional) mode parallel ports. If your PC supports byte mode, scanning and fax reception will be at a faster speed. To verify or change the parallel port mode, please check your system BIOS in the CMOS Setup or *contact your computer manufacturer for assistance*.

NOTE: Some older PC models support only nibble mode. Generally, newer models support both nibble and byte modes.

MFC Connect Failure or Bi-Directional Communication Error

Recently, some printers have included a function to show the printer status on the PC display. Such printers use the bi-directional communication parallel port between the printer and the PC. Our MFC 4450 also has a bi-directional parallel port function. Since Windows® 3.xx does not support bi-directional communication on the parallel port, each peripheral vendor has developed and supplies their own bi-directional device driver which will be installed into Windows® 3.xx. If you install two or more different bi-directional device drivers into Windows®, they might conflict with each other and cause some problems.

Please make sure you have installed the MFC 4450 driver by executing SETUP.EXE from your disk drive, as instructed on the Disk 1 label. The bi-directional communication may be disabled when the driver is installed from Add menu in "Printers" of Control Panel please restart Windows®.

Remove the conflicting situation caused by one of the following printer drivers. Review the following sections that apply to any additional printer drivers you may have installed into your Windows® software.

Brother HL-6/6V/10h/630series/660series/960/1260/WL-660
 HP LaserJet series II, IID, IIP, IIP+, III, IIID, IIIP or IV Plus
 NEC SuperScript 610/660
 EPSON ActionLaser 1100/1400
 LexMark WinWriter 200

Brother HL-6/6V/10h/630series/660series/960/1260/WL-660:

The Resource Manager for MFC 4450 may not work if the printer driver for the above models are installed after the installation of the MFC 4450 printer driver.

In this case, please install the MFC 4450 printer driver again or copy BI-DI.386 from Disk 1 to the Windows®/System directory. (NOTE: BI-DI.386 on Disk 1 is not compressed.)

HP LaserJet series II, IID, IIP, IIP+, III, IIID or IIIP:

If Microsoft Windows® Printing System for above models are used, you have to modify the "win.ini" file which is in the Windows® directory to turn the printer's bi-directional function off.

We recommend you to have back-up before you modify the WIN.INI or SYSTEM.INI, just in case.

TROUBLESHOOTING PROCEDURES

Open the file "win.ini" by using the "notepad" application. You can find the following statement in the [spooler] section.

```
[spooler]
QP.LPT1 = wpsljqp.dll
```

To disable this function, put a semicolon at the head of above sentence as follows;

```
[spooler]
;QP.LPT1 = wpsljqp.dll
```

Then, open the file "system.ini" by using the "notepad" application. You can find the following statement in the [386Enh] section.

```
[386Enh]
device=wpsljvpd.386
:
:
WPSLPT1=1
```

To disable this function, put a semicolon at the head of above sentences as follows;

```
;device=wpsljvpd.386
:
:
;WPSLPT1=1
```

You must restart Windows® to make these modification effective.

The modification disables the printer status reporting on your PC, however, you will be able to use MFC 4450 with no further problems.

HP LaserJet 4 Plus:

Please uninstall the Main Status windows by double clicking the Un-install Status windows in HP LaserJet group.

NEC SuperScript 610/660:

Please remove the NEC SuperScript driver by having NECDELETE.EXE run in the Disk 1 coming with NEC printers.

EPSON ActionLaser 1100 / 1400:

Please remove the EPSON Action Laser 1100/1400 driver by having EPDELETE.EXE file in Windows® Printer Driver for these models run.

Lexmark WinWriter 200:

You have to modify the "win.ini" and "system.ini" files which are in the Windows® directory to turn the printer's bi-directional function off.

We recommend you to back-up WIN.INI and SYSTEM.INI before you modify them.

TROUBLESHOOTING PROCEDURES

Open the file "win.ini" by using the "notepad" application. You can find the following statement in the [windows] section.

```
[windows]
run=C:/WINDOWS/SYSTEM/WPSIOMON
```

To disable this function, put a semicolon at the head of above sentence as follows;

```
[windows]
;run=C:/WINDOWS/SYSTEM/WPSIOMON
```

Also, You can find the following statement in the [spooler] section.

```
[spooler]
QP.LPT1=wpslbq.dll
```

To disable this function, put a semicolon at the head of above sentence as follows;

```
[spooler]
;QP.LPT1=wpslbq.dll
```

Then, Open the file "system.ini" by using the "notepad" application. You can find the following statement in the [386Enh] section.

```
[386Enh]
device=wpscomd.386
device=wpsljvpd.386
:
:
WPSLPT1=1
```

To disable the function, put a semicolon at the head of above sentences as follows;

```
[386Enh]
;device=wpscomd.386
;device=wpsljvpd.386
:
:
;WPSLPT1=1
```

You must restart Windows® to make these modification effective. The modification disables the printer status reporting on your PC, however, you will be able to use MFC 4450 with no further problems.

Graphics or text is missing when the document is printed

This could be caused by your Display Driver software. Contact your reseller and inquire about the latest Display Driver software. Another solution is to change your Windows® Setup Display selection from the current selection to the standard VGA or SVGA selection; contact your reseller or Microsoft Support if you need help modifying your Windows® Display selection or installing new Display Driver software.

TROUBLESHOOTING PROCEDURES

Q & A

This section contains questions and answers for using your MFC, if you are having difficulty:

Setting Up the MFC

Difficulty	Suggestions
The MFC does not print.	Check the following: <ul style="list-style-type: none"> • The MFC is turned on. • The toner cartridge and drum unit are installed properly. • The interface cable is securely connected between the MFC and computer. • Check to see if the LCD is showing an error message. (See page 14-2~4.)

Windows® Setup Printing Problems

Difficulty	Suggestions
I can not print from my application software.	<ul style="list-style-type: none"> • Make sure the Windows® printer driver is installed and you selected it in your application software.

TROUBLESHOOTING PROCEDURES

Paper Handling

Difficulty or Question	Suggestions
The MFC does not load paper. The LCD shows CHECK PAPER or PRINTER JAM.	<ul style="list-style-type: none"> • Check to see if the CHECK PAPER or PRINTER JAM message appears on the LCD. If so, the multipurpose sheet feeder may be out of paper or not properly installed. If it is empty, load a new stack of paper into the feeder. • If there is paper in the multipurpose sheet feeder, make sure it is straight. If the paper is curled, you should straighten it. Sometimes it is helpful to remove the paper, turn the stack over and put it back into the paper tray. • Reduce the amount of paper in the multipurpose sheet feeder, then try again.
The MFC does not load paper from the manual feedstop.	Reinsert the paper firmly, one sheet at a time.
How can I load envelopes?	You can load envelopes from either the multipurpose sheet feeder or the manual feed slot. Your application software must be set up to print the envelope size you are using. This is usually done in the Page Setup or Document Setup menu of your software. Refer to your application manual.
What paper can I use?	You can use plain paper, envelopes, transparencies, labels, and organizer paper. For information on loading paper. See "Acceptable Paper" in Chapter 9.
How can I clear paper jams?	See "Paper Jams" on page 13-6~8.

General Printing

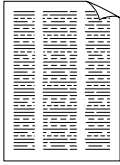
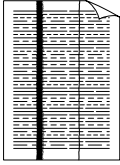
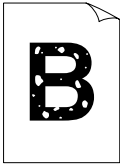
Difficulty	Suggestions
The MFC prints unexpectedly or it prints garbage.	<ul style="list-style-type: none"> • Turn the MFC off and on or reset it. • Make sure your application software is correctly set up to use the MFC by checking the printer settings in your application software.
The MFC can not print full pages of a document. A MEMORY FULL error message occurs.	<ul style="list-style-type: none"> • Reduce the printer resolution. • Reduce the complexity of your document and try again. • Reduce the graphic quality or the number of font sizes within your application software.
My headers or footers appear when I view my document on the screen but do not show up when I print them.	Most laser printers have a restricted area that will not accept print. Usually these are the first two lines and last two lines, leaves 62 printable lines. Adjust the top and bottom margins in your document to allow for this.

TROUBLESHOOTING PROCEDURES

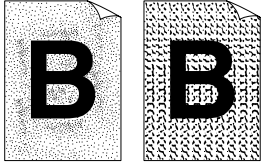
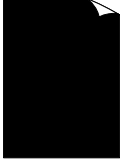

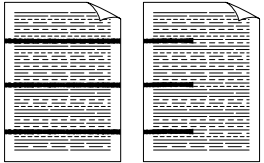
Print Quality Problems

NOTICE

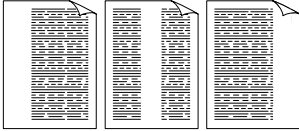
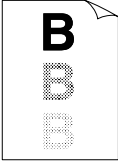
If the display shows CHANGE DRUM, you can clear a print quality problem by replacing the drum unit with a new one. The old drum unit is at the end of its life.

Difficulty	Suggestions
<p>Printed Pages are too dark or light.</p>	<p>Adjust the print conditions by setting the Print Density function, or turn the print density dial counterclockwise for lighter images and clockwise for darker images. It has been factory set to the middle position. See "The Print is too Light or too Dark" on page 14-5.</p>
<p>Printed pages contain white stripes.</p>  <p>White Stripes or Faint Images</p>	<p>You may fix this by wiping the scanner windows with a clean soft cloth. (See "Regular Maintenance" and "Cleaning the Drum Unit" on page 13-1~3.)</p> <p>If you still see white stripes or faint images and the display shows CHANGE DRUM, replace the drum unit with a new one.</p>
<p>Printed pages are stained with toner or have vertical stripes.</p>  <p>Dark Stripes or Toner Stains</p>	<ul style="list-style-type: none"> • Clean the MFC interior and the primary corona wire of the toner cartridge. See "Regular Maintenance" and "Cleaning the Drum Unit" on page 13-1~3. • Make sure that the tab of the corona wire is at the home position. <p>If you still see dark stripes or toner stains and the display shows CHANGE DRUM, after cleaning, replace the drum unit with a new one.</p>
<p>Printed pages have white spots in black text and graphics area.</p>  <p>White Spots</p>	<p>Make sure that you use paper that meets the specifications. Rough surface or thick media can cause the problem.</p> <p>If you still see white spots and the display shows CHANGE DRUM, replace the drum unit with a new one.</p>

TROUBLESHOOTING PROCEDURES

Difficulty	Suggestions
<p>Toner scatters and stains the printed page.</p>  <p>Scattering Toner</p>	<p>If toner scattered over the whole printing surface, adjust the print density dial inside the printer counterclockwise. See "The Print is too Light or too Dark" on page 14-5.</p> <p>Clean the MFC interior. See "Regular Maintenance" and "Cleaning the Drum Unit" on page 13-2~3.</p> <p>Make sure that you use paper that meets specifications. See page 9-1.</p> <p>If you still have scattered toner and the display shows CHANGE DRUM, replace the drum unit with a new one.</p>
<p>The whole page is printed in black.</p>  <p>Black Page</p>	<p>Wipe the electric terminals referring to page 13-2. Also, do not use heat-sensitive paper as it will cause this problem.</p> <p>If the printed pages are still black and the display shows CHANGE DRUM, on after cleaning, replace the drum unit with a new one.</p>
<p>Nothing is printed on the page.</p>  <p>White page</p>	<ul style="list-style-type: none"> • Make sure that the toner cartridge is not empty. • Wipe the electric terminals referring to "Regular Maintenance" and "Cleaning the Drum Unit" on page 13-1~3. • Make sure that a torn piece of paper does not remain on the scanner window.
<p>Printed pages are marked at regular intervals.</p>  <p>Example of Regular Marking</p>	<p>Markings may disappear by themselves. Try copying multiple pages to clear this problem. Markings may occur if the MFC has not been used for a long time.</p> <p>A possible cause is that the surface of the drum is scratched. You must then replace the drum unit with a new one.</p> <p>If the markings do not disappear, it may be that the drum was marked or damaged by excessive exposure to light. In this case, replace the drum unit with a new one.</p>

TROUBLESHOOTING PROCEDURES

Difficulty	Suggestions
<p>Printed pages are blurred at the center or at either edge.</p>  <p>Blurred Page</p>	<p>Certain environmental conditions such as humidity, high temperatures, etc. may cause this condition to occur.</p> <ul style="list-style-type: none"> • Make sure the MFC is placed on a flat, horizontal surface. • Remove the drum unit with the toner cartridge installed. Try rocking them from side to side. • You may clear a blurred page by wiping the scanner windows with a clean soft cloth. (See "Regular Maintenance" and "Cleaning the Drum Unit" on page 13-1~3.) <p>If a blurred page occurs after cleaning and the display shows CHANGE DRUM, replace the drum unit with a new one.</p>
<p>Ghost images appear on printed pages.</p>  <p>Ghost Images</p>	<ul style="list-style-type: none"> • Turn the print density dial counterclockwise for lighter images. See "The Print is too Light or too Dark" on page 14-5. • Make sure that you use paper that meets the specifications. Rough surface or thick media can cause ghost image.

NOTE

The drum unit is a consumable item, and it is necessary to replace it periodically.

15. SPECIFICATIONS

Product Description Five performance modes are available for the MFC: fax, printer, copier, scanner and PC fax.

<Printer Specifications>

Emulation	Brother Printing System for Windows®
Printer Driver	Windows® 3.1/3.11 and Windows® 95 driver, supporting Brother Native Compression mode and bidirectional capability
Interface	Bidirectional parallel
Memory	512KB
Printer Method	Electrophotography by semiconductor laser beam scanning
Resolution	600 dots/inch
Print Quality	Normal printing mode Economy printing mode (saves up to 50% of the normal toner usage)
Print Speed	6 pages/minute (when loading A4 or letter size paper from the multipurpose sheet feeder)
Print Media	Toner cartridge: Life Expectancy: 2,200 pages/new toner cartridge 1,000 pages/starter toner cartridge (USA, Canada and some other areas only) (when printing A4 or letter size paper at 5% print coverage) NOTE: Toner life expectancy will vary depending on the type of average print job printed. Drum Unit: Life Expectancy: 20,000 pages at 20 pages per job 8,000 pages at 1 page per job NOTE: There are many factors that determine the actual drum life, such as temperature, humidity, type of paper and toner that you use, the number of pages per joint job, etc.

<Fax Specifications>

Compatibility	ITU-TS Group 3
Coding system	MH / MR / MMR
Modem speed	9600/7200/4800/2400; Automatic Fallback
Memory*	300KB (30 pages)
Document input width	148 mm to 216 mm (5.8 inches to 8.5 inches)
Scanning/Printing width	208 mm (8.2 inches)
Paper size	Letter/Legal/A4
Multipurpose sheet feeder	200 sheets (20 lbs)

* Brother chart standard resolution MMR coding method.

SPECIFICATIONS

Gray scale	64 levels
Polling types	Standard, Delay, Sequential
Contrast control	Automatic/Super Light/Super Dark (manual setting)
Resolution	• Horizontal 8 dot/mm (203 dot/inch) • Vertical Standard 3.85 line/mm (98 line/inch) Fine, Photo 7.7 line/mm (196 line/inch) Superfine, Photo (copy) 15.4 line/mm (392 line/inch)
One-touch dial	24 stations
Speed-dial	36 stations
Automatic redial	3 times at 5 minutes intervals
Speaker type	Monitor
Auto answer	0, 1, 2, 3 or 4 rings
Communication source	Public switched telephone network

<Electrical and Environment>

Temperature	(Allowable) 50 - 90.5° F (10 - 32.5° C) (Storage) 38 - 104° F (3.3 - 40° C)
Warm-up	Max. 1 minute at 23° C (73.4° F)
First Print	20 seconds (when loading the Letter size paper from the multipurpose sheet feeder)
Power Source	120V AC 50/60Hz (U.S.A., Canadian Version Only)
Power Consumption	Operating (Copying): 160 W or less (25° C) Sleep Mode: 9 W or less Standby: 30 W or less (25° C)
Noise	Operating: 50 dB A or less Stand-by: 39 dB A or less
Humidity	Operating: 35 to 80% (without condensation) Storage: 20 to 80% (without condensation)
Dimensions	383 x 452 x 251 (mm)/15.1 x 17.8 x 9.9 (inches)
Weight	8.5 kg/18.8 lbs

SPECIFICATIONS

PARALLEL INTERFACE SPECIFICATIONS

Interface Connector Printer Side: Amphenol FCN-685J036-L/X or equivalent
A shielded cable should be used.

Pin Assignment

Pin No.	Signal	Direction	Pin No.	Signal	Direction
1	DATA STROBE	Input	19	0V(S.G.)	-
2	DATA 1	Input	20	0V(S.G.)	-
3	DATA 2	Input	21	0V(S.G.)	-
4	DATA 3	Input	22	0V(S.G.)	-
5	DATA 4	Input	23	0V(S.G.)	-
6	DATA 5	Input	24	0V(S.G.)	-
7	DATA 6	Input	25	0V(S.G.)	-
8	DATA 7	Input	26	0V(S.G.)	-
9	DATA 8	Input	27	0V(S.G.)	-
10	ACKNLG	Output	28	0V(S.G.)	-
11	BUSY	Output	29	0V(S.G.)	-
12	PE	Output	30	0V(S.G.)	-
13	SLCT	Output	31	IMPVT PRIME	Input
14	AUTO FEED	Input	32	FAULT	Output
15	N.C.	-	33	N.C.	-
16	0V(S.G.)	-	34	N.C.	-
17	0V(S.G.)	-	35	N.C.	-
18	+5V	-	36	SLCT IN	Input

IMPORTANT INFORMATION

16. IMPORTANT INFORMATION

Standard Telephone and FCC Notices (Applies only to 120V model)

These notices are in effect on models sold and used in the U.S.A.

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 or late evening.

This equipment complies with Part 68 of FCC Rules. On the rear panel of this equipment is a label that contains, among other information, the FCC Registration Number and Ringer equivalence Number (REN) for this equipment. You must, upon request, provide this information to your telephone company.

You may safely connect this equipment to the telephone line by means of a standard modular jack, USOC RJ11C.

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

The REN is useful to determine the quantity of devices you may connect to your telephone line and still have those devices ring when your telephone number is called. In most, but not all areas, the sum of the RENs of all devices connected to one line should not exceed five (5). To be certain of the number of devices you may connect to your line, as determined by the REN, you should contact your local telephone company to determine the maximum REN for your calling area.

If your MFC 4450 damages the telephone line, the telephone company may discontinue your service temporarily. If possible, they will notify you in advance. But if advanced notice is not practical, you will be notified as soon as possible. You will be informed of your right to file a complaint with the FCC.

Your telephone company may make changes to its facilities, equipment, operations or procedures that could affect the proper functioning of your equipment. If they do, you will be notified in advance to give you an opportunity to maintain uninterrupted telephone service. If you experience trouble with this MFC 4450, please contact the manufacturer's authorized service agency for information on obtaining service or repair. The telephone company may ask that you disconnect this equipment from the line until the problem has been corrected or until you are sure that the equipment is not malfunctioning.

If you are not able to solve a problem with your MFC, contact Brother service personnel

USA : 1-800-284-4329 (voice).

1-908-271-1937 (fax)

From within Canada : 1-800-853-6660 (voice)

1-514-685-4898 (fax)

From within Montreal : 1-514-685-6464 (voice)

IMPORTANT INFORMATION

Warning

For protection against the risk of electrical shock, always disconnect all cables from the wall outlet before servicing, modifying or installing the equipment.

This equipment may not be used on coin service lines provided by the telephone company or connected to party lines.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the fax equipment and the receiver.
- Connect the fax equipment on a separate circuit.
- Consult with the dealer or an experienced radio/TV technician for help.

Laser Safety (For 110-120 V Model Only)

This equipment is certified as a Class I laser product under the U.S. Department of Health and Human Services (DHHS) Radiation Performance Standard according to the Radiation Control for Health and Safety Act of 1968. This means that the equipment does not produce hazardous laser radiation.

Since radiation emitted inside the equipment is completely confined within protective housings and external covers, the laser beam can not escape from the machine during any phase of user operation.

FDA Regulations

U.S. Food and Drug Administration (FDA) has implemented regulations for laser products manufactured on and after August 2, 1976. Compliance is mandatory for products marketed in the United States. One of the following labels on the back of the printer indicates compliance with the FDA regulations and must be attached to laser products marketed in the United States.

MANUFACTURED :

BROTHER INDUSTRIES, LTD.
 15-1 Naeshiro-cho Mizuho-ku Nagoya, 467 Japan
 This product complies with FDA radiation performance standards, 21 CFR Subchapter J.

Caution

Use of controls, adjustments or performance of procedures other than those specified in this manual may result in hazardous invisible radiation exposure.

IMPORTANT INFORMATION

International Energy Star Compliance Statement

The purpose of the International Energy Star Program is to promote the development and popularization of energy-efficient office equipments, which includes computers, monitors, printers, facsimile receivers and copy machines world-wide.

As an International Energy Star partner, Brother Industries, Ltd. has decided that this product meets the guideline of the program.



Brother can not accept any financial or other responsibilities that may be the result of your use of this information, including direct, special or consequential damages. There are no warranties extended or granted by this document.

The serial number may be found on the label affixed to the back of the unit. For your convenience, note the number below and retain this Operations Manual to serve as a permanent record of your purchase, in the event of a theft or fire, or for future reference.

MODEL NO. MFC 4450 SERIAL NO. _____

NAME OF DEALER _____

DATE OF PURCHASE _____

Important Safety Instructions

1. Read all of these instructions
2. Save them for later reference.
3. Follow all warnings and instructions marked on the product.
4. Unplug this product from the wall outlet before cleaning. Do not use liquid or aerosol cleaners. Use a damp cloth for cleaning.
5. Do not use this product near water.
6. Do not place this product on an unstable cart, stand, or table. The product may fall, causing serious damage to the product.
7. Slots and openings in the cabinet and the back or bottom 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 openings should never be blocked by placing the product on a bed, sofa, rug, or other similar surface. This product should never be placed near or over a radiator or heater. This product should not be placed in a built-in installation unless proper ventilation is provided.

IMPORTANT INFORMATION

8. This product should be operated from the type of power source indicated on the label. If you are not sure of the type of power available, consult with your dealer or local power company.
9. This product is equipped with a 3-wire grounding type plug, a plug having a third (grounding) pin. This plug will fit only into a grounding-type power outlet. This is a safety feature. If you are unable to insert the plug into the outlet, contact your electrician to replace your obsolete outlet. Do not defeat the purpose of the grounding-type plug.
10. Do not allow anything to rest on the power cord. Do not locate this product where people can walk on the cord.
11. If an extension cord is used (see page 2-8 of Setup Manual for Fax, Printer, Copier) with this product, make sure that the total ampere ratings on the products plugged into the extension cord do not exceed the extension cord ampere rating. Also, make sure that the total of all products plugged into the wall outlet does not exceed 15 amperes (U.S.A. only).
12. Never push objects of any kind into this product through cabinet slots since they may touch dangerous voltage points or short out parts resulting in a risk of fire or electric shock. Never spill liquid of any kind on the product.
13. Do not attempt to service this product yourself because opening or removing covers may expose you to dangerous voltage points and/or other risks and may void your warranty. Refer all servicing to an Authorized Service Personnel. A list of Authorized Service Centers has been included for your convenience, or you may contact the following Customer Service Numbers for your nearest Authorized Service Center:

USA :
 1-800-284-4329 (voice)
 1-908-271-1937 (fax)
 1-800-521-2846 (Fax-Back System)

From within Canada : 1-800-853-6660 (voice)
 1-514-685-4898 (fax)
 1-800-681-9838 (Fax-Back System)

From within Montreal : 1-514-685-6464 (voice)

14. Unplug this product from the wall outlet and refer servicing to Authorized Service Personnel under the following conditions:
 - A. When the power cord or plug is damaged or frayed.
 - B. If liquid has been spilled into the product.
 - C. If the product has been exposed to rain or water.
 - D. If the product does not operate normally when the operating instructions are followed. Adjust only those controls that are covered by the operating instructions since improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to normal operation.
 - E. If the product has been dropped or the cabinet has been damaged.
 - F. If the product exhibits a distinct change in performance, indicating a need for service.
15. To protect your product against power surges, we recommend the use of a power protection device (Surge Protector).

IMPORTANT INFORMATION

Important - About the Interface Cable

This machine has been certified to comply with FCC standards, which are applied to the U.S.A. only. A shielded interface cable should be used according to FCC 15.27 (C). In addition, a grounded plug should be plugged into a grounded AC outlet after checking the rating of the local power supply for the printer to operate properly and safely.

CAUTION

Changes or modifications not expressly approved by Brother Industries, Ltd. could void the user's authority to operate the equipment.

17. INDEX

- A**
- Activity Report 10-1, 10-3~4
 - ADF 5-2
 - AllDialList 10-1, 10-5
 - Answer Mode 6-1
 - Automatic Transmission 5-5~6
- B**
- Battery (See Memory Storage/
Temporary Battery Back Up) 3-9
 - Beeper 3-5
 - Broadcasting 5-10~11
- C**
- Call Back Message
. 5-23~25, 10-1
 - Call Reservation 5-23~24
 - Canceling 5-14
 - Chain Dialing 3-11
 - CHANGE DRUM 12-5, 14-2
 - CHANGE TONER 12-1, 14-2
 - Cleaning 13-1~3
 - Connecting
. 2-6~13 of Setup Manual,
6-12, 6-15~16
 - Contrast 5-4
 - Control Panel Keys 1-1~6
 - Copy 1-3, 11-1~4
 - Cover Open 14-3
 - Cover Page 5-17~22, 10-1
- D**
- Daily Timer 5-9
 - Date and Time 3-2
 - Delayed Transmission 5-9~10
 - Delayed Polling 7-4
 - Dial Pad 1-2, 2-8~10
 - Distinctive Ringing 6-18~22
 - Document 5-1~2
 - D/R SET MODE 6-21~22
 - Drum Unit 12-5~7, 13-2~3
 - Duplex 9-8
- E**
- E C M 5-25
 - Enlarging Copies 11-3
 - Envelopes 9-1, 9-3
 - Environment 15-2
 - Error Retransmission 5-25~26
 - Error Message/Codes 14-2~4
 - External Telephone 6-12
 - Extension Telephone 6-12
- F**
- Fax Forwarding 8-3, 8-6
 - Fax Mode 6-1~2
 - Fax Storage 8-1
 - FCC Notices 16-1~3
 - FF/CONT Key 9-4~5
 - Fine 5-3
 - F/T Mode 6-1, 6-3~4
 - F/TRing Time 6-3~4
 - Function 1-5, 2-1~6
- G**
- Group 3-9~11
- H**
- Help 1-6, 2-7
 - Hook 1-2, 4-1~2

INDEX

- I
- Interrupting 5-13~14
- J
- Jack 6-12, 6-16
- Jam 13-6~8
- L
- Label 9-1
- Loading Paper
 . 2-2~5 of Setup Manual, 9-8~10
- M
- Manual Duplex 9-8
- Manual Feed 9-9~10
- Manual Dial 4-1
- Manual Mode 6-1~2
- Memory 3-9, 6-8
- MEMORY FULL
 5-8, 11-2, 14-3, 14-11
- Memory Full Error ... 14-3, 14-11
- Memory Status List
 8-9~10, 10-1, 10-7
- Memory Transmission
 5-8, 5-9~13
- Mode 1-6, 6-1
- Multiple Copies 11-2
- Multiple Resolution Transmission
 5-16~17
- Multipurpose Sheet Feeder
 9-7~8
- N
- Next-FAX Reservation .. 5-26~27
- Number Groups 3-9~11
- O
- OffLine 9-4
- OnLine 9-4
- One-touch Dial
 ... 1-3, 2-3, 3-6~7, 3-9, 4-1, 5-5
- On-Screen Programming 2-1~2
- Organizer Sheet 9-1
- Overseas Mode 5-15
- P
- Packing List
 1-2 of Setup Manual
- Paging 8-3~5
- Paper 9-1~3
- Paper Jam 13-6~8
- Paper Size 6-5~8
- Paper Specifications 9-1
- Parallel Interface 15-3
- Pause 1-2, 3-7, 4-2
- PBXs . 2-13 of Setup Manual, 3-8
- Photo 5-3, 11-1, 11-4
- Polling 7-1~6
- Power
 .. 2-6~7 of Setup Manual, 15-2
- Printable Area 9-3
- Print Quality 14-5
- Q
- Q & A 14-10~14
- R
- Redial 1-2, 5-7
- Reduction 6-7~8, 11-3
- Remote Access/Retrieval
 8-6~10
- Remote Activation 6-12~15
- Remote Code 6-12~15
- Remote Control Commands
 8-9
- Remote Deactivation .. 6-12~15

Reports 10-1~7
 Reset 9-5
 Resolution 1-6, 2-3, 5-3, 5-16~17
 Ring Delay 6-2~3
 Ring Time 6-3~4
 Ring Volume 6-11

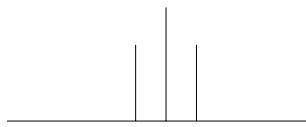
S

Safety Instructions 16-3~5
 Sequential Polling 7-5~6
 Setting Up
 2-1~13 of Setup Manual
 Shift 1-3, 3-6, 5-12, 9-10
 Simultaneous 9-4
 Sleep Mode 2-10~11
 Smoothing 6-4~5
 Speaker Volume 6-10
 Specifications 15-1~3
 Speed Dial
 1-2, 2-4, 3-7~9, 4-1, 5-5
 Station ID 3-3~4
 Standard Mode .. 5-3, 5-17, 11-1
 Super Dark Mode 5-4
 Super fine Mode . 5-3, 5-16, 11-1
 Super Light Mode 5-4
 Super Quick Scan
 1-6, 5-8, 5-10~13

T

TAD Mode 6-1, 6-15~18
 Telephone Index .. 1-2, 4-2, 5-5
 Test Print 9-5
 Transmission Verification Report
 10-1, 10-6~7
 Toner Cartridge 12-1~4
 Toner Empty 12-1, 14-2
 Tone/Pulse 3-1
 Toner Save 6-9~10

Transparency 9-1~2
 Troubleshooting 14-1~14



Ordering Accessories and Supplies

For the best quality results use only genuine Brother accessories, available at most Brother retailers. If you cannot find the accessory you need and you have a Visa, MasterCard, Discover, or American Express credit card, you can order accessories directly from Brother.

USA: 1-888-879-3232
(voice)

1445 (fax)	
From within Canada: 1-800-668-	
2768 (voice)	

Laser Fax Toner TN5000PF

Laser Fax Drum DR200



MFC 4450/OP-US-5.0

brother[®]

Brother International Corporation
200 Cottontail Lane,
Somerset, NJ 08875-6714, U.S.A.

Brother International Corporation (Canada) Ltd.
1 rue Hôtel de Ville,
Dollard-des-Ormeaux, QC, CANADA H9B 3H6

These machines are made for use in the USA or CANADA only. We can not recommend using them overseas because it may violate the Telecommunications Regulations of that country and the power requirements of your fax machine may not be compatible with the power available in foreign countries. **Using USA or CANADA models overseas is at your own risk and will void your warranty.**

* Manufactured by Brother Industries Ltd. whose quality system is registered by BSI and JQA.

BSI Certificate of registration No. FM27391
JQA Certificate of registration No. JQA-0340

UF78100011
Printed in Japan